

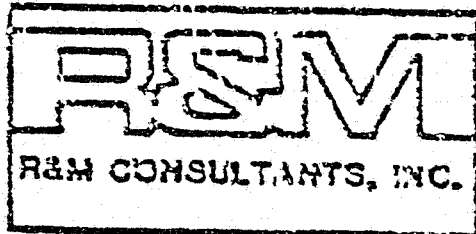
SUSITNA HYDROELECTRIC PROJECT

PROCESSED CLIMATIC DATA

VOLUME 6

DEVIL CANYON STATION

PREPARED BY:



PREPARED FOR:



ALASKA POWER AUTHORITY

Task 3, Hydrology. Processed Climatic Data. Volume 6, Devil Canyon Station

March 1982

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- A copy of the cover as published by R & M Consultants, Inc.
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- An additional set of preliminary data for July 1981.
All copies of this report were distributed with one set of data for the entire month of July 1981 (comprising nine pages). Some copies were distributed with an additional set of preliminary data for July 1981 (also comprising nine pages) that cover only the first two and half days of July. Those preliminary data sheets immediately follow the pages for June 1981.

HARZA-EBASCO

Susitna Joint Venture
Document Number

208

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SUSITNA HYDROELECTRIC PROJECT

PROCESSED CLIMATIC DATA

VOLUME 6

DEVIL CANYON STATION

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ALASKA POWER AUTHORITY

SUB
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SUSITNA HYDROELECTRIC PROJECT

PROCESSED CLIMATIC DATA

VOLUME 6

DEVIL CANYON STATION



R&M CONSULTANTS, INC.
ENGINEERS GEOLOGISTS PLANNERS SURVEYORS

ALASKA POWER AUTHORITY
SUSITNA HYDROELECTRIC PROJECT

TASK 3 - HYDROLOGY

PROCESSED CLIMATIC DATA
VOLUME 6 - DEVIL CANYON STATION

MARCH 1982

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ALASKA POWER AUTHORITY
SUSITNA HYDROELECTRIC PROJECT

TASK 3 - HYDROLOGY

PROCESSED CLIMATIC DATA

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PROCESSED CLIMATIC DATA
VOLUME 6
DEVIL CANYON STATION
JULY 17, 1980 THRU SEPTEMBER 30, 1981

The Devil Canyon Climate Station was installed on July 17, 1980, on a ridge on the South bank of the Susitna River $\frac{1}{2}$ -mile downstream of the Devil Canyon damsite. It is located on map Talkeetna Mountains (D-5) SE $\frac{1}{4}$ Section 32, R1E, T32N, Seward Meridian. The data were collected using a Meteorology Research Incorporated (MRI) Digital Weather Station. Data thru June 30, 1981 were processed by MRI and all subsequent data by R&M Consultants. An explanation of the parameters measured is located at the back of this report.

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1980

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	15.9	*****	54	346	.4	087	3.2	029
2100	13.7	*****	68	280	.8	311	3.2	001
2400	11.9	*****	73	219	.6	253	1.9	001

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	10.9	*****	90	179	.5	178	1.3	001
0600	12.2	9.4	83	153	.1	205	1.3	020
0900	15.2	7.9	62	341	.9	300	3.2	032
1200	18.6	7.6	49	324	1.5	327	4.4	078
1500	21.0	6.5	39	301	2.5	308	4.4	086
1800	21.9	4.8	33	276	1.9	276	5.1	029
2100	15.8	4.7	48	279	.8	279	3.8	002
2400	9.4	*****	69	158	1.0	144	2.5	000

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1980

DAY 19

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.8	*****	85	140	.8	115	2.5	001
0600	8.9	4.5	74	063	.8	061	2.5	021
0900	17.6	8.7	56	009	1.1	043	2.5	058
1200	23.7	-1.3	19	303	1.7	287	3.8	041
1500	23.7	-4.5	15	352	1.4	037	6.3	025
1800	23.6	-4.6	15	021	2.7	037	6.3	034
2100	16.6	1.4	36	022	1.3	017	5.7	002
2400	12.6	4.0	56	155	1.1	112	3.2	001

DAY 20

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	9.4	*****	72	107	1.3	115	3.8	001
0600	11.2	5.4	68	057	1.5	071	3.2	021
0900	19.9	7.2	44	040	1.5	047	3.2	057
1200	22.9	.0	22	015	1.6	052	5.7	082
1500	23.0	-2.6	18	001	2.0	062	5.7	070
1800	23.8	-6.3	13	011	2.1	009	5.7	030
2100	15.7	*****	41	027	1.0	018	4.4	002
2400	10.5	2.5	58	146	1.2	128	3.8	000

DAY 21

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	7.8	3.6	75	102	1.0	111	3.8	001
0600	10.4	4.9	69	063	1.1	095	2.5	024
0900	16.9	8.0	56	359	1.1	302	3.8	056
1200	20.3	7.9	45	317	2.3	332	4.4	069
1500	22.1	5.9	35	317	2.9	311	5.1	070
1800	21.9	6.1	36	310	1.7	003	5.7	027
2100	17.3	10.1	63	283	1.4	287	3.8	001
2400	13.8	*****	74	248	.9	269	2.5	001

DAY 22

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	10.3	*****	90	175	.8	184	1.9	001
0600	10.9	*****	86	108	.3	136	1.9	017
0900	17.8	9.4	58	355	1.0	334	2.5	055
1200	22.4	8.8	42	323	1.3	359	3.8	081
1500	23.5	2.8	26	033	1.4	020	5.1	058
1800	15.0	*****	84	032	.4	359	12.7	015
2100	13.5	10.6	83	142	.5	192	1.9	001
2400	10.3	8.2	87	130	1.1	142	2.5	000

DAY 23

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	8.2	*****	93	108	.8	089	3.2	001
0600	10.9	7.9	82	056	1.0	046	3.2	021
0900	18.7	10.5	59	046	1.7	048	3.2	055
1200	24.1	2.8	25	050	1.4	057	3.2	078
1500	22.6	3.6	29	024	1.3	015	5.7	020
1800	21.3	6.0	37	301	1.0	031	5.7	005
2100	16.2	9.1	63	237	.9	247	3.2	001
2400	14.9	*****	70	185	.9	165	1.9	000

DAY 24

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	12.7	11.3	91	234	1.0	239	2.5	001
0600	14.3	10.9	80	242	.8	262	2.5	026
0900	15.0	9.9	72	312	2.0	312	5.1	021
1200	16.5	10.3	67	306	1.9	297	4.4	035
1500	16.7	10.5	67	317	2.5	330	5.7	018
1800	15.0	10.2	73	309	2.2	318	5.7	003
2100	13.7	10.5	81	300	1.5	299	4.4	001
2400	12.0	10.4	90	308	1.8	290	4.4	000

DAY 25

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	11.3	10.2	93	289	1.3	316	3.8	001
0600	10.9	10.1	95	285	1.1	318	3.2	004
0900	10.9	10.0	94	269	.8	262	2.5	006
1200	11.1	10.2	94	293	1.3	302	3.8	005
1500	11.8	*****	91	306	1.7	302	5.1	008
1800	11.9	*****	90	307	.5	346	2.5	002
2100	11.7	*****	91	255	.7	267	2.5	000
2400	10.8	9.7	93	146	.7	144	4.4	000

DAY 26

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	9.5	*****	94	111	.9	084	2.5	001
0600	11.1	*****	86	087	.4	108	1.9	015
0900	12.9	9.1	78	323	.9	310	2.5	027
1200	12.8	9.0	78	295	1.1	293	3.8	028
1500	15.3	8.7	65	308	1.4	317	5.7	018
1800	13.6	9.2	75	305	1.8	317	5.7	007
2100	11.9	*****	93	248	.6	303	3.8	001
2400	12.0	9.2	83	227	.7	196	3.2	000

DAY 27

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	10.9	*****	93	262	1.1	275	3.8	000
0600	10.9	8.8	87	262	.9	256	3.8	003
0900	9.8	8.5	92	276	1.6	299	4.4	006
1200	11.1	7.4	78	265	2.1	259	7.6	027
1500	11.2	7.7	79	247	2.6	238	8.3	012
1800	9.5	8.6	94	231	.4	301	3.8	002
2100	9.3	*****	97	275	.3	297	3.2	001
2400	8.5	7.9	96	165	.7	120	2.5	000

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1980

DAY 28

DAY 29

DAY 30

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	8.0	*****	96	193	.4	132	2.5	000	0300	7.5	*****	99	101	.9	113	2.5	000	0300	8.1	-111.	00	114	.9	115	1.9	000
0600	0.2	*****	00	267	.3	287	1.9	011	0600	8.0	7.7	98	093	.8	104	2.5	003	0600	7.6	*****	97	116	.6	129	1.9	007
0900	9.3	*****	89	075	.5	022	1.9	010	0900	10.5	8.9	90	031	1.0	042	2.5	020	0900	13.8	6.6	62	070	1.4	093	4.4	055
1200	10.3	*****	84	056	.8	033	2.5	027	1200	10.6	*****	87	316	.7	298	3.8	029	1200	16.2	5.1	48	080	1.2	083	5.1	064
1500	12.8	*****	69	355	.6	029	2.5	027	1500	11.9	8.7	81	287	1.3	294	3.2	027	1500	16.5	6.0	50	064	2.3	088	5.1	035
1800	11.3	7.9	80	110	.4	093	3.2	015	1800	11.7	*****	82	316	.8	292	1.9	008	1800	16.2	5.7	50	053	2.0	020	8.3	024
2100	10.4	7.8	84	174	.5	107	3.2	001	2100	10.1	*****	92	233	.4	238	1.9	001	2100	10.2	5.9	75	124	.9	135	3.2	001
2400	8.5	*****	96	184	.3	191	2.5	000	2400	8.8	*****	95	150	.8	153	1.9	000	2400	9.2	*****	93	153	.7	169	2.5	000

DAY 31

DAY 31

DAY 31

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	8.5	*****	00	143	.4	091	1.9	001	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***
0600	9.1	*****	99	165	.2	188	1.3	004	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***
0900	12.0	*****	83	330	.4	032	1.9	035	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***
1200	14.7	9.0	69	302	1.1	283	2.5	052	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***
1500	16.7	5.9	49	317	1.5	331	3.2	036	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***
1800	14.4	3.4	48	312	2.2	298	7.6	005	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***
2100	11.9	5.2	64	272	.5	315	3.8	001	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***
2400	7.9	3.9	76	137	1.6	135	3.2	001	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1980

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	01
02	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	02
03	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	03
04	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	04
05	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	05
06	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	06
07	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	07
08	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	08
09	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	09
10	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	10
11	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	11
12	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	12
13	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	13
14	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	14
15	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	15
16	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	16
17	15.9	11.9	13.9	***	*****	1.0	087	3.2	WNW	57	*****	0.0	1920	17
18	22.1	9.1	15.6	291	.7	1.3	276	5.1	S	49	6.8	0.0	6868	18
19	24.2	6.3	15.3	016	.8	1.6	037	6.3	NNE	38	1.2	0.0	6983	19
20	24.3	8.6	16.5	037	1.1	1.7	052	5.7	NNE	40	1.0	0.0	7345	20
21	22.8	7.8	15.3	321	1.0	1.7	003	5.7	NW	53	6.6	0.0	7053	21
22	24.5	9.3	16.9	047	.3	1.2	359	12.7	W	57	8.0	3.0	6348	22
23	25.4	8.2	16.8	045	.5	1.4	015	5.7	NE	52	6.6	0.0	6305	23
24	17.8	12.0	14.9	301	1.6	1.8	330	5.7	NW	73	10.5	1.2	3303	24
25	12.1	10.8	11.5	286	.8	1.1	302	5.1	WNW	93	10.0	7.6	870	25
26	16.5	9.5	13.0	299	.6	1.2	317	5.7	NW	79	9.0	12.0	4062	26
27	11.8	8.4	10.1	256	1.1	1.4	238	8.3	W	88	8.1	37.0	1398	27
28	13.7	7.7	10.7	097	.1	.8	093	3.2	NNE	87	7.9	18.0	3048	28
29	12.1	7.5	9.8	358	.2	1.0	298	3.8	NNE	84	8.4	2.6	2870	29
30	17.5	7.4	12.5	082	1.1	1.5	020	8.3	E	57	-13.7	.2	6158	30
31	17.2	7.6	12.4	303	.4	1.2	298	7.6	NNW	60	5.5	3.2	4573	31
MONTH	25.4	6.3	13.7	330	.4	1.3	359	12.7	NW	65	5.4	84.8	69101	

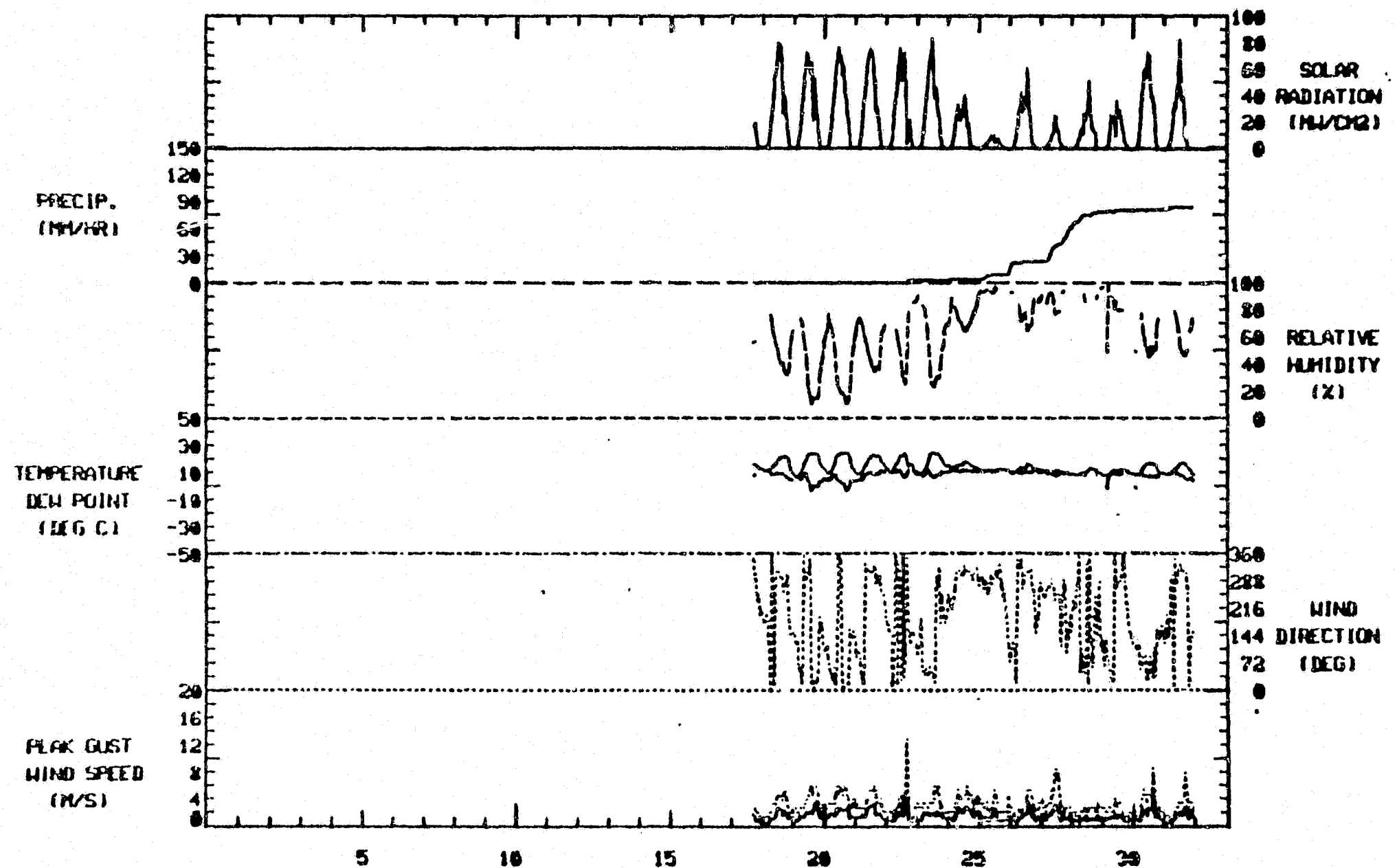
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 1.9
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 6.3
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 6.3
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 3.8

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 17 JULY, 1988

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1980

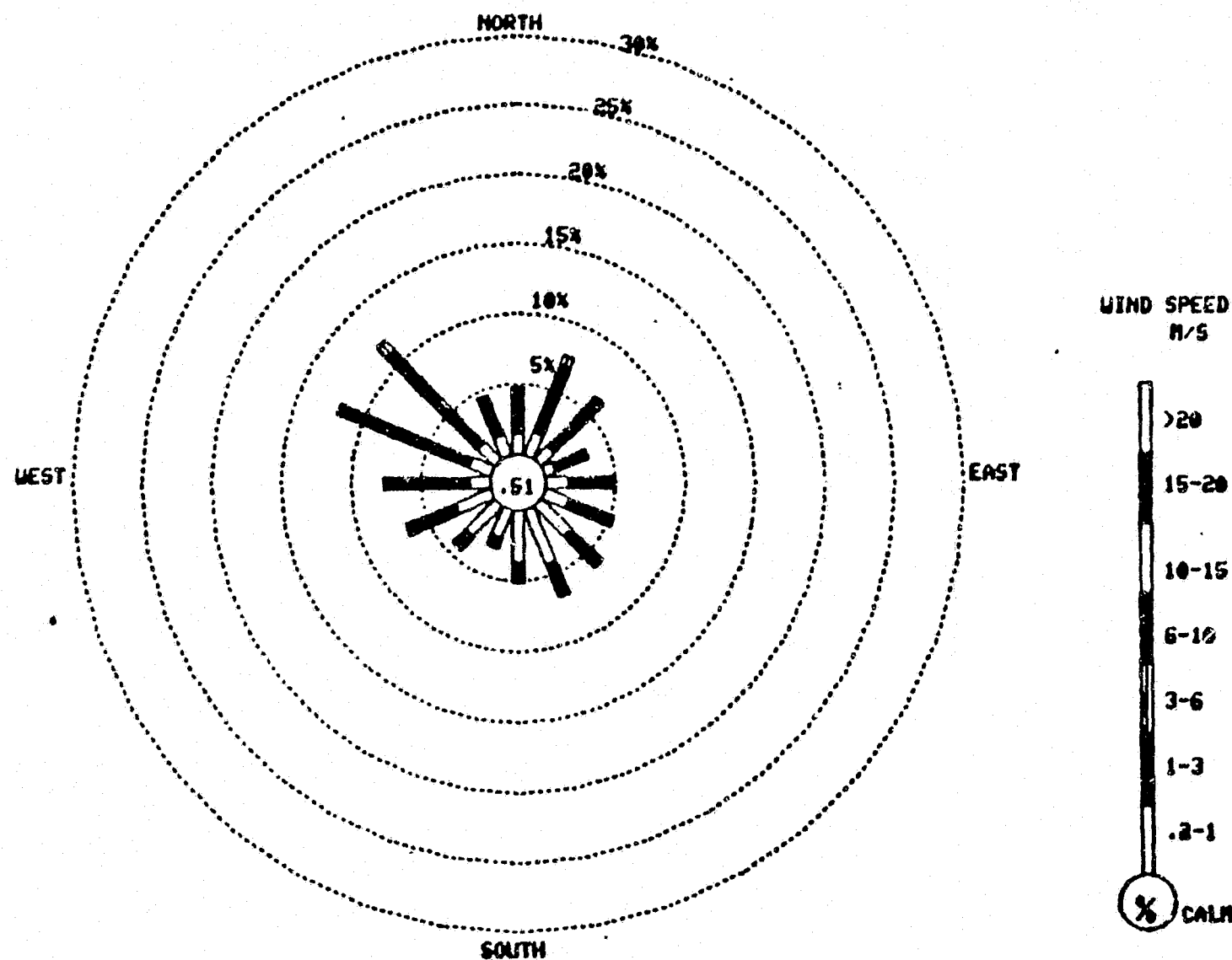
DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	1.52	3.05	.15	.07	0.00	0.00	0.00	4.79
NNE	1.74	5.08	.80	0.00	0.00	0.00	0.00	7.62
NE	1.31	4.79	.15	0.00	0.00	0.00	0.00	6.24
ENE	.80	2.54	0.00	0.00	0.00	0.00	0.00	3.34
E	1.60	3.34	0.00	0.00	0.00	0.00	0.00	4.93
ESE	1.81	3.41	0.00	0.00	0.00	0.00	0.00	5.22
SE	3.05	3.05	0.00	0.00	0.00	0.00	0.00	6.10
SSE	4.14	2.47	0.00	0.00	0.00	0.00	0.00	6.60
S	3.63	1.45	0.00	0.00	0.00	0.00	0.00	5.08
SSW	2.03	.80	0.00	0.00	0.00	0.00	0.00	2.83
SW	2.98	1.23	.07	0.00	0.00	0.00	0.00	4.28
WSW	2.76	3.48	.29	0.00	0.00	0.00	0.00	6.53
W	1.52	6.10	0.00	0.00	0.00	0.00	0.00	62
WNW	1.74	9.87	.22	0.00	0.00	0.00	0.00	.83
NW	1.74	9.14	1.02	0.00	0.00	0.00	0.00	11.90
NNW	1.60	2.83	.15	0.00	0.00	0.00	0.00	4.57
CALM	-----	-----	-----	-----	-----	-----	-----	.51
TOTAL	33.96	62.63	2.83	.07	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

1378 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION

JULY, 1980



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING AUGUST , 1980

DAY 01

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	4.4	4.0	97	115	1.2	104	3.2	001
0600	6.1	3.0	81	085	1.1	100	3.2	023
0900	14.5	5.0	53	026	1.0	061	2.5	057
1200	16.7	1.5	36	288	1.7	269	5.1	083
1500	18.0	-.4	29	298	1.8	286	5.1	012
1800	17.9	*****	36	297	1.8	312	5.1	023
2100	11.5	3.7	59	227	.9	272	3.2	001
2400	7.2	*****	84	164	1.0	170	2.5	001

DAY 02

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	6.6	*****	93	110	.9	154	3.8	001
0600	6.8	5.6	92	066	1.0	080	3.2	003
0900	10.0	*****	88	080	1.0	091	4.4	027
1200	10.4	10.2	99	291	.8	270	2.5	004
1500	11.1	*****	89	271	.8	275	2.5	023
1800	10.2	*****	93	262	1.0	246	3.2	011
2100	9.1	8.8	98	256	.8	250	2.5	000
2400	7.4	6.8	96	169	.7	146	1.9	000

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	6.2	*****	95	139	.9	138	2.5	000
0600	8.0	*****	93	123	.5	104	1.9	018
0900	11.7	7.2	74	330	1.0	344	3.2	021
1200	13.5	6.5	63	303	2.3	309	5.1	023
1500	15.6	6.2	54	317	2.8	335	7.6	074
1800	13.5	7.4	67	302	1.9	269	4.4	009
2100	11.2	*****	95	277	1.0	286	3.2	000
2400	10.5	9.6	94	251	.5	270	2.5	001

DAY 04

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	9.4	9.1	98	229	.8	260	3.2	001
0600	9.5	*****	96	213	.5	222	2.5	006
0900	10.3	*****	92	299	.2	263	1.3	016
1200	13.6	8.2	70	305	.7	292	3.2	024
1500	16.8	8.9	60	269	.8	311	3.2	057
1800	17.1	7.1	52	298	1.5	283	3.2	021
2100	10.8	*****	84	239	.5	309	2.5	001
2400	7.4	*****	98	131	.9	123	2.5	000

DAY 05

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	7.4	6.6	95	081	1.0	061	3.2	001
0600	8.5	6.4	87	063	1.4	073	3.2	015
0900	15.4	7.9	61	035	1.1	050	2.5	057
1200	18.3	7.3	49	312	1.7	320	3.8	081
1500	18.9	7.6	48	326	2.6	322	5.1	042
1800	17.8	8.0	53	304	2.2	323	5.1	010
2100	14.3	*****	75	236	.9	261	2.5	001
2400	14.3	10.5	78	209	.6	254	2.5	001

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	12.9	*****	91	188	.3	248	1.9	000
0600	12.7	*****	95	193	.2	130	1.9	004
0900	12.9	-41.2	01	356	.4	320	2.5	016
1200	15.2	11.0	76	317	1.4	325	5.1	024
1500	15.3	9.6	69	310	2.1	317	5.1	022
1800	14.4	10.0	75	307	2.1	310	5.1	004
2100	12.1	11.6	97	294	1.3	298	3.2	000
2400	9.7	-43.2	01	302	2.2	313	5.7	001

DAY 07

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	8.9	*****	97	277	.9	303	3.8	000
0600	9.2	*****	96	148	.3	155	1.9	005
0900	9.9	*****	80	328	.6	332	1.9	019
1200	10.3	*****	88	280	.9	275	2.5	017
1500	9.9	6.9	82	291	1.1	313	3.2	014
1800	9.6	*****	96	300	.7	346	1.9	006
2100	9.0	*****	96	217	.3	268	1.3	000
2400	8.7	*****	95	146	.4	062	1.9	001

DAY 08

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	8.4	*****	94	163	.3	177	1.3	000
0600	8.5	*****	79	095	.2	134	1.3	003
0900	10.1	*****	28	344	.5	021	1.3	019
1200	11.9	6.5	70	299	.9	286	1.9	036
1500	13.6	6.9	64	291	1.5	277	3.2	038
1800	13.8	*****	65	280	1.1	271	3.2	007
2100	10.8	7.6	81	210	.6	198	1.9	001
2400	9.8	*****	78	160	.9	119	2.5	000

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	9.9	5.4	74	166	1.0	163	1.9	001
0600	11.8	5.8	67	139	1.1	148	3.2	015
0900	13.6	6.4	62	106	2.5	095	6.3	012
1200	16.1	6.2	52	101	2.5	113	7.0	036
1500	17.0	5.8	48	097	2.7	104	7.0	028
1800	16.0	8.9	63	100	.9	090	5.1	013
2100	11.7	-21.5	08	250	1.2	294	2.5	000
2400	10.2	*****	05	192	1.0	194	1.9	000

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING AUGUST , 1980

DAY 10

DAY 11

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	9.8	****	05	141	.6	157	2.5	000	0300	7.5	6.3	92	125	1.1	141	2.5	000	0300	8.4	****	06	167	.7	172	2.5	000
0600	10.4	-27.5	05	148	.7	134	2.5	008	0600	10.0	-21.5	09	096	1.3	121	4.4	017	0600	9.0	****	06	076	.8	094	1.9	013
0900	14.9	7.1	60	319	.6	335	2.5	043	0900	13.5	8.1	70	099	2.3	110	5.1	051	0900	13.9	-27.4	04	018	.9	044	2.5	023
1200	20.4	6.6	41	097	1.2	103	5.1	069	1200	21.3	5.6	36	060	1.6	100	4.4	058	1200	17.0	-28.2	03	299	2.1	312	5.1	063
1500	22.7	6.8	36	119	1.9	113	5.1	054	1500	22.9	6.2	34	013	.0	089	3.8	039	1500	13.0	-28.0	04	306	3.4	300	6.3	026
1800	20.1	8.4	47	043	.4	103	5.1	010	1800	21.4	13.8	62	282	.9	250	2.5	016	1800	11.3	-26.9	05	302	3.0	304	7.6	004
2100	12.8	****	56	293	1.5	298	5.1	000	2100	15.1	-26.5	04	286	1.5	316	4.4	000	2100	9.4	-26.3	06	304	2.0	307	5.1	000
2400	9.0	-26.6	06	177	1.0	148	2.5	000	2400	10.9	-27.2	05	174	.8	228	1.9	000	2400	7.7	-27.6	06	291	1.8	302	4.4	000

DAY 13

DAY 14

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	7.2	-28.0	06	304	1.3	309	3.8	000	0300	****	****	**	***	****	***	****	***	0300	****	****	**	***	****	***	****	***
0600	7.1	-28.0	06	297	1.0	318	3.2	002	0600	****	****	**	***	****	***	****	***	0600	****	****	**	***	****	***	****	***
0900	7.7	-27.6	06	313	1.3	303	3.2	011	0900	****	****	**	***	****	***	****	***	0900	****	****	**	***	****	***	****	***
1200	8.5	-27.0	06	312	1.6	309	3.2	013	1200	****	****	**	***	****	***	****	***	1200	****	****	**	***	****	***	****	***
1500	8.3	-27.2	06	307	1.7	304	3.2	007	1500	****	****	**	***	****	***	****	***	1500	****	****	**	***	****	***	****	***
1800	7.7	-27.6	06	299	1.2	295	3.2	004	1800	****	****	**	***	****	***	****	***	1800	****	****	**	***	****	***	****	***
2100	6.8	****	07	289	.9	326	3.2	000	2100	****	****	**	***	****	***	****	***	2100	****	****	**	***	****	***	****	***
2400	****	****	**	192	.7	191	1.3	***	2400	****	****	**	***	****	***	****	***	2400	****	****	**	***	****	***	****	***

DAY 16

DAY 17

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	****	****	**	***	****	***	****	***	0300	****	****	**	***	****	***	****	***	0300	****	****	**	***	****	***	****	***
0600	****	****	**	***	****	***	****	***	0600	****	****	**	***	****	***	****	***	0600	****	****	**	***	****	***	****	***
0900	****	****	**	***	****	***	****	***	0900	****	****	**	***	****	***	****	***	0900	****	****	**	***	****	***	****	***
1200	****	****	**	***	****	***	****	***	1200	****	****	**	***	****	***	****	***	1200	****	****	**	***	****	***	****	***
1500	****	****	**	***	****	***	****	***	1500	****	****	**	***	****	***	****	***	1500	****	****	**	***	****	***	****	***
1800	****	****	**	***	****	***	****	***	1800	****	****	**	***	****	***	****	***	1800	****	****	**	***	****	***	****	***
2100	****	****	**	***	****	***	****	***	2100	****	****	**	***	****	***	****	***	2100	****	****	**	***	****	***	****	***
2400	****	****	**	***	****	***	****	***	2400	****	****	**	***	****	***	****	***	2400	****	****	**	***	****	***	****	***

SUSITNA HYDROELECTRIC PROJECT

DAY 19

DAY 21

DAY 22

DAY 24

DAY 25

DAY 27

STATION 1									STATION 2									STATION 3								
HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.			
NDNG	TEMP.	POINT	RH	DIR.	SPD.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	NDNG	TEMP.	POINT	RH	DIR.	SPD.			
	DEG C	DEG C	%	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S			
0300	*****	*****	**	***	*****	0300	*****	*****	**	***	*****	0300	*****	*****	**	***	*****	0300	*****	*****	**	***	*****			
0600	*****	*****	**	***	*****	0600	*****	*****	**	***	*****	0600	*****	*****	**	***	*****	0600	*****	*****	**	***	*****			
0900	*****	*****	**	***	*****	0900	*****	*****	**	***	*****	0900	*****	*****	**	***	*****	0900	*****	*****	**	***	*****			
1200	*****	*****	**	***	*****	1200	*****	*****	**	***	*****	1200	*****	*****	**	***	*****	1200	*****	*****	**	***	*****			
1500	*****	*****	**	***	*****	1500	*****	*****	**	***	*****	1500	*****	*****	**	***	*****	1500	*****	*****	**	***	*****			
1800	*****	*****	**	***	*****	1800	*****	*****	**	***	*****	1800	*****	*****	**	***	*****	1800	*****	*****	**	***	*****			
2100	*****	*****	**	***	*****	2100	*****	*****	**	***	*****	2100	*****	*****	**	***	*****	2100	*****	*****	**	***	*****			
2400	*****	*****	**	***	*****	2400	*****	*****	**	***	*****	2400	*****	*****	**	***	*****	2400	*****	*****	**	***	*****			

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING AUGUST , 1980

DAY 28

HOUR NDNG	DEW TEMP. DEG C	POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 29

HOUR NDNG	DEW TEMP. DEG C	POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 30

HOUR NDNG	DEW TEMP. DEG C	POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 31

HOUR NDNG	DEW TEMP. DEG C	POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 31

HOUR NDNG	DEW TEMP. DEG C	POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 31

HOUR NDNG	DEW TEMP. DEG C	POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING AUGUST , 1980

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	19.2	3.9	11.6	294	.3	1.4	269	5.1	WNW	58	2.8	0.0	6528	01
02	11.6	6.5	9.1	224	.1	1.0	091	4.4	E	85	7.9	8.6	2033	02
03	16.9	6.1	11.5	303	1.0	1.5	335	7.6	NW	67	7.4	6.8	4640	03
04	17.7	7.4	12.6	260	.4	.9	260	3.2	WNW	63	8.3	3.0	4270	04
05	19.7	6.7	13.2	332	.7	1.5	322	5.1	NW	67	7.8	0.0	5215	05
06	16.1	9.7	12.9	305	1.1	1.4	313	5.7	NW	63	-7.0	.6	2038	06
07	11.0	8.5	9.8	281	.4	.8	303	3.8	WNW	82	6.9	4.4	2098	07
08	14.9	8.4	11.6	269	.4	.8	277	3.2	WNW	71	7.0	.8	3248	08
09	17.8	9.2	13.5	120	1.2	1.7	113	7.0	E	59	2.4	.4	2900	09
10	23.5	9.0	16.3	132	.3	1.3	103	5.1	ESE	34	-4.2	.2	5645	10
11	23.9	6.7	15.3	097	.5	1.4	110	5.1	ESE	41	-4.4	0.0	4938	11
12	17.0	7.7	12.4	306	1.4	1.9	304	7.6	WNW	09	-27.4	.6	4455	12
13	*****	*****	*****	304	1.2	1.3	309	3.8	NW	08	-27.6	5.4	1116	13
14	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	14
15	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	15
16	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	16
17	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	17
18	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	18
19	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	19
20	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	20
21	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	21
22	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	22
23	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	23
24	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	24
25	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	25
26	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	26
27	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	27
28	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	28
29	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	29
30	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	30
31	*****	*****	*****	***	****	****	***	****	MSG	**	*****	****	***	31
MONTH	23.9	3.9	12.5	301	.4	1.3	335	7.6	WNW	54	-1.5	30.8	49121	

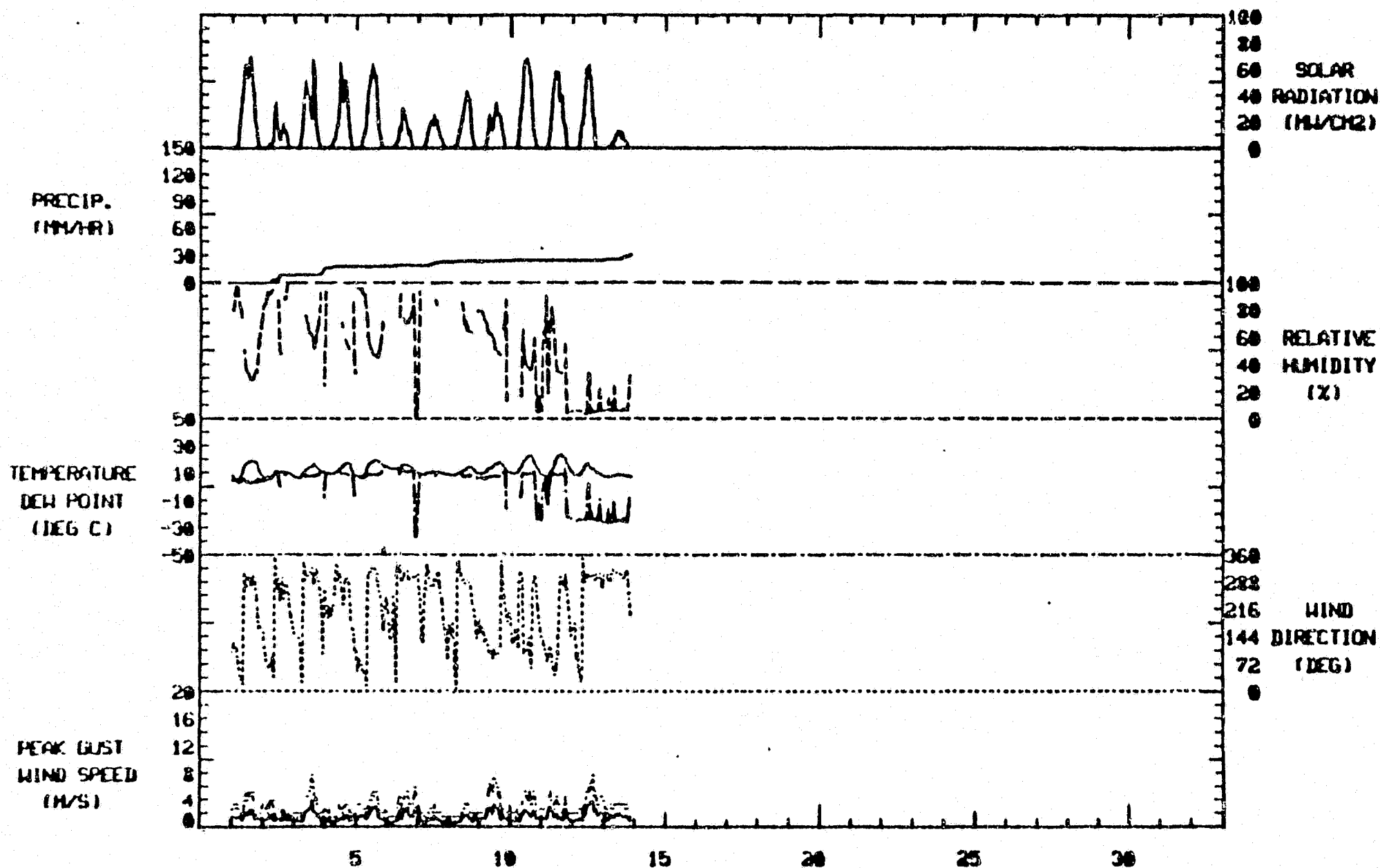
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 5.1
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 5.7
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 7.0
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 7.6

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 AUGUST , 1980

R&M CONSULTANTS, INC.

SUSITHA HYDROELECTRIC PROJECT

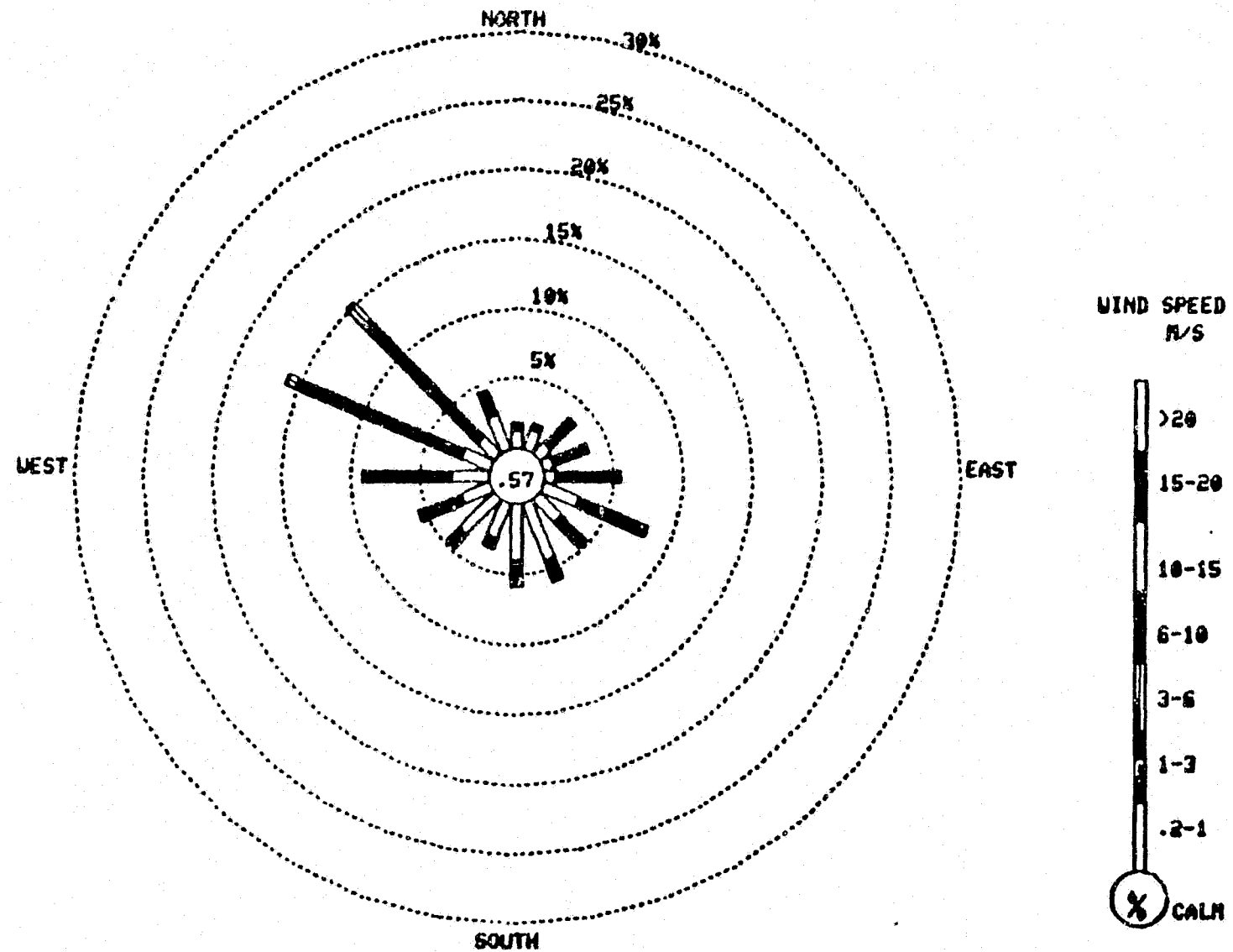
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING AUGUST , 1980

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	1.21	.57	.08	0.00	0.00	0.00	0.00	1.86
NNE	1.45	.57	0.00	0.00	0.00	0.00	0.00	2.02
NE	1.05	2.58	0.00	0.00	0.00	0.00	0.00	3.63
ENE	.73	2.75	0.00	0.00	0.00	0.00	0.00	3.47
E	.81	4.36	.32	0.00	0.00	0.00	0.00	5.49
ESE	2.75	4.68	.85	0.00	0.00	0.00	0.00	8.08
SE	2.26	2.50	0.00	0.00	0.00	0.00	0.00	4.77
SSE	4.28	1.62	0.00	0.00	0.00	0.00	0.00	5.90
S	3.96	1.86	0.00	0.00	0.00	0.00	0.00	5.82
SSW	2.58	.81	0.00	0.00	0.00	0.00	0.00	3.39
SW	3.47	1.29	0.00	0.00	0.00	0.00	0.00	4.77
WSW	2.26	3.23	0.00	0.00	0.00	0.00	0.00	5.49
W	2.75	6.38	0.00	0.00	0.00	0.00	0.00	9.13
WNW	2.26	12.84	.81	0.00	0.00	0.00	0.00	15.91
NW	1.70	11.71	1.78	0.00	0.00	0.00	0.00	15.19
NNW	2.67	1.70	.16	0.00	0.00	0.00	0.00	4.52
CALM								.57
TOTAL	36.19	59.45	3.80	0.00	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

1238 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
AUGUST, 1980



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

SUSITNA HYDROELECTRIC PROJECT

DAY 01

DAY 02

DAY 03

STATION 1									STATION 2									STATION 3								
HR	NDNG	TEMP.	DEW	RH	WIND DIR.	WIND SPD.	GUST DIR.	GUST MAX.	HR	NDNG	TEMP.	DEW	RH	WIND DIR.	WIND SPD.	GUST DIR.	GUST MAX.	HR	NDNG	TEMP.	DEW	RH	WIND DIR.	WIND SPD.	GUST DIR.	GUST MAX.
		DEG C	POINT DEG C	%	DEG.	M/S	DEG.	M/S			DEG C	POINT DEG C	%	DEG.	M/S	DEG.	M/S			DEG C	POINT DEG C	%	DEG.	M/S	DEG.	M/S
0300	*****	*****	***	***	*****	***	*****	***	0300	*****	*****	***	***	*****	***	*****	***	0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***	0600	*****	*****	***	***	*****	***	*****	***	0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***	0900	*****	*****	***	***	*****	***	*****	***	0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***	1200	*****	*****	***	***	*****	***	*****	***	1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***	1500	*****	*****	***	***	*****	***	*****	***	1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***	1800	*****	*****	***	***	*****	***	*****	***	1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***	2100	*****	*****	***	***	*****	***	*****	***	2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***	2400	*****	*****	***	***	*****	***	*****	***	2400	*****	*****	***	***	*****	***	*****	***

DAY 04

DAY 05

DAY 06

STATION 1									STATION 2									STATION 3								
HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.							
NDNG	TEMP.	POINT	RH	DIR.	SPD.	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	RAD						
	DEG C	DEG C	%	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	MW						
0300	*****	*****	**	***	*****	***	0300	*****	*****	**	***	*****	***	0300	*****	*****	**	***	*****	***						
0600	*****	*****	**	***	*****	***	0600	*****	*****	**	***	*****	***	0600	*****	*****	**	***	*****	***						
0900	*****	*****	**	***	*****	***	0900	*****	*****	**	***	*****	***	0900	*****	*****	**	***	*****	***						
1200	*****	*****	**	***	*****	***	1200	*****	*****	**	***	*****	***	1200	*****	*****	**	***	*****	***						
1500	*****	*****	**	***	*****	***	1500	*****	*****	**	***	*****	***	1500	*****	*****	**	***	*****	***						
1800	*****	*****	**	***	*****	***	1800	*****	*****	**	***	*****	***	1800	*****	*****	**	***	*****	***						
2100	*****	*****	**	***	*****	***	2100	*****	*****	**	***	*****	***	2100	*****	*****	**	***	*****	***						
2400	*****	*****	**	***	*****	***	2400	*****	*****	**	***	*****	***	2400	*****	*****	**	***	*****	***						

DAY 07

DAY 08

DAY 09

[illegible]

SUSITNA HYDROELECTRIC PROJECT

DAY 10

DAY 11

DAY 12

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD			
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	
0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***

DAY 13

DAY 14

DAY 15

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.			
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***

DAY 16

DAY 17

DAY 18

[illegible]

SUSITNA HYDROELECTRIC PROJECT

DAY 19

DAY 20

DAY 21

DAY 22

DAY 23

DAY 24

DAY 25

DAY 26

DAY 27

NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	GUST MAX.	RAD
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	*****	*****	★★	★★★	*****	★★★	*****	★★★
0600	*****	*****	★★	★★★	*****	★★★	*****	★★★
0900	*****	*****	★★	★★★	*****	★★★	*****	★★★
1200	*****	*****	★★	★★★	*****	★★★	*****	★★★
1500	*****	*****	★★	★★★	*****	★★★	*****	★★★
1800	*****	*****	★★	★★★	*****	★★★	*****	★★★
2100	*****	*****	★★	★★★	*****	★★★	*****	★★★
2400	*****	*****	★★	★★★	*****	★★★	*****	★★★

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING SEPTEMBER , 1980

DAY 28

DAY 29

DAY 30

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***

R&M CONSULTANTS, INC.

S' SITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING SEPTEMBER , 1980

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P*VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	01
02	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	02
03	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	03
04	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	04
05	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	05
06	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	06
07	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	07
08	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	08
09	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	09
10	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	10
11	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	11
12	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	12
13	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	13
14	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	14
15	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	15
16	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	16
17	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	17
18	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	18
19	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	19
20	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	20
21	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	21
22	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	22
23	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	23
24	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	24
25	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	25
26	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	26
27	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	27
28	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	28
29	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	29
30	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	30
MONTH	*****	*****	*****	***	*****	*****	***	*****	MSG	**	*****	*****	***	

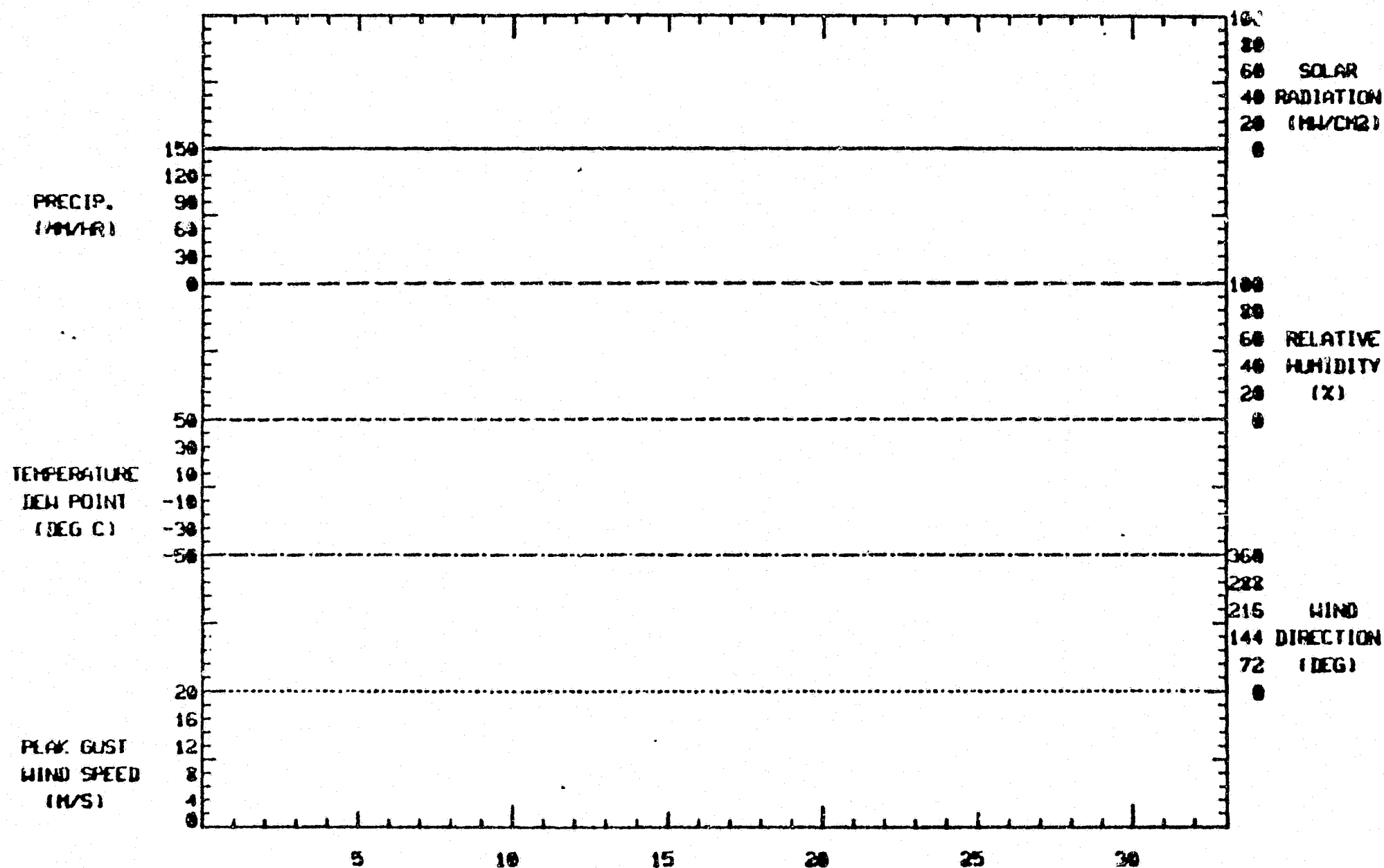
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS *****
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL *****
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL *****
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS *****

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

***** SEE GENERAL NOTES AT THE BACK OF THE REPORT *****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DEVIL CANYON WEATHER STATION

DATA START: 01 SEPTEMBER, 1980

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

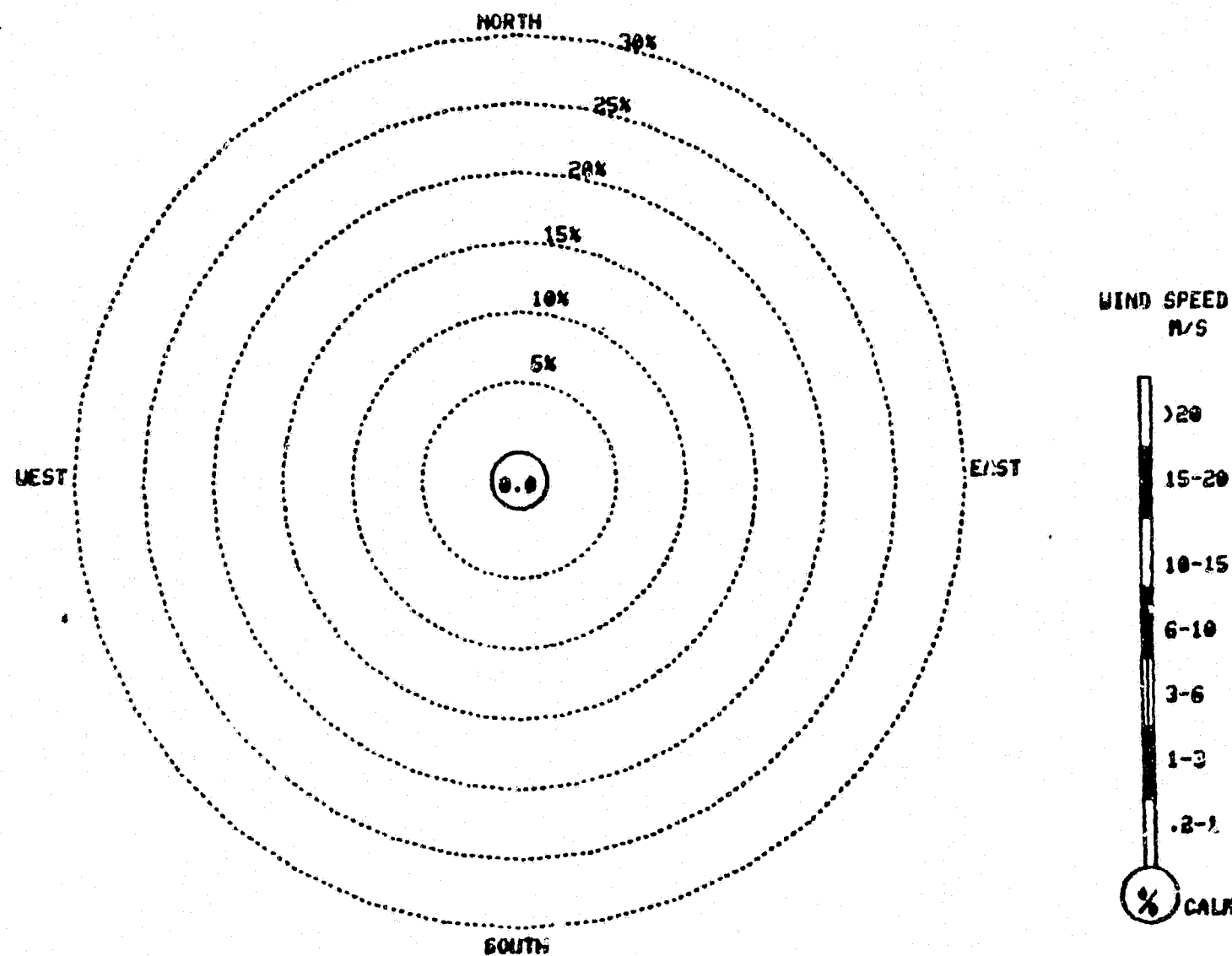
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING SEPTEMBER , 1980

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALM	-----	-----	-----	-----	-----	-----	-----	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

0 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
SEPTEMBER, 1980



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING OCTOBER , 1980

DAY 01

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	*****	*****	70	087	.2	037	1.9	022
0600	*****	*****	51	152	.4	118	3.2	035
0900	6.0	*****	44	125	1.4	103	5.1	012
1200	10.0	.2	65	188	1.0	188	2.5	001
1500	11.0	*****	82	163	1.0	141	3.2	001
1800	4.3	-1.8	47	193	.6	184	1.9	001
2100	1.7	*****						
2400	1.3	*****						

DAY 02

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	.7	*****	47	193	.2	162	1.9	001
0600	1.5	*****	73	089	.9	090	2.5	001
0900	2.1	*****	76	118	.3	098	1.9	006
1200	4.3	-15.2	23	336	.5	302	1.9	029
1500	4.4	-40.5	02	298	1.5	311	3.8	016
1800	1.6	-7.8	50	200	.7	319	3.2	001
2100	-.8	*****	49	157	1.1	169	2.5	001
2400	-2.0	*****	96	163	.1	116	1.3	001

DAY 03

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	-3.4	*****	00	101	0.0	132	.6	001
0600	-4.8	*****	00	090	0.0	090	.6	001
0900	-1.5	*****	96	068	0.0	102	.6	016
1200	3.7	*****	15	013	.5	019	2.5	025
1500	6.7	*****	58	017	.5	040	1.9	011
1800	4.8	-.9	67	125	.9	108	1.9	001
2100	2.4	*****	08	159	.7	144	1.9	001
2400	2.2	*****	08	220	.6	201	1.3	001

DAY 04

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	1.2	*****	28	171	.7	184	1.9	001
0600	.8	*****	37	117	.6	128	1.9	001
0900	3.3	-34.8	04	063	.9	035	3.2	027
1200	6.1	-1.6	58	117	1.7	106	6.8	***
1500	5.8	-2.4	56	103	2.4	102	7.0	011
1800	4.1	-2.4	63	088	2.1	067	5.7	001
2100	3.6	-4.0	58	127	1.5	094	4.4	001
2400	3.8	-4.3	56	162	1.1	144	3.8	001

DAY 05

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	5.4	-5.1	47	134	1.9	153	4.4	001
0600	4.2	-2.3	63	091	1.7	082	7.0	001
0900	1.8	-1.2	81	118	.8	094	5.1	004
1200	4.7	*****	35	316	.3	311	1.9	014
1500	5.6	*****	78	090	1.0	098	3.2	007
1800	4.6	*****	84	115	.9	119	3.2	001
2100	3.9	*****	12	187	.8	185	1.9	001
2400	2.6	*****	55	231	.9	256	3.2	001

DAY 06

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	1.8	*****	84	151	.6	151	1.9	001
0600	.9	-9.0	48	128	.9	077	2.5	001
0900	4.5	*****	55	171	.8	151	2.5	015
1200	8.9	.7	57	090	1.0	104	5.1	018
1500	8.7	1.3	60	107	3.1	107	7.0	007
1800	6.3	3.5	83	132	1.0	107	4.4	001
2100	8.4	2.1	65	170	1.3	142	3.2	001
2400	7.4	*****	80	111	1.4	099	5.7	001

DAY 07

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	5.1	*****	12	180	1.2	190	2.5	001
0600	4.7	-5.2	49	171	1.2	159	2.5	001
0900	7.7	*****	72	173	.6	179	1.9	014
1200	9.5	2.7	63	114	.3	015	2.5	015
1500	7.7	-.9	55	247	.4	253	2.5	007
1800	5.4	-27.7	07	265	1.4	250	3.2	001
2100	3.4	-2.4	66	306	1.8	317	4.4	001
2400	2.3	-3.1	68	257	1.0	259	3.2	001

DAY 08

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	.1	-7.5	57	252	.9	240	1.9	001
0600	-.7	-2.6	87	295	1.4	305	3.2	001
0900	-1.0	-10.5	49	302	1.1	302	3.2	002
1200	-.6	-24.9	14	308	1.2	311	3.2	010
1500	.1	-14.8	32	289	.9	266	3.2	005
1800	-.8	*****	92	265	1.0	273	2.5	001
2100	-1.2	*****	98	225	.4	211	1.3	001
2400	-1.7	*****	99	237	.5	256	1.9	001

DAY 09

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	MAX. GUST M/S	RAD MW
0300	-3.3	*****	98	155	.4	113	1.9	001
0600	-4.1	-4.4	98	090	.7	090	2.5	001
0900	-4.6	*****	90	073	.7	081	1.9	007
1200	-1.7	*****	79	039	.7	080	1.9	010
1500	-1.7	*****	80	269	.5	267	1.9	003
1800	-3.1	*****	93	184	.6	126	4.4	001
2100	-4.0	-4.8	94	254	.5	268	3.2	001
2400	-5.2	-5.7	96	166	.8	133	2.5	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING OCTOBER , 1980

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-5.8	-6.3	96	178	1.2	159	1.9	001
0600	-4.1	-4.4	98	254	1.1	274	3.8	001
0900	-2.9	*****	85	277	.8	298	3.2	006
1200	-1.2	*****	72	039	.3	045	1.9	009
1500	-1.6	-4.1	83	117	.9	151	3.2	003
1800	-3.5	-4.5	93	152	1.5	152	2.5	001
2100	-5.6	-7.1	89	123	1.4	133	3.2	001
2400	-6.8	-7.5	95	075	1.5	065	3.2	001

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-7.9	-9.0	92	066	1.2	084	3.2	001
0600	-8.3	-9.1	94	072	1.5	055	3.2	001
0900	-7.1	-9.7	82	071	1.5	079	3.2	012
1200	-4.2	-8.4	73	040	1.3	059	3.2	013
1500	-1.4	*****	65	072	.9	054	2.5	006
1800	-5.6	-8.4	81	142	1.4	151	3.2	001
2100	-8.1	-9.9	87	137	1.9	147	3.8	001
2400	-9.6	-10.8	91	103	1.3	106	3.2	001

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-10.8	-12.1	90	086	1.4	079	3.2	001
0600	-10.6	-12.1	89	058	1.4	076	3.2	001
0900	-8.4	-11.1	81	061	1.6	065	3.8	007
1200	-3.8	-9.5	65	063	1.4	056	3.8	020
1500	-1.6	-10.0	53	112	.9	101	2.5	004
1800	-6.2	-10.0	75	145	1.7	135	3.8	001
2100	-8.9	-11.3	83	113	1.4	129	2.5	001
2400	-10.4	-11.5	92	101	1.5	087	3.8	001

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-10.9	-12.4	89	084	2.0	090	3.2	001
0600	-11.3	-12.6	90	092	2.2	096	3.8	001
0900	-7.5	-11.4	74	103	1.9	110	3.8	020
1200	-2.6	-7.4	70	088	2.4	094	5.1	014
1500	-2.4	-7.6	68	088	2.3	091	5.1	***
1800	-4.2	-7.7	77	108	1.8	098	4.4	***
2100	-4.2	-7.3	79	132	1.8	123	3.2	***
2400	-3.9	-7.1	79	128	1.5	136	2.5	***

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-2.3	-5.8	77	144	1.1	145	2.5	***
0600	-2.9	-5.3	84	156	1.0	112	1.9	***
0900	.1	*****	71	161	1.0	177	1.9	***
1200	2.2	-3.8	65	117	1.1	142	3.2	***
1500	2.2	-5.1	59	107	3.1	099	8.3	***
1800	2.2	-4.4	62	108	3.4	109	7.6	***
2100	.5	-13.7	34	105	1.0	104	3.8	***
2400	1.5	-.5	67	147	1.2	115	3.2	***

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	1.6	.7	94	160	1.6	141	4.4	***
0600	1.0	*****	03	195	.8	201	2.5	***
0900	.9	*****	27	221	.6	221	2.5	***
1200	2.5	-35.4	04	291	1.2	266	4.4	***
1500	2.9	*****	87	293	1.0	321	4.4	***
1800	1.8	-2.8	72	239	.5	260	3.8	***
2100	1.7	-6.0	57	149	1.4	128	5.1	***
2400	.9	-5.6	62	260	1.4	263	5.1	***

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-1.9	*****	89	243	.1	247	3.8	***
0600	-2.5	*****	92	080	.1	129	.6	***
0900	-1.2	*****	64	094	.2	062	1.3	***
1200	*****	*****	61	115	1.9	104	5.1	***
1500	1.1	-7.5	53	105	1.9	110	3.8	***
1800	-1.9	-7.1	68	141	1.4	115	3.2	***
2100	-2.5	-5.5	80	172	1.4	186	2.5	***
2400	-2.3	-5.3	80	174	1.3	184	2.5	***

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-3.3	*****	79	176	1.2	181	2.5	***
0600	-2.3	-7.1	70	165	1.2	165	2.5	***
0900	-.3	*****	59	146	1.2	147	2.5	***
1200	3.0	-8.5	43	104	.3	120	4.4	***
1500	2.4	-8.7	44	109	2.8	115	5.7	***
1800	1.8	-6.4	55	100	2.2	097	6.3	***
2100	.9	-5.4	63	124	1.6	111	4.4	***
2400	1.5	-4.9	63	154	1.4	149	3.2	***

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	1.4	-4.5	65	154	1.5	149	2.5	***
0600	1.3	-4.0	68	154	1.4	169	2.5	***
0900	3.2	-4.1	59	130	1.4	107	3.8	***
1200	5.0	-4.2	52	106	1.8	103	4.4	***
1500	4.4	-4.5	53	110	1.7	113	4.4	***
1800	2.8	-3.2	65	140	1.4	109	3.2	***
2100	3.2	-2.6	66	146	1.1	133	3.2	***
2400	3.8	-2.7	63	158	1.1	138	3.2	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING OCTOBER , 1980

DAY 19

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	3.0	-2.8	66	158	1.1	130	1.9	***
0600	2.8	-3.4	64	146	1.7	145	3.2	***
0900	3.5	-4.3	57	159	1.5	168	2.5	***
1200	5.1	-5.7	46	104	2.6	094	7.0	***
1500	5.1	-5.4	47	101	3.5	105	8.9	***
1800	4.9	-5.9	46	103	3.3	112	7.6	***
2100	4.8	-6.3	45	114	2.5	106	6.3	***
2400	1.9	-7.8	49	144	1.4	111	3.8	***

DAY 20

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	.9	-8.5	50	162	1.2	157	2.5	***
0600	3.6	-7.4	45	165	1.3	135	4.4	***
0900	3.5	-7.7	44	138	1.6	134	4.4	***
1200	4.9	-7.1	42	106	1.4	114	5.7	***
1500	4.5	-7.1	43	100	1.5	111	4.4	***
1800	1.7	-.3	87	140	.3	314	3.8	***
2100	.5	-18.4	23	108	.5	101	2.5	***
2400	.6	-2.7	79	108	1.6	122	3.8	***

DAY 21

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	-.2	-1.2	93	131	1.1	141	3.2	***
0600	-2.9	-4.6	88	134	1.6	136	3.8	***
0900	-3.3	-4.9	89	086	1.7	081	3.2	***
1200	*****	*****	54	094	.6	119	2.5	***
1500	3.9	-6.0	49	102	2.0	108	7.6	***
1800	3.4	-6.7	48	098	2.1	087	6.3	***
2100	2.6	-8.0	46	120	2.1	113	5.7	***
2400	3.5	-7.7	44	118	2.3	110	8.3	***

DAY 22

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	3.3	-8.2	43	104	2.4	099	8.3	***
0600	3.0	-8.5	43	113	2.1	098	7.6	***
0900	4.9	-7.7	40	117	1.7	098	8.3	***
1200	6.0	-7.0	39	088	1.7	110	7.0	***
1500	5.3	-7.3	40	118	1.8	100	7.6	***
1800	3.1	*****	45	149	1.5	135	4.4	***
2100	1.8	-7.9	49	160	1.7	152	4.4	***
2400	1.4	*****	51	143	1.2	165	2.5	***

DAY 23

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	-1.3	-8.4	59	147	1.3	145	3.2	***
0600	3.2	*****	54	133	1.1	142	3.2	***
0900	5.7	-5.7	44	109	2.4	102	7.6	***
1200	7.6	-4.6	42	107	2.4	099	8.9	***
1500	6.8	-5.3	42	103	2.5	100	6.3	***
1800	3.9	-6.5	47	114	2.3	122	7.6	***
2100	3.6	-6.2	49	138	1.8	118	4.4	***
2400	3.6	-6.2	49	178	1.3	188	3.2	***

DAY 24

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	4.3	-5.9	48	131	1.8	109	7.0	***
0600	5.4	-5.4	46	118	2.1	116	6.3	***
0900	6.4	-4.5	46	145	1.8	115	5.7	***
1200	8.6	-4.4	40	115	2.8	128	5.7	***
1500	5.8	-5.3	45	119	2.3	103	5.7	***
1800	2.1	*****	57	156	1.3	158	3.2	***
2100	1.8	-4.6	63	161	1.1	147	3.2	***
2400	.9	-3.5	73	176	1.4	183	2.5	***

DAY 25

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	0.0	*****	78	169	1.2	156	2.5	***
0600	1.9	-3.5	68	176	1.3	176	2.5	***
0900	1.1	-4.0	69	189	1.1	185	3.2	***
1200	3.2	-3.7	61	242	.3	047	2.5	***
1500	4.0	*****	62	099	.7	100	3.2	***
1800	.6	-5.1	66	149	1.1	106	3.8	***
2100	-2.0	-5.2	79	123	1.5	130	3.8	***
2400	-2.7	-3.1	97	110	1.3	125	3.2	***

DAY 26

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	-5.1	*****	01	092	1.5	110	5.1	***
0600	-3.0	*****	99	156	.9	122	3.8	***
0900	-1.2	*****	88	145	1.0	125	3.2	***
1200	3.9	*****	49	196	.3	168	1.9	***
1500	2.6	-6.1	53	159	1.1	214	3.2	***
1800	-1.4	-5.5	74	174	1.2	185	2.5	***
2100	-.9	-5.0	74	162	1.3	178	2.5	***
2400	-1.8	*****	81	158	1.0	158	2.5	***

DAY 27

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	GUST MAX. M/S	RAD MW
0300	1.6	-6.3	56	155	1.2	153	3.2	***
0600	-.4	-6.9	62	136	1.3	143	4.4	***
0900	-2.4	*****	77	161	.8	174	2.5	***
1200	.6	-8.0	53	168	.2	114	2.5	***
1500	3.4	-9.1	40	111	1.7	087	5.7	***
1800	-.2	-10.6	46	137	1.1	102	4.4	***
2100	.2	-9.9	47	131	2.1	127	6.3	***
2400	-1.6	-8.0	62	166	1.3	166	4.4	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING OCTOBER , 1980

DAY 28

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
DEG C	DEG C	%	DEG.	M/S	DEG. M/S
0300	-1.9	*****	78	184	1.4
0600	-1.4	*****	92	149	.8
0900	0.0	*****	91	118	.7
1200	.2	*****	03	078	.5
1500	.1	*****	02	002	.5
1800	-1.9	*****	14	282	.6
2100	-1.6	*****	02	293	1.2
2400	-1.6	*****	99	273	.7

DAY 29

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
DEG C	DEG C	%	DEG.	M/S	DEG. M/S
0300	-2.3	*****	99	277	.8
0600	-2.5	*****	00	257	.6
0900	-1.9	*****	97	175	.2
1200	-1.6	*****	96	007	.3
1500	-1.3	*****	93	015	.3
1800	-2.3	*****	99	188	.2
2100	-2.7	*****	99	189	.3
2400	-2.8	*****	99	139	.5

DAY 30

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
DEG C	DEG C	%	DEG.	M/S	DEG. M/S
0300	-3.2	*****	00	077	.3
0600	-3.3	-112.	00	077	.8
0900	-4.5	-4.8	98	096	1.0
1200	-1.6	*****	70	102	.9
1500	-3.5	-4.9	90	142	1.3
1800	-7.4	-8.4	93	138	1.8
2100	-9.0	-9.5	96	088	1.5
2400	-10.7	-10.8	99	086	1.9

DAY 31

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
DEG C	DEG C	%	DEG.	M/S	DEG. M/S
0300	-11.8	-12.4	95	095	1.6
0600	-12.7	*****	93	117	.8
0900	-13.1	-14.1	92	109	1.2
1200	-5.7	-10.7	68	123	.6
1500	-4.2	-8.2	74	147	1.0
1800	-5.8	-9.9	73	153	2.1
2100	-8.4	-11.8	77	144	2.0
2400	-8.3	-11.7	77	155	1.6

DAY 31

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
DEG C	DEG C	%	DEG.	M/S	DEG. M/S
0300	*****	*****	**	***	****
0600	*****	*****	**	***	****
0900	*****	*****	**	***	****
1200	*****	*****	**	***	****
1500	*****	*****	**	***	****
1800	*****	*****	**	***	****
2100	*****	*****	**	***	****
2400	*****	*****	**	***	****

DAY 31

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
DEG C	DEG C	%	DEG.	M/S	DEG. M/S
0300	*****	*****	**	***	****
0600	*****	*****	**	***	****
0900	*****	*****	**	***	****
1200	*****	*****	**	***	****
1500	*****	*****	**	***	****
1800	*****	*****	**	***	****
2100	*****	*****	**	***	****
2400	*****	*****	**	***	****

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING OCTOBER, 1980

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	11.2	1.2	6.2	159	.8	1.0	103	5.1	S	56	-1.8	****	2427	01
02	4.5	-3.0	.8	192	.1	.8	311	3.8	SSE	45	-21.2	****	1245	02
03	6.7	-4.9	.9	118	.1	.5	019	2.5	E	63	-.9	****	1560	03
04	6.4	.6	3.5	113	1.2	1.5	102	7.0	ESE	58	-8.3	****	1872	04
05	5.8	1.8	3.8	125	.7	1.2	082	7.0	E	59	-2.9	****	983	05
06	9.1	.9	5.0	125	1.1	1.4	107	7.0	ESE	66	-.3	****	1313	06
07	9.5	2.3	5.9	236	.6	1.1	317	4.4	S	36	-6.1	****	1040	07
08	2.0	-1.8	.1	282	.8	1.0	305	3.2	W	42	-12.1	****	563	08
09	-1.1	-5.2	-3.2	137	.2	.8	126	4.4	ENE	92	-5.0	****	763	09
10	-.1	-6.8	-3.5	143	.5	1.3	274	3.8	SSE	89	-5.7	****	780	10
11	-1.4	-9.7	-5.6	090	1.1	1.5	147	3.8	ENE	84	-9.3	****	1170	11
12	-1.3	-10.9	-6.1	092	1.2	1.5	065	3.8	E	80	-11.0	****	1338	12
13	-2.1	-11.7	-6.9	101	1.9	2.0	094	5.1	E	80	-9.2	****	1734	13
14	2.8	-3.8	-.5	122	1.5	1.7	099	8.3	ESE	65	-5.5	****	***	14
15	3.4	.4	1.9	222	.6	1.3	128	5.1	W	56	-9.8	****	***	15
16	1.5	-2.8	-.7	139	.8	1.0	104	5.1	ESE	66	-6.4	****	***	16
17	3.3	-4.6	-.7	130	1.3	1.6	097	6.3	ESE	60	-6.8	****	***	17
18	5.3	.8	3.1	135	1.3	1.5	103	4.4	SSE	61	-3.7	****	***	18
19	5.4	1.6	3.5	119	2.0	2.3	105	8.9	ESE	52	-5.2	****	***	19
20	6.0	.2	3.1	127	1.1	1.4	114	5.7	ESE	47	-7.4	****	***	20
21	3.9	-3.7	.1	111	1.6	1.8	110	8.3	ESE	61	-5.6	****	***	21
22	6.8	-.8	3.0	122	1.6	1.9	099	8.3	ESE	43	-7.8	****	***	22
23	8.0	-1.6	3.2	122	1.8	2.0	099	8.9	ESE	47	-6.2	****	***	23
24	8.6	-.1	4.3	135	1.7	2.0	109	7.0	ESE	52	-4.8	****	***	24
25	4.6	-2.5	1.1	149	.9	1.2	106	3.8	S	72	-4.1	****	***	25
26	4.3	-5.6	-.7	150	.9	1.2	110	5.1	S	72	-5.5	****	***	26
27	4.2	-2.5	.8	140	1.2	1.4	127	6.3	SE	51	-8.4	****	***	27
28	1.0	-2.3	-.7	216	.2	.9	101	3.8	W	51	-13.4	****	***	28
29	-1.0	-2.8	-1.9	246	.1	.4	286	2.5	S	49	*****	****	***	29
30	-1.5	-10.7	-6.1	105	1.1	1.2	089	3.8	ENE	83	-25.1	****	***	30
31	-3.5	-13.4	-8.5	134	1.3	1.5	093	3.8	SSE	82	-11.3	****	***	31
MONTH	11.2	-13.4	.2	127	.9	1.3	105	8.9	ESE	62	-7.6	****	16785	

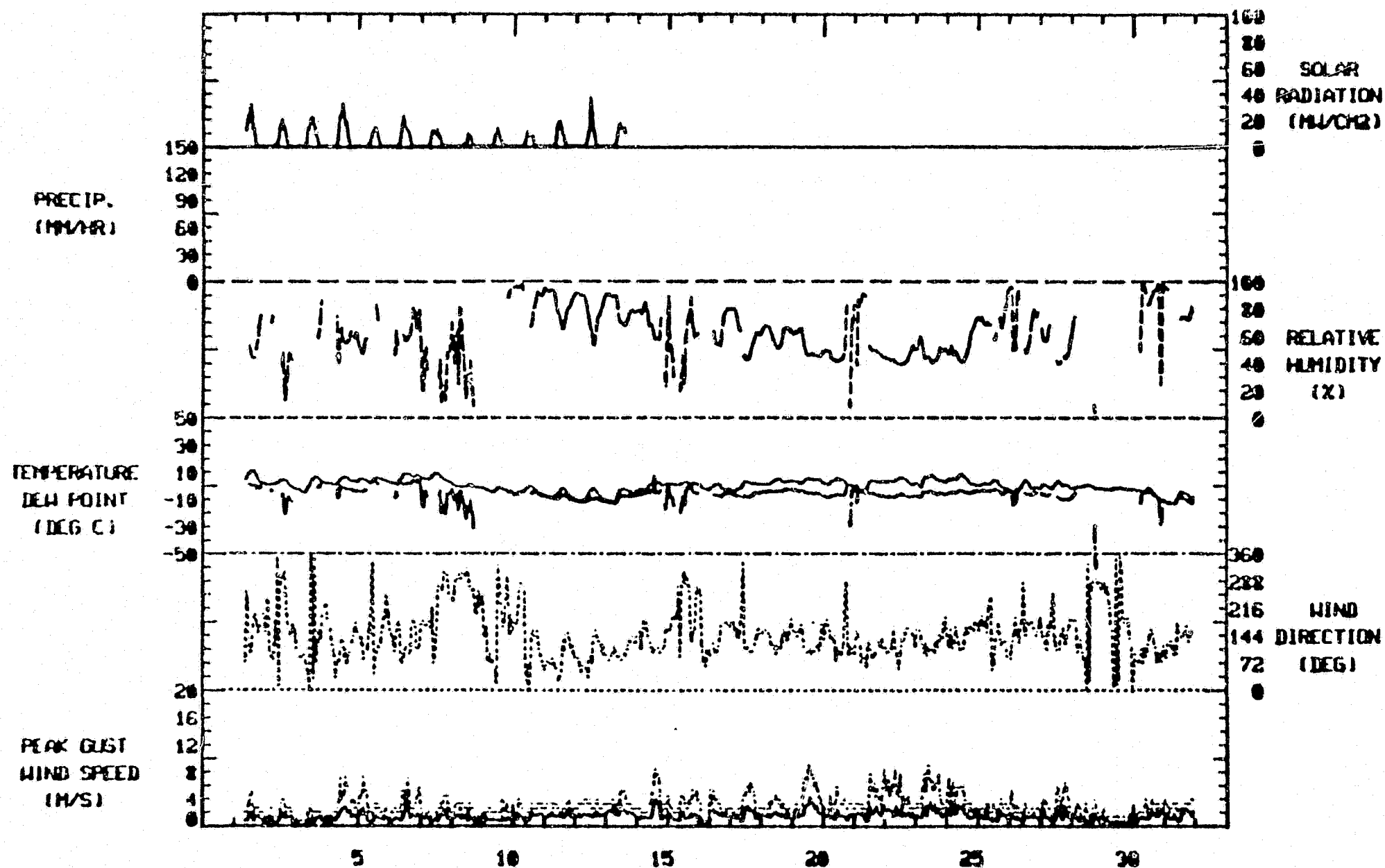
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 5.1
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 6.3
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 6.3
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 7.0

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 OCTOBER , 1980

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

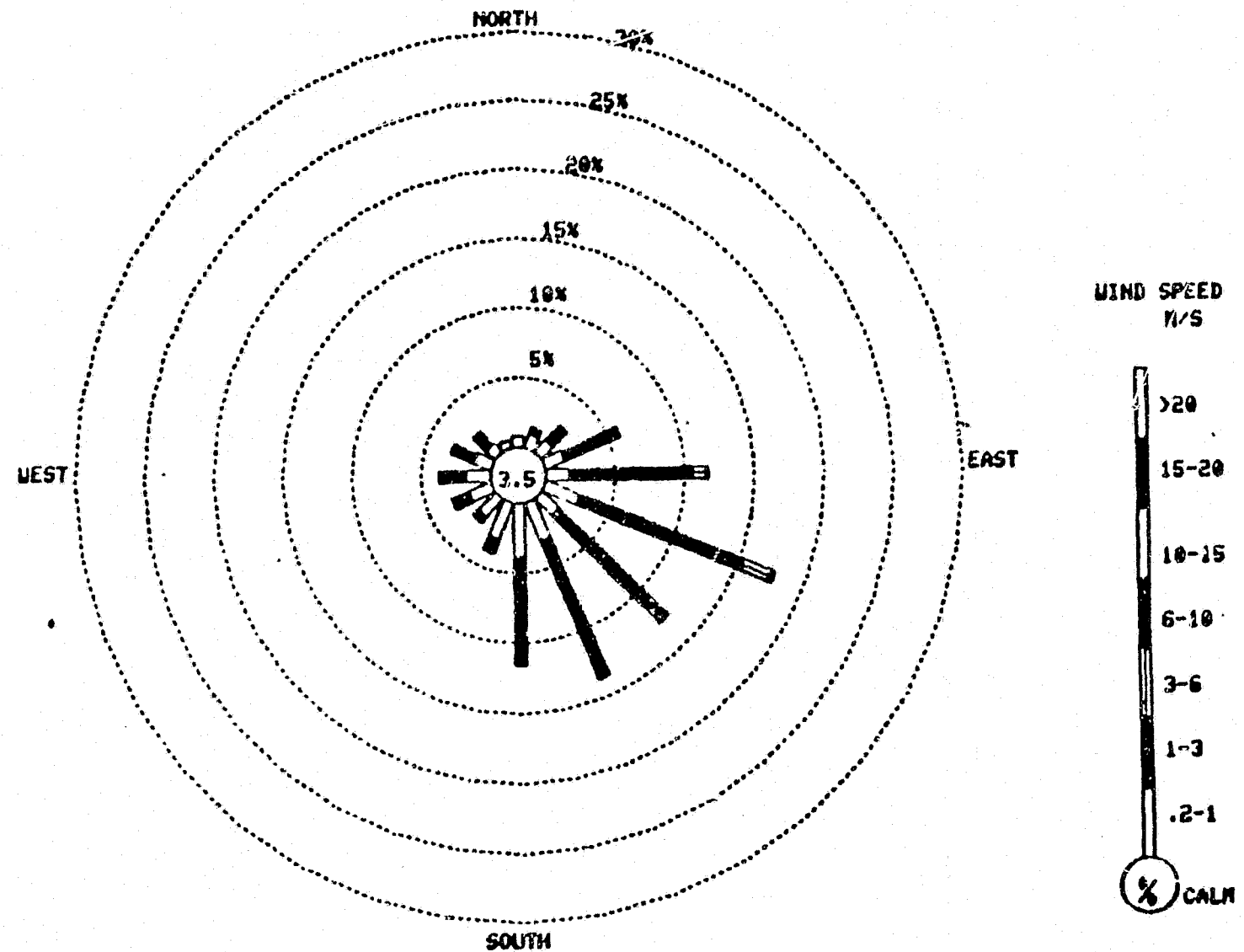
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING OCTOBER , 1980

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	.75	.07	0.00	0.00	0.00	0.00	0.00	.82
NNE	1.06	.51	0.00	0.00	0.00	0.00	0.00	1.57
NE	1.16	1.50	0.00	0.00	0.00	0.00	0.00	2.66
ENE	1.47	4.29	.03	0.00	0.00	0.00	0.00	5.79
E	1.67	8.76	1.16	.03	0.00	0.00	0.00	11.62
ESE	2.59	12.61	2.42	.03	.03	0.00	0.00	17.68
SE	1.70	10.66	.24	0.00	0.00	0.00	0.00	12.61
SSE	2.93	10.66	0.00	0.00	0.00	0.00	0.00	13.59
S	3.62	7.67	0.00	0.00	0.00	0.00	0.00	11.48
SSW	2.76	1.02	0.00	0.00	0.00	0.00	0.00	3.78
SW	1.74	.51	0.00	0.00	0.00	0.00	0.00	2.25
WSW	1.77	1.29	0.00	0.00	0.00	0.00	0.00	3.07
W	1.84	1.81	0.00	0.00	0.00	0.00	0.00	3.65
WNW	1.36	1.74	0.00	0.00	0.00	0.00	0.00	3.10
NW	.87	1.29	0.00	0.00	0.00	0.00	0.00	2.18
NNW	.55	.07	0.00	0.00	0.00	0.00	0.00	.61
CALM								3.54
TOTAL	28.04	64.46	3.85	.07	.03	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2935 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
OCTOBER, 1980



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING NOVEMBER , 1980

DAY 01

DAY 02

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-2.4	-11.4	79	133	1.6	150	3.8	***	0300	-5.8	-9.4	76	128	1.9	137	3.2	***	0300	-5.7	-7.9	85	082	1.9	084	3.8	***
0600	-7.5	-11.4	74	103	1.4	098	3.2	***	0600	-6.7	-9.8	79	135	1.8	146	3.2	***	0600	-6.5	-7.9	90	085	1.8	081	3.6	***
0900	-8.1	-12.3	72	112	2.2	103	4.4	***	0900	-6.7	-9.8	79	113	1.6	116	3.2	***	0900	-6.5	-7.6	92	100	1.1	076	3.8	***
1200	-2.9	-10.6	56	117	1.6	145	3.8	***	1200	-4.2	-8.9	70	071	1.3	068	3.2	***	1200	-3.4	*****	84	079	1.1	068	3.2	***
1500	-3.3	-9.6	62	135	2.4	135	4.4	***	1500	-4.3	-8.7	72	116	2.2	120	4.4	***	1500	1.4	-2.2	77	092	.6	080	3.2	***
1800	-5.6	-10.1	71	132	1.4	135	3.2	***	1800	-3.7	-7.2	77	131	2.1	141	4.4	***	1800	.7	-3.3	75	149	1.2	146	6.3	***
2100	-4.5	*****	79	128	.9	130	1.9	***	2100	-3.6	-7.3	76	116	1.7	125	4.4	***	2100	1.2	-4.5	66	159	1.5	166	3.2	***
2400	-4.4	-8.8	72	121	1.4	122	2.5	***	2400	-4.7	-7.8	79	112	1.9	126	3.8	***	2400	.8	-4.7	67	138	1.1	153	2.5	***

DAY 04

DAY 05

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-.4	-4.3	75	130	1.8	115	3.2	***	0300	.2	-11.6	41	140	.8	124	2.5	***	0300	-1.6	-1.9	98	***	****	***	0.0	***
0600	-1.2	-4.6	78	118	1.8	113	3.8	***	0600	.9	-16.6	26	125	.8	140	2.5	***	0600	-3.0	-3.3	98	***	****	***	0.0	***
0900	-.9	-3.5	83	138	1.7	148	3.8	***	0900	1.0	*****	15	126	.9	126	2.5	***	0900	-3.3	-3.6	98	***	****	***	0.0	***
1200	.6	*****	66	145	1.4	144	3.2	***	1200	1.1	*****	27	080	.5	131	2.5	***	1200	-1.6	-2.6	93	***	****	***	0.0	***
1500	3.9	-3.3	60	129	1.5	116	5.1	***	1500	.9	*****	28	067	.6	090	2.5	***	1500	-1.6	-2.5	94	***	****	***	1.9	***
1800	1.9	-1.8	77	157	1.2	125	3.2	***	1800	.1	-16.0	29	056	.7	037	1.3	***	1800	-2.0	-2.4	97	***	****	***	.6	***
2100	2.3	-1.6	76	175	1.3	186	2.5	***	2100	-.3	-1.8	90	***	****	***	0.0	***	2100	-2.2	-50.4	01	***	****	***	0.0	***
2400	.9	*****	98	128	1.6	124	4.4	***	2400	-1.0	-2.9	87	***	****	***	0.0	***	2400	-2.7	-45.1	02	***	****	***	.6	***

DAY 07

DAY 08

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-4.1	-51.6	01	***	****	***	.6	***	0300	-8.8	-12.0	78	***	****	***	.6	***	0300	-11.3	-16.5	66	***	****	***	.6	***
0600	-5.8	-5.9	99	***	****	***	.6	***	0600	-8.2	-11.9	75	***	****	***	.6	***	0600	-13.4	-16.5	78	***	****	***	.6	***
0900	-4.2	-11.3	00	***	****	***	.6	***	0900	-7.9	-13.0	67	***	****	***	.6	***	0900	-15.3	-18.9	79	***	****	***	0.0	***
1200	-2.9	-3.3	97	***	****	***	.6	***	1200	-5.3	-13.0	55	***	****	***	.6	***	1200	-12.7	-16.4	74	***	****	***	0.0	***
1500	-1.6	-2.7	92	***	****	***	.6	***	1500	-5.9	-13.1	57	***	****	***	.6	***	1500	-10.0	-15.2	66	***	****	***	.6	***
1800	-5.0	-7.2	85	***	****	***	.6	***	1800	-8.9	-14.0	67	***	****	***	.6	***	1800	-12.0	-15.9	73	***	****	***	0.0	***
2100	-7.0	-9.6	82	***	****	***	.6	***	2100	-9.3	-14.6	66	***	****	***	.6	***	2100	-12.8	-15.6	80	***	****	***	.6	***
2400	-9.1	-11.2	85	***	****	***	.6	***	2400	-10.6	-16.2	64	***	****	***	0.0	***	2400	-10.2	-14.9	69	***	****	***	.6	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING NOVEMBER , 1980

DAY 19

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-3.5	-6.3	81	111	1.1	129
0600	-3.9	-6.1	85	137	1.7	129
0900	-2.5	*****	87	116	.9	056
1200	.4	-4.5	70	139	.9	143
1500	-.5	-5.6	69	137	1.4	143
1800	-.7	-5.9	68	127	1.5	129
2100	-.6	-6.9	63	164	1.6	155
2400	.2	-10.2	46	147	1.4	122

DAY 20

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	.9	-11.0	41	153	1.6	152
0600	-1.3	*****	53	136	.9	161
0900	-1.4	-9.4	55	128	1.2	132
1200	-3.0	-3.3	98	106	1.3	089
1500	-3.3	-3.9	96	079	.9	083
1800	-4.1	-4.9	94	104	1.7	107
2100	-4.2	-5.0	94	116	1.9	129
2400	-5.0	-5.3	98	101	1.6	097

DAY 21

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-5.1	-6.1	93	087	1.3	104
0600	-6.3	-6.4	99	072	1.4	070
0900	-7.0	-7.5	96	063	1.6	062
1200	-6.3	-7.7	90	066	2.0	077
1500	-6.5	-8.2	88	070	1.7	058
1800	-8.4	-9.2	94	078	2.3	080
2100	-8.2	-9.0	94	083	1.4	065
2400	-7.8	-8.5	95	103	1.2	081

DAY 22

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-5.8	-7.3	89	121	1.4	104
0600	-4.2	-6.2	86	143	1.0	155
0900	-1.9	-5.4	77	154	1.0	116
1200	.1	-6.6	61	126	1.8	102
1500	.4	-7.5	56	107	1.9	108
1800	-2.1	-6.5	72	168	1.2	152
2100	-3.5	-7.9	72	153	1.1	111
2400	-5.6	-7.4	87	105	1.5	126

DAY 23

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-4.4	-6.9	83	086	1.4	084
0600	-4.9	-5.6	95	071	1.5	078
0900	-4.4	-6.1	88	095	1.5	096
1200	-2.2	*****	78	066	1.3	080
1500	-1.9	-5.8	75	111	1.6	115
1800	-4.5	-6.8	84	133	1.6	103
2100	-3.8	-5.8	86	138	1.4	160
2400	-1.4	-5.0	77	136	1.9	120

DAY 24

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	.3	-7.3	57	105	4.2	100
0600	2.1	-9.6	42	104	2.3	092
0900	2.7	-9.4	41	106	1.9	122
1200	2.6	-8.0	46	111	1.2	099
1500	-.5	*****	76	189	.7	161
1800	-1.4	-5.0	77	114	1.1	135
2100	-3.9	-5.5	89	116	1.2	105
2400	-1.4	-2.3	94	133	1.0	113

DAY 25

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-1.7	-4.1	84	142	1.1	143
0600	-1.8	-3.9	86	152	1.6	154
0900	-2.5	-4.2	88	156	1.2	151
1200	-.4	*****	76	166	1.0	187
1500	-.1	*****	75	153	.6	113
1800	-1.3	-4.0	82	150	1.3	154
2100	-1.3	-3.9	83	149	1.3	129
2400	-2.3	*****	89	154	1.0	146

DAY 26

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-1.7	-4.2	83	155	.8	151
0600	-2.7	-3.1	97	150	.9	127
0900	-4.5	-5.3	94	149	1.3	157
1200	-2.2	-5.2	80	137	1.0	127
1500	-4.9	*****	90	171	.8	163
1800	-4.5	-6.2	88	105	1.3	128
2100	-.8	*****	94	110	1.5	113
2400	-.6	-4.2	77	119	1.5	089

DAY 27

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
0300	-.7	*****	74	119	.9	107
0600	-2.8	*****	04	163	.4	138
0900	-3.5	*****	04	191	.4	200
1200	-2.7	-3.0	98	089	.3	087
1500	-3.1	*****	99	047	.3	059
1800	-4.1	*****	00	125	.6	103
2100	-4.8	-5.6	94	147	1.3	144
2400	-5.1	-5.8	95	151	1.3	140

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING NOVEMBER , 1980

DAY 28

DAY 29

DAY 30

HOUR									HOUR									HOUR								
NDNG	TEMP.	DEW	RH	WIND	WIND	GUST	MAX.	RAD	NDNG	TEMP.	DEW	RH	WIND	WIND	GUST	MAX.	RAD	NDNG	TEMP.	DEW	RH	WIND	WIND	GUST	MAX.	RAD
	DEG C	POINT	%	DIR.	SPD.	DIR.	GUST	MW		DEG C	POINT	%	DIR.	SPD.	DIR.	GUST	MW		DEG C	POINT	%	DIR.	SPD.	DIR.	GUST	MW
		DEG C		DEG.	M/S	DEG.	M/S				DEG C		DEG.	M/S	DEG.	M/S				DEG C		%	DEG.	M/S	DEG.	M/S
0300	-5.8	-7.1	91	132	1.7	111	3.2	***	0300	-12.6	-15.2	81	090	1.7	097	3.2	***	0300	-17.3	-20.7	75	075	2.8	069	4.4	***
0600	-6.5	*****	98	113	1.3	120	3.2	***	0600	-15.1	-16.0	93	099	1.8	090	4.4	***	0600	-17.5	-20.7	76	076	2.9	075	5.1	***
0900	-6.5	-6.9	97	095	.9	124	2.5	***	0900	-15.3	-16.2	93	118	1.3	122	3.2	***	0900	-16.8	-20.7	72	085	2.9	079	4.4	***
1200	-5.2	-6.6	90	107	.7	134	2.5	***	1200	-15.0	-17.1	84	099	1.3	091	3.2	***	1200	-15.7	-19.5	73	083	2.1	087	3.8	***
1500	-5.2	-8.0	81	119	1.7	114	3.8	***	1500	-14.3	-16.7	82	080	2.1	074	4.4	***	1500	-14.3	-18.5	71	083	1.7	090	3.8	***
1800	-5.4	-11.2	64	120	1.7	113	3.2	***	1800	-15.9	-18.6	80	068	2.5	067	5.1	***	1800	-13.2	-17.2	72	089	1.9	093	3.8	***
2100	-6.7	-12.1	66	148	1.3	121	3.8	***	2100	-16.8	-19.8	78	070	3.0	084	5.7	***	2100	-13.6	-17.5	73	093	2.1	089	4.4	***
2400	-10.1	-13.4	77	113	1.5	099	3.2	***	2400	-17.6	-21.0	75	077	3.4	080	5.7	***	2400	-14.0	*****	76	101	1.4	096	3.8	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING NOVEMBER , 1980

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	-2.5	-10.6	-6.6	123	1.6	1.7	103	4.4	ESE	70	-10.6	****	***	01
02	-3.6	-7.3	-5.4	118	1.7	1.9	120	4.4	ESE	76	-8.6	****	***	02
03	1.7	-6.9	-2.6	109	1.1	1.4	146	6.3	E	80	-5.4	****	***	03
04	4.2	-2.2	1.0	138	1.5	1.6	116	5.1	SE	76	-3.2	****	***	04
05	1.8	-1.0	.4	110	.6	.8	124	2.5	SE	49	-9.8	****	***	05
06	-1.8	-3.6	-2.2	***	****	****	***	1.9	MSG	77	-14.0	****	***	06
07	-1.6	-9.1	-5.4	***	****	****	***	.6	MSG	67	-25.5	****	***	07
08	-4.9	-11.3	-8.1	***	****	****	***	.6	MSG	68	-13.5	****	***	08
09	-9.2	-15.4	-12.3	***	****	****	***	.6	MSG	72	-16.1	****	***	09
10	-4.8	-10.3	-7.6	***	****	1.8	113	4.4	ESE	63	-12.9	****	***	10
11	-1.7	-10.1	-5.9	132	1.6	1.7	117	4.4	SE	58	-11.0	****	***	11
12	-1.3	-11.1	-6.2	120	1.8	1.9	107	7.0	ESE	61	-10.2	****	***	12
13	-.2	-8.6	-4.4	115	1.3	1.5	131	3.8	SE	85	-6.5	****	***	13
14	-6.4	-12.3	-9.4	094	1.7	1.7	100	4.4	E	90	-10.4	****	***	14
15	.1	-10.1	-5.0	132	1.2	1.3	105	6.3	SE	83	-6.2	****	***	15
16	.4	-5.5	-2.6	115	1.4	1.6	101	7.0	ESE	81	-4.7	****	***	16
17	-2.9	-6.4	-4.6	089	.9	1.2	115	3.2	NE	61	-15.9	****	***	17
18	-.6	-6.3	-3.5	151	1.2	1.3	136	3.2	SE	79	-7.1	****	***	18
19	2.1	-5.2	-1.5	137	1.3	1.4	122	5.1	SE	71	-6.5	****	***	19
20	1.4	-5.0	-1.8	116	1.3	1.5	152	3.8	ESE	73	-6.1	****	***	20
21	-4.9	-9.1	-7.0	076	1.6	1.7	062	3.8	ENE	92	-7.8	****	***	21
22	.8	-7.8	-3.5	130	1.3	1.5	102	6.3	ESF	74	-6.9	****	***	22
23	-1.1	-5.1	-3.1	106	1.4	1.6	120	5.1	E	84	-6.0	****	***	23
24	3.2	-4.3	-.6	112	1.6	1.8	100	10.2	ESE	61	-6.7	****	***	24
25	.4	-4.0	-1.8	152	1.1	1.2	143	3.2	SSE	83	-4.0	****	***	25
26	-.4	-5.4	-2.9	133	1.1	1.2	113	5.1	SE	84	-4.7	****	***	26
27	-.7	-5.1	-2.9	139	.6	.8	107	3.2	SE	91	-4.8	****	***	27
28	-5.0	-10.1	-7.6	120	1.3	1.4	114	3.8	ESE	81	-9.3	****	***	28
29	-10.3	-17.6	-13.9	083	2.1	2.2	084	5.7	ENE	83	-17.6	****	***	29
30	-12.6	-18.1	-15.4	084	2.2	2.2	075	5.1	E	74	-19.3	****	***	30
MONTH	4.2	-18.1	-5.1	115	1.3	1.5	100	10.2	ESE	75	-9.7	****	***	

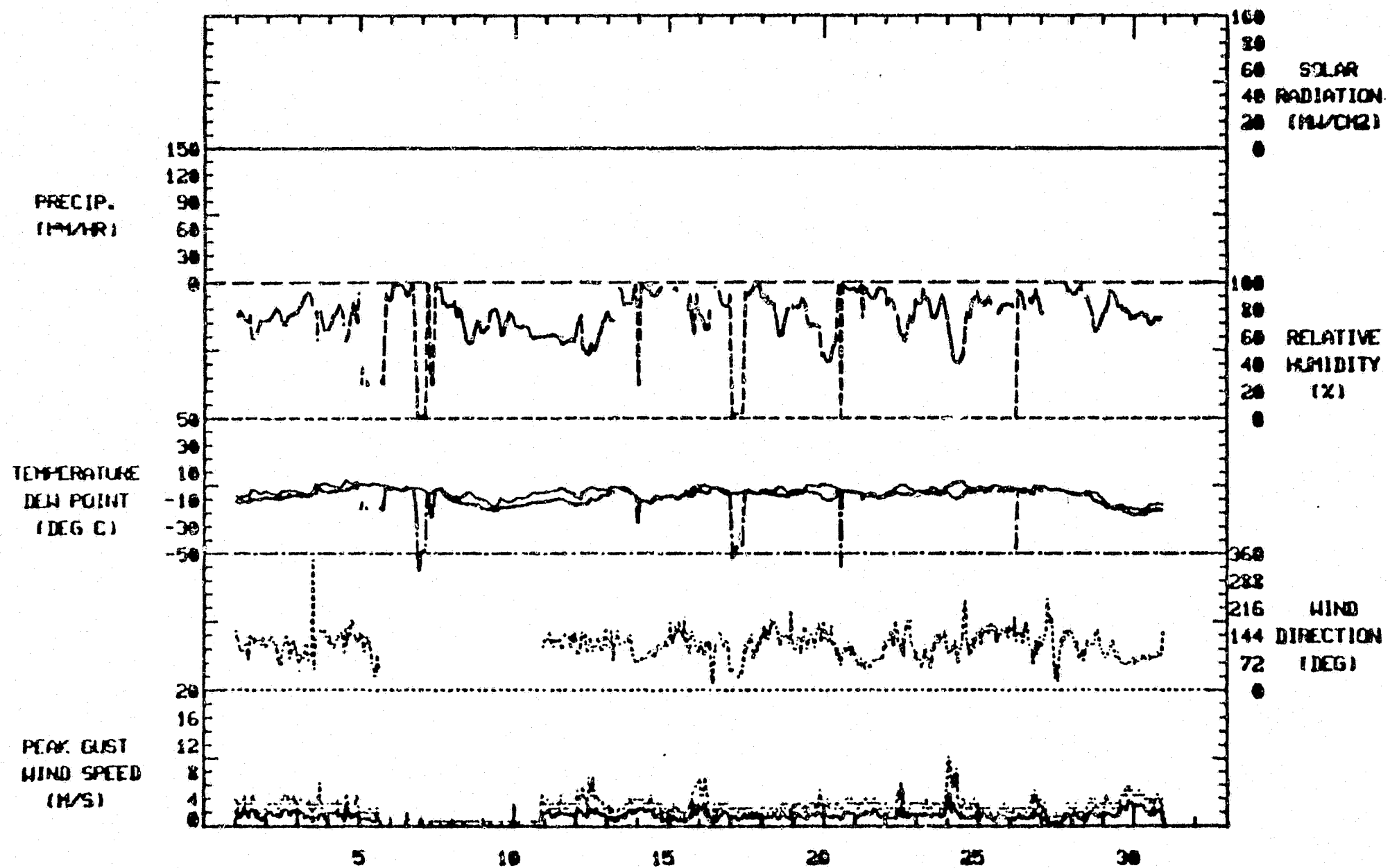
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 6.3
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 8.9
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 5.7
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 8.9

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RIM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 NOVEMBER, 1980

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

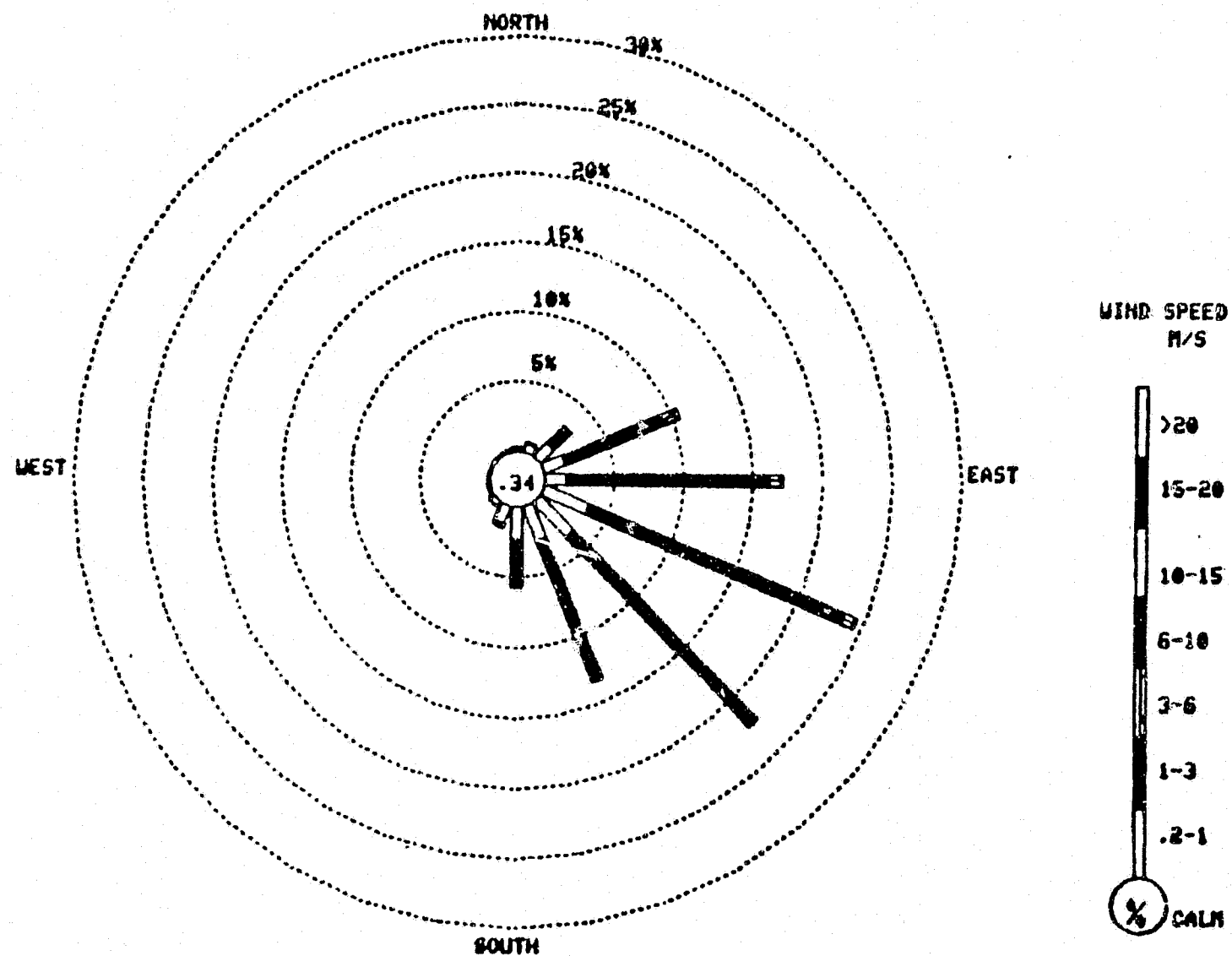
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING NOVEMBER , 1980

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	.21	.04	0.00	0.00	0.00	0.00	0.00	.25
NNE	.59	.17	0.00	0.00	0.00	0.00	0.00	.76
NE	1.35	1.77	0.00	0.00	0.00	0.00	0.00	3.11
ENE	1.60	7.61	1.26	0.00	0.00	0.00	0.00	10.47
E	1.56	14.50	1.01	0.00	0.00	0.00	0.00	17.07
ESE	3.49	19.84	1.01	0.00	0.00	0.00	0.00	24.34
SE	3.40	18.54	.25	0.00	0.00	0.00	0.00	22.19
SSE	2.56	10.80	0.00	0.00	0.00	0.00	0.00	13.37
S	2.23	3.40	0.00	0.00	0.00	0.00	0.00	5.63
SSW	1.30	.25	0.00	0.00	0.00	0.00	0.00	1.56
SW	.42	0.00	0.00	0.00	0.00	0.00	0.00	.42
WSW	.13	.04	0.00	0.00	0.00	0.00	0.00	.17
W	0.00	.08	0.00	0.00	0.00	0.00	0.00	.08
WNW	.04	0.00	0.00	0.00	0.00	0.00	0.00	.04
NW	.08	0.00	0.00	0.00	0.00	0.00	0.00	.08
NNW	.13	0.00	0.00	0.00	0.00	0.00	0.00	.13
CALM								.34
TOTAL	19.08	77.05	3.53	0.00	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2379 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
NOVEMBER, 1980



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING DECEMBER , 1980

DAY 01

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-11.0	-18.1	56	099	1.7	097	3.2	***
0600	-10.5	-18.6	52	120	2.1	128	4.4	***
0900	-11.6	-19.4	53	122	1.9	137	3.8	***
1200	-12.1	-19.8	53	118	2.7	122	5.1	***
1500	-12.7	-19.9	55	133	3.3	139	5.7	***
1800	-13.6	-20.4	57	121	3.5	136	5.7	***
2100	-14.3	-20.6	59	107	2.3	137	5.1	***
2400	-14.3	-20.2	61	092	2.1	106	4.4	***

DAY 02

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-15.1	-20.6	63	087	2.5	099	5.1	***
0600	-16.8	-21.0	70	056	1.9	046	4.4	***
0900	-14.4	-20.3	61	061	2.2	048	5.1	***
1200	-15.3	-20.3	66	061	2.3	049	5.1	***
1500	-14.7	-20.4	62	082	2.1	095	5.7	***
1800	-13.9	-19.9	61	073	1.8	102	5.1	***
2100	-15.4	-20.2	67	076	2.0	094	5.7	***
2400	-15.9	-20.2	70	055	2.4	062	4.4	***

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-14.4	-19.4	66	058	2.3	053	5.1	***
0600	-16.6	-20.5	72	057	2.1	059	5.1	***
0900	-15.7	-19.8	71	056	2.4	049	5.1	***
1200	-14.3	-19.0	68	063	2.4	061	4.4	***
1500	-13.7	-18.2	69	064	2.1	072	4.4	***
1800	-14.4	-18.2	73	067	2.0	077	3.8	***
2100	-12.9	-17.8	67	081	2.0	115	4.4	***
2400	-12.8	-17.9	66	102	2.1	122	4.4	***

DAY 04

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-13.5	-18.6	66	109	2.1	109	5.1	***
0600	-13.8	-18.7	67	111	2.5	126	5.7	***
0900	-14.3	-19.1	67	097	2.0	109	5.7	***
1200	-13.8	-19.0	65	107	2.2	118	5.1	***
1500	-13.7	-18.4	68	095	1.6	130	4.4	***
1800	-15.8	-19.3	75	064	1.6	063	3.8	***
2100	-16.7	-19.8	77	061	2.0	069	3.8	***
2400	-17.6	-20.2	80	060	1.8	054	3.2	***

DAY 05

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-18.0	-20.5	81	060	1.7	083	3.8	***
0600	-17.7	-20.1	82	064	2.0	078	4.4	***
0900	-19.3	-21.5	83	066	2.4	076	4.4	***
1200	-17.1	-19.6	81	069	2.5	062	4.4	***
1500	-15.2	-17.9	80	065	2.0	066	3.8	***
1800	-14.7	-17.6	79	073	2.1	067	3.8	***
2100	-13.4	-16.6	77	065	2.0	060	3.8	***
2400	-12.4	-16.5	72	070	1.8	066	3.8	***

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-13.4	-17.1	74	115	1.5	114	4.4	***
0600	-15.0	-17.4	82	085	1.7	105	3.8	***
0900	-18.2	-19.2	92	093	1.9	096	4.4	***
1200	-18.0	-20.9	78	115	1.7	101	4.4	***
1500	-20.1	-22.0	85	114	1.1	129	3.2	***
1800	-18.7	-23.0	69	095	1.9	082	4.4	***
2100	-14.9	-23.3	49	131	1.7	136	4.4	***
2400	-18.9	-23.4	68	129	1.4	146	3.8	***

DAY 07

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-17.2	*****	63	088	2.0	092	3.2	***
0600	-11.8	-22.2	42	136	2.5	128	6.3	***
0900	-11.7	-22.7	40	148	1.8	151	6.3	***
1200	-9.6	-25.6	26	116	2.8	121	7.0	***
1500	-9.2	-28.7	19	128	3.3	129	7.6	***
1800	-16.2	-25.5	45	094	1.4	093	4.4	***
2100	-16.2	-25.0	47	084	1.1	079	2.5	***
2400	-18.3	-26.0	51	089	1.5	103	4.4	***

DAY 08

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-10.4	-27.2	24	116	2.0	139	5.7	***
0600	-12.6	-28.2	26	160	2.1	158	4.4	***
0900	-11.8	-27.5	26	135	1.2	122	4.4	***
1200	-9.4	-26.8	23	121	2.2	146	5.1	***
1500	-10.5	-27.3	24	105	1.7	088	7.6	***
1800	-10.0	-26.8	24	133	1.9	156	5.1	***
2100	-10.1	-26.5	25	114	2.1	125	5.1	***
2400	-10.1	-26.9	24	124	1.7	103	3.8	***

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-15.2	-24.3	46	126	1.8	143	4.4	***
0600	-12.6	-25.6	33	141	1.7	146	4.4	***
0900	-13.7	-26.6	33	155	2.4	141	5.1	***
1200	-16.8	-25.8	46	093	1.2	165	4.4	***
1500	-16.3	-26.6	41	067	1.4	057	3.2	***
1800	-17.0	-27.2	41	071	1.6	076	3.8	***
2100	-18.3	-28.4	41	102	2.2	099	5.1	***
2400	-21.4	-29.1	50	086	2.6	108	5.1	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING DECEMBER , 1980

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-22.9	-28.9	58	088	3.3	080	5.1	***
0600	-23.1	-28.2	63	099	2.2	100	5.7	***
0900	-24.9	-28.4	73	099	2.5	093	5.7	***
1200	-23.7	-27.4	72	104	1.9	100	4.4	***
1500	-24.4	-27.6	75	108	1.6	104	3.8	***
1800	-25.3	-28.2	77	108	1.8	101	5.1	***
2100	-25.4	*****	78	105	1.4	132	4.4	***
2400	-25.4	*****	77	098	1.6	109	3.8	***

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-26.1	-28.9	77	107	1.4	107	3.8	***
0600	-26.2	-28.9	78	106	1.2	082	3.2	***
0900	-25.2	-28.6	73	128	.9	092	3.8	***
1200	-21.1	-28.0	54	147	1.4	143	4.4	***
1500	-20.7	-29.1	47	131	2.5	124	6.3	***
1800	-21.6	-29.5	49	128	2.0	137	6.3	***
2100	-22.7	-30.7	48	131	1.8	140	5.1	***
2400	-25.0	-32.4	50	1	1.9	133	3.2	***

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-26.1	-33.5	50	136	1.8	151	3.8	***
0600	-27.9	-33.6	58	115	.8	106	2.5	***
0900	-28.7	*****	66	105	.8	131	2.5	***
1200	-27.7	*****	60	096	1.1	101	2.5	***
1500	-26.0	-32.0	57	117	1.2	143	3.2	***
1800	-26.7	*****	70	124	1.2	146	3.2	***
2100	-26.4	-31.9	60	107	1.4	144	5.1	***
2400	-26.5	-31.5	63	084	1.0	124	3.8	***

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-27.0	-30.8	70	081	2.6	069	5.1	***
0600	-24.0	-27.9	70	071	2.5	083	4.4	***
0900	-21.3	*****	82	092	1.4	131	4.4	***
1200	-15.0	*****	85	108	.6	094	3.2	***
1500	-15.9	-18.0	84	103	1.5	111	3.8	***
1800	-21.9	-24.0	83	269	.8	262	3.8	***
2100	-23.2	-25.6	81	243	1.3	247	3.8	***
2400	-23.7	-25.9	82	183	.6	182	1.9	***

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-23.1	*****	83	236	.3	187	1.9	***
0600	-22.9	-25.1	82	268	.9	263	2.5	***
0900	-22.6	*****	82	271	.6	300	1.9	***
1200	-22.0	*****	81	224	.3	199	1.3	***
1500	-22.8	*****	81	173	.5	194	1.9	***
1800	-23.0	*****	82	182	.3	187	1.3	***
2100	-24.1	*****	80	100	.5	093	1.9	***
2400	-26.0	-28.7	78	140	.9	127	1.9	***

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-26.0	*****	78	154	.8	135	1.9	***
0600	-27.2	-29.9	78	138	.9	137	1.9	***
0900	-28.7	-31.5	77	114	1.0	115	2.5	***
1200	-29.6	-32.8	74	100	1.3	086	3.2	***
1500	-30.5	*****	74	103	1.3	085	3.2	***
1800	-30.8	*****	73	101	1.1	114	2.5	***
2100	-31.6	-34.8	73	087	.9	082	3.2	***
2400	-31.6	-35.0	72	083	1.0	117	3.2	***

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-32.0	*****	72	083	1.0	082	2.5	***
0600	-33.3	-36.7	71	114	1.2	114	2.5	***
0900	-34.2	-37.7	70	117	1.2	127	2.5	***
1200	-33.6	-37.5	69	109	1.6	094	3.8	***
1500	-34.0	-37.6	70	117	1.4	111	2.5	***
1800	-34.2	-37.7	70	110	1.7	103	2.5	***
2100	-33.7	-37.1	71	110	1.9	120	3.2	***
2400	-33.1	-36.4	72	109	1.5	089	3.2	***

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-32.2	*****	72	120	.7	103	2.5	***
0600	-28.0	-31.2	74	102	.8	098	3.2	***
0900	-21.8	-28.1	57	128	1.3	109	3.2	***
1200	-19.9	-26.7	55	146	2.3	136	5.1	***
1500	-18.8	-27.1	48	141	2.5	119	5.1	***
1800	-20.5	-28.7	48	139	2.3	140	4.4	***
2100	-19.9	-28.4	47	129	2.4	113	5.7	***
2400	-18.5	-28.3	42	124	3.2	122	5.7	***

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-18.6	-27.9	44	149	2.7	157	5.7	***
0600	-16.8	-27.3	40	163	3.1	170	5.7	***
0900	-17.0	-28.3	37	127	2.8	125	5.1	***
1200	-19.4	-29.1	42	147	2.4	139	5.1	***
1500	-18.1	-28.2	41	114	1.6	137	4.4	***
1800	-19.8	-29.2	43	131	1.6	155	4.4	***
2100	-18.4	-28.0	43	126	2.0	123	5.1	***
2400	-18.4	-27.0	47	089	1.2	097	3.8	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING DECEMBER , 1980

DAY 19

DAY 20

DAY 21

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	
0300	-12.7	-23.6	40	104	1.9	127	4.4 ***	0300	-15.2	-26.7	37	113	2.3	117	5.1 ***	0300	-13.8	*****	34	098	1.2	069	4.4 ***
0600	-13.6	-24.7	39	108	2.2	132	5.7 ***	0600	-17.4	-28.1	39	120	1.8	118	3.8 ***	0600	-10.1	-26.9	24	140	1.7	155	5.1 ***
0900	-13.8	-24.9	39	122	2.9	135	6.3 ***	0900	-21.5	*****	52	136	1.4	130	5.1 ***	0900	-9.9	-25.9	26	096	.8	131	5.7 ***
1200	-15.1	-26.0	39	132	2.6	126	7.0 ***	1200	-18.0	-27.9	42	109	2.2	123	5.1 ***	1200	-7.5	-25.7	22	116	1.5	149	5.7 ***
1500	-15.7	-26.6	39	141	1.8	134	3.8 ***	1500	-20.3	-28.5	48	107	1.1	167	3.8 ***	1500	-6.3	-28.8	15	132	1.7	152	5.7 ***
1800	-15.5	-26.4	39	129	1.4	140	3.8 ***	1800	-20.5	-28.5	49	096	1.9	077	5.1 ***	1800	-16.5	*****	44	139	1.4	121	4.4 ***
2100	-15.8	-26.7	39	135	1.9	147	5.1 ***	2100	-22.1	*****	62	135	.6	117	4.4 ***	2100	-9.2	-26.2	24	109	1.5	102	4.4 ***
2400	-17.4	-26.3	46	120	1.6	132	3.8 ***	2400	-22.7	*****	61	157	.5	086	3.2 ***	2400	-12.8	*****	32	123	2.1	142	7.0 ***

DAY 22

DAY 23

DAY 24

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	
0300	-9.5	-26.9	23	107	2.3	100	4.4 ***	0300	-18.8	-28.8	41	079	2.6	082	5.1 ***	0300	-18.3	-26.5	49	082	2.9	080	5.1 ***
0600	-15.6	-26.8	38	091	1.3	088	4.4 ***	0600	-20.1	-29.5	43	056	2.1	081	3.8 ***	0600	-19.4	-26.8	52	068	2.5	064	4.4 ***
0900	-17.5	-27.7	41	056	1.1	054	3.2 ***	0900	-20.9	-29.8	45	054	2.4	053	4.4 ***	0900	-19.6	-26.8	53	078	2.4	078	5.1 ***
1200	-17.7	-28.1	40	079	2.3	096	3.8 ***	1200	-20.7	-29.8	44	065	3.2	066	5.1 ***	1200	-19.0	-26.0	54	092	2.2	078	3.8 ***
1500	-17.8	-27.9	41	084	2.7	090	4.4 ***	1500	-19.3	-28.1	46	074	3.4	074	5.1 ***	1500	-18.1	-25.2	54	090	2.4	083	4.4 ***
1800	-18.0	-28.1	41	075	2.8	075	4.4 ***	1800	-20.0	-28.5	47	069	3.7	069	5.7 ***	1800	-18.0	-24.7	56	090	2.3	082	4.4 ***
2100	-18.4	-28.2	42	074	2.8	073	4.4 ***	2100	-19.8	-28.1	48	073	3.4	071	5.7 ***	2100	-17.1	-24.1	55	094	1.8	085	4.4 ***
2400	-19.0	-28.5	43	083	3.1	089	4.4 ***	2400	-19.3	-27.6	48	074	2.8	067	5.1 ***	2400	-16.8	*****	55	087	1.4	091	4.4 ***

DAY 25

DAY 26

DAY 27

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD MW
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	
0300	-15.4	*****	55	133	.2	017	2.5 ***	0300	-24.0	*****	74	137	.7	097	3.8 ***	0300	-14.4	-29.4	27	118	2.3	124	8.9 ***
0600	-16.8	*****	59	183	.6	222	2.5 ***	0600	-24.6	*****	73	125	.7	100	3.8 ***	0600	-14.3	-30.5	24	118	3.4	121	8.3 ***
0900	-14.8	-22.8	51	127	.5	175	3.2 ***	0900	-24.4	*****	68	111	.7	100	2.5 ***	0900	-14.6	-30.3	25	110	2.5	098	8.9 ***
1200	-18.5	*****	60	112	.6	093	2.5 ***	1200	-24.4	*****	72	232	.5	192	1.3 ***	1200	-14.1	-30.3	24	104	3.2	093	9.5 ***
1500	-18.5	*****	61	140	.8	146	2.5 ***	1500	-15.4	-26.9	37	102	1.1	064	4.4 ***	1500	-16.8	-31.4	27	149	2.0	163	7.6 ***
1800	-20.2	-25.3	64	107	1.2	098	3.8 ***	1800	-14.0	-27.6	31	127	2.3	150	5.7 ***	1800	-18.1	-31.5	30	121	1.7	125	3.8 ***
2100	-22.3	-27.0	66	115	1.8	108	4.4 ***	2100	-14.3	-28.2	30	133	2.6	120	6.3 ***	2100	-18.7	-31.7	31	116	1.9	121	3.8 ***
2400	-24.3	-27.8	73	105	1.3	110	4.4 ***	2400	-15.3	-29.0	30	135	2.4	142	5.7 ***	2400	-19.9	-32.1	33	110	2.4	110	5.1 ***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING DECEMBER , 1980

DAY 28

DAY 29

DAY 30

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-20.8	-31.7	37	106	2.5	087	5.1	***	0300	-22.4	-27.6	63	073	2.8	087	5.1	***	0300	-11.9	-14.2	83	107	2.5	103	6.3	***
0600	-22.4	-32.1	41	114	2.6	112	5.1	***	0600	-17.3	-22.7	63	078	2.2	075	4.4	***	0600	-12.6	-14.2	88	112	2.0	122	4.4	***
0900	-22.3	-32.0	41	125	3.2	124	5.7	***	0900	-17.8	-23.7	60	113	1.6	124	4.4	***	0900	-12.6	-13.8	91	099	1.7	094	3.8	***
1200	-21.9	-31.4	42	123	3.2	124	5.7	***	1200	-18.5	-23.9	63	087	1.7	083	3.8	***	1200	-11.6	-12.8	91	094	1.4	100	3.8	***
1500	-21.4	-30.5	44	119	3.0	117	5.7	***	1500	-17.7	*****	64	077	.9	083	3.2	***	1500	-11.2	-12.4	91	087	1.9	099	3.8	***
1800	-21.4	-29.8	47	114	3.1	121	5.7	***	1800	-16.1	*****	59	099	1.0	148	3.8	***	1800	-10.9	-12.1	91	074	1.9	065	3.2	***
2100	-21.5	-29.4	49	092	2.3	085	5.1	***	2100	-10.3	-16.7	60	089	1.4	112	3.8	***	2100	-10.7	*****	95	084	1.3	082	3.8	***
2400	-21.4	-28.3	54	084	2.6	123	5.7	***	2400	-11.0	-12.9	86	094	2.6	092	5.1	***	2400	-5.0	*****	61	179	.5	173	1.3	***

DAY 31

DAY 31

DAY 31

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.0	-3.6	83	125	1.3	122	5.1	***	0300	*****	*****	**	***	****	***	*****	***	0300	*****	*****	**	***	****	***	*****	***
0600	-1.2	-2.4	92	163	1.4	143	6.3	***	0600	*****	*****	**	***	****	***	*****	***	0600	*****	*****	**	***	****	***	*****	***
0900	-1.0	-1.4	97	222	1.2	240	3.2	***	0900	*****	*****	**	***	****	***	*****	***	0900	*****	*****	**	***	****	***	*****	***
1200	-.7	-1.1	97	200	.7	175	1.9	***	1200	*****	*****	**	***	****	***	*****	***	1200	*****	*****	**	***	****	***	*****	***
1500	-.2	*****	00	195	.7	177	2.5	***	1500	*****	*****	**	***	****	***	*****	***	1500	*****	*****	**	***	****	***	*****	***
1800	-1.6	*****	00	181	.7	152	1.9	***	1800	*****	*****	**	***	****	***	*****	***	1800	*****	*****	**	***	****	***	*****	***
2100	-.8	*****	96	160	.8	144	2.5	***	2100	*****	*****	**	***	****	***	*****	***	2100	*****	*****	**	***	****	***	*****	***
2400	-.5	*****	99	130	1.0	098	3.2	***	2400	*****	*****	**	***	****	***	*****	***	2400	*****	*****	**	***	****	***	*****	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING DECEMBER , 1980

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	-9.6	-15.3	-12.5	116	2.4	2.5	139	5.7	ESE	56	-19.6	****	***	01
02	-12.9	-17.0	-15.0	069	2.1	2.3	095	5.7	NE	64	-20.4	****	***	02
03	-12.3	-16.8	-14.5	068	2.1	2.2	053	5.1	ENE	70	-18.9	****	***	03
04	-13.1	-17.7	-15.4	090	1.8	2.1	126	5.7	ESE	70	-19.1	****	***	04
05	-12.3	-15.9	-14.1	067	2.1	2.1	078	4.4	ENE	80	-18.8	****	***	05
06	-12.1	-20.1	-16.1	109	1.5	1.6	114	4.4	E	73	-20.8	****	***	06
07	-8.1	-19.4	-13.8	118	1.7	1.9	129	7.6	SE	38	-25.1	****	***	07
08	-7.9	-18.4	-13.2	126	1.8	2.0	088	7.6	ESE	26	-27.2	****	***	08
09	-9.6	-21.4	-15.5	107	1.6	2.0	141	5.1	ENE	38	-26.7	****	***	09
10	-21.7	-25.6	-23.7	100	2.0	2.1	100	5.7	E	70	-28.1	****	***	10
11	-20.0	-26.9	-23.5	129	1.6	1.7	124	6.3	SE	59	-29.5	****	***	11
12	-25.2	-29.0	-27.1	112	1.1	1.3	144	5.1	ESE	58	-32.5	****	***	12
13	-14.5	-27.6	-21.0	093	.8	1.6	069	5.1	E	77	-25.4	****	***	13
14	-22.0	-26.0	-24.0	203	.3	.7	263	2.5	SSE	81	-26.9	****	***	14
15	-25.3	-32.0	-28.7	108	1.0	1.1	086	3.2	ESE	75	-32.8	****	***	15
16	-31.4	-34.4	-32.9	109	1.4	1.5	094	3.3	ESE	71	-37.3	****	***	16
17	-17.0	-33.4	-25.2	132	1.9	2.0	113	5.7	ESE	55	-28.4	****	***	17
18	-16.3	-21.2	-18.8	136	2.1	2.3	157	5.7	SSE	42	-28.1	****	***	18
19	-12.6	-18.3	-15.5	124	2.0	2.1	126	7.0	SE	40	-25.6	****	***	19
20	-14.4	-23.2	-18.8	116	1.4	1.6	117	5.1	E	45	-27.9	****	***	20
21	-6.2	-21.9	-14.1	122	1.4	1.8	142	7.0	SE	27	-26.7	****	***	21
22	-9.4	-19.4	-14.4	082	2.3	2.4	100	4.4	ENE	38	-27.8	****	***	22
23	-17.6	-21.0	-19.3	069	2.9	3.0	069	5.7	ENE	45	-28.8	****	***	23
24	-13.8	-20.0	-16.9	084	2.2	2.3	080	5.1	E	53	-25.7	****	***	24
25	-11.1	-24.6	-17.8	121	.8	1.1	108	4.4	ESE	62	-25.7	****	***	25
26	-13.7	-25.0	-19.4	130	1.3	1.5	120	6.3	SE	42	-27.9	****	***	26
27	-13.2	-19.9	-16.6	117	2.4	2.5	093	9.5	ESE	27	-30.9	****	***	27
28	-20.0	-22.7	-21.4	111	2.7	2.8	124	5.7	ESE	43	-30.6	****	***	28
29	-9.8	-23.0	-16.4	088	1.7	1.9	087	5.1	ENE	62	-21.2	****	***	29
30	-5.0	-12.7	-8.9	097	1.6	1.7	103	6.3	E	89	-13.2	****	***	30
31	1.2	-4.2	-1.5	169	.8	1.1	143	6.3	SSW	78	-2.1	****	***	31
MONTH	1.2	-34.4	-17.9	105	1.6	1.9	093	9.5	ESE	57	-25.2	****	***	

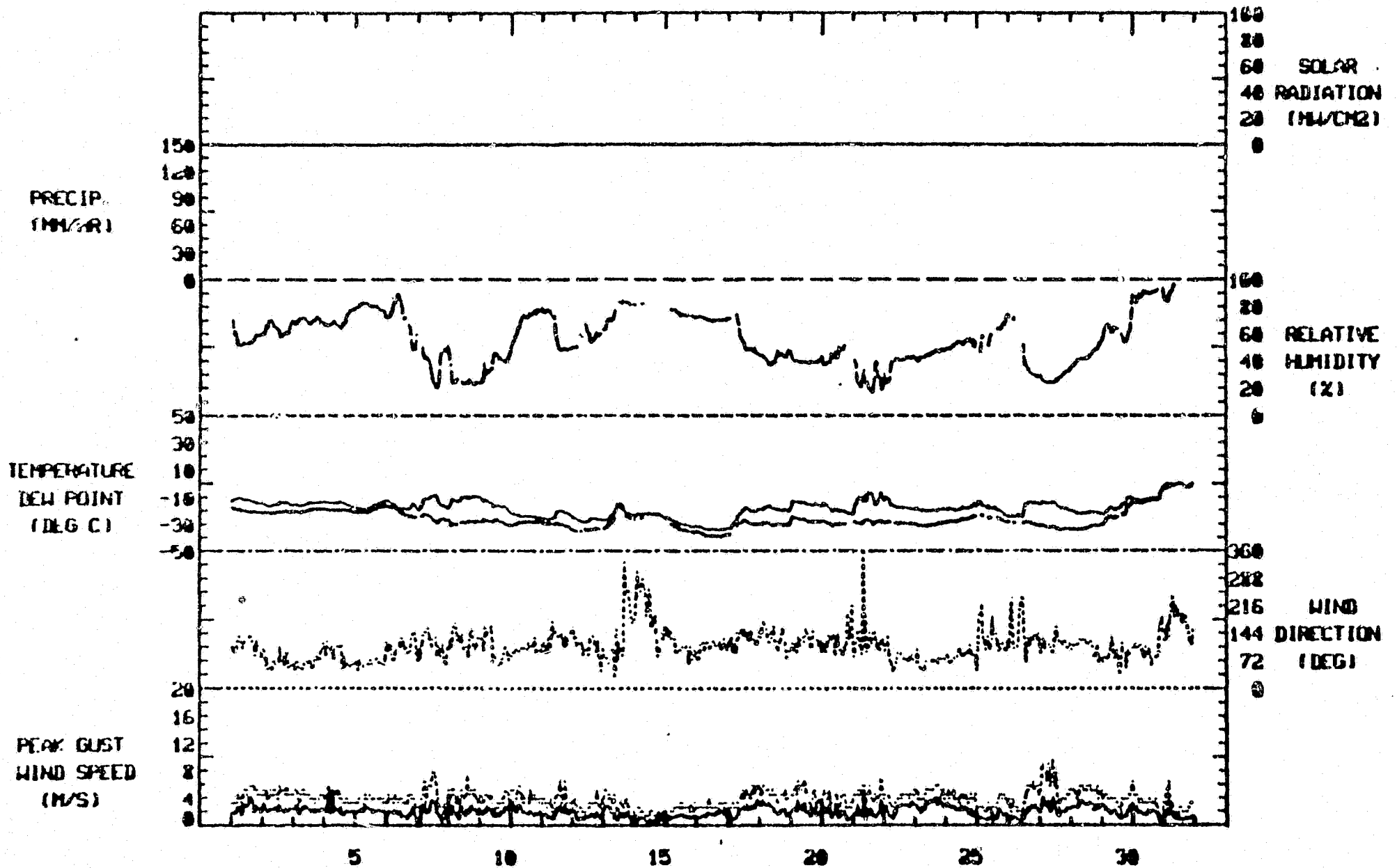
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 6.3
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 3.8
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 8.3
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 7.0

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

*** SEE GENERAL NOTES AT THE BACK OF THE REPORT ***

RSM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 DECEMBER, 1980

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING DECEMBER , 1980

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	.13	.03	0.00	0.00	0.00	0.00	0.00	.17
NNE	.13	.17	0.00	0.00	0.00	0.00	0.00	.30
NE	.57	4.84	.03	0.00	0.00	0.00	0.00	5.45
ENE	1.58	13.95	2.35	0.00	0.00	0.00	0.00	17.88
E	2.45	16.74	2.08	0.00	0.00	0.00	0.00	21.28
ESE	2.05	18.55	3.29	0.00	0.00	0.00	0.00	23.90
SE	1.65	10.66	2.86	0.00	0.00	0.00	0.00	15.16
SSE	1.88	4.87	.81	0.00	0.00	0.00	0.00	7.56
S	1.34	1.24	.07	0.00	0.00	0.00	0.00	2.66
SSW	1.08	.40	0.00	0.00	0.00	0.00	0.00	1.48
SW	1.28	.17	0.00	0.00	0.00	0.00	0.00	1.45
WSW	.57	.50	0.00	0.00	0.00	0.00	0.00	1.08
W	.30	.37	0.00	0.00	0.00	0.00	0.00	.67
WNW	.27	.13	0.00	0.00	0.00	0.00	0.00	.40
NW	.07	.03	0.00	0.00	0.00	0.00	0.00	.10
NNW	.24	.03	0.00	0.00	0.00	0.00	0.00	.27
CALM								.20
TOTAL	15.60	72.71	11.50	0.00	0.00	0.00	0.00	100.00

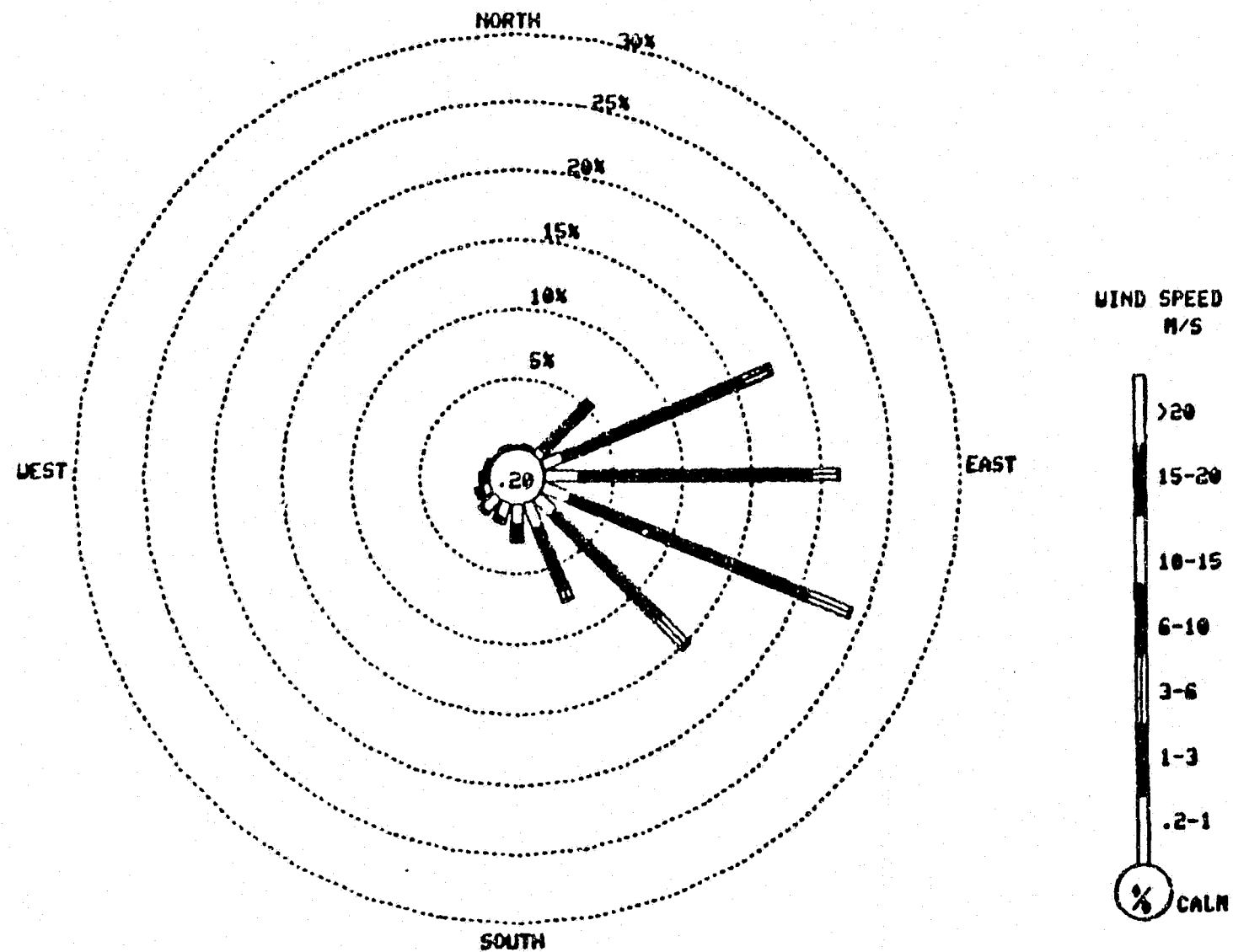
NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2975 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT

DEVIL CANYON WEATHER STATION

DECEMBER, 1980



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JANUARY , 1981

DAY 01

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	.1	-1.2	91	165	1.2	189	2.5	***
0600	.8	*****	89	165	1.2	169	2.5	***
0900	2.5	-1.4	76	174	1.3	149	3.2	***
1200	2.1	-1.6	77	183	1.4	177	2.5	***
1500	2.9	-1.3	74	177	1.5	184	3.2	***
1800	4.9	-.2	70	108	3.1	108	9.5	***
2100	4.5	-2.2	62	111	3.0	106	8.3	***
2400	2.5	.7	38	195	.9	146	3.2	***

DAY 02

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	1.7	-1.1	82	171	.6	106	2.5	***
0600	.7	*****	08	131	.5	120	2.5	***
0900	-.3	*****	95	163	.8	144	2.5	***
1200	-.7	*****	85	115	.7	093	2.5	***
1500	-1.8	-2.8	93	085	1.5	092	3.8	***
1800	-5.3	-5.6	98	115	1.9	119	3.8	***
2100	-7.9	-8.3	97	079	1.6	108	3.2	***
2400	-10.6	-11.3	00	086	1.4	062	4.4	***

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-12.6	-12.7	99	072	1.8	062	4.4	***
0600	-13.4	-13.8	97	078	2.4	085	3.8	***
0900	-12.8	-13.4	95	089	2.4	089	4.4	***
1200	-10.1	-11.2	92	076	1.6	082	3.8	***
1500	-10.0	-11.1	92	092	2.7	089	4.4	***
1800	-9.8	*****	01	143	.9	120	3.2	***
2100	-8.7	-9.2	96	139	.6	101	3.2	***
2400	-8.5	*****	00	165	.5	159	1.9	***

DAY 04

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.2	-4.6	90	137	1.2	125	3.2	***
0600	-3.1	-4.7	91	129	1.9	129	3.8	***
0900	-3.0	-4.9	87	131	2.1	122	4.4	***
1200	-2.5	-5.0	83	117	1.7	117	5.1	***
1500	-2.5	-5.0	83	128	2.6	124	5.1	***
1800	-3.8	-5.7	87	128	2.6	126	4.4	***
2100	-6.1	*****	96	120	1.7	133	3.8	***
2400	-6.1	-6.5	97	084	1.4	106	3.8	***

DAY 05

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-9.0	-9.1	99	072	1.7	065	4.4	***
0600	-10.0	-11.3	00	070	2.5	067	4.4	***
0900	-10.9	-11.3	00	082	2.3	085	4.4	***
1200	-11.5	-12.2	95	083	2.0	095	4.4	***
1500	-12.3	*****	98	108	.8	091	3.8	***
1800	-10.6	*****	98	191	.4	154	3.2	***
2100	-4.6	-8.2	76	165	.7	135	3.2	***
2400	-7.0	*****	86	156	1.0	132	3.2	***

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.4	-9.6	54	124	1.6	101	5.7	***
0600	-2.5	-6.2	76	099	1.9	090	7.6	***
0900	-2.0	-6.4	72	122	1.7	121	5.1	***
1200	-2.2	-7.2	69	126	1.8	108	5.1	***
1500	-2.4	-7.8	67	145	1.7	140	4.4	***
1800	-4.1	*****	72	149	1.3	131	3.2	***
2100	-1.0	-6.6	66	130	1.8	129	5.1	***
2400	-1.0	*****	69	115	1.4	107	3.8	***

DAY 07

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-.4	-4.9	72	127	1.3	144	3.8	***
0600	.5	-5.2	66	130	1.4	131	4.4	***
0900	2.6	-5.2	57	143	1.4	136	3.1	***
1200	4.0	-5.1	52	124	2.4	109	7.0	***
1500	3.7	-5.9	50	102	1.7	080	7.6	***
1800	1.5	-7.2	53	151	1.5	109	3.8	***
2100	2.4	-6.6	52	104	1.5	100	4.4	***
2400	.8	-6.9	57	130	1.8	142	3.8	***

DAY 08

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-.6	-6.7	64	130	1.7	139	3.8	***
0600	-1.4	-4.3	81	120	1.3	135	3.2	***
0900	-2.2	-4.7	83	118	2.3	116	4.4	***
1200	-2.3	-5.0	82	117	2.8	107	6.3	***
1500	-3.9	-5.6	88	122	1.4	135	3.2	***
1800	-4.9	*****	93	133	1.2	092	3.8	***
2100	-.9	-5.9	69	160	1.0	137	3.8	***
2400	1.3	-8.6	48	137	1.8	120	5.1	***

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	1.8	-9.9	42	133	1.7	132	4.4	***
0600	1.2	-10.7	41	111	1.8	132	7.0	***
0900	.3	*****	42	119	1.6	110	4.4	***
1200	1.4	-10.9	40	107	2.0	084	7.6	***
1500	0.0	-11.2	43	097	3.2	108	9.5	***
1800	0.0	-9.3	50	103	2.6	096	9.5	***
2100	-.8	-7.1	63	132	1.8	138	6.3	***
2400	-.5	-6.2	66	116	1.5	130	3.8	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JANUARY , 1981

DAY 10

DAY 11

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-0.4	-6.1	66	093	1.4	092	3.8	***	0300	-1.5	*****	02	161	.5	156	1.9	***	0300	-1.8	-1.9	99	124	1.5	120	3.8	***
0600	-1.2	-4.9	76	135	1.3	157	3.2	***	0600	-2.5	-4.1	89	144	1.5	146	3.2	***	0600	-2.5	-2.6	99	100	1.3	137	3.2	***
0900	-1.3	-4.7	78	139	1.3	142	3.2	***	0900	-4.2	-5.0	94	144	1.9	144	3.8	***	0900	-3.0	*****	03	084	1.0	083	3.2	***
1200	-0.7	*****	76	118	1.0	113	2.5	***	1200	-3.7	*****	96	173	1.0	178	3.2	***	1200	-2.9	-3.0	99	054	1.0	008	2.5	***
1500	-1.4	-5.1	76	114	1.2	122	4.4	***	1500	0.0	-2.4	84	157	1.0	145	3.2	***	1500	-2.2	-112.	00	074	1.1	087	2.5	***
1800	-5.0	-6.7	88	133	1.5	110	3.2	***	1800	1.1	-3.1	74	162	.8	114	3.8	***	1800	-4.2	-51.6	01	079	1.1	076	2.5	***
2100	-5.4	-7.0	89	103	1.5	100	3.8	***	2100	-0.5	*****	97	137	1.1	150	2.5	***	2100	-6.3	*****	01	107	1.0	106	3.2	***
2400	-2.5	-35.1	06	136	.7	130	3.2	***	2400	-1.4	-112.	00	128	.7	102	2.5	***	2400	-7.0	*****	00	125	.9	130	3.2	***

DAY 13

DAY 14

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-4.5	-5.6	92	151	1.2	151	3.8	***	0300	2.3	-6.7	52	116	1.9	114	6.3	***	0300	5.1	-0.6	67	143	2.3	155	3.8	***
0600	-1.1	-4.8	76	145	1.2	082	3.8	***	0600	.1	-4.8	70	135	1.6	118	5.7	***	0600	5.4	-0.1	68	102	2.0	100	6.3	***
0900	-0.7	-6.5	65	130	2.4	117	7.0	***	0900	.6	-3.7	73	125	1.5	135	3.2	***	0900	5.1	-0.2	69	109	3.1	109	7.0	***
1200	.7	-8.9	49	101	3.3	106	8.9	***	1200	1.5	-2.1	77	142	1.3	109	6.3	***	1200	3.5	2.3	92	142	1.1	124	5.1	***
1500	.9	-8.5	50	105	2.2	117	8.3	***	1500	4.0	-2.3	64	124	1.7	108	7.6	***	1500	2.8	-27.0	09	144	.9	159	2.5	***
1800	2.4	-7.6	48	115	1.6	090	5.1	***	1800	3.9	-2.4	64	089	2.6	096	8.3	***	1800	.8	-25.5	12	275	.7	314	5.7	***
2100	1.8	-7.9	49	113	1.4	105	6.3	***	2100	5.0	-1.5	63	111	3.0	111	8.3	***	2100	.7	*****	08	266	1.0	310	4.4	***
2400	1.4	-7.0	54	126	1.8	108	5.1	***	2400	5.0	-1.1	65	124	1.5	116	5.7	***	2400	0.0	-1.3	91	150	1.0	131	3.2	***

DAY 16

DAY 17

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-0.4	-2.2	88	141	1.4	128	2.5	***	0300	.5	-4.6	69	149	1.2	129	3.8	***	0300	2.2	-7.0	51	144	1.8	158	6.3	***
0600	-1.7	-2.1	97	152	1.7	143	3.2	***	0600	-1.3	-4.7	78	163	1.2	139	2.5	***	0600	3.0	-4.6	58	121	3.7	123	8.3	***
0900	-3.1	-3.8	95	129	1.2	104	3.2	***	0900	.9	-3.6	72	176	1.4	190	2.5	***	0900	2.9	-3.8	62	112	3.2	102	7.6	***
1200	-0.5	-2.9	84	150	1.2	124	3.2	***	1200	1.1	-4.4	67	151	1.4	139	3.2	***	1200	2.0	-4.8	61	137	2.0	124	5.1	***
1500	1.3	-4.4	66	161	1.5	147	6.3	***	1500	.1	-4.6	71	172	.8	141	1.9	***	1500	1.3	-4.6	65	155	1.0	105	2.5	***
1800	1.2	-5.4	62	152	1.7	127	5.1	***	1800	3.0	-5.8	53	139	1.4	124	5.1	***	1800	2.0	-3.8	66	151	1.2	140	3.2	***
2100	1.3	-5.7	60	139	1.9	128	5.7	***	2100	2.7	-6.3	52	121	2.0	088	5.7	***	2100	2.9	-4.9	57	151	1.2	146	3.2	***
2400	.8	-5.1	65	130	1.7	140	3.8	***	2400	2.3	-6.9	51	130	1.8	115	5.7	***	2400	1.1	-5.9	60	168	1.5	153	3.8	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JANUARY , 1981

DAY 28

DAY 29

DAY 30

HOUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-12.2	-13.1	93	075	1.6	084	3.8	***	0300	-8.6	-11.8	78	095	1.9	085	5.1	***	0300	-1.6	-6.6	69	133	1.7	138	3.8	***
0600	-14.9	*****	91	088	1.4	099	3.8	***	0600	-8.6	-9.8	91	088	1.3	069	3.8	***	0600	-2.4	-6.8	72	140	1.3	123	3.2	***
0900	-14.8	-16.0	91	083	2.1	074	3.8	***	0900	-7.3	-11.0	75	121	1.6	124	3.2	***	0900	-.5	-5.6	69	145	1.4	146	2.5	***
1200	-13.1	*****	87	085	1.6	089	3.8	***	1200	-6.5	-7.6	92	119	1.3	117	3.2	***	1200	1.5	*****	61	153	1.7	144	3.8	***
1500	-13.0	*****	89	101	.9	072	2.5	***	1500	-4.3	*****	84	143	.8	125	1.9	***	1500	2.7	-6.5	51	134	1.0	124	3.2	***
1800	-11.8	-13.6	87	129	1.1	129	2.5	***	1800	-4.5	-5.9	90	159	1.1	169	1.9	***	1800	1.8	-6.2	56	128	1.4	128	3.2	***
2100	-8.4	*****	81	133	1.6	159	3.2	***	2100	-1.5	-5.1	77	140	1.2	108	3.8	***	2100	-1.4	*****	76	160	1.2	119	3.2	***
2400	-7.9	-11.8	74	103	1.9	102	5.1	***	2400	-.8	*****	74	109	1.0	104	3.8	***	2400	-1.3	*****	77	158	1.0	181	2.5	***

DAY 31

DAY 31

DAY 31

HOUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-.8	*****	79	120	1.0	122	2.5	***	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***
0600	-.7	*****	00	123	.8	122	3.2	***	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***
0900	-2.0	*****	99	070	.5	077	1.9	***	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***
1200	0.0	*****	95	067	.4	060	1.9	***	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***
1500	-.4	*****	88	112	.2	098	2.5	***	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***
1800	-2.4	-3.4	93	140	1.0	141	2.5	***	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***
2100	-1.4	-3.5	86	149	1.4	121	3.2	***	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***
2400	1.4	-4.3	66	135	1.6	105	6.3	***	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JANUARY , 1981

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	PVAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	5.2	-3	2.4	146	1.4	1.8	108	9.5	S	72	-1.0	****	***	01
02	2.7	-10.7	-4.0	107	1.0	1.3	062	4.4	ESE	72	-26.2	****	***	02
03	-6.2	-14.0	-10.1	091	1.5	1.7	062	4.4	E	93	-11.9	****	***	03
04	-2.2	-9.1	-5.7	123	1.9	2.0	117	5.1	SE	88	-5.2	****	***	04
05	-4.2	-12.6	-8.4	092	1.2	1.5	065	4.4	ENE	61	-51.2	****	***	05
06	-6	-10.4	-5.5	125	1.6	1.7	090	7.6	SE	68	-7.3	****	***	06
07	4.5	-1.2	1.7	125	1.6	1.7	080	7.6	ESE	58	-5.9	****	***	07
08	1.3	-5.9	-2.3	127	1.6	1.8	107	6.3	ESE	77	-5.8	****	***	08
09	2.8	-1.1	.9	112	2.0	2.2	108	9.5	ESE	47	-9.3	****	***	09
10	.2	-7.6	-3.7	120	1.2	1.3	122	4.4	ESE	77	-9.9	****	***	10
11	1.5	-4.8	-1.7	149	1.1	1.2	144	3.8	SE	84	-25.4	****	***	11
12	-1.4	-7.6	-4.5	095	1.0	1.2	120	3.8	E	52	-34.3	****	***	12
13	2.9	-7.5	-2.3	119	1.8	2.0	106	8.9	ESE	61	-7.1	****	***	13
14	5.1	-1.6	1.8	117	1.8	2.0	096	8.3	ESE	64	-3.1	****	***	14
15	5.6	-8	2.4	132	1.0	1.7	109	7.0	ESE	54	-7.5	****	***	15
16	3.0	-3.1	-.0	144	1.5	1.6	147	6.3	SSE	77	-4.0	****	***	16
17	3.6	-1.3	1.2	147	1.3	1.5	088	5.7	SSE	64	-5.1	****	***	17
18	3.7	.6	2.2	135	1.9	2.1	123	8.3	SE	59	-4.9	****	***	18
19	4.0	-7.7	-1.8	176	.4	1.4	289	5.7	SE	67	-10.4	****	***	19
20	-3.1	-10.7	-6.9	127	1.3	1.4	120	4.4	SE	78	-9.4	****	***	20
21	-1.7	-11.0	-6.4	112	1.6	1.8	077	7.6	ESE	72	-8.7	****	***	21
22	2.3	-4.1	-.9	136	1.5	1.6	145	5.1	ESE	66	-4.9	****	***	22
23	2.6	-2.3	.1	127	.8	1.1	101	4.4	ESE	74	-3.3	****	***	23
24	3.4	-5.6	-1.1	125	1.2	1.5	112	7.0	ESE	65	-5.5	****	***	24
25	4.4	-1.7	1.3	137	1.6	1.7	099	8.3	SE	46	-7.6	****	***	25
26	-.7	-4.4	-2.5	072	.5	.9	120	3.2	NE	84	-5.8	****	***	26
27	-3.7	-9.2	-6.5	101	1.1	1.2	106	4.4	ESE	90	-20.1	****	***	27
28	-7.5	-16.5	-12.0	098	1.4	1.6	102	5.1	E	87	-13.6	****	***	28
29	-.3	-9.2	-4.8	118	1.2	1.3	085	5.1	ESE	82	-8.5	****	***	29
30	2.7	-2.5	.1	143	1.3	1.4	138	3.8	SE	66	-6.3	****	***	30
31	1.4	-3.4	-1.0	126	.8	1.0	105	6.3	ESE	82	-3.7	****	***	31
MONTH	5.6	-16.5	-2.5	123	1.3	1.6	108	9.5	ESE	70	-10.7	****	***	

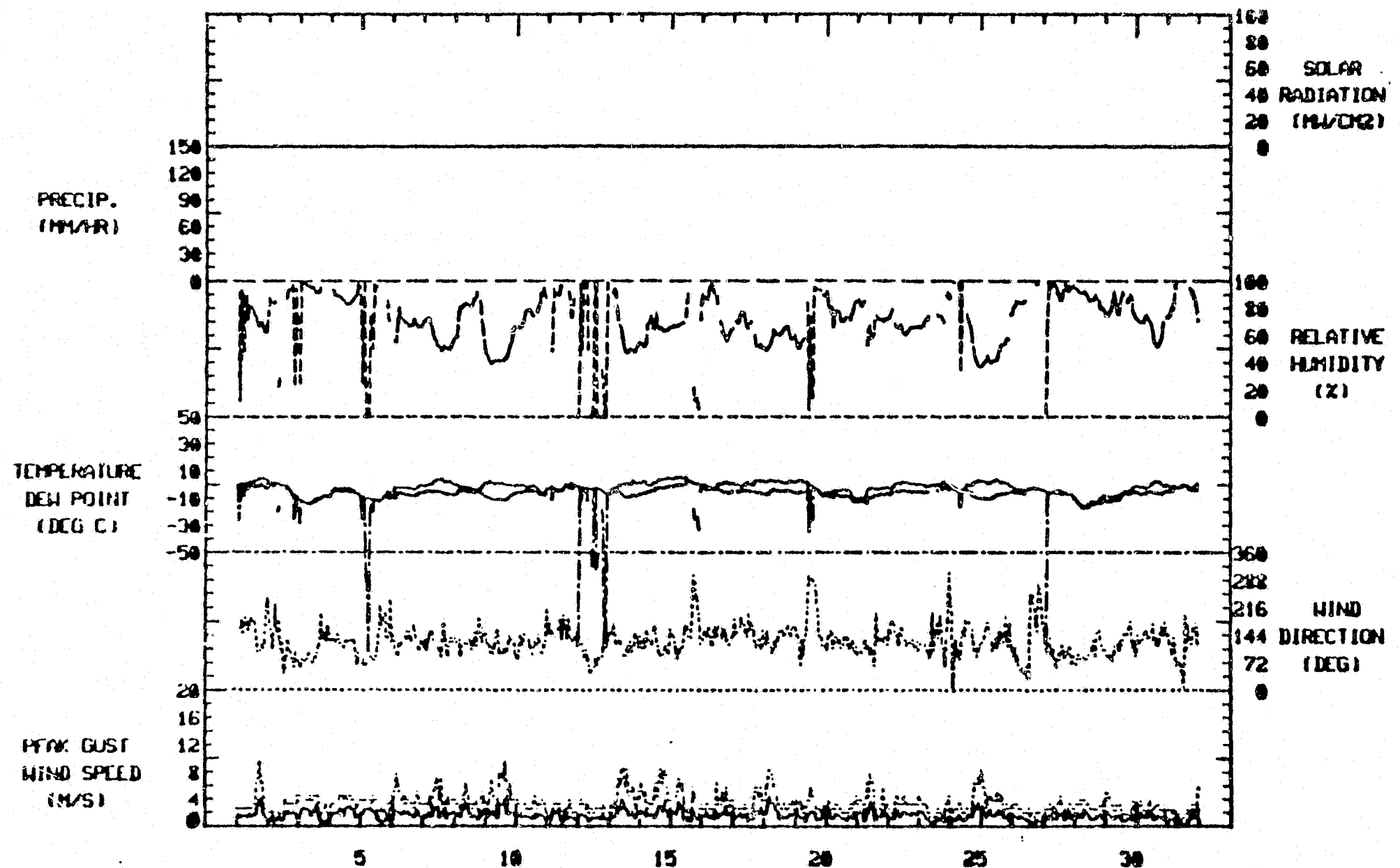
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 6.3
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 5.7
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 7.0
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 8.3

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 JANUARY , 1981

R&N CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JANUARY , 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER TO THAN 20.0	
N	.10	0.00	0.00	0.00	0.00	0.00	0.00	.10
NNE	.30	.10	0.00	0.00	0.00	0.00	0.00	.40
NE	1.01	.91	0.00	0.00	0.00	0.00	0.00	1.92
ENE	1.38	5.81	.17	0.00	0.00	0.00	0.00	7.36
E	1.78	11.16	1.11	0.00	0.00	0.00	0.00	14.05
ESE	2.62	18.15	2.92	0.00	0.00	0.00	0.00	23.69
SE	3.19	18.62	.44	0.00	0.00	0.00	0.00	22.24
SSE	3.16	10.52	0.00	0.00	0.00	0.00	0.00	13.68
S	2.79	5.48	0.00	0.00	0.00	0.00	0.00	8.27
SSW	2.32	1.08	0.00	0.00	0.00	0.00	0.00	3.39
SW	1.28	.30	0.00	0.00	0.00	0.00	0.00	1.58
WSW	.77	.30	0.00	0.00	0.00	0.00	0.00	1.08
W	.30	.60	0.00	0.00	0.00	0.00	0.00	.91
WNW	.17	.54	0.00	0.00	0.00	0.00	0.00	.71
NW	.10	.20	0.00	0.00	0.00	0.00	0.00	.30
NNW	.10	0.00	0.00	0.00	0.00	0.00	0.00	.10
CALM	-----	-----	-----	-----	-----	-----	-----	.24
TOTAL	21.37	73.76	4.64	0.00	0.00	0.00	0.00	100.00

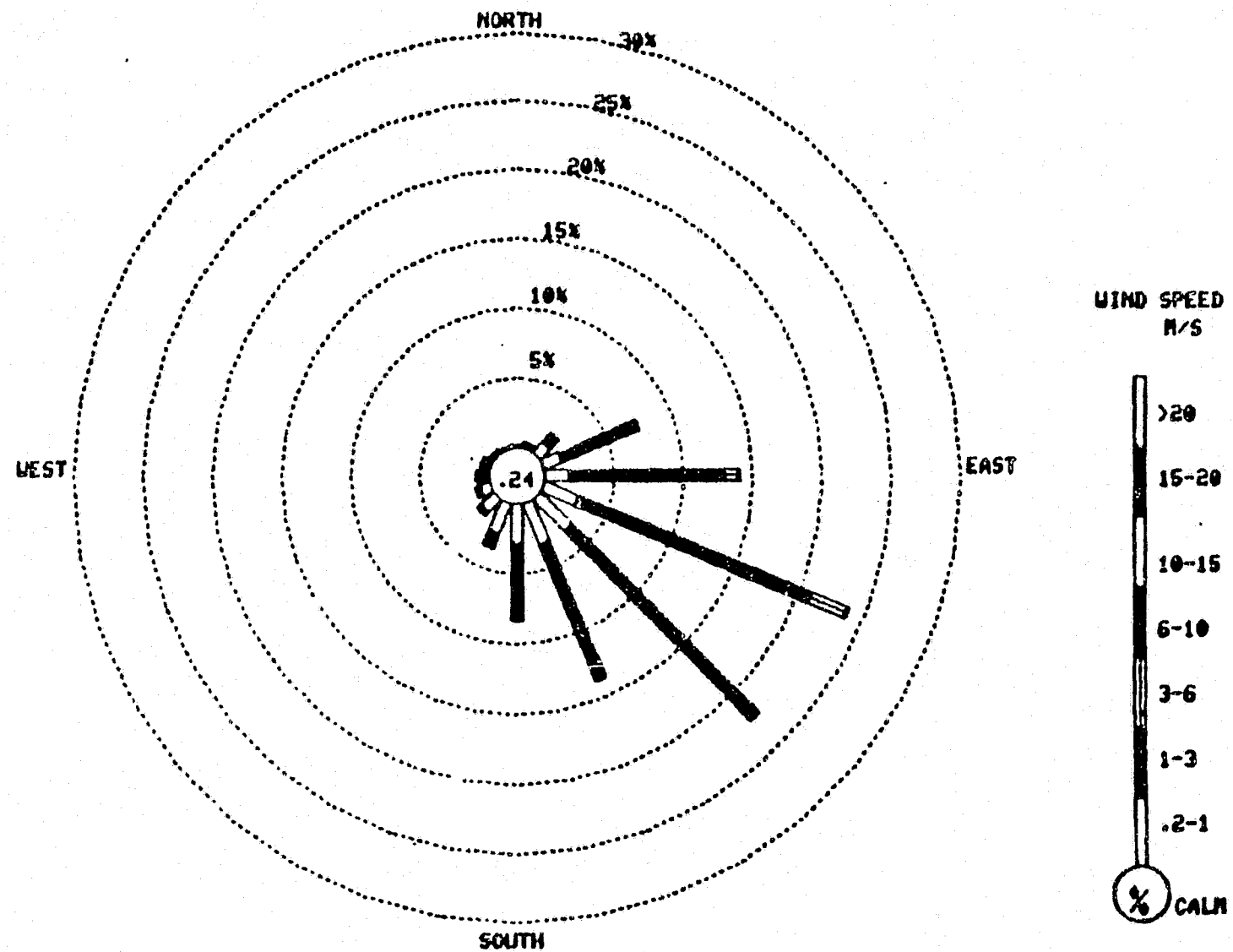
NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2976 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT

DEVIL CANYON WEATHER STATION

JANUARY, 1981



WIND ROSE PLOT

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT

HOURLY PRECIPITATION SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

DAY 01

DAY 02

DAY 03

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	1.3	-4.2	67	099	2.5	092	6.3 ***	0300	-3.3	*****	93	122	1.4	115	3.8 ***	0300	-2.4	*****	99	133	.0	073	1.9 ***
0600	1.4	-5.0	63	097	2.5	095	8.3 ***	0600	2.3	-3.9	64	123	1.9	109	7.6 ***	0600	-2.2	-2.5	98	167	.2	110	1.9 ***
0900	1.8	-4.4	64	110	2.5	096	7.0 ***	0900	3.0	-4.3	59	103	2.0	108	7.0 ***	0900	-2.6	-3.0	97	112	.8	097	1.9 ***
1200	3.4	-4.0	59	107	2.8	112	7.0 ***	1200	1.3	-1.6	81	289	.7	087	7.6 ***	1200	-1.3	-2.9	89	111	.9	111	2.5 ***
1500	2.2	-4.2	63	108	1.4	112	4.4 ***	1500	.4	*****	86	276	1.2	280	3.8 ***	1500	-1.6	*****	94	124	.7	113	1.9 ***
1800	-2.6	*****	80	135	1.5	140	3.2 ***	1800	-.7	*****	88	158	.5	237	1.9 ***	1800	-2.2	*****	00	173	.2	132	1.9 ***
2100	-2.3	*****	89	084	.9	085	3.2 ***	2100	-.9	-2.5	89	117	.8	133	2.5 ***	2100	-2.5	*****	99	107	.4	112	1.9 ***
2400	-3.2	-4.2	93	099	1.7	070	3.8 ***	2400	-1.8	*****	97	106	1.3	122	3.2 ***	2400	-1.9	*****	99	091	.3	064	1.9 ***

DAY 04

DAY 05

DAY 06

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-2.3	*****	99	075	.4	088	1.3 ***	0300	-2.3	-2.6	98	***	*****	***	.6 ***	0300	-.5	-1.1	96	***	*****	***	0.0 ***
0600	-1.7	-112.	00	059	.2	059	.6 ***	0600	-3.0	-3.1	99	***	*****	***	0.0 ***	0600	-.8	-1.2	97	***	*****	***	0.0 ***
0900	-1.7	-2.0	98	***	*****	***	0.0 ***	0900	-2.6	-2.9	98	***	*****	***	0.0 ***	0900	-.7	-1.1	97	***	*****	***	0.0 ***
1200	-1.2	-1.8	96	***	*****	***	0.0 ***	1200	-2.0	-2.7	95	***	*****	***	0.0 ***	1200	.1	-.5	96	***	*****	***	0.0 ***
1500	-.8	-1.4	96	***	*****	***	0.0 ***	1500	-1.2	-1.8	96	***	*****	***	0.0 ***	1500	-.2	-.6	97	***	*****	***	0.0 ***
1800	-1.1	-1.7	96	***	*****	***	0.0 ***	1800	-1.6	-1.7	99	***	*****	***	0.0 ***	1800	-.4	-.8	97	***	*****	***	0.0 ***
2100	-1.2	-1.9	95	***	*****	***	1.3 ***	2100	-1.2	-1.6	97	***	*****	***	0.0 ***	2100	-.8	-1.1	98	***	*****	***	0.0 ***
2400	-1.5	-1.9	97	***	*****	***	.6 ***	2400	-.8	-1.2	97	***	*****	***	0.0 ***	2400	-1.9	-2.2	98	***	*****	***	0.0 ***

DAY 07

DAY 08

DAY 09

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-3.1	-3.7	96	***	*****	***	0.0 ***	0300	-3.1	-3.7	96	***	*****	***	0.0 ***	0300	-2.8	-3.5	95	***	*****	***	0.0 ***
0600	-3.8	-4.1	98	***	*****	***	0.0 ***	0600	-3.3	-3.9	96	***	*****	***	0.0 ***	0600	-2.7	-3.5	94	***	*****	***	0.0 ***
0900	-3.9	-4.7	94	***	*****	***	0.0 ***	0900	-4.5	-5.1	96	***	*****	***	0.0 ***	0900	-2.5	-3.8	91	***	*****	***	0.0 ***
1200	-2.9	-4.3	90	***	*****	***	0.0 ***	1200	-1.7	-3.3	89	***	*****	***	0.0 ***	1200	-1.1	-3.5	84	***	*****	***	0.0 ***
1500	-2.2	-3.2	93	***	*****	***	0.0 ***	1500	-1.2	-2.4	92	***	*****	***	0.0 ***	1500	-2.4	-3.1	95	***	*****	***	0.0 ***
1800	-3.3	-3.7	97	***	*****	***	0.0 ***	1800	-1.3	-2.0	95	***	*****	***	0.0 ***	1800	-3.3	-3.7	97	***	*****	***	0.0 ***
2100	-3.0	-3.0	96	***	*****	***	0.0 ***	2100	-1.0	-2.0	93	***	*****	***	0.0 ***	2100	-3.7	-4.3	96	***	*****	***	0.0 ***
2400	-3.2	-3.8	96	***	*****	***	0.0 ***	2400	-1.2	-2.1	94	***	*****	***	0.0 ***	2400	-3.6	-4.2	96	***	*****	***	0.0 ***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-3.8	-4.4	96	***	****	***	0.0	***
0600	-3.7	-4.3	96	***	****	***	0.0	***
0900	-3.3	-3.9	96	***	****	***	0.0	***
1200	-3.1	-3.7	96	***	****	***	0.0	***
1500	-2.8	-3.4	96	***	****	***	0.0	***
1800	-3.5	-4.1	96	***	****	***	0.0	***
2100	-4.0	-4.6	96	***	****	***	0.0	***
2400	-4.7	-5.2	96	***	****	***	0.0	***

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-6.8	-8.5	88	***	****	***	0.0	***
0600	-8.0	-9.2	91	***	****	***	0.0	***
0900	-7.9	-9.4	89	***	****	***	0.0	***
1200	-5.9	-8.8	80	***	****	***	0.0	***
1500	-5.5	-10.0	71	***	****	***	0.0	***
1800	-11.4	-12.7	90	***	****	***	0.0	***
2100	-10.6	-13.0	83	***	****	***	0.0	***
2400	-11.4	-14.4	79	***	****	***	0.0	***

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-11.3	-15.4	72	***	****	***	0.0	***
0600	-11.5	-16.3	68	***	****	***	0.0	***
0900	-11.2	-16.9	63	***	****	***	0.0	***
1200	-10.0	-17.9	53	***	****	***	0.0	***
1500	-11.7	-17.8	61	***	****	***	0.0	***
1800	-13.8	-18.3	69	***	****	***	0.0	***
2100	-11.9	-17.0	66	***	****	***	0.0	***
2400	-12.4	-17.3	67	***	****	***	0.0	***

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-13.4	-17.8	70	***	****	***	0.0	***
0600	-13.9	-18.1	71	***	****	***	0.0	***
0900	-15.0	-19.0	72	***	****	***	0.0	***
1200	-11.3	-17.4	61	***	****	***	0.0	***
1500	-11.6	-17.5	62	***	****	***	0.0	***
1800	-15.0	-19.6	68	***	****	***	0.0	***
2100	-18.9	-22.6	73	***	****	***	0.0	***
2400	-21.9	-24.6	79	***	****	***	0.0	***

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-20.2	-23.8	73	***	****	***	0.0	***
0600	-22.6	-25.7	76	***	****	***	0.0	***
0900	-19.5	-23.6	70	***	****	***	0.0	***
1200	-15.3	-23.5	50	***	****	***	0.0	***
1500	-14.1	-23.1	47	***	****	***	0.0	***
1800	-18.5	-24.4	60	***	****	***	0.0	***
2100	-21.2	-26.1	65	***	****	***	0.0	***
2400	-24.1	-27.6	73	***	****	***	0.0	***

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-25.9	-29.5	72	***	****	***	0.0	***
0600	-27.0	-30.2	74	***	****	***	0.0	***
0900	-27.8	-31.3	72	***	****	***	0.0	***
1200	-21.0	-28.5	51	***	****	***	0.0	***
1500	-17.7	-25.2	52	***	****	***	0.0	***
1800	-19.8	-25.8	59	***	****	***	0.0	***
2100	-20.2	-25.6	62	***	****	***	0.0	***
2400	-23.0	-27.0	70	***	****	***	0.0	***

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-22.2	-25.6	74	***	****	***	0.0	***
0600	-20.2	-23.5	75	***	****	***	0.0	***
0900	-20.1	-22.8	79	***	****	***	0.0	***
1200	-16.1	-22.1	60	***	****	***	0.0	***
1500	-16.4	-21.7	64	***	****	***	0.0	***
1800	-17.7	-20.6	78	***	****	***	0.0	***
2100	-18.5	-20.8	82	***	****	***	0.0	***
2400	-18.2	-20.7	81	***	****	***	0.0	***

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-18.3	-21.1	79	***	****	***	0.0	***
0600	-17.7	-20.6	78	***	****	***	0.0	***
0900	-18.0	-21.4	75	***	****	***	0.0	***
1200	-14.9	-20.8	61	***	****	***	0.0	***
1500	-13.7	-20.1	59	***	****	***	0.0	***
1800	-14.6	-20.0	64	***	****	***	0.0	***
2100	-16.8	-21.4	68	***	****	***	0.0	***
2400	-19.3	-23.3	71	***	****	***	0.0	***

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-20.3	-23.9	73	***	****	***	0.0	***
0600	-23.8	-26.6	78	***	****	***	0.0	***
0900	-24.1	-26.9	78	***	****	***	0.0	***
1200	-14.9	-21.2	59	***	****	***	0.0	***
1500	-12.4	-18.8	59	***	****	***	0.0	***
1800	-13.2	-18.5	65	***	****	***	0.0	***
2100	-13.6	-17.0	76	***	****	***	0.0	***
2400	-11.9	-16.3	70	***	****	***	0.0	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

DAY 19

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-12.8	-17.4	69	***	****	***	0.0	***
0600	-12.8	-16.7	73	***	****	***	0.0	***
0900	-10.8	-15.1	71	***	****	***	0.0	***
1200	-5.9	-12.5	60	***	****	***	0.0	***
1500	-4.2	-10.3	63	***	****	***	0.0	***
1800	-5.8	-10.8	68	***	****	***	0.0	***
2100	-7.9	-12.1	72	***	****	***	0.0	***
2400	-8.3	-12.5	72	***	****	***	0.0	***

DAY 20

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-8.4	-12.4	73	***	****	***	0.0	***
0600	-9.7	-13.7	73	***	****	***	0.0	***
0900	-7.5	-12.3	69	***	****	***	0.0	***
1200	-2.1	-10.8	52	***	****	***	0.0	***
1500	-1.6	-11.0	49	***	****	***	0.0	***
1800	-3.1	-11.0	55	***	****	***	0.0	***
2100	-2.8	-9.2	62	***	****	***	0.0	***
2400	-2.0	-8.4	62	***	****	***	0.0	***

DAY 21

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.3	-9.2	64	***	****	***	0.0	***
0600	-3.4	-7.1	76	***	****	***	0.0	***
0900	-3.6	-6.1	83	***	****	***	0.0	***
1200	-3.1	-5.6	83	***	****	***	0.0	***
1500	-2.8	-6.0	79	***	****	***	0.0	***
1800	-6.8	-7.2	97	***	****	***	0.0	***
2100	-7.9	-8.4	96	***	****	***	0.0	***
2400	-9.6	-10.1	96	***	****	***	0.0	***

DAY 22

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-10.9	-11.6	95	***	****	***	0.0	***
0600	-11.0	-11.8	94	***	****	***	0.0	***
0900	-11.1	-12.0	93	***	****	***	0.0	***
1200	-4.9	-11.4	61	***	****	***	0.0	***
1500	-6.1	-14.9	50	***	****	***	0.0	***
1800	-8.9	-15.3	60	***	****	***	0.0	***
2100	-9.6	-14.7	67	***	****	***	0.0	***
2400	-7.9	-8.8	93	***	****	***	0.0	***

DAY 23

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-8.2	-10.0	87	***	****	***	0.0	***
0600	-9.6	-12.3	81	***	****	***	0.0	***
0900	-8.4	-11.4	79	***	****	***	0.0	***
1200	-4.5	-11.2	60	***	****	***	0.0	***
1500	-4.2	-8.7	71	***	****	***	0.0	***
1800	-6.1	-7.5	90	***	****	***	0.0	***
2100	-6.9	-8.3	90	***	****	***	.6	***
2400	-8.0	-8.4	97	***	****	***	.6	***

DAY 24

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-8.2	-9.0	94	***	****	***	0.0	***
0600	-9.1	-10.3	91	***	****	***	0.0	***
0900	-6.8	-9.2	83	***	****	***	2.5	***
1200	-5.8	-7.5	88	***	****	***	3.8	***
1500	-5.5	-7.3	87	***	****	***	5.7	***
1800	-5.8	-6.5	95	***	****	***	5.1	***
2100	-5.0	-6.9	87	***	****	***	3.8	***
2400	-5.0	-6.0	93	***	****	***	4.4	***

DAY 25

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-4.7	-6.3	89	***	****	***	4.4	***
0600	-4.6	-7.2	82	***	****	***	4.4	***
0900	-4.5	*****	93	***	****	***	3.8	***
1200	-1.1	*****	82	062	.7	097	2.5	010
1500	.8	*****	70	072	.7	071	2.5	008
1800	-1.6	-5.2	77	126	1.2	115	3.2	000
2100	-3.5	-5.8	84	121	1.0	173	2.5	001
2400	-6.3	-7.8	89	060	1.3	065	4.4	001

DAY 26

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-9.6	-10.7	92	054	1.0	070	3.2	000
0600	-10.9	-11.7	94	073	1.7	072	3.8	001
0900	-9.6	-11.4	87	082	1.3	087	3.2	007
1200	-4.7	-8.9	73	060	1.9	061	3.8	017
1500	-1.2	-6.6	67	047	1.4	057	2.5	010
1800	-2.5	*****	86	064	.7	061	1.9	001
2100	-4.5	-5.1	96	112	.5	120	1.9	001
2400	-5.9	*****	99	103	1.1	080	3.2	001

DAY 27

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-5.4	-5.5	99	084	1.4	086	3.2	00
0600	-5.5	-5.8	98	079	1.5	078	3.2	00
0900	-4.7	*****	96	070	1.1	080	2.5	00
1200	.2	-3.9	74	046	.9	061	2.5	01
1500	-.4	-3.6	79	061	.7	112	3.8	00
1800	-2.2	-3.6	90	263	.5	294	3.2	00
2100	-3.2	-5.1	87	142	1.9	143	3.8	00
2400	-4.9	-6.5	89	148	2.1	136	3.8	00

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

DAY 28

DAY 29

DAY 30

DAY 28									DAY 29									DAY 30								
HOUR	DEW	WIND	WIND	GUST	MAX.				HOUR	DEW	WIND	WIND	GUST	MAX.				HOUR	DEW	WIND	WIND	GUST	MAX.			
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-6.0	-7.3	91	116	1.8	137	3.8	001	0300	*****	*****	**	***	****	***	****	***	0300	*****	*****	**	***	****	***	****	***
0600	-5.4	-7.3	87	087	1.5	107	3.8	001	0600	*****	*****	**	***	****	***	****	***	0600	*****	*****	**	***	****	***	****	***
0900	-3.8	-7.0	79	119	1.0	122	3.8	010	0900	*****	*****	**	***	****	***	****	***	0900	*****	*****	**	***	****	***	****	***
1200	.4	-9.5	48	093	1.1	075	3.8	016	1200	*****	*****	**	***	****	***	****	***	1200	*****	*****	**	***	****	***	****	***
1500	-1.1	-10.5	46	095	2.0	075	5.1	012	1500	*****	*****	**	***	****	***	****	***	1500	*****	*****	**	***	****	***	****	***
1800	-1.3	-9.3	55	117	1.2	134	3.2	001	1800	*****	*****	**	***	****	***	****	***	1800	*****	*****	**	***	****	***	****	***
2100	-1.4	*****	67	166	1.0	147	2.5	001	2100	*****	*****	**	***	****	***	****	***	2100	*****	*****	**	***	****	***	****	***
2400	-3.0	-6.5	77	168	1.2	187	2.5	001	2400	*****	*****	**	***	****	***	****	***	2400	*****	*****	**	***	****	***	****	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P-VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	3.6	-3.2	.2	105	1.9	2.0	095	8.3	ESE	69	-4.3	****	***	01
02	4.4	-5.3	-.5	122	.7	1.5	109	7.6	ESE	79	-3.1	****	***	02
03	-1.3	-2.8	-2.1	119	.4	.6	111	2.5	ESE	94	-2.8	****	***	03
04	-.8	-2.5	-1.7	***	****	.4	088	1.3	ENE	91	-17.6	****	***	04
05	-.5	-3.3	-1.9	***	****	****	***	.6	MSG	92	-2.2	****	***	05
06	.4	-1.9	-.8	***	****	****	***	0.0	MSG	93	-1.1	****	***	06
07	-1.8	-3.9	-2.8	***	****	****	***	0.0	MSG	95	-3.9	****	***	07
08	-.8	-4.6	-2.7	***	****	****	***	0.0	MSG	94	-3.0	****	***	08
09	-.6	-3.8	-2.2	***	****	****	***	0.0	MSG	93	-3.7	****	***	09
10	-2.8	-4.7	-3.8	***	****	****	***	0.0	MSG	96	-4.2	****	***	10
11	-4.4	-11.8	-8.1	***	****	****	***	0.0	MSG	86	-10.8	****	***	11
12	-9.7	-13.8	-11.8	***	****	****	***	0.0	MSG	66	-17.1	****	***	12
13	-10.2	-21.9	-16.1	***	****	****	***	0.0	MSG	69	-19.6	****	***	13
14	-12.6	-24.1	-18.3	***	****	****	***	0.0	MSG	64	-24.7	****	***	14
15	-17.0	-27.8	-22.4	***	****	****	***	0.0	MSG	64	-27.9	****	***	15
16	-15.7	-23.7	-19.7	***	****	****	***	0.0	MSG	74	-22.2	****	***	16
17	-13.1	-19.3	-16.2	***	****	****	***	0.0	MSG	70	-21.1	****	***	17
18	-11.9	-25.1	-18.5	***	****	****	***	0.0	MSG	70	-21.1	****	***	18
19	-3.4	-13.6	-8.5	***	****	****	***	0.0	MSG	69	-13.4	****	***	19
20	-.8	-11.2	-6.0	***	****	****	***	0.0	MSG	62	-11.1	****	***	20
21	-2.0	-9.6	-5.8	***	****	****	***	0.0	MSG	83	-7.5	****	***	21
22	-4.6	-11.6	-8.1	***	****	****	***	0.0	MSG	76	-12.6	****	***	22
23	-3.3	-10.6	-7.0	***	****	****	***	.6	MSG	82	-9.7	****	***	23
24	-4.7	-9.2	-7.0	***	****	1.5	***	5.7	MSG	89	-7.8	****	***	24
25	.9	-6.3	-2.7	***	****	1.3	***	4.4	E	83	-6.5	****	951	25
26	-.8	-11.0	-5.4	070	1.1	1.3	072	3.8	ENE	85	-9.0	****	1063	26
27	2.1	-5.8	-1.9	102	.9	1.5	112	3.8	E	87	-4.9	****	1153	27
28	1.6	-7.0	-2.7	116	1.2	1.5	075	5.1	ESE	70	-8.2	****	1295	28
MONTH	4.4	-27.8	-7.3	104	1.0	1.3	095	8.3	ESE	80	-10.8	****	4461	

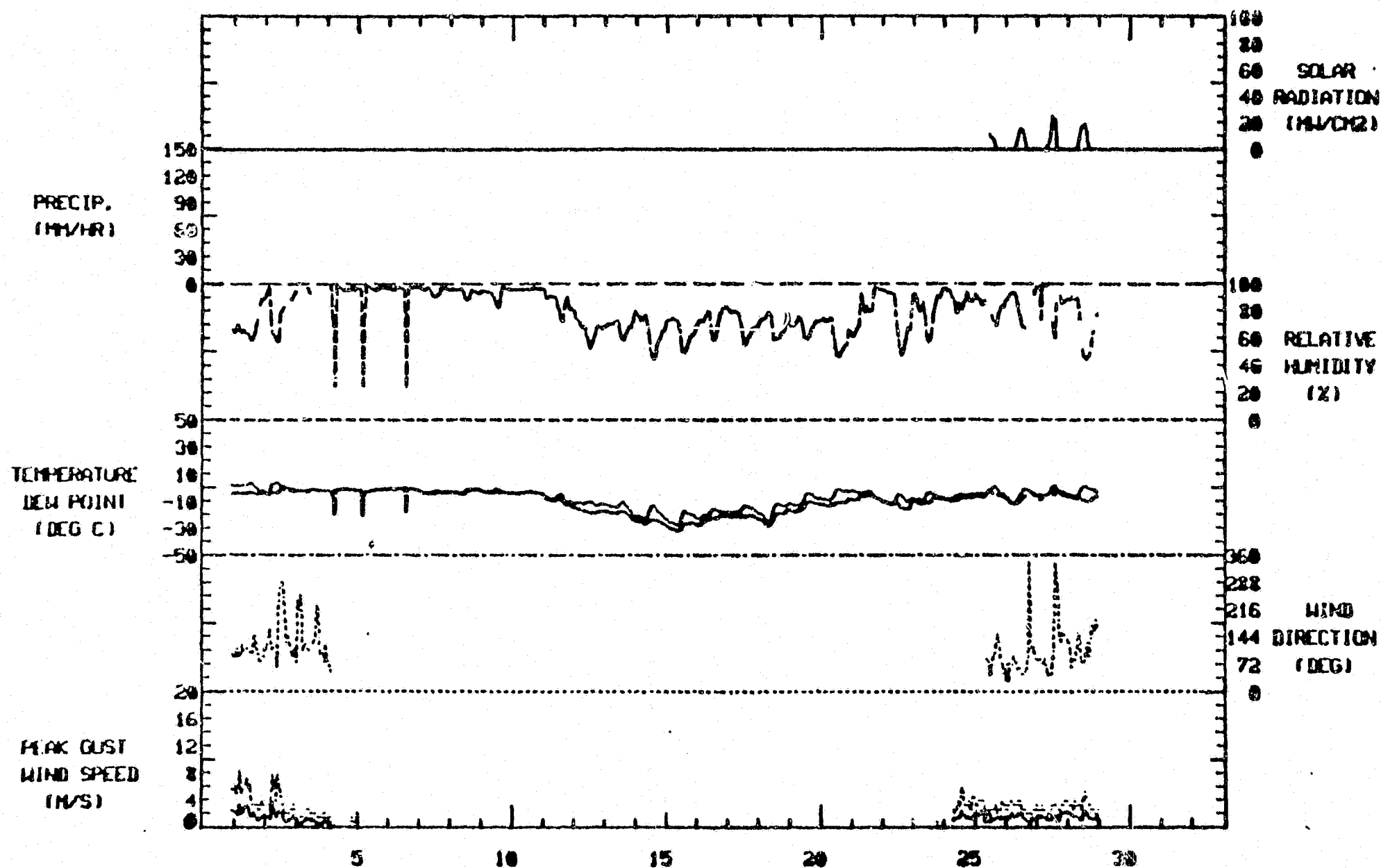
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 3.2
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 5.1
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 7.6
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 6.3

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH DEVIL CANYON WEATHER STATION

DATA START: 01 FEBRUARY, 1981

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT

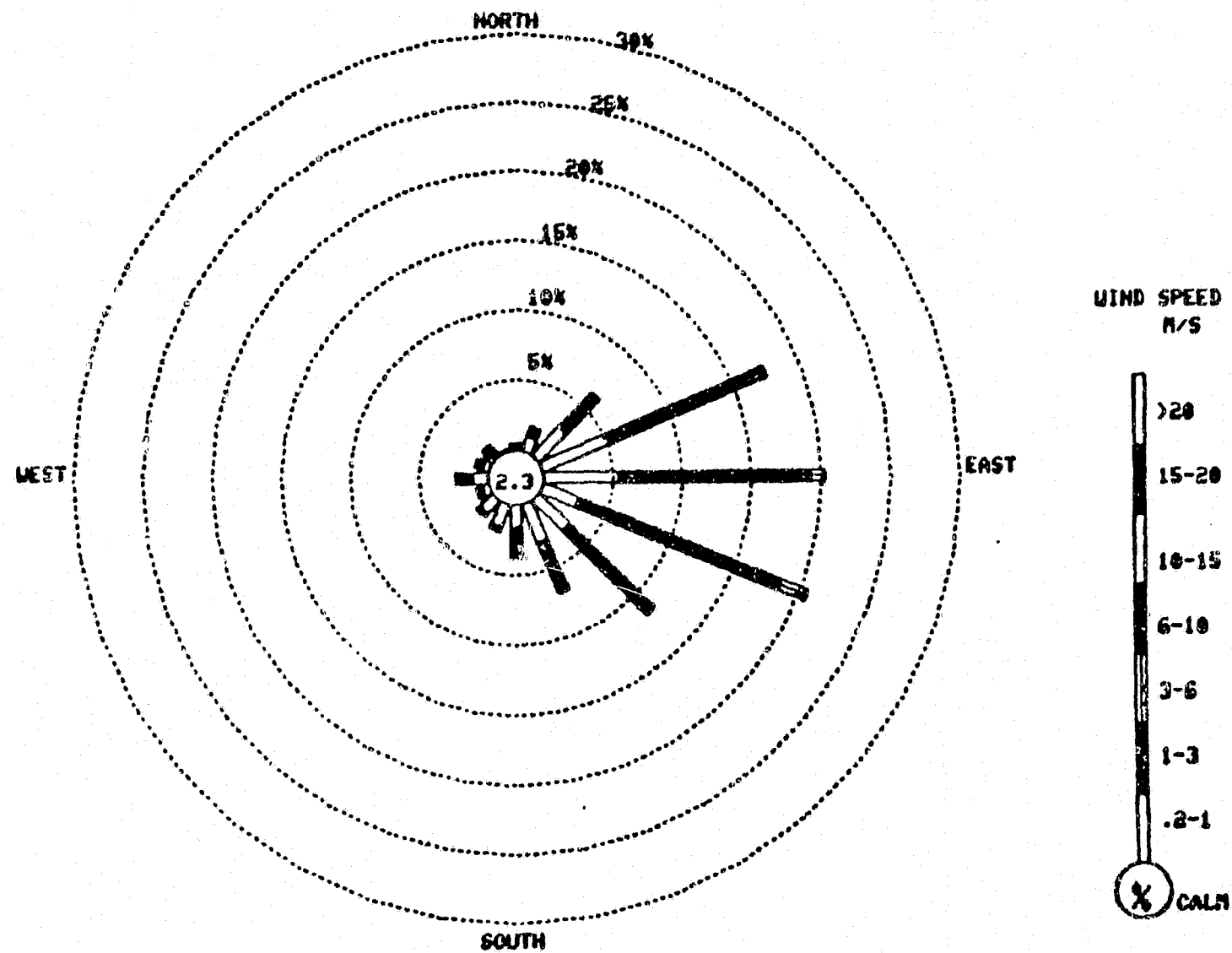
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING FEBRUARY , 1981

DIRECTION	VELOCITY (M/S)						GREATER THAN 20.0	TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0		
N	.31	.15	0.00	0.00	0.00	0.00	0.00	.46
NNE	1.08	.77	0.00	0.00	0.00	0.00	0.00	1.85
NE	2.77	3.39	0.00	0.00	0.00	0.00	0.00	6.16
ENE	5.24	12.17	0.00	0.00	0.00	0.00	0.00	17.41
E	5.39	13.71	1.08	0.00	0.00	0.00	0.00	20.18
ESE	2.77	15.56	2.16	0.00	0.00	0.00	0.00	20.49
SE	3.08	8.47	0.00	0.00	0.00	0.00	0.00	11.56
SSE	2.93	3.85	0.00	0.00	0.00	0.00	0.00	6.78
S	1.54	2.16	0.00	0.00	0.00	0.00	0.00	3.70
SSW	1.69	.31	0.00	0.00	0.00	0.00	0.00	2.00
SW	1.23	.31	0.00	0.00	0.00	0.00	0.00	1.54
WSW	.46	.46	0.00	0.00	0.00	0.00	0.00	.92
W	1.08	1.23	0.00	0.00	0.00	0.00	0.00	2.31
WNW	.46	.46	.15	0.00	0.00	0.00	0.00	1.08
NW	.15	.77	.15	0.00	0.00	0.00	0.00	1.08
NNW	.15	0.00	0.00	0.00	0.00	0.00	0.00	.15
CALM								2.31
TOTAL	30.35	63.79	3.54	0.00	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

649 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
FEBRUARY, 1981



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MARCH , 1981

DAY 01

DAY 02

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.9	-5.6	76	126	1.2	115	3.2	001	0300	-1.6	*****	93	245	.5	285	2.5	001	0300	-7.5	-8.2	95	065	1.2	056	3.2	001
0600	-1.3	-5.4	74	141	1.3	131	3.2	001	0600	-2.0	-2.3	98	280	.9	290	2.5	001	0600	-8.8	-9.6	94	061	1.6	056	3.8	001
0900	-.4	-5.5	69	150	1.1	170	2.5	008	0900	-1.9	-2.5	96	307	1.4	329	3.2	002	0900	-7.9	-9.6	88	055	1.5	060	3.2	001
1200	3.8	-6.3	48	117	1.9	099	5.7	036	1200	-1.6	-2.5	94	310	1.6	324	3.8	004	1200	-4.2	-8.6	72	056	1.3	045	3.2	006
1500	3.0	-6.5	50	104	2.0	093	5.7	009	1500	-1.6	-3.0	90	304	1.9	321	4.4	004	1500	-2.5	-8.1	66	056	1.1	021	2.5	004
1800	1.8	-5.0	61	140	1.0	113	3.8	001	1800	-2.7	*****	98	293	1.2	301	3.8	001	1800	-4.6	-8.6	74	135	1.8	118	3.2	001
2100	1.3	-4.2	67	159	1.3	141	3.8	001	2100	-3.5	-3.9	97	179	.6	136	2.5	000	2100	-6.7	-9.3	82	133	1.7	130	3.2	001
2400	0.0	*****	84	150	1.0	138	1.9	001	2400	-4.9	*****	96	108	.7	112	2.5	001	2400	-8.4	-11.0	82	126	1.3	131	3.2	001

DAY 04

DAY 05

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-11.5	-13.8	83	110	1.8	083	3.8	000	0300	-5.6	-9.9	72	167	1.6	162	2.5	001	0300	-5.8	-12.2	61	135	1.6	144	3.2	001
0600	-14.2	-16.2	85	061	2.6	081	3.8	001	0600	-4.3	-9.2	69	153	1.5	157	2.5	001	0600	-7.3	-12.1	69	081	1.7	079	3.8	001
0900	-12.0	-15.1	78	085	2.1	086	3.2	008	0900	-2.1	-9.0	56	124	.9	132	2.5	007	0900	-4.3	-11.4	58	086	1.7	089	4.4	012
1200	-5.0	-12.5	56	072	1.6	110	3.8	017	1200	.1	-10.8	44	101	2.1	104	5.7	021	1200	0.0	-11.5	42	096	2.2	102	4.4	039
1500	-4.2	-12.5	53	109	2.5	117	5.7	009	1500	.4	-10.9	43	090	2.3	077	6.3	013	1500	.5	-11.4	41	108	2.4	092	5.1	020
1800	-5.8	*****	64	127	1.3	129	4.4	001	1800	-1.1	*****	45	111	1.7	107	4.4	001	1800	-3.6	-11.4	55	128	1.8	109	3.8	001
2100	-6.4	-11.0	70	189	1.0	184	2.5	001	2100	-2.6	*****	59	154	.9	137	2.5	001	2100	-5.9	-11.5	65	137	1.9	155	3.2	001
2400	-5.1	-10.0	69	147	1.3	135	2.5	000	2400	-3.4	-11.3	55	137	1.1	128	2.5	001	2400	-8.9	-13.1	72	110	1.6	128	3.8	001

DAY 07

DAY 08

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-12.3	-14.8	82	086	2.0	102	3.8	001	0300	-4.2	-15.0	43	099	1.7	084	6.3	001	0300	-2.0	-9.9	55	142	1.3	104	3.2	001
0600	-14.4	-16.0	88	105	3.0	109	5.1	001	0600	-4.5	-14.0	48	143	1.7	119	5.1	001	0600	-2.2	-9.9	56	142	1.5	124	3.8	001
0900	-6.9	*****	61	106	2.0	109	4.4	017	0900	-2.6	-13.9	42	116	1.2	129	3.2	012	0900	1.5	-9.0	46	121	1.5	102	4.4	030
1200	.7	-10.3	44	065	.4	077	3.2	032	1200	.1	-10.3	46	110	2.4	112	5.1	034	1200	2.0	-8.5	46	104	2.2	119	5.7	023
1500	1.1	-10.8	41	081	2.0	080	7.0	021	1500	.2	-11.3	42	090	3.0	092	7.0	014	1500	3.4	-7.8	44	103	2.1	090	5.1	017
1800	-1.3	-13.3	40	116	2.4	094	5.7	001	1800	-.7	-11.0	46	119	1.6	116	5.1	001	1800	1.0	-7.9	52	122	1.6	108	3.8	001
2100	-3.3	-14.5	42	127	1.4	127	3.8	001	2100	-.7	*****	47	108	2.1	072	8.3	001	2100	-1.3	-6.9	66	126	1.5	144	2.5	001
2400	-4.2	-15.3	42	128	2.0	152	4.4	001	2400	-1.2	-10.4	50	133	.8	138	3.2	001	2400	-2.3	-4.5	85	137	1.7	135	3.8	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MARCH , 1981

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-3.8	-5.2	90	129	2.0	129	3.8	001
0600	-4.2	-5.8	89	137	1.7	137	3.2	001
0900	-2.4	-7.0	71	121	2.2	100	4.4	012
1200	*****	*****	**	092	2.2	109	6.3	043
1500	3.0	-9.1	41	092	2.2	097	5.1	022
1800	-1.3	-8.8	57	111	1.8	113	4.4	001
2100	-3.8	-8.2	72	138	1.6	126	3.2	001
2400	-4.8	*****	86	151	.8	118	2.5	001

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	.1	-6.4	62	145	1.1	123	5.1	001
0600	.4	-6.1	62	090	3.0	087	7.6	001
0900	1.4	-4.5	65	092	3.4	074	8.9	013
1200	4.7	-4.2	53	099	2.5	120	6.3	018
1500	4.1	-2.0	65	080	1.5	094	5.1	003
1800	1.2	-1.9	80	119	1.5	120	4.4	001
2100	1.0	-2.8	76	147	1.1	151	3.2	001
2400	.8	*****	66	143	1.0	157	3.8	000

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	.6	-6.1	61	107	1.0	133	3.2	001
0600	-.1	-7.5	58	117	1.0	053	4.4	001
0900	.9	-8.0	52	134	1.3	134	3.8	011
1200	*****	*****	44	083	1.2	103	4.4	033
1500	2.9	*****	45	122	2.0	122	4.4	012
1800	.4	-7.0	58	109	1.4	111	4.4	001
2100	-.4	-7.5	59	136	1.5	124	3.2	001
2400	-2.2	-6.3	74	127	1.5	127	3.2	001

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-4.0	-6.3	84	159	1.3	158	2.5	001
0600	-3.4	-7.8	72	133	1.2	127	2.5	001
0900	-1.1	-10.1	51	129	1.2	101	4.4	013
1200	.3	-11.6	41	099	2.6	098	7.0	***
1500	*****	*****	33	095	2.8	107	6.3	***
1800	-.5	-10.3	48	099	1.9	109	5.1	001
2100	-2.4	*****	66	166	1.4	162	3.2	001
2400	-2.1	-8.5	62	145	2.0	123	5.7	001

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-.6	-8.9	54	139	1.8	139	6.3	001
0600	-1.7	-9.2	57	166	1.4	151	3.2	001
0900	.8	-8.8	49	137	.9	113	3.2	013
1200	2.6	-8.3	45	118	2.1	124	6.3	010
1500	2.0	-4.8	61	316	.6	256	2.5	020
1800	-1.6	-6.6	69	232	.2	314	1.9	001
2100	-2.4	-7.2	70	155	1.1	143	3.2	001
2400	-5.1	-7.4	84	128	1.4	135	3.2	001

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-8.2	-9.7	89	097	1.6	090	3.2	001
0600	-9.8	-11.0	91	082	2.0	075	4.4	001
0900	-6.6	-12.0	66	086	2.4	086	3.8	025
1200	*****	*****	43	075	2.1	065	3.8	***
1500	*****	*****	37	107	2.2	091	3.8	***
1800	-2.2	-10.6	53	133	1.1	***	3.8	001
2100	-5.0	-11.4	61	108	1.4	098	3.8	001
2400	-7.3	*****	74	091	1.4	080	3.2	000

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-9.2	-12.2	79	073	2.0	076	4.4	001
0600	-10.9	-13.6	81	075	2.6	070	4.4	001
0900	-8.5	-13.6	67	076	2.6	073	4.4	016
1200	.8	*****	**	064	2.2	087	4.4	029
1500	1.6	-10.7	40	095	2.6	095	5.7	021
1800	-.9	-10.4	49	111	1.8	103	4.4	001
2100	-2.5	*****	61	168	1.2	137	2.5	001
2400	-.9	-8.7	56	150	1.4	159	3.2	001

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	.2	-9.1	50	155	1.5	166	3.2	001
0600	-.1	-9.1	51	165	1.1	166	2.5	001
0900	2.9	-8.6	43	154	.8	136	2.5	018
1200	4.5	-8.4	39	091	1.9	091	6.3	024
1500	5.4	-7.9	38	083	2.1	100	7.0	013
1800	2.8	*****	44	092	.8	078	3.8	001
2100	1.7	-8.0	49	182	1.4	171	2.5	001
2400	.2	-7.9	55	177	1.0	191	2.5	000

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-.4	*****	56	161	.8	138	1.9	001
0600	.2	-8.4	53	168	.9	163	1.9	001
0900	4.5	-8.4	39	103	.5	193	2.5	025
1200	7.9	-10.6	26	084	1.3	098	3.8	030
1500	9.0	-11.7	22	096	2.0	103	5.7	017
1800	6.8	-11.5	26	108	2.6	106	7.0	002
2100	2.5	-8.7	44	162	1.1	122	5.7	001
2400	1.1	*****	63	168	.8	190	1.9	001

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DAY 19

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	.9	*****	62	134	1.1	131
0600	0.0	*****	90	192	.6	211
0900	2.0	*****	80	060	.6	056
1200	1.0	-.6	89	315	1.0	305
1500	2.1	-.0	86	292	1.4	309
1800	.1	-1.8	87	253	.9	275
2100	-1.9	-2.8	94	155	1.1	181
2400	-4.2	-5.0	94	122	1.3	123

DAY 20

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-6.6	-6.7	99	094	1.4	100
0600	-8.1	-11.3	00	086	1.7	073
0900	-3.3	-7.5	73	088	1.8	097
1200	4.4	-9.5	36	086	1.3	135
1500	4.7	-11.6	30	108	3.0	106
1800	1.2	-12.0	37	113	2.1	115
2100	-3.5	*****	57	138	1.2	155
2400	-6.4	*****	70	120	.9	145

DAY 21

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-8.1	-12.0	74	088	1.8	076
0600	-10.2	-12.0	87	092	1.8	084
0900	-5.1	-12.6	56	076	1.7	090
1200	2.4	-11.7	35	092	1.8	110
1500	2.7	-11.7	34	105	3.1	097
1800	-.5	-12.0	42	112	2.7	110
2100	-3.4	-12.2	51	131	1.4	076
2400	-5.3	-14.0	51	145	1.3	172

DAY 22

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-6.2	-14.8	51	142	1.4	162
0600	-6.7	-15.0	52	168	1.9	146
0900	-1.4	-13.7	39	126	1.2	085
1200	.2	-12.9	37	101	3.4	098
1500	.4	-12.7	37	066	2.9	067
1800	-1.7	-12.5	44	062	2.7	064
2100	-4.8	-10.8	63	153	1.6	119
2400	-5.8	-9.9	73	174	1.7	160

DAY 23

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-8.7	-10.1	90	179	1.4	170
0600	-7.5	-8.6	92	171	1.2	188
0900	-1.9	-8.9	59	141	.6	075
1200	1.7	-8.3	48	104	2.2	106
1500	2.6	-6.9	50	111	2.5	109
1800	.2	-6.7	60	117	1.7	097
2100	-1.5	-6.0	72	134	1.6	141
2400	-1.3	-5.9	71	130	1.7	136

DAY 24

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-1.6	-5.7	74	119	1.5	125
0600	-2.6	*****	90	116	1.2	118
0900	1.1	-5.0	64	050	1.2	064
1200	2.3	-5.9	55	106	2.3	102
1500	4.2	-6.2	47	115	1.7	127
1800	.7	-6.3	60	152	1.4	140
2100	-2.5	-5.9	78	144	1.7	151
2400	-5.0	-6.7	88	117	1.8	114

DAY 25

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-7.6	-7.9	98	088	1.7	099
0600	-9.1	-9.5	97	082	2.4	078
0900	-3.7	-9.0	67	075	2.1	086
1200	3.0	-7.1	48	068	1.9	071
1500	5.3	-7.7	39	138	1.7	106
1800	.5	-8.3	52	139	1.8	139
2100	-1.8	-6.6	70	132	2.0	144
2400	-1.5	*****	72	135	1.3	142

DAY 26

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-1.6	-6.1	72	141	1.2	141
0600	-1.6	*****	76	189	.6	200
0900	1.7	*****	59	121	.6	166
1200	3.2	-5.6	53	086	2.0	091
1500	4.0	-4.8	53	068	2.1	048
1800	2.3	-4.1	63	050	1.9	047
2100	-.7	*****	77	178	1.0	187
2400	-.8	*****	80	187	.7	186

DAY 27

HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.
					M/S	MW
0300	-1.9	*****	94	235	.3	289
0600	-1.6	*****	01	191	.2	135
0900	.2	*****	91	276	.4	283
1200	2.1	-1.7	76	309	1.0	278
1500	1.8	-1.7	78	302	1.7	286
1800	.5	-1.4	87	287	.5	320
2100	-.8	*****	98	163	.5	145
2400	-2.4	*****	97	119	.8	123

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DAY 28

DAY 29

DAY 30

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-3.1	*****	93	115	.8	147	1.9 001	0300	-8.3	-10.0	88	105	1.8	091	3.8 001	0300	-5.4	-9.2	75	103	1.5	141	3.8 001
0600	-4.6	-5.4	94	073	1.2	083	3.2 001	0600	-9.5	*****	90	097	1.0	097	2.5 002	0600	-9.6	-11.4	87	082	1.7	074	4.4 002
0900	-1.5	-5.6	74	048	1.5	071	3.2 019	0900	-4.5	-10.4	64	055	1.8	058	3.8 032	0900	-4.4	-10.9	61	066	2.0	077	3.2 031
1200	3.0	-6.3	51	058	1.4	036	3.2 037	1200	2.3	-9.1	43	083	2.0	075	5.1 047	1200	2.0	-8.8	45	079	2.0	059	4.4 048
1500	3.8	-6.3	48	307	.9	271	3.2 017	1500	3.3	-9.2	40	140	2.2	143	4.4 034	1500	3.3	-9.2	40	141	.9	040	3.8 035
1800	1.3	*****	55	203	.9	140	3.2 002	1800	.1	-9.0	51	133	1.7	124	3.8 002	1800	1.8	-9.3	44	256	1.4	266	3.8 004
2100	-2.8	*****	73	131	1.0	148	2.5 001	2100	-3.5	-8.4	69	142	1.8	131	3.2 001	2100	-2.0	*****	68	177	.8	271	2.5 001
2400	-4.9	-8.5	76	117	1.4	120	3.2 001	2400	-5.0	-8.6	76	132	2.1	128	3.8 000	2400	-2.1	*****	80	128	.8	116	2.5 000

DAY 31

DAY 31

DAY 31

HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR NDNG	DEW TEMP.	POINT RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-3.2	*****	00	018	.2	053	1.3 000	0300	*****	*****	**	***	*****	***	*****	0300	*****	*****	**	***	*****	***	*****
0600	-3.5	*****	95	307	.6	299	2.5 001	0600	*****	*****	**	***	*****	***	*****	0600	*****	*****	**	***	*****	***	*****
0900	-2.4	-4.5	66	093	.5	071	3.2 008	0900	*****	*****	**	***	*****	***	*****	0900	*****	*****	**	***	*****	***	*****
1200	-.4	-7.1	61	095	1.5	080	4.4 017	1200	*****	*****	**	***	*****	***	*****	1200	*****	*****	**	***	*****	***	*****
1500	.6	-12.6	37	133	.3	013	4.4 037	1500	*****	*****	**	***	*****	***	*****	1500	*****	*****	**	***	*****	***	*****
1800	*****	*****	**	170	.9	051	3.8 ***	1800	*****	*****	**	***	*****	***	*****	1800	*****	*****	**	***	*****	***	*****
2100	-6.7	-13.3	60	124	1.9	127	3.8 001	2100	*****	*****	**	***	*****	***	*****	2100	*****	*****	**	***	*****	***	*****
2400	-7.4	-11.6	72	106	1.5	127	3.2 001	2400	*****	*****	**	***	*****	***	*****	2400	*****	*****	**	***	*****	***	*****

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MARCH , 1981

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SGM	DAY
01	3.8	-3.5	.2	132	1.3	1.4	099	5.7	SE	65	-5.5	****	1263	01
02	-.1	-4.9	-2.5	294	.8	1.2	321	4.4	NW	95	-2.8	****	390	02
03	-2.3	-8.9	-5.6	085	1.1	1.4	056	3.8	NE	82	-9.1	****	578	03
04	-3.6	-14.2	-8.9	105	1.5	1.9	117	5.7	E	71	-13.0	****	1060	04
05	.8	-6.4	-2.8	124	1.3	1.6	077	6.3	SSE	55	-10.3	****	1370	05
06	.5	-9.2	-4.4	110	1.7	1.9	092	5.1	ESE	56	-11.8	****	1800	06
07	1.8	-14.8	-6.5	106	1.8	2.1	080	7.0	ESE	58	-13.6	****	1875	07
08	1.2	-5.8	-2.3	111	1.7	1.9	072	8.3	ESE	45	-12.3	****	1735	08
09	3.5	-2.9	.3	122	1.6	1.8	119	5.7	ESE	55	-8.1	****	1788	09
10	3.4	-6.7	-1.6	120	1.7	1.9	109	6.3	SE	69	-7.4	****	1825	10
11	5.4	-4.8	.3	105	1.8	2.0	074	8.9	ESE	67	-4.0	****	1135	11
12	3.1	-2.7	.2	120	1.3	1.6	053	4.4	SE	56	-7.1	****	1595	12
13	3.4	-5.4	-1.0	124	1.6	1.9	098	7.0	SSE	57	-9.1	****	1527	13
14	3.2	-5.5	-1.2	140	1.0	1.4	139	6.3	SSE	61	-7.7	****	1408	14
15	2.8	-10.1	-3.7	093	1.7	1.8	075	4.4	E	66	-10.9	****	2211	15
16	1.8	-2.7	-.4	092	1.8	2.1	095	5.7	ENE	61	-11.5	****	2150	16
17	5.5	-1.6	2.0	131	1.0	1.4	100	7.0	S	46	-8.4	****	1783	17
18	9.2	-.7	4.3	122	1.1	1.4	106	7.0	S	34	-9.9	****	2308	18
19	2.6	-4.5	-1.0	189	.2	1.1	131	4.4	ESE	83	-2.1	****	1563	19
20	5.1	-8.1	-1.5	103	1.6	1.8	106	6.3	ESE	54	-26.7	****	3278	20
21	2.9	-10.2	-3.7	104	1.9	2.0	110	7.0	ESE	55	-12.3	****	2978	21
22	.7	-8.3	-3.8	113	1.6	2.2	098	7.6	SSE	48	-12.8	****	3063	22
23	2.8	-8.7	-3.0	129	1.5	1.7	109	5.7	SE	66	-7.7	****	2615	23
24	4.2	-5.0	-.4	117	1.4	1.6	102	5.7	ESE	66	-6.0	****	2988	24
25	5.3	-9.4	-2.0	104	1.6	1.9	071	4.4		68	-8.0	****	3463	25
26	4.3	-2.0	1.2	102	.8	1.4	048	5.7		62	-5.1	****	2128	26
27	2.7	-2.4	.1	281	.3	.8	286	3.8		87	-1.6	****	1510	27
28	4.0	-4.9	-.4	088	.7	1.3	083	3.2	NE	69	-6.4	****	2475	28
29	3.4	-9.5	-3.1	113	1.6	1.9	075	5.1	SE	64	-9.2	****	3615	29
30	4.2	-9.6	-2.7	101	.8	1.6	074	4.4	ENE	61	-9.8	****	3635	30
31	2.1	-7.5	-2.7	113	.7	1.3	080	4.4	E	57	-9.8	0.0	2405	31
MONTH	9.2	-14.8	-1.8	112	1.2	1.6	074	8.9	ESE	63	-9.0	0.0	63510	

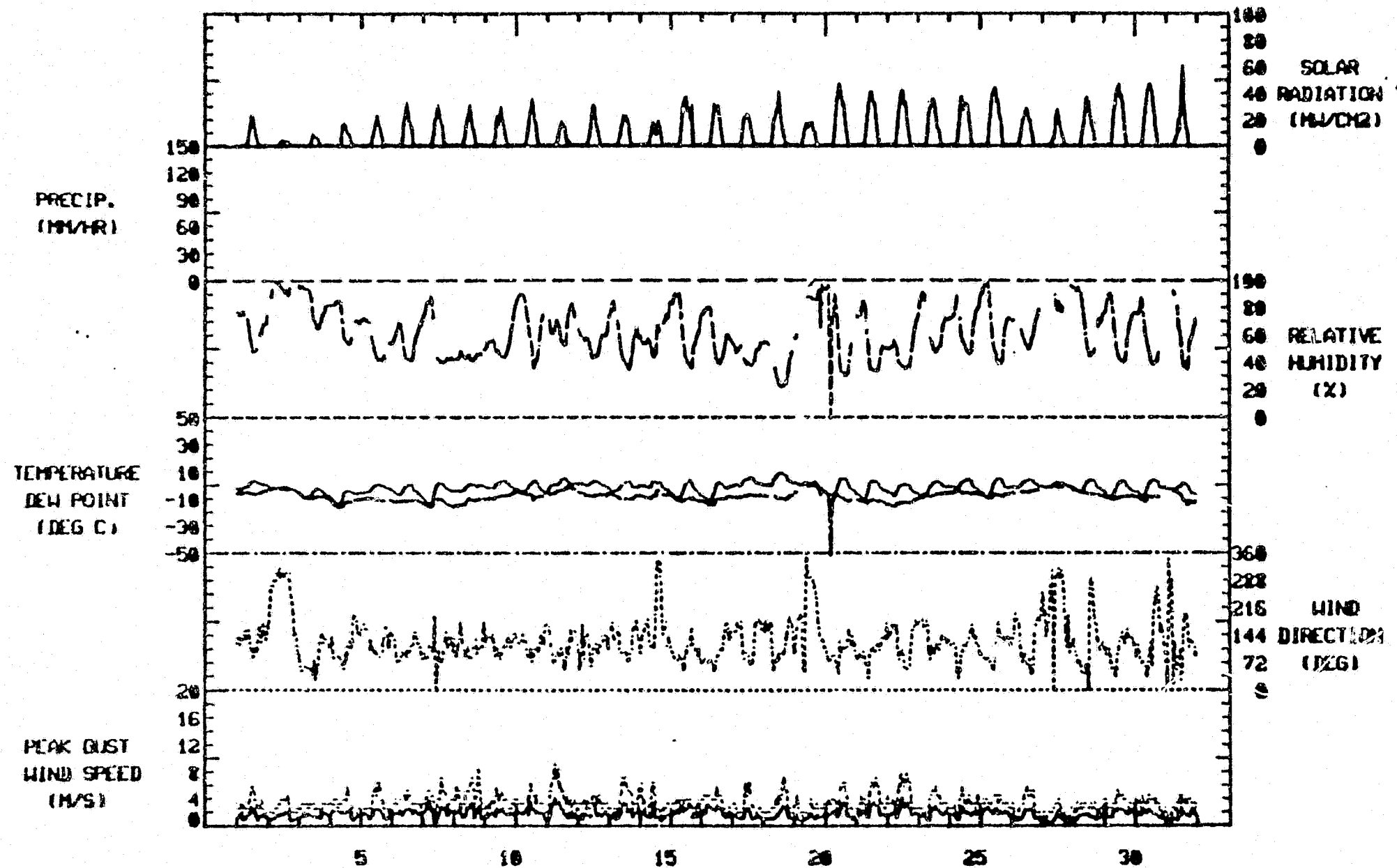
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 7.6
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 7.0
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 7.6
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 5.1

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

R&M CONSULTANT, INC.

SUSTIYA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 MARCH . 1981

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

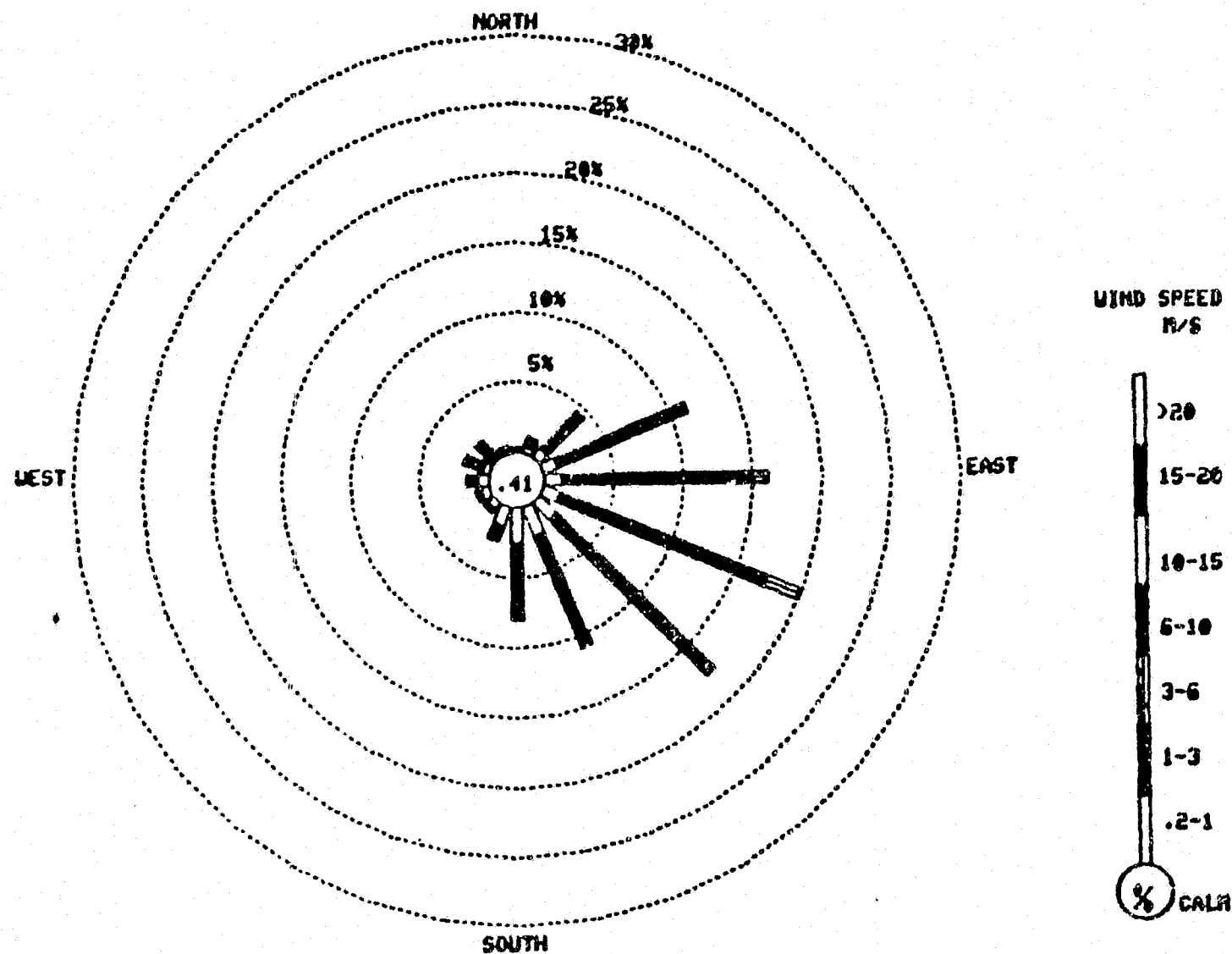
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MARCH , 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	.07	.24	0.00	0.00	0.00	0.00	0.00	.31
NNE	.41	.82	0.00	0.00	0.00	0.00	0.00	1.23
NE	.75	3.69	.10	0.00	0.00	0.00	0.00	4.54
ENE	1.09	9.49	.58	0.00	0.00	0.00	0.00	11.16
E	1.23	13.65	1.13	0.00	0.00	0.00	0.00	16.01
ESE	1.26	15.90	2.76	0.00	0.00	0.00	0.00	19.93
SE	1.64	15.73	.14	0.00	0.00	0.00	0.00	17.51
SSE	2.15	8.60	.03	0.00	0.00	0.00	0.00	10.78
S	2.42	5.49	0.00	0.00	0.00	0.00	0.00	7.92
SSW	1.37	1.13	0.00	0.00	0.00	0.00	0.00	2.49
SW	.51	.38	0.00	0.00	0.00	0.00	0.00	.89
WSW	.61	.38	0.00	0.00	0.00	0.00	0.00	.99
W	.75	.82	0.00	0.00	0.00	0.00	0.00	1.57
WNW	.48	1.50	0.00	0.00	0.00	0.00	0.00	1.98
NW	.24	1.54	0.00	0.00	0.00	0.00	0.00	1.77
NNW	.38	.14	0.00	0.00	0.00	0.00	0.00	.51
CALM								.41
TOTAL	15.36	79.49	4.74	0.00	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2930 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
MARCH, 1981



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING APRIL , 1981

DAY 01

DAY 02

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-7.2	*****	73	094	1.4	095	3.2	001	0300	-4.9	*****	99	213	.1	014	1.3	000	0300	-10.0	-11.1	92	084	1.5	110	3.8	001
0600	-7.8	-8.9	92	116	.5	129	1.9	002	0600	-4.6	*****	99	185	.2	199	1.3	002	0600	-11.6	-12.9	90	074	1.4	072	3.8	003
0900	-5.5	-7.0	89	047	1.2	056	2.5	016	0900	-2.1	-4.3	85	325	.9	308	3.8	016	0900	-5.4	-12.0	60	057	1.6	060	3.2	043
1200	-1.8	-5.4	77	036	1.4	039	3.8	030	1200	-2.0	-4.7	82	310	2.0	314	5.1	007	1200	-1.6	-11.6	47	104	2.2	090	5.1	052
1500	-1.0	-3.9	81	057	1.6	045	3.8	016	1500	0.0	-7.6	57	325	1.7	330	4.4	041	1500	.1	-12.4	39	119	1.5	084	5.7	036
1800	-1.7	*****	96	024	.9	064	3.2	003	1800	-2.2	-8.2	64	258	1.3	311	4.4	003	1800	-2.4	-14.3	40	185	1.2	160	3.8	007
2100	-3.0	*****	98	321	.2	288	1.3	001	2100	-6.4	-9.0	82	149	.9	101	2.5	000	2100	-8.5	-15.2	59	111	1.3	133	3.2	001
2400	-3.9	*****	00	244	.1	099	.6	000	2400	-8.2	-10.9	81	104	1.0	054	3.8	000	2400	-10.7	-14.5	74	121	1.6	122	3.8	001

DAY 04

DAY 05

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-13.3	-15.6	83	118	1.0	107	3.2	001	0300	-13.8	-16.8	78	081	1.9	088	3.8	001	0300	-7.5	-13.6	62	118	1.6	128	3.8	001
0600	-15.1	-17.2	84	101	1.3	113	3.2	003	0600	-14.3	-17.5	77	082	1.9	090	3.8	003	0600	-9.2	-15.4	61	110	1.8	118	3.8	006
0900	-7.5	-15.3	54	053	1.7	059	3.8	036	0900	-4.3	-12.8	52	052	1.8	047	3.8	021	0900	-5.2	-14.9	47	076	1.6	097	4.4	***
1200	-6	-15.4	32	052	1.4	033	3.2	052	1200	-1.5	-13.5	40	062	1.7	096	3.8	066	1200	-1.1	-13.8	38	080	1.9	043	4.4	039
1500	.7	-13.2	35	291	.4	002	3.8	036	1500	-.4	-13.5	37	293	.9	029	4.4	041	1500	.1	*****	**	221	.7	042	3.8	034
1800	-1.9	-16.6	32	184	.7	213	3.8	008	1800	-3.0	-12.1	50	231	1.3	193	3.2	003	1800	*****	*****	45	233	1.3	215	3.8	004
2100	-8.5	-15.4	58	140	1.2	177	3.2	001	2100	-6.8	*****	63	117	.6	095	2.5	001	2100	-5.0	-11.7	60	111	.9	140	3.2	001
2400	-10.7	-15.9	66	095	1.4	086	3.8	001	2400	-7.7	-13.0	66	090	1.0	084	2.5	001	2400	-7.4	*****	66	104	1.1	082	1.9	001

DAY 07

DAY 08

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-8.9	*****	71	118	.9	090	2.5	001	0300	-10.6	-14.4	74	079	1.3	088	3.2	001	0300	-5.2	*****	66	200	1.0	180	1.9	001
0600	-10.4	-13.9	76	109	1.4	094	3.2	003	0600	-11.8	-15.1	77	074	1.6	074	3.2	005	0600	-7.5	*****	82	163	.8	134	3.8	004
0900	-4.7	-13.4	51	057	1.6	094	3.2	037	0900	-4.6	-13.8	49	050	1.7	068	3.8	040	0900	-1.0	-14.0	37	100	1.5	108	3.8	038
1200	.1	-12.7	38	043	1.6	058	3.8	054	1200	.2	-14.3	33	022	.6	201	4.4	058	1200	-.1	-17.5	26	119	2.2	103	5.1	***
1500	.9	-13.7	33	145	.5	***	13.9	036	1500	.3	-14.2	33	192	1.8	177	4.4	036	1500	.8	-17.6	24	114	2.8	130	6.3	040
1800	-.6	-14.0	36	175	1.0	199	3.2	008	1800	-.8	-12.9	40	226	1.1	180	3.8	006	1800	-1.6	-20.2	23	110	2.6	109	5.7	011
2100	-5.5	-14.2	51	111	1.1	119	3.2	001	2100	-4.3	*****	57	128	.7	166	1.9	001	2100	-6.7	-19.4	36	134	1.9	111	3.2	002
2400	-7.8	-14.3	60	097	1.5	094	5.1	001	2400	-4.1	-10.8	60	154	1.0	142	2.5	001	2400	-10.3	-19.1	49	151	1.2	160	2.5	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING APRIL , 1981

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-10.5	-18.6	52	132	1.4	143	3.2	001
0600	-12.6	-19.2	58	094	1.5	085	3.8	003
0900	-4.2	-18.6	32	092	2.3	103	7.0	040
1200	-1.3	-19.9	23	105	3.8	102	7.6	056
1500	-1.3	-20.4	22	104	3.7	119	8.3	041
1800	-2.1	-20.6	23	092	3.3	075	7.6	012
2100	-8.0	-21.2	34	121	1.4	104	5.7	002
2400	-6.7	-20.8	32	121	1.2	163	3.8	002

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-6.7	-21.1	31	125	1.3	118	4.4	002
0600	-5.1	-20.9	28	153	1.8	099	5.7	005
0900	-4.4	-19.7	22	090	2.0	106	5.7	041
1200	2.4	-17.3	22	094	3.2	112	8.3	057
1500	3.5	-16.9	21	103	3.3	126	7.0	041
1800	1.6	-18.5	21	093	2.7	106	6.3	012
2100	-3.7	-18.5	31	126	1.5	088	3.8	002
2400	-4.7	-17.3	37	151	1.5	157	3.2	001

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-8.3	-17.5	48	104	1.4	104	3.8	001
0600	-9.7	-18.5	49	109	2.1	137	3.8	004
0900	-2.3	-16.5	33	075	2.0	114	5.1	041
1200	2.0	-15.7	26	096	2.4	084	5.1	058
1500	2.4	-19.0	19	068	2.5	024	8.9	043
1800	-3.3	-20.1	21	020	5.3	019	9.5	013
2100	-3.9	-21.2	25	047	1.9	017	9.5	002
2400	-8.2	-19.0	42	107	1.0	150	3.2	001

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-10.1	-18.4	51	100	1.3	094	2.5	001
0600	-11.2	*****	56	145	1.0	136	2.5	004
0900	-2.9	-18.2	30	087	1.1	087	4.4	041
1200	-1.3	-20.4	22	092	3.0	106	9.5	058
1500	-1.3	-20.1	21	066	3.6	095	8.9	043
1800	-1.2	-21.4	20	064	3.0	069	7.0	013
2100	-6.1	-18.6	37	104	1.5	052	5.1	001
2400	-9.4	-19.2	45	144	1.6	175	3.8	002

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-9.6	-19.4	45	131	1.4	122	3.8	001
0600	-8.8	-19.8	41	132	1.9	147	3.8	009
0900	-5.0	-20.0	30	099	2.3	079	8.3	042
1200	-4.0	-21.7	24	080	3.4	101	9.5	059
1500	-3.6	-20.0	27	061	4.0	057	9.5	039
1800	-3.2	-18.9	29	057	3.6	063	7.6	013
2100	-6.9	-20.3	34	091	1.8	044	5.1	002
2400	-9.7	-20.3	42	160	1.6	112	3.8	001

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-10.0	-20.1	44	161	1.3	161	3.2	001
0600	-9.6	*****	41	133	1.7	130	3.8	008
0900	-3.4	-19.4	28	072	2.5	064	8.3	043
1200	-1.9	-20.9	22	069	3.3	055	8.3	060
1500	-1.7	-21.0	20	084	3.6	101	7.6	044
1800	-1.4	-22.2	19	094	3.2	103	8.3	015
2100	-6.7	-21.1	31	101	1.9	093	4.4	002
2400	-8.4	-21.9	33	118	2.0	117	3.8	002

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-10.4	*****	36	156	1.5	145	3.8	002
0600	-6.0	*****	28	162	1.1	153	3.2	013
0900	-3.7	-22.0	23	075	2.1	081	6.3	044
1200	-2.2	-21.2	22	057	3.3	038	7.6	060
1500	-1.6	-19.8	22	109	2.2	113	5.7	044
1800	-1.1	-20.8	21	073	2.0	067	4.4	013
2100	-7.3	-18.7	40	139	1.7	097	3.8	001
2400	-8.6	-18.0	47	137	2.4	137	3.8	001

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-11.1	-19.1	52	124	2.0	126	3.8	001
0600	-10.6	-18.9	51	082	1.9	114	3.2	011
0900	-3.4	-17.2	34	060	1.9	069	4.4	044
1200	.7	-15.1	30	096	2.7	094	5.7	061
1500	2.2	-14.6	28	104	2.4	117	5.7	044
1800	.5	-15.6	29	092	2.4	098	5.7	013
2100	-4.7	-14.7	46	137	1.1	054	5.1	001
2400	-6.0	-14.4	52	159	1.2	161	2.5	001

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG	WIND SPD. M/S	GUST DIR. DEG	MAX. GUST M/S	RAD MW
0300	-9.5	*****	66	140	1.1	102	2.5	001
0600	-6.0	*****	49	125	.9	115	3.2	012
0900	1.2	-14.6	30	096	1.4	111	5.7	045
1200	4.5	-14.5	24	112	3.2	108	6.3	061
1500	4.1	-15.9	22	083	3.2	102	7.6	036
1800	2.2	-14.2	29	055	2.6	054	7.0	007
2100	1.0	-14.0	32	111	1.2	066	3.8	002
2400	-1.8	-12.3	45	142	.9	116	3.2	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING APRIL , 1981

DAY 19

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-2.0	-11.7	48	172	1.5	157	2.5	001
0600	-.3	*****	45	156	.9	139	2.5	013
0900	2.4	-11.3	36	079	1.9	118	5.7	045
1200	6.5	-10.0	30	110	2.6	106	5.1	063
1500	5.6	-10.0	32	100	2.5	083	5.7	045
1800	4.3	-10.0	35	058	2.4	053	5.7	014
2100	-2.3	-8.7	62	120	1.2	051	4.4	001
2400	-3.7	*****	75	168	1.1	156	2.5	000

DAY 20

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.1	-7.3	73	166	1.0	151	2.5	001
0600	-.2	*****	61	167	.9	166	1.9	015
0900	6.0	-7.0	39	053	.5	073	5.1	046
1200	8.2	-7.3	33	083	2.2	071	5.7	053
1500	9.4	-7.4	30	065	1.9	047	4.4	048
1800	6.4	-8.1	35	177	.9	201	3.8	008
2100	2.4	*****	59	235	.3	340	4.4	001
2400	1.0	*****	69	134	.9	125	2.5	001

DAY 21

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.8	-3.7	87	108	1.3	146	2.5	000
0600	-1.6	-5.2	77	075	1.5	075	3.2	015
0900	4.6	-7.7	41	067	1.5	130	3.8	047
1200	8.6	-6.1	30	094	2.1	109	5.1	066
1500	8.6	-9.0	28	059	2.7	029	6.3	047
1800	8.0	-9.1	29	043	2.4	031	5.7	015
2100	.6	*****	59	123	.8	031	3.2	001
2400	-.9	-6.9	64	139	1.4	130	3.2	001

DAY 22

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.4	-5.9	72	127	1.1	152	3.2	000
0600	-1.5	-7.1	66	102	1.4	112	3.8	012
0900	5.3	-8.0	38	043	1.9	047	3.8	047
1200	8.9	-8.3	29	135	1.2	187	3.0	061
1500	9.4	-8.8	27	212	1.9	215	3.8	048
1800	8.7	-9.4	27	233	1.7	254	4.4	015
2100	.8	-7.3	55	188	1.0	234	3.2	001
2400	-1.6	-5.7	74	152	1.0	090	2.5	000

DAY 23

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.5	-5.7	85	109	.7	071	2.5	001
0600	-2.7	-6.9	73	069	1.0	063	2.5	013
0900	4.4	-8.2	40	036	1.6	039	3.2	048
1200	8.4	-8.3	30	316	.7	358	3.2	047
1500	9.2	-8.5	28	199	1.3	214	4.4	054
1800	8.1	*****	30	102	1.0	099	6.3	015
2100	.9	-4.6	67	160	.7	129	1.9	001
2400	-1.2	*****	77	148	.8	176	1.9	001

DAY 24

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.2	-4.8	89	107	1.0	089	3.8	001
0600	-2.1	-6.0	75	080	1.0	089	2.5	015
0900	5.3	-6.4	43	032	1.4	038	2.5	048
1200	9.6	-7.3	30	084	1.3	079	4.4	057
1500	8.5	-8.2	30	065	2.0	110	7.0	033
1800	5.0	-2.4	59	032	1.8	015	5.1	004
2100	2.0	*****	83	253	1.4	300	4.4	000
2400	-1.3	-2.2	94	157	1.0	121	2.5	001

DAY 25

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.9	-2.2	98	113	1.0	117	2.5	001
0600	-1.2	-3.1	87	072	1.0	097	3.8	019
0900	5.3	-3.6	53	038	1.6	046	3.2	050
1200	7.6	-7.8	33	012	.8	134	3.8	081
1500	9.0	-8.7	28	259	1.2	300	5.1	060
1800	6.2	-5.0	45	242	1.0	203	5.7	021
2100	.4	*****	84	269	1.0	301	4.4	001
2400	-1.6	*****	98	160	.9	119	2.5	001

DAY 26

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.0	-3.3	98	105	.7	144	2.5	000
0600	-2.1	-4.3	82	066	1.1	059	3.2	025
0900	5.2	-5.0	48	038	1.5	047	3.2	049
1200	7.0	-6.1	39	245	.8	200	4.4	067
1500	7.9	-8.8	30	229	1.9	204	4.4	048
1800	7.2	-7.8	34	249	1.3	255	4.4	014
2100	.6	-5.3	65	209	.6	278	3.2	000
2400	-2.7	*****	86	157	1.0	159	1.9	001

DAY 27

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-3.6	-5.5	87	097	1.2	068	3.2	000
0600	-2.8	-6.5	76	084	1.2	104	3.2	014
0900	4.7	-6.4	45	039	1.7	031	3.2	049
1200	8.6	-8.6	29	035	.9	355	3.2	065
1500	8.9	-8.8	28	109	.5	210	5.1	052
1800	7.9	-10.1	27	235	1.5	204	3.8	011
2100	1.4	*****	53	180	.5	270	1.9	001
2400	.6	-5.7	63	143	.6	059	2.5	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING APRIL , 1981

DAY 28

DAY 29

DAY 30

HOUR NDNG	TEMP. DEG C	DEW DEG C	POINT RH	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW DEG C	POINT RH	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW DEG C	POINT RH	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	RAD MW
0300	-1.3	-6.3	69	112	1.2	126	2.5	001	0300	.9	*****	98	068	.7	057	1.9	001	0300	-1.1	-3.3	85	071	1.3	088	4.4	001
0600	-.1	-5.8	60	070	.9	071	3.2	015	0600	1.4	*****	94	053	1.0	064	3.2	014	0600	.3	-3.3	77	071	1.7	070	3.2	016
0900	5.7	-7.7	38	022	1.2	037	2.5	034	0900	7.0	-2.6	51	083	.3	234	4.4	055	0900	7.2	-4.1	45	056	1.8	104	4.4	039
1200	8.0	-7.4	33	265	1.2	258	4.4	049	1200	8.4	-5.6	37	225	1.8	223	5.1	066	1200	10.9	*****	32	127	1.8	117	5.1	061
1500	7.0	-7.9	34	264	1.4	252	5.1	020	1500	8.8	-6.0	35	270	2.0	241	5.7	048	1500	11.1	-6.0	30	077	.8	153	3.8	036
1800	4.3	-2.6	61	271	1.9	280	4.4	003	1800	8.1	-6.6	35	284	1.8	281	5.7	016	1800	9.4	-4.7	37	260	1.1	215	3.2	010
2100	2.6	*****	85	208	.3	281	1.9	000	2100	2.9	*****	63	183	.5	242	2.5	001	2100	5.4	-3.3	54	222	.8	282	2.5	001
2400	1.8	.9	94	091	.7	062	1.9	001	2400	1.7	*****	71	094	1.0	086	3.2	001	2400	5.0	-.7	67	197	.9	214	2.5	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING APRIL , 1981

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P-VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	-0.8	-7.8	-4.3	056	.8	1.0	039	3.8	NE	82	-6.3	0.0	2000	01
02	.6	-9.2	-4.3	301	.4	1.2	314	5.1	NW	74	-7.5	.8	1715	02
03	.5	-11.8	-5.6	102	1.3	1.7	084	5.7	ENE	63	-13.0	0.0	4214	03
04	1.1	-15.2	-7.1	093	.8	1.4	059	3.8	SE	55	-15.6	.4	4131	04
05	1.5	-15.1	-6.8	075	.8	1.6	029	4.4	E	57	-14.2	0.0	4002	05
06	.6	-9.5	-4.4	110	.9	1.6	097	4.4	ESE	52	-13.9	0.0	3597	06
07	2.6	-10.9	-4.1	096	1.0	1.5	***	13.9	E	51	-13.7	0.0	4302	07
08	1.7	-11.9	-5.1	110	.6	1.5	201	4.4	ENE	53	-13.6	0.0	4088	08
09	.8	-10.3	-4.8	127	1.6	1.9	130	6.3	ESE	40	-18.0	0.0	4358	09
10	-0.7	-13.1	-6.9	104	2.3	2.4	119	8.3	ESE	34	-19.9	0.0	4679	10
11	4.0	-8.5	-2.3	111	2.0	2.3	112	8.3	ESE	26	-18.8	0.0	4943	11
12	3.8	-9.8	-3.0	066	1.9	2.6	019	9.5	ESE	33	-18.4	0.0	4960	12
13	-0.3	-13.4	-6.8	090	1.8	2.2	106	9.5	ESE	34	-19.5	0.0	4963	13
14	-2.9	-12.2	-7.6	088	2.1	2.7	101	9.5	ENE	34	-20.1	0.0	4463	14
15	-0.6	-12.0	-6.3	095	2.2	2.5	064	8.3	ESE	29	-21.0	0.0	5190	15
16	.7	-10.5	-4.9	105	1.6	2.2	038	7.6	SE	29	-20.1	0.0	5205	16
17	2.9	-12.5	-4.8	102	1.8	2.1	094	5.7	ESE	40	-16.2	0.0	5225	17
18	4.5	-10.0	-2.8	099	1.6	1.9	102	7.6	ESE	34	-14.2	0.0	4983	18
19	6.5	-4.0	1.3	110	1.4	1.9	118	5.7	SSE	43	-10.3	0.0	5275	19
20	9.5	-4.9	2.3	113	.7	1.3	071	5.7	SSE	45	-7.4	0.0	4778	20
21	9.4	-3.2	3.1	080	1.5	1.9	029	6.3	ENE	51	-7.1	0.0	5538	21
22	10.1	-3.9	3.1	153	.7	1.5	254	4.4	SW	47	-7.6	0.0	5573	22
23	9.8	-4.8	2.5	104	.4	1.2	099	6.3	NE	47	-7.0	0.0	5658	23
24	9.6	-3.7	3.0	068	.8	1.5	110	7.0	NE	59	-5.3	0.0	4385	24
25	9.4	-2.6	3.4	033	.1	1.5	203	5.7	NE	54	-5.1	0.0	6703	25
26	8.6	-4.1	2.3	196	.3	1.4	200	4.4	SSE	53	-5.9	0.0	5935	26
27	9.4	-4.7	2.3	089	.5	1.3	210	5.1	NE	52	-7.4	0.0	5690	27
28	8.4	-1.8	3.3	289	.2	1.3	252	5.1	ESF	51	-5.3	0.0	3972	28
29	9.2	.4	4.8	256	.3	1.4	241	5.7	ENE	53	-5.2	0.0	5795	29
30	12.3	-1.6	5.3	096	.6	1.5	117	5.1	ENE	54	-3.6	0.0	4833	30
MONTH	12.3	-15.2	-1.8	098	1.0	1.7	***	13.9	ESE	48	-12.0	1.2	141149	

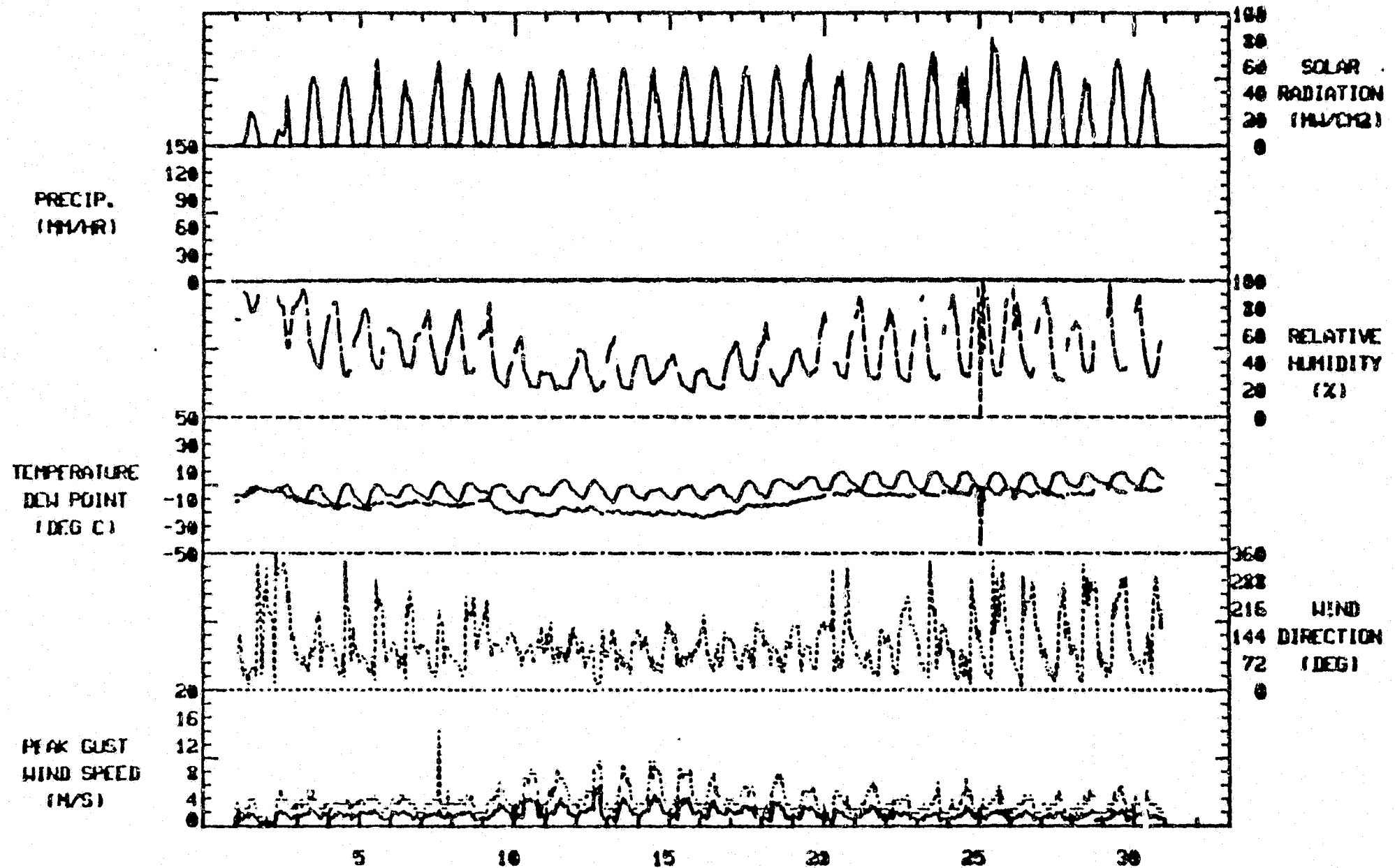
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 3.8
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 3.8
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 4.4
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 3.8

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 APRIL 1981

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING APRIL , 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	.31	.38	.03	0.00	0.00	0.00	0.00	.73
NNE	.70	2.96	.77	.07	0.00	0.00	0.00	4.50
NE	.84	8.57	1.01	0.00	0.00	0.00	0.00	10.42
ENE	1.32	10.07	2.37	0.00	0.00	0.00	0.00	13.77
E	1.71	10.35	1.78	0.00	0.00	0.00	0.00	13.84
ESE	2.02	11.36	2.79	0.00	0.00	0.00	0.00	16.17
SE	1.64	7.70	.24	0.00	0.00	0.00	0.00	9.59
SSE	2.34	5.75	0.00	0.00	0.00	0.00	0.00	8.09
S	1.64	4.71	0.00	0.00	0.00	0.00	0.00	6.34
SSW	.91	2.72	0.00	0.00	0.00	0.00	0.00	3.62
SW	.52	3.28	0.00	0.00	0.00	0.00	0.00	3.80
WSW	.28	2.09	0.00	0.00	0.00	0.00	0.00	2.37
W	.28	1.60	0.00	0.00	0.00	0.00	0.00	1.88
WNW	.24	1.64	.03	0.00	0.00	0.00	0.00	1.92
NW	.14	1.22	0.00	0.00	0.00	0.00	0.00	1.36
NNW	.21	.91	0.00	0.00	0.00	0.00	0.00	1.12
CALM								.49
TOTAL	15.09	75.32	9.03	.07	0.00	0.00	0.00	100.00

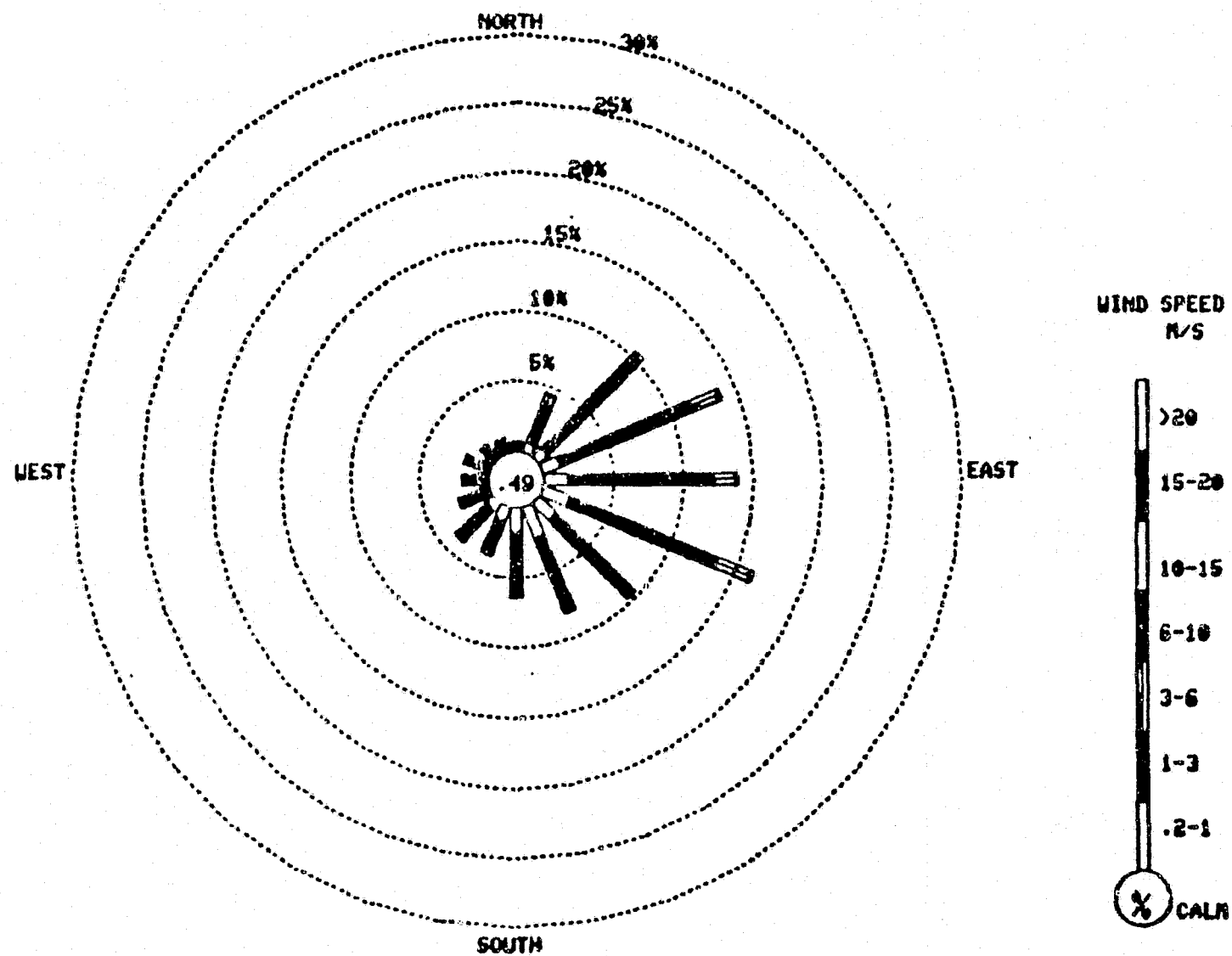
NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2869 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT

DEVIL CANYON WEATHER STATION

APRIL, 1981



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MAY , 1981

DAY 01

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	3.0	.7	85	230	.8	243	3.8	000
0600	1.6	*****	03	128	.6	134	1.9	002
0900	1.1	*****	01	010	.2	018	1.3	008
1200	3.0	*****	94	283	.8	268	1.9	024
1500	3.7	2.7	93	290	1.2	282	2.5	021
1800	4.1	2.6	90	272	1.3	272	3.2	013
2100	.5	.4	99	203	.8	281	2.5	000
2400	0.0	*****	00	169	1.0	170	2.5	001

DAY 02

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-1.9	-2.0	99	148	1.0	129	3.2	000
0600	.8	-1.6	84	128	.7	125	2.5	022
0900	5.8	-5.1	46	018	.8	034	2.5	051
1200	8.3	-4.3	41	281	1.0	213	5.1	067
1500	8.5	-4.5	40	222	1.9	194	5.1	050
1800	6.6	-3.5	49	251	1.8	253	5.1	008
2100	3.8	*****	68	184	.5	257	1.9	001
2400	4.2	*****	66	189	.8	245	3.2	001

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.4	-1.8	74	163	.6	262	1.9	001
0600	2.0	*****	78	096	.4	098	2.5	012
0900	4.6	-2.4	61	317	1.3	329	3.2	027
1200	4.0	-.3	74	308	2.1	309	5.1	027
1500	4.1	1.9	86	297	2.3	302	5.1	019
1800	3.9	1.4	84	304	2.2	309	4.4	010
2100	2.3	*****	97	292	1.1	298	3.2	000
2400	1.2	*****	94	170	.5	159	1.3	001

DAY 04

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	-.1	-.5	97	159	.8	189	1.9	001
0600	5.1	-1.7	62	155	.8	121	3.8	013
0900	8.1	-3.2	45	092	2.0	094	5.7	040
1200	11.1	-3.5	36	101	2.9	113	7.0	***
1500	11.5	-4.3	33	099	2.5	070	6.3	031
1800	10.8	-4.6	34	108	2.0	123	5.1	007
2100	7.0	-3.4	48	277	.5	063	3.2	001
2400	3.2	-1.4	72	171	1.0	159	2.5	001

DAY 05

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.0	-1.3	79	143	.9	098	2.5	000
0600	1.9	-2.1	75	086	.4	147	2.5	016
0900	9.4	-1.5	47	034	1.3	047	2.5	045
1200	11.5	-1.8	40	257	1.9	269	7.0	067
1500	11.2	-2.7	38	241	1.9	257	4.4	031
1800	10.2	*****	41	247	1.5	254	4.4	013
2100	4.5	-1.4	66	190	.9	245	3.2	001
2400	2.6	-.4	81	131	.8	081	3.2	001

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	.1	-1.2	91	089	1.2	085	3.2	001
0600	1.6	-1.5	80	071	.8	075	3.2	017
0900	10.6	*****	44	034	1.3	045	2.5	047
1200	14.3	-.7	36	315	1.3	306	4.4	071
1500	14.9	-2.2	31	294	1.9	264	4.4	052
1800	14.4	-2.6	31	271	1.1	***	3.2	017
2100	7.0	-1.8	54	200	.5	277	2.5	001
2400	2.6	*****	74	129	1.0	108	3.2	001

DAY 07

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	.8	-1.8	83	120	.7	085	2.5	001
0600	3.4	-1.6	70	088	1.1	097	3.8	018
0900	13.7	-.8	37	046	1.7	048	3.2	053
1200	17.4	-2.9	25	088	2.4	110	7.0	067
1500	18.7	-2.9	23	068	2.8	085	7.0	052
1800	18.4	-3.2	23	062	2.4	065	5.7	019
2100	12.4	-4.0	32	117	1.4	036	3.8	001
2400	6.8	-3.0	50	148	1.4	131	3.2	001

DAY 08

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.5	-3.3	66	107	1.1	097	3.8	001
0600	6.0	*****	56	136	.2	105	3.2	019
0900	16.7	-.6	31	029	1.0	020	3.2	053
1200	18.7	-1.8	25	067	2.7	041	6.3	***
1500	19.0	-2.7	23	022	4.2	013	6.3	052
1800	18.6	-6.3	18	038	2.7	015	7.0	019
2100	10.4	-4.2	36	058	1.0	012	5.7	002
2400	9.4	-2.1	45	141	.8	204	3.2	001

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	5.5	*****	58	129	1.0	111	4.4	001
0600	5.6	*****	60	132	.4	150	1.9	008
0900	10.2	*****	47	358	.5	033	1.9	025
1200	13.6	-2.1	34	310	1.4	242	4.4	024
1500	13.8	-2.3	33	260	1.9	288	6.3	010
1800	12.2	-2.2	37	254	1.4	268	5.1	007
2100	9.7	-.9	48	159	.6	227	2.5	001
2400	7.1	.9	65	243	1.1	243	3.2	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MAY , 1981

DAY 10

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	4.7	3.3	91	252	1.0	256	2.5	000
0600	3.9	*****	95	266	1.0	270	1.9	004
0900	4.5	3.0	90	276	1.0	264	3.2	015
1200	6.9	4.0	82	292	1.1	291	2.5	031
1500	9.4	2.9	64	298	1.5	271	3.8	028
1800	9.8	1.1	55	288	1.7	***	5.1	011
2100	5.9	1.4	73	249	1.1	286	3.8	001
2400	4.3	1.3	61	158	.8	151	2.5	000

DAY 11

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	3.4	*****	88	148	.7	128	2.5	001
0600	3.5	1.5	87	064	.5	067	2.5	012
0900	8.5	.9	59	003	.8	015	3.2	017
1200	11.6	-1.3	41	282	1.4	262	5.1	039
1500	13.6	-1.7	35	304	1.8	291	5.7	057
1800	11.7	-2.6	37	295	1.6	300	3.8	010
2100	8.5	-2.3	47	257	.8	317	3.2	001
2400	3.6	*****	69	164	1.1	128	2.5	001

DAY 12

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.8	-.9	77	159	.6	118	2.5	001
0600	6.1	-.9	61	050	.4	168	2.5	021
0900	13.7	-1.2	36	044	2.3	085	5.1	054
1200	16.2	-4.5	24	085	2.9	119	7.0	077
1500	15.3	-4.7	25	071	2.9	103	7.6	027
1800	15.6	-5.0	24	067	2.1	084	6.3	020
2100	10.8	-3.1	38	101	1.0	056	5.1	001
2400	7.0	*****	62	176	1.0	133	2.5	001

DAY 13

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.6	*****	68	205	.8	200	1.9	001
0600	8.3	.7	59	204	.8	243	1.9	022
0900	11.3	1.7	52	320	1.5	326	3.2	052
1200	14.3	1.1	41	301	1.3	305	4.4	044
1500	11.2	6.3	72	257	1.8	227	5.1	018
1800	11.3	4.9	65	119	.9	183	5.1	012
2100	8.8	2.7	66	143	.1	044	2.5	001
2400	6.6	*****	81	164	1.0	154	2.5	001

DAY 14

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	4.4	*****	97	138	.4	170	1.9	001
0600	6.1	*****	92	085	.3	073	2.5	011
0900	10.2	4.1	66	325	1.7	319	5.1	045
1200	13.3	1.8	46	317	2.8	314	6.3	067
1500	15.0	.3	37	290	2.0	290	5.1	017
1800	9.2	7.8	91	254	1.6	263	5.1	001
2100	6.6	-11.1	00	178	.7	337	5.7	001
2400	5.0	4.7	98	166	.9	163	1.9	001

DAY 15

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	4.8	*****	97	185	.6	199	1.9	001
0600	5.3	*****	96	170	.5	181	1.9	008
0900	10.1	*****	71	028	.3	001	1.9	022
1200	13.2	*****	58	309	1.0	309	3.2	021
1500	13.6	2.1	46	088	1.2	069	5.7	034
1800	12.0	3.1	55	025	2.2	027	10.8	008
2100	9.4	3.7	68	139	.6	136	3.2	001
2400	7.8	4.0	77	141	1.2	141	2.5	001

DAY 16

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.3	5.2	93	164	1.2	160	3.2	001
0600	6.8	5.1	89	082	.6	052	2.5	013
0900	13.9	2.1	45	040	1.6	080	4.4	056
1200	14.4	1.2	41	350	1.4	038	4.4	084
1500	15.3	-1.4	32	316	1.9	301	6.3	015
1800	13.0	2.4	49	059	1.1	092	6.3	013
2100	8.7	1.7	62	112	1.2	082	3.2	001
2400	4.6	2.6	87	176	1.1	179	1.9	001

DAY 17

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.0	*****	96	162	.9	175	3.2	001
0600	6.6	*****	79	116	.4	140	2.5	021
0900	11.1	3.3	59	325	1.2	338	3.8	020
1200	13.1	.7	43	321	2.0	326	5.7	021
1500	16.7	.2	33	300	2.0	287	6.3	052
1800	13.5	-.3	39	284	1.9	301	5.7	007
2100	8.4	4.2	75	278	1.6	242	7.0	001
2400	7.1	5.1	87	268	1.1	259	3.2	001

DAY 18

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	5.6	*****	96	234	.4	317	2.5	001
0600	7.5	*****	83	117	.3	098	2.5	012
0900	8.7	5.4	80	303	1.4	295	3.2	035
1200	9.9	4.8	71	314	2.4	308	5.1	022
1500	12.8	2.8	51	345	.4	274	5.7	052
1800	10.1	5.2	72	287	2.0	311	6.3	012
2100	6.4	4.0	85	200	.7	254	2.5	001
2400	4.3	2.9	91	127	1.1	125	3.8	001

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THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
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DAY 19

DAY 20

DAY 21

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW
0300	2.4	*****	98	101	1.0	106	3.2	001	0300	4.3	3.6	95	155	.6	167	1.9	001	0300	.1	*****	97	150	.9	127	2.5	001
0600	3.5	*****	97	073	1.2	059	3.2	008	0600	4.9	*****	94	117	.6	113	2.5	008	0600	3.1	*****	91	154	.4	167	1.9	011
0900	10.2	3.2	62	039	1.0	048	3.8	025	0900	7.7	*****	84	296	.8	262	2.5	026	0900	6.7	-.8	59	347	.8	285	2.5	016
1200	10.3	*****	73	047	1.5	062	4.4	016	1200	10.7	3.4	61	282	.9	212	3.8	067	1200	6.8	1.6	70	004	1.0	044	3.8	021
1500	12.5	4.9	60	003	.6	080	2.5	029	1500	7.5	4.2	80	313	2.3	275	8.3	020	1500	7.7	1.2	64	013	1.2	324	5.7	071
1800	9.8	3.7	66	302	1.9	283	5.7	008	1800	8.2	2.6	68	310	2.6	304	6.3	012	1800	8.8	-.9	51	306	1.2	271	5.1	024
2100	6.2	*****	98	242	1.0	280	4.4	001	2100	4.3	2.3	87	295	2.2	318	7.6	001	2100	4.0	-.1	75	194	.6	153	3.2	001
2400	4.9	*****	97	167	.6	099	1.9	001	2400	2.6	2.0	96	235	1.0	265	3.2	000	2400	1.0	-.5	90	153	1.0	158	2.5	000

DAY 22

DAY 23

DAY 24

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW
0300	-.1	-.7	96	148	.8	143	2.5	001	0300	4.4	*****	86	196	.7	184	1.9	001	0300	1.8	*****	99	116	1.1	081	2.5	001
0600	2.4	.6	88	059	.9	104	2.5	020	0600	5.7	*****	89	199	.2	205	1.3	015	0600	6.0	2.8	80	063	1.5	085	3.2	021
0900	10.6	-2.9	39	028	1.4	036	3.2	062	0900	10.7	.0	48	359	.9	051	3.2	022	0900	14.6	.3	38	046	1.6	054	3.8	054
1200	13.7	-5.1	27	019	1.8	023	5.1	085	1200	13.0	-1.5	37	034	1.6	045	6.3	027	1200	17.9	-3.0	24	073	1.7	086	5.7	047
1500	9.5	1.8	59	082	.8	027	5.7	013	1500	14.6	-.8	35	026	1.9	008	5.7	035	1500	17.5	-3.4	24	347	1.2	112	3.8	025
1800	9.0	5.9	81	100	.5	134	3.2	015	1800	11.1	2.8	57	310	1.8	301	5.7	025	1800	13.8	1.0	42	275	1.5	308	5.1	006
2100	7.7	5.0	83	116	.8	063	3.2	001	2100	7.7	4.6	81	278	.7	291	4.4	001	2100	9.5	4.8	73	307	.6	343	3.8	001
2400	5.7	*****	89	146	.9	141	2.5	001	2400	4.7	2.4	85	149	.9	128	2.5	000	2400	7.3	6.4	94	168	.8	193	1.9	001

DAY 25

DAY 26

DAY 27

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW	HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	DIR. DEG.	WIND SPD. M/S	WIND DIR. DEG.	GUST MAX. M/S	RAD MW
0300	6.5	5.9	96	099	.8	080	2.5	001	0300	3.6	*****	92	107	1.2	113	3.2	002	0300	12.1	7.6	74	145	1.7	162	1.9	001
0600	8.5	5.6	82	084	.5	096	1.9	024	0600	7.7	3.7	76	046	.8	096	3.2	022	0600	10.3	*****	95	121	.7	138	2.5	006
0900	13.3	4.9	57	346	1.2	305	3.8	060	0900	16.8	1.5	36	031	1.5	026	3.2	057	0900	12.0	9.9	87	337	.6	348	2.5	022
1200	15.0	2.7	44	308	1.5	249	4.4	046	1200	19.7	.1	27	355	1.3	335	4.4	054	1200	12.7	8.7	77	303	2.0	305	5.7	034
1500	16.8	.3	33	327	1.8	326	4.4	032	1500	20.4	-2.7	21	021	1.1	044	5.7	021	1500	11.2	9.9	92	308	2.3	307	4.4	020
1800	17.8	.4	31	303	1.5	301	5.1	024	1800	19.7	*****	25	071	1.0	079	3.8	008	1800	9.0	8.1	94	307	1.9	302	4.4	002
2100	12.0	*****	50	275	1.0	310	3.2	001	2100	16.6	4.2	44	091	1.1	043	3.8	001	2100	8.6	7.8	95	306	.9	313	2.5	000
2400	6.8	1.8	71	140	1.1	169	3.2	000	2400	13.2	6.5	64	140	1.6	130	4.4	001	2400	7.7	-44.4	01	291	1.2	319	3.2	001

R&M CONSULTANTS, INC.

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DAY 28

DAY 29

DAY 30

OUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	OUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	7.3	-44.6	01	296	1.0	292	3.2	001	0300	2.2	1.8	97	113	1.4	102	3.2	001	0300	10.2	2.5	59	217	1.1	246	4.4	002
0600	7.5	6.9	96	270	.7	297	2.5	008	0600	5.5	*****	90	083	1.2	035	3.2	022	0600	13.5	*****	51	210	.1	200	1.9	027
0900	9.1	7.2	88	284	.9	289	2.5	012	0900	15.2	6.7	57	061	1.1	095	3.8	058	0900	15.3	2.4	42	311	1.8	328	5.1	057
1200	8.5	7.3	92	309	1.1	304	3.2	014	1200	19.5	3.1	34	075	1.8	073	5.1	072	1200	18.3	1.7	33	328	3.5	335	7.0	055
1500	8.2	*****	92	301	1.0	312	3.2	006	1500	23.2	2.0	25	082	2.2	089	6.3	057	1500	19.1	2.8	34	308	3.5	317	8.3	059
1800	8.5	*****	91	353	.5	002	1.9	006	1800	23.7	.0	21	090	1.6	122	5.1	025	1800	17.0	3.9	42	280	2.6	308	7.6	016
2100	7.0	*****	91	114	.3	113	1.9	001	2100	16.7	4.3	44	078	.6	096	3.8	002	2100	12.7	4.6	58	296	2.0	310	7.6	001
2400	5.1	3.9	92	145	.9	125	2.5	001	2400	12.5	*****	63	169	1.1	149	3.2	001	2400	10.4	6.9	79	281	1.5	293	3.8	000

DAY 31

DAY 31

DAY 31

OUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	HOUR	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD	OUR NDNG	TEMP.	DEW POINT	RH	WIND DIR.	WIND SPD.	GUST DIR.	MAX. GUST	RAD
DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	8.4	*****	93	253	.7	303	2.5	001	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***
0600	8.5	*****	95	116	.7	165	1.9	006	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***
0900	8.9	8.0	94	313	.8	293	4.4	018	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***
1200	9.8	7.7	87	302	1.1	281	3.2	021	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***
1500	12.6	6.4	66	327	.7	312	2.5	016	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***
1800	12.6	5.9	64	287	.9	281	2.5	013	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***
2100	10.2	*****	80	306	.1	108	3.8	002	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***
2400	7.5	*****	89	187	.7	195	1.9	001	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***

R&M CONSULTANTS, INC.

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MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
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DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P-VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	5.6	-0.6	2.5	244	.5	.9	243	3.8	W	79	1.6	7.6	2170	01
02	8.9	-2.8	3.0	218	.6	1.3	213	5.1	WSW	50	-3.5	0.0	5995	02
03	5.1	1.0	3.1	300	1.0	1.4	309	5.1	WNW	76	-0.2	.4	3210	03
04	12.4	-0.8	5.8	113	1.3	1.7	113	7.0	E	46	-2.8	0.0	4504	04
05	12.1	.1	6.1	224	.5	1.4	269	7.0	WSW	53	-1.6	0.0	5200	05
06	15.3	-0.8	7.3	353	.3	1.3	306	4.4	W	53	-1.7	0.0	6120	06
07	19.2	-0.4	9.4	084	1.5	1.9	110	7.0	ENE	40	-2.5	0.0	6313	07
08	19.8	2.0	10.9	050	1.4	1.9	019	8.3	NNE	33	-3.0	0.0	6318	08
09	14.5	4.9	9.7	253	.5	1.2	288	6.3	WSW	41	-1.3	0.0	2733	09
10	11.7	3.8	7.8	271	1.0	1.3	***	5.1	W	74	2.0	.2	3308	10
11	13.6	2.2	7.9	288	.5	1.3	291	5.7	NW	49	-0.9	0.0	5360	11
12	17.0	1.7	9.4	079	1.4	1.9	103	7.6	ENE	36	-2.9	0.0	5669	12
13	15.9	6.1	11.0	258	.5	1.3	227	5.1	SW	55	2.9	.4	4788	13
14	15.7	4.3	10.0	292	.7	1.5	314	6.3	NW	63	-15.5	4.8	4568	14
15	14.7	4.3	9.5	079	.3	1.2	027	10.8	S	63	3.2	1.6	4315	15
16	16.6	5.5	11.0	054	.4	1.5	301	6.3	S	55	2.4	.4	5103	16
17	16.7	1.8	9.3	292	1.0	1.5	242	7.0	NW	58	2.2	0.0	5218	17
18	13.3	4.0	8.6	292	.6	1.5	311	6.3	WNW	73	4.2	0.0	4198	18
19	12.5	2.3	7.4	033	.4	1.3	283	5.7	NE	73	3.9	4.6	3043	19
20	12.5	3.1	7.8	294	1.0	1.6	275	8.3	WNW	78	3.0	1.8	3688	20
21	9.4	-0.2	4.6	009	.1	1.2	324	5.7	SSE	71	.1	1.4	4290	21
22	14.1	-0.4	6.9	072	.6	1.3	027	5.7	NNE	63	.7	.8	4694	22
23	16.2	4.2	10.2	357	.4	1.3	045	6.3	S	53	1.3	0.0	5343	23
24	18.7	1.4	10.1	047	.5	1.5	086	5.7	ENE	55	1.3	0.0	4763	24
25	17.8	5.3	11.5	323	.6	1.4	301	5.1	WNW	54	3.1	0.0	4963	25
26	21.5	3.6	12.5	063	.8	1.4	044	5.7	NE	46	2.2	0.0	5390	26
27	13.7	8.1	11.0	302	.8	1.5	305	5.7	NW	85	1.1	3.2	2168	27
28	9.1	5.8	7.5	294	.5	.9	292	3.2	WNW	63	-3.9	5.6	1673	28
29	24.0	2.2	13.1	090	1.2	1.6	089	6.3	E	51	3.0	0.0	7168	29
30	19.7	10.1	14.9	299	1.8	2.2	317	8.3	NW	47	3.5	0.0	6728	30
31	13.7	7.3	10.5	285	.4	.9	293	4.4	WNW	82	7.0	6.2	2943	31
MONTH	24.0	-2.8	8.7	341	.2	1.4	027	10.8	WNW	59	.3	39.0	141937	

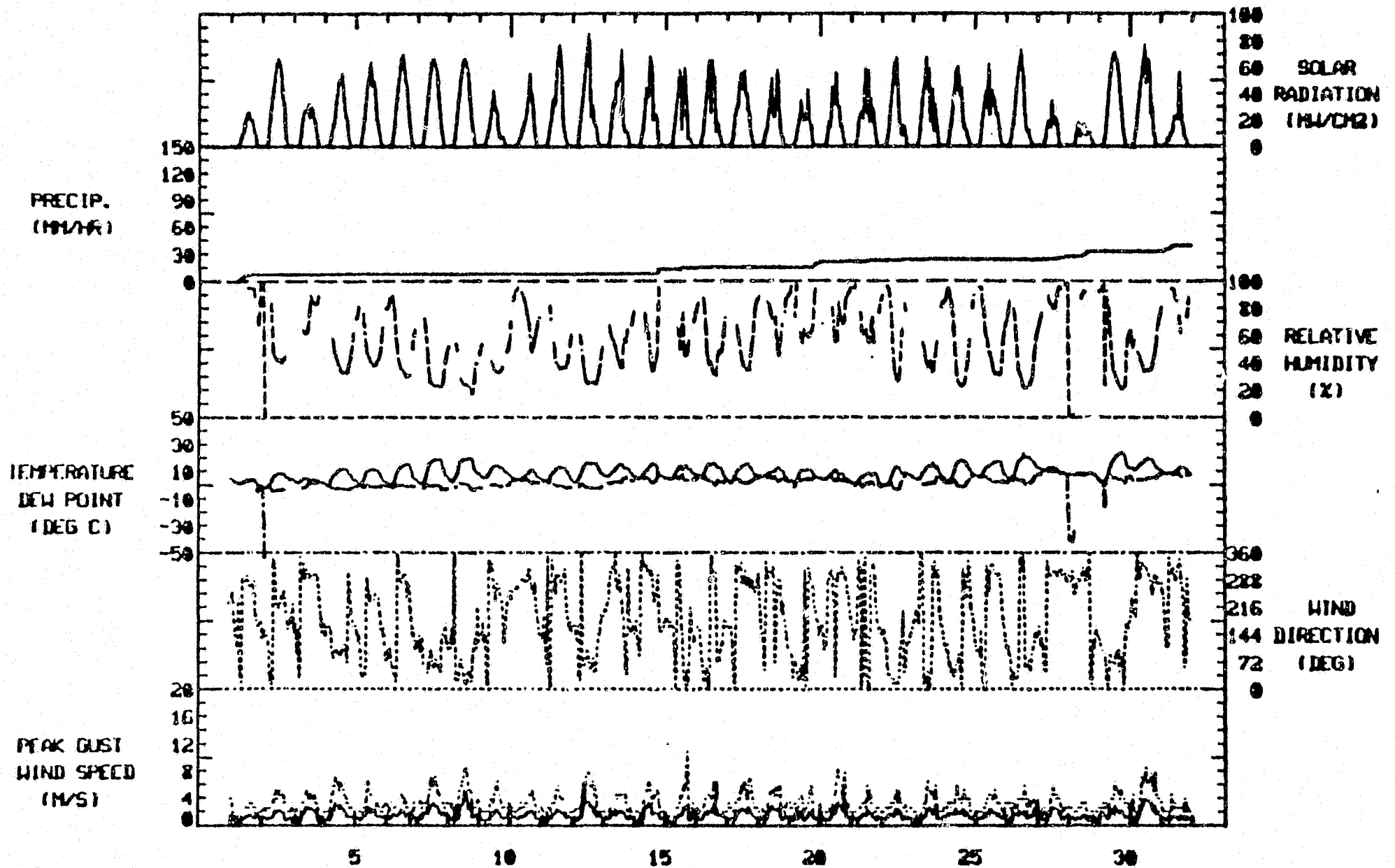
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 7.0
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 7.6
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 7.0
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 5.1

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE GENERAL NOTES AT THE BACK OF THE REPORT ****

RHM CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 MAY . 1981

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

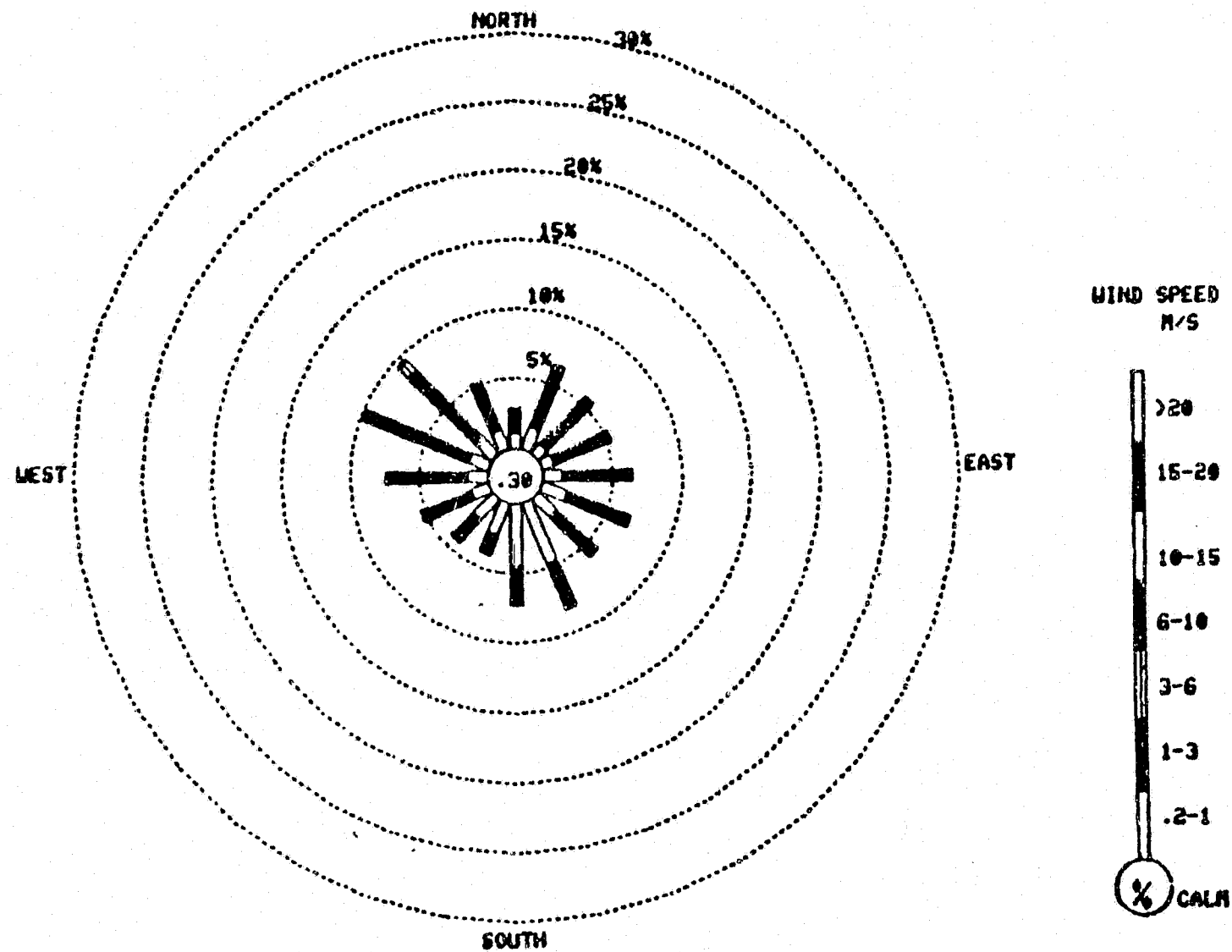
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING MAY , 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	1.08	1.75	.07	0.00	0.00	0.00	0.00	2.90
NNE	1.65	4.25	.57	0.00	0.00	0.00	0.00	6.48
NE	.88	4.42	.24	0.00	.03	0.00	0.00	5.56
ENE	.91	3.91	.47	0.00	0.00	0.00	0.00	5.30
E	1.32	4.55	.47	0.00	0.00	0.00	0.00	6.34
ESE	1.89	4.45	.34	0.00	0.00	0.00	0.00	6.68
SE	1.85	3.95	0.00	0.00	0.00	0.00	0.00	5.80
SSE	4.69	3.44	0.00	0.00	.03	0.00	0.00	8.16
S	4.42	2.77	0.00	0.00	0.00	0.00	0.00	7.18
SSW	2.39	1.48	0.00	0.00	0.00	0.00	0.00	3.88
SW	1.96	2.23	0.00	0.00	0.00	0.00	0.00	4.18
WSW	1.35	3.91	0.00	0.00	0.00	0.00	0.00	5.26
W	1.55	5.56	.24	0.00	0.00	0.00	0.00	7.35
WNW	1.48	7.89	.51	0.00	0.00	0.00	0.00	9.88
NW	1.52	6.88	1.15	0.00	0.00	0.00	0.00	9.54
NNW	1.48	3.47	.24	0.00	0.00	0.00	0.00	5.19
CALM								.30
TOTAL	30.42	64.92	4.28	0.00	.07	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2965 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
MAY, 1981



WIND ROSE PLOT

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

HOURLY PRECIPITATION SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JUNE , 1981

PRECIPITATION VALUES ARE IN MILLIMETERS

HOURLY ENDING

DATE	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DATE	
01	0.0	0.0	0.0	0.0	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	01	
02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	02	
03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0	.4	1.0	.2	0.0	.2	03	
04	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	04	
05	0.0	0.0	0.0	0.0	1.2	1.6	1.4	1.0	2.0	.8	.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	05	
06	0.0	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	06
07	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	07	
08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	1.2	.8	1.2	1.6	1.4	1.2	1.6	.8	.4	08	
09	.6	.6	.6	.6	.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	09	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	11	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	.2	0.0	0.0	0.0	0.0	0.0	13	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	
15	0.0	0.0	0.0	.2	0.0	.6	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	.6	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	
16	0.0	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	16	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	18	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	.8	1.6	20
21	.4	.6	.2	0.0	.4	.2	.6	.4	.6	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	.2	0.0	23
24	.2	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	.2	24	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	
26	.4	.6	1.0	.8	.8	.4	.8	.8	.6	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	0.0	0.0	26	
27	0.0	0.0	0.0	0.0	0.0	0.0	.2	.2	.2	.4	0.0	.2	.4	.8	1.2	.8	.4	.2	.2	0.0	0.0	.2	.2	0.0	27	
28	0.0	.2	.6	.2	0.0	.2	0.0	0.0	0.0	.2	0.0	.4	0.0	.2	0.0	0.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	.2	28	
29	.2	.2	.2	.4	0.0	.2	0.0	0.0	.2	.2	1.4	.6	1.6	1.4	1.6	1.4	1.4	2.6	3.2	3.0	5.0	5.0	4.0	4.8	29	
30	3.6	2.6	.6	.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	.2	0.0	0.0	0.0	.2	0.0	0.0	30	

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JUNE , 1981

DAY 01

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	7.4	6.3	93	243	.8	272	3.2	001
0600	7.7	6.1	90	131	.6	259	1.9	011
0900	12.9	2.9	51	072	1.3	056	3.8	064
1200	15.6	-7	33	089	2.4	117	5.7	032
1500	13.4	4.7	56	019	.8	325	7.0	020
1800	11.3	3.0	57	302	3.3	305	9.5	012
2100	7.4	2.8	73	262	.7	323	3.8	001
2400	3.8	2.8	93	162	1.0	168	1.9	001

DAY 02

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	1.3	*****	97	159	.8	142	1.9	002
0600	5.1	*****	87	015	.2	163	1.9	017
0900	10.1	4.0	66	326	1.4	331	3.8	034
1200	12.7	1.9	48	314	1.9	315	5.1	076
1500	14.2	.3	39	307	2.7	325	6.3	030
1800	14.5	-1	37	304	2.4	303	5.7	030
2100	10.7	2.4	57	296	1.8	321	5.1	002
2400	8.4	*****	73	220	.9	249	2.5	000

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.8	*****	82	236	1.0	236	1.9	001
0600	7.7	4.6	81	054	.0	053	1.9	019
0900	12.8	3.1	52	352	1.2	353	3.2	070
1200	12.5	1.7	48	357	.5	180	5.1	036
1500	13.5	2.6	48	289	1.8	205	4.4	056
1800	9.0	7.3	89	298	1.7	327	4.4	011
2100	7.8	*****	94	253	.7	264	4.4	001
2400	6.9	6.3	96	105	.8	097	3.2	001

DAY 04

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.0	5.2	95	139	.8	076	2.5	002
0600	6.6	5.8	95	109	.3	034	2.5	020
0900	9.6	4.9	73	345	.9	023	2.5	036
1200	12.6	2.6	51	340	1.7	338	5.1	062
1500	12.8	2.5	50	311	2.7	313	6.3	032
1800	12.9	.8	44	242	1.9	243	5.1	010
2100	9.9	3.8	66	084	.8	302	4.4	002
2400	7.8	3.2	73	272	1.2	308	3.8	001

DAY 05

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.0	4.3	89	287	1.7	301	4.4	001
0600	4.8	*****	96	285	1.4	279	4.4	005
0900	4.4	3.7	95	342	.4	019	2.5	012
1200	5.7	4.6	93	021	.4	094	2.5	024
1500	7.6	4.9	83	305	1.7	306	3.2	032
1800	8.8	4.4	74	295	1.4	290	3.8	021
2100	6.0	4.8	92	282	.9	290	2.5	002
2400	3.9	*****	95	164	.8	191	1.9	001

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	4.3	*****	96	185	.5	184	1.3	002
0600	5.4	*****	95	081	.2	110	1.9	012
0900	9.7	5.0	73	309	1.4	295	4.4	073
1200	14.4	1.9	43	319	1.4	320	3.8	081
1500	14.1	3.5	49	312	1.7	302	5.7	055
1800	12.1	*****	54	284	2.2	283	5.7	002
2100	8.8	*****	81	119	1.3	113	5.1	001
2400	6.2	*****	97	175	.8	207	2.5	001

DAY 07

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	6.0	*****	96	191	.6	169	1.3	001
0600	6.4	*****	94	258	.5	262	1.9	007
0900	8.7	4.3	74	320	1.5	342	3.8	039
1200	11.7	1.5	50	309	2.6	307	5.1	081
1500	13.3	1.2	44	315	3.1	322	6.3	***
1800	13.4	-0	40	311	3.1	337	5.7	028
2100	10.6	2.1	56	298	1.6	298	5.1	002
2400	5.5	3.1	85	193	1.3	185	2.5	001

DAY 08

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	3.0	*****	97	198	.7	185	1.9	002
0600	5.7	*****	85	305	.3	357	1.9	012
0900	7.6	4.9	83	316	.9	284	2.5	017
1200	7.7	5.5	86	298	2.7	313	7.0	031
1500	5.5	5.1	97	307	3.1	312	5.7	006
1800	3.4	3.1	98	314	2.5	319	5.7	004
2100	1.6	1.2	97	317	1.0	317	3.8	001
2400	.3	*****	97	118	.5	140	1.9	001

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	1.0	*****	98	079	.3	337	1.3	002
0600	2.6	1.7	94	022	.6	004	1.9	009
0900	6.8	3.5	80	020	1.2	026	2.5	032
1200	7.7	2.9	72	355	1.2	315	5.1	024
1500	5.9	4.4	90	010	1.0	045	4.4	027
1800	7.7	4.8	82	294	1.2	305	4.4	031
2100	5.7	3.5	86	291	1.3	319	3.8	002
2400	1.5	.8	95	151	1.1	137	3.2	000

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JUNE , 1981

DAY 10

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	-2	-3	99	098	1.4	083	3.2	002
0600	2.1	1.1	93	066	1.3	055	3.2	018
0900	10.5	-7	46	012	1.3	319	3.2	061
1200	13.7	-1.6	35	297	1.6	314	4.4	075
1500	15.2	-3.8	27	305	1.7	346	5.1	059
1800	15.1	-2.0	31	288	1.9	315	5.7	030
2100	11.2	.8	49	242	.8	256	3.8	002
2400	6.0	*****	76	174	1.0	184	2.5	000

DAY 11

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	3.0	*****	93	158	.5	135	2.5	003
0600	6.7	2.3	74	043	1.0	050	2.5	026
0900	13.3	2.4	48	342	1.5	339	3.2	056
1200	15.9	1.1	37	310	2.1	323	4.4	058
1500	11.9	4.3	60	328	5.6	013	7.0	030
1800	10.6	6.1	74	334	.3	271	3.8	007
2100	8.4	6.3	87	114	1.4	108	4.4	002
2400	6.8	*****	88	109	1.2	121	3.2	001

DAY 12

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	4.0	3.6	97	078	1.4	077	3.2	002
0600	6.7	3.8	82	058	1.4	096	3.2	038
0900	13.1	3.9	54	347	1.6	021	3.8	061
1200	16.7	-2	32	311	2.0	338	5.1	076
1500	*****	*****	28	295	2.0	306	5.1	063
1800	17.3	-2.5	26	300	2.6	302	6.3	032
2100	13.8	*****	33	279	1.5	300	5.7	003
2400	7.4	-1.2	55	170	1.2	175	2.5	001

DAY 13

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	3.0	*****	81	166	.9	156	2.5	002
0600	9.4	*****	58	350	.4	202	1.3	027
0900	14.4	.9	40	334	1.3	354	3.8	060
1200	20.3	.1	26	305	1.6	282	3.8	075
1500	18.8	-1.7	25	304	2.4	353	7.0	006
1800	16.8	5.3	47	264	.1	038	6.3	008
2100	12.6	6.1	65	235	1.2	253	4.4	002
2400	7.2	5.0	86	202	1.1	267	3.2	001

DAY 14

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	4.2	*****	96	162	.9	140	3.2	002
0600	9.4	*****	76	078	.1	115	2.5	016
0900	13.1	.7	43	340	1.6	334	4.4	059
1200	16.5	1.3	36	317	2.8	300	5.7	073
1500	17.4	1.3	34	318	2.9	324	5.7	025
1800	16.2	1.0	36	296	1.5	322	5.1	010
2100	13.4	4.2	54	078	.3	304	2.5	001
2400	10.5	*****	74	118	1.0	084	2.5	001

DAY 15

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	8.5	*****	86	188	.7	192	1.9	001
0600	8.4	*****	91	138	.3	104	1.9	008
0900	11.7	5.7	67	322	.9	354	3.2	036
1200	15.3	6.5	56	295	1.8	309	3.8	044
1500	10.2	8.9	92	318	2.9	357	10.8	005
1800	10.4	9.5	94	285	1.2	290	3.2	013
2100	9.8	*****	93	287	1.2	299	3.2	002
2400	8.9	*****	92	220	.7	241	1.9	000

DAY 16

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	8.5	*****	96	221	.8	230	2.5	001
0600	9.7	*****	66	237	.2	173	1.3	011
0900	12.2	7.0	71	304	1.6	339	2.5	046
1200	16.6	7.7	56	299	2.0	031	3.2	074
1500	19.7	7.7	46	305	2.0	308	5.1	038
1800	16.4	5.3	48	275	1.8	300	6.3	004
2100	11.9	9.4	85	140	1.3	163	3.8	003
2400	7.4	6.6	95	134	1.1	121	2.5	001

DAY 17

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	4.8	*****	97	075	.6	048	2.5	002
0600	8.3	6.6	89	049	1.0	081	2.5	026
0900	16.6	7.5	55	345	.8	019	2.5	059
1200	21.6	4.1	32	288	1.4	306	3.8	074
1500	23.9	-6.2	13	274	1.5	306	4.4	065
1800	22.3	-1.1	21	278	2.1	275	6.3	030
2100	17.8	6.6	48	307	2.2	308	6.3	002
2400	11.1	7.2	77	249	1.0	327	8.9	001

DAY 18

HOUR NDNG	DEW TEMP.	POINT DEG C	RH %	WIND DIR.	WIND SPD. M/S	GUST DIR.	GUST MAX. M/S	MAX. RAD MW
0300	7.2	*****	92	156	.9	180	1.9	002
0600	12.3	*****	72	036	.7	091	2.5	031
0900	15.5	8.2	62	303	1.9	296	5.1	055
1200	18.3	6.1	45	303	2.5	301	5.1	***
1500	14.1	9.1	72	313	1.7	043	12.7	020
1800	14.4	7.6	64	294	1.3	319	11.4	017
2100	10.7	7.5	81	256	1.2	277	3.8	002
2400	7.3	6.4	94	151	1.1	170	1.9	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

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DAY 19

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	4.7	4.1	96	141	.9	105	2.5	002
0600	8.6	5.7	82	058	1.1	050	3.8	029
0900	17.9	2.5	36	351	1.2	340	4.4	061
1200	20.3	-11.1	11	321	2.1	319	7.6	076
1500	21.2	-19.8	05	003	2.5	329	7.6	032
1800	21.4	-19.6	05	020	2.7	055	6.3	035
2100	16.4	*****	18	005	2.2	011	5.1	004
2400	8.1	-1.8	50	150	1.4	134	3.8	001

DAY 20

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	5.8	.7	70	149	1.0	157	3.2	002
0600	7.4	2.4	71	055	1.3	037	3.2	023
0900	15.3	4.3	48	035	1.7	043	3.2	051
1200	20.1	-2.4	22	358	1.1	306	3.8	068
1500	19.7	-1.5	24	275	.6	177	4.4	026
1800	15.9	1.1	37	234	1.3	187	6.3	013
2100	13.4	5.0	57	201	.4	181	5.7	001
2400	9.6	*****	94	255	.7	297	5.1	001

DAY 21

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	9.4	*****	94	133	.4	105	1.9	001
0600	9.2	*****	92	240	.7	260	2.5	001
0900	9.4	*****	93	222	.6	225	1.9	003
1200	10.1	*****	92	269	.2	207	1.9	010
1500	10.9	*****	90	322	.4	021	1.9	016
1800	10.8	*****	89	293	.5	301	2.5	010
2100	10.4	*****	93	030	.1	022	1.3	001
2400	9.3	*****	93	166	.5	187	1.9	001

DAY 22

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	9.2	*****	94	198	.4	188	1.3	001
0600	9.6	*****	91	234	.5	244	1.9	004
0900	11.9	8.1	78	299	1.7	309	5.1	031
1200	15.7	6.6	55	305	2.5	315	5.1	081
1500	16.4	*****	69	302	1.7	253	6.3	062
1800	16.1	0.4	53	283	1.2	319	5.1	011
2100	13.6	5.7	59	274	1.5	308	4.4	003
2400	7.4	*****	89	190	1.0	218	2.5	001

DAY 23

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	4.9	*****	96	138	.9	139	2.5	002
0600	7.5	5.8	89	055	1.4	076	2.5	025
0900	15.4	7.9	61	357	1.0	272	3.2	053
1200	18.3	2.9	36	295	2.4	312	5.1	027
1500	20.2	-1.5	25	286	1.5	290	4.4	023
1800	18.4	3.0	36	307	1.7	318	7.6	018
2100	14.0	5.3	56	305	1.4	310	5.7	001
2400	9.2	8.3	94	242	.4	009	3.8	000

DAY 24

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	6.2	6.1	99	153	.9	125	2.5	002
0600	8.3	*****	92	106	.5	134	1.9	017
0900	14.0	7.2	64	333	1.2	318	3.2	063
1200	16.0	4.3	46	327	3.1	328	8.3	073
1500	17.8	5.3	44	308	3.4	303	7.6	062
1800	15.3	7.3	59	293	2.0	302	6.3	009
2100	13.2	*****	71	253	.9	280	3.2	001
2400	10.2	*****	91	181	.7	259	3.2	000

DAY 25

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	8.9	*****	92	189	.7	189	1.9	001
0600	9.4	*****	83	251	.7	253	1.9	015
0900	12.3	5.6	64	304	1.7	289	3.8	039
1200	15.3	5.1	51	317	2.4	314	4.4	068
1500	17.0	6.1	49	315	3.1	318	7.0	057
1800	15.5	5.9	53	318	3.5	322	7.0	015
2100	14.2	*****	63	290	1.5	309	4.4	003
2400	10.9	6.4	74	295	1.4	307	5.7	001

DAY 26

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	8.1	6.7	91	272	1.7	304	4.4	001
0600	7.7	*****	95	242	1.0	271	3.2	002
0900	7.1	6.2	94	278	1.4	291	3.8	003
1200	7.4	6.3	93	277	1.3	295	4.4	002
1500	8.1	6.5	90	265	2.0	263	5.7	015
1800	8.5	6.8	89	267	1.8	281	6.3	003
2100	8.4	6.7	89	257	1.6	283	3.8	001
2400	7.4	5.5	88	277	2.0	297	5.7	000

DAY 27

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	GUST MAX. M/S	RAD MW
0300	6.9	5.8	93	269	2.2	285	6.3	001
0600	6.5	5.6	94	270	2.2	284	5.7	002
0900	6.2	5.6	96	276	1.7	280	4.4	004
1200	6.6	5.5	93	272	1.7	288	4.4	008
1500	6.9	6.3	96	281	1.4	298	3.8	004
1800	7.1	*****	92	266	1.2	278	3.8	003
2100	6.8	*****	95	234	1.0	246	5.1	001
2400	6.0	*****	96	271	.8	298	3.8	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JUNE , 1981

DAY 28

DAY 29

DAY 30

HOUR	DEW			WIND	WIND	GUST	MAX.		HOUR	DEW			WIND	WIND	GUST	MAX.		HOUR	DEW			WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	4.7	4.0	95	297	.3	228	2.5	001	0300	5.0	*****	95	144	.9	122	3.2	001	0300	1.4	*****	96	124	.6	098	3.2	001
0600	4.7	3.8	94	056	.8	103	2.5	003	0600	5.3	3.9	91	126	1.1	130	2.5	005	0600	2.2	*****	92	298	.6	049	2.5	011
0900	5.7	*****	93	059	1.0	093	3.2	011	0900	6.2	*****	87	105	.7	114	3.2	010	0900	6.4	3.0	79	342	.9	329	3.8	062
1200	6.9	*****	92	025	1.0	026	2.5	018	1200	6.7	*****	91	347	.6	354	1.9	011	1200	9.4	-.3	51	299	1.8	296	5.1	045
1500	8.5	6.8	89	324	1.2	298	4.4	018	1500	6.9	*****	92	344	.6	043	2.5	011	1500	8.6	1.6	62	311	2.6	317	6.3	017
1800	7.2	5.6	90	299	1.7	330	4.4	007	1800	5.2	4.0	92	277	1.2	257	5.1	003	1800	5.5	4.1	91	229	.4	291	5.1	015
2100	6.6	*****	90	244	.2	280	1.3	002	2100	2.6	*****	94	256	1.0	269	7.0	001	2100	4.5	3.5	93	131	.3	080	3.2	001
2400	5.6	4.9	95	122	.8	117	2.5	000	2400	1.1	.4	95	140	.8	171	2.5	000	2400	2.9	2.2	95	149	.9	133	2.5	001

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JUNE , 1981

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P-VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	17.7	3.7	10.7	021	.1	1.7	305	9.5	E	63	3.5	.4	5583	01
02	14.9	1.3	8.1	301	1.2	1.6	325	6.3	NW	52	1.7	0.0	5610	02
03	14.8	5.8	10.3	296	.6	1.3	180	5.1	SW	64	4.3	49.2	4653	03
04	14.1	5.0	9.6	304	.6	1.5	313	6.3	NW	64	3.6	.2	4775	04
05	9.9	3.9	6.9	293	.8	1.3	301	4.4	WNW	86	4.4	8.8	3053	05
06	14.9	3.9	9.4	294	.5	1.4	302	5.7	WNW	64	3.5	.6	5288	06
07	13.9	5.5	9.7	301	1.4	1.8	322	6.3	NW	59	2.0	.2	6079	07
08	8.2	.3	4.3	304	1.2	1.6	313	7.0	NW	91	3.9	10.4	2445	08
09	9.4	.5	4.9	349	.5	1.2	315	5.1	NNE	82	3.1	5.4	4465	09
10	16.3	-.4	7.9	316	.4	1.5	315	5.7	NW	58	-1.0	0.0	7450	10
11	16.7	2.4	9.6	345	.9	2.0	013	7.0	NW	64	3.8	.4	5078	11
12	18.2	3.6	10.9	317	.9	1.8	302	6.3	NW	53	1.2	0.0	7455	12
13	21.8	3.0	12.4	284	.7	1.4	353	7.0	S	48	2.6	1.6	6078	13
14	18.6	4.2	11.4	321	.8	1.6	300	5.7	NW	48	1.7	0.0	5997	14
15	16.5	7.8	12.1	293	.9	1.3	357	10.8	WNW	78	7.7	5.6	4530	15
16	20.5	7.4	14.0	277	.7	1.5	300	6.3	WNW	67	7.3	2.6	5480	16
17	24.1	4.8	14.4	298	.9	1.6	327	8.9	WNW	49	3.5	0.0	7035	17
18	22.0	6.9	14.5	293	.8	1.7	043	12.7	WNW	65	7.5	1.2	5607	18
19	22.0	4.3	13.1	013	1.1	2.0	319	7.6	NNE	35	-5.7	0.0	7840	19
20	20.3	4.8	12.5	009	.2	1.5	187	6.3	NE	51	1.4	2.8	4712	20
21	11.2	8.9	10.1	237	.2	.6	260	2.5	SW	90	*****	3.6	1017	21
22	18.4	7.4	12.9	283	1.1	1.5	253	6.3	NW	64	6.7	1.8	5379	22
23	21.3	4.9	13.1	311	.8	1.6	318	7.6	WNW	59	4.6	.8	6205	23
24	18.7	6.0	12.4	304	1.0	1.7	328	8.3	NW	59	6.0	7.4	5600	24
25	17.2	8.9	13.1	305	1.7	1.9	318	7.0	NW	61	5.8	0.0	5943	25
26	10.9	7.1	9.0	268	1.6	1.7	281	6.3	WSW	91	6.4	6.8	585	26
27	8.0	6.0	7.0	269	1.5	1.6	285	6.3	W	94	5.8	5.6	815	27
28	8.7	4.5	6.6	000	.4	1.0	298	4.4	NNE	92	5.0	2.4	2008	28
29	7.4	1.0	4.2	175	.1	1.1	269	7.0	ESE	93	2.8	38.6	1625	29
30	9.7	.9	5.3	302	.5	1.4	317	6.3	WNW	76	2.3	9.0	4958	30
MONTH	24.1	-.4	10.0	302	.7	1.5	043	12.7	NW	67	3.6	166.4	143143	

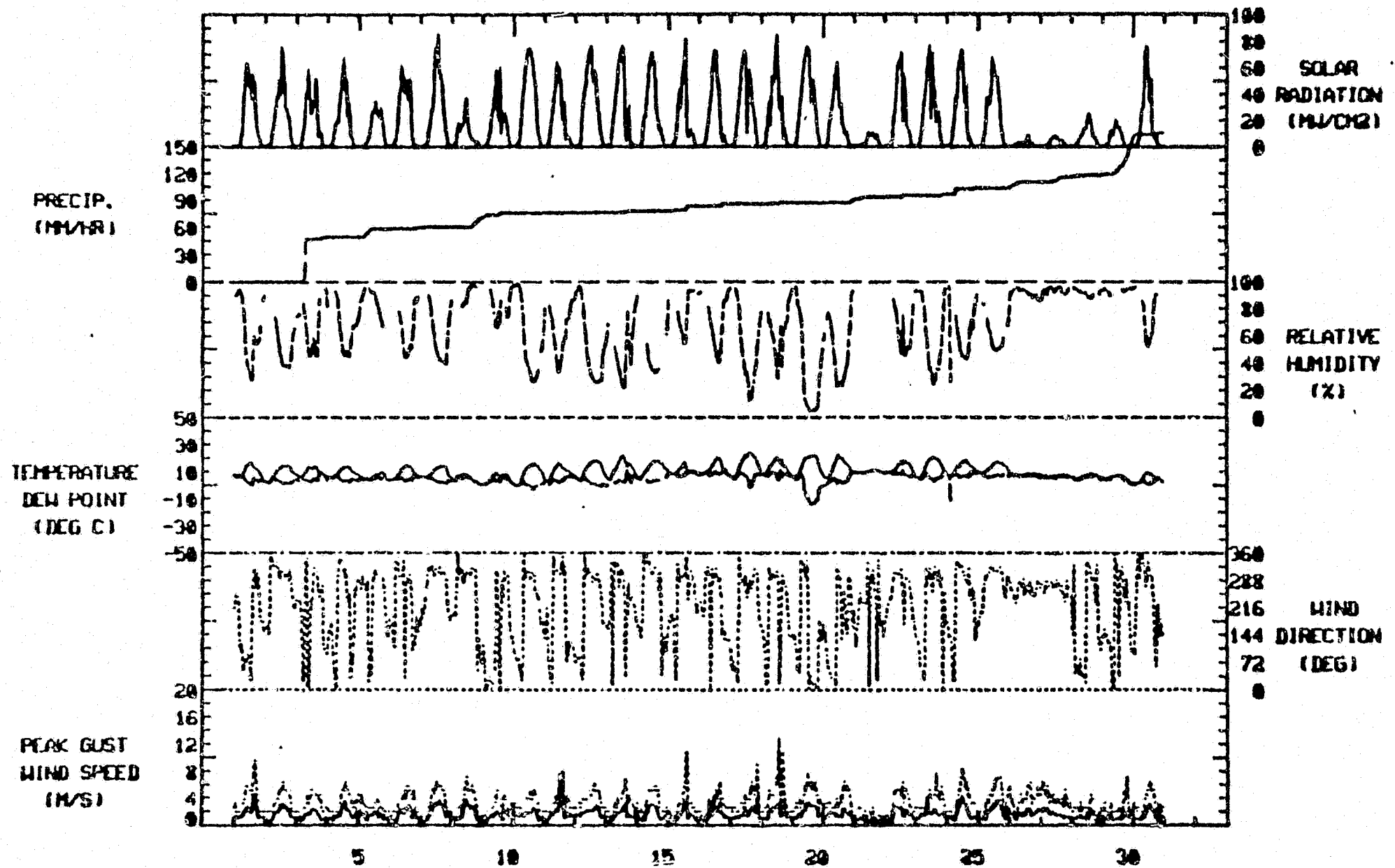
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 3.2
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 11.4
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 4.4
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 2.5

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

***** SEE GENERAL NOTES AT THE BACK OF THE REPORT *****

R&M CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 JUNE . 1981

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JUNE , 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	1.36	2.37	.17	0.00	0.00	0.00	0.00	3.90
NNE	1.43	3.59	.31	0.00	0.00	0.00	0.00	5.33
NE	.77	2.68	.07	0.00	0.00	0.00	0.00	3.52
ENE	.63	1.78	0.00	0.00	0.00	0.00	0.00	2.40
E	.77	2.37	.03	0.00	0.00	0.00	0.00	3.17
ESE	1.36	2.75	.03	0.00	0.00	0.00	0.00	4.14
SE	1.85	2.72	0.00	0.00	0.00	0.00	0.00	4.56
SSE	2.75	2.06	0.00	0.00	0.00	0.00	0.00	4.81
S	3.34	2.58	0.00	0.00	0.00	0.00	0.00	5.92
SSW	3.27	1.22	0.00	0.00	0.00	0.00	0.00	4.49
SW	2.72	2.30	0.00	0.00	0.00	0.00	0.00	5.02
WSW	2.16	4.46	.03	0.00	0.00	0.00	0.00	6.65
W	1.95	8.22	.24	0.00	.07	0.00	0.00	10.48
WNW	1.43	11.39	.73	0.00	.03	0.00	0.00	13.58
NW	1.60	10.52	3.66	0.00	0.00	0.00	.03	15.81
NNW	1.22	4.14	.45	0.00	0.00	0.00	.03	5.85
CALM								.35
TOTAL	28.60	65.13	5.75	0.00	.10	0.00	.07	100.00

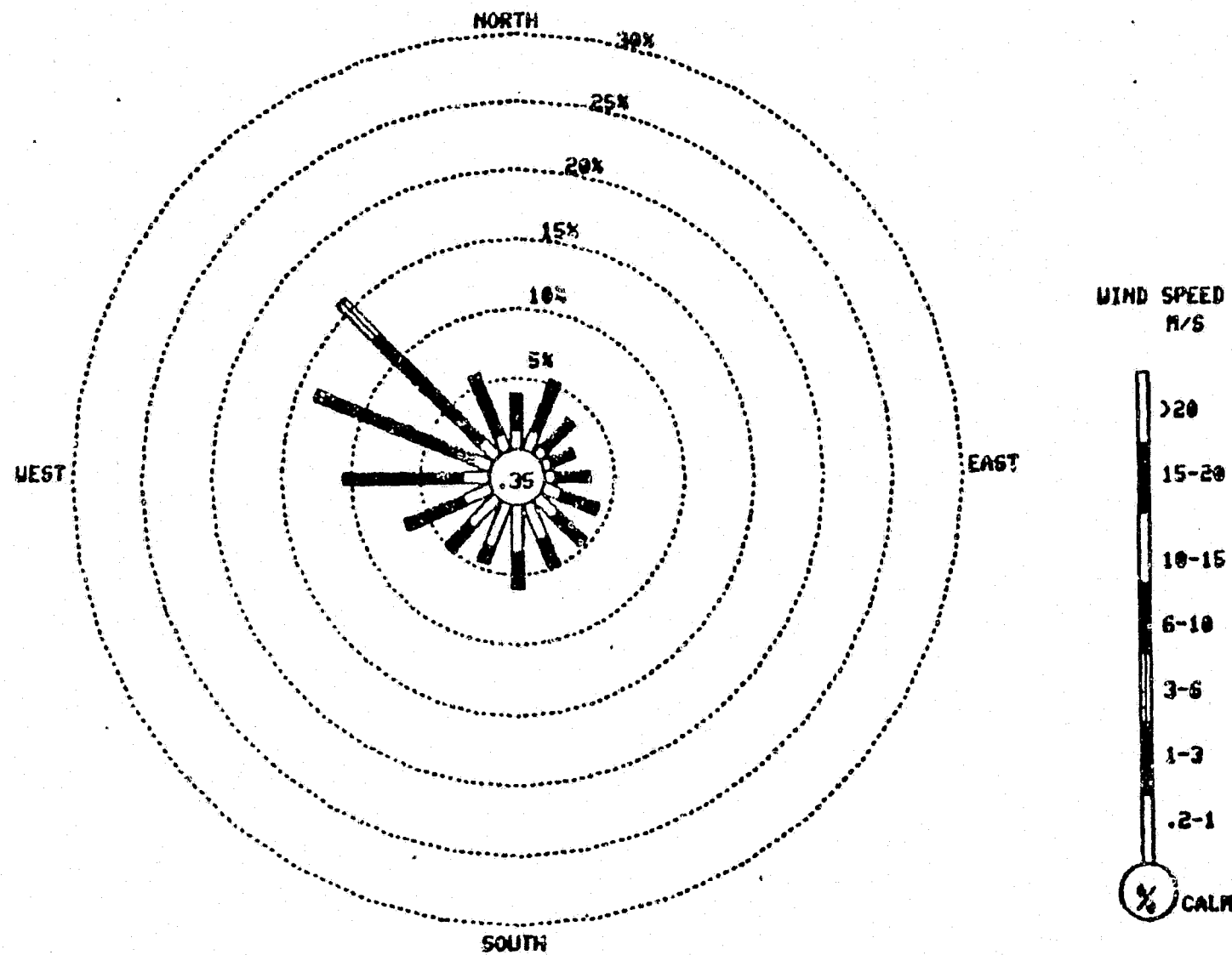
NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

2871 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT

DEVIL CANYON WEATHER STATION

JUNE, 1981



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

DATE	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DATE	
01	.4	.6	0.0	.2	0.0	0.0	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	01	
02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	02	
03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***	***	***	***	***	***	***	***	***	***	***	03
04	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	04
05	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	05
06	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	06
07	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	07
08	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	08
09	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	09
10	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	10
11	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	11
12	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	12
13	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	13
14	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	14
15	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	15
16	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	16
17	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	17
18	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	18
19	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	19
20	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	20
21	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	21
22	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	22
23	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	23
24	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	24
25	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	25
26	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	26
27	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	27
28	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	28
29	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	29
30	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	30
31	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	31

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1981

DAY 01

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.9	2.0	94	095	1.1	106	3.2	002
0600	4.0	3.1	94	088	1.1	123	3.2	004
0900	9.2	3.3	67	064	1.0	124	3.8	072
1200	12.4	.4	44	301	1.7	301	4.4	052
1500	11.9	*****	59	293	1.3	305	4.4	022
1800	12.5	1.1	46	019	1.6	074	4.4	029
2100	10.4	*****	54	071	1.2	019	5.7	003
2400	3.4	1.4	87	145	1.2	133	3.2	001

DAY 02

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	1.8	.9	94	129	1.2	119	3.2	002
0600	6.2	3.3	82	126	.9	122	3.2	017
0900	11.6	-3.1	36	044	.5	010	8.3	031
1200	13.0	-6.2	26	328	2.0	333	5.7	053
1500	13.6	-5.7	26	008	3.5	035	8.3	041
1800	13.4	-5.3	27	359	2.8	339	6.3	019
2100	11.0	*****	41	350	1.3	346	5.1	003
2400	4.6	*****	70	179	1.0	242	1.9	001

DAY 03

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	2.5	-.1	83	138	1.1	130	3.2	002
0600	5.5	*****	78	089	.6	178	3.2	017
0900	12.6	-4.2	31	322	1.1	286	4.4	032
1200	13.7	-6.1	25	338	1.7	304	5.7	071
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 04

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 05

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 06

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 07

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 08

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

DAY 09

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	***	***	*****	***	*****	***
0600	*****	*****	***	***	*****	***	*****	***
0900	*****	*****	***	***	*****	***	*****	***
1200	*****	*****	***	***	*****	***	*****	***
1500	*****	*****	***	***	*****	***	*****	***
1800	*****	*****	***	***	*****	***	*****	***
2100	*****	*****	***	***	*****	***	*****	***
2400	*****	*****	***	***	*****	***	*****	***

SUSITNA HYDROELECTRIC PROJECT

DAY 10

DAY 11

DAY 12

HOUR	DEW	WIND	WIND	GUST	GUST	HOUR	DEW	WIND	WIND	GUST	GUST	HOUR	DEW	WIND	WIND	GUST	GUST	HOUR	DEW	WIND	WIND	GUST	GUST	HOUR	DEW	WIND	WIND	GUST	GUST	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	TEMP.	POINT	RH	DIR.	SPD.	DIR.	TEMP.	POINT	RH	DIR.	SPD.	DIR.	TEMP.	POINT	RH	DIR.	SPD.	DIR.	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.		DEG C	DEG C	%	DEG.	M/S	DEG.		DEG C	DEG C	%	DEG.	M/S	DEG.		DEG C	DEG C	%	DEG.	M/S	DEG.		DEG C	DEG C
0300	*****	*****	**	***	*****	***	0300	*****	*****	**	***	*****	***	0300	*****	*****	**	***	*****	***	0300	*****	*****	**	***	*****	***	0300	*****	*****
0600	*****	*****	**	***	*****	***	0600	*****	*****	**	***	*****	***	0600	*****	*****	**	***	*****	***	0600	*****	*****	**	***	*****	***	0600	*****	*****
0900	*****	*****	**	***	*****	***	0900	*****	*****	**	***	*****	***	0900	*****	*****	**	***	*****	***	0900	*****	*****	**	***	*****	***	0900	*****	*****
1200	*****	*****	**	***	*****	***	1200	*****	*****	**	***	*****	***	1200	*****	*****	**	***	*****	***	1200	*****	*****	**	***	*****	***	1200	*****	*****
1500	*****	*****	**	***	*****	***	1500	*****	*****	**	***	*****	***	1500	*****	*****	**	***	*****	***	1500	*****	*****	**	***	*****	***	1500	*****	*****
1800	*****	*****	**	***	*****	***	1800	*****	*****	**	***	*****	***	1800	*****	*****	**	***	*****	***	1800	*****	*****	**	***	*****	***	1800	*****	*****
2100	*****	*****	**	***	*****	***	2100	*****	*****	**	***	*****	***	2100	*****	*****	**	***	*****	***	2100	*****	*****	**	***	*****	***	2100	*****	*****
2400	*****	*****	**	***	*****	***	2400	*****	*****	**	***	*****	***	2400	*****	*****	**	***	*****	***	2400	*****	*****	**	***	*****	***	2400	*****	*****

DAY 13

DAY 14

DAY 15

STATION 1									STATION 2									STATION 3											
HOUR	DEW		WIND		WIND		GUST		MAX.	HOUR	DEW		WIND		WIND		GUST		MAX.	HOUR	DEW		WIND		WIND		GUST		MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD		NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD		NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***	0300	*****	*****	**	***	*****	***	*****	***			
0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***	0600	*****	*****	**	***	*****	***	*****	***			
0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***	0900	*****	*****	**	***	*****	***	*****	***			
1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***	1200	*****	*****	**	***	*****	***	*****	***			
1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***	1500	*****	*****	**	***	*****	***	*****	***			
1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***	1800	*****	*****	**	***	*****	***	*****	***			
2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***	2100	*****	*****	**	***	*****	***	*****	***			
2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***	2400	*****	*****	**	***	*****	***	*****	***			

DAY 16

DAY 17

DAY 18

[illegible]

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1981

DAY 19

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 20

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 21

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 22

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 23

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 24

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 25

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 26

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

DAY 27

HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.
	DEG C	DEG C	%	DEG.	M/S
0300	*****	*****	**	***	*****
0600	*****	*****	**	***	*****
0900	*****	*****	**	***	*****
1200	*****	*****	**	***	*****
1500	*****	*****	**	***	*****
1800	*****	*****	**	***	*****
2100	*****	*****	**	***	*****
2400	*****	*****	**	***	*****

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1981

DAY 28

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 29

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 30

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 31

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 31

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

DAY 31

HOUR NDNG	TEMP. DEG C	DEW POINT DEG C	RH %	WIND DIR. DEG.	WIND SPD. M/S	GUST DIR. DEG.	MAX. GUST M/S	RAD MW
0300	*****	*****	**	***	*****	***	*****	***
0600	*****	*****	**	***	*****	***	*****	***
0900	*****	*****	**	***	*****	***	*****	***
1200	*****	*****	**	***	*****	***	*****	***
1500	*****	*****	**	***	*****	***	*****	***
1800	*****	*****	**	***	*****	***	*****	***
2100	*****	*****	**	***	*****	***	*****	***
2400	*****	*****	**	***	*****	***	*****	***

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1981

DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY WH/SQM	DAY
01	14.5	2.6	8.5	046	.5	1.5	019	5.7	ENE	66	1.9	1.6	5898	01
02	14.4	1.1	7.8	010	.9	1.9	010	8.3	N	47	-2.7	0.0	5703	02
03	*****	*****	*****	***	****	1.5	019	6.3	SE	47	-3.5	0.0	5961	03
04	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	04
05	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	05
06	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	06
07	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	07
08	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	08
09	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	09
10	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	10
11	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	11
12	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	12
13	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	13
14	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	14
15	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	15
16	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	16
17	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	17
18	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	18
19	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	19
20	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	20
21	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	21
22	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	22
23	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	23
24	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	24
25	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	25
26	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	26
27	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	27
28	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	28
29	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	29
30	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	30
31	*****	*****	*****	***	****	*****	***	*****	MSG	**	*****	*****	***	31
MONTH	14.5	1.1	8.1	022	.7	1.6	010	8.3	N	53	-1.4	1.6	17561	

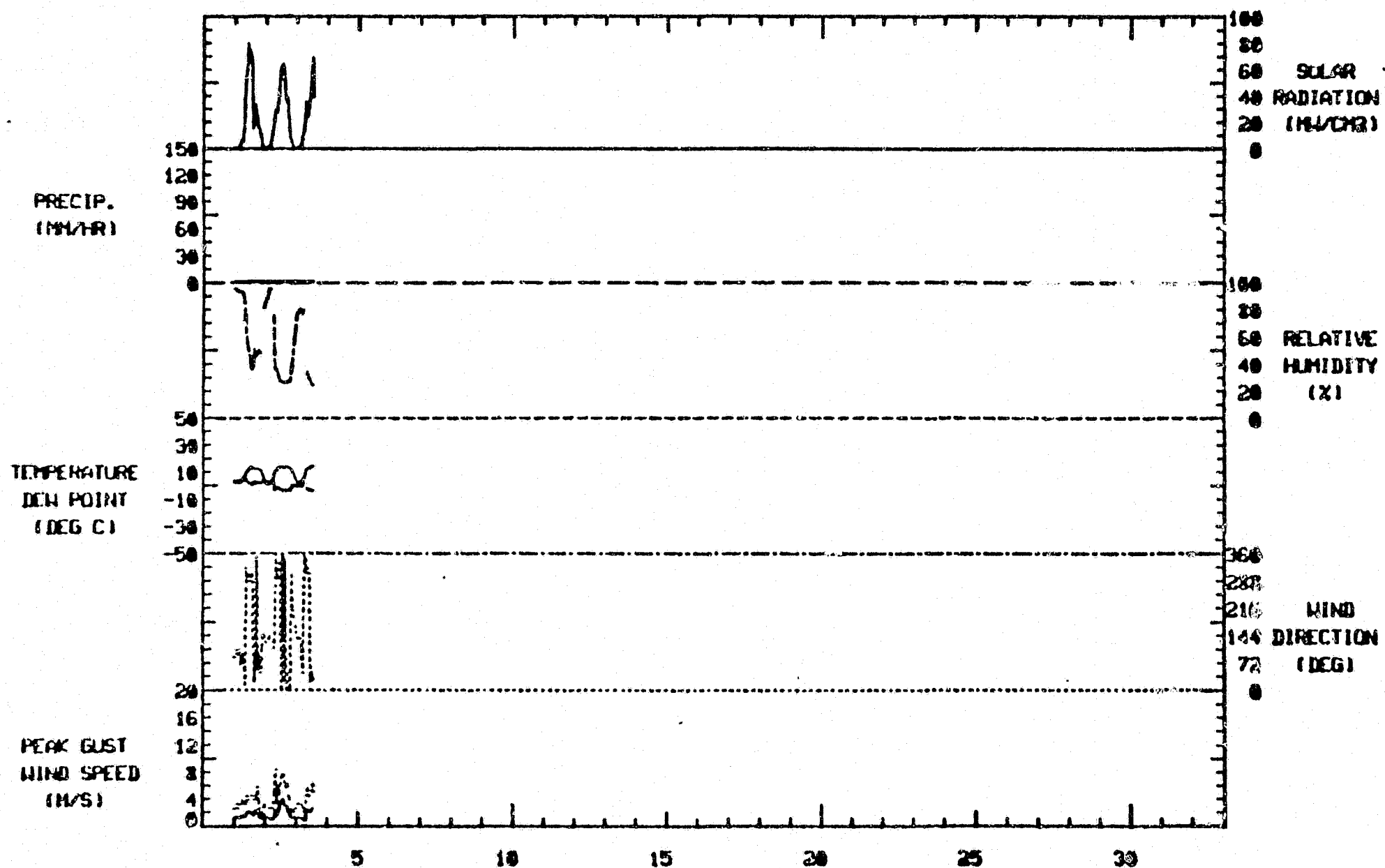
GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 3.2
 GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 5.1
 GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 6.3
 GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 3.2

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEED ARE <1.0 METERS PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

***** SEE GENERAL NOTES AT THE BACK OF THE REPORT *****

R&M CONSULTANT, INC.

SUSITNA HYDROELECTRIC PROJECT



DAY OF THE MONTH

DEVIL CANYON WEATHER STATION

DATA START: 01 JULY, 1981

R&M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

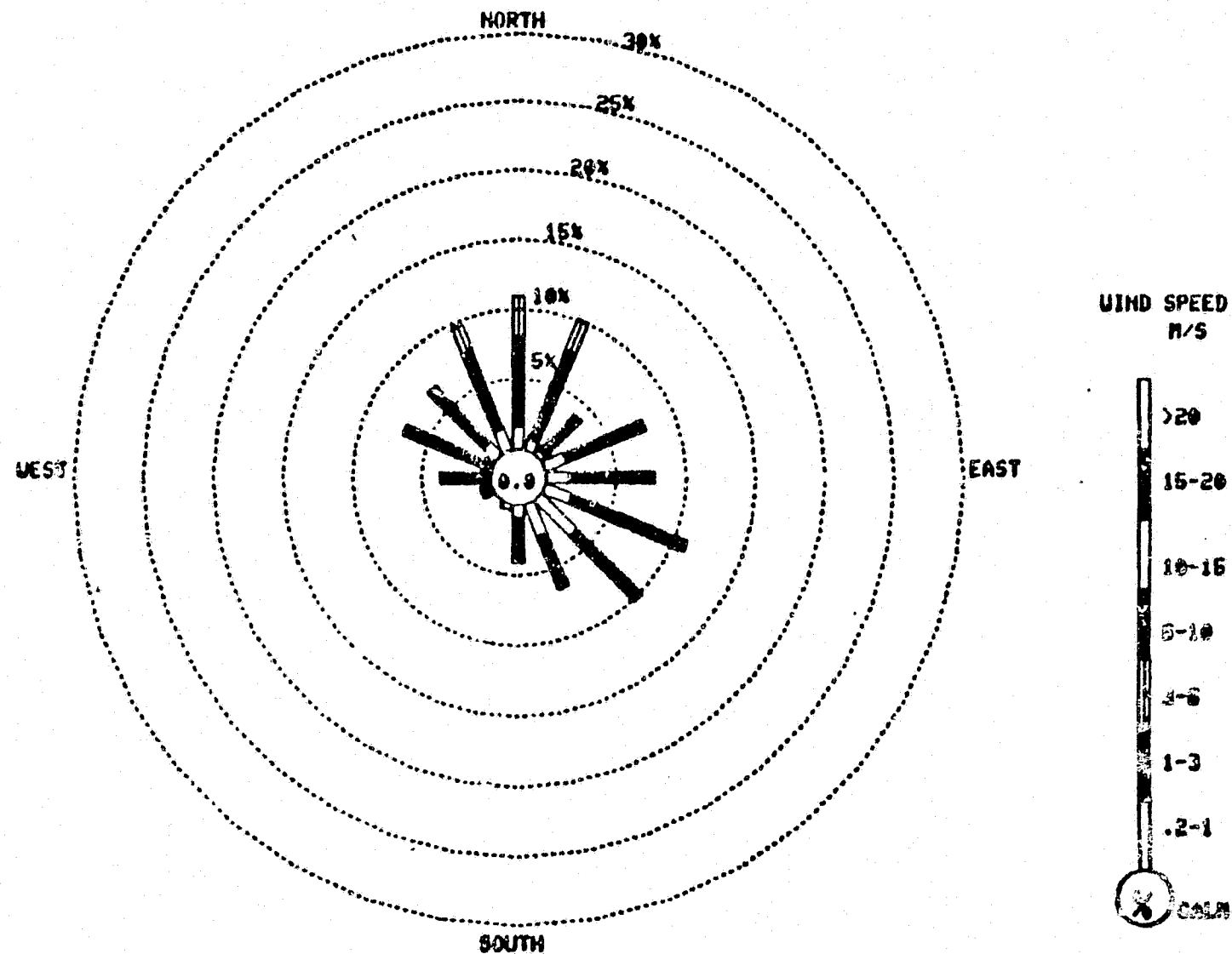
WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING JULY , 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	GREATER THAN 20.0	
N	1.61	6.45	2.82	0.00	0.00	0.00	0.00	10.89
NNE	.81	6.85	2.42	0.00	0.00	0.00	0.00	10.08
NE	.40	3.23	.40	0.00	0.00	0.00	0.00	4.03
ENE	1.61	6.05	0.00	0.00	0.00	0.00	0.00	7.66
E	1.61	6.05	0.00	0.00	0.00	0.00	0.00	7.66
ESE	2.02	8.87	0.00	0.00	0.00	0.00	0.00	10.89
SE	3.63	6.45	0.00	0.00	0.00	0.00	0.00	10.08
SSE	2.42	4.93	0.00	0.00	0.00	0.00	0.00	6.45
S	.81	3.23	0.00	0.00	0.00	0.00	0.00	4.03
SSW	.40	0.00	0.00	0.00	0.00	0.00	0.00	.40
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	.81	0.00	0.00	0.00	0.00	0.00	.81
W	0.00	3.63	0.00	0.00	0.00	0.00	0.00	3.63
WNW	0.00	6.45	.40	0.00	0.00	0.00	0.00	6.85
NW	1.21	5.65	0.00	0.00	0.00	0.00	0.00	6.85
NNW	1.61	6.05	2.02	0.00	0.00	0.00	0.00	9.68
CALM								0.00
TOTAL	18.15	73.79	8.06	0.00	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES EXPRESSED IN PERCENT.

248 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
JULY, 1981



WIND ROSE PLOT

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

HOURLY PRECIPITATION SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

DATE	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DATE
1	.4	.6	0.0	.2	0.0	0.0	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
6	0.0	0.0	0.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	2.2	11.2	3.4	0.0	.2	7
8	0.0	0.0	0.0	0.0	.2	0.0	0.0	.2	.4	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.0	1.2	2.6	3.2	3.0	.4	2.2	1.0	.6	.6	9
10	.6	1.4	1.8	2.8	3.8	3.2	2.4	1.8	0.0	0.0	0.0	1.2	2.0	1.2	1.0	.4	0.0	.2	0.0	0.0	.8	.4	.4	.2	10
11	.4	.4	.2	.2	.2	0.0	0.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0	11
12	.2	.2	.2	.6	0.0	.2	0.0	.4	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12
13	0.0	0.0	.6	.4	.4	.2	.8	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13
14	0.0	0.0	0.0	.8	.2	0.0	0.0	0.0	.6	0.0	0.0	0.0	.2	.2	.4	.2	0.0	.2	.2	0.0	0.0	0.0	.2	0.0	14
15	0.0	.2	.2	.4	.6	.4	.4	.2	.4	.8	.4	.4	.4	.2	.4	0.0	.2	1.2	.8	.6	.6	.4	.6	0.0	15
16	0.0	1.0	1.8	2.6	1.8	1.4	.6	.4	.4	.2	.2	.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	16
17	.4	0.0	0.0	0.0	.2	0.0	0.0	0.0	0.0	1.2	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	0.0	.2	.4	.2	18
19	0.0	.2	.4	.2	0.0	.4	.4	0.0	0.0	1.0	3.0	0.0	.4	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19
20	.2	.2	0.0	0.0	.2	.6	1.4	1.6	1.0	1.4	.8	.8	.2	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	0.0	20
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	.4	1.0	.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	.4	.6	1.4	22
23	1.0	1.4	1.4	1.6	.2	.2	0.0	0.0	0.0	.6	.2	.4	.2	0.0	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23
24	0.0	0.0	0.0	.2	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.4	1.0	.8	.4	.2	0.0	.2	.2	24
25	.4	0.0	0.0	.8	1.2	1.0	.8	.2	.2	0.0	.6	.6	.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.8	.8	0.0	.6	0.0	.2	0.0	0.0	.4	.8	.6	.4	.6	28
29	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0	0.0	1.4	3.8	7.6	1.8	1.4		29
30	2.0	2.4	2.0	1.0	.6	.4	.2	.4	.2	0.0	.2	0.0	0.0	.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	.2	.6	.2	.2	.2	.4	31

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

DAY 01

DAY 02

DAY 03

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG.	M/S	MW
0300	2.9	2.0	94	095	1.1	106	3.2	2	0300	1.8	.9	94	129	1.2	119	3.2	2
0600	4.0	3.1	94	088	1.1	123	3.2	4	0600	6.2	3.4	82	126	.9	122	3.2	17
0900	9.2	3.4	67	064	1.0	124	3.8	72	0900	11.6	-3.1	36	044	.5	010	8.3	31
1200	12.4	.4	44	301	1.7	301	4.4	52	1200	13.0	-6.2	26	328	2.0	333	5.7	53
1500	11.9	*****	59	293	1.3	305	4.4	22	1500	13.6	-5.7	26	008	3.5	035	8.3	41
1800	12.5	1.1	46	019	1.6	074	4.4	29	1800	13.4	-5.3	27	359	2.8	003	7.0	19
2100	10.4	*****	54	071	1.2	019	5.7	3	2100	11.0	*****	41	350	1.3	346	5.1	3
2400	3.4	1.4	87	145	1.2	133	3.2	1	2400	4.6	*****	70	179	1.0	242	1.9	1

DAY 04

DAY 05

DAY 06

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG.	M/S	MW
0300	3.9	1.1	82	123	1.0	083	3.2	2	0300	9.4	3.4	66	260	1.6	249	3.2	1
0600	7.7	2.4	69	047	1.3	051	3.2	18	0600	9.3	6.0	80	284	1.1	307	3.8	11
0900	12.3	3.3	54	349	.8	039	3.2	37	0900	10.8	*****	70	310	1.8	312	4.4	24
1200	15.1	.4	37	304	1.7	317	4.4	36	1200	11.9	5.6	65	323	2.1	325	4.4	13
1500	15.9	-.9	32	319	2.0	334	5.1	28	1500	11.7	*****	69	298	.7	299	3.2	8
1800	15.3	-.2	35	274	2.0	317	6.3	15	1800	12.1	*****	68	022	.6	012	1.9	6
2100	12.9	1.5	46	276	1.6	266	5.1	2	2100	10.6	*****	85	328	.3	321	1.3	1
2400	11.0	4.1	62	256	1.5	272	3.8	1	2400	9.2	7.8	91	116	.5	127	2.5	1

DAY 07

DAY 08

DAY 09

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG.	M/S	MW
0300	9.7	7.5	86	247	1.2	279	3.8	1	0300	6.3	5.4	94	089	1.0	112	3.8	1
0600	9.9	7.3	94	270	1.6	278	3.8	6	0600	6.6	*****	96	115	1.3	114	3.8	2
0900	11.6	7.0	73	295	1.8	277	7.0	20	0900	6.7	6.1	96	094	1.1	098	3.8	3
1200	12.2	5.9	65	263	2.8	252	10.2	18	1200	9.4	*****	92	340	.5	337	3.2	4
1500	12.6	7.3	70	248	2.6	240	8.9	20	1500	10.9	9.1	89	248	1.3	244	3.2	3
1800	9.7	5.3	74	275	2.4	248	8.3	2	1800	11.7	9.1	84	286	1.9	302	6.3	3
2100	6.6	6.0	96	037	1.2	027	9.5	1	2100	11.1	9.0	87	258	1.4	268	5.1	1
2400	5.8	5.2	96	108	1.0	076	3.2	1	2400	10.9	8.5	85	251	1.2	257	2.5	1

R & M CONSULTANTS, INC.

SUSTINA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

DAY 10

DAY 11

DAY 12

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	8.4	*****	2	039	.2	347	1.3	1	0300	9.1	*****	96	258	.6	292	1.9	1	0300	9.4	8.3	93	270	1.6	275	4.4	1
0600	8.6	*****	2	013	.2	059	1.3	4	0600	8.7	-35.1	2	311	.8	329	2.5	5	0600	9.4	7.8	90	280	1.5	284	4.4	2
0900	9.6	*****	89	327	.5	327	1.3	13	0900	9.0	7.6	91	299	1.1	310	3.2	10	0900	9.7	8.3	91	298	1.9	314	5.1	3
1200	10.7	8.8	88	020	.3	108	2.5	10	1200	9.6	8.0	90	302	1.8	307	5.7	10	1200	11.0	*****	84	238	.8	267	3.2	6
1500	11.1	9.3	89	110	1.3	127	3.8	13	1500	11.2	8.8	85	288	1.7	297	5.7	13	1500	12.0	8.9	81	188	.5	012	3.2	6
1800	11.4	9.8	90	073	.4	112	3.2	11	1800	12.0	8.5	79	290	2.1	292	7.0	7	1800	12.9	*****	82	320	.5	358	3.2	12
2100	9.9	*****	93	271	.9	278	2.5	1	2100	10.8	9.0	89	282	1.9	295	5.7	1	2100	11.4	*****	85	279	.9	265	3.2	1
2400	9.4	8.9	97	269	.7	321	2.5	0	2400	10.0	8.4	90	269	1.6	282	5.7	0	2400	9.4	*****	90	204	.6	208	1.9	1

DAY 13

DAY 14

DAY 15

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	9.2	*****	93	279	.7	265	2.5	1	0300	8.8	*****	93	087	.2	124	2.5	1	0300	9.2	*****	4	119	.0	328	1.3	1
0600	9.2	*****	91	288	.7	301	2.5	8	0600	9.0	*****	92	131	.6	158	2.5	5	0600	9.9	*****	3	024	.5	033	1.9	7
0900	9.8	8.1	89	275	.8	276	2.5	11	0900	10.1	8.2	88	298	.9	289	3.8	9	0900	11.7	9.4	86	305	1.0	305	2.5	26
1200	10.7	8.6	87	272	1.1	304	3.8	19	1200	10.4	8.6	89	308	1.8	307	4.4	12	1200	12.8	10.8	88	291	1.4	281	2.5	38
1500	11.1	9.2	88	288	1.5	302	4.4	31	1500	10.6	9.2	91	311	1.7	301	4.4	8	1500	12.5	10.9	90	293	1.2	291	2.5	24
1800	11.1	9.3	89	291	1.7	299	5.1	4	1800	9.9	8.6	92	310	1.6	329	4.4	5	1800	11.9	10.6	92	282	1.3	281	2.5	7
2100	10.4	*****	93	236	.2	327	1.9	1	2100	9.4	8.5	94	318	1.1	310	2.5	1	2100	11.3	*****	92	268	.9	276	1.9	1
2400	9.3	*****	91	127	.7	141	2.5	1	2400	9.4	*****	4	306	.5	319	1.9	1	2400	10.7	*****	91	205	.4	229	1.3	1

DAY 16

DAY 17

DAY 18

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	10.6	*****	97	196	.2	193	1.3	1	0300	11.4	*****	90	093	.2	085	2.5	1	0300	9.5	*****	89	211	.8	245	1.9	1
0600	11.1	*****	0	262	.2	277	1.3	6	0600	11.8	*****	95	052	.1	117	1.9	5	0600	10.3	7.9	85	271	.8	229	2.5	8
0900	11.9	10.5	91	294	.8	284	2.5	12	0900	12.4	*****	91	326	.7	276	3.2	6	0900	10.8	8.4	85	308	1.3	.99	3.2	14
1200	12.5	10.7	89	298	1.9	293	3.8	20	1200	13.6	11.0	84	309	1.8	306	3.8	25	1200	11.7	9.3	85	312	1.9	305	5.7	12
1500	14.4	11.6	83	311	1.9	316	4.4	22	1500	15.5	11.3	76	311	2.4	303	4.4	53	1500	11.8	9.5	86	308	2.0	324	5.1	27
1800	14.2	11.4	83	303	1.3	294	3.2	7	1800	14.0	5.7	57	304	2.2	311	5.1	29	1800	11.0	9.4	90	304	1.6	303	3.8	4
2100	12.7	*****	88	257	.8	265	2.5	1	2100	14.3	*****	74	289	1.5	284	3.8	3	2100	10.1	*****	90	275	.8	286	3.8	1
2400	11.7	*****	90	185	.5	227	1.3	1	2400	11.6	9.0	84	259	1.0	259	2.5	1	2400	9.6	*****	90	213	.3	274	1.3	0

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

DAY 19

DAY 20

DAY 21

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	9.4	*****	97	220	.2	267	1.3	1	0300	9.9	*****	91	274	.5	260	1.9	1	0300	10.1	*****	95	270	.6	291	1.9	1
0600	9.6	*****	99	035	.1	017	1.3	3	0600	10.2	*****	93	350	.3	307	1.3	4	0600	10.6	*****	89	290	.4	276	1.3	6
0900	10.6	*****	87	360	.7	358	1.9	12	0900	10.2	8.6	90	299	1.3	304	3.2	8	0900	11.9	*****	87	304	.5	243	1.3	15
1200	10.9	9.1	89	317	1.5	336	4.4	12	1200	10.9	9.0	88	312	1.5	299	3.2	16	1200	.4	*****	84	316	.9	338	3.8	22
1500	11.8	9.9	88	312	1.7	318	3.8	9	1500	11.1	9.5	90	307	1.7	308	3.8	13	1500	14.2	10.5	78	302	2.1	306	4.4	29
1800	11.1	9.3	89	309	1.8	301	3.8	4	1800	11.2	9.6	90	308	1.5	315	3.8	5	1800	14.1	10.7	80	303	1.8	306	5.1	19
2100	11.1	*****	90	289	.8	296	4.4	1	2100	10.8	*****	91	290	.8	291	2.5	1	2100	11.8	10.2	90	250	.4	313	1.9	1
2400	10.2	*****	91	216	.5	164	1.3	0	2400	10.1	*****	92	296	.9	293	2.5	0	2400	11.0	*****	90	172	.6	156	1.9	0

DAY 22

DAY 23

DAY 24

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	10.3	*****	88	175	.5	170	1.3	1	0300	11.1	*****	93	235	.1	239	1.3	1	0300	11.3	*****	89	172	.3	193	1.3	1
0600	11.9	*****	84	256	.4	252	1.9	11	0600	11.1	*****	97	047	.2	053	1.3	6	0600	12.0	*****	88	061	.4	073	1.3	12
0900	12.9	9.6	80	300	.9	298	2.5	18	0900	12.0	10.2	89	035	.7	061	2.5	11	0900	14.3	*****	85	019	.9	013	1.9	20
1200	14.2	10.3	77	304	1.9	293	3.8	27	1200	12.0	10.4	90	309	1.1	316	3.2	15	1200	18.0	10.9	63	069	1.3	093	3.2	39
1500	14.9	10.6	75	316	2.1	315	4.4	22	1500	13.1	11.1	88	296	1.4	293	3.2	18	1500	16.3	12.7	79	068	1.8	055	4.4	6
1800	14.7	*****	78	310	1.3	330	3.2	4	1800	13.6	*****	88	296	.5	308	1.9	9	1800	12.2	10.6	90	299	1.6	276	5.1	4
2100	12.1	*****	91	258	1.0	262	3.8	1	2100	12.7	*****	90	227	.3	280	1.3	1	2100	11.4	*****	92	258	.9	287	2.5	1
2400	11.2	*****	90	114	.3	117	1.9	1	2400	11.9	*****	91	206	.5	186	1.3	0	2400	10.2	*****	89	146	.5	073	1.9	1

DAY 25

DAY 26

DAY 27

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW				
0300	10.0	*****	91	107	.9	104	1.9	1	0300	8.8	*****	89	181	.6	165	2.5	1	0300	6.5	*****	93	139	.7	117	2.5	1
0600	10.2	*****	90	084	.6	071	1.9	4	0600	9.6	*****	87	111	.4	131	1.9	8	0600	7.9	*****	89	065	.5	112	1.9	8
0900	13.4	*****	84	048	.6	118	1.9	27	0900	12.0	8.9	81	308	1.1	312	3.2	26	0900	12.7	8.0	73	321	1.0	301	3.8	19
1200	12.7	*****	87	340	.5	043	2.5	16	1200	13.6	*****	75	298	.8	281	2.5	29	1200	14.9	8.7	66	311	1.6	325	4.4	34
1500	11.7	9.8	88	310	1.5	299	5.1	22	1500	14.4	8.9	69	325	1.4	310	3.8	21	1500	15.5	8.6	63	316	2.6	305	6.3	27
1800	11.9	*****	86	296	1.5	310	3.8	7	1800	14.4	9.1	70	322	1.6	319	3.8	9	1800	14.8	9.0	68	310	2.2	322	5.7	5
2100	10.3	*****	91	294	.9	319	4.4	1	2100	10.0	8.4	90	201	.9	314	2.5	1	2100	11.9	9.5	85	251	.9	260	3.2	1
2400	9.5	*****	90	169	.6	122	1.9	1	2400	8.4	*****	91	182	.7	191	1.9	1	2400	9.8	*****	87	178	1.0	166	2.5	1

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

DAY 28

DAY 29

DAY 30

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0700	8.8	*****	91	161	.6	154	1.9	0	0300	10.2	9.7	97	279	.4	319	2.5	1	0300	9.1	8.3	95	160	.6	131	1.9	1
0600	9.4	*****	91	163	.5	165	1.9	3	0600	10.0	8.1	88	251	1.1	240	3.2	3	0600	9.3	*****	95	053	.4	105	1.9	3
0900	11.1	*****	88	281	.5	277	1.9	7	0900	11.1	8.5	84	279	1.2	278	3.2	20	0900	10.2	*****	86	331	.5	032	2.5	15
1200	10.7	8.8	88	287	1.3	306	3.2	7	1200	12.8	8.1	73	310	1.9	321	3.8	22	1200	11.5	*****	85	286	.9	281	1.9	14
1500	10.6	8.7	88	305	1.5	312	3.8	3	1500	14.4	9.1	70	296	1.5	309	4.4	16	1500	13.6	*****	80	295	.2	280	1.9	38
1800	10.3	*****	88	272	.9	299	2.5	1	1800	13.4	8.7	73	292	.4	327	3.2	17	1800	13.9	*****	82	357	.4	113	1.9	6
2100	9.9	*****	90	281	1.2	304	3.8	1	2100	10.7	9.6	93	225	.5	252	3.8	0	2100	11.9	10.6	92	152	.3	099	1.9	1
2400	9.7	*****	94	240	.5	259	1.9	1	2400	9.7	*****	91	136	.3	103	2.5	1	2400	10.4	*****	90	160	.6	154	2.5	0

DAY 31

HOUR	DEW	WIND	WIND	GUST	MAX.			
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	9.0	*****	89	185	.6	170	1.9	1
0600	10.4	*****	87	217	.2	186	1.9	12
0900	11.2	8.3	82	296	1.4	296	3.2	17
1200	12.6	9.1	79	297	1.5	302	3.2	20
1500	13.6	9.7	77	286	1.4	286	3.2	5
1800	12.1	10.0	87	263	.6	252	3.2	2
2100	10.5	9.2	92	268	1.2	297	3.8	1
2400	10.0	9.1	94	288	1.5	303	3.8	1

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

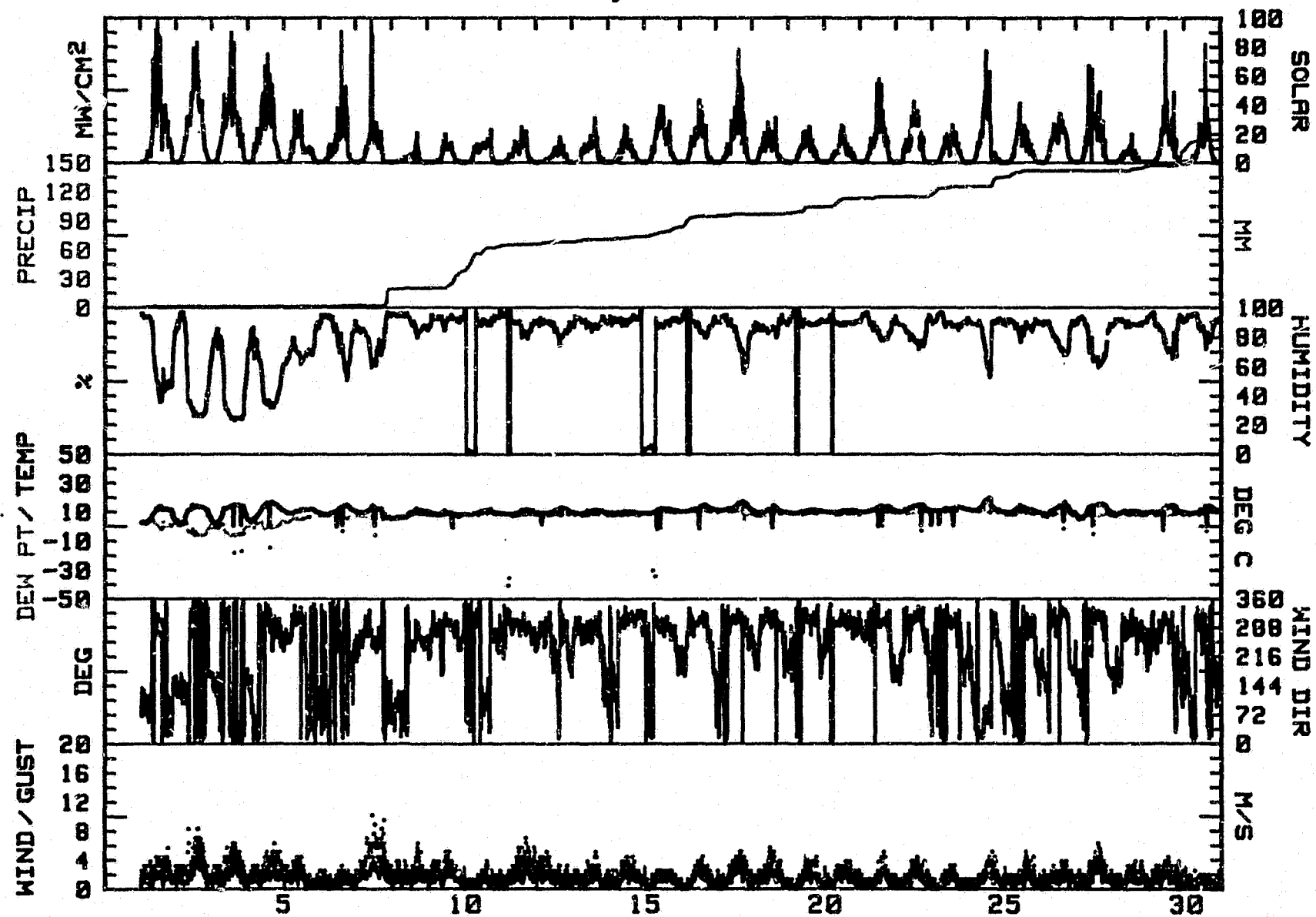
DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY DAY WH/SQM
1	14.5	2.6	8.6	046	.5	1.5	019	5.7	ENE	68	1.7	1.6	5898 1
2	15.0	1.1	8.1	010	.9	1.9	010	8.3	N	51	-2.7	0.0	5703 2
3	15.3	.3	7.8	015	.9	1.7	019	6.3	NNE	46	-3.9	0.0	5275 3
4	17.0	.2	8.6	300	.9	1.6	317	6.3	W	53	.8	0.0	4628 4
5	12.3	9.2	10.8	304	.8	1.2	312	4.4	NW	72	5.2	0.0	2270 5
6	15.3	.1	7.7	340	.2	.8	031	3.2	NNW	81	7.1	.8	3013 6
7	14.9	.6	7.8	269	1.3	2.1	252	10.2	W	80	6.6	17.2	2735 7
8	12.6	5.5	9.1	250	.3	1.3	302	6.3	WSW	91	7.7	1.0	760 8
9	11.0	.4	5.7	287	1.3	1.4	321	5.1	WNW	92	7.9	18.2	1105 9
10	12.0	8.4	10.2	013	.1	.8	127	3.8	W	68	9.3	25.6	1548 10
11	12.0	8.7	10.4	288	1.4	1.5	292	7.0	WNW	83	6.4	2.2	1575 11
12	13.2	3.4	8.3	272	.9	1.2	314	5.1	WNW	87	8.3	2.0	993 12
13	11.7	8.9	10.3	279	.8	1.0	299	5.1	WNW	90	8.7	2.6	1683 13
14	10.9	8.7	9.8	311	.8	1.2	307	4.4	NW	84	8.7	3.2	1438 14
15	12.8	.2	6.5	291	.7	.9	305	2.5	WNW	64	8.3	9.8	2885 15
16	15.2	1.0	8.1	290	.8	1.0	316	4.4	WNW	80	10.8	11.0	2695 16
17	17.4	11.3	14.4	303	1.1	1.4	311	5.1	NW	82	10.3	2.0	3810 17
18	14.6	1.5	8.1	294	1.0	1.3	305	5.7	WNW	87	8.8	1.0	1833 18
19	11.9	9.4	10.7	308	.8	1.0	336	4.4	NW	87	9.3	6.2	1660 19
20	11.3	9.8	10.6	303	1.0	1.1	308	3.8	WNW	88	9.0	8.8	1535 20
21	14.7	.4	7.6	293	.8	1.0	306	5.1	WNW	87	10.2	2.0	3050 21
22	15.4	1.0	8.2	297	.8	1.1	315	4.4	NW	83	10.1	2.8	2710 22
23	13.7	1.9	7.8	302	.4	.7	316	3.2	WNW	90	10.1	7.6	1840 23
24	19.9	10.2	15.1	035	.3	1.1	276	5.1	NNE	94	11.1	10.2	3273 24
25	14.7	9.5	12.1	323	.3	1.1	299	5.1	WNW	88	9.6	6.4	2290 25
26	17.0	4.0	10.5	290	.5	1.1	310	3.8	S	82	8.8	0.0	2775 26
27	15.9	1.0	8.5	304	.8	1.5	305	6.3	NW	77	8.1	0.0	3740 27
28	11.1	8.7	9.9	273	.6	.9	312	3.8	W	90	8.5	5.2	860 28
29	15.1	.4	7.8	283	.8	1.2	309	4.4	WNW	84	8.7	16.6	2695 29
30	14.4	0.0	7.2	293	.1	.7	032	2.5	NW	89	8.6	10.6	2428 30
31	13.9	9.0	11.5	279	.9	1.1	297	3.8	WNW	85	9.2	2.0	1705 31
MONTH	19.9	0.0	9.3	300	.6	1.2	252	10.2	WNW	80	7.5	176.6	80423

GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 6.3
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 6.3
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 6.3
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 4.4

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEEDS ARE LESS THAN ONE METER PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE NOTES AT THE BACK OF THIS REPORT ****

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
July, 1981



R & M CONSULTANTS, INC.

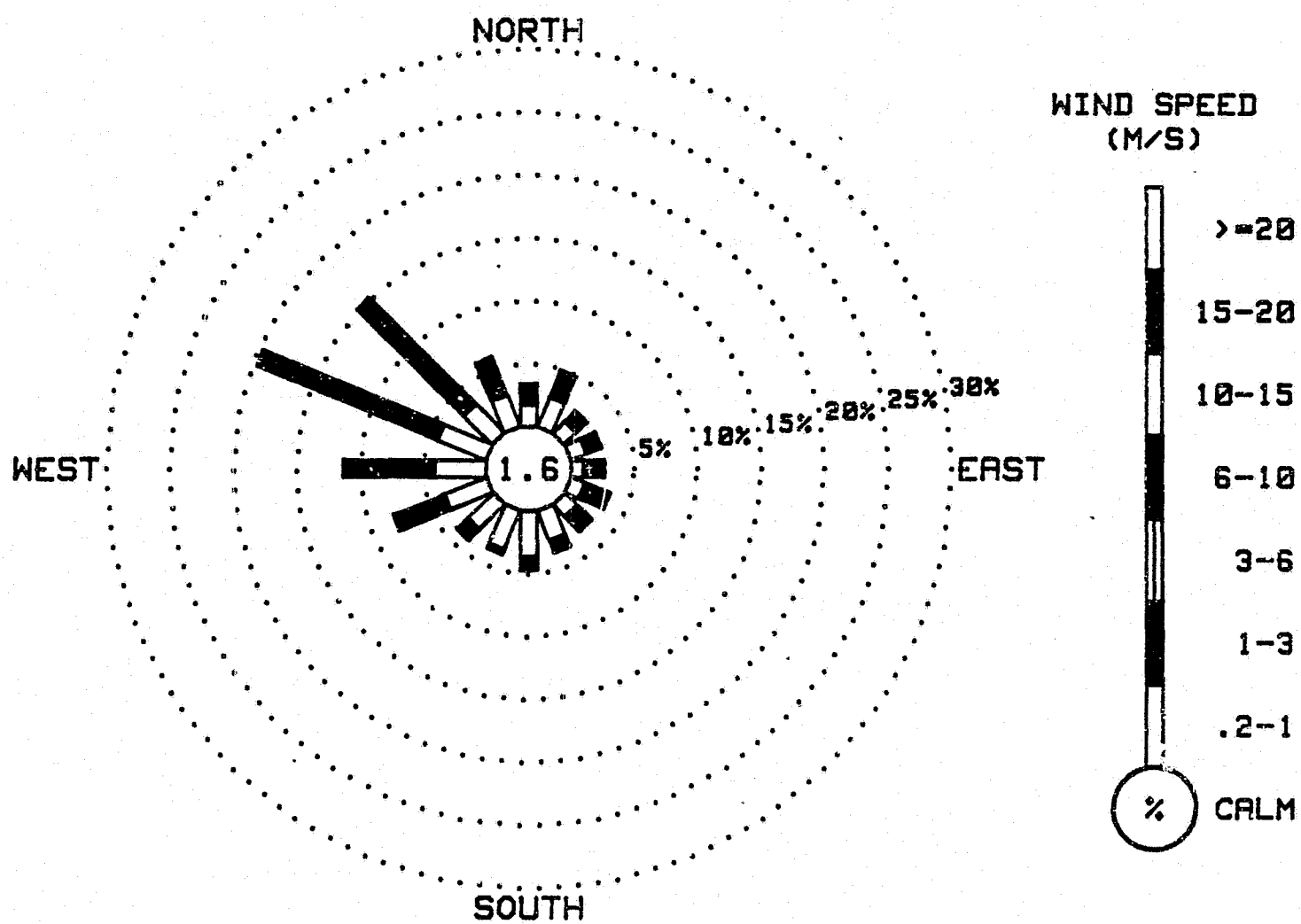
SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING July, 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	20.0 OR GREATER	
N	1.75	1.38	.27	0.00	0.00	0.00	0.00	3.39
NNE	2.55	1.85	.37	0.00	0.00	0.00	.07	4.84
NE	1.34	1.11	.03	0.00	0.00	0.00	0.00	2.49
ENE	1.34	1.24	0.00	0.00	0.00	0.00	0.00	2.59
E	.97	1.68	0.00	0.00	0.00	0.00	0.00	2.66
ESE	1.21	2.12	0.00	0.00	0.00	0.00	0.00	3.33
SE	1.38	1.65	0.00	0.00	0.00	0.00	0.00	3.03
SSE	2.55	1.01	0.00	0.00	0.00	0.00	0.00	3.56
S	3.63	1.04	0.00	0.00	0.00	0.00	0.00	4.67
SSW	3.36	.37	0.00	0.00	0.00	0.00	0.00	3.73
SW	2.82	1.14	.03	0.00	0.00	0.00	0.00	4.00
WSW	3.60	4.00	.34	0.00	0.00	0.00	0.00	7.93
W	4.10	7.09	.03	0.00	0.00	0.00	.10	11.33
WNW	4.13	15.26	.20	0.00	0.00	0.00	.07	19.66
NW	3.23	11.60	.30	0.00	0.00	0.00	.07	15.19
NNW	2.72	2.99	.27	0.00	0.00	0.00	0.00	5.98
CALM								1.61
TOTAL	40.71	55.53	1.85	0.00	0.00	0.00	.30	100.00

NOTE: ALL FREQUENCIES ARE EXPRESSED IN PERCENT
2975 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
July, 1981



WIND ROSE PLOT

SUSITNA HYDROELECTRIC PROJECT

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

DATE	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	DATE
1	.2	.4	.2	.4	1.0	1.2	.6	2.0	2.4	2.8	1.0	1.2	.2	.8	1.4	1.4	2.0	1.8	.6	1.6	1.6	1.8	2.0	3.6	1
2	2.2	2.6	1.8	1.0	.8	.8	.4	0.0	.2	.2	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	****	.6	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
7	0.0	1.0	1.6	2.6	.4	.2	.6	2.0	.6	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	.4	0.0	0.0	0.0	.6	7
8	0.0	.2	0.0	0.0	.2	0.0	.2	0.0	0.0	1.6	0.0	0.0	.8	.2	0.0	3.0	4.0	3.6	.2	0.0	0.0	.2	.2	.6	8
9	.4	0.0	.2	.2	0.0	0.0	.2	.2	0.0	.2	0.0	****	.6	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9
10	.2	.4	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.8	0.0	2.2	0.0	.2	3.0	.4	0.0	0.0	.2	.2	.2	10
11	.8	.2	0.0	.2	.2	0.0	.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.0	1.6	1.6	2.2	1.0	1.0	.6	11
12	.4	.6	.4	.2	.6	.4	.4	.8	1.8	.4	.4	.8	****	****	****	****	****	****	****	****	****	****	****	****	12
13	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	13
14	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	14
15	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	15
16	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	16
17	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	17
18	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	18
19	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	19
20	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	20
21	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	21
22	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	22
23	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	23
24	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	24
25	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	25
26	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	26
27	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	27
28	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	28
29	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	29
30	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	30
31	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	31

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING August, 1981

DAY 01

DAY 02

DAY 03

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	
0300	9.0	*****	98	271	.6	294	2.5	0	0300	9.4	8.3	93	203	.3	120	1.9	0
0600	10.2	*****	98	105	.7	092	3.2	2	0600	9.6	*****	95	104	.4	168	1.9	7
0900	10.9	*****	99	014	.2	083	1.9	4	0900	11.1	*****	88	021	.7	016	1.9	18
1200	11.9	*****	89	004	.8	031	2.5	10	1200	13.4	8.9	74	004	1.0	344	2.5	39
1500	11.9	*****	89	354	.6	357	1.9	7	1500	13.8	*****	74	008	.8	027	2.5	26
1800	11.3	9.7	90	267	.9	270	2.5	3	1800	14.2	*****	78	027	.8	012	2.5	9
2100	10.6	8.5	87	250	.8	246	2.5	0	2100	11.1	*****	90	170	.3	196	1.9	1
2400	9.9	*****	86	253	.9	242	2.5	1	2400	9.0	*****	90	132	1.3	137	3.2	1

DAY 04

DAY 05

DAY 06

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	
0300	6.8	5.4	91	175	.6	197	2.5	1	0300	6.7	*****	85	173	.8	140	3.8	0
0600	8.0	5.1	82	080	1.1	081	3.8	18	0600	13.2	4.9	57	160	1.2	141	3.2	17
0900	15.9	4.3	46	043	1.4	059	3.8	43	0900	16.5	4.5	45	050	1.5	062	5.1	50
1200	20.1	-1	26	096	2.1	069	5.1	73	1200	18.8	3.3	36	060	1.6	071	33.2	25
1500	21.6	-5	23	112	2.9	108	6.3	53	1500	18.4	3.7	38	089	2.1	105	6.3	12
1800	20.3	-2.8	21	096	2.6	098	57.0	21	1800	16.1	9.4	64	115	2.1	109	5.7	7
2100	14.8	1.2	40	125	1.8	097	5.1	1	2100	1.8	-4.0	65	170	.8	183	2.5	1
2400	.3	-8.2	53	138	2.0	135	4.4	1	2400	12.6	5.1	60	152	1.3	138	4.4	1

DAY 07

DAY 08

DAY 09

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	
0300	9.2	*****	91	117	1.9	112	7.0	0	0300	11.8	8.7	81	141	2.0	160	3.2	1
0600	9.4	*****	91	210	.7	212	1.9	4	0600	11.8	9.4	85	153	1.2	126	3.8	6
0900	10.9	8.8	87	240	.5	248	2.5	13	0900	15.9	8.0	59	059	.7	078	3.2	15
1200	15.5	10.1	70	015	.4	047	3.8	61	1200	16.4	9.4	63	276	.8	225	4.4	87
1500	14.6	8.2	65	095	2.9	124	7.0	16	1500	15.5	*****	63	281	1.5	260	5.7	12
1800	13.1	8.8	75	096	2.2	100	7.0	6	1800	11.1	9.5	90	157	.8	133	2.5	7
2100	11.6	9.5	87	138	1.6	110	5.1	1	2100	8.7	*****	92	171	.7	224	3.8	1
2400	11.1	9.7	91	142	1.4	127	4.4	0	2400	8.9	*****	89	121	.8	131	2.5	1

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING August, 1981

DAY 10

DAY 11

DAY 12

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	9.4	*****	89	216	.5	177	1.9	0	0300	7.7	*****	91	172	.4	134	1.9	1	0300	6.5	4.6	88	115	1.0	109	2.5	1
0600	9.7	7.6	87	127	.6	125	2.5	8	0600	7.7	*****	89	103	.8	091	2.5	3	0600	5.9	*****	92	123	1.2	121	3.2	6
0900	12.3	9.5	83	012	.6	118	2.5	16	0900	8.6	6.7	88	003	.3	285	2.5	11	0900	6.8	*****	92	082	.7	095	2.5	11
1200	12.8	8.1	73	306	1.8	332	4.4	23	1200	11.0	7.3	78	285	1.5	263	3.2	26	1200	8.5	7.1	91	347	.7	026	1.9	12
1500	10.7	8.9	89	295	1.9	317	5.1	12	1500	11.4	7.2	75	313	2.2	304	5.1	16	1500	*****	*****	**	***	*****	292	1.9	***
1800	10.1	8.7	91	292	1.4	281	3.2	3	1800	8.2	6.8	91	288	1.2	299	3.8	3	1800	*****	*****	**	***	*****	***	*****	***
2100	8.7	*****	91	255	1.0	277	3.2	0	2100	7.2	5.6	90	271	.8	292	2.5	1	2100	*****	*****	**	***	*****	***	*****	***
2400	8.2	*****	89	107	.6	140	1.9	0	2400	6.5	*****	89	259	.8	289	2.5	0	2400	*****	*****	**	***	*****	***	*****	***

DAY 13

DAY 14

DAY 15

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	*****	*****	**	***	****	127	1.9	***	0300	*****	*****	**	***	****	***	****	***	0300	*****	*****	**	***	****	***	****	***
0600	*****	*****	**	***	****	***	****	***	0600	*****	*****	**	***	****	***	****	***	0600	*****	*****	**	***	****	***	****	***
0900	*****	*****	**	***	****	***	****	***	0900	*****	*****	**	***	****	***	****	***	0900	*****	*****	**	***	****	***	****	***
1200	*****	*****	**	***	****	***	****	***	1200	*****	*****	**	***	****	***	****	***	1200	*****	*****	**	***	****	***	****	***
1500	*****	*****	**	***	****	***	****	***	1500	*****	*****	**	***	****	***	****	***	1500	*****	*****	**	***	****	***	****	***
1800	*****	*****	**	***	****	***	****	***	1800	*****	*****	**	***	****	***	****	***	1800	*****	*****	**	***	****	***	****	***
2100	*****	*****	**	***	****	***	****	***	2100	*****	*****	**	***	****	***	****	***	2100	*****	*****	**	***	****	***	****	***
2400	*****	*****	**	***	****	***	****	***	2400	*****	*****	**	***	****	***	****	***	2400	*****	*****	**	***	****	***	****	***

DAY 16

DAY 17

DAY 18

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.										
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD										
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW				
0300	*****	*****	**	***	***	***	***	***	0300	*****	*****	**	***	***	***	***	***	***	0300	*****	*****	**	***	***	***	***	***
0600	*****	*****	**	***	***	***	***	***	0600	*****	*****	**	***	***	***	***	***	***	0600	*****	*****	**	***	***	***	***	***
0900	*****	*****	**	***	***	***	***	***	0900	*****	*****	**	***	***	***	***	***	***	0900	*****	*****	**	***	***	***	***	***
1200	*****	*****	**	***	***	***	***	***	1200	*****	*****	**	***	***	***	***	***	***	1200	*****	*****	**	***	***	***	***	***
1500	*****	*****	**	***	***	***	***	***	1500	*****	*****	**	***	***	***	***	***	***	1500	*****	*****	**	***	***	***	***	***
1800	*****	*****	**	***	***	***	***	***	1800	*****	*****	**	***	***	***	***	***	***	1800	*****	*****	**	***	***	***	***	***
2100	*****	*****	**	***	***	***	***	***	2100	*****	*****	**	***	***	***	***	***	***	2100	*****	*****	**	***	***	***	***	***
2400	*****	*****	**	***	***	***	***	***	2400	*****	*****	**	***	***	***	***	***	***	2400	*****	*****	**	***	***	***	***	***

7777

7

7

DAY 21

DAY 25								DAY 26								DAY 27							
HOUR	DEW	WIND	WIND	GUST	MAX.			HOUR	DEW	WIND	WIND	GUST	MAX.			HOUR	DEW	WIND	WIND	GUST	MAX.		
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S
0300	*****	*****	**	***	****	***	****	0300	*****	*****	**	***	****	***	****	0300	*****	*****	**	***	****	***	****
0600	*****	*****	**	***	****	***	****	0600	*****	*****	**	***	****	***	****	0600	*****	*****	**	***	****	***	****
0900	*****	*****	**	***	****	***	****	0900	*****	*****	**	***	****	***	****	0900	*****	*****	**	***	****	***	****
1200	*****	*****	**	***	****	***	****	1200	*****	*****	**	***	****	***	****	1200	*****	*****	**	***	****	***	****
1500	*****	*****	**	***	****	***	****	1500	*****	*****	**	***	****	***	****	1500	*****	*****	**	***	****	***	****
1800	*****	*****	**	***	****	***	****	1800	*****	*****	**	***	****	***	****	1800	*****	*****	**	***	****	***	****
2100	*****	*****	**	***	****	***	****	2100	*****	*****	**	***	****	***	****	2100	*****	*****	**	***	****	***	****
2400	*****	*****	**	***	****	***	****	2400	*****	*****	**	***	****	***	****	2400	*****	*****	**	***	****	***	****

R & M CONSULTANTS, INC.

SUSTNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING August, 1981

DAY 28

DAY 29

DAY 30

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.									
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD									
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW			
0300	*****	*****	**	***	****	***	****	***	0300	*****	*****	**	***	****	***	****	***	0300	*****	*****	**	***	****	***	****	***
0600	*****	*****	**	***	****	***	****	***	0600	*****	*****	**	***	****	***	****	***	0600	*****	*****	**	***	****	***	****	***
0900	*****	*****	**	***	****	***	****	***	0900	*****	*****	**	***	****	***	****	***	0900	*****	*****	**	***	****	***	****	***
1200	*****	*****	**	***	****	***	****	***	1200	*****	*****	**	***	****	***	****	***	1200	*****	*****	**	***	****	***	****	***
1500	*****	*****	**	***	****	***	****	***	1500	*****	*****	**	***	****	***	****	***	1500	*****	*****	**	***	****	***	****	***
1800	*****	*****	**	***	****	***	****	***	1800	*****	*****	**	***	****	***	****	***	1800	*****	*****	**	***	****	***	****	***
2100	*****	*****	**	***	****	***	****	***	2100	*****	*****	**	***	****	***	****	***	2100	*****	*****	**	***	****	***	****	***
2400	*****	*****	**	***	****	***	****	***	2400	*****	*****	**	***	****	***	****	***	2400	*****	*****	**	***	****	***	****	***

DAY 31

HOUR	DEW	WIND	WIND	GUST	MAX.			
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	
0300	*****	*****	**	***	****	***	****	***
0600	*****	*****	**	***	****	***	****	***
0900	*****	*****	**	***	****	***	****	***
1200	*****	*****	**	***	****	***	****	***
1500	*****	*****	**	***	****	***	****	***
1800	*****	*****	**	***	****	***	****	***
2100	*****	*****	**	***	****	***	****	***
2400	*****	*****	**	***	****	***	****	***

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING August, 1981

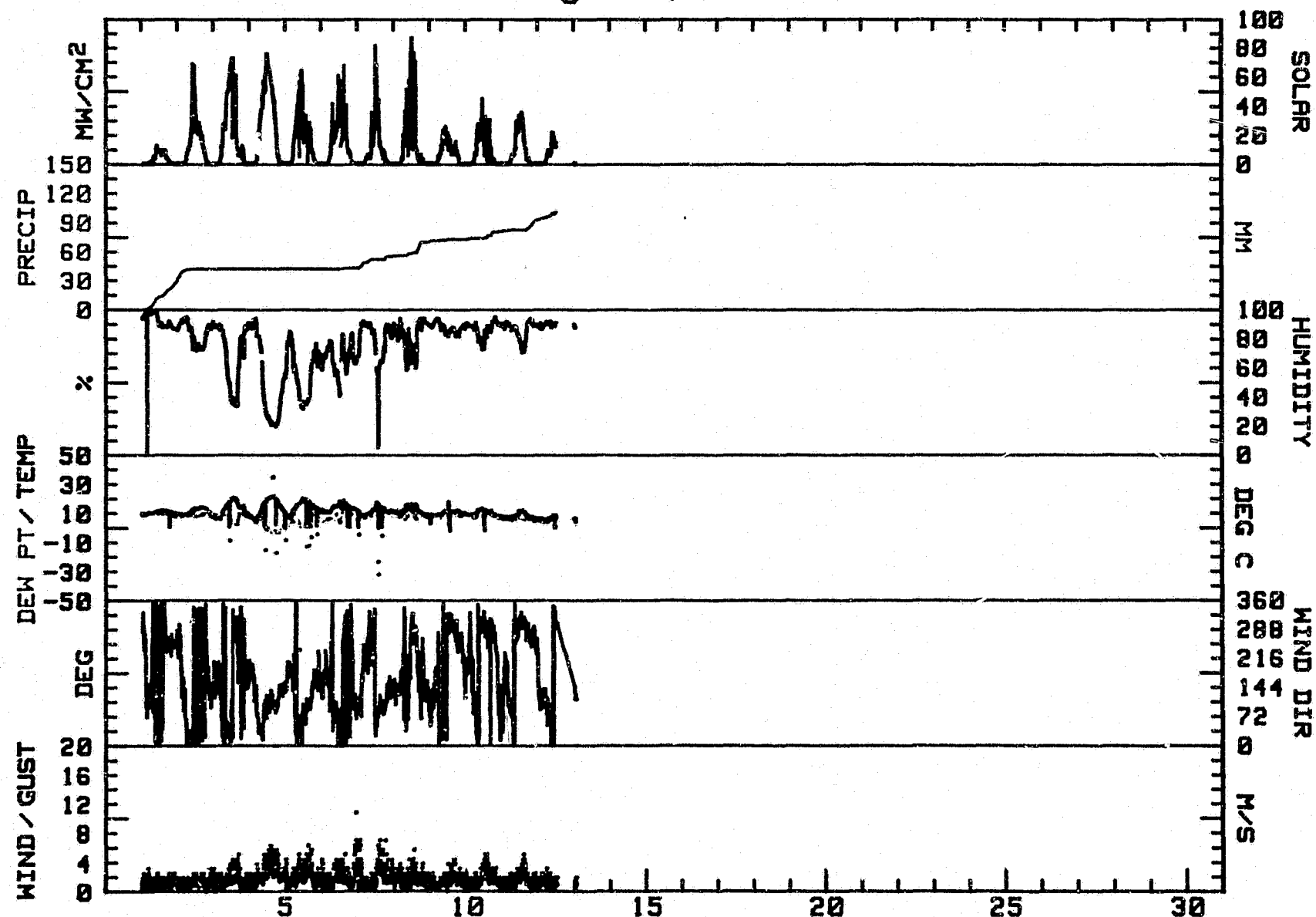
DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY DAY WH/SQM
1	12.2	1.0	6.6	291	.3	.8	092	3.2	WSW	92	9.5	32.2	913 1
2	14.4	9.0	11.7	053	.3	.9	137	3.2	NNE	84	8.8	10.2	3083 2
3	20.9	1.0	11.0	065	.1	1.1	156	5.1	SSE	70	6.0	0.0	4983 3
4	21.9	.3	11.1	106	1.6	1.9	098	57.0	ESE	60	.7	0.0	6248 4
5	20.4	1.0	10.7	111	1.0	1.5	071	33.2	S	67	4.0	0.0	3875 5
6	19.0	1.0	10.0	098	.7	1.5	067	10.8	ESE	86	7.3	.8	3439 6
7	17.6	.3	9.0	118	1.1	1.6	112	7.0	ESE	89	7.1	12.8	2458 7
8	16.4	8.7	12.6	160	.5	1.3	260	5.7	SE	82	9.0	15.0	3525 8
9	18.0	1.0	9.5	298	.5	1.0	292	4.4	NNE	97	9.0	2.2	1834 9
10	13.5	1.3	7.4	291	.6	1.2	317	5.1	WNW	87	8.5	8.0	2313 10
11	12.2	6.5	9.4	290	.6	1.1	304	5.1	W	87	6.7	12.2	2173 11
12	8.7	.6	4.7	095	.6	1.0	120	3.2	ESE	90	5.1	7.2	1798 12
13	6.6	6.5	6.6	126	.8	.8	127	1.9	ESE	89	4.7	****	144 13
14	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 14
15	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 15
16	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 16
17	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 17
18	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 18
19	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 19
20	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 20
21	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 21
22	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 22
23	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 23
24	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 24
25	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 25
26	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 26
27	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 27
28	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 28
29	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 29
30	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 30
31	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	**** 31
MONTH	21.9	.3	9.2	107	.3	1.2	098	57.0	ESE	82	6.7	100.6	36784

GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 5.1
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 5.7
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 5.7
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 4.4

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEEDS ARE LESS THAN ONE METER PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE NOTES AT THE BACK OF THIS REPORT ****

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
August, 1981



R & M CONSULTANTS, INC.

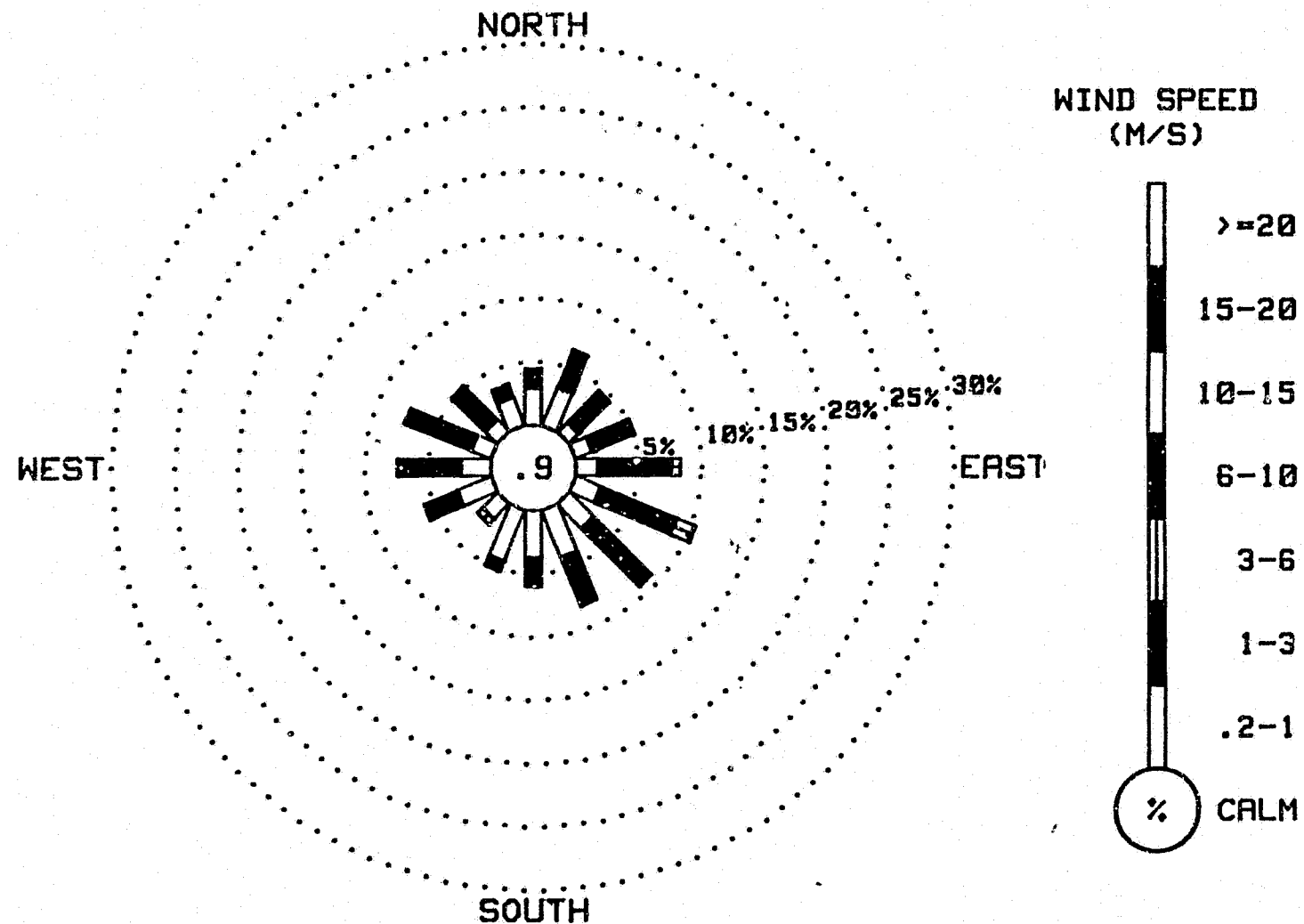
SUSITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING August, 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	20.0 OR GREATER	
N	2.98	1.27	0.00	0.00	0.00	0.00	.18	4.43
NNE	3.35	3.07	0.00	0.00	0.00	0.00	0.00	6.42
NE	1.08	3.53	0.00	0.00	0.00	0.00	0.00	4.61
ENE	1.45	3.44	.18	0.00	0.00	0.00	0.00	5.06
E	1.81	5.79	.72	0.00	0.00	0.00	0.00	8.32
ESE	2.17	6.51	1.54	0.00	0.00	0.00	.09	10.31
SE	2.71	6.42	.09	0.00	0.00	0.00	0.00	9.22
SSE	3.98	4.07	0.00	0.00	0.00	0.00	.09	8.14
S	3.71	2.26	0.00	0.00	0.00	0.00	0.00	5.97
SSW	4.34	.81	0.00	0.00	0.00	0.00	0.00	5.15
SW	1.72	.54	0.00	0.00	0.00	0.00	0.00	2.26
WSW	2.89	2.80	0.00	0.00	0.00	0.00	0.00	5.70
W	2.35	4.88	0.00	0.00	0.00	0.00	.18	7.41
WNW	1.72	5.70	0.00	0.00	0.00	0.00	0.00	7.41
NW	1.36	3.35	.18	0.00	0.00	0.00	.27	5.15
NNW	2.44	1.08	0.00	0.00	0.00	0.00	0.00	3.53
CALM								.90
TOTAL	40.05	55.52	2.71	0.00	0.00	0.00	.81	100.00

NOTE: ALL FREQUENCIES ARE EXPRESSED IN PERCENT
1106 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
August, 1981



WIND ROSE PLOT

R & M CONSULTANTS, INC.

SUBITNA HYDROELECTRIC PROJECT

HOURLY PRECIPITATION SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING September, 1981

PRECIPITATION VALUES ARE IN MILLIMETERS

HOUR ENDING

[illegible]

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1

1

DAY 03

DAY 07								DAY 08								DAY 09										
HOUR	DEW	WIND	WIND	GUST	MAX.			HOUR	DEW	WIND	WIND	GUST	MAX.			HOUR	DEW	WIND	WIND	GUST	MAX.					
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAI		
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		
0300	*****	*****	**	***	****	***	*****	***	0300	*****	*****	**	***	****	***	*****	***	0300	*****	*****	**	***	****	***	*****	***
0600	*****	*****	**	***	****	***	*****	***	0600	*****	*****	**	***	****	***	*****	***	0600	*****	*****	**	***	****	***	*****	***
0900	*****	*****	**	***	****	***	*****	***	0900	*****	*****	**	***	****	***	*****	***	0900	*****	*****	**	***	****	***	*****	***
1200	*****	*****	**	***	****	***	*****	***	1200	*****	*****	**	***	****	***	*****	***	1200	*****	*****	**	***	****	***	*****	***
1500	*****	*****	**	***	****	***	*****	***	1500	*****	*****	**	***	****	***	*****	***	1500	*****	*****	**	***	****	***	*****	***
1800	*****	*****	**	***	****	***	*****	***	1800	*****	*****	**	***	****	***	*****	***	1800	*****	*****	**	***	****	***	*****	***
2100	*****	*****	**	***	****	***	*****	***	2100	*****	*****	**	***	****	***	*****	***	2100	*****	*****	**	***	****	***	*****	***
2400	*****	*****	**	***	****	***	*****	***	2400	*****	*****	**	***	****	***	*****	***	2400	*****	*****	**	***	****	***	*****	***

R & M CONSULTANTS, INC.

SUSITNA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING September, 1981

DAY 10

DAY 11

DAY 12

HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.		
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	
0300	*****	*****	**	***	***	***	0300	*****	*****	**	***	***	***	0300	*****	*****	**	***	***	***	***
0600	*****	*****	**	***	***	***	0600	*****	*****	**	***	***	***	0600	*****	*****	**	***	***	***	***
0900	*****	*****	**	***	***	***	0900	*****	*****	**	***	***	***	0900	*****	*****	**	***	***	***	***
1200	*****	*****	**	***	***	***	1200	*****	*****	**	***	***	***	1200	*****	*****	**	***	***	***	***
1500	*****	*****	**	***	***	***	1500	*****	*****	**	***	***	***	1500	*****	*****	**	***	***	***	***
1800	*****	*****	**	***	***	***	1800	*****	*****	**	***	***	***	1800	*****	*****	**	***	***	***	***
2100	*****	*****	**	***	***	***	2100	*****	*****	**	***	***	***	2100	*****	*****	**	***	***	***	***
2400	*****	*****	**	***	***	***	2400	*****	*****	**	***	***	***	2400	*****	*****	**	***	***	***	***

DAY 13

DAY 14

DAY 15

HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.	
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.
	DEG C	DEG C	%	DEG.	M/S	DEG.		DEG C	DEG C	%	DEG.	M/S	DEG.		DEG C	DEG C	%	DEG.	M/S	DEG.
0300	*****	*****	**	***	***	***	0300	*****	*****	**	***	***	***	0300	5.2	1.2	75	167	1.0	121
0600	*****	*****	**	***	***	***	0600	*****	*****	**	***	***	***	0600	7.0	1.9	70	158	1.0	152
0900	*****	*****	**	***	***	***	0900	*****	*****	**	***	***	***	0900	6.9	*****	87	141	.6	146
1200	*****	*****	**	***	***	***	1200	11.0	-1.2	43	046	.8	088	1200	9.9	4.1	57	054	.9	066
1500	*****	*****	**	***	***	***	1500	14.0	-6.9	23	070	1.3	092	1500	11.0	3.3	59	056	1.4	035
1800	*****	*****	**	***	***	***	1800	12.7	-8.0	23	073	2.0	076	1800	7.1	5.5	90	216	.5	193
2100	*****	*****	**	***	***	***	2100	8.1	-3.8	43	127	2.2	121	2100	5.0	3.5	90	177	1.0	184
2400	*****	*****	**	***	***	***	2400	4.7	*****	61	148	1.2	169	2400	3.4	*****	90	145	.9	137

DAY 16

DAY 17

DAY 18

HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.		HOUR	DEW	WIND	WIND	GUST	MAX.							
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.						
DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S						
0300	3.4	*****	91	119	.8	120	2.5	1	0300	5.3	*****	82	203	.7	149	1.9	1	0300	6.8	-1.6	55	114	1.0	063	4.4	1
0600	3.4	2.0	91	096	1.0	074	3.2	2	0600	4.0	*****	89	188	.7	195	1.3	2	0600	6.2	*****	77	141	1.1	114	5.7	3
0900	6.5	*****	84	069	.7	074	2.5	16	0900	9.9	*****	53	154	.1	138	1.9	30	0900	10.5	.2	49	118	1.5	103	5.7	29
1200	11.2	-.4	45	040	.8	045	3.2	17	1200	12.2	-1.8	38	063	.9	071	3.2	43	1200	11.1	.2	47	106	2.4	095	6.3	20
1500	10.8	.5	49	310	.6	283	3.2	8	1500	14.4	-4.5	27	344	1.1	047	5.1	30	1500	10.5	*****	59	105	1.2	116	3.8	10
1800	7.9	1.3	63	250	1.7	270	4.4	2	1800	12.6	-6.0	27	039	2.0	068	6.3	3	1800	8.5	2.6	66	212	.5	285	1.9	1
2100	6.3	*****	76	201	.7	244	2.5	1	2100	6.8	*****	48	120	.4	016	4.4	1	2100	6.9	5.0	88	144	1.3	142	3.2	1
2400	5.1	*****	82	201	.8	231	1.9	1	2400	5.3	*****	60	156	.9	119	2.5	1	2400	6.6	5.1	90	152	.7	115	2.5	1

R & M CONSULTANTS, INC.

SUSTINA HYDROELECTRIC PROJECT

THREE HOUR SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING September, 1981

DAY 19

DAY 20

DAY 21

HOUR	DEW	WIND	WIND	GUST MAX.	HOUR	DEW	WIND	WIND	GUST MAX.	HOUR	DEW	WIND	WIND	GUST MAX.
NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD	NDNG TEMP. POINT RH DIR. SPD. DIR. GUST RAD
DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW	DEG C DEG C % DEG. M/S DEG. M/S MW
0300 6.6 5.2 91 196 1.0 208 2.5 1	0300 3.9 ***** 90 107 .9 110 2.5 1	0300 .6 -.9 90 113 .8 130 2.5 1												
0600 7.4 4.9 84 174 1.0 144 2.5 1	0600 4.2 2.2 87 092 .8 080 1.9 2	0600 1.3 -.3 89 082 .6 077 1.9 3												
0900 7.3 5.4 88 144 .8 130 2.5 5	0900 7.2 3.1 75 085 .9 073 3.2 31	0900 3.5 1.5 87 052 .8 098 3.2 17												
1200 8.8 ***** 86 167 .5 137 2.5 11	1200 8.4 ***** 73 090 1.2 096 3.8 6	1200 8.3 ***** 61 303 .8 317 2.5 17												
1500 7.9 6.3 90 236 .2 195 3.2 7	1500 6.2 4.2 87 153 .4 248 5.7 4	1500 8.0 -.5 55 083 1.4 090 5.1 18												
1800 7.2 5.5 89 125 .8 137 2.5 1	1800 4.9 2.6 85 106 1.0 082 3.8 1	1800 6.6 -4.6 45 022 2.1 022 7.0 2												
2100 5.7 ***** 88 180 .8 146 2.5 1	2100 2.6 ***** 90 138 1.4 114 2.5 1	2100 4.9 -5.5 47 042 1.8 020 7.0 1												
2400 4.4 2.2 86 120 1.1 143 2.5 1	2400 1.1 ***** 90 126 1.1 142 2.5 1	2400 2.6 -3.5 64 136 .7 091 4.4 1												

DAY 22

DAY 23

DAY 24

DEW WIND WIND GUST MAX.									DEW WIND WIND GUST MAX.									DEW WIND WIND GUST MAX.								
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
	DEG C	DEG C	%	DEG.	M/S		DEG.	M/S		DEG C	DEG C	%	DEG.	M/S		DEG.	M/S		DEG C	DEG C	%	DEG.	M/S		DEG.	M/S
0300	.1	-2.8	81	149	.9	173	1.9	1	0300	.4	-1.7	86	084	1.0	084	2.5	1	0300	-.1	*****	96	073	.1	084	1.3	1
0600	-1.6	-3.7	86	146	1.2	170	2.5	2	0600	.3	-1.8	86	075	1.1	080	3.2	1	0600	.1	*****	98	331	.1	076	1.9	1
0900	3.9	*****	60	146	.2	127	2.5	27	0900	1.5	-1.2	82	052	1.0	100	2.5	15	0900	.3	*****	92	265	.3	192	1.3	2
1200	6.8	-6.3	39	303	.5	249	2.5	40	1200	4.5	*****	69	024	1.1	028	3.2	8	1200	2.0	*****	81	289	.1	255	1.3	7
1500	7.9	-7.1	34	281	1.3	287	3.8	23	1500	2.8	1.3	90	311	.6	302	3.2	4	1500	2.6	*****	73	054	.1	108	1.9	17
1800	4.3	-6.1	47	240	1.1	272	3.8	1	1800	.3	*****	91	187	.1	106	1.9	1	1800	-.1	*****	87	120	.7	135	2.5	1
2100	1.2	*****	65	173	1.1	170	2.5	1	2100	0.0	*****	89	049	.1	061	1.9	1	2100	-1.6	-4.9	78	125	1.3	118	3.2	1
2400	1.2	*****	71	172	.4	138	2.5	1	2400	.1	*****	94	063	.2	081	1.9	1	2400	-2.6	*****	89	133	.9	119	2.5	1

DAY 25

DAY 26

DAY 27

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	RAD
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S	MW
0300	-2.8	*****	90	157	.7	171	1.9	1	0300	-7.6	*****	83	085	1.6	091	4.4	1
0600	-2.8	*****	89	126	.8	126	2.5	1	0600	-8.3	-10.8	82	104	1.6	107	3.8	1
0900	.8	*****	75	108	.6	111	2.5	21	0900	-4.5	-11.1	60	069	1.8	069	3.8	32
1200	3.9	*****	40	317	.4	346	2.5	43	1200	.9	-11.3	40	063	1.6	093	3.8	38
1500	3.5	-12.2	31	078	1.2	113	3.8	15	1500	1.3	-10.9	40	139	2.2	136	4.4	12
1800	-.5	-9.4	51	128	1.2	055	3.2	1	1800	-3.1	-12.1	50	138	1.4	127	3.8	1
2100	-2.9	-8.5	65	127	1.4	143	3.2	1	2100	-5.2	-11.1	63	121	2.0	112	3.8	1
2400	-5.0	-10.7	64	092	1.6	115	4.4	1	2400	-6.3	-10.8	70	080	1.2	122	3.8	1

SUSITNA HYDROELECTRIC PROJECT

DAY 30

HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.	HOUR	DEW	WIND	WIND	GUST	MAX.																
NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	TEMP.	POINT	RH	DIR.	SPD.	DIR.	GUST	NDNG	
	DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		DEG C	DEG C	%	DEG.	M/S	DEG.	M/S		
0300	-5.4	-7.8	83	125	1.3	138	2.5	1	0300	-2.5	-12.6	46	149	1.2	113	4.4	1	0300	.4	-9.7	47	145	1.4	162	3.2	1							
0600	-7.4	*****	91	141	1.1	128	2.5	1	0600	-2.0	-12.7	44	131	1.7	153	3.8	2	0600	1.3	-8.6	48	145	1.1	196	3.2	1							
0900	-1.5	*****	54	221	.3	172	2.5	25	0900	.9	-12.0	38	103	2.7	106	8.9	36	0900	4.0	-7.2	44	111	1.6	116	3.8	16							
1200	.9	-10.4	43	095	2.7	075	7.0	35	1200	1.7	-11.2	38	099	3.6	103	9.5	31	1200	6.4	-6.3	40	108	1.5	071	6.3	27							
1500	.9	-10.7	42	085	3.3	107	7.6	13	1500	2.6	-10.4	38	081	2.6	107	7.0	13	1500	*****	*****	**	***	*****	100	3.2	***							
1800	.1	-11.4	42	078	2.7	082	7.6	1	1800	.6	-10.1	45	102	2.3	117	5.7	1	1800	*****	*****	**	***	*****	***	*****	***							
2100	.1	-11.1	43	120	3.0	107	7.0	1	2100	-.3	*****	48	121	1.4	108	5.1	1	2100	*****	*****	**	***	*****	***	*****	***							
2400	-.9	-12.0	43	094	2.7	096	7.0	1	2400	-.1	-9.9	48	147	1.5	144	3.2	1	2400	*****	*****	**	***	*****	***	*****	***							

R & M CONSULTANTS, INC.

SUSTNA HYDROELECTRIC PROJECT

MONTHLY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING September, 1981

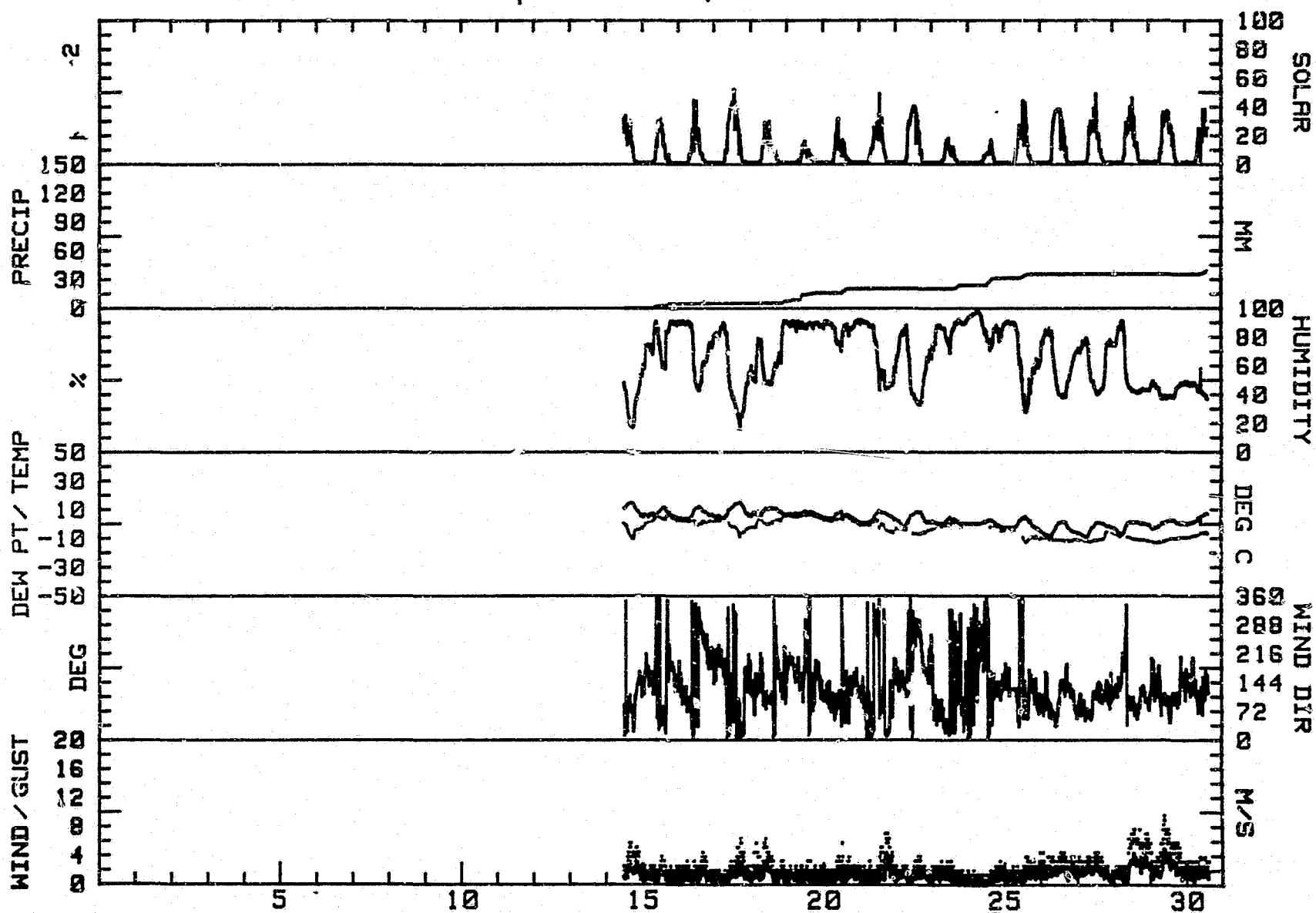
DAY	MAX. TEMP. DEG C	MIN. TEMP. DEG C	MEAN TEMP. DEG C	RES. WIND DIR. DEG	RES. WIND SPD. M/S	AVG. WIND SPD. M/S	MAX. GUST DIR. DEG	MAX. GUST SPD. M/S	P'VAL DIR.	MEAN RH %	MEAN DP DEG C	PRECIP MM	DAY'S SOLAR ENERGY DAY WH/SQM
1	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
2	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
3	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
4	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
5	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
6	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
7	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
8	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
9	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
10	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
11	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
12	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
13	*****	*****	*****	***	****	****	***	****	***	**	*****	*****	***
14	14.7	4.7	9.7	100	1.3	1.8	092	5.7	E	36	-5.0	0.0	2762
15	11.2	3.4	7.3	136	.6	1.0	035	3.8	S	78	3.1	4.6	1648
16	12.0	3.1	7.6	166	.2	1.0	270	4.4	E	72	1.6	.2	1865
17	15.3	4.0	9.7	077	.3	1.2	008	6.3	S	55	-3.1	0.0	3270
18	11.3	5.8	8.6	125	1.1	1.4	095	6.3	ESE	64	1.2	2.4	1643
19	8.9	3.8	6.4	160	.7	.9	195	3.2	SSE	89	4.9	8.6	870
20	8.7	.8	4.8	110	.9	1.2	248	5.7	ESE	85	2.5	4.2	1298
21	9.2	.2	4.7	055	.8	1.4	022	7.0	NNE	68	-2.3	.2	2148
22	8.5	-1.9	3.3	200	.5	1.0	287	3.8	SE	59	-3.2	0.0	2898
23	4.7	-.1	2.3	051	.5	.8	080	3.2	ENE	85	-1.4	3.6	990
24	2.9	-2.7	.1	126	.3	.6	118	3.2	SE	87	-3.5	7.4	798
25	5.2	-5.0	.1	111	.8	1.1	115	4.4	SE	64	-10.0	4.0	2223
26	1.6	-8.8	-3.6	102	1.5	1.8	091	4.4	ENE	61	-11.0	0.0	2808
27	.9	-9.4	-4.3	096	1.5	1.7	105	4.4	ESE	61	-10.9	0.0	3298
28	1.3	-7.8	-3.3	101	2.0	2.2	107	7.6	E	57	-10.0	0.0	2413
29	2.7	-3.8	-.6	110	2.0	2.3	103	9.5	ESE	43	-11.3	0.0	2513
30	7.2	-1.6	2.8	117	1.3	1.7	071	6.3	ESE	45	-7.5	3.2	2053
MONTH	15.3	-9.4	3.3	109	.8	1.3	103	9.5	ESE	66	-4.0	38.4	34492

GUST VEL. AT MAX. GUST MINUS 2 INTERVALS 8.3
GUST VEL. AT MAX. GUST MINUS 1 INTERVAL 8.9
GUST VEL. AT MAX. GUST PLUS 1 INTERVAL 8.9
GUST VEL. AT MAX. GUST PLUS 2 INTERVALS 7.6

NOTE: RELATIVE HUMIDITY READINGS ARE UNRELIABLE WHEN WIND SPEEDS ARE LESS THAN ONE METER PER SECOND. SUCH READINGS HAVE NOT BEEN INCLUDED IN THE DAILY OR MONTHLY MEAN FOR RELATIVE HUMIDITY AND DEW POINT.

**** SEE NOTES AT THE BACK OF THIS REPORT ****

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
September, 1981



R & M CONSULTANTS, INC.

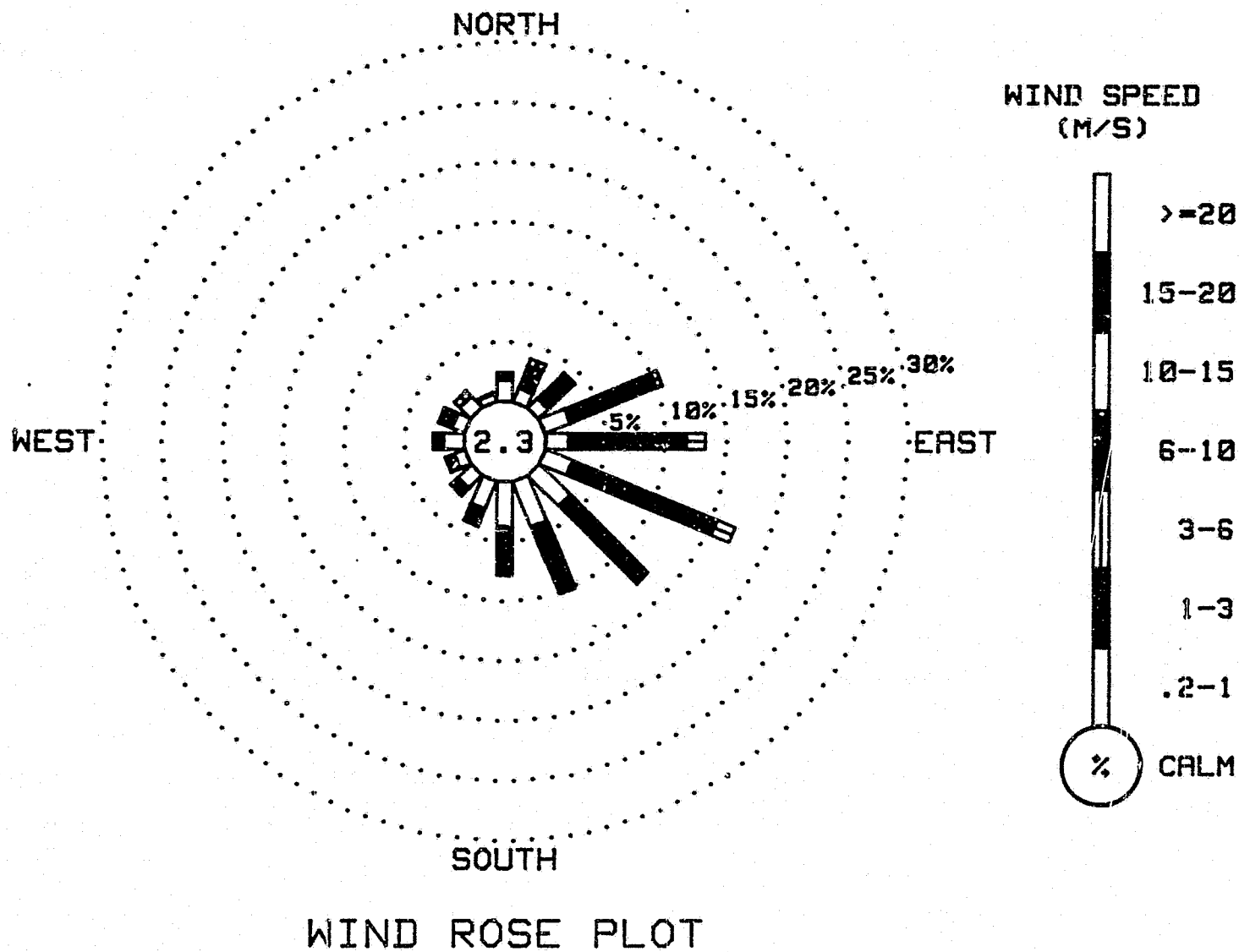
SUSTITNA HYDROELECTRIC PROJECT

WIND FREQUENCY SUMMARY FOR DEVIL CANYON WEATHER STATION
DATA TAKEN DURING September, 1981

DIRECTION	VELOCITY (M/S)							TOTAL
	0.2 TO 1.0	1.0 TO 3.0	3.0 TO 6.0	6.0 TO 10.0	10.0 TO 15.0	15.0 TO 20.0	20.0 OR GREATER	
N	1.76	.38	.25	0.00	0.00	0.00	0.00	2.39
NNE	1.26	1.95	.63	0.00	0.00	0.00	0.00	3.84
NE	1.13	2.89	.06	0.00	0.00	0.00	0.00	4.09
ENE	2.20	7.74	.50	0.00	0.00	0.00	0.00	10.45
E	1.89	9.75	1.57	0.00	0.00	0.00	0.00	13.22
ESE	2.39	12.96	1.64	0.00	0.00	0.00	0.00	16.99
SE	3.59	9.13	.06	0.00	0.00	0.00	0.00	12.78
SSE	4.09	6.04	0.00	0.00	0.00	0.00	0.00	10.13
S	3.78	4.03	0.00	0.00	0.00	0.00	0.00	7.80
SSW	2.52	1.51	0.00	0.00	0.00	0.00	0.00	4.03
SW	1.57	.82	0.00	0.00	0.00	0.00	0.00	2.39
WSW	1.01	.76	0.00	0.00	0.00	0.00	0.00	1.76
W	1.83	.82	0.00	0.00	0.00	0.00	0.00	2.64
WNW	1.20	1.20	0.00	0.00	0.00	0.00	0.00	2.39
NW	1.32	.63	0.00	0.00	0.00	0.00	0.00	1.95
NNW	.69	.13	0.00	0.00	0.00	0.00	0.00	.82
CALM								2.33
TOTAL	32.22	60.73	4.72	0.00	0.00	0.00	0.00	100.00

NOTE: ALL FREQUENCIES ARE EXPRESSED IN PERCENT
1589 VALID WIND OBSERVATIONS USED TO DEVELOP FREQUENCY SUMMARY

R&M CONSULTANTS, INC.
SUSITNA HYDROELECTRIC PROJECT
DEVIL CANYON WEATHER STATION
September, 1981



R & M CONSULTANTS, INC.

CLIMATE DATA SUMMARIES
DOCUMENTATION

A. GRAPHICAL DATA PLOT

1. GRAPHICAL REPRESENTATION OF VALID RECORDED AND/OR COMPUTED DATA.

B. HOURLY PRECIPITATION SUMMARY TABLE

1. HOURLY PRECIPITATION VALUES ARE CALCULATED AS THE DIFFERENCE BETWEEN VALID CONSECUTIVE HOURLY READINGS. WHEN EITHER OF THE HOURLY PRECIPITATION READINGS IS INVALID, NO VALUE IS REPORTED AND ZERO PRECIPITATION IS ASSUMED.
2. A NON-AUTOMATIC ROLL-OVER TO ZERO, AS WHEN THE TAPE IS CHANGED, MUST BE FLAGGED WITH A NEGATIVE ONE (-1) AS THE PRECIPITATION VALUE.

C. MONTHLY SUMMARY TABLE

1. MAXIMUM DAILY AND MONTHLY TEMPERATURES ARE DETERMINED FROM ALL VALID RECORDED TEMPERATURES.
2. MINIMUM DAILY AND MONTHLY TEMPERATURES ARE DETERMINED FROM ALL VALID RECORDED TEMPERATURES.
3. MEAN DAILY AND MONTHLY TEMPERATURES ARE DETERMINED FROM ALL VALID RECORDED TEMPERATURES. THE MEAN DAILY TEMPERATURE IS DETERMINED FROM THE MEAN OF THE MAXIMUM AND MINIMUM TEMPERATURES. THE MEAN MONTHLY TEMPERATURE IS DETERMINED FROM THE MEAN OF ALL REPORTED DAILY MEAN TEMPERATURES.
4. RESULTANT DAILY AND MONTHLY WIND DIRECTIONS AND SPEEDS ARE SUMMED VECTORIALLY FROM ALL VALID READINGS.
5. AVERAGE DAILY AND MONTHLY WIND SPEEDS ARE ARITHMETICALLY MEANED FROM ALL VALID READINGS.
6. MAXIMUM DAILY AND MONTHLY GUST SPEEDS ARE DETERMINED FROM ALL VALID READINGS. ASSOCIATED DIRECTIONS ARE THE RESULTANT DIRECTIONS FROM THE RECORDING INTERVAL IN WHICH THE PEAK INTERVAL GUST WAS OBSERVED.
7. PREVAILING DAILY AND MONTHLY DIRECTIONS ARE DETERMINED FROM ALL VALID READINGS. THE REPORTED VALUE IS THE MOST FREQUENT DIRECTION OBSERVED.
8. MEAN DAILY AND MONTHLY RELATIVE HUMIDITIES ARE DETERMINED FROM ALL VALID READINGS. (ARITHMETIC MEAN)
9. MEAN DAILY AND MONTHLY DEWPOINT TEMPERATURES ARE DETERMINED FROM ALL VALID READINGS. (ARITHMETIC MEAN) WHEN THE WIND SPEED IS LESS THAN 1 m/s, WHEN THE DEWPOINT CALCULATES TO A VALUE GREATER THAN THE RECORDED TEMPERATURE, WHEN OR THE DEWPOINT CALCULATES TO LESS THAN MINUS 47 DEGREES OR MORE THAN 27 DEGREES, THE DEWPOINT IS NOT USED.
10. DAILY AND MONTHLY PRECIPITATION VALUES ARE DETERMINED FROM ALL VALID READINGS.
11. DAILY AND MONTHLY SOLAR ENERGY VALUES ARE DETERMINED FROM ALL VALID

READINGS. DAILY SOLAR ENERGY IS DETERMINED BY AVERAGING THE RECORDED SOLAR INTENSITY AND CONVERTING THE UNITS. THE MONTHLY VALUE IS THE SUM OF THE DAILY VALUES.

D. THREE HOUR SUMMARY TABLES

1. THE TEMPERATURE REPORTED IS THE TEMPERATURE RECORDED AT THE SPECIFIED TIME.
2. THE DEWPOINT TEMPERATURE REPORTED IS THE DEWPOINT CALCULATED AT THE SPECIFIED TIME. DEWPOINTS ARE OMITTED WHEN THE WIND SPEED IS LESS THAN 1m/s, WHEN THE DEWPOINT IS CALCULATED TO A VALUE GREATER THAN THE RECORDED TEMPERATURE, OR WHEN THE DEWPOINT CALCULATES TO LESS THAN MINUS 47 DEGREES OR MORE THAN 27 DEGREES.
3. THE RELATIVE HUMIDITY REPORTED IS THE HUMIDITY RECORDED AT THE SPECIFIED TIME.
4. THE WIND DIRECTION REPORTED IS THE THREE-HOUR VECTORIAL RESULTANT SUM OF DATA RECORDED UP TO THE SPECIFIED TIME.
5. THE WIND SPEED REPORTED IS THE THREE-HOUR VECTORIAL RESULTANT OF DATA RECORDED UP TO THE SPECIFIED TIME.
6. THE GUST DIRECTION REPORTED IS THE DIRECTION OF THE MAXIMUM GUST RECORDED DURING THE PRECEDING THREE-HOUR PERIOD.
7. THE GUST REPORTED IS THE MAXIMUM RECORDED DURING THE THREE-HOUR PERIOD.
8. THE RADIATION REPORTED IS THE SOLAR RADIATION INTENSITY RECORDED AT THE SPECIFIED TIME.

E. WIND FREQUENCY SUMMARY TABLE

1. REPORTED DATA ARE DETERMINED FROM ALL VALID READINGS.

F. WIND ROSE GRAPHICAL PLOT

1. PLOT IS A GRAPHICAL REPRESENTATION OF THE WIND FREQUENCY SUMMARY TABLE.

G. GENERAL NOTES

1. THE FIRST DAY OF EACH MONTH MUST HAVE THE PRECEDING DAY'S LAST READING, AT 2400 HOURS, INSERTED AS THE FIRST READING OF THE FIRST DAY OF THE MONTH, AT 0000 HOURS, PRIOR TO RUNNING THE SUMMARY. THIS PROVIDES AN INITIAL VALUE FOR PRECIPITATION SUMMARY TABLE.
2. FLAGGED DATA IS NOT USED. WHEN AN ENTIRE LINE IS FLAGGED, NO DATA IN THAT LINE IS USED.
3. BAD DATA CAN BE USER-FLAGGED AS BEING BAD DATA BY REPLACING THE RAW DATA WITH THE VALUE '999'.
4. MISSING DATA IS ASSUMED TO BE BAD DATA.
5. IF A DATA LINE IS SHIFTED OVER AT ANY POINT, THE ENTIRE LINE WILL BE TREATED AS BAD DATA.
6. THE FOLLOWING ARE THE VALID DATA RANGES; DATA OUTSIDE THESE RANGES ARE NOT USED:

TIME : 0000 through 2400 - at specified time intervals.
TEMP : -50 through +35
WIND : 0 through 99.9 and less than or equal to GUST
DIR : 0 through 360
RH : 0 through 99
PRCP : 0 through 99.8 & greater than last PRCP except in the case of an automatic roll-over. The difference between PRCPs cannot exceed 30mm. A '-1' implies a manual re-start.
SOL : 0 through 150
GUST : 0 through 99.9
BATT : 9 through 14.5

7. THE FOLLOWING ARE THE DIRECTION RANGES USED IN THE PREVAILING DIRECTION, WIND FREQUENCY AND WIND ROSE SUMMARIES:

DIRECTION	COMPASS HEADING
NORTH	350 through 11
NORTH-NORTHEAST	12 through 34
NORTHEAST	35 through 56
EAST-NORTHEAST	57 through 79
EAST	80 through 101
EAST-SOUTHEAST	102 through 124
SOUTHEAST	125 through 146
SOUTH-SOUTHEAST	147 through 169
SOUTH	170 through 191
SOUTH-SOUTHWEST	192 through 214
SOUTHWEST	215 through 236
WEST-SOUTHWEST	237 through 259
WEST	260 through 281
WEST-NORTHWEST	282 through 304
NORTHWEST	305 through 326
NORTH-NORTHWEST	327 through 349