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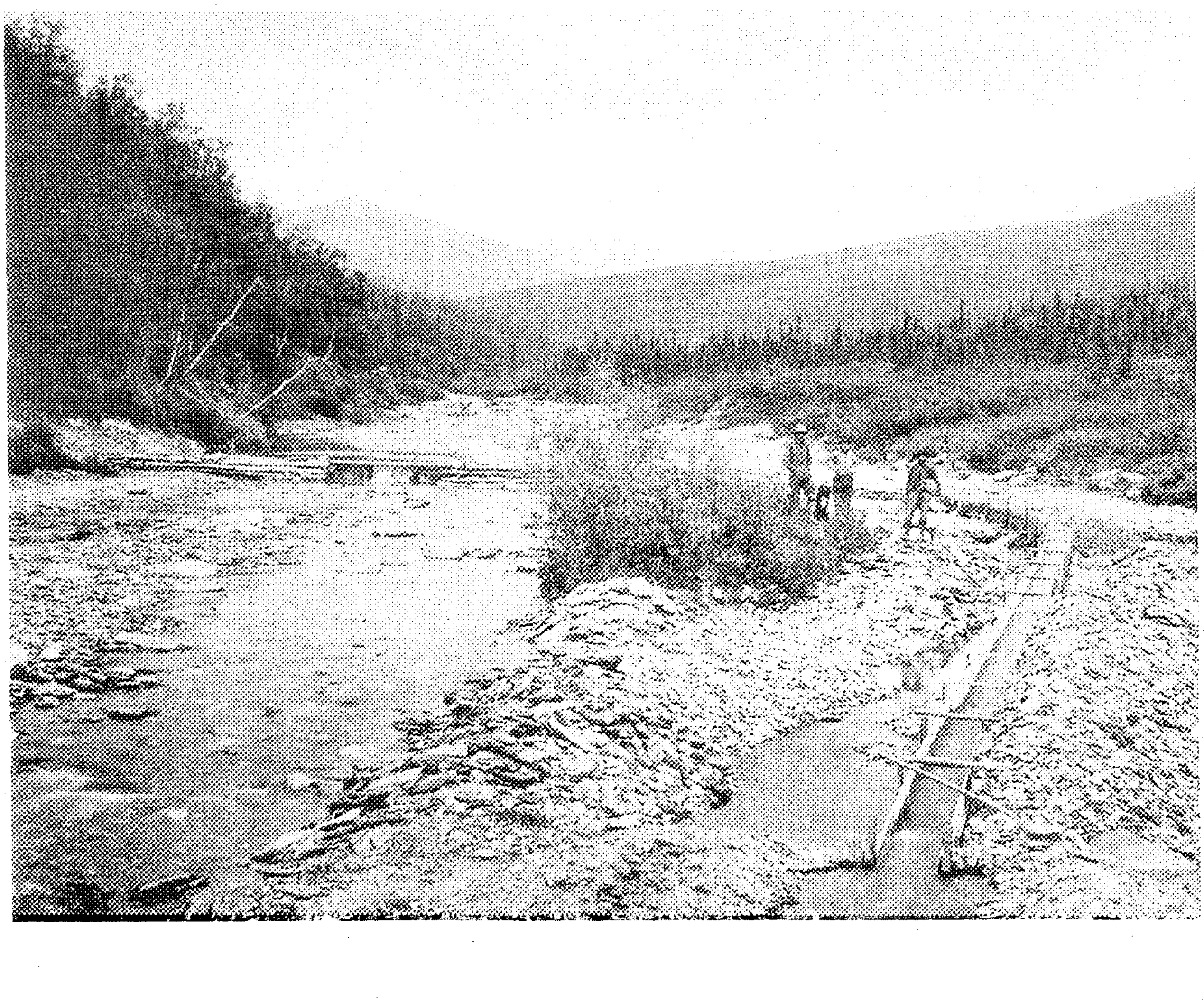
# Mineral Investigations of the Koyukuk Mining District, Northern Alaska

## Progress Report

Joseph M. Kurtak, Robert F. Klieforth, John M. Clark, and Earle M. Williams



**Mission Statement**

The Bureau of Land Management sustains the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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**Cover**

Hand mining for placer gold on Myrtle Creek in 1899. Photo by F.C. Schrader, U.S. Geological Survey.

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# MINERAL INVESTIGATIONS OF THE KOYUKUK MINING DISTRICT, NORTHERN ALASKA--PROGRESS REPORT

## ABSTRACT

The Bureau of Land Management Anchorage Mineral Resource Team (AMRT) is conducting a five-year mineral resource assessment of the 11.6 million acre Koyukuk mining district in northern Alaska. The district comprises the upper portion of the Koyukuk River drainage basin, the headwaters of which lie on the southern flank of the Brooks Range. The federal government manages 72% of the land within the district. District production totals approximately 286,000 ounces of placer gold and six tons of antimony ore. In 1998 there were 13 active placer mines in the district.

There are 407 documented mines, prospects, and mineral occurrences within the district. These include gold placers; gold- and antimony-bearing quartz veins; copper- and zinc-bearing massive sulfides; copper-bearing porphyries; tungsten-, copper-, and tin-bearing skarns; tin-bearing greisens; chromite; and coal. A total of 175 sites have been examined to date and 960 rock, soil, stream sediment, pan concentrate, and placer samples collected.

A portion of the study, consisting of an airborne geophysical survey, was done in cooperation with the Alaska Division of Geological and Geophysical Surveys (ADGGS). Ground magnetic and electromagnetic conductivity surveys were done by AMRT as a followup to the airborne survey. In addition ground penetrating radar surveys were conducted over known placer deposits to identify channel locations and bedrock depth.

Significant results from the first two years of this assessment include the delineation of anomalous gold values within volcanic rocks on the upper Indian River, anomalous placer gold in bench gravels above the Hammond River, gold-bearing quartz veinlets on nearby Vermont and Smith Creeks, and gold anomalies associated with skarn and massive sulfide occurrences in the Chandalar copper belt north of Bettles River.

## ABBREVIATIONS

| | |
|---|---|
| Btu/lb | British thermal unit per pound |
| °F | degrees Fahrenheit |
| oz | ounce(s) |
| oz/cyd | ounce(s) per cubic yard |
| oz/ton | ounce(s) per short ton |
| ppb | part(s) per billion |
| ppm | part(s) per million |

# INTRODUCTION

In 1997 the Bureau of Land Management (BLM) Anchorage Mineral Resource Team (AMRT) initiated a five-year assessment of the mineral resources of the Koyukuk Mining District. The ultimate objectives of this evaluation are: **1)** to identify the mineral resources of the area and **2)** to perform mining feasibility studies, using hypothetical mine models on mineral deposits that have potential to be economic. This study is part of the BLM's ongoing mining district evaluation program and is authorized under Section 1010 of the Alaska National Interest Lands Conservation Act (ANILCA). An airborne geophysical survey of a portion of the district was done in 1997 as a cooperative effort with the Alaska Division of Geological and Geophysical Surveys (ADGGS). This report discusses the results from the first two years of the Koyukuk study and includes information gathered in the district by the former U.S. Bureau of Mines.

Out of 56 placer-producing districts in Alaska, the Koyukuk ranks 17$^{th}$ highest, with production totaling approximately 286,000 ounces of gold. Approximately 60% of this gold comes from creeks in the Wiseman area (Plate 1). Lode production consists of about six tons of antimony ore mined from a small deposit near Nolan Creek. In 1998 there were 1,354 active mining claims, the fourth highest among the state's 69 mining districts, and 13 active placer mines in the district.

The Koyukuk contains 407 mines[1], prospects[2], and mineral occurrences[3]. These include gold placers, gold-bearing quartz veins, copper-zinc massive sulfides, copper-bearing porphyries, tungsten-copper skarns, tin-bearing greisens, podiform chromite, and coal.

**Acknowledgments**

The authors are indebted to the many individuals involved in helping the Koyukuk study progress to its present status. Field assistants Darrel VandeWeg and Emily Davenport along with volunteers: Mark Johnson, Fred Harnisch, Trisha Herminghaus, Karsten Eden, and Dan Kurtak provided much-appreciated assistance while putting up with bugs, bears, and bad weather along the way. Resource Apprenticeship Program intern and high school student Johnnie Lyman was a welcome addition to the field crew and kept us focused by asking lots of questions.

Helicopter pilots Ed Bartoli and Marty Stauber did their utmost to help us accomplish our mission without compromising safety. Mechanic Lowell Berentsen kept the helicopter running smoothly and went out of his way to ensure that aircraft maintenance did not conflict with field work. The staffs of the Indian Mountain Long Range Radar Site, Bettles Lodge, and Silverado Gold Mines Inc. provided comfortable accommodations for the field crew.

The authors appreciate the cooperation and hospitality shown by the following claim owners and apologize for any that may have been left out: Bill and Lil Fichus (Crevice Creek), Mitch Fleming (Myrtle Creek), John and Ethel Hall (Linda Creek), Ralph Hamm (Porcupine Creek), Mick Manns (Birch Creek), Marie Mead (Sawyer Creek), Northern Lights Mining (Rye Creek), Heinrich Schoenke (Lake Creek), Silverado Gold Mines Inc. (Nolan Creek), Dennis Stacey (Vermont Creek), and Ted Wicken (Gold Creek).

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[1] Confirmed production over a period of several years.

[2] Development work done, but no recorded production.

[3] Mineralization exists, but there is no sign of development.

## Geography and Climate

The Koyukuk mining district contains 11.6 million acres and drains the upper portion of the Koyukuk River basin and the adjoining Kanuti River (Plate 1, Figure 1). The Kanuti-Koyukuk confluence forms the southern boundary of the district. The north is bounded by the crest of the Brooks Range, the west by the Noatak and Kobuk Rivers, and the east by the Chandalar River. It has been divided into two subdistricts: the Alatna in the southwest half and the Wiseman in the northeastern half (Ransome and Kerns, 1954, p.82).

The majority of the southern portion of the district is located in the unglaciated Kanuti Flats which are low plains 400-1,000 feet in elevation, dotted by lakes, and containing little to no rock exposures. The Kanuti Flats are characterized by a *taiga* environment where black and white spruce, poplar, birch, alder, and willow are concentrated along river drainages with low sedge tussock-covered hills in between. The flats give way to the unglaciated Indian and Ray Mountains on the south with summits rising to 4,800 feet.

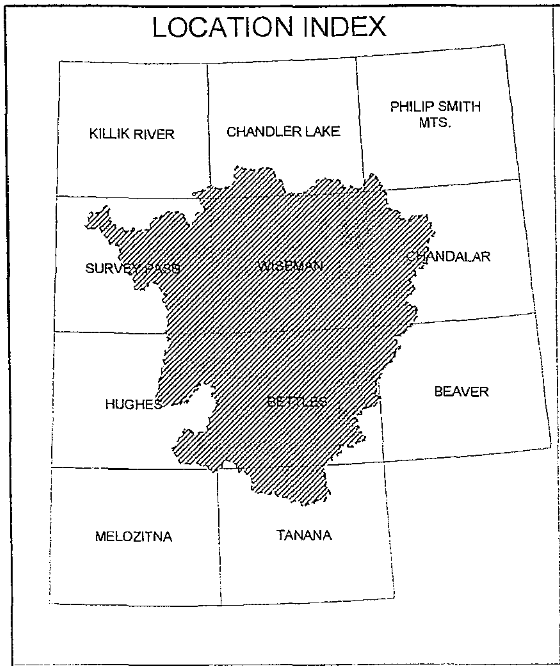
The northern half of the district is dominated by the rugged glaciated peaks of the Endicott Mountains which make up the Central Brooks Range (Figure 2). This includes Mt. Doonerak, which at 7,610 feet is one of the highest peaks in the range. Cirque glaciers occur locally in the higher parts of the range. The Endicott Mountains contain broad river valleys with similar vegetation as the flats, giving way to tundra-covered uplands with timberline ranging between 2,000 and 3,000 feet. In general the region south of the trunk of the Koyukuk River lies within the discontinuous permafrost zone while that to the north lies within the continuous permafrost zone (Maddren, 1913, p. 28; Ferrians, 1965; Wahrhaftig, 1965).

Three-quarters of the Koyukuk district lies north of the Arctic Circle (lat 66°33'31" N.) and is dominated by the continental climate zone of Alaska; a zone characterized by warm summers and extremely cold winters, low precipitation, low cloudiness and low humidity (Johnson and Hartman, 1969, p. 60). The summaries shown in Table 1 are taken from seven weather stations located within or adjacent to the district. Low temperatures for these sites average 11°F and highs average 30°F. The extremes are 93°F and -82°F. This low is an unofficial North American low temperature set at Coldfoot in 1989 (Mull and Adams, 1989, p. 79). Precipitation averages 13.6 inches with an average snowfall of 85.5 inches. It is usually lightest in April and highest in August. Afternoon thunder and lightening storms with accompanying precipitation occur during summer months and fresh snow can coat the high peaks during any month of the year.

Permanent settlements within the district include three native villages: Anaktuvuk (population 308), Allakaket (population 143), and Alatna (population 32). Bettles (population 48, and labelled Evansville on most maps) is centrally located in the district and provides aircraft services and accommodation for travelers. Wiseman (population 19) and Coldfoot (population 17), established to support nearby placer mines, are accessible from the North Slope Haul Road (Dalton Highway) which is the only road access to the district. Wildlife inhabiting the area include grizzly and black bear, caribou, moose, Dall sheep, wolves, and red fox.

## Land Status

Land area within the Koyukuk mining district totals 11.6 million acres, 72% of which are under federal management (Plate 1). BLM lands are concentrated along the pipeline corridor in the eastern portion of the district. These are generally open to mineral entry except those portions lying directly adjacent to the




Looking southeast at Sukakpak Mountain (4459 ft) near the Dalton Highway.

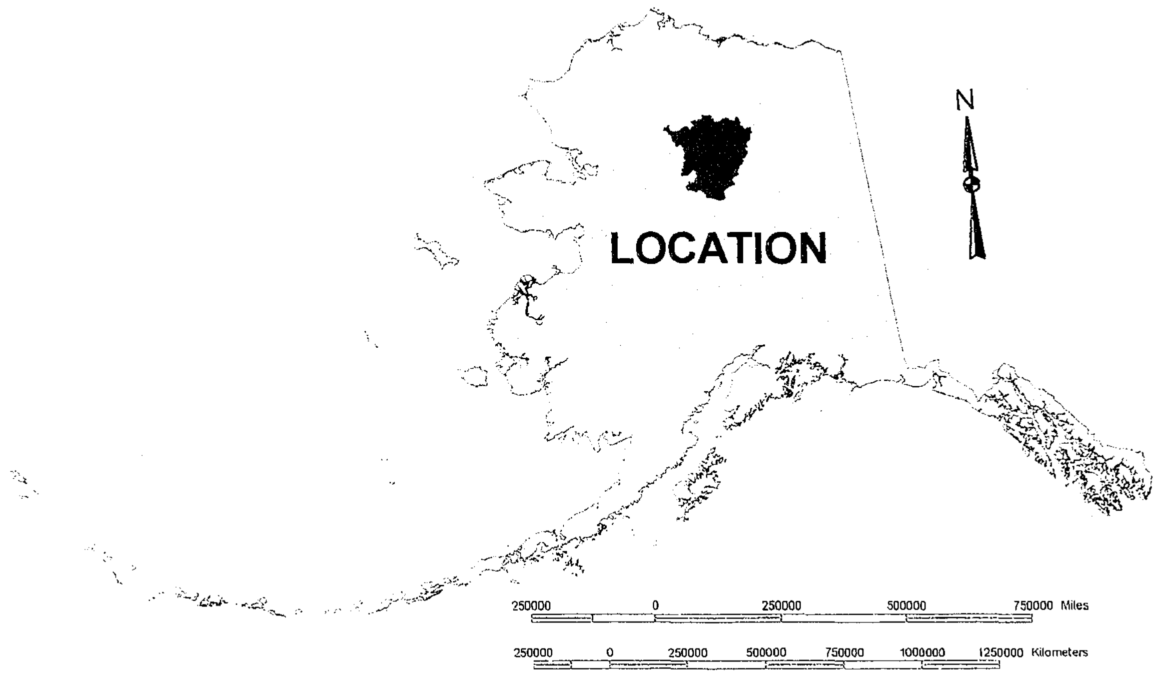



Figure 1. - Location map of the Koyukuk mining district study area, Alaska.

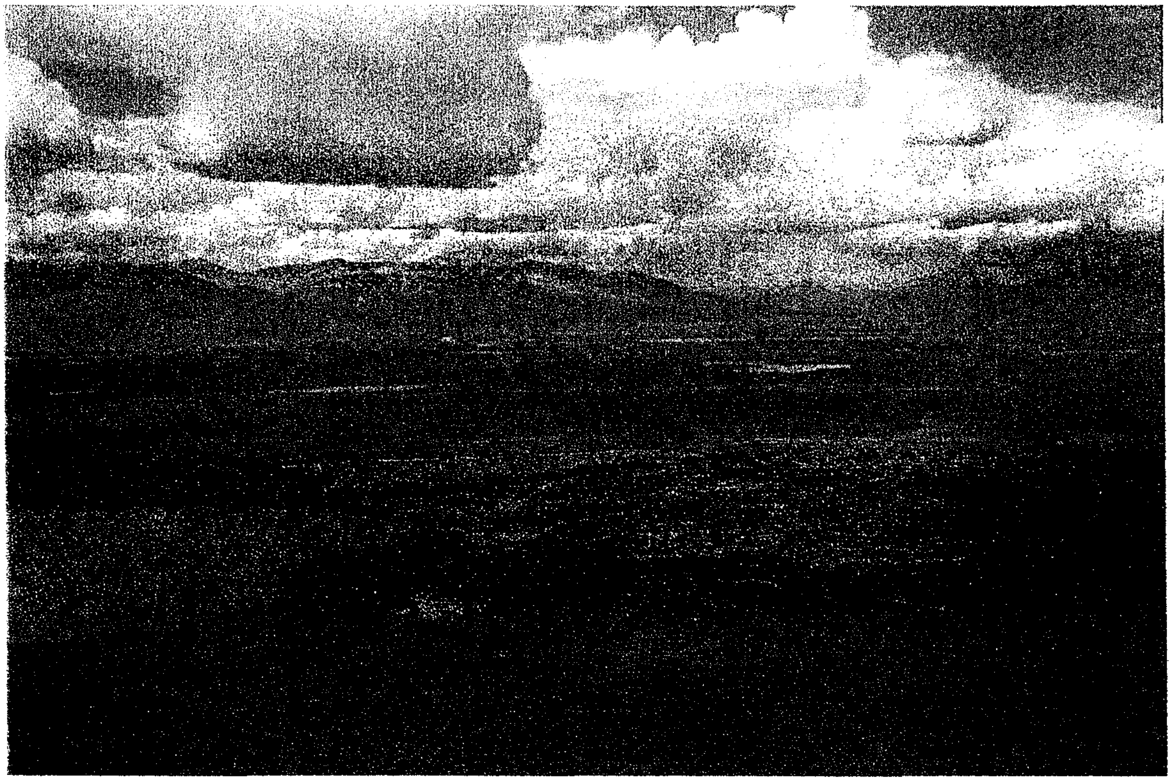


**Figure 2** Looking north across the Koyukuk River lowlands towards the Endicott Mountains.

Table 1. Climate Summary for Weather Stations in the Koyukuk Mining District[1]

| Location | Average High (°F) | Average Low (°F) | Average Total Precipitation (inches) | Average Total Snowfall (inches) |
|---|---|---|---|---|
| Allakaket | 30.9 | 5.7 | 12.3 | 61.4 |
| Anaktuvuk | 21.7 | 5.3 | 10.1 | 57.0 |
| Bettles | 30.6 | 13.5 | 13.7 | 84.4 |
| Coldfoot | 29.9 | 8.7 | 15.4 | 116.5 |
| Indian Mountain | 32.2 | 16.6 | 18.7 | 112.9 |
| Wiseman | 32.2 | 11.8 | 11.5 | 80.5 |
| Average | 29.6 | 10.3 | 13.6 | 85.5 |

[1] Data from Leslie, 1986 and Western Regional Climate Center

pipeline. Other federal lands include Gates of the Arctic National Park and the Kanuti Wildlife Refuge, both of which are closed to mineral entry. State land makes up 21% of the district and is generally open to mineral entry. The remaining 7% is held by native corporations: Doyon Corporation being the largest landowner.

**Previous Studies**

The first published account of exploration into the Koyukuk region of Alaska was made by Lieutenant H.T. Allen, who in the summer of 1885 made a remarkable 2,200 mile journey through Alaska. Allen and his party, under orders from the War Department, traversed up the Koyukuk River from the mouth of the Kanuti River and then up the John River to a point about five miles above its mouth. This exploration produced the first accurate map of the area (Allen, 1887). They were followed by a party commanded by Lieutenant G.M. Stoney of the U.S. Navy, which during the winter of 1885-86 crossed from the headwaters of the Kobuk River to the Alatna River in the northwest corner of the Koyukuk mining district. The Alatna River was then ascended and the Brooks Range divide crossed to Chandler Lake (Stoney, 1900).

Little documented exploration followed until the Klondike gold discovery in 1896 which brought a rush of prospectors into Alaska, including the Koyukuk country. News of subsequent gold discoveries prompted the federal government to send out U.S. Geological Survey (USGS) parties to conduct systematic scientific explorations in the area. The first of these was led by geologist F.C. Schrader in 1899. His party which included topographers, ascended the Chandalar River and descended the Koyukuk via the Bettles and Dietrich Rivers to its mouth. In 1901 a party led by W.J. Peters and including Schrader, ascended the John River to the Brooks Range divide and descended the Colville River to the coast. Schrader was the first to describe the mineral resources of the area in some detail and documented his work with the first published photographs of mining operations in the Koyukuk (Schrader, 1900, 1904). In 1901 another USGS party led by W.C. Mendenhall descended the Kanuti River to the Koyukuk, then ascended 80 miles up the Alatna to Helpmejack Creek before crossing the divide and going down the Kobuk River (Mendenhall, 1902;

Smith and Mertie, 1930; Marshall, 1933, pp. 29-44). In 1909 A.G. Maddren made a brief visit to the district, gathering information on the gold placers, including production (Maddren, 1910). In 1911 a party under the direction of Philip Smith ascended the Alatna River to its head and descended the Noatak for its entire length, describing the geology along the way (Smith, 1913). In 1911 and 1912 Maddren revisited the principal mining areas in the district and made some of the first detailed descriptions of the placer gold deposits (Maddren, 1913). During the winter of 1924, a party led by Philip Smith ascended the Alatna River, but focused geologic work on rocks north of the Brooks Range divide (Smith and Mertie, 1930).

In the following years there was little documentation of activities in the district until 1929 when Robert Marshall, a forester by profession, conducted a series of personal explorations into the headwaters of the Koyukuk. He visited many remote areas and contributed to the knowledge of the geography of the region by naming numerous features and publishing a sketch map of the area. He also described the cultural aspects and socioeconomics of life on the Koyukuk (Marshall, 1931, 1933, 1970). I.M. Reed, a mining engineer with the Territorial Department of Mines, visited the district briefly in 1929. In 1937 he revisited and made the most extensive examination on record of the district's placers (Reed, 1938).

Interest by the USGS in the area resumed in the late 1950s due to geologic studies of the Naval Petroleum Reserve No. 4 which lies north of the crest of the Brooks Range and has a mutual boundary with the Koyukuk. As a result geologic maps were made of the Chandalar (Brosge and Reiser, 1964), Hughes (Patton and Miller, 1966), Melozitna (Patton and others, 1978), and the Survey Pass quadrangles (Nelson and Grybeck, 1980). The Chandalar, Wiseman, and Survey Pass quadrangles were evaluated as part of the Alaska Mineral Resource Assessment Program (AMRAP) which included geochemical surveys by the USGS (Brosge and Reiser, 1972; Marsh and others, 1978a, b).

With completion of the Dalton Highway across the eastern portion of the district, the ADGGS in conjunction with the USGS, began geologic studies of state selected lands adjacent to the road. This resulted in a series of State publications: Dillon and others, 1980-1981, 1986-89; Mosier and Lewis, 1986; Bliss and others, 1988; Mull and Adams, 1989. The U.S. Bureau of Mines did critical and strategic metal investigations in the southeastern portion of the district adjacent to the haul road (Foley and McDermott, 1983; Barker, 1991). Graduate theses and dissertations on the geology and mineral deposits of specific areas within the district include the following areas: Anaktuvuk Pass (Porter, 1962), Chandalar lode mines (Ashworth, 1983), Arrigetch Peaks (Adams, 1983), Upper Bonanza Creek skarns (Clautice, 1987), Endicott Mountains (Gottschalk, 1987; Handschy, 1989), Sukakpak Mountain (Huber, 1988), and the Chandalar Copper Belt (Nicholson, 1990).

## Mining History and Production

Reports of placer gold on the gravel bars of the Koyukuk River go back to the period between 1885 and 1890 when minor discoveries were made at Tramway, Florence and Hughes Bars. The area did not receive major attention by prospectors though until the Klondike gold rush era. Beginning in 1899, stampeders disenchanted with the Klondike rush in Canada, worked their way down the Yukon River and prospected its tributaries, including the Koyukuk. This led to the first major discovery in the district when members of the Dorothy party from Boston, Massachusetts found gold near the confluence of Slate and Myrtle Creeks in 1899. Knute Elingson and partners mined off Myrtle Creek the same year (see report cover), making the first "real money" on the Koyukuk (Schrader, 1900, 1904; Marshall, 1933).

In 1900 Myrtle Creek produced 1,900 oz of gold. News of this find and others on nearby Emma and Slate

Creeks sparked a rush of about 1,000 fortune seekers up the Koyukuk River and its tributaries. The settlement of Coldfoot (Plate 1) was established as a supply point for mining operations in the area. The site got its name when some gold seekers reportedly got "cold feet" and turned around at that point on the Koyukuk River (Maddren, 1913; Marshall, 1933).

Gold was discovered on the Hammond River in 1900 and on Nolan Creek in 1901. A shifting of activity to these areas led to the establishment of Wiseman, 11 miles north of Coldfoot, resulting in the eventual abandonment of the latter site. Other strikes occurred on Mascot, Gold, Linda, and Porcupine Creeks. Mascot Creek, which produced about 4,300 oz of gold during 1903, was said to be one of the most profitable in the Koyukuk. The Mascot gold rested directly on bedrock with only a thin gravel cover, making it extremely easy to recover. When compared to other Alaskan placer districts, the Koyukuk proved extremely remote and also one of the most costly to operate in. At the time it was noted as being one of the most northern mining districts in the world (Maddren, 1910, 1913).

Initial production from creeks in the Wiseman area was from shallow placers. These were soon worked out and by 1904 production began to drop off (Appendix C). Rumors of bonanzas on the John River in 1905 sent 400 prospectors in that direction and the Chandalar discoveries in 1906 funneled more gold seekers away from the Nolan area. However interest was renewed with the discovery of extremely-rich buried channels more than 100 feet beneath the surface at Nolan in Creek in 1907. In a little over three months, it is reported that about 5,000 oz of gold was recovered and the following year it was estimated that nearly 250 people were working on the creek (Hill, 1909). The district's greatest production year came in 1909 when 20,230 oz of gold were recovered. The Nolan Creek drainage proved to be some of the richest ground in the district, yielding at least 158,202 oz of gold through 1998. A similar rich deep channel beneath the Hammond River was struck in 1912 and during the following four years over 48,000 oz gold were produced, including a 138.8 oz nugget (second largest in Alaska) (Pringel, 1921; T.K. Bundtzen, written communication, 1999). The Nolan-Hammond area is still the center of mining activity in the district.

Gold was first mined in the central part of the district in 1904 following discoveries near Wild Lake and in Crevice Creek on the John River drainage. Interest in the area took a major jump in 1915 when 572 oz of gold were produced from Jay Creek (Pringel, 1921). Sporadic mining has continued to the present day, concentrated on Crevice, Lake, Jay, and Birch Creeks.

The report of a gold discovery by a native on the Indian River in the southwest corner of the district, prompted J.C. Felix to visit the area in 1910. He found workable placers and began mining the following year. In 1913 approximately 1,550 oz gold were produced. Discoveries followed on nearby Black and Utopia Creeks (Eakin, 1916, pp. 83-84). A dry-land dredge operated on upper Indian River and Black Creek into the early 1960s and a floating dredge worked nearly the entire length of Utopia Creek from about 1939 to 1950.

Mechanized mining in the northern part of the district began in 1940 when a dragline-dozer operation was started on Myrtle Creek, resulting in a major jump in district production. Production dropped to a minimum in 1942 due to enactment of Public Law L208 which curtailed mining in the United States not related to the production of strategic metals. The only recorded lode production occurred the same year when about six tons of antimony ore were mined on Smith Creek as a byproduct of gold mining (Maddren, 1913; Marshall, 1933; Cobb, 1973). Production picked up again after the war, reaching a high of 11,817 oz in 1964 with Nolan Creek being the largest producer. Completion of the Dalton Highway in 1975 allowed for road access to many of the placer mines along the Middle Fork Koyukuk River.

In 1994 Silverado Gold Mines Inc. was the largest producer, recovering 8,024 oz from a large surface and underground operation on Nolan Creek (Figure 3). In addition this operation recovered a 41.4 oz nugget from Nolan Creek (unofficially the 10th largest in Alaska). By 1997 district production had dropped to approximately 540 oz. During 1998, there were thirteen active operations in the district with a minimum of 243 oz of gold produced.

High runoff during the spring of 1998 resulted in the destruction of many mine access roads which operators spent most of the summer reconstructing. In addition a major drop in the price of gold in 1997 dampened enthusiasm towards mining. In the Wiseman area mining took place on Hammond River, Nolan, Linda, Gold, and Porcupine Creeks. In the central portion of the district mining took place on Jay Creek and at a tourist-oriented mine on Birch Creek. Underground drift mines operated on Nolan and Linda Creeks.

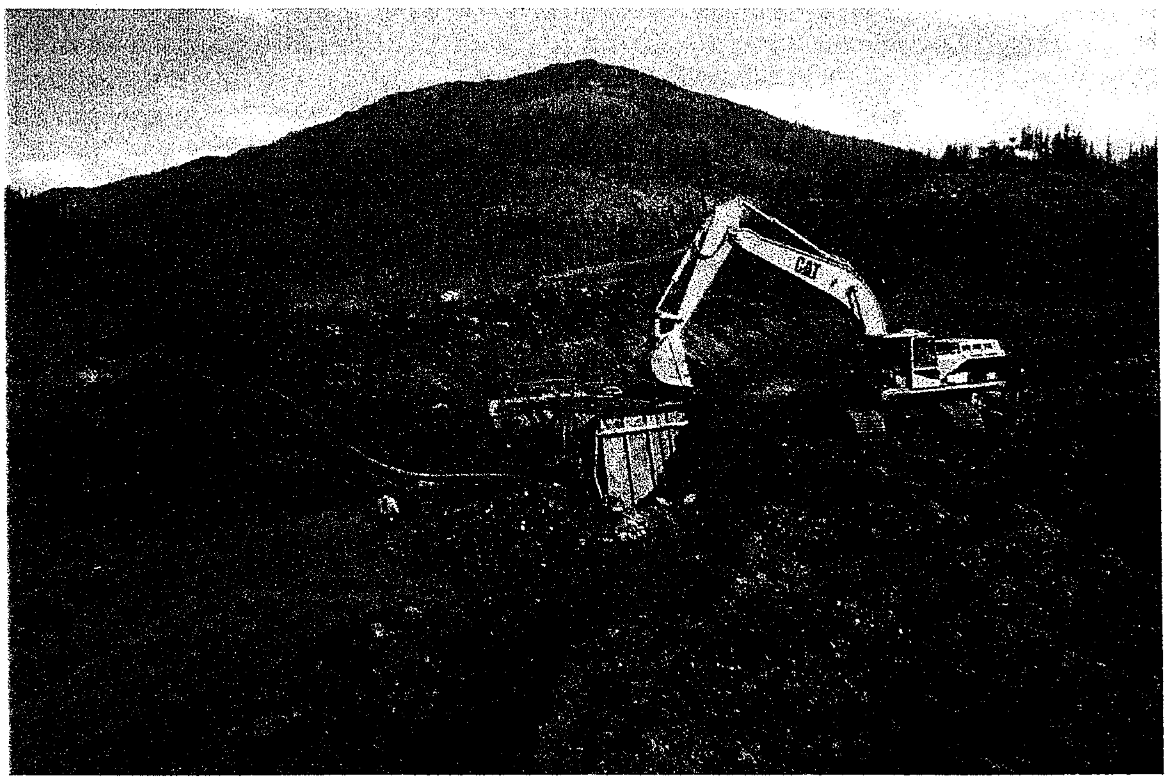



**Figure 3** Placer operation on Nolan Creek by Silverado Gold Mines Inc. In 1994, Silverado recovered a 41.4 oz nugget (tenth largest in Alaska) from bench gravels on the east side of the creek.

## BUREAU INVESTIGATIONS

A brief examination was made of the district in 1994 when the Alaska mining district studies were administered by the U.S. Bureau of Mines (BOM). After closure of that agency in 1996, this function was transferred to the BLM and work resumed on the project. Prior to beginning field work in 1997, an extensive bibliography on the geology and mineral resources of the district was assembled. Letters were sent to 181 claimants requesting permission to visit their properties and obtain any input they might have in regards to site-specific projects. Initial field investigations focused on documented mines, prospects, and mineral occurrences, followed by prospecting areas having anomalous geochemistry or geology similar to that of documented occurrences. At lode sites rock samples were collected and geologic mapping done in an effort to determine grade and extent of the mineralization. Placer deposits were evaluated by test panning and collection of placer samples. To date 94 days have been spent in the field and 175 sites examined.

As a cooperative effort between ADGGS and the BLM in 1997, an airborne geophysical survey was made of a 533 square mile area in the northeast portion of the district. The BLM provided the funding and selected the area to be covered while the ADGGS administered the project. The survey was done by Sial Geosciences Inc. and On-Line Exploration Services was the field representative. The results of this survey have been published as series of ADGGS Public Data Files and Reports of Investigation (Sial Geosciences Inc., 1998a-d). The BLM has also funded publication by the ADGGS of the Chandalar C-5 geologic map (Dillon and others, 1996) which lies within the area covered by the airborne survey.

In 1998 AMRT conducted ground magnetic and electromagnetic conductivity surveys at five sites as a followup to the airborne geophysical work (Figure 4). These surveys delineated several anomalies on the ground. Additional geophysical studies were conducted in the form of ground penetrating radar (GPR) profiles, completed at three known placer deposits to identify channel locations and depth to bedrock.

In a partnership with Silverado Gold Mines Inc., AMRT supported a geology graduate student, who in 1998 mapped the geology and assessed lode mineralization in the Nolan-Hammond River area. This work will be compiled as a thesis to fulfill the requirements of a masters degree in geology at the Technical University of Clausthal in Germany.

### Sampling Methods

A total of 960 samples have been collected to date as a part of the Koyukuk study. These consisted of rock, pan concentrate, stream sediment, placer, and soil samples.

Rock samples were collected from the following sites: **1) outcrop** - rock is in place; **2) rubblecrop** - rock fragments overlying bedrock which is not visible, but implied; **3) float** - loose rock fragments or cobbles not necessarily found near or overlying bedrock of the same composition.

Rock samples are of six types: **1) continuous chip** - small rock fragments broken in a continuous line for a measured distance across an exposure; **2) spaced chip** - collected in a continuous line at designated intervals across an exposure; **3) representative chip** - sample volume collected in proportion to volumes of different rock types observed at a specific locality; **4) random chip** - collected at random points from an apparently homogenous mineralized exposure; **5) grab sample** - collected more or less at random from float or outcrop; **6) select sample** - collected from the highest grade portion of a mineralized zone.

**Figure 4** Ground magnetic and VLF survey, near the Ginger Prospect, Big Spruce Creek.

Pan concentrate samples were collected at sites where heavy minerals might accumulate such as stream gradient changes from steep to moderate, and the downstream side of boulders, and on bedrock. A heaping 14-inch gold pan of coarse gravel and sand is panned down to 0.75 oz of fine concentrate which was kept for chemical analysis. The presence of heavy minerals in the concentrate such as gold, sulfides, magnetite, and garnet were noted in the field.

Stream sediment samples consisted of composites of silt and clay collected from the active portion of the stream bed. Samples were collected with a plastic trowel and stored in geochemical envelopes made of water resistant paper.

Placer samples consist of 0.1 cubic yards of stream or bank material run through a 10- by 48- inch sluice box and then panned down to produce approximately 2.5 oz of concentrate. Visible gold was recovered from the sample and weighed. Remaining concentrates were examined with microscope and ultraviolet lamp to determine mineralogy where possible. The concentrates were then forwarded to the laboratory for geochemical analysis.

Soil samples were collected from the thin C horizon characteristic of Arctic soils with a stainless steel hand auger. The samples were stored in the same geochemical envelopes used for stream sediment samples.

Coal samples were collected from channels cut a minimum of 1 foot into outcrops. The coal was stored in airtight bags to retain original moisture content during shipment.

## REGIONAL GEOLOGY

Proterozoic through Mesozoic metasediments make up the majority of the rock types in the Koyukuk district. Segments of these rocks were intruded by Devonian and Cretaceous plutons and metamorphosed during the mid-late Mesozoic Brooks Range orogeny. Cretaceous sediments fill a basin in the central portion of the district and the higher elevations have undergone extensive glaciation.

The Koyukuk district is underlain by three main geologic terranes (Figure 5). The oldest is the Ruby terrane which underlies the eastern margin of the district and makes up a portion of the Ruby Geanticline; a linear uplift of pre-Cretaceous rocks that diagonally crosses central Alaska. The geanticline is composed of autochthonous Proterozoic(?) through Late Paleozoic metasedimentary rocks consisting of miogeosynclinal pelitic schist, quartzite, greenstone, carbonate rocks, and quartzo-feldspathic gneiss. These rocks were metamorphosed in the Early Cretaceous to greenschist facies with areas of local almandine-amphibolite facies and glaucophane-bearing blueschist mineral assemblages. It is extensively intruded by mid-Cretaceous granitic plutons. The Ruby Geanticline may have been contiguous with the Arctic Alaska terrane to the north and possibly a portion of the southern Brooks Range that was rotated or displaced in Mesozoic time (Mull and Adams, 1989, p. 27).

The continentally-derived Arctic Alaska terrane makes up the northern half of the district and underlies the central and eastern portions of the Brooks Range Province. It is composed of Proterozoic(?) through Mesozoic sedimentary, metasedimentary, and volcanic rocks, including an extensive carbonate sequence, confined mostly to the northern portion of the terrane. The carbonate sequence and associated volcanic rocks were intruded by early to middle Devonian premetamorphic granitic and mixed felsic-mafic intrusive complexes. These rocks host tin-bearing skarns in the Arrigetch Peaks and copper-bearing porphyries and skarns north of the Bettles River.

The oceanic Upper Paleozoic-Mesozoic Angayucham terrane makes up the central portion and contains the youngest and least metamorphosed rocks in the area. The base of the terrane is composed of a Permian-Jurassic sequence of mafic and ultramafic volcanic and intrusive rocks consisting of pillow basalt, diabase, gabbro, and dunite with subordinate chert, limestone, and serpentinite. The igneous rocks, which are considered to be part of a dismembered ophiolite, locally contain small podiform chromite occurrences. This complex is unconformably overlain by Early and Late Cretaceous graywacke and igneous- and quartz-pebble conglomerate which filled the lower Koyukuk basin, leaving the igneous rocks exposed only on the basin margins. The Late Cretaceous sediments contain some coal beds. This terrane appears to be the erosional remnants or klippen of allochthonous rocks that were obducted over rocks of the Arctic Alaska terrane in the Late Mesozoic (Mull and Adams, 1989). During the Jurassic through Cretaceous Brooks Range orogeny, obduction of the younger Angayuchum terrane onto the Arctic Alaska terrane resulted in imbricate thrusting, northward-verging folding, and tectonic-burial metamorphism in the latter. Metamorphism was most intense along the boundary of the Arctic Alaska terrane with the Angayuchum terrane resulting in formation of a belt of schistose rocks along the south flank of the Brooks Range. There is a broad scale equivalence between this schist and the schist belt which hosts volcanogenic massive sulfide deposits in the Ambler district, 90 miles to the west (Mull and Adams, 1989, p. 161; Nicholson, 1990). These schistose rocks host some of the major placer gold-producing drainages in the district.

The Angayuchum and adjoining Ruby terranes are intruded by a series of mid-Cretaceous granitic plutons which stitch together the boundary between the two (Mull and Adams, 1985, p. 158). In the upper Kanuti River area the granites host tin-bearing greisens (Barker and Foley, 1986). The granites are deeply eroded

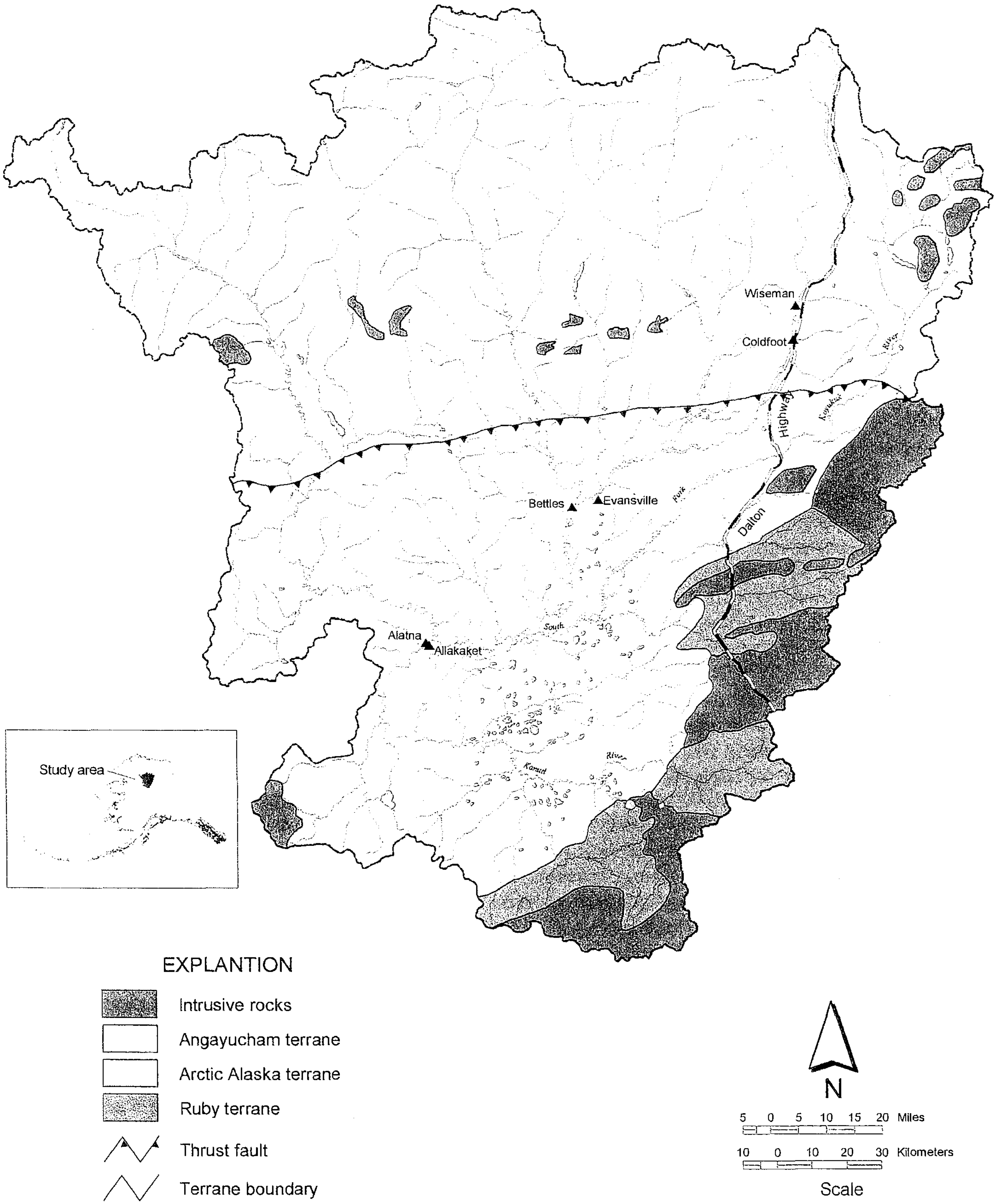



Figure 5. Tectonostratigraphic terranes in the Koyukuk mining district.
(from Moore and Others, 1994 and Beikman, 1980)

and the resulting alluvium in nearby drainages contains placer tin concentrations. The granitic rocks host tungsten-bearing skarns near the headwaters of Bonanza Creek (Clautice, 1987).

Cretaceous andesitic volcanic rocks and interbedded graywacke and mudstone are intruded by intermediate intrusive rocks near Indian Mountain in the southwestern corner of the district. Placer gold deposits in the area appear to be associated with hornfelsed rocks near intrusive contacts (Patton and Miller, 1966; Patton and others, 1978).

The northern Koyukuk has been affected by a series of at least four major glacial advances during the Tertiary and Quaternary periods which shaped the present landscape and played a significant role in formation of the district's placer deposits. The last advance ended about 10,000 years ago and cirque glaciers still exist in the highest portions of the Endicott Mountains (Mull and Adams, 1989).

## MINERAL DEPOSIT TYPES

### Placer Gold

Gold placers are the only mineral deposits in the district that have been extensively developed. Placers are concentrated in the southwestern and northeastern portions of the district with the greatest production coming from the Coldfoot-Wiseman area. Placers in the Wiseman and Wild Lake areas are related to a belt of schistose rocks that lie along the southern boundary of the Arctic Alaska terrane, while those near Indian River and Prospect Creek appear to be related to hornfelsed rocks near intrusive contacts.

The Koyukuk placers range from shallow unfrozen deposits that are relatively easy to mine to deeply-buried permanently frozen gravels. The formation of these deposits is closely tied to the glacial history of the area which has been affected by at least four major phases of glaciation (Mull and Adams, 1989, pp. 23-26). Placer deposits consist of three basic types:

**1)** Shallow placers concentrated in modern stream and river valleys. Gold is concentrated in fractured bedrock and the lower 1 to 2 feet of the overlying stream gravel. These were the first placers in the district to be discovered and exploited due to ease of mining. Mascot Creek is the most profitable example of this placer type.

**2)** Placer gold concentrated on bedrock in deeply incised bedrock channels that have been covered by 10 to 140 feet of stream gravel. The gold was probably deposited on bedrock in pre or interglacial periods and then covered due to a raising of base-level related to subsequent glacial activity. These channels, which occupy side valleys to the Middle Fork of the Koyukuk drainage, are truncated by it, indicating that they predate the last major glacial advance in the area. These deposits proved to be the richest in the district, but also the most difficult to exploit as considerable overburden has to be removed to reach gold-bearing gravel. Consequently these types have been mined mostly by underground methods with the channels on Nolan Creek and Hammond River being the richest. These placers are known for coarse showy nuggets. The second largest gold nugget found in Alaska (138.8 oz) was recovered from the Hammond River.

**3)** Placer deposits concentrated on benches cut in bedrock lying anywhere from 2 to 360 feet above modern stream levels. These benches were cut when streams were flowing at higher levels, possibly due to damming by glacial ice. Erosion of these bench placers through downcutting by modern streams has probably produced the shallow placers. The gold varies from rounded water-worn nuggets in the deep channels to angular rough gold with attached quartz fragments on the benches. The most profitable bench placers are located at Gold Bench on the South Fork Koyukuk River and on Nolan Creek. The mean fineness for Koyukuk gold is 914 (Maddren, 1913, pp. 75-83; Reed, 1938, pp. 62-72; Cobb, 1973, pp. 155-160; Metz and Hawkins, 1981, p. 36).

### Mineralized Quartz Veins

Mineralized quartz veins in the district are of three general types. The first consists of massive galena-bearing quartz-ankerite veins concentrated in the lower Michigan Creek area (Plate 1, map no. 104)[4]. Samples from these veins contain up to 2.6 oz/ton silver. The second type consists of stibnite-bearing

[4] Refer to Plate 1 for location unless text figure is indicated. See Appendix B for analytical results.

quartz veins. The most extensive examples occur along a faulted contact in the Sukakpak Mountain area (map nos. 329-330). Samples from these veins contain up to 1.4 oz/ton gold. Veins of similar composition, though much smaller, occur in the Smith Creek area (Figure 8, map nos. 178-186). Samples from these veins contain up to 12.2 ppm gold. The third type consists of quartz veinlets which fill fractures cutting phyllite and concentrated mostly in the Vermont Creek area (Figure 8, map nos. 162-167). Samples from these veinlets contain up to 1.85 oz/ton gold. In addition they contain ankerite-pyrite gangue and trace amounts of arsenic and antimony.

**Tin-bearing Granites**

A series of Early Cretaceous large granitic plutons intrude phyllite and schist of the Ruby terrane and mafic/ultramafic rocks of the Angayuchum terrane in the southeast corner of the district. They are composed mainly of coarsely porphyritic biotite granite, but locally include granodiorite and monzonite. The Sithylemenkat pluton (map no. 381) is a two-phase granite that is locally altered and contains low-grade disseminated tin and tungsten. Weathering of the granite has produced tin-bearing placers in drainages surrounding the pluton (WGM Inc., 1980a, c; Warner, 1985, p. 5; Mull and Adams, 1989, p. 28).

**Podiform Chromite**

A belt of Permian-Jurassic mafic/ultramafic rocks extends for 62 miles along the southern border of the Angayuchum terrane in the southeastern corner of the district. The ultramafic rocks are composed of serpentinized dunite and pyroxene-peridotite, pyroxenite, gabbro, diabase, altered pillow basalt, and associated chert.. These rocks represent a dismembered ophiolite. In the Caribou Mountain area (map no. 380), the dunites contain concentrations of chromite. Sampling indicates an average content of 1.7% chromium (Foley and McDermott, 1983; Mull and Adams, 1989, p. 33).

**Massive Sulfides**

The Koyukuk mining district contains lead-zinc-copper massive sulfide occurrences, several of which have undergone detailed investigations including geophysics and drilling. Some occur within the Brooks Range schist belt and are thought to be contemporaneous with volcanogenic massive sulfide deposits in the Ambler district to the west. This includes the Ann Group and Buzz prospects (map nos. 17-18) which are located in the northwest part of the district. The sulfides are hosted by sericitic schist, graphitic schist, and marble. Sulfide minerals occur in exposures up to 9 feet in diameter and include up to 25% galena, 25% sphalerite, and 50% pyrite. These occurrences have also been interpreted to be polymetallic veins or remobilized stratabound sulfides (Nokleberg and others, 1987).

The Venus prospect, located in the Chandalar Copper Belt in the northeast portion of the district, contains massive magnetite, pyrite, and chalcopyrite. The massive sulfides, which occur as boulders and in outcrop, are concentrated extensively along a 0.25 mile stretch of an unnamed tributary to Big Spruce Creek (map nos. 306-308) and are intercalated with sulfide-bearing skarn outcrops.

The Luna prospect (map no. 291), north of the Venus prospect, is another massive sulfide occurrence in the Chandalar Copper Belt. Sphalerite, chalcopyrite, pyrrhotite, and pyrite occur as massive pods, veins, and stringers. The host rocks include schist and calc-silicate rocks (WGM, 1979d; WGM, 1983, pp. 30). The massive sulfides at Luna are believed to be volcanogenic in origin (WGM, 1979d; Nicholson, 1990) or an intrusive related skarn (WGM, 1983).

**Porphyry Copper**

Devonian granitic plutons intrude the Arctic Alaska terrane, in the northeastern portion of the Koyukuk district. The pluton, which outcrops prominently at Horace Mountain and sporadically throughout the Chandalar Copper Belt, is a silica oversaturated, metaluminous, porphyritic biotite/hornblende granite and hornblende-biotite granodiorite prophyry (Newberry, Dillon, and Adams, 1986). The Venus prospect, on Big Spruce Creek, is a well-investigated porphyry copper prospect. A porphyry granite outcrops for approximately 1 mile along the creek (map nos. 308-310). The granite-granodiorite contains 1 to 3% disseminated pyrite and chalcopyrite, with minor malachite and abundant limonite staining.

**Tin-, Copper-, and Tungsten-bearing Skarns**

Localized zones of skarn are associated with Devonian and Cretaceous granitic plutons that intrude the extensive Devonian carbonate units of the Arctic Alaska terrane and the much thinner carbonate units of the Ruby terrane. Prospects cited in this report include tin-bearing skarns within the Gates of the Arctic National Park, copper-bearing skarns north of Bettles River, and tungsten-bearing skarns near Bonanza Creek.

Tin-bearing skarns are located in the Gates of the Arctic National Park, near the Arrigetch Peaks (map nos. 10-13). The granites that comprise the Arrigetch Peaks are characterized by peraluminous, S-type granites emplaced at moderate depths. The skarns are anomalous in tin, copper, and zinc (Newberry, Dillon, and Adams, 1986). The skarn prospects north of Bettles River, however, are characterized by low tin and anomalous gold, silver, and copper. The intrusion has a relatively shallow emplacement and is generally metaluminous, I-type granite and granodiorite (Newberry, Dillon, and Adams, 1986).

A tungsten skarn prospect is located east of the South Fork Koyukuk River, near Bonanza Creek (map no. 379). The Cretaceous intrusive is a multiple phase granite-monzogranite with abundant pegmatite and aplite. The host rocks include pelitic and calcareous schists; however, the carbonate units are discontinuous and relatively thin (<50 feet thick) (Clautice, 1987). The prospect has been investigated by several mining companies and government agencies. Select trench samples contained pyrrhotite, chalcopyrite, and coarse-grained scheelite.

## SIGNIFICANT RESULTS

### Gates of the Arctic National Park

The Gates of the Arctic National Park (GANP) lies within the Hammond subterrane of the Arctic Alaska terrane. The most prevalent units are thick, Devonian sedimentary formations including the Skajit Limestone, Beaucoup Formation, and Hunt Fork Shale. The sedimentary units are intruded locally by Devonian granitic plutons. Both the sedimentary and granitic rocks were subsequently metamorphosed to greenschist facies during the Jurassic through Cretaceous Brooks Range orogeny.

There are 36 documented mineral occurrences within the Koyukuk mining district that are located within GANP. Of these sites, 25 have been visited at least once and 2 sites immediately outside the district have also been visited.

Exactly half of these sites are placer gold occurrences and half are lode prospects. There were no significant placer gold anomalies in any reconnaissance stream sediment or pan concentrate samples collected within the park boundaries. The lode prospects investigated include skarns near the Arrigetch Peaks and Sheep Creek as well as a lead prospect at Bonanza Creek.

The skarns in the Arrigetch Peaks (map nos. 10-13) occur on the margins of the upper Devonian(?) Arrigetch Pluton which intrude thick Devonian carbonate units. The pluton is composed of silica oversaturated and peraluminous granite. Skarns include calc-silicate, magnetite, and sulfide-rich varieties (in decreasing abundance), with transition types also present (Newberry, Dillon, and Adams, 1986).

Samples of magnetite-rich and sulfide-rich skarns were collected. A select sample of magnetite-rich skarn (map no. 11, sample 10827) collected 2 miles northeast of the Arrigetch Peaks contained 902 ppm tin, 904 ppm copper, and 1674 ppm zinc. The magnetite-rich zones extended for a maximum of 100 feet along strike and occurred in ribbons within calc-silicate rock and marble units. A 0.5 foot-wide sulfide-rich quartz vein (map no. 13, sample 10864) on the margin of a magnetite zone yielded 60 ppb gold, 4492 ppm copper, 859 ppm bismuth, and >10000 ppm arsenic.

Minor copper mineralization has also been documented for approximately 10 miles along the southern border of the park near John River (map nos. 37-40). Field examination and published data indicate the mineral occurrences are stratabound, limited to a few tens of feet in strike and up to 5 feet in width (WGM, 1978).

In upper Sheep Creek, podiform copper mineralization was traced along a marble-schist contact for approximately 1700 feet along strike (map no. 39). Bornite and chalcopyrite were observed in quartz veins and fracture fillings parallel to bedding in the marble which overlies the schist. A select sample of the marble (10783) contained 9.0% copper. The quartz-mica schist is locally mineralized, near the contact. One select sample of quartz vein (10805) contained 26 ppb gold, 16.53% copper, and 78.6 ppm silver. The vein was 15 feet long and 3 to 6 inches wide, occasionally widening to 1 foot.

The unnamed prospect (map no. 40) immediately northeast of the Sheep Creek site contained similar podiform copper mineralization. A select sample of micaceous schist float (10806) contained 17 ppb gold, 68.9 ppm silver, and 11% copper. The observed mineralization was found in float below the limestone and schist contact.

Abundant quartz veinlets occur in a 35- by 150-foot rusty-weathering outcrop of intensely fractured and dolomitized metamorphic rock on the west slope of the ridge between Conglomerate and Bonanza Creeks (map no. 118). The veinlets contain trace galena, sphalerite, and ankerite(?). A select sample of quartz float found below the outcrop (10881) contained 3510 ppm zinc, 3438 ppm lead, and 3772 ppm arsenic. This exposure may represent a northwest-trending shear zone that cuts through the ridge.

**Mettenpherg Creek**

The bedrock in the Mettenpherg Creek area includes several Devonian and Pre-Devonian units: the Skajit Limestone, interbedded clastic sedimentary units (schist belt), thin mafic and felsic volcanic layers, and granitic plutons near Ernie Lake and Sixtymile River. The units are part of the Arctic Alaska terrane. All of these units were subsequently metamorphosed to greenschist and amphibolite facies during the Jurassic through Cretaceous Brooks Range orogeny (Dillon and others, 1980).

The Ann Group (map no. 17), located 3.5 miles east of Ernie Lake, contains stringer, disseminated, and massive sulfides. Samples were collected from a galena-sphalerite-rich pod which was positioned between a graphitic schist and a sericite-talc schist. A 5.5 foot-wide continuous chip sample (11020) across the entire pod contained 2478 ppb gold, 2.64 oz/ton silver, 3.34% lead, and 4.31% zinc. Approximately 500 feet downstream, an outcrop containing minor pyrite and barite was also observed.

The Buzz prospect (map no. 18) lies approximately 2,300 feet upslope and northwest of the Ann Group. Two galena-sphalerite-rich exposures were sampled. One of the outcrops was a massive sulfide lense exposed on the face of a marble bluff. A 4.4 foot-wide continuous chip sample (11043) contained 2337 ppb gold, 5.73 oz/ton silver, 7.23% lead, and 22.69% zinc. The other exposure measured 8 feet by 9 feet and was within a chlorite-sericite schist interbed of the same marble unit. A representative chip sample (11044) contained 2435 ppb gold, 2.20 oz/ton silver, 3.93% lead, and 4.70% zinc. The gold values of the two samples from the Buzz prospect were the highest of all massive sulfide samples in the district and warrant further investigation.

The ABO prospect (map nos. 19-20) is located in the northeastern headwaters of Mettenpherg Creek, south of Sixtymile Creek. The bedrock consists of the Hunt Fork Shale and the underlying Skajit Limestone. The limestone contains dolomitic zones and quartz veining along with disseminated sphalerite and galena. A select float sample (map no. 19) contained 1.80% lead, 22.41% zinc, and 77 ppb gold. Sphalerite was also observed in a trench which exposes a silicious dolomite-marble contact. A 1.2 foot-wide continuous chip sample (map no. 20) contained 12.92% zinc and 0.34% lead.

The presence of pods of massive galena, sphalerite, pyrite, and chalcopyrite along with adjacent barite occurrences indicates the Ann Group and Buzz prospects are possibly volcanogenic in origin. The original rocks and associated base metals may have been remobilized during metamorphism (WGM, 1977, pp 11). Others believe the sulfides to be associated with polymetallic veins (Nokleberg and others, 1987).

**John River**

The John River, which flows south from the crest of the Brooks Range, bisects the Arctic Alaska and the Angayucham terranes. Placer and lode prospects are confined to the Arctic Alaska terrane, which lies at the southern boundary of the Wiseman quadrangle.

Sampling was conducted at several tributaries of the John River reported to contain placer gold: McKinley, Rock, Sixtymile, McCamant, Crevice, and Bullrun Creeks. Evidence of mining was observed at McCamant, Bullrun, and Crevice Creeks. A pan concentrate sample from Bullrun Creek (map no. 24) contained >10000 ppb gold. A pan concentrate from Crevice Creek (map no. 27) contained 27.12 ppm gold. Finally, a pan concentrate from McKinley Creek (map no. 29) contained 625 ppb gold.

Two unnamed copper occurrences (map nos. 37-38) lie along a marble-schist contact, very similar to that found at upper Sheep Creek (see page 20). A select sample of brecciated Skajit limestone float (map no. 37) contained 585 ppm copper and 1744 ppm lead. A select sample (map no. 38, sample 10884) of the underlying chlorite-quartz schist contained 23 ppb gold and 1664 ppm copper. The mineralization is podiform in nature.

**Wild Lake**

The bedrock surrounding Wild Lake (Figure 6) is predominantly Devonian Skajit Limestone and underlying silicious clastic rocks (phyllite and schist). Greenstone-greenschist-metabasite occur on Mathews Dome and at Sentinel Rock (Chipp, 1972). The units are part of the Arctic Alaska terrane. Placer mining has been concentrated on the east side of the lake at Surprise, Spring, and Lake Creeks.

Old boom dams, stacked rocks, and cabin remains occur along a two-mile stretch of Surprise Creek, a northeast tributary of Wild Lake. However, most mine workings are concentrated along a 500-foot stretch of creek about 0.5 miles above the stream mouth. Miners removed barren overburden, exposing gold-bearing gravel in the lower few feet of material lying on quartz-chlorite-schist bedrock. The canyon is narrow with steep walls, and gold-bearing gravel appears to be mostly mined out.

Numerous test pans taken from gravel lying bedrock along Surprise Creek contained no visible gold, but laboratory analysis showed several to be anomalous in gold. One pan concentrate sample (Figure 6, map no. 56) contained 3889 ppb gold. A pan concentrate (Figure 6, map no. 53, sample 11038) collected from an east tributary to Surprise Creek contained 64 ppb gold, but the stream was not investigated. At the same site, a piece of malachite-stained chlorite-quartz-schist (11036) contained 861 ppm copper. A piece of limonite-stained quartz-carbonate float from the stream bed (Figure 6, map no. 55) contained 163 ppb gold and 867 ppm strontium. Limonite-stained quartz veins in schist on the ridge north of Surprise Creek (Figure 6, map nos. 46-50) were sampled, but contained no significant metal values.

Spring Creek has been extensively mined in a manner similar to nearby Surprise Creek as evidenced by stacked rocks and cabin remains. No visible gold was observed in six pan concentrate samples taken along a 1.2 mile stretch of the creek (Figure 6, map nos. 58-63), but laboratory analysis showed all to be anomalous in gold - averaging 1260 ppb. On nearby Surprise Creek pan concentrates contained lower gold values. For this reason Spring Creek warrants further investigation for possible lode gold sources.

Lake Creek has the longest mining history of the streams in the area, operating intermittently from about 1904 into the 1990s. A mining operation was active near the creek mouth on the southeast shore of the lake in 1996, but there has been no activity since. Mining appears to have been concentrated in two areas: a narrow stretch of creek 1.5 miles up from the mouth of Lake Creek and on the lower creek just above where it breaks out onto an alluvial fan.

Sluice concentrates from the lower mine site contain up to 5930 ppb platinum (Figure 6, map no. 73,

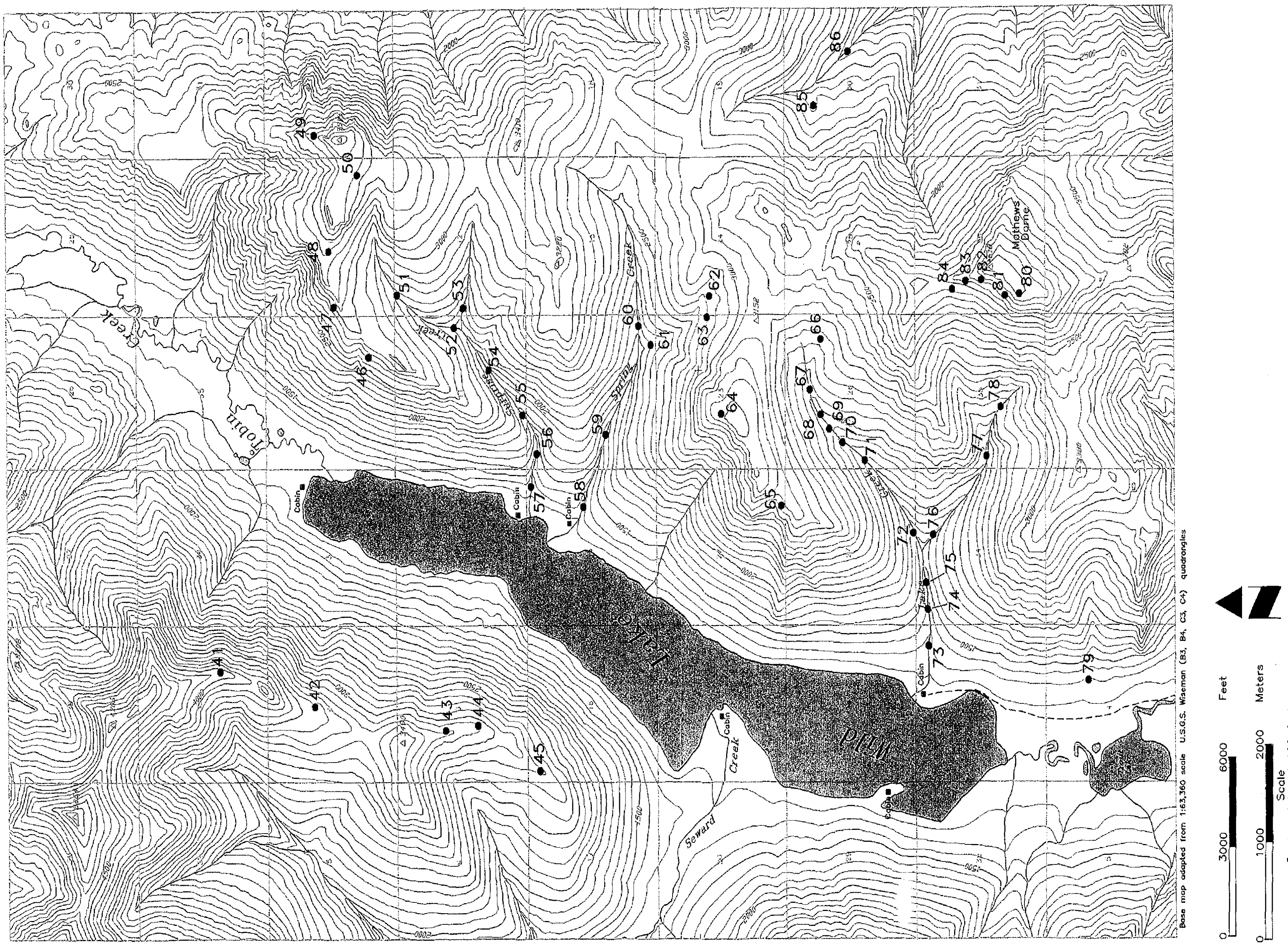



Figure 6. -- Sample location map of the Wild Lake area, Koyukuk mining district, Alaska.

sample 10781), 976 ppm tungsten (Figure 6, map no. 74, sample 8055), 0.44% bismuth and 1750 ppm arsenic (Figure 6, map no. 73, sample 10762). Pan concentrate samples collected along a 1.3 mile stretch of the creek were all anomalous with the highest containing 3043 ppb gold (Figure 6, map no. 67); however, no visible gold was observed. Bedrock is composed mostly of muscovite-chlorite-schist containing varying amounts of carbonate. Numerous quartz lenses and veinlets which cut the schist bedrock are of three types: **1)** lenses of metamorphic quartz which lie parallel to cleavage, **2)** narrow quartz veinlets that run parallel to schistosity, and **3)** quartz-carbonate veinlets which crosscut the other two types. Quartz float was found to contain disseminated pyrite, chalcopyrite, and what is either tetrahedrite or tennantite (Figure 6, map no. 68). Samples collected from the veins and the schist bedrock did not contain anomalous precious metal values. A 300 foot-wide greenstone schist dike reported by Reed (1938, p. 123) to cross the creek was not located.

A pan sample (Figure 6, map no. 79) collected from an eastern tributary to the Wild River, south of Wild Lake, contained 4267 ppb gold. The location is below Sentinel Rock, a reported greenschist-greenstone contact (Chipp, 1972), and warrants additional investigation.

Isolated quartz-stibnite veins anomalous in gold have been documented by previous studies (Chipp, 1972; Dillon, Lamal, Huber, 1989). Minor copper mineralization has also been documented at a few, isolated occurrences. North of Matthews Dome, malachite staining and minor tetrahedrite(?) occur in a calc-schist and in a crosscutting, vertical quartz vein. A 3 foot-wide continuous chip sample of the calc-schist (Figure 6, map no. 83, sample 11017) yielded 8631 ppm copper. At the same site, a select sample of a crosscutting quartz vein (11016) contained 4003 ppm copper, 62 ppb gold.

**Wild River and Tributaries**

Flat Creek is a large eastern tributary of the Wild River. The mapped bedrock units of the area are predominantly Devonian Hunt Fork Shale and Skajit Limestone. Two active placer operations exist on tributaries of Flat Creek - at Birch and Rye Creeks. On Birch Creek, an eastern tributary of Flat Creek, a tourist-oriented mine has been operating for the past few years. A mechanized operation was active on Jay Creek, a northern tributary of Rye Creek.

Gold was discovered on Birch Creek in 1904 and mining activities produced $1800 in the first year (Reed, 1938). Subsequent drift mining was done, though the results are not known. The current placer operations at Birch Creek are directed towards tourists. Operators remove stream gravels down to bedrock with dozers. They are followed by paying customers who use gold detectors, pans, sluices, or dredges to find gold. Several coarse nuggets weighing up to 10.75 oz have been found at the site. A rubblecrop sample of quartz mica schist (map no. 88) collected on a ridge north of Birch Creek contained 35 ppb gold and 1767 ppm arsenic; however, no lode gold sources in the area have been documented.

Rye Creek and its tributary, Jay Creek, have been mined since 1912. Production has included sluicing and drifting operations, producing $35,000 worth of gold by 1938 (Reed, 1938). The bedrock at Rye Creek is predominantly limestone with calc-schist and chlorite schist. At the headwaters, the schistose units are dominant. A pan concentrate sample collected from Jay Creek (map no. 99, sample 10887) contained >10,000 ppb gold. Samples of greenschist (map no. 95, sample 10850) and greenstone (map no. 99, sample 10857) were collected, but no significant anomalies were noted. A representative chip sample of a quartz vein with pyrite and chalcopyrite (map no. 95, sample 10851) that contained 21 ppb gold and 82 ppm arsenic.

Galena Creek is an eastern tributary of Wild River, named for a piece of galena found in its bed by early prospectors. The steep gradient deterred early prospectors; however, it heads into a reportedly highly mineralized zone - formerly called Galena Mountain (Reed, 1938). A select float sample of vein quartz with galena, chalcopyrite, pyrrhotite, arsenopyrite contained 1545 ppm lead and 670 ppm zinc (map no. 103). Stream sediment and pan concentrate samples from the same site contained 165 ppm and 122 ppm zinc, respectively.

Approximately 2.5 miles upstream from the mouth of Michigan Creek is the Silver King Mine, from which there has been no recorded production. A caved adit and two cabin-tent sites are still visible. Mineralization consists of quartz veins containing galena, chalcopyrite, silver, lead, and gold (Schrader, 1904, pp. 105; Berg and Cobb, 1967; Nokleberg and others, 1987). No quartz was found in outcrop, but samples from limonite-stained quartz boulders in the creek 300 feet upstream from the adit contained up to 2.63 oz/ton silver, 4.35% lead, and 118 ppm antimony (map no. 104, sample 8009). Quartz veins cutting the southern canyon wall about 0.5 miles upstream from the Silver King Mine site were observed from the air, but not examined.

**Mascot Creek**

Mascot Creek (Figure 7) proved to be one of the most profitable placer streams in the Koyukuk as the gold lay on bedrock with only a thin cover of overburden, ranging from a few inches to 3 feet thick (Maddren, 1913, pp. 108-09; Reed, 1938, pp. 82-87). Bedrock consists of quartz-mica schist, graphitic schist, phyllite, siliceous mudstone, and schistose quartzite. Boulders of greenstone agglomerate(?) and granitic rock were occasionally observed. The creek, which was last mined on a large scale in the early 1980s, is essentially worked out except for a few small, though potentially high-grade pockets. These pockets are mostly buried under colluvium resulting from the numerous slumps that have occurred along the steep unstable canyon walls. In 1997 a recent cut was examined which had exposed bedrock through 5-6 feet of overburden on the west side of the creek. A placer sample taken from a six-inch thick zone consisting of clay-rich colluvium and underlying tan-weathering muscovite schist in the bottom of the cut contained 1.08 oz/cyd gold (Figure 7, map no. 130). The gold is both rounded and angular and some pieces have limonite or manganese oxide coatings. The site contained only a few yards of this rich material which on a return trip in 1998 was found to be mined out.

There is evidence of considerable prospecting with hand tools for similar occurrences along both sides of Mascot Creek. Most of this prospecting is concentrated along a 0.5 mile stretch about 3 miles upstream from the mouth of Mascot Creek. These sites do not contain enough pay to interest a large operator, but could be profitable for mining at a small scale using mostly hand methods. In most cases a minimum of 5-6 feet of overburden has to be removed to get to the pay layer.

Pan concentrate samples were taken from the major side streams flowing into Mascot Creek and analyzed for gold. The highest value (425 ppm gold) was from No. 1 Pup (Figure 7, map no. 129). A value of 7364 ppb gold was obtained from a western tributary near the stream's headwaters (Figure 7, map no. 125). A value of 3831 ppb gold was obtained from Knorr Creek (Figure 7, map no. 139). Minor galena was found in massive quartz and associated with quartz fillings in brecciated mudstone at the mouth of Discovery Pup (Figure 7, map no. 131, sample 10673). Galena was also noted in a medium grained granitic stream cobble (Figure 7, map no. 133) collected 0.5 miles downstream from this site contained 2315 ppm lead. This rock type was not observed in place along the creek. Micaceous quartzite float located in the stream bottom adjacent to an abandoned mining camp 2.5 miles above the mouth of Mascot Creek contained pyrite and

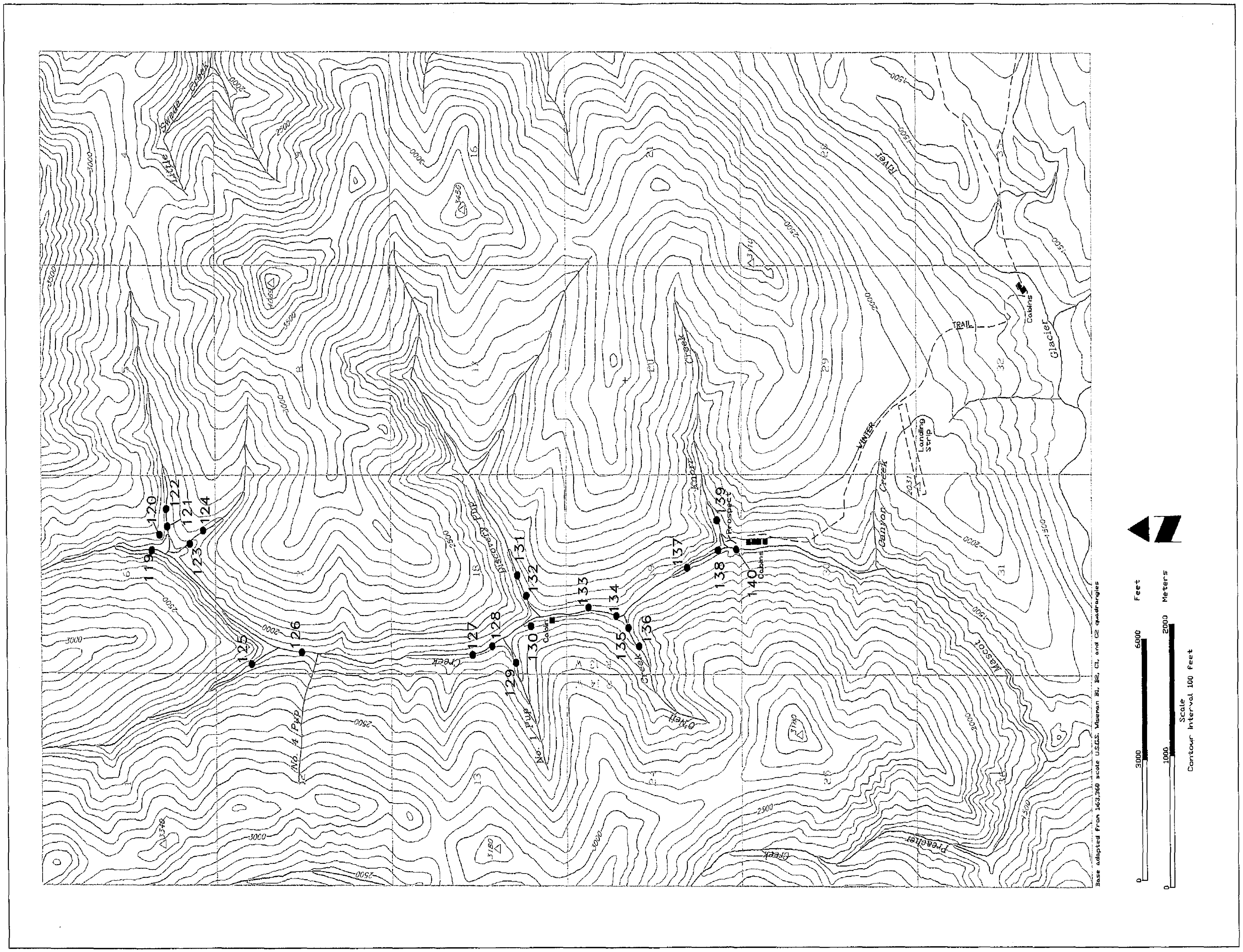


Figure 7. -- Sample location map of the Mascot Creek area, Koyukuk mining district, Alaska.

arsenopyrite in bands up to four millimeters wide. Samples contained up to 3130 ppm arsenic and 32 ppb gold (Figure 7, map no. 140, sample 8018). The source of the quartzite was not located.

**Nolan Creek--Hammond River**

The majority of the placer gold produced in the Koyukuk district has been mined in the Nolan Creek-Hammond River area (Figure 8). Bedrock in the area consists of phyllite and schist with minor amounts of greenstone. The metasedimentary rocks contain concentrations of euhedral pyrite in layers which are probably formed during the lithification of the sediments. Additionally the metasediments contain lenses of metamorphic quartz and are crosscut by two generations of gold-bearing quartz veinlets (Maddren, 1913; Reed, 1938; Brosge and Reiser, 1972; Proffett,1982; Driscoll, 1987).

In an effort to determine possible bedrock sources of gold, sampling was done of the veinlets and the pyrite-bearing bedrock throughout the area. The highest value obtained from bedrock was 73 ppb gold in a pyrite-bearing micaceous schist (Figure 8, map no. 160, sample 11175) on the Right Fork of Vermont Creek. A sample of pyrite-bearing chloritic schist in Thompson Pup (Figure 8, map no. 208, sample 11214) contained 65 ppb gold. Both samples were collected from bedrock in creek bottoms that had been mined, introducing the possibility of contamination by placer gold. A sample of pyrite-bearing phyllite (Figure 8, map no. 163) which makes up the bedrock crosscut by gold-bearing quartz veinlets near Friday the 13$^{th}$ Pup contained 38 ppb gold. Excluding samples possibly contaminated by placer gold, values for the pyrite-bearing schist and phyllite averaged 12 ppb gold. The average crustal abundance of gold is between 4 and 5 ppb (Levinson, 1974, p. 43).

Pyrite cubes in placer concentrates from the Nolan Creek-Hammond River area (Figure 8, map no. 177, sample 10674) were cleaned and analyzed for gold. The highest value obtained was 79 ppb gold (10675) from the Nolan Creek area. Arsenopyrite crystals from concentrates obtained in Thompson Pup were also analyzed and contained 1964 ppb gold (Figure 8, map no. 216, 10676). These results indicate that arsenopyrite contains more gold than the pyrite; however, the possibility of contamination exists due to association by the sulfides with placer gold in the concentrates.

Anomalous lode gold values are concentrated in two different sets of veins. Stibnite-bearing quartz veins near the mouth of Smith Creek (Figure 8, map nos. 178-184) are anomalous in gold. The veinlets average less than 1 inch wide, commonly extend for only a few feet along strike, and can occur in parallel sets a few feet apart. The average veinlet orientation is N. 55° E. with near-vertical dip. The veinlets are best exposed on the north side of Smith Creek near its mouth where placer mining has uncovered bedrock. Thirteen samples of stibnite-bearing veinlets from that area averaged 2.9 ppm gold. The highest value obtained was 12.2 ppm gold (Figure 8, map no. 178, sample 10747). Samples contained up to 66.4% antimony (Figure 8, map no. 180) and 5772 ppm arsenic (Figure 8, map no. 184, sample 11165). Veins up to 6 inches wide and exposed for 100 feet along strike have been reported in the Smith Creek area. About 6 tons of hand-picked antimony ore was mined from these veins in 1942 (Joestring, 1943; Ebbley and Wright, 1948).

Another concentration of gold-bearing quartz veinlets occurs along the Right Fork of Vermont Creek with the majority concentrated near Friday the 13$^{th}$ Pup (Figure 8, map nos. 162-167) (Figure 9). The veinlets appear to fill a fracture set which cuts phyllite. The veinlets average 0.5 inches wide with a general orientation of N. 60° W. and an average dip of 75° SW. The veinlets are randomly spaced across bedrock bluff faces exposed a short distance south of Friday the 13$^{th}$ Pup. A 100 foot-wide exposure of phyllite in

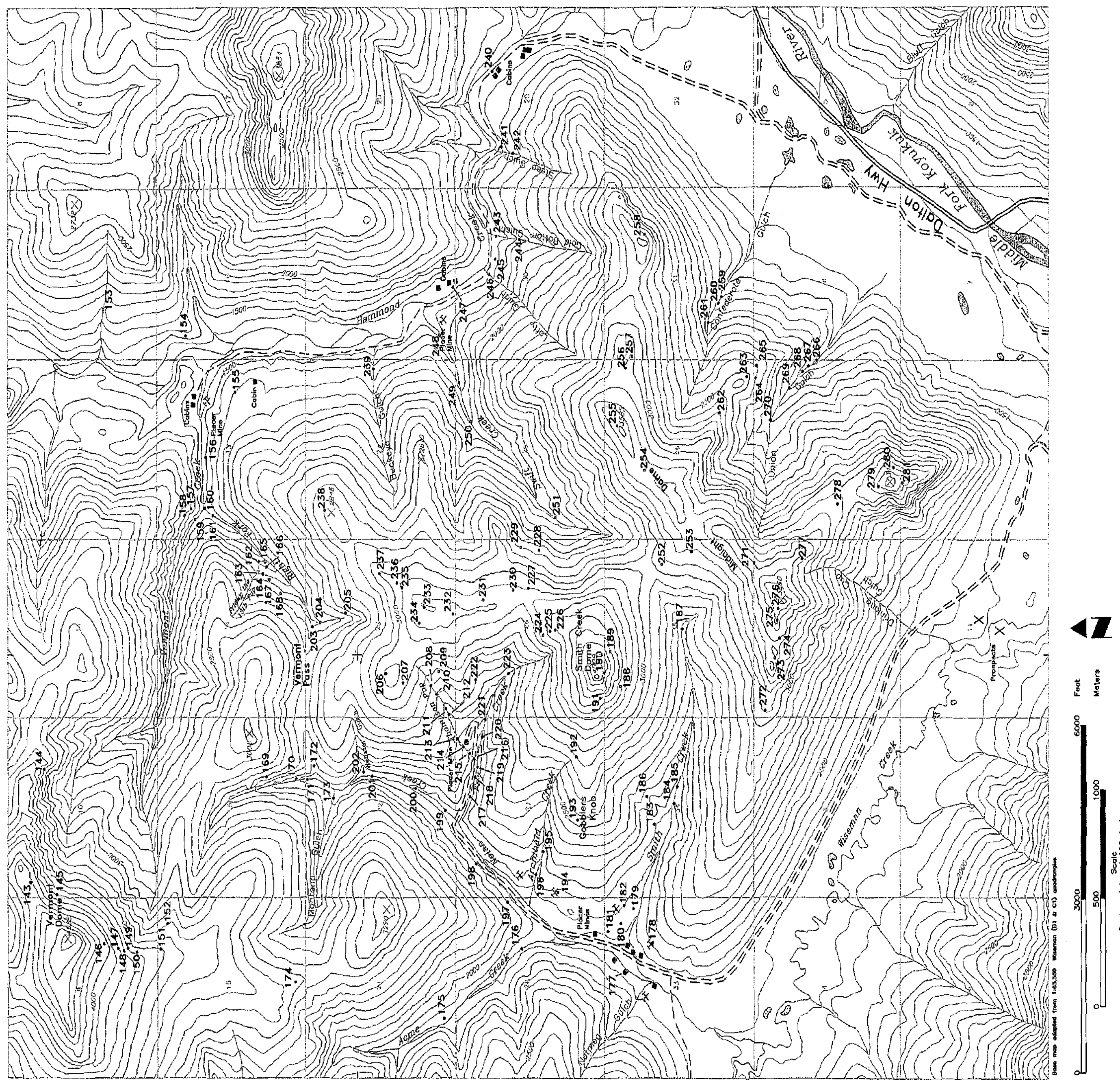



Figure 8. -- Sample location map of the Nolan Creek and Hammond River area, Koyukuk mining district, Alaska

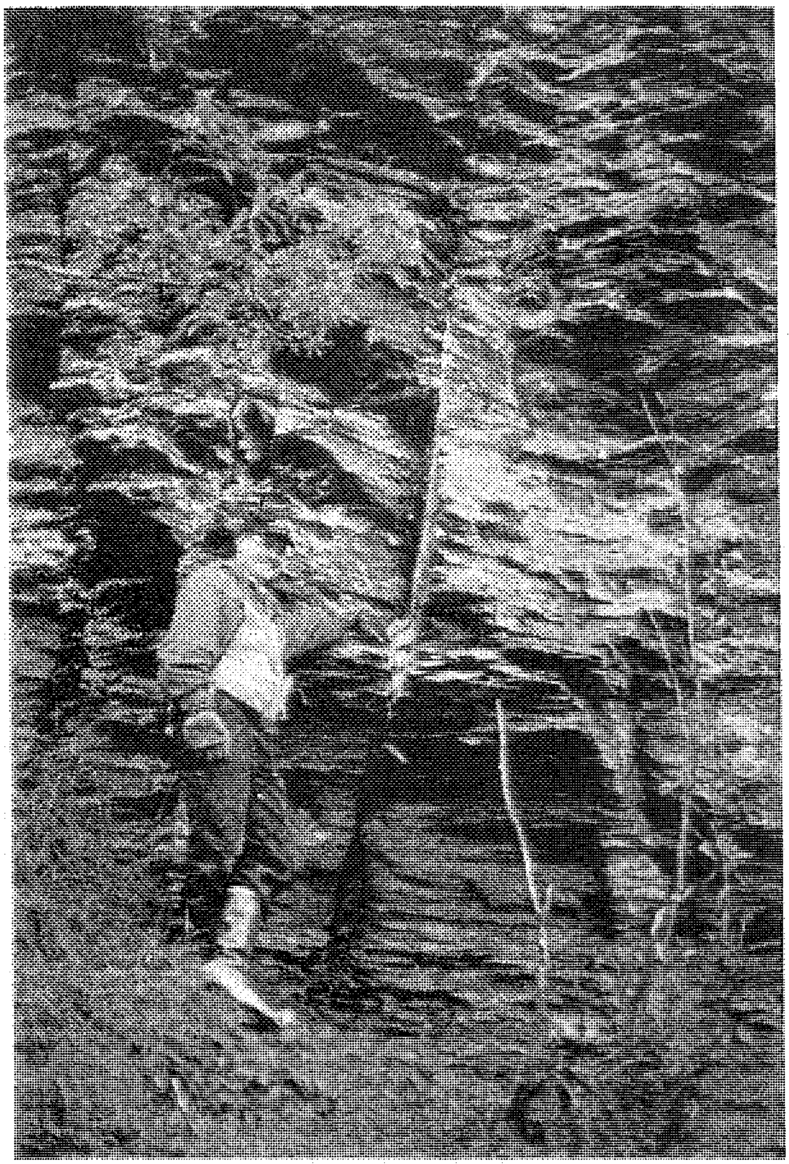


**Figure 9** Gold-bearing quartz veinlets in phyllite on Vermont Creek. Samples of the veinlets contained up to 63.6 ppm gold.

this area contained 18 quartz veinlets. Samples from individual veinlets contain up to 63.6 ppm gold (map no. 164, sample 10730). Visible gold was observed in one veinlet, a sample from which contained 17.8 ppm gold (Figure 8, map no. 167, sample 11266). A composite sample from three veinlets (Figure 8, map no. 164, sample 10727) contained 1.8 ppm gold. The veinlets also contain 1-2% pyrite along with trace arsenopyrite and stibnite. Samples averaged 260 ppm arsenic and 160 ppm antimony. When compared to the Smith Creek veinlets, these veinlets contain higher gold values, have a northwest as opposed to a northeast orientation, and contain only minor amounts of antimony and arsenic. Differences in composition and orientation would indicate separate sources and emplacement history for the veins.

Through a cooperative effort with Silverado Gold Mines Inc. in 1998, the BLM supported a geology graduate student (Karsten Eden) who mapped the geology of the Nolan-Hammond River area and is working to develop emplacement models for the veins. The results of this work will be completed as a thesis in fulfillment of a master's degree in economic geology from the Technical University of Clausthal in Germany.

A geochemical survey consisting of pan concentrate and stream sediment samples was carried out to delineate areas in the Nolan Creek-Hammond River vicinity that might be anomalous in gold. Pan concentrates proved the best indicator of gold and were relied on for interpretation. Excluding sites where mining had previously taken place, anomalies concentrated in two areas. The first occurs on the northeast and southeast flanks of Midnight Dome. In this area, Lofty (Figure 8, map no. 246), Gold Bottom (Figure 8, map no. 244), Steep (Figure 8, map no. 242), and upper Union Gulches (Figure 8, map no. 270) are all anomalous in gold. The highest value (13.3 ppm) was obtained from Lofty Gulch. The upper portions of these drainages have not been mined as they are narrow, have steep gradients, and contain only small amounts of potentially gold-bearing gravel. A select sample of a quartz vein on the ridge above Gold Bottom Gulch (Figure 8, map no. 258) contained 810 ppb gold.

A second area which drains the west and east flanks of hill 3008 between upper Nolan Creek and the Right Fork of Vermont Creek was also anomalous in gold. A pan concentrate from Friday the 13th Pup (Figure 8, map no. 165) contained 1750 ppb gold. This pup drains an area where previously-mentioned gold-bearing quartz veinlets occur. A sample from upper Vermont Creek (Figure 8, map no. 159) contained 398 ppb gold. A sample from upper Nolan Creek (Figure 8, map no. 171) contained 15 ppm gold. The rocks underlying hill 3008 may contain a high concentration of gold-bearing quartz veinlets or there may be gold-bearing bench gravels on the hill. The erosion of either source could be producing the fine gold in the creeks.

An investigation was made of gold-bearing gravel terraces on the east side of the Hammond River above Vermont Creek (Figure 10). The terraces are the remnants of an ancestral flood plain created by the Hammond River when it flowed at a base level 300-400 feet higher than at present. Such a rise in base level may have resulted from damming of the Hammond River valley by glacial ice advancing down the Middle Fork of the Koyukuk River.

Samples were collected from the south wall of a gully dissecting a terrace and exposing a 90 foot thickness of gravel resting on phyllite bedrock. A placer sample (Figure 8, map no. 153, sample 11277) collected from shallow pits at approximately 20 foot intervals up the gully wall contained 0.0008 oz/cyd gold. Another placer sample (11278) collected from a single pit 150 feet upstream and on the same side of the gully contained a high percentage of colluvial material and no weighable gold. A third placer sample (11279) made up of gravel and underlying bedrock contained 0.006 oz/cyd gold. The gold in the samples

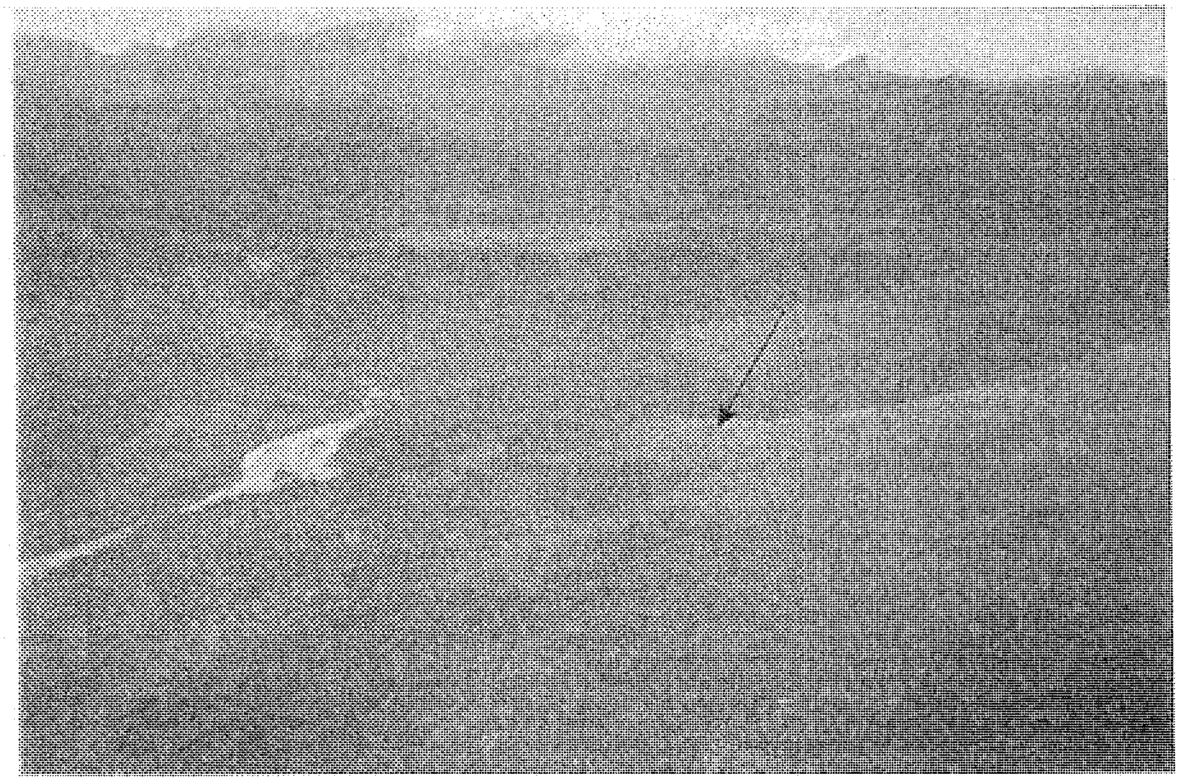


**Figure 10** Looking north at gold-bearing terrace gravels on east side of the Hammond River above Vermont Creek. Placer samples from one site contained up to 0.006 oz/cyd gold.

was mostly bright and nuggety in character. These results indicate that gold occurs throughout the gravel, but that the highest values are concentrated on bedrock. More sampling is warranted and should focus on bedrock and the gravel lying just above it.

As part of an effort to verify reports that gold has been panned from the soils on Smith Creek Dome, a 0.03 cubic yard sample of soil was collected from the west slope of the dome (Figure 8, map no. 193). It was concentrated using a processing plant that had been previously used to run gold-bearing samples from drilling projects in the area. Analysis showed the final concentrate to contain 388 ppm gold. To verify the first sample, a 0.02 cubic yard sample (Figure 8, map no. 192) was collected 1800 feet to the east and processed through a BLM sluice box. It contained no visible gold or black sand and analysis showed it to contain 2.3 ppm gold. The latter value is considerably less than the first sample, but still considered to be significant. It is suspected that the test plant used for the first sample may have been contaminated with gold from previous tests. It is recommended that additional large soil samples should be collected in the area for further confirmation.

### Bettles River and Robert Creek

Bettles River and Robert Creek lie at the headwaters of the Middle Fork Koyukuk River. The Skajit Limestone is the predominant bedrock unit and is intruded by a Devonian granitic pluton. Porphyry, skarn, and massive sulfide prospects occur along a northeastern trend called the Chandalar Copper Belt (Figure 11). Placer gold has been mined on several tributaries.

The Luna prospect lies near the headwaters of Robert Creek. Massive sulfides are reportedly hosted in quartz-sericite schist, calcareous-quartz-(sericite) schist (WGM, 1979d), and calc-silicate rocks (WGM, 1983). Three select float samples (map no. 291) were anomalous in gold, copper, and zinc. The highest values were obtained from a select float sample of quartz-sericite schist (10700) containing 1129 ppb gold, 98.4 ppm silver, 10.2% copper, and 8447 ppm zinc.

The genesis of the massive sulfides at Luna is a source of debate. Nicholson (1990) cites the presence of strataform massive sulfide layers, high sulfur isotopic ratios, and the spatial association between stringer mineralization, chloritic, and silicic alteration as evidence of volcanogenic massive sulfide style mineralization. The Luna prospect most likely represents one or more of the following: **1**) original volcanogenic massive sulfide; **2**) skarn-altered metavolcanic rocks and volcanogenic massive sulfide; or **3**) skarn-altered calcareous and metasedimentary rocks (Central Alaska Gold Co., 1992).

The Ginger prospect (map nos. 294-297) lies 3.5 miles southwest of Luna and contains small, isolated skarn outcrops. A select sample (map no. 296, sample 8041) measuring 2 feet by 6 feet contained 548 ppb gold and 3.61% copper. A calc-silicate rock (map no. 294, sample 11251) collected adjacent to a sericite schist consisted of 1201 ppb gold and 2.8% copper. There are numerous outcrops of sericite schists; however, no sulfide mineralization is associated with this unit at Ginger. A diabase sill containing disseminated pyrrhotite is exposed for 50 feet along strike. The sill was injected within two marble beds and truncated by a vertical fault. A random chip sample (map no 295, sample 11048) contains 5.16% iron and is magnetic. Correlation of this unit to adjacent aero-magnetic anomalies is currently being investigated.

The Evelyn Lee (map nos. 298-299) prospect is located on an eastern tributary of Big Spruce Creek. The prospect is a discontinuous skarn which encircles a hill. On the north side, a representative sample from a

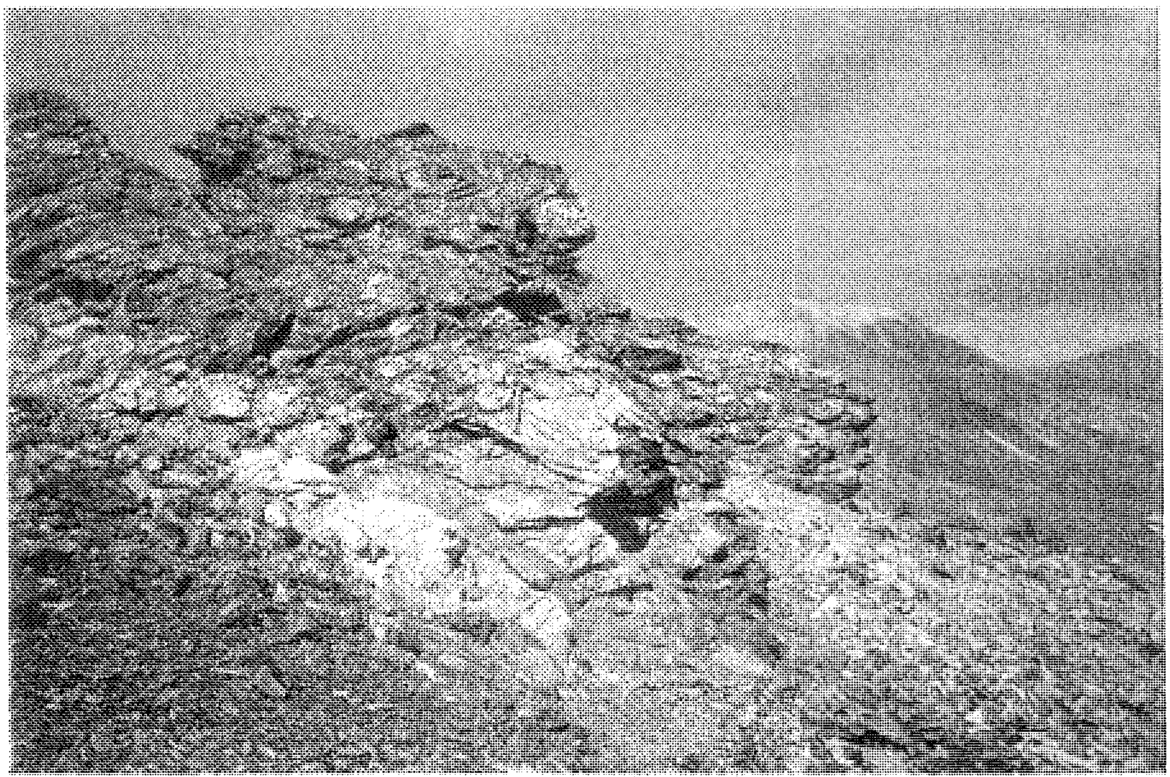


**Figure 11** Copper skarn outcrop in the Big Spruce Creek area.

trench (map no. 298, sample 11107) contained 7.0% copper and 82 ppb gold. Surficial copper staining is prolific on the southwest side of the hill; however, much of it has leached from small, mineralized pods and precipitated onto barren marble due to pH changes. A select sample of skarn rock collected from a fault surface (map no. 299, sample 11046) contained 1896 ppb gold and 3.5% copper.

Samples were collected from skarn on the ridge between Mathews River and Big Spruce Creek near Peak 4737 (map nos. 301-302). There were six 1-foot-wide sulfide-rich pods concentrated within a 150- by 30-foot skarn exposure. A 1.0 foot-wide continuous chip sample (map no. 302, sample 11186) of a quartz-epidote-garnet skarn pod contained 321 ppb gold and 1.22% copper.

The Venus prospect (map nos. 302-310) is located on Big Spruce Creek, approximately 6 miles east of Wiehl Mountain. A granite porphyry with disseminated pyrite and chalcopyrite outcrops on both sides of the creek (and unnamed tributary) for approximately 1 mile. A grab sample of the granite (map no. 308, sample 11180) contained 14 ppb gold and 1382 ppm copper.

Several skarns and massive sulfides adjacent to the granite outcrops were sampled. At Peak 5274, upslope from Venus, a select rubblecrop sample (map no. 305, sample 8030) of a skarn contained 1020 ppb gold, 7.76% copper, 555 ppm arsenic. Skarn outcrops and boulders containing massive magnetite, pyrite, chalcopyrite, and pyrrhotite are also found on the unnamed tributary at Venus. A random chip sample of a massive sulfide skarn outcrop (map no. 308, sample 11181) contained 39 ppb gold, 0.17% copper, and 32.14% iron.

Samples of skarn exceeding 1000 ppb gold were found at Venus, Evelyn Lee, Ginger, and Luna prospects. Unfortunately, the auriferous skarns do not have identifiable common characteristics. There is no consistent antimony or arsenic anomalies or mineral associations correlated with the auriferous samples. All four samples did contain elevated amounts of copper - ranging from 2.8% to 10.2%.

Historically, placer operations have operated on Bettles River, Robert Creek, and many of the tributaries. Reconnaissance samples were collected on Emery, Garnet, Eightmile, Limestone, Mule, and Phoebe Creeks. Evidence of previous placer mining operations was visible on all creeks. Visible gold was found in an concentrate samples at Sheep Creek (map no. 311), Bettles River (map no. 318), and Mule Creek (map no. 321); however, the gold was limited to a few very fine grains.

**Sukakpak Mountain**

On the south side of Sukakpak Mountain (map nos. 329-330) stibnite and gold-bearing quartz veins are concentrated along the faulted contact between Devonian and Silurian(?) limestone, and Ordovician to Cambrian(?) schist and quartzite. The largest vein is up to 4 feet wide and extends 380 feet along a N. 56° E. trend. Eleven samples collected at varying intervals along the strike length by previous investigators averaged 15.6 ppm gold and 19.0% antimony (Dillon, 1982; Huber, 1988; Dillon and Reifenstuhl, 1995). Vein width at the sample sites is unknown. Two continuous chip samples (map no. 329, samples 11049 and 11111) averaged 15.4 ppm gold across an average 2.8 foot vein width. Select samples of massive stibnite float contained up to 47.3 ppm gold (11112). The site is within the inner Pipeline Corridor and withdrawn from mineral entry. Northwest-trending faults which form a graben on Wiehl Mountain, 4.5 miles east of Sukakpak Mountain are reported to contain stibnite-bearing quartz veinlets (Huber, 1988, p. 31). An aerial reconnaissance was made of the area, but no obvious quartz veining was spotted. Nonetheless a ground traverse is recommended along the ridge running south from the summit of the

### Bob Johnson (Big) Lake

Four sites in the Bob Johnson Lake (Big Lake on some maps) area reported to contain placer gold were examined. Lake Creek (map nos. 344-345) at the northwest end of the lake contained the highest gold values. A placer sample (map no. 345, sample 11270) taken from 6 inches of gravel and 4 inches of underlying bedrock contained 0.067 oz/cyd gold. At this site an approximately 500-foot-long stretch of the creek has been mined extensively with hydraulic and hand methods. It is estimated that only about 5 cubic yards of gravel similar to that from which the sample was collected remain. Bedrock consists mainly of muscovite-chlorite-quartz-schist with interlayered black, pyrite-bearing phyllite. Samples of the phyllite (map no. 345, sample 11269) contained up to 9 ppb gold and 37 ppm arsenic. A pan concentrate sample from Holy Moses Creek (map no. 346) on the southwest side of the lake contained 193 ppb gold. Samples from Shamrock and Billy Glenn Creeks were not anomalous in gold.

### Middle Fork Koyukuk River - Coldfoot Area

The Middle Fork Koyukuk River bisects several geologic terranes of the Brooks Range. The portion south of Twelvemile and Cathedral Mountains consists of the Angayucham terrane. The Angayucham fault system trends east-west and provides a 3 mile wide transition zone between the Angayucham terrane and the Arctic Alaska terrane, which makes up most of the Brooks Range.

Sampling along the Middle Fork consisted mostly of reconnaissance placer investigations along prominent Middle Fork tributaries. Visible gold was found on 7 of 11 tributaries visited. A pan concentrate sample from Minnie Creek (map no. 355, sample 11292) contained 6899 ppb gold. At Marion Creek (map no. 361), a placer sample contained 0.006 oz/cyd of gold. A pan concentrate sample at tributary to Clara Creek (map no. 365) contained 199 ppm gold. At Myrtle Creek, a pan concentrate sample (map no. 366) collected three miles upstream of the mouth contained 9790 ppb gold. A pan sample collected from bedrock on Porcupine Creek (map no. 367, sample 11324) contained 27 ppm gold. Pan concentrate samples at Rosie (map no. 368) and Twelvemile (map no. 369) Creeks produced 2668 ppb and 171 ppm gold, respectively.

Iron sulfides, most often in the form of disseminated pyrite and pyrrhotite, were found in select rock samples on several Middle Fork tributaries (Minnie, Marion, Myrtle, and Porcupine Creeks). At Myrtle Creek, a float sample of biotite quartz schist with approximately 20% euhedral pyrite contained 23 ppb gold (map no. 366, sample 11313). Also, a select outcrop sample of quartz mica schist with approximately 10% euhedral pyrite from Porcupine Creek contained 33 ppb gold (map no. 367, sample 11322).

### Tramway Bar Coal

Upper Cretaceous sediments in the upper reaches of the Koyukuk basin contain isolated exposures of coal. This coal was historically used on a limited basis by local miners for blacksmithing purposes. Two exposures located on the west side of the Middle Fork of the Koyukuk River upriver from Tramway Bar were sampled during the present study (map nos. 370-371) (Schrader, 1900, p. 485; Collier, 1903, pp. 48-49; Rao, 1980).

At a site 2.3 miles above Tramway Bar (map no. 370) and on the west side of the river an 11.2 foot-thick coal-bearing section interbedded with sandstone is exposed for about 500 feet along strike and dips 30° into the river bluff. The lower 7.1 feet of the bed is lignitic coal and the upper 4.1 feet is bituminous coal with clay partings up to 0.3 feet thick. The bituminous portion of the bed was sampled and analyzed. An "as received" analysis showed the coal showed it to have the following: 7.11% moisture content, 26.86% ash, 30.02% volatiles, 36.01% fixed carbon, 0.21% sulfur, and 8460 Btu/lb.

At a second site 1.5 miles above Tramway Bar (map no. 371) and on the same side of the river, two vertical bituminous coal-bearing beds 6.0 and 10.8 feet thick, separated by 3.5 feet of clay were sampled. The averaged "as received" results of the two samples are the following: 10% moisture content, 27.99% ash, 27.57% volatiles, 34.45% fixed carbon, 0.23% sulfur, and 7823 Btu/lb.

When averaged, the analytical results from the two sites indicate an "apparent" ranking of 11,570. According to the American Society for Testing and Materials specification (ASTM-D-388-66), the Tramway Bar coal is bituminous in quality. The low sulfur content is typical of Alaskan coals, but the high ash content places it in the unclean category.

**South Fork Koyukuk River**

The South Fork Koyukuk River bisects the Ruby and Angayucham terranes. The Ruby terrane is comprised of Proterozoic to lower Paleozoic continentally associated metasedimentary rocks and protoliths. The Angayucham terrane is derived from oceanic crust and contains diabase, pillow basalt, chert, and graywacke. Mid-Cretaceous granitic plutons and batholiths intrude both terranes, providing an upper time limit for the thrusting of the Angayucham over the Ruby (Dillon, 1989).

The area contains numerous placer prospects and a tungsten-bearing skarn prospect. Reconnaissance stream sediment and pan concentrate samples were collected on Bonanza Creek, Prospect Creek, Douglas Creek, and Jim River. The Bonanza Creek tungsten skarn was also investigated.

Placer gold was found in broken bedrock in the Jim River canyon (map no. 376) and in gravel four miles upstream of the canyon (map no. 375). The two pan concentrate samples revealed visible fine gold and contained 1231 ppb and 1590 ppb gold, respectively. Bedrock at the canyon site consisted of interlayered chert and serpentized greenstone, locally containing pillows. A malachite-stained piece of greenstone(?) float was found in the riverbed nearby. A placer sample collected at the upstream location yielded only 0.0003 oz/cyd gold. It is suspected the anomalies represent fine or 'flood gold' associated with the Jim River pluton which outcrops north of the canyon for approximately 20 miles. Because of its proximity to the Haul Road, the Jim River warrants further investigation as a potential recreational panning area.

The skarn prospect is located in the southern headwaters of Bonanza Creek (map no. 379). Tungsten anomalies were first detected in 1976 during a regional geochemical stream sediment sampling program conducted by B.P. Alaska Exploration Inc. (Clautice, 1987). The prospect is immediately north of the Kanuti Pluton, where lower Paleozoic (and older?) metasediments contact a granitic pluton of varied texture. The metasediments contain pelitic and calcareous schists, minor greenstone, and isolated marble pods. The marble pods occur as discontinuous beds and pods up to 50 feet thick and 200 feet long (Clautice, 1987).

A series of trenches were located on the southeast side of a small knob (Windy Knoll) on the north side of Bonanza Creek. The trenches expose dark green pyroxene skarn rubblecrop across a 1400 foot distance. The skarn was locally limonite-stained and contained coarse scheelite grains up to 1/8-inch in size, up to 10% pyrrhotite, and trace chalcopyrite. A select sample (10987) contained 1.44% tungsten, 1438 ppm zinc, and 12 ppb gold. Exposures of the skarn are poor, but indicate that the extent of the mineralization is limited.

**Lake Todatonten**

A mineral resource investigation was made of the Lake Todatonten area (Figure 12) prior to its addition to the Kanuti Wildlife Refuge and subsequent withdrawal from mineral entry. The terrain surrounding the lake consists of low, tree and tundra-covered hills with the only rock exposures being occasional float on the ridgetops. The area is underlain by sedimentary rocks, consisting of Late Cretaceous interbedded graywacke and mudstone of unknown orientation and thickness. Stream sediment and pan concentrate samples were collected from drainages surrounding the lake where silt and gravel could be obtained. In addition traverses were made along ridgetops and rock and soil samples collected where obtainable through the lichen cover. One pan concentrate collected from a stream on the southeast side of the lake (Figure 12, map no. 401, sample 10556) was anomalous in gold (397 ppb). A resample of the same stream gave a value of only 5 ppb gold (10946). The rest of the samples collected were not anomalous in any metals. These results indicate that the area has low mineral resource potential. In December, 1998 a public land order (PLO 7372) was issued which created a Special Management Area (SMA) of a 37,359-acre parcel of land surrounding Lake Todatonten, withdrawing it from mineral entry.

**Indian River**

The headwaters of the Indian River lie just outside the Koyukuk mining district boundary. However the area was investigated as it contains known mineral occurrences and geology similar to that within the district. Igneous rocks near the headwaters of the Indian River consist of Late Cretaceous granodiorite and quartz monzonite and late Jurassic to early Cretaceous andesitic volcanics. The intrusive rocks make up the Indian Mountain pluton which intrudes late Early Cretaceous graywacke and mudstone. The sedimentary rocks are locally metamorphosed along intrusive contacts to resistant dark-brown hornfels (Patton and Miller, 1966). The hornfels contains up to 1 - 2% finely-disseminated pyrite with concentrations highest where felsic dikes related to the pluton intrude the hornfels. The hornfels contain brecciated zones cemented by quartz and is also cut by quartz veinlets. In both cases the quartz contains minor chalcopyrite. Both Indian River and Utopia Creek drain the intrusive-sediment contact and have been extensively mined for placer gold. Small areas of fractured hornfels bedrock and a clay-rich layer lying on top of it near the headwaters of Black Creek (Figure 13) still contain significant amounts of gold. Placer samples taken from the fractured hornfels bedrock to a 6 inch depth contained up to 0.84 oz/cyd gold, 813 ppm arsenic, and >2000 ppm tungsten (Figure 13, map no. 444, samples 10589 and 10638). Individual gold flakes weighing up to 0.01 oz were recovered. A sample of the clay-rich layer and associated colluvium on the right limit of Black Creek contained 0.061 oz/cyd gold (10590). These resources are not large, but could prove economic for a small operator using mostly hand methods.

Rocks at the headwaters of Black Creek were examined to determine possible lode sources for the placer gold. This drainage is small in extent, confining the area where a potential lode gold source might occur (Figure 14). The upper portion of the creek contains interbedded graywacke and mudstone which have been hornfelsed near the intrusive contact. These rocks are locally cut by quartz veinlets and brecciated with quartz cementing the fragments. Some veinlets cut entirely across all previous breccia textures

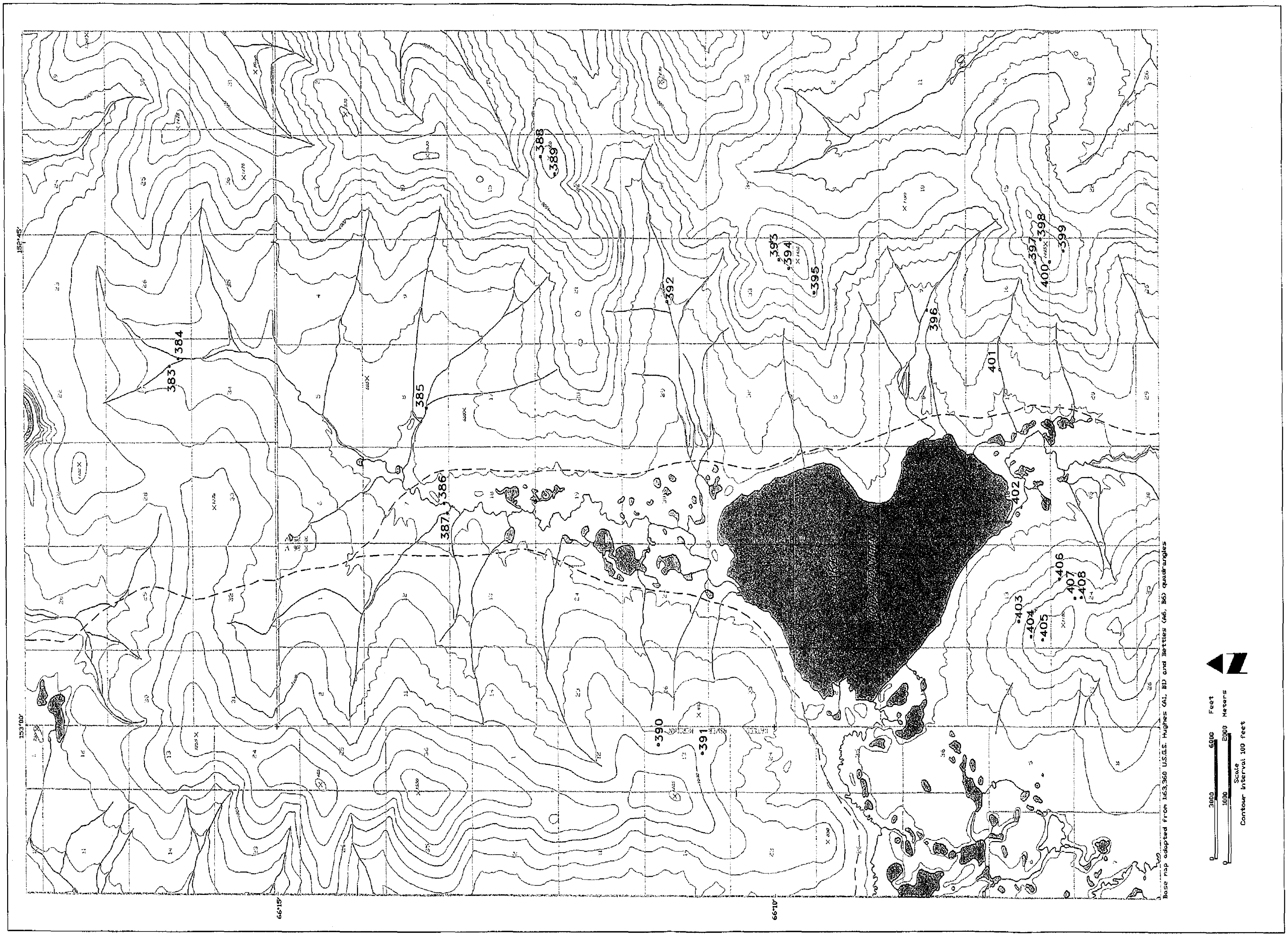



Figure 12. -- Sample location map of the Lake Todatonten area, Koyukuk mining district, Alaska.

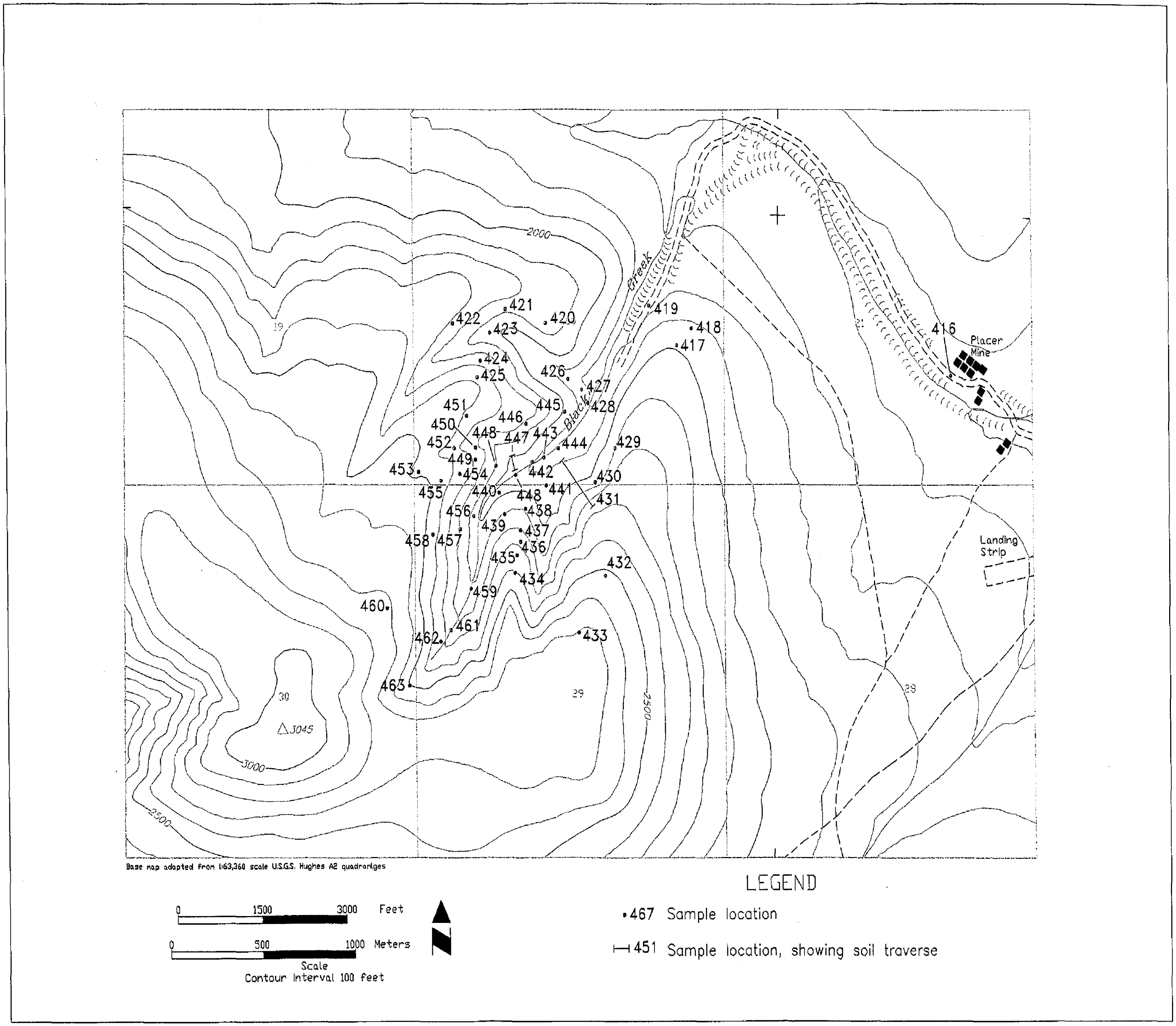



Figure 13. -- Sample location map of the Black Creek area, Koyukuk mining district, Alaska.

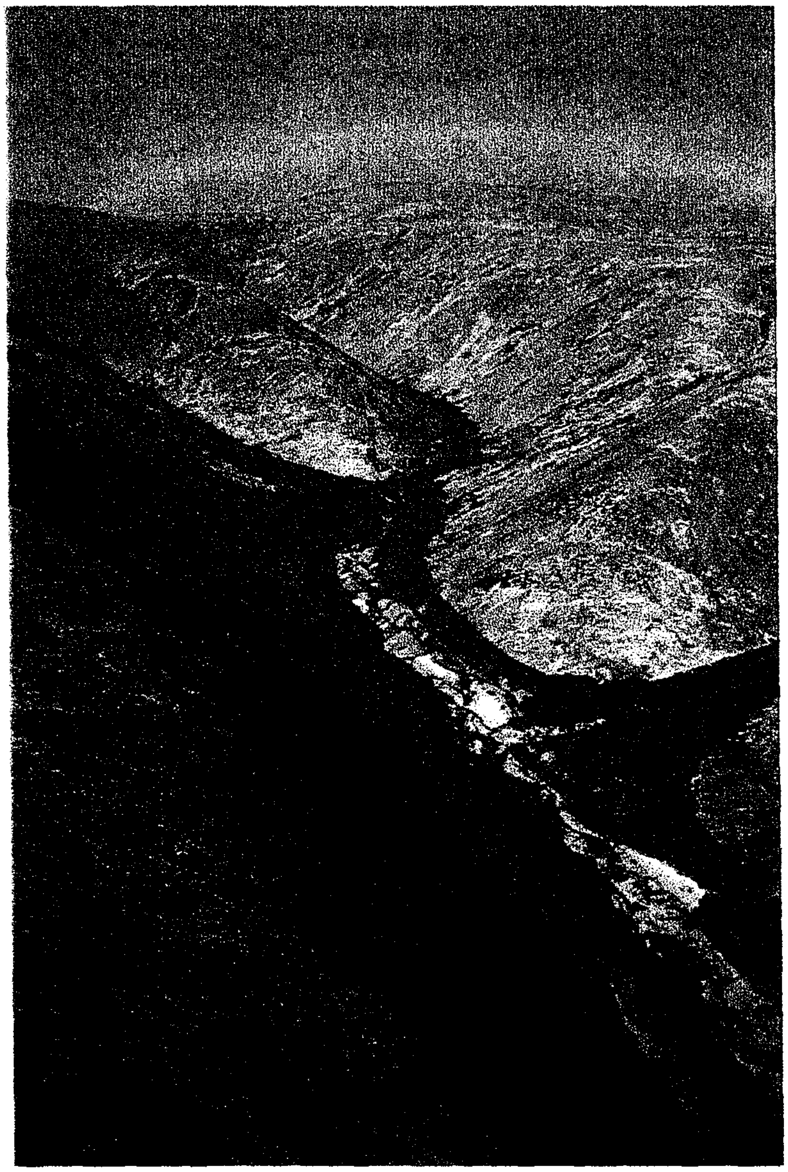


**Figure 14** Placer tailings in Black Creek near Indian Mountain. Placer samples from near the forks just above the photo center contained up to 0.84 oz/cyd gold.

indicating more that one period of fracturing. This entire sequence of rocks is cut by a series of northwest-trending faults.

Roughly east-west oriented felsic dikes and a single exposure of what appears to be porphyritic andesite(?) intrude the sediments and hornfels. The hornfels and graywacke contain 1-2% disseminated and stringer pyrrhotite and minor arsenopyrite with the highest concentrations of sulfides indicated by limonite-stained colluvium. Sulfide concentrations are apparently highest near felsic dikes. Minor chalcopyrite occurs as both disseminations and in quartz veinlets. Samples of sulfide-bearing graywacke and graywacke breccia contained up to 611 ppb gold and 3912 ppm copper (Figure 13, map no. 432), 2676 ppm arsenic (Figure 13, map no. 453), and 473 ppm bismuth (Figure 13, map no. 419). Samples of the andesite contained up to 57 ppb gold (Figure 13, map no. 457, sample 10596). Samples of the felsite contained up to 42 ppb gold (Figure 13, map no. 451, sample 10964).

Soil samples were collected at 100-foot intervals for 900 feet up the colluvial slopes on the east side (Figure 13, map no. 431) and 300 feet up the west side (Figure 13, map no. 447) of Black Creek. The highest value obtained was 323 ppb gold from a sample collected on the east side of the creek just above the stream bottom (Figure 13, map no. 431, sample 10972). Pan concentrates were collected from the various branches of the upper part of the creek. The highest value obtained was 36 ppb gold (Figure 13, map no. 426) taken from the farthest side drainage to the west. Extensive hornfels and wide distribution of sulfides along with the presence of felsite dikes indicate that the intrusive-sediment contact may be shallow in this area, dipping at low angle to the south. The rocks at the headwaters of Black Creek could represent a possible cupola overlying an intrusive body.

Investigations were made at a site west of the Indian River (map no. 468) where previous sampling had resulted in anomalous gold values (Miller and Ferrians, 1968, p. 5). A float sample of sulfide-bearing silicified vuggy metarhyolite(?) collected from the site of an old mining road along the west side of Indian River contained 8.3 ppm gold and 11.5 ppm silver (10633). The sample contained disseminated pyrite and a gray metallic mineral which due to the silver and copper content of the rock is possibly tetrahedrite. Anomalous lead and zinc values indicate the presence of galena and sphalerite, but they were not observed. More limonite-stained rocks which occur just east of the site sampled have yet to be investigated.

Intense limonite staining forms a conspicuous 50- by 100-foot color anomaly on the east side of the Indian River 4.5 miles south of Indian Mountain (map no. 469). Float at the site is composed of hydrothermally-altered andesite(?) that has been silicified as represented by numerous quartz veinlets. The rock contains 2-3% pyrite and abundant boxworks and gossaneous textures indicate that the original sulfide content was probably much higher. Samples of quartz-rich float contain up to 593 ppb gold, 21.6 ppm silver, and 692 ppm copper (10511).

## SUMMARY

As of 1998 the BLM has examined 175 documented mineral occurrences in an ongoing mineral assessment of the Koyukuk mining district. Significant results from the first two years of study include the delineation of anomalous gold values within volcanic and hornfelsed rocks on the upper Indian River, widespread fine placer gold along Jim River, anomalous placer gold in bench gravels above the Hammond River near Vermont Creek, gold-bearing stibnite-quartz veins on the right fork of Vermont Creek and Smith Creek, and gold anomalies in skarn and massive sulfides north of Bettles River.

Two more field seasons are planned to complete the assessment which includes examination of the remaining 232 documented mineral occurrences, followup of anomalous geochemical samples, and anomalies resulting from an airborne geophysical survey done in the northeast portion of the district. A mine costing study will also be done using the various deposit types occurring in the district as models.

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## APPENDIX A - Analytical Procedures

All samples were analyzed by Intertek Testing Services[1] of Vancouver, Canada. Pan concentrate and rock samples were dried and pulverized to minus 150 mesh. Stream sediment and soil samples were dried and sieved through to minus 80 mesh.

Gold was analyzed by a pre-concentration fire assay followed by either an atomic absorption (AA) finish or an induction couple plasma (ICP) atomic emission spectroscopy finish. Platinum and palladium were also analyzed by a pre-concentration fire assay followed by an ICP finish. The detection limits for gold, platinum, and palladium are illustrated on Table 1.

All other elements (except mercury) were digested in a (3:1) $HCl-HNO_3$ solution. Once in solution, the elements were measured by ICP atomic emission spectroscopy. The analysis for mercury was accomplished with (3:1) $HCl-HNO_3$ digestion followed by cold vapor measurement. The minimum detection for mercury is 0.010 ppm. The minimum detection for the other elements tested are detailed on Table 2.

Concentrations of gold and silver which exceeded the upper detection limit (>10,000 and >500 ppb, respectively) for the AA finish were re-analyzed by fire assay gravimetric methods. Elevated concentrations of antimony, barium, bismuth, copper, iron, lead, and zinc were re-analyzed by multi acid digestion followed by atomic absorption. Finally, a peroxide sinter preparation and ICP method were used for tungsten anomalies. The detection limits (and methods) for these special re-runs are listed in Table 3.

In 1994, 56 samples were collected during a brief visit to the Koyukuk mining district. They were analyzed by different analytical methods than the 1997-1998 samples. The methods and detection limits for the 1994 samples are presented in Table 4.

[1] Mention of Intertek Testing Services does not signify BLM endorsement.

**Table 1.** Standard Fire Assay Analysis for Gold, Platinum, and Palladium

| Element | Element | Minimum Detection | Finish Method |
|---|---|---|---|
| Au | gold | 5 ppb | atomic absorption |
| | gold | 1 ppb | ICP |
| Pt | platinum | 5 ppb | ICP |
| Pd | palladium | 1 ppb | ICP |

**Table 2.** Minimum Detections for ICP - Atomic Emission Analyses (Standard Run)

| Element | Element | Minimum Detection | Element | Element | Minimum Detection |
|---|---|---|---|---|---|
| Ag | silver | 0.2 ppm | Mo | molybdenum | 1 ppm |
| Al | aluminum | 0.01 % | Na | sodium | 0.01 % |
| As | arsenic | 5 ppm | Nb | niobium | 1 ppm |
| Ba | barium | 1 ppm | Ni | nickel | 1 ppm |
| Bi | bismuth | 5 ppm | Pb | lead | 2 ppm |
| Ca | calcium | 0.01 % | Sb | antimony | 5 ppm |
| Cd | cadmium | 0.2 ppm | Sc | scandium | 5 ppm |
| Co | cobalt | 1 ppm | Sn | tin | 20 ppm |
| Cr | chromium | 1 ppm | Sr | strontium | 1 ppm |
| Cu | copper | 1 ppm | Ta | tantalum | 10 ppm |
| Fe | iron | 0.01 % | Te | tellurium | 10 ppm |
| Ga | gallium | 2 ppm | Ti | titanium | 0.01 % |
| K | potassium | 0.01 % | V | vanadium | 1 ppm |
| La | lanthanum | 1 ppm | W | tungsten | 20 ppm |
| Li | lithium | 1 ppm | Y | yttrium | 1 ppm |
| Mg | magnesium | 0.01 % | Zn | zinc | 1 ppm |
| Mn | manganese | 1 ppm | Zr | zirconium | 1 ppm |

**Table 3.** Methods and Minimum Detections for Ore Grade Runs

| Element | Element | Method | Minimum Detection |
|---|---|---|---|
| Ag | silver | fire assay, gravimetric finish | 0.7 ppm |
| Au | gold | fire assay, gravimetric finish | 0.17 ppm |
| Bi | bismuth | atomic absorption low level assay | 0.005 % |
| Ba | barium | atomic absorption | 0.01 % |
| Cu | copper | atomic absorption low level assay | 0.01 % |
| Fe | iron | atomic absorption low level assay | 0.01 % |
| Pb | lead | atomic absorption low level assay | 0.01 % |
| Sb | antimony | atomic absorption low level assay | 0.01 % |
| W | tungsten | ICP - peroxide sinter extraction | 0.01 % |
| Zn | zinc | atomic absorption low level assay | 0.01 % |

**Table 4.** Analytical Methods and Detection Limits by Element for 1994 Samples

| Element | Element | Analytical Method | Minimum Detection |
|---|---|---|---|
| Au | gold | neutron activation | 5 ppb |
| | gold | fineness | 0.10 ppt |
| Pt | platinum | fire assay - DCP | 5 ppb |
| Pd | palladium | fire assay - DCP | 1 ppb |
| Ag | silver | neutron activation | 5 ppm |
| | silver (ore grade) | fire assay | 0.02 oz/ton |
| Cu | copper (ore grade) | atomic absorption | 0.01 % |
| Pb | lead (ore grade) | atomic absorption | 0.01 % |
| Zn | zinc | neutron activation | 200 ppm |
| Mo | molybdenum | neutron activation | 2 ppm |
| Ni | nickel | neutron activation | 20 ppm |
| Co | cobalt | neutron activation | 10 ppm |

**Table 4 (cont.)** Analytical Methods and Detection Limits by Element for 1994 Samples

| Element | Element | Analytical Method | Minimum Detection |
|---|---|---|---|
| Cd | cadmium | neutron activation | 10 ppm |
| As | arsenic | neutron activation | 1 ppm |
| Sb | antimony | neutron activation | 0.2 ppm |
| | antimony (ore grade) | atomic absorption | 0.01 % |
| Hg | mercury | cold vapor AA | 0.010 ppm |
| Fe | iron | neutron activation | 0.5 % |
| Te | tellurium | neutron activation | 20 ppm |
| Ba | barium | neutron activation | 100 ppm |
| Cr | chromium | neutron activation | 50 ppm |
| Sn | tin | neutron activation | 200 ppm |
| W | tungsten | neutron activation | 2 ppm |
| La | lanthanum | neutron activation | 5 ppm |
| Na | sodium | neutron activation | 0.05 % |
| Sc | scandium | neutron activation | 0.5 ppm |
| Ta | tantalum | neutron activation | 1 ppm |
| Zr | zirconium | neutron activation | 500 ppm |

**Sample Site**

| | |
|---|---|
| core | drill core |
| drum | 55 gallon drum |
| flt | float |
| otc | outcrop |
| rub | rubblecrop |
| tail | mine tailings |
| trn | trench |

**Sample Type**

| | |
|---|---|
| cont | continuous chip |
| grab | grab sample |
| pan | pan sample |
| plac | placer sample |
| rand | random chip |
| rep | representative chip |
| sed | sediment sample |
| sel | select |
| slu | sluice concentrate |
| soil | soil sample |
| spac | spaced chip |

**Placer gold: size classification**

| | |
|---|---|
| v. fine | < 0.5 mm |
| fine | 0.5 - 1.0 mm |
| coarse | 1 -2 mm |
| v. coarse | > 2 mm |

**Footnotes:**

Bold numbers indicate multiple erratic results, which were averaged.
IS denotes insufficient sample volume for analysis of all elements.
Results for Au are reported in ppb unless other units are stated.

**Sample Description**

| | |
|---|---|
| abu | abundant |
| Ag | silver |
| alt | altered, alteration |
| amph | amphibole |
| ank | ankerite |
| apy | arsenopyrite |
| Au | gold |
| az | azurite |
| ba | barite |
| bio | biotite |
| blk | black |
| bn | bornite |
| box | boxworks |
| brn | brown |
| ca | calcite |
| calc | calcareous |
| carb | carbonate |
| cc | chalcocite |
| cgl | conglomerate |
| ch | chlorite |
| comp | composite |
| con | concentrate |
| cont | continuous |
| cpy | chalcopyrite |
| cst | cassiterite |
| Cu | copper |
| cv | covellite |
| diss | disseminated |
| ep | epidote |
| feld | feldspar |
| ft | foot (12 inches) |
| gar | garnet |
| gn | galena |
| gwy | graywacke |
| hbl | hornblende |
| hem | hematite |
| hfls | hornfels |
| Hg | mercury |
| hydro | hydrothermal |
| in | inch |
| intr | intrusive |

**Sample Description**

| | |
|---|---|
| lim | limonite |
| ls | limestone |
| lt | light |
| mag | magnetite |
| mal | malachite |
| mdst | mudstone |
| meta | metamorphic |
| MnO | manganese oxide |
| Mo | molybdenum |
| mod | moderate |
| monz | monzonite |
| musc | muscovite |
| oz/cyd | ounces per cubic yard |
| oz/st | ounces per short ton |
| po | pyrrhotite |
| ppb | parts per billion |
| ppm | parts per million |
| psuedo | psuedomorph |
| py | pyrite |
| qtz | quartzite |
| qz | quartz |
| sch | scheelite |
| sco | scorodite |
| sed | sediment |
| ser | sericite |
| serp | serpentinized |
| sid | siderite |
| sl | sphalerite |
| slts | siltstone |
| ss | sandstone |
| stb | stibnite |
| tet | tetrahedrite |
| tm | tourmaline |
| tr | trace |
| v | very |
| val | valentinite |
| volc | volcanic |
| w/ | with |
| xcut | crosscutting |
| xln | crystalline |
| xls | crystals |

**Elements**

| | |
|---|---|
| Ag | silver |
| Al | aluminum |
| As | arsenic |
| Au | gold |
| Ba | barium |
| Bi | bismuth |
| Ca | calcium |
| Cd | cadmium |
| Co | cobalt |
| Cr | chromium |
| Cu | copper |
| Fe | iron |
| Ga | gallium |
| Hg | mercury |
| K | potassium |
| La | lanthanum |
| Li | lithium |
| Mg | magnesium |
| Mn | manganese |
| Mo | molybdenum |
| Na | sodium |
| Nb | niobium |
| Ni | nickel |
| Pb | lead |
| Pd | palladium |
| Pt | platinum |
| Sb | antimony |
| Sc | scandium |
| Sn | tin |
| Sr | strontium |
| Ta | tantalum |
| Te | tellurium |
| Ti | titanium |
| V | vanadium |
| W | tungsten |
| Y | yttrium |
| Zn | zinc |
| Zr | zirconium |

## Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8051 | Kuyuktuvuk Ck | flt | grab | felsic volc-qz vein? w/ py, mal, lim | <5 | | | <5 | | | <200 | 3 | <20 | <10 | <10 | | 8 |
| 2 | 8052 | Trembley Ck | rub | grab | carbonaceous paper shale | <5 | | | <5 | | | <200 | <2 | 48 | 14 | <10 | | 72 |
| 3 | 8053 | Big Jim Ck | rub | grab | qz vein w/ lim | <5 | | | <5 | | | <200 | 2 | <20 | <10 | <10 | | 5 |
| 3 | 8054 | Big Jim Ck | otc | sel | qz vein w/ < 1% cpy, tr gn | <5 | | | <5 | 0.36% | | <200 | 6 | <20 | <10 | <10 | | 4 |
| 4 | 10808 | Allen River | | sed | | <5 | | | <0.2 | 47 | 29 | 130 | <1 | 51 | 21 | <0.2 | <5 | 7 |
| 4 | 10809 | Allen River | | pan | one fine Au (?), no mag | 18 | <5 | <1 | <0.2 | 65 | 48 | 137 | <1 | 52 | 20 | 0.4 | <5 | 9 |
| 5 | 10810 | Allen River | | pan | | 24 | <5 | <1 | <0.2 | 120 | 49 | 127 | <1 | 56 | 20 | <0.2 | <5 | 8 |
| 5 | 10811 | Allen River | | pan | | 18 | <5 | <1 | <0.2 | 70 | 28 | 132 | <1 | 56 | 19 | 0.3 | <5 | 7 |
| 6 | 10776 | John River trib. | | sed | | 8 | | | <0.2 | 52 | 16 | 143 | <1 | 46 | 18 | <0.2 | <5 | 7 |
| 6 | 10777 | John River trib. | | pan | tr py, no mag, no visible Au | 18 | <5 | <1 | <0.2 | 85 | 44 | 184 | <1 | 49 | 19 | 0.4 | <5 | 9 |
| 6 | 10778 | John River trib. | flt | sel | massive qz w/ tr gn and cpy | <5 | | | <0.2 | 19 | 59 | 34 | 2 | 15 | 4 | <0.2 | <5 | <5 |
| 7 | 10779 | Hunt Fork John River | flt | sel | phyllite w/ tr cpy | <5 | | | <0.2 | 26 | 16 | 26 | <1 | 12 | 4 | 0.4 | <5 | <5 |
| 8 | 8012 | Lucky Six Ck | flt | grab | qz-carb vein w/ tet, mal, az | <75 | | | 43 | | | <1100 | <18 | <110 | <10 | <88 | | 672 |
| 9 | 8013 | Lucky Six Ck | flt | grab | vein qz w/ graphitic partings, mal | 6 | | | 8 | | | <200 | 12 | 49 | 23 | <10 | | 3 |
| 10 | 10832 | Arrigetch Peaks | flt | sel | skarn w/ massive sulfides, greissen | <5 | | | <0.2 | 163 | 36 | 32 | <1 | 17 | <1 | <0.2 | <5 | <5 |
| 10 | 10833 | Arrigetch Peaks | flt | sel | skarn w/ massive sulfides, greissen | 8 | | | <0.2 | 195 | 2 | 43 | <1 | 14 | 13 | <0.2 | <5 | <5 |
| 10 | 10834 | Arrigetch Peaks | flt | sel | banded schist w/ py, tm (?) | <5 | | | <0.2 | 30 | 5 | 38 | <1 | 13 | 7 | <0.2 | <5 | <5 |
| 10 | 10835 | Arrigetch Peaks | flt | sel | skarn w/ cpy py, lim | 8 | | | 0.6 | 3874 | 15 | 59 | <1 | 29 | 115 | <0.2 | <5 | 17 |
| 11 | 10827 | Arrigetch Peaks | flt | sel | skarn w/ abu mag, tr mal | <5 | | | 0.3 | 904 | 8 | 1674 | <1 | 3 | 3 | 3.5 | <5 | 7 |
| 11 | 10828 | Arrigetch Peaks | flt | sel | skarn w/ py and cpy, ep, hbl | <5 | | | <0.2 | 174 | 3 | 229 | <1 | 34 | 11 | 0.5 | <5 | 10 |
| 11 | 10829 | Arrigetch Peaks | flt | sel | skarn w/ massive py, cpy, po | 44 | | | <0.2 | 3042 | 19 | 75 | <1 | 115 | 269 | <0.2 | <5 | 8 |
| 11 | 10830 | Arrigetch Peaks | otc | sel | skarn w/ abu mag, mod mal | <5 | | | <0.2 | 66 | 33 | 280 | <1 | 4 | 6 | 0.4 | 36 | 12 |
| 12 | 10780 | Arrigetch Peaks | otc | cont | 4.5 ft-wide skarn w/ >20% mag, tr mal | <5 | | | <0.2 | 3 | 15 | 233 | <1 | 1 | 4 | <0.2 | 11 | 15 |
| 12 | 10861 | Arrigetch Peaks | otc | cont | 4.0 ft-wide skarn w/ massive mag, mal | 10 | | | <0.2 | 29 | 7 | 219 | <1 | 2 | 3 | <0.2 | 88 | 25 |
| 12 | 10862 | Arrigetch Peaks | rub | ran | gar ep skarn w/ 5% mag | 30 | | | <0.2 | 13 | 6 | 183 | <1 | 5 | 4 | <0.2 | 34 | 16 |
| 13 | 10863 | Arrigetch Peaks | rub | ran | mag rich skarn w/ minor py | 14 | | | 0.9 | 1142 | 17. | 7782 | <1 | <1 | <1 | 33.0 | 79 | 238 |
| 13 | 10864 | Arrigetch Peaks | otc | sel | qz vein w/ massive sulfides locally | 60 | | | 2.4 | 4492 | 74 | 262 | <1 | <1 | 8 | <0.2 | 859 | >10000 |
| 14 | 10898 | Helpmejack Mn | rub | sel | greenstone w/ <1% po, lim | <1 | | | <0.2 | 119 | <2 | 60 | 2 | 40 | 24 | <0.2 | <5 | <5 |
| 15 | 10899 | Helpmejack Ck | | sed | | 2 | | | <0.2 | 16 | 7 | 73 | <1 | 26 | 11 | 0.2 | <5 | 6 |
| 15 | 10900 | Helpmejack Ck | | pan | | 54 | <5 | <1 | <0.2 | 19 | 7 | 76 | 4 | 29 | 13 | <0.2 | <5 | 10 |
| 15 | 10934 | Helpmejack Ck | otc | grab | greenstone w/ no sulfides | <1 | | | <0.2 | 26 | 3 | 103 | 2 | 10 | 4 | <0.2 | <5 | <5 |
| 16 | 10935 | Rockybottom Ck | | plac | 6 v fine, flat Au flakes | 0.0003 oz/cyd | <5 | 4 | <0.2 | 40 | 4 | 69 | <1 | 35 | 16 | <0.2 | <5 | 9 |
| 17 | 11020 | Ann Group | otc | cont | 5.5 ft-wide schist w/ >20% gn and sl | 2478 | | | 2.64 oz/ton | 250 | 3.34% | 4.31% | 3 | 6 | 3 | <492.9 | <5 | >10000 |
| 17 | 11028 | Ann Group | otc | sel | pelitic schist w/ gn, sl, py, cpy | 1438 | | | 8.23 oz/ton | 773 | 11.24% | 6.11% | 2 | 2 | <1 | <657.1 | 7 | >10000 |
| 18 | 11043 | Buzz | otc | cont | 4.4 ft-wide marble w/ >20% gn, sl, py | 2337 | | | 5.73 oz/ton | 1509 | 7.23% | 22.69% | 4 | 4 | 2 | 1008.1 | 274 | 6480 |
| 18 | 11044 | Buzz | trn | rep | 9 ft-wide exposure w/ 25% gn, 25% sl | 2435 | | | 2.20 oz/ton | 1451 | 3.93% | 4.70% | 4 | 7 | 3 | <358.9 | 23 | >10000 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8051 | 15.0 | | 1.7 | | <20 | 1400 | 290 | | <200 | <2 | 13 | | | | 0.13 | | | | | | | 2.3 | <1 | | <500 |
| 2 | 8052 | 8.2 | | 3.9 | | <20 | 580 | 160 | | <200 | 3 | 36 | | | | 0.15 | | | | | | | 19.0 | <1 | | <500 |
| 3 | 8053 | 12.0 | | 1.0 | | <20 | <100 | 320 | | <200 | <2 | <5 | | | | <0.05 | | | | | | | 1.7 | <1 | | <500 |
| 3 | 8054 | 16.0 | | 1.2 | | <20 | <100 | 380 | | <200 | <2 | <5 | | | | <0.05 | | | | | | | 0.6 | <1 | | <500 |
| 4 | 10808 | <5 | 0.104 | 5.52 | 592 | <10 | 50 | 23 | 24 | <20 | <20 | 6 | 1.56 | 0.88 | 0.45 | 0.01 | 0.03 | 19 | 5 | 2 | 39 | 2 | <5 | <10 | <0.01 | 5 |
| 4 | 10809 | <5 | 0.098 | 5.67 | 612 | <10 | 689 | 93 | 34 | <20 | <20 | 6 | 2.16 | 0.87 | 0.33 | 0.09 | 0.23 | 33 | 6 | 4 | 37 | 3 | 6 | <10 | <0.01 | 8 |
| 5 | 10810 | <5 | 0.076 | 5.65 | 566 | <10 | 519 | 74 | 38 | <20 | <20 | 6 | 2.51 | 0.93 | 0.25 | 0.09 | 0.25 | 31 | 5 | 4 | 46 | 3 | 5 | <10 | <0.01 | 8 |
| 5 | 10811 | <5 | 0.092 | 5.67 | 575 | <10 | 289 | 56 | 33 | <20 | <20 | 5 | 2.22 | 0.93 | 0.27 | 0.05 | 0.16 | 25 | 5 | 4 | 46 | 3 | <5 | <10 | <0.01 | 8 |
| 6 | 10776 | <5 | 0.081 | 5.53 | 648 | <10 | 26 | 20 | 22 | <20 | <20 | 5 | 1.37 | 0.93 | 0.43 | <0.01 | 0.03 | 15 | 4 | <2 | 31 | 2 | <5 | <10 | <0.01 | 3 |
| 6 | 10777 | <5 | 0.394 | 6.45 | 731 | <10 | 193 | 99 | 38 | <20 | <20 | 6 | 1.96 | 1.04 | 0.40 | 0.05 | 0.17 | 23 | 4 | 3 | 35 | 3 | 5 | <10 | <0.01 | 5 |
| 6 | 10778 | <5 | <0.010 | 1.72 | 807 | <10 | 9 | 186 | 10 | <20 | <20 | 3 | 0.74 | 0.35 | 1.99 | 0.01 | 0.03 | 77 | 8 | <2 | 13 | <1 | <5 | <10 | <0.01 | 1 |
| 7 | 10779 | <5 | 0.201 | 1.83 | 770 | <10 | 10 | 200 | 9 | <20 | <20 | 3 | 0.38 | 0.64 | 1.77 | 0.01 | 0.03 | 22 | 3 | <2 | 6 | <1 | <5 | <10 | <0.01 | 1 |
| 8 | 8012 | 3580.0 | | <0.8 | | <360 | <720 | <320 | | <3300 | <9 | <5 | | | | <0.35 | | | | | | | 1.5 | <2 | | <2300 |
| 9 | 8013 | 3.3 | | 2.8 | | <20 | 140 | 340 | | <200 | <2 | 11 | | | | 0.10 | | | | | | | 7.0 | <1 | | <500 |
| 10 | 10832 | <5 | 0.024 | >10.00 | 217 | <10 | 3 | 6 | 2 | <20 | <20 | 7 | 0.06 | 0.03 | 1.74 | <0.01 | 0.01 | 44 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 10 | 10833 | <5 | <0.010 | >10.00 | 1545 | <10 | 23 | 84 | 24 | <20 | <20 | 6 | 2.26 | 1.23 | 1.99 | 0.14 | 0.39 | 17 | 3 | 3 | 18 | 2 | <5 | <10 | 0.09 | <1 |
| 10 | 10834 | <5 | <0.010 | 2.85 | 587 | <10 | 36 | 23 | 13 | <20 | <20 | 16 | 1.43 | 1.48 | >10.00 | 0.01 | 0.38 | 335 | 15 | <2 | 23 | <1 | <5 | <10 | 0.03 | <1 |
| 10 | 10835 | <5 | 0.015 | >10.00 | 66 | <10 | 3 | 78 | 2 | <20 | <20 | 6 | 0.07 | 0.03 | 0.07 | <0.01 | 0.01 | 3 | 4 | <2 | 3 | 1 | <5 | <10 | <0.01 | <1 |
| 11 | 10827 | <5 | <0.010 | >10.00 | 1579 | <10 | 76 | 23 | 25 | 902 | 83 | 14 | 3.71 | 0.71 | >10.00 | 0.60 | 1.08 | 92 | 7 | 14 | 13 | 3 | <5 | <10 | 0.09 | 4 |
| 11 | 10828 | <5 | <0.010 | 2.33 | 557 | <10 | 12 | 88 | 19 | <20 | <20 | 2 | 0.60 | 0.61 | 3.09 | 0.02 | 0.05 | 47 | 7 | <2 | 21 | 2 | <5 | <10 | 0.10 | <1 |
| 11 | 10829 | <5 | <0.010 | >10.00 | 690 | <10 | 2 | 31 | 9 | 288 | <20 | 8 | 0.53 | 0.03 | 3.09 | 0.01 | 0.01 | 11 | 6 | <2 | 2 | <1 | <5 | <10 | 0.04 | 8 |
| 11 | 10830 | <5 | <0.010 | >10.00 | 1433 | <10 | 21 | 22 | 20 | 601 | <20 | 22 | 1.92 | 0.91 | >10.00 | 0.23 | 0.40 | 77 | 11 | 3 | 9 | 4 | <5 | <10 | 0.16 | 5 |
| 12 | 10780 | <5 | <0.010 | >10.00 | 1299 | <10 | 16 | 10 | 13 | 142 | <20 | 13 | 0.65 | 0.62 | 2.17 | 0.13 | 0.17 | 23 | 5 | 3 | 7 | <1 | <5 | <10 | 0.03 | 2 |
| 12 | 10861 | <5 | <0.010 | >10.00 | 1401 | <10 | 27 | 14 | 17 | 165 | 80 | 21 | 1.07 | 0.90 | 3.71 | 0.14 | 0.52 | 30 | 7 | 11 | 28 | 3 | <5 | <10 | 0.05 | 1 |
| 12 | 10862 | <5 | <0.010 | >10.00 | 910 | <10 | 17 | 39 | 18 | 111 | 57 | 26 | 1.65 | 0.72 | 3.86 | 0.06 | 0.41 | 53 | 11 | 9 | 40 | 3 | <5 | <10 | 0.10 | 7 |
| 13 | 10863 | <5 | 0.017 | >10.00 | 2804 | <10 | 8 | 7 | 5 | 87 | <20 | 18 | 0.37 | 0.20 | 1.65 | 0.07 | 0.12 | 7 | 2 | 7 | 9 | 2 | <5 | <10 | 0.02 | 1 |
| 13 | 10864 | 29 | 0.012 | >10.00 | 308 | <10 | 2 | 30 | 9 | <20 | <20 | 15 | 0.92 | 0.35 | 4.16 | 0.05 | 0.06 | 11 | 6 | 19 | 16 | 1 | <5 | <10 | 0.01 | 3 |
| 14 | 10898 | <5 | <0.010 | 5.60 | 852 | <10 | 351 | 54 | 123 | <20 | <20 | 5 | 3.61 | 2.18 | 2.50 | 0.06 | 0.13 | 22 | 11 | 5 | 18 | <1 | <5 | <10 | 0.37 | 8 |
| 15 | 10899 | <5 | 0.031 | 2.55 | 410 | <10 | 79 | 17 | 24 | <20 | <20 | 20 | 1.14 | 0.70 | 0.65 | <0.01 | 0.05 | 20 | 9 | <2 | 18 | <1 | <5 | <10 | 0.03 | <1 |
| 15 | 10900 | <5 | 0.022 | 6.92 | 2118 | <10 | 57 | 252 | 64 | <20 | <20 | 73 | 1.81 | 0.66 | 0.93 | 0.02 | 0.07 | 22 | 34 | <2 | 17 | <1 | 12 | <10 | 0.12 | <1 |
| 15 | 10934 | <5 | <0.010 | 1.89 | 297 | <10 | 41 | 161 | 30 | <20 | <20 | 43 | 2.26 | 0.40 | 2.57 | 0.05 | 0.17 | 34 | 146 | 14 | 4 | 5 | <5 | <10 | 0.12 | 45 |
| 16 | 10935 | <5 | 0.142 | 5.45 | 818 | <10 | 170 | 100 | 133 | <20 | <20 | 15 | 2.33 | 1.20 | 1.37 | 0.03 | 0.13 | 81 | 12 | 5 | 26 | <1 | 10 | <10 | 0.24 | 11 |
| 17 | 11020 | 1238 | 8.500 | >10.00 | 6618 | 22 | 10 | 105 | 2 | <20 | <20 | 3 | 0.18 | 1.87 | 4.30 | <0.01 | 0.08 | 54 | 3 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 17 | 11028 | >2000 | 11.900 | >10.00 | 9525 | 17 | <1 | 67 | <1 | <20 | <20 | 1 | 0.08 | 1.29 | 4.15 | <0.01 | 0.02 | 54 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 18 | 11043 | 531 | 12.120 | >10.00 | 1927 | 89 | <1 | 67 | <1 | <20 | <20 | <1 | 0.04 | 0.38 | 1.05 | <0.01 | 0.01 | 14 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 18 | 11044 | >2000 | 2.030 | >10.00 | 4338 | <10 | <1 | 59 | 1 | <20 | <20 | <1 | 0.12 | 2.10 | 2.87 | 0.01 | 0.04 | 39 | <1 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 11045 | ABO | flt | sel | dolomitized ls w/ sl, tr py, gn (?) | 77 | | | 0.34 oz/ton | 56 | 1.80% | 22.41% | <1 | 5 | 34 | 210.5 | <5 | 123 |
| 20 | 11029 | ABO | otc | cont | silicious rock w/ abu sl | 19 | | | 2.7 | 39 | 0.34% | 12.92% | <1 | 7 | 17 | 102.0 | <5 | 128 |
| 21 | 10878 | Sixtymile Ck | | sed | | 4 | | | 0.2 | 16 | 13 | 49 | <1 | 14 | 8 | <0.2 | <5 | 33 |
| 21 | 10879 | Sixtymile Ck | | pan | tr mag | 44 | <5 | <1 | 0.9 | 8 | 12 | 39 | 1 | 10 | 6 | <0.2 | <5 | 13 |
| 21 | 10901 | Sixtymile Ck | | sed | | 5 | | | 0.2 | 14 | 12 | 58 | <1 | 13 | 7 | <0.2 | <5 | 16 |
| 21 | 10902 | Sixtymile Ck | | pan | mod mag, no visible Au | 12 | <5 | <1 | 0.5 | 9 | 8 | 34 | 2 | 14 | 5 | <0.2 | <5 | 9 |
| 22 | 10841 | Rock Ck | | sed | | 6 | | | <0.2 | 7 | 4 | 20 | <1 | 5 | 3 | <0.2 | <5 | 9 |
| 22 | 10842 | Rock Ck | | pan | abu mag (fine and coarse) | 54 | <5 | <1 | <0.2 | 15 | 8 | 44 | <1 | 24 | 15 | <0.2 | <5 | 14 |
| 22 | 10843 | Rock Ck | flt | sel | greenschist w/ abu mag | 7 | | | <0.2 | 71 | <2 | 130 | <1 | 58 | 42 | <0.2 | <5 | <5 |
| 22 | 10844 | Rock Ck | | pan | | IS | <5 | <1 | <0.2 | 13 | 9 | 24 | <1 | 12 | 7 | <0.2 | <5 | 15 |
| 23 | 10903 | Bullrun Ck | | sed | | 4 | | | <0.2 | 19 | 8 | 56 | <1 | 17 | 8 | <0.2 | <5 | 7 |
| 23 | 10904 | Bullrun Ck | | pan | | 131 | <5 | <1 | <0.2 | 22 | 9 | 56 | 2 | 21 | 10 | <0.2 | <5 | 7 |
| 24 | 10905 | Bullrun Ck | | sed | | 3 | | | <0.2 | 37 | 17 | 88 | 1 | 24 | 14 | 0.3 | <5 | 12 |
| 24 | 10906 | Bullrun Ck | | pan | tr mag, no visible Au | >10000 | 5 | 2 | <0.2 | 19 | 10 | 76 | 2 | 21 | 11 | <0.2 | <5 | 9 |
| 25 | 8014 | Crevice Ck | | slu | placer con | 8130 | <5 | <1 | <5 | | | <200 | <2 | 48 | 26 | <10 | | 15 |
| 26 | 10547 | Crevice Ck | | pan | 3 pan comp w/ 2 coarse Au, abu mag | 282.31 ppm | | | 11.6 | 40 | 56 | 64 | <1 | 37 | 23 | <0.2 | <5 | 44 |
| 26 | 10646 | Crevice Ck | flt | sel | heavy iron-rich cobble | 44 | | | 0.3 | 203 | 23 | 21 | <1 | 8 | 4 | 0.5 | <5 | 14 |
| 27 | 10548 | Crevice Ck | | pan | abu mag xls | 27.12 ppm | | | 1.3 | 47 | 61 | 69 | <1 | 40 | 24 | <0.2 | <5 | 15 |
| 28 | 10845 | McCamant Ck | | sed | | 2 | | | <0.2 | 30 | 9 | 59 | <1 | 22 | 9 | <0.2 | <5 | 10 |
| 28 | 10846 | McCamant Ck | | pan | | 3 | <5 | <1 | <0.2 | 64 | 20 | 131 | 3 | 32 | 23 | 0.2 | <5 | 9 |
| 28 | 10847 | McCamant Ck | otc | sel | qz veinlets w/ minor po and tr cpy | 3 | | | <0.2 | 92 | 8 | 78 | 2 | 32 | 10 | 0.3 | <5 | 6 |
| 29 | 10836 | McKinley Ck | | sed | | <5 | | | <0.2 | 13 | 10 | 39 | <1 | 8 | 5 | <0.2 | <5 | 15 |
| 29 | 10837 | McKinley Ck | | pan | 2 coarse Au, abu mag and py | 625 | <5 | <1 | 1 | 37 | 296 | 70 | <1 | 18 | 15 | <0.2 | <5 | 77 |
| 30 | 10838 | McKinley Ck | | pan | mod mag and sulfides | 6 | <5 | <1 | <0.2 | 20 | 9 | 28 | <1 | 12 | 8 | <0.2 | <5 | 26 |
| 30 | 10839 | McKinley Ck | | pan | 2 pan comp, minor mag | IS | <5 | <1 | 0.9 | 158 | 286 | 102 | <1 | 40 | 28 | <0.2 | <5 | 140 |
| 30 | 10840 | McKinley Ck | otc | rep | ch schist w/ rusty sulfides | <5 | | | <0.2 | 14 | 20 | 24 | <1 | 8 | 4 | <0.2 | <5 | <5 |
| 31 | 8016 | Allen River | rub | sel | qz vein w/ < 1% cpy | <5 | | | <5 | | | <200 | <2 | <20 | <10 | <10 | | 73 |
| 32 | 10912 | Trout Lake | | pan | mod mag | 17 | <5 | <1 | 0.2 | 18 | 5 | 62 | 2 | 28 | 14 | <0.2 | <5 | 8 |
| 32 | 10913 | Trout Lake | | pan | abu mag, no visible Au | 7 | <5 | <1 | 0.5 | 14 | 9 | 53 | 2 | 25 | 12 | <0.2 | <5 | 11 |
| 32 | 10914 | Trout Lake | flt | rep | greenstone w/ 1% py | <1 | | | <0.2 | 47 | <2 | 86 | 2 | 23 | 27 | <0.2 | <5 | <5 |
| 33 | 10915 | Unnamed Occurrence | rub | sel | green ch schist w/ cpy, po | <1 | | | <0.2 | 64 | <2 | 91 | 1 | 40 | 45 | <0.2 | <5 | <5 |
| 33 | 10916 | Unnamed Occurrence | rub | sel | green ch schist w/ 3% py cubes | 2 | | | <0.2 | 47 | 10 | 35 | 4 | 28 | 10 | <0.2 | <5 | 33 |
| 34 | 10769 | Seward Ck | | sed | | 54 | | | <0.2 | 20 | 5 | 58 | <1 | 20 | 11 | <0.2 | <5 | 6 |
| 34 | 10770 | Seward Ck | | pan | tr mag, no visible Au | 6 | <5 | <1 | <0.2 | 26 | 15 | 99 | <1 | 40 | 21 | <0.2 | <5 | 9 |
| 35 | 10771 | Sirr Ck | | sed | | <5 | | | <0.2 | 28 | 6 | 68 | <1 | 27 | 11 | <0.2 | <5 | 9 |
| 35 | 10772 | Sirr Ck | | pan | tr mag, no visible Au | <5 | <5 | <1 | <0.2 | 40 | 13 | 88 | <1 | 35 | 14 | <0.2 | <5 | 14 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 11045 | 84 | 20.980 | 4.71 | 3898 | 46 | 15 | 50 | <1 | <20 | <20 | 5 | 0.05 | 3.08 | 7.92 | <0.01 | 0.04 | 171 | 3 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 20 | 11029 | 47 | 9.980 | 2.96 | 2960 | 31 | 25 | 63 | <1 | <20 | <20 | <1 | 0.02 | 5.55 | >10.00 | <0.01 | <0.01 | 142 | 2 | <2 | 1 | 2 | <5 | <10 | <0.01 | <1 |
| 21 | 10878 | <5 | 0.027 | 1.74 | 289 | <10 | 33 | 15 | 12 | <20 | <20 | 17 | 0.64 | 0.91 | 5.65 | <0.01 | 0.21 | 105 | 10 | <2 | 10 | <1 | <5 | <10 | 0.02 | <1 |
| 21 | 10879 | <5 | 0.088 | 2.03 | 265 | <10 | 43 | 90 | 8 | <20 | <20 | 7 | 0.59 | 1.07 | >10.00 | 0.01 | 0.10 | 260 | 8 | <2 | 9 | <1 | <5 | <10 | 0.02 | <1 |
| 21 | 10901 | <5 | 0.025 | 1.76 | 378 | <10 | 29 | 9 | 10 | <20 | <20 | 12 | 0.60 | 0.53 | 5.14 | <0.01 | 0.08 | 125 | 7 | <2 | 10 | <1 | <5 | <10 | 0.01 | <1 |
| 21 | 10902 | <5 | 0.014 | 1.73 | 285 | <10 | 27 | 233 | 12 | <20 | <20 | 9 | 0.65 | 0.47 | >10.00 | 0.02 | 0.14 | 273 | 5 | <2 | 9 | <1 | <5 | <10 | 0.04 | 1 |
| 22 | 10841 | <5 | 0.017 | 1.13 | 234 | <10 | 11 | 2 | 6 | <20 | <20 | 16 | 0.17 | 1.08 | >10.00 | <0.01 | <0.01 | 369 | 7 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 22 | 10842 | <5 | 0.045 | >10.00 | 225 | <10 | 140 | 49 | 346 | <20 | <20 | 16 | 0.35 | 0.81 | >10.00 | <0.01 | 0.05 | 340 | 6 | <2 | 7 | 21 | <5 | <10 | 0.05 | 2 |
| 22 | 10843 | <5 | 0.012 | 8.94 | 971 | <10 | 39 | 91 | 200 | <20 | <20 | 6 | 2.96 | 3.04 | 2.60 | 0.02 | 0.07 | 69 | 8 | 8 | 57 | 16 | 13 | <10 | 0.22 | <1 |
| 22 | 10844 | <5 | 0.016 | 6.01 | 214 | <10 | 55 | 69 | 99 | <20 | <20 | 17 | 0.35 | 0.73 | >10.00 | <0.01 | 0.05 | 469 | 7 | <2 | 6 | 5 | <5 | <10 | 0.04 | 1 |
| 23 | 10903 | <5 | 0.017 | 2.86 | 533 | <10 | 22 | 18 | 25 | <20 | <20 | 13 | 1.01 | 1.15 | 3.07 | <0.01 | 0.05 | 74 | 8 | <2 | 13 | <1 | <5 | <10 | 0.03 | <1 |
| 23 | 10904 | <5 | 0.025 | 3.12 | 639 | <10 | 57 | 203 | 26 | <20 | <20 | 9 | 1.29 | 1.23 | 3.05 | 0.02 | 0.12 | 66 | 7 | <2 | 17 | <1 | <5 | <10 | 0.04 | <1 |
| 24 | 10905 | <5 | 0.033 | 3.31 | 1571 | <10 | 45 | 16 | 21 | <20 | <20 | 18 | 0.99 | 1.13 | 2.70 | <0.01 | 0.06 | 60 | 8 | <2 | 13 | <1 | <5 | <10 | 0.02 | <1 |
| 24 | 10906 | <5 | 0.020 | 3.86 | 1465 | <10 | 44 | 147 | 31 | <20 | <20 | 13 | 1.24 | 1.30 | 2.50 | 0.02 | 0.11 | 56 | 7 | <2 | 14 | <1 | <5 | <10 | 0.04 | <1 |
| 25 | 8014 | 3.4 |  | >10.0 |  | <20 | <100 | <50 |  | <200 | 2 | 9 |  |  |  | <0.05 |  |  |  |  |  |  | 2.4 | <1 |  | <500 |
| 26 | 10547 | 10 | 1.102 | >10.00 | 1220 | <10 | 104 | 222 | 246 | <20 | <20 | 11 | 1.44 | 0.71 | 2.75 | 0.07 | 0.23 | 73 | 13 | <2 | 11 | 4 | 5 | <10 | 0.17 | 3 |
| 26 | 10646 | 14 | <0.010 | >10.00 | 25 | <10 | 17 | 66 | 147 | <20 | 35 | 2 | 0.19 | 0.03 | 0.02 | 0.01 | 0.01 | 3 | 2 | 2 | 3 | <1 | <5 | <10 | 0.06 | 2 |
| 27 | 10548 | <5 | 0.231 | >10.00 | 1572 | <10 | 84 | 169 | 313 | <20 | <20 | 11 | 1.48 | 0.73 | 3.02 | 0.08 | 0.22 | 83 | 14 | <2 | 12 | 5 | 6 | <10 | 0.20 | 4 |
| 28 | 10845 | <5 | 0.029 | 2.45 | 460 | <10 | 16 | 14 | 16 | <20 | <20 | 10 | 0.80 | 0.75 | 4.45 | <0.01 | 0.03 | 151 | 8 | <2 | 14 | <1 | <5 | <10 | <0.01 | <1 |
| 28 | 10846 | <5 | 0.024 | 9.56 | 686 | <10 | 57 | 131 | 95 | <20 | <20 | 16 | 1.86 | 1.08 | 0.30 | 0.02 | 0.12 | 15 | 8 | <2 | 29 | 1 | <5 | <10 | 0.03 | 2 |
| 28 | 10847 | <5 | <0.010 | 2.57 | 1014 | <10 | 35 | 215 | 23 | <20 | <20 | 10 | 1.27 | 0.60 | 2.17 | 0.04 | 0.14 | 62 | 7 | <2 | 16 | <1 | <5 | <10 | <0.01 | <1 |
| 29 | 10836 | <5 | 0.028 | 1.49 | 310 | <10 | 45 | 4 | 7 | <20 | <20 | 18 | 0.38 | 1.11 | >10.00 | <0.01 | 0.02 | 335 | 7 | <2 | 8 | <1 | <5 | <10 | <0.01 | 1 |
| 29 | 10837 | 9 | 0.224 | 7.32 | 317 | <10 | 33 | 58 | 48 | <20 | <20 | 18 | 0.48 | 1.08 | >10.00 | 0.01 | 0.08 | 346 | 8 | <2 | 9 | 3 | <5 | <10 | 0.14 | 3 |
| 30 | 10838 | <5 | 0.015 | 2.07 | 257 | <10 | 104 | 69 | 13 | <20 | <20 | 15 | 0.49 | 0.62 | >10.00 | <0.01 | 0.07 | 464 | 7 | <2 | 8 | <1 | <5 | <10 | 0.07 | 2 |
| 30 | 10839 | 11 | 0.743 | 9.61 | 318 | <10 | 27 | 112 | 65 | <20 | <20 | 28 | 0.58 | 1.04 | 8.95 | <0.01 | 0.08 | 281 | 12 | <2 | 9 | 5 | <5 | <10 | 0.21 | 5 |
| 30 | 10840 | <5 | <0.010 | 1.39 | 301 | <10 | 19 | 89 | 5 | <20 | <20 | 11 | 0.83 | 0.77 | 6.28 | 0.02 | 0.13 | 257 | 14 | <2 | 8 | <1 | <5 | <10 | 0.01 | 2 |
| 31 | 8016 | 117.0 |  | 0.6 |  | <20 | <100 | 270 |  | <200 | <2 | <5 |  |  |  | 0.21 |  |  |  |  |  |  | <0.5 | <1 |  | <500 |
| 32 | 10912 | <5 | 0.026 | 5.86 | 476 | <10 | 28 | 110 | 52 | <20 | <20 | 39 | 1.26 | 1.36 | 9.25 | 0.03 | 0.11 | 317 | 8 | <2 | 24 | <1 | <5 | <10 | 0.07 | <1 |
| 32 | 10913 | <5 | 0.024 | 4.65 | 452 | <10 | 36 | 80 | 41 | <20 | <20 | 19 | 1.14 | 1.14 | >10.00 | 0.02 | 0.11 | 472 | 7 | <2 | 20 | 1 | <5 | <10 | 0.06 | <1 |
| 32 | 10914 | <5 | <0.010 | 6.82 | 889 | <10 | 167 | 40 | 147 | <20 | <20 | 9 | 2.62 | 1.96 | 2.37 | 0.09 | 0.39 | 54 | 25 | 5 | 9 | <1 | 8 | <10 | 0.24 | <1 |
| 33 | 10915 | <5 | <0.010 | 9.31 | 1261 | <10 | <1 | 98 | 232 | <20 | <20 | <1 | 4.45 | 4.43 | 3.33 | 0.01 | <0.01 | 117 | 11 | 5 | 89 | 2 | 21 | <10 | 0.42 | <1 |
| 33 | 10916 | <5 | 0.018 | 3.85 | 268 | <10 | 47 | 222 | 18 | <20 | <20 | 10 | 1.38 | 0.36 | 2.73 | 0.02 | 0.22 | 144 | 8 | <2 | 14 | <1 | <5 | <10 | <0.01 | 4 |
| 34 | 10769 | <5 | <0.010 | 4.90 | 654 | <10 | 10 | 24 | 48 | <20 | <20 | 17 | 0.63 | 0.67 | 0.73 | <0.01 | 0.01 | 24 | 6 | <2 | 12 | 4 | <5 | <10 | 0.08 | <1 |
| 34 | 10770 | <5 | <0.010 | 5.92 | 856 | <10 | 39 | 121 | 55 | <20 | <20 | 33 | 1.66 | 1.28 | 0.48 | 0.07 | 0.12 | 27 | 7 | 3 | 24 | 4 | <5 | <10 | 0.06 | 3 |
| 35 | 10771 | <5 | 0.027 | 3.24 | 598 | <10 | 21 | 24 | 35 | <20 | <20 | 11 | 1.41 | 1.13 | 2.53 | <0.01 | 0.03 | 73 | 6 | 2 | 16 | 3 | <5 | <10 | 0.04 | 2 |
| 35 | 10772 | <5 | 0.272 | 4.54 | 920 | <10 | 49 | 90 | 49 | <20 | <20 | 13 | 2.07 | 1.52 | 4.78 | 0.02 | 0.11 | 158 | 7 | 3 | 25 | 3 | <5 | <10 | 0.06 | 4 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 8015 | Bar Ck | rub | sel | ls w/ 5-10% py, rusty qz | <5 | | | <5 | | | <200 | <2 | <20 | <10 | <10 | | 2 |
| 37 | 10883 | Unnamed Occurrence | flt | sel | brecciated ls w/ cc (< 1%), mal | 6 | | | 0.2 | 585 | 1744 | 17 | <1 | 2 | <1 | <0.2 | <5 | 46 |
| 38 | 10884 | Unnamed Occurrence | otc | sel | ch-qz schist w/ cc, mal, az | 23 | | | 4.8 | 1664 | 19 | 40 | 19 | 11 | 4 | 0.6 | <5 | 286 |
| 38 | 10885 | Unnamed Occurrence | flt | sel | qz rich rock w/ <5% py | <5 | | | 2.1 | 40 | 60 | 53 | 12 | 8 | 1 | <0.2 | <5 | 158 |
| 39 | 10783 | Upper Sheep Ck | flt | sel | ls w/ 10% cpy, tr mal | 14 | | | 1.5 | 9.00% | 28 | 145 | <1 | 1 | 6 | <0.2 | <5 | 11 |
| 39 | 10784 | Upper Sheep Ck | flt | sel | qz w/ 20% cpy, mal, tr az | 46 | | | 6.6 | 13.40% | 52 | 212 | <1 | 18 | 6 | <0.2 | <5 | 362 |
| 39 | 10785 | Upper Sheep Ck | flt | sel | qz-ch schist w/ mal or fuchsite | <5 | | | 0.3 | 872 | 27 | 21 | <1 | 6 | 2 | 0.3 | <5 | <5 |
| 39 | 10802 | Upper Sheep Ck | flt | sel | vein qz w/ minor mal and az | <5 | | | 0.4 | 1551 | <2 | 73 | <1 | 33 | 40 | <0.2 | <5 | 348 |
| 39 | 10803 | Upper Sheep Ck | flt | sel | vein qz w/ mal and bn (?) | 23 | | | 3.8 | 3597 | 4 | 45 | 6 | 13 | 6 | <0.2 | <5 | <5 |
| 39 | 10804 | Upper Sheep Ck | otc | sel | qz vein w/ 5% cpy and po, mal | 15 | | | 5.9 | 4.70% | 21 | 190 | 15 | 45 | 24 | 1.3 | <5 | <5 |
| 39 | 10805 | Upper Sheep Ck | otc | sel | qz vein w/ bn, cpy, po (?), mal, az | 26 | | | 78.6 | 16.53% | 150 | 212 | 1 | 10 | 5 | 1.7 | <5 | 151 |
| 40 | 10806 | Unnamed Occurrence | flt | sel | micaceous schist w/ bn, mal | 17 | | | 68.9 | 11.00% | 37 | 146 | <1 | 8 | 2 | <0.2 | <5 | <5 |
| 40 | 10807 | Unnamed Occurrence | flt | sel | ls w/ lim | <5 | | | <0.2 | 197 | <2 | 93 | <1 | 10 | 6 | <0.2 | <5 | <5 |
| 40 | 10831 | Unnamed Occurrence | flt | sel | qz-ch schist w/ 5% bn or gn (?), mal | 6 | | | 2.7 | 3527 | 8 | 51 | 1 | 19 | 8 | <0.2 | <5 | <5 |
| 41 | 10641 | Sirr Mtn | otc | rand | ch schist w/ qz-carb lenses | <5 | | | <0.2 | 84 | 6 | 125 | <1 | 74 | 21 | 0.5 | <5 | <5 |
| 42 | 10642 | Sirr Mtn | flt | sel | vein qz w/ tet, cpy, mal | <5 | | | 2.1 | 401 | 220 | 1 | 2 | 9 | <1 | 0.2 | <5 | <5 |
| 43 | 10643 | Sirr Mtn | flt | rand | qz lenses in schist w/ lim | <5 | | | <0.2 | 14 | 27 | 38 | 1 | 15 | 4 | 0.3 | <5 | 17 |
| 44 | 10645 | Sirr Mtn | flt | sel | vein qz w/ tr py, gn, lim | <5 | | | 0.3 | 10 | 60 | 25 | 1 | 11 | 3 | 0.3 | <5 | 6 |
| 45 | 10644 | Sirr Mtn | otc | rand | dark gray phyllite | <5 | | | <0.2 | 52 | 3 | 81 | <1 | 31 | 19 | <0.2 | <5 | <5 |
| 46 | 10933 | Surprise Ck | rub | sel | qz vein w/ ch partings, tr cpy | 2 | | | 0.6 | 19 | 53 | 11 | 2 | 6 | 2 | <0.2 | <5 | <5 |
| 47 | 10956 | Surprise Ck | flt | sel | qz veinlets w/ cal, ank (?) | <1 | | | 0.4 | 4 | 5 | 34 | 2 | 12 | 7 | <0.2 | <5 | 15 |
| 48 | 10955 | Surprise Ck | otc | ran | qz-musc-calc schist w/ mal, fuchsite | 3 | | | 0.5 | 20 | 4 | 33 | 2 | 18 | 8 | <0.2 | <5 | <5 |
| 49 | 10931 | Surprise Ck | otc | ran | qz vein w/ apy, tr py, lim | 63 | | | 0.5 | 10 | 7 | 35 | 2 | 19 | 10 | 0.6 | <5 | 162 |
| 50 | 10932 | Surprise Ck | flt | sel | calc schist w/ qz, py, lim, fuchsite (?) | <1 | | | 0.5 | 12 | 7 | 32 | 2 | 9 | 4 | <0.2 | <5 | 14 |
| 51 | 11034 | Surprise Ck | | sed | | 4 | | | <0.2 | 18 | 6 | 66 | <1 | 22 | 11 | <0.2 | <5 | 6 |
| 51 | 11035 | Surprise Ck | | pan | no mag | <1 | <5 | <1 | <0.2 | 24 | 7 | 83 | 3 | 42 | 16 | <0.2 | <5 | 13 |
| 52 | 11039 | Surprise Ck | | sed | | 2 | | | <0.2 | 20 | 5 | 59 | <1 | 22 | 11 | <0.2 | <5 | 9 |
| 52 | 11040 | Surprise Ck | | pan | no mag | 3 | <5 | <1 | <0.2 | 19 | 4 | 93 | 2 | 39 | 20 | <0.2 | <5 | 13 |
| 53 | 11036 | Surprise Ck | flt | sel | ch-qz schist w/ cv or tet (?), mal | 12 | | | 1.4 | 861 | 8 | 28 | 1 | 12 | 5 | <0.2 | <5 | <5 |
| 53 | 11037 | Surprise Ck | | sed | | 3 | | | <0.2 | 20 | 6 | 56 | <1 | 21 | 10 | <0.2 | <5 | 13 |
| 53 | 11038 | Surprise Ck | | pan | no mag, no visible Au | 64 | 82 | <1 | <0.2 | 153 | 5 | 89 | 2 | 37 | 15 | <0.2 | <5 | 16 |
| 54 | 11041 | Surprise Ck | flt | sel | conglomerate w/ sulfides (?) | 3 | | | <0.2 | 15 | 8 | 26 | 1 | 22 | 7 | <0.2 | <5 | <5 |
| 55 | 11042 | Surprise Ck | flt | sel | qz cobble w/ 1% euhedral py | 163 | | | 0.8 | 8 | 10 | 77 | 24 | 24 | 6 | 0.4 | <5 | 16 |
| 56 | 10787 | Surprise Ck | | sed | | 6 | | | <0.2 | 31 | 10 | 83 | <1 | 29 | 12 | <0.2 | <5 | 12 |
| 56 | 10788 | Surprise Ck | | pan | no mag, no visible Au | 3889 | <5 | <1 | <0.2 | 46 | 14 | 105 | <1 | 41 | 16 | <0.2 | <5 | 21 |
| 57 | 10786 | Surprise Ck | flt | sel | musc-qz schist w/ mal or fuchsite (?) | <5 | | | <0.2 | 167 | 3 | 24 | <1 | 9 | 6 | <0.2 | <5 | 6 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 8015 | 1.0 | | 1.7 | | <20 | <100 | 100 | | <200 | <2 | 10 | | | | 0.85 | | | | | | | 2.7 | <1 | | <500 |
| 37 | 10883 | 921 | 0.048 | 0.48 | 760 | <10 | 22 | 38 | 12 | <20 | <20 | 7 | 0.05 | 5.13 | >10.00 | <0.01 | 0.03 | 102 | 2 | <2 | 3 | 2 | <5 | <10 | <0.01 | 2 |
| 38 | 10884 | 67 | 22.460 | 1.31 | 310 | <10 | 86 | 147 | 31 | <20 | <20 | 1 | 0.92 | 0.33 | 0.72 | 0.02 | 0.06 | 15 | 2 | <2 | 2 | 3 | <5 | <10 | <0.01 | 16 |
| 38 | 10885 | 20 | 0.521 | 4.82 | 167 | <10 | 56 | 227 | 99 | <20 | <20 | 3 | 1.29 | 0.09 | 0.17 | <0.01 | <0.01 | 6 | <1 | 4 | <1 | 7 | <5 | <10 | <0.01 | 19 |
| 39 | 10783 | <5 | 0.560 | 7.83 | 105 | <10 | 7 | <1 | 1 | <20 | <20 | 9 | 0.02 | 0.07 | >10.00 | <0.01 | <0.01 | 298 | 2 | <2 | <1 | 3 | <5 | <10 | <0.01 | <1 |
| 39 | 10784 | 87 | 17.220 | >10.00 | 21 | <10 | 4 | 35 | 3 | <20 | <20 | 3 | 0.08 | <0.01 | 0.07 | 0.01 | 0.02 | 4 | <1 | <2 | <1 | 9 | <5 | <10 | <0.01 | 5 |
| 39 | 10785 | <5 | 0.112 | 1.00 | 799 | <10 | 308 | 76 | 11 | <20 | <20 | 14 | 0.67 | 0.43 | 9.86 | <0.01 | 0.03 | 99 | 17 | <2 | 11 | <1 | <5 | <10 | <0.01 | 3 |
| 39 | 10802 | 415 | 18.140 | 0.45 | 136 | <10 | 8 | 2 | <1 | <20 | <20 | 11 | <0.01 | 0.15 | >10.00 | <0.01 | 0.01 | 763 | 2 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 39 | 10803 | <5 | 0.199 | 1.82 | 213 | <10 | 23 | 201 | 23 | <20 | <20 | 8 | 1.44 | 0.19 | 0.33 | <0.01 | 0.06 | 5 | 3 | 3 | 4 | 2 | <5 | <10 | <0.01 | 15 |
| 39 | 10804 | <5 | 0.600 | >10.00 | 1430 | <10 | 5 | 35 | 40 | <20 | <20 | 14 | 2.37 | 2.17 | 3.98 | <0.01 | <0.01 | 37 | 8 | 5 | 33 | 6 | 8 | <10 | <0.01 | 22 |
| 39 | 10805 | 6 | 4.960 | 4.97 | 262 | 12 | 23 | 57 | 10 | <20 | <20 | 27 | 0.71 | 0.14 | 3.01 | <0.01 | 0.11 | 44 | 8 | 3 | 2 | 7 | <5 | <10 | <0.01 | 25 |
| 40 | 10806 | <5 | 1.020 | 0.66 | 58 | <10 | 7 | 43 | 14 | <20 | <20 | 13 | 0.76 | 0.19 | 0.44 | 0.07 | 0.04 | 24 | 6 | 3 | 9 | 8 | <5 | <10 | <0.01 | 9 |
| 40 | 10807 | <5 | 0.046 | 4.47 | 438 | <10 | 8 | 4 | 19 | <20 | <20 | 10 | 0.04 | 6.32 | >10.00 | <0.01 | 0.02 | 268 | 12 | <2 | 3 | 2 | 8 | <10 | <0.01 | <1 |
| 40 | 10831 | <5 | 0.173 | 0.90 | 103 | <10 | 20 | 197 | 8 | <20 | <20 | 4 | 0.71 | 0.37 | 0.89 | 0.03 | 0.07 | 18 | 2 | <2 | 13 | <1 | <5 | <10 | <0.01 | 11 |
| 41 | 10641 | <5 | <0.010 | 6.03 | 1016 | <10 | 39 | 129 | 90 | <20 | <20 | 13 | 3.68 | 2.64 | 4.49 | 0.02 | 0.14 | 81 | 13 | 7 | 34 | 1 | 9 | <10 | 0.13 | 8 |
| 42 | 10642 | <5 | 0.074 | 0.34 | 41 | <10 | 3 | 284 | 2 | <20 | <20 | <1 | 0.03 | <0.01 | 0.07 | <0.01 | <0.01 | 2 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 43 | 10643 | <5 | 0.012 | 2.43 | 667 | <10 | 38 | 164 | 7 | <20 | <20 | 3 | 0.48 | 0.58 | 2.33 | 0.03 | 0.11 | 62 | 6 | <2 | 1 | <1 | <5 | <10 | <0.01 | 10 |
| 44 | 10645 | <5 | 0.017 | 1.39 | 387 | <10 | 11 | 228 | 3 | <20 | <20 | <1 | 0.12 | 0.13 | 1.19 | 0.01 | 0.04 | 19 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 4 |
| 45 | 10644 | <5 | <0.010 | 4.71 | 1636 | <10 | 44 | 92 | 50 | <20 | <20 | 14 | 1.40 | 1.70 | 1.71 | 0.12 | 0.15 | 90 | 4 | 3 | 18 | <1 | 5 | <10 | 0.05 | 4 |
| 46 | 10933 | <5 | <0.010 | 0.72 | 477 | <10 | 5 | 172 | 6 | <20 | <20 | <1 | 0.30 | 0.23 | 8.39 | <0.01 | 0.01 | 222 | 9 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 47 | 10956 | 6 | 0.025 | 4.60 | 854 | <10 | 13 | 122 | 9 | <20 | <20 | <1 | 0.05 | 1.73 | 8.71 | 0.01 | 0.02 | 429 | 16 | <2 | <1 | <1 | 5 | <10 | <0.01 | <1 |
| 48 | 10955 | 7 | 0.029 | 2.67 | 954 | <10 | 31 | 103 | 21 | <20 | <20 | 1 | 1.20 | 1.16 | >10.00 | 0.02 | 0.11 | 147 | 8 | <2 | 5 | <1 | 5 | <10 | <0.01 | <1 |
| 49 | 10931 | 6 | 0.045 | 2.18 | 901 | <10 | 22 | 135 | 13 | <20 | <20 | <1 | 0.50 | 0.54 | >10.00 | 0.02 | 0.06 | 184 | 17 | <2 | 4 | <1 | 5 | <10 | <0.01 | <1 |
| 50 | 10932 | <5 | 0.099 | 2.11 | 813 | <10 | 18 | 152 | 11 | <20 | <20 | <1 | 0.42 | 0.45 | 9.96 | 0.01 | 0.05 | 159 | 8 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 51 | 11034 | <5 | 0.040 | 2.97 | 553 | <10 | 35 | 24 | 31 | <20 | <20 | 15 | 1.25 | 0.85 | 0.53 | <0.01 | 0.03 | 14 | 6 | <2 | 15 | <1 | <5 | <10 | <0.01 | <1 |
| 51 | 11035 | <5 | 0.028 | 4.65 | 723 | <10 | 74 | 295 | 53 | <20 | <20 | 41 | 2.11 | 0.78 | 0.47 | 0.05 | 0.15 | 23 | 6 | 2 | 25 | <1 | <5 | <10 | 0.02 | 4 |
| 52 | 11039 | <5 | 0.026 | 2.74 | 468 | <10 | 25 | 23 | 27 | <20 | <20 | 11 | 1.31 | 0.92 | 0.48 | <0.01 | 0.02 | 14 | 6 | <2 | 15 | 1 | <5 | <10 | <0.01 | <1 |
| 52 | 11040 | <5 | 0.015 | 5.07 | 709 | <10 | 40 | 152 | 52 | <20 | <20 | 22 | 2.59 | 1.70 | 0.76 | 0.02 | 0.08 | 21 | 9 | <2 | 28 | <1 | <5 | <10 | 0.06 | <1 |
| 53 | 11036 | <5 | 0.490 | 1.44 | 1059 | <10 | 41 | 127 | 12 | <20 | <20 | 1 | 0.71 | 0.67 | 9.65 | 0.02 | 0.04 | 129 | 7 | <2 | 7 | <1 | <5 | <10 | <0.01 | <1 |
| 53 | 11037 | <5 | 0.022 | 2.54 | 475 | <10 | 16 | 16 | 20 | <20 | <20 | 16 | 0.82 | 0.49 | 0.44 | <0.01 | 0.02 | 15 | 5 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 53 | 11038 | <5 | 0.022 | 5.29 | 755 | <10 | 43 | 218 | 57 | <20 | <20 | 70 | 2.36 | 1.04 | 0.82 | 0.03 | 0.11 | 25 | 9 | 2 | 20 | <1 | <5 | <10 | 0.03 | 1 |
| 54 | 11041 | <5 | 0.035 | 1.21 | 81 | <10 | 63 | 198 | 23 | <20 | <20 | 14 | 0.73 | 0.23 | 0.16 | 0.01 | 0.29 | 13 | 6 | <2 | 8 | <1 | <5 | <10 | <0.01 | 8 |
| 55 | 11042 | <5 | 0.090 | 9.28 | 5449 | <10 | 24 | 14 | 17 | <20 | <20 | 3 | 0.04 | 1.92 | >10.00 | 0.01 | 0.01 | 867 | 30 | <2 | <1 | <1 | 18 | <10 | <0.01 | <1 |
| 56 | 10787 | <5 | 0.027 | 3.24 | 651 | <10 | 24 | 21 | 30 | <20 | <20 | 17 | 1.23 | 0.87 | 1.06 | <0.01 | 0.02 | 31 | 6 | <2 | 19 | 2 | <5 | <10 | 0.02 | 1 |
| 56 | 10788 | <5 | 0.013 | 5.40 | 702 | <10 | 211 | 136 | 58 | <20 | <20 | 30 | 2.20 | 1.34 | 1.86 | 0.04 | 0.14 | 68 | 8 | 4 | 31 | 4 | <5 | <10 | 0.05 | 4 |
| 57 | 10786 | <5 | 0.027 | 1.95 | 931 | <10 | 19 | 68 | 17 | <20 | <20 | 11 | 0.55 | 0.35 | >10.00 | 0.01 | 0.05 | 179 | 10 | <2 | 3 | <1 | <5 | <10 | <0.01 | 1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 58 | 10694 | Spring Ck | | pan | | 617 | | | <0.2 | 32 | 11 | 96 | 1 | 46 | 14 | 0.2 | <5 | 58 |
| 58 | 10695 | Spring Ck | | sed | | 56 | | | <0.2 | 33 | 7 | 80 | 1 | 26 | 13 | 0.2 | <5 | 55 |
| 58 | 10696 | Spring Ck | otc | sel | qz-mica schist w/ tr py | 23 | | | <0.2 | 24 | <2 | 55 | <1 | 17 | 8 | 0.8 | <5 | 309 |
| 59 | 10691 | Spring Ck | | pan | | 592 | | | <0.2 | 25 | 24 | 104 | 1 | 51 | 15 | <0.2 | <5 | 22 |
| 59 | 10692 | Spring Ck | | sed | | 20 | | | <0.2 | 18 | 6 | 77 | <1 | 23 | 12 | <0.2 | <5 | 7 |
| 59 | 10693 | Spring Ck | trn | sel | vein qz w/ lim, ank (?) | 6 | | | <0.2 | 9 | 22 | 19 | 1 | 10 | 3 | 0.2 | <5 | 33 |
| 60 | 10689 | Spring Ck | | pan | | 1704 | | | <0.2 | 16 | 9 | 120 | 1 | 50 | 15 | <0.2 | <5 | 11 |
| 60 | 10690 | Spring Ck | | sed | | 48 | | | <0.2 | 30 | 10 | 107 | <1 | 31 | 15 | 0.3 | <5 | 22 |
| 61 | 10687 | Spring Ck | | pan | | 1697 | | | <0.2 | 28 | 6 | 88 | 2 | 47 | 13 | <0.2 | <5 | 24 |
| 61 | 10688 | Spring Ck | | sed | | 14 | | | <0.2 | 22 | 5 | 73 | <1 | 21 | 13 | <0.2 | <5 | 11 |
| 62 | 10684 | Spring Ck | | pan | minor mag | 1689 | | | <0.2 | 47 | 6 | 65 | 2 | 32 | 17 | 0.7 | <5 | 61 |
| 62 | 10685 | Spring Ck | | sed | | 30 | | | <0.2 | 26 | 5 | 65 | <1 | 21 | 13 | <0.2 | <5 | 13 |
| 63 | 10686 | Spring Ck | otc | rep | qz-mica schist | <5 | | | <0.2 | 23 | 4 | 43 | <1 | 19 | 8 | <0.2 | <5 | 6 |
| 64 | 10659 | Lake Ck | flt | sel | vein qz w/ unknown gray mineral | <5 | | | <0.2 | 12 | 3 | 8 | <1 | 3 | 1 | <0.2 | <5 | <5 |
| 65 | 10660 | Lake Ck | flt | sel | vein qz w/ lim in schist | <5 | | | <0.2 | 9 | 43 | 6 | 2 | 9 | 2 | 0.2 | <5 | 16 |
| 66 | 10512 | Lake Ck | otc | rand | calc-musc schist w/ qz lenses | <5 | | | <0.2 | 21 | 5 | 37 | 1 | 14 | 6 | 0.2 | <5 | 14 |
| 67 | 10513 | Lake Ck | | sed | | 72 | | | <0.2 | 11 | 6 | 51 | <1 | 17 | 12 | <0.2 | <5 | <5 |
| 67 | 10514 | Lake Ck | | pan | tr mag | 3043 | | | <0.2 | 23 | 34 | 62 | 2 | 38 | 14 | <0.2 | <5 | 16 |
| 68 | 10515 | Lake Ck | trn | sel | massive qz w/ tr cpy, mal | <5 | | | <0.2 | 67 | 20 | 10 | <1 | 5 | 1 | 0.2 | <5 | <5 |
| 68 | 10516 | Lake Ck | flt | sel | vein qz w/ tr cpy and tet | 15 | | | 0.3 | 247 | 20 | 103 | <1 | 13 | 15 | 0.6 | <5 | 49 |
| 69 | 10517 | Lake Ck | | pan | | 401 | | | <0.2 | 19 | 75 | 76 | 1 | 41 | 13 | <0.2 | <5 | 12 |
| 69 | 10518 | Lake Ck | | sed | | 18 | | | <0.2 | 21 | 4 | 65 | <1 | 23 | 12 | <0.2 | <5 | 7 |
| 69 | 10519 | Lake Ck | otc | rand | ch schist w/ qz lenses | <5 | | | <0.2 | 13 | 3 | 83 | <1 | 40 | 16 | 0.2 | <5 | <5 |
| 70 | 8011 | Lake Ck | flt | grab | vein qz w/ tet, mal, sid | <5 | | | <5 | | | <200 | 3 | <20 | <10 | <10 | | 2 |
| 71 | 10520 | Lake Ck | otc | rand | qz calcite pebble meta cgl | <5 | | | <0.2 | 16 | 8 | 25 | <1 | 9 | 5 | 0.3 | <5 | <5 |
| 72 | 10524 | Lake Ck | | pan | | 142 | | | <0.2 | 19 | 11 | 92 | <1 | 46 | 21 | <0.2 | <5 | 7 |
| 72 | 10525 | Lake Ck | | sed | | <5 | | | <0.2 | 25 | 6 | 70 | <1 | 26 | 16 | <0.2 | <5 | <5 |
| 73 | 10526 | Lake Ck | | slu | placer con | 680.14 ppm | | | 116.8 | 572 | 3.31% | 52 | 2 | 134 | 187 | 4.2 | 352 | 914 |
| 73 | 10762 | Lake Ck | | slu | placer con | 5471.13 ppm | | | 1835.5 | 2366 | 41.11% | 441 | 10 | 36 | 36 | 29.5 | 0.44% | 1750 |
| 73 | 10781 | Lake Ck | | slu | placer con | 1310.53 ppm | 5930 | <70 | 137.0 | 540 | >10000 | 101 | 6 | 56 | 46 | 3.5 | 308 | 720 |
| 74 | 8055 | Lake Ck | | slu | placer con | >10000 | | | >300 | | | <2300 | <220 | <320 | 58 | <300 | | 1930 |
| 74 | 8056 | Lake Ck | | slu | Au fineness: 953.7 parts per thousand | | | | | | | | | | | | | |
| 75 | 8010 | Lake Ck | | slu | placer con w/ nonmag fraction | 2450 | <5 | <1 | 86 | | | <200 | <2 | <20 | <10 | <10 | | 6 |
| 76 | 10521 | Lake Ck | | pan | | 372 | | | <0.2 | 34 | 11 | 90 | 1 | 47 | 16 | <0.2 | <5 | 15 |
| 76 | 10522 | Lake Ck | | sed | | 10 | | | <0.2 | 23 | 5 | 61 | <1 | 22 | 13 | <0.2 | <5 | 6 |
| 76 | 10523 | Lake Ck | otc | rand | ch schist w/ qz lenses | <5 | | | <0.2 | 9 | 4 | 72 | <1 | 27 | 17 | <0.2 | <5 | <5 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 58 | 10694 | 11 | 0.021 | 5.08 | 707 | <10 | 202 | 303 | 79 | <20 | <20 | 24 | 3.27 | 1.20 | 1.52 | 0.17 | 0.50 | 72 | 10 | 3 | 25 | 2 | 7 | <10 | 0.05 | 7 |
| 58 | 10695 | 7 | <0.010 | 3.18 | 600 | <10 | 38 | 20 | 26 | <20 | <20 | 9 | 1.01 | 0.76 | 3.49 | 0.01 | 0.02 | 136 | 6 | 3 | 16 | 5 | <5 | <10 | 0.02 | 3 |
| 58 | 10696 | 14 | 0.126 | 2.94 | 528 | <10 | 83 | 79 | 21 | <20 | <20 | 5 | 0.63 | 0.78 | 6.63 | 0.06 | 0.19 | 182 | 6 | <2 | 4 | <1 | 5 | <10 | <0.01 | 5 |
| 59 | 10691 | 14 | 0.020 | 5.90 | 668 | <10 | 204 | 301 | 89 | <20 | <20 | 35 | 3.15 | 1.03 | 0.32 | 0.15 | 0.48 | 44 | 9 | 3 | 25 | 2 | 6 | <10 | 0.07 | 6 |
| 59 | 10692 | <5 | <0.010 | 3.04 | 530 | <10 | 25 | 20 | 28 | <20 | <20 | 13 | 0.89 | 0.59 | 0.29 | <0.01 | 0.01 | 12 | 5 | 3 | 13 | 4 | <5 | <10 | 0.03 | 2 |
| 59 | 10693 | <5 | <0.010 | 1.37 | 454 | <10 | 11 | 129 | 5 | <20 | <20 | <1 | 0.19 | 0.51 | 4.76 | 0.03 | 0.03 | 167 | 6 | <2 | 2 | <1 | <5 | <10 | <0.01 | 2 |
| 60 | 10689 | <5 | 0.020 | 4.55 | 775 | <10 | 212 | 299 | 72 | <20 | <20 | 26 | 3.14 | 0.93 | 0.25 | 0.18 | 0.49 | 42 | 8 | 4 | 24 | 2 | 6 | <10 | 0.02 | 6 |
| 60 | 10690 | <5 | 0.073 | 3.64 | 616 | <10 | 34 | 24 | 35 | <20 | <20 | 13 | 1.14 | 0.74 | 0.36 | <0.01 | 0.02 | 15 | 6 | 3 | 18 | 5 | <5 | <10 | 0.03 | 3 |
| 61 | 10687 | 6 | 0.027 | 4.71 | 726 | <10 | 178 | 377 | 62 | <20 | <20 | 28 | 2.72 | 0.73 | 0.26 | 0.17 | 0.42 | 35 | 8 | 4 | 19 | 2 | 5 | <10 | 0.03 | 6 |
| 61 | 10688 | <5 | 0.046 | 3.25 | 564 | <10 | 30 | 19 | 30 | <20 | <20 | 13 | 0.75 | 0.51 | 0.31 | <0.01 | 0.02 | 11 | 6 | 3 | 11 | 4 | <5 | <10 | 0.03 | 2 |
| 62 | 10684 | 8 | 0.027 | 5.74 | 481 | <10 | 81 | 317 | 52 | <20 | <20 | 166 | 1.64 | 0.43 | 0.43 | 0.15 | 0.28 | 39 | 16 | 7 | 12 | 7 | 9 | <10 | 0.05 | 8 |
| 62 | 10685 | <5 | 0.058 | 3.25 | 476 | <10 | 26 | 18 | 30 | <20 | <20 | 15 | 0.71 | 0.51 | 0.29 | <0.01 | 0.01 | 12 | 6 | 3 | 11 | 4 | <5 | <10 | 0.04 | 2 |
| 63 | 10686 | 9 | 0.084 | 3.05 | 963 | <10 | 29 | 54 | 18 | <20 | <20 | 3 | 0.57 | 0.96 | >10.00 | 0.05 | 0.10 | 188 | 11 | <2 | 5 | <1 | 5 | <10 | <0.01 | 3 |
| 64 | 10659 | <5 | <0.010 | 0.80 | 493 | <10 | 11 | 56 | 4 | <20 | <20 | 6 | 0.21 | 0.18 | >10.00 | 0.02 | 0.03 | 157 | 10 | <2 | 1 | <1 | <5 | <10 | <0.01 | 2 |
| 65 | 10660 | <5 | <0.010 | 0.61 | 216 | <10 | 6 | 237 | 1 | <20 | <20 | <1 | 0.05 | <0.01 | 0.40 | 0.01 | 0.01 | 7 | 1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 2 |
| 66 | 10512 | <5 | <0.010 | 2.73 | 1010 | <10 | 28 | 54 | 22 | <20 | <20 | <1 | 1.07 | 0.73 | >10.00 | 0.07 | 0.08 | 178 | 10 | 2 | 11 | <1 | <5 | <10 | <0.01 | 4 |
| 67 | 10513 | <5 | 0.032 | 3.87 | 443 | <10 | 14 | 23 | 41 | <20 | <20 | 15 | 0.53 | 0.45 | 0.41 | <0.01 | 0.01 | 14 | 7 | 3 | 8 | 5 | <5 | <10 | 0.07 | 2 |
| 67 | 10514 | <5 | 0.112 | 6.52 | 576 | <10 | 113 | 345 | 72 | <20 | <20 | 208 | 2.57 | 0.64 | 0.56 | 0.31 | 0.38 | 53 | 22 | 4 | 15 | 2 | 6 | <10 | 0.07 | 4 |
| 68 | 10515 | <5 | <0.010 | 0.47 | 436 | <10 | 8 | 81 | 3 | <20 | <20 | <1 | 0.18 | 0.11 | >10.00 | 0.01 | 0.03 | 437 | 10 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 68 | 10516 | 102 | 0.055 | 6.49 | 2126 | <10 | 9 | 13 | 28 | <20 | <20 | <1 | 0.47 | 1.84 | >10.00 | 0.04 | 0.02 | 290 | 17 | <2 | 17 | <1 | <5 | <10 | <0.01 | 2 |
| 69 | 10517 | <5 | <0.010 | 5.17 | 579 | <10 | 91 | 313 | 49 | <20 | <20 | 29 | 2.62 | 1.07 | 1.16 | 0.14 | 0.29 | 35 | 7 | 4 | 20 | 3 | <5 | <10 | 0.02 | 3 |
| 69 | 10518 | <5 | 0.028 | 3.35 | 517 | <10 | 20 | 23 | 29 | <20 | <20 | 11 | 0.90 | 0.63 | 0.55 | <0.01 | 0.01 | 17 | 6 | 3 | 11 | 4 | <5 | <10 | 0.03 | 2 |
| 69 | 10519 | <5 | <0.010 | 4.47 | 815 | <10 | 61 | 66 | 30 | <20 | <20 | 12 | 2.98 | 1.62 | 4.42 | 0.03 | 0.26 | 44 | 8 | 6 | 32 | <1 | 6 | <10 | <0.01 | 3 |
| 70 | 8011 | 2.0 | | 0.6 | | <20 | <100 | 410 | | <200 | <2 | <5 | | | | <0.05 | | | | | | | 1.1 | <1 | | <500 |
| 71 | 10520 | <5 | <0.010 | 2.15 | 941 | <10 | 57 | 39 | 10 | <20 | <20 | 4 | 0.75 | 0.77 | >10.00 | 0.04 | 0.17 | 305 | 9 | <2 | 2 | <1 | <5 | <10 | <0.01 | 3 |
| 72 | 10524 | <5 | <0.010 | 6.65 | 538 | <10 | 79 | 188 | 79 | <20 | <20 | 31 | 2.95 | 1.53 | 0.49 | 0.24 | 0.31 | 40 | 9 | <2 | 23 | 2 | 7 | <10 | 0.10 | 2 |
| 72 | 10525 | <5 | 0.021 | 3.92 | 569 | <10 | 15 | 29 | 42 | <20 | <20 | 12 | 0.99 | 0.92 | 0.39 | <0.01 | 0.01 | 17 | 6 | 3 | 16 | 7 | <5 | <10 | 0.06 | 2 |
| 73 | 10526 | 28 | 0.960 | >10.00 | 533 | 39 | 12 | 267 | 143 | <20 | 242 | 23 | 0.81 | 0.40 | 0.28 | 0.04 | 0.07 | 19 | 5 | <2 | 9 | 3 | <5 | <10 | 0.11 | 6 |
| 73 | 10762 | 249 | 1.532 | >10.00 | 124 | 293 | 13 | 181 | 152 | 512 | 719 | 191 | 0.08 | 0.02 | 0.12 | <0.01 | 0.01 | 70 | 11 | <2 | <1 | 7 | <5 | <10 | 0.27 | 4 |
| 73 | 10781 | 51 | 3.294 | >10.00 | 646 | 13 | 31 | 150 | 183 | 64 | 150 | 8 | 1.01 | 0.65 | 0.35 | 0.06 | 0.11 | 25 | 4 | <2 | 15 | 5 | <5 | <10 | 0.07 | 8 |
| 74 | 8055 | 67.1 | | >10.0 | | <2100 | <3700 | 3400 | | <18000 | 976 | 551 | | | | <0.39 | | | | | | | 7.7 | <4 | | <6500 |
| 74 | 8056 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 75 | 8010 | 16.0 | | >10.0 | | <20 | <100 | 83 | | <200 | 19 | <5 | | | | <0.05 | | | | | | | 4.7 | <1 | | <500 |
| 76 | 10521 | <5 | 0.014 | 6.07 | 709 | <10 | 98 | 222 | 61 | <20 | <20 | 54 | 2.82 | 1.12 | 1.47 | 0.21 | 0.33 | 56 | 9 | 4 | 24 | 2 | 6 | <10 | 0.03 | 4 |
| 76 | 10522 | <5 | 0.018 | 3.32 | 569 | <10 | 22 | 20 | 29 | <20 | <20 | 9 | 0.73 | 0.62 | 1.51 | <0.01 | 0.01 | 53 | 5 | 2 | 12 | 5 | <5 | <10 | 0.04 | 2 |
| 76 | 10523 | <5 | 0.031 | 4.08 | 1164 | <10 | 51 | 100 | 39 | <20 | <20 | 14 | 1.45 | 1.68 | 1.93 | 0.13 | 0.18 | 116 | 5 | 3 | 19 | <1 | <5 | <10 | 0.06 | 4 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 11071 | Lake Ck trib. | | sed | | 1 | | | <0.2 | 19 | 4 | 59 | <1 | 24 | 14 | <0.2 | <5 | 9 |
| 77 | 11072 | Lake Ck trib. | | pan | minor black sands (not mag) | 1 | <5 | <1 | <0.2 | 15 | <2 | 84 | 2 | 36 | 20 | <0.2 | <5 | 11 |
| 78 | 11019 | Lake Ck trib. | | pan | | 6 | <5 | <1 | <0.2 | 16 | 8 | 87 | 1 | 37 | 21 | <0.2 | <5 | 11 |
| 79 | 10910 | Wild River trib. | | sed | | 2 | | | <0.2 | 34 | 8 | 72 | <1 | 28 | 14 | <0.2 | <5 | 18 |
| 79 | 10911 | Wild River trib. | | pan | no visible Au | 4267 | <5 | <1 | <0.2 | 15 | 3 | 82 | 2 | 38 | 19 | <0.2 | <5 | 9 |
| 80 | 11018 | Mathews Dome | rub | sel | qz-calc schist w/ 0.5 cm py cubes | 18 | | | <0.2 | 36 | 17 | 121 | 1 | 45 | 28 | 0.9 | <5 | 46 |
| 81 | 10552 | Mathews Dome | flt | sel | ch schist w/ py cubes and lim | <5 | | | <0.2 | 127 | <2 | 75 | 3 | 30 | 52 | <0.2 | <5 | 16 |
| 82 | 11070 | Mathews Dome | rub | sel | ch schist w/ qz, py, lim | <1 | | | <0.2 | 25 | 19 | 74 | 3 | 33 | 16 | <0.2 | <5 | 6 |
| 83 | 10553 | Mathews Dome | flt | sel | ch schist w/ qz, small py cubes | <5 | | | <0.2 | 50 | 24 | 65 | <1 | 25 | 16 | 0.2 | <5 | 12 |
| 83 | 11016 | Mathews Dome | otc | sel | qz vein w/ tet, mal, bn (?) | 62 | | | 5.1 | 4003 | 16 | 29 | 1 | 16 | 8 | <0.2 | 9 | <5 |
| 83 | 11017 | Mathews Dome | otc | chip | calc schist w/ tet, mal | 14 | | | 8.1 | 8631 | 31 | 39 | 2 | 14 | 7 | <0.2 | 7 | <5 |
| 84 | 10658 | Mathews Dome | otc | sel | qz veins w/ tet, mal | 9 | | | 4.1 | 5188 | 5 | 43 | 1 | 17 | 9 | <0.2 | <5 | <5 |
| 85 | 10927 | Oregon Ck | | sed | | 5 | | | <0.2 | 13 | 5 | 58 | <1 | 19 | 11 | <0.2 | <5 | 5 |
| 85 | 10928 | Oregon Ck | | pan | tr mag, no visible Au | 7 | 5 | <1 | <0.2 | 29 | 3 | 90 | 1 | 34 | 19 | <0.2 | <5 | <5 |
| 86 | 10929 | Oregon Ck | | sed | | 160 | | | <0.2 | 15 | 5 | 57 | <1 | 22 | 10 | <0.2 | <5 | 6 |
| 86 | 10930 | Oregon Ck | | pan | tr mag, no visible Au | 134 | <5 | <1 | <0.2 | 67 | 4 | 98 | 2 | 57 | 21 | <0.2 | <5 | 6 |
| 87 | 10922 | Agnes Ck | | sed | | 3 | | | <0.2 | 24 | 11 | 92 | 1 | 29 | 13 | <0.2 | <5 | 10 |
| 87 | 10923 | Agnes Ck | | pan | mod rusty sulfides, no visible Au | 15 | <5 | <1 | 0.6 | 63 | 15 | 118 | 2 | 44 | 21 | <0.2 | <5 | 20 |
| 87 | 10924 | Agnes Ck | otc | rep | graphitic schist w/ py, cpy (?) | <1 | | | <0.2 | 20 | 31 | 47 | 2 | 21 | 6 | <0.2 | <5 | <5 |
| 87 | 10925 | Agnes Ck | | sed | | 3 | | | <0.2 | 40 | 10 | 88 | 1 | 30 | 12 | 0.2 | <5 | 10 |
| 87 | 10926 | Agnes Ck | | pan | abu py, no visible Au, no mag | 28 | <5 | <1 | <0.2 | 38 | 22 | 115 | 3 | 43 | 22 | 0.2 | <5 | 44 |
| 88 | 10909 | Birch Ck | rub | sel | qz-mica schist w/ py, cpy (?) | 35 | | | 2.6 | 88 | 294 | 125 | 7 | 46 | 37 | 7.2 | <5 | 1767 |
| 89 | 10897 | Birch Ck | | slu | placer con | | <70 | <70 | 4.4 | 105 | 847 | 102 | 2 | 61 | 27 | 0.7 | 6 | 581 |
| 90 | 10858 | Rue Ck (Birch Ck trib.) | | sed | | 2 | | | <0.2 | 23 | 9 | 81 | <1 | 32 | 12 | <0.2 | <5 | 7 |
| 90 | 10859 | Rue Ck (Birch Ck trib.) | | pan | taken from cutbank | <1 | <5 | <1 | <0.2 | 42 | 14 | 114 | 2 | 61 | 22 | <0.2 | <5 | 16 |
| 91 | 10860 | Birch Ck | | pan | 2 coarse Au | 262.98 ppm | <5 | <1 | 7.3 | 53 | 10 | 155 | 2 | 79 | 33 | 0.4 | <5 | 27 |
| 91 | 10894 | Birch Ck | flt | sel | rusty qz veinlets | 4 | | | 1.3 | 26 | 163 | 32 | 3 | 29 | 10 | 0.6 | <5 | 96 |
| 92 | 10895 | Birch Ck | flt | sel | rusty qz veinlets w/ 1% py | 6 | | | <0.2 | 80 | 45 | 107 | 1 | 55 | 22 | <0.2 | <5 | 13 |
| 92 | 10896 | Birch Ck | | sed | | 4 | | | <0.2 | 39 | 14 | 103 | 2 | 39 | 15 | 0.4 | <5 | 14 |
| 93 | 10907 | Birch Ck | rub | sel | greenschist w/ cpy, diss mag | <1 | | | <0.2 | 6 | <2 | 41 | 1 | 5 | 27 | <0.2 | <5 | <5 |
| 93 | 10908 | Birch Ck | otc | sel | qz-ch schist w/ py cubes, lim | 1 | | | <0.2 | 3 | <2 | 108 | 2 | 33 | 11 | <0.2 | <5 | <5 |
| 93 | 10921 | Birch Ck | otc | spac | greenschist w/ 5% mag | <1 | | | <0.2 | 27 | <2 | 80 | 2 | 11 | 38 | <0.2 | <5 | 6 |
| 94 | 10766 | Kay Ck | | sed | | <5 | | | <0.2 | 21 | 7 | 47 | <1 | 21 | 10 | <0.2 | <5 | 8 |
| 94 | 10767 | Kay Ck | | pan | abu mag, no visible Au | 12 | <5 | <1 | <0.2 | 48 | 13 | 53 | <1 | 52 | 22 | <0.2 | <5 | 19 |
| 94 | 10768 | Kay Ck | flt | sel | qz-mica schist w/ 10% po | <5 | | | <0.2 | 4 | <2 | 61 | <1 | 86 | 31 | <0.2 | <5 | <5 |
| 95 | 10850 | Jay Ck | otc | sel | greenschist w/ 3% py, cpy (?) | <1 | | | <0.2 | 41 | 6 | 75 | 1 | 9 | 26 | <0.2 | <5 | <5 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 11071 | <5 | 0.010 | 4.03 | 715 | <10 | 10 | 28 | 43 | <20 | <20 | 19 | 0.95 | 0.96 | 0.43 | <0.01 | 0.01 | 13 | 7 | <2 | 14 | <1 | <5 | <10 | 0.06 | <1 |
| 77 | 11072 | <5 | 0.013 | 5.43 | 488 | <10 | 25 | 168 | 60 | <20 | <20 | 24 | 1.54 | 1.44 | 0.45 | 0.06 | 0.10 | 23 | 7 | <2 | 21 | <1 | <5 | <10 | 0.09 | <1 |
| 78 | 11019 | <5 | <0.010 | 5.11 | 733 | <10 | 26 | 143 | 60 | <20 | <20 | 14 | 1.67 | 1.62 | 0.51 | 0.04 | 0.09 | 20 | 6 | <2 | 23 | <1 | <5 | <10 | 0.10 | <1 |
| 79 | 10910 | <5 | 0.028 | 3.76 | 940 | <10 | 29 | 27 | 37 | <20 | <20 | 17 | 1.01 | 1.11 | 0.87 | <0.01 | 0.04 | 34 | 7 | <2 | 20 | <1 | <5 | <10 | 0.04 | <1 |
| 79 | 10911 | <5 | 0.019 | 4.77 | 744 | <10 | 31 | 138 | 51 | <20 | <20 | 25 | 1.21 | 1.22 | 0.59 | 0.04 | 0.09 | 30 | 6 | <2 | 28 | <1 | <5 | <10 | 0.08 | <1 |
| 80 | 11018 | <5 | <0.010 | 7.39 | 3158 | <10 | 17 | 71 | 26 | <20 | <20 | 14 | 1.99 | 4.20 | 8.15 | 0.01 | 0.08 | 191 | 12 | <2 | 35 | 5 | 7 | <10 | <0.01 | 7 |
| 81 | 10552 | <5 | 0.013 | 9.02 | 779 | <10 | 1 | 83 | 72 | <20 | <20 | <1 | 4.45 | 4.33 | 0.68 | 0.01 | <0.01 | 28 | <1 | 4 | 48 | <1 | <5 | <10 | 0.28 | <1 |
| 82 | 11070 | <5 | 0.022 | 3.60 | 510 | <10 | 35 | 214 | 50 | <20 | <20 | 21 | 2.44 | 1.01 | 0.22 | 0.03 | 0.11 | 11 | 6 | 3 | 24 | <1 | <5 | <10 | <0.01 | 9 |
| 83 | 10553 | <5 | 0.020 | 3.99 | 944 | <10 | 31 | 126 | 23 | <20 | <20 | 6 | 1.54 | 1.07 | 3.68 | 0.07 | 0.14 | 169 | 8 | 4 | 19 | <1 | <5 | <10 | 0.01 | 3 |
| 83 | 11016 | <5 | 0.540 | 1.45 | 413 | <10 | 10 | 199 | 11 | <20 | <20 | 2 | 0.78 | 0.62 | 2.63 | 0.02 | 0.04 | 76 | 6 | <2 | 12 | 3 | <5 | <10 | <0.01 | 1 |
| 83 | 11017 | <5 | 1.739 | 2.22 | 1152 | <10 | 7 | 132 | 5 | <20 | <20 | 2 | 0.24 | 4.15 | 7.91 | 0.05 | 0.03 | 190 | 8 | <2 | 3 | 6 | <5 | <10 | <0.01 | 4 |
| 84 | 10658 | <5 | 0.075 | 1.66 | 473 | <10 | 14 | 219 | 15 | <20 | <20 | 2 | 0.74 | 0.73 | 0.84 | 0.04 | 0.05 | 29 | 2 | <2 | 11 | 3 | <5 | <10 | <0.01 | 2 |
| 85 | 10927 | <5 | 0.018 | 3.89 | 369 | <10 | 8 | 23 | 44 | <20 | <20 | 13 | 0.61 | 0.68 | 0.44 | <0.01 | 0.01 | 16 | 7 | <2 | 11 | <1 | <5 | <10 | 0.07 | <1 |
| 85 | 10928 | <5 | 0.061 | 5.40 | 672 | <10 | 27 | 157 | 54 | <20 | <20 | 41 | 1.15 | 1.20 | 0.76 | 0.06 | 0.10 | 30 | 7 | <2 | 21 | <1 | <5 | <10 | 0.08 | <1 |
| 86 | 10929 | <5 | 0.029 | 3.90 | 527 | <10 | 14 | 23 | 40 | <20 | <20 | 19 | 0.69 | 0.75 | 0.65 | <0.01 | 0.01 | 19 | 7 | <2 | 13 | <1 | <5 | <10 | 0.06 | <1 |
| 86 | 10930 | <5 | 0.027 | 5.18 | 615 | <10 | 62 | 117 | 38 | <20 | <20 | 51 | 1.82 | 1.85 | 1.53 | 0.05 | 0.13 | 67 | 7 | <2 | 41 | <1 | <5 | <10 | 0.04 | 3 |
| 87 | 10922 | <5 | 0.031 | 3.37 | 536 | <10 | 18 | 21 | 20 | <20 | <20 | 27 | 1.36 | 0.80 | 0.66 | <0.01 | 0.03 | 19 | 6 | <2 | 28 | <1 | <5 | <10 | <0.01 | 3 |
| 87 | 10923 | <5 | 0.209 | 7.16 | 501 | <10 | 56 | 174 | 31 | <20 | <20 | 14 | 2.49 | 1.19 | 0.45 | 0.04 | 0.15 | 20 | 5 | <2 | 50 | 1 | <5 | <10 | <0.01 | 9 |
| 87 | 10924 | <5 | <0.010 | 2.72 | 605 | <10 | 46 | 218 | 14 | <20 | <20 | 10 | 1.21 | 0.55 | 0.86 | 0.03 | 0.16 | 31 | 3 | <2 | 22 | 1 | <5 | <10 | <0.01 | 2 |
| 87 | 10925 | <5 | 0.033 | 3.28 | 552 | <10 | 17 | 18 | 18 | <20 | <20 | 21 | 1.24 | 0.79 | 1.45 | <0.01 | 0.03 | 40 | 8 | <2 | 16 | <1 | <5 | <10 | <0.01 | 4 |
| 87 | 10926 | <5 | 0.083 | 7.93 | 664 | <10 | 54 | 152 | 36 | <20 | <20 | 9 | 2.56 | 1.19 | 2.14 | 0.03 | 0.15 | 78 | 7 | <2 | 49 | <1 | <5 | <10 | 0.01 | 9 |
| 88 | 10909 | <5 | 0.408 | >10.00 | 1228 | <10 | 5 | 57 | 68 | <20 | <20 | <1 | 1.82 | 1.33 | 2.37 | 0.04 | 0.04 | 94 | 4 | <2 | 40 | <1 | 11 | <10 | <0.01 | <1 |
| 89 | 10897 | <5 | 0.063 | >10.00 | 611 | <10 | 21 | 144 | 115 | <20 | <20 | 13 | 1.34 | 0.49 | 0.17 | 0.03 | 0.13 | 12 | 6 | <2 | 20 | <1 | <5 | <10 | <0.01 | 2 |
| 90 | 10858 | <5 | 0.022 | 3.09 | 536 | <10 | 27 | 23 | 20 | <20 | <20 | 25 | 1.29 | 0.62 | 0.21 | <0.01 | 0.04 | 9 | 8 | <2 | 23 | <1 | <5 | <10 | <0.01 | <1 |
| 90 | 10859 | <5 | 0.017 | 4.95 | 696 | <10 | 35 | 176 | 28 | <20 | <20 | 25 | 1.73 | 0.81 | 0.19 | 0.02 | 0.11 | 9 | 11 | <2 | 29 | <1 | <5 | <10 | <0.01 | 3 |
| 91 | 10860 | <5 | 3.073 | 5.45 | 942 | <10 | 46 | 157 | 30 | <20 | <20 | 25 | 2.22 | 0.95 | 0.20 | 0.03 | 0.15 | 14 | 9 | <2 | 37 | <1 | <5 | <10 | <0.01 | 3 |
| 91 | 10894 | <5 | 0.016 | 1.20 | 442 | <10 | 48 | 234 | 8 | <20 | <20 | 9 | 0.36 | 0.09 | 0.21 | 0.04 | 0.09 | 25 | 4 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 92 | 10895 | <5 | 0.011 | 4.90 | 878 | <10 | 4 | 157 | 85 | <20 | <20 | 23 | 1.81 | 1.15 | 0.45 | 0.10 | 0.02 | 33 | 6 | 3 | 23 | <1 | 10 | <10 | 0.02 | <1 |
| 92 | 10896 | <5 | 0.045 | 3.49 | 565 | <10 | 29 | 21 | 22 | <20 | <20 | 27 | 1.36 | 0.69 | 0.42 | <0.01 | 0.04 | 17 | 13 | <2 | 28 | <1 | <5 | <10 | <0.01 | <1 |
| 93 | 10907 | <5 | <0.010 | 9.68 | 921 | <10 | <1 | 34 | 136 | <20 | <20 | 5 | 2.30 | 1.98 | 1.85 | 0.05 | <0.01 | 36 | 20 | 3 | 31 | 1 | 7 | <10 | 0.24 | <1 |
| 93 | 10908 | <5 | <0.010 | 8.17 | 1702 | <10 | 33 | 187 | 52 | <20 | <20 | 9 | 3.60 | 2.91 | 3.71 | 0.01 | 0.12 | 40 | 10 | <2 | 79 | <1 | 6 | <10 | <0.01 | <1 |
| 93 | 10921 | <5 | <0.010 | 7.00 | 759 | <10 | 42 | 60 | 239 | <20 | <20 | <1 | 2.59 | 2.21 | 1.53 | 0.04 | 0.10 | 46 | 5 | 4 | 35 | <1 | <5 | <10 | 0.70 | <1 |
| 94 | 10766 | <5 | 0.013 | 2.44 | 356 | <10 | 16 | 18 | 14 | <20 | <20 | 17 | 0.79 | 0.56 | 0.25 | <0.01 | 0.03 | 6 | 7 | <2 | 10 | 1 | <5 | <10 | 0.01 | <1 |
| 94 | 10767 | <5 | 0.037 | >10.00 | 338 | <10 | 59 | 225 | 205 | <20 | <20 | 18 | 1.04 | 0.67 | 0.29 | 0.02 | 0.06 | 10 | 6 | <2 | 13 | 15 | <5 | <10 | 0.14 | 1 |
| 94 | 10768 | <5 | <0.010 | 4.59 | 403 | <10 | 5 | 157 | 81 | <20 | <20 | 4 | 1.84 | 1.90 | 1.63 | 0.04 | <0.01 | 57 | 4 | 4 | 18 | 6 | 5 | <10 | 0.29 | <1 |
| 95 | 10850 | <5 | <0.010 | 6.95 | 1535 | <10 | 117 | 44 | 43 | <20 | <20 | 12 | 1.47 | 1.70 | 5.63 | 0.03 | 0.33 | 350 | 14 | <2 | 21 | <1 | <5 | <10 | 0.07 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 10851 | Jay Ck | otc | rep | qz vein w/ euhedral py (< 1cm), cpy | 21 | | | <0.2 | 32 | 4 | 18 | 3 | 10 | 10 | 0.2 | <5 | 82 |
| 96 | 10848 | Jay Ck | otc | rep | qz vein w/ tr sulfides | <1 | | | <0.2 | 13 | 29 | 12 | 2 | 8 | 3 | <0.2 | <5 | <5 |
| 96 | 10849 | Jay Ck | flt | sel | qtz w/ red stain (glassy texture?) | <1 | | | <0.2 | 8 | 18 | 30 | 2 | 9 | 2 | <0.2 | <5 | <5 |
| 96 | 10852 | Jay Ck | | sed | | 15 | | | <0.2 | 55 | 16 | 144 | 2 | 43 | 22 | 0.6 | <5 | 11 |
| 96 | 10853 | Jay Ck | | pan | mod mag | 9 | <5 | 3 | 0.4 | 158 | 50 | 110 | 3 | 65 | 32 | 0.4 | <5 | 45 |
| 96 | 10854 | Jay Ck | | pan | | 6 | 7 | 1 | <0.2 | 38 | 18 | 99 | 4 | 37 | 19 | <0.2 | <5 | 16 |
| 97 | 10855 | Jay Ck | | pan | mod mag, 1 py cube (1 mm) | 2 | <5 | <1 | <0.2 | 30 | 10 | 108 | 2 | 33 | 19 | <0.2 | <5 | 7 |
| 98 | 10782 | Jay Ck | | slu | abu mag | 0.006 oz/cyd | <70 | <70 | 0.5 | 31 | 299 | 51 | 2 | 43 | 21 | <0.2 | <5 | <5 |
| 98 | 10856 | Jay Ck | | pan | mod mag, no visible Au | 1 | 8 | <1 | <0.2 | 54 | 20 | 106 | 3 | 35 | 19 | <0.2 | <5 | 7 |
| 98 | 10890 | Jay Ck | | sed | | 4 | | | <0.2 | 30 | 14 | 86 | 2 | 30 | 14 | 0.2 | <5 | 8 |
| 98 | 10891 | Jay Ck | | pan | no mag | 19 | <5 | <1 | <0.2 | 36 | 13 | 116 | 3 | 41 | 20 | <0.2 | <5 | 10 |
| 98 | 10892 | Jay Ck | | sed | | 2 | | | <0.2 | 34 | 12 | 50 | <1 | 22 | 11 | <0.2 | <5 | 6 |
| 98 | 10893 | Jay Ck | flt | sel | marble w/ diss stringer py (1%) | 1 | | | 1.0 | 2 | 9 | 11 | <1 | 2 | 1 | <0.2 | <5 | <5 |
| 99 | 10857 | Jay Ck | flt | sel | greenstone w/ 3% euhedral py | 3 | | | <0.2 | 125 | <2 | 43 | 1 | 11 | 40 | <0.2 | <5 | 6 |
| 99 | 10886 | Rye Ck | | sed | | 2 | | | <0.2 | 17 | 10 | 47 | <1 | 14 | 8 | <0.2 | <5 | 6 |
| 99 | 10887 | Rye Ck | | pan | 1fine Au, abu mag, minor py | >10000 | <5 | <1 | 0.4 | 35 | 64 | 52 | 3 | 30 | 27 | <0.2 | <5 | 15 |
| 99 | 10888 | Jay Ck | | sed | | 3 | | | <0.2 | 36 | 12 | 56 | <1 | 21 | 13 | <0.2 | <5 | <5 |
| 99 | 10889 | Jay Ck | | pan | | 182 | <5 | <1 | <0.2 | 42 | 15 | 73 | 2 | 24 | 13 | <0.2 | <5 | 6 |
| 100 | 10939 | East Ck | flt | sel | qz-rich rock w/ 1% sulfides | <1 | | | 1.2 | 21 | 22 | 40 | 1 | 19 | 5 | 0.6 | <5 | 5 |
| 100 | 10940 | East Ck | | pan | abu mag | 7 | <5 | 5 | <0.2 | 32 | 4 | 50 | 5 | 16 | 25 | <0.2 | <5 | 5 |
| 100 | 10941 | East Ck | | sed | | 3 | | | <0.2 | 31 | 6 | 55 | 1 | 19 | 13 | <0.2 | <5 | 9 |
| 100 | 10942 | East Ck | flt | sel | fine grained hfls w/ 1% diss po | <1 | | | <0.2 | 12 | 3 | 20 | 2 | 15 | 4 | <0.2 | <5 | 11 |
| 101 | 10773 | Unnamed Ck | otc | sel | schist w/ 5% py (3mm cubes) | <5 | | | <0.2 | 154 | <2 | 64 | <1 | 33 | 27 | <0.2 | <5 | <5 |
| 101 | 10774 | Unnamed Ck | | sed | | <5 | | | <0.2 | 35 | <2 | 51 | <1 | 11 | 11 | <0.2 | <5 | 5 |
| 101 | 10775 | Unnamed Ck | | pan | mod mag, minor py, no visible Au | 10 | <5 | <1 | <0.2 | 40 | 5 | 62 | <1 | 18 | 21 | <0.2 | <5 | <5 |
| 102 | 10789 | Scofield Ck | | sed | | <5 | | | <0.2 | 41 | 19 | 77 | <1 | 26 | 16 | <0.2 | <5 | 9 |
| 102 | 10790 | Scofield Ck | | pan | abu euhedral mag | 12 | <5 | <1 | <0.2 | 57 | 127 | 61 | <1 | 23 | 31 | <0.2 | <5 | 26 |
| 103 | 10936 | Galena Ck | flt | sel | vein qz w/ gn, cpy, po, apy | 1 | | | 10.4 | 140 | 1545 | 670 | 3 | 8 | 11 | 11.0 | 8 | 68 |
| 103 | 10937 | Galena Ck | | sed | | 8 | | | <0.2 | 48 | 24 | 165 | 5 | 52 | 15 | 1.3 | <5 | 28 |
| 103 | 10938 | Galena Ck | | pan | no mag, mod gar (< 3 mm) | 11 | <5 | <1 | <0.2 | 32 | 14 | 122 | 5 | 43 | 14 | 0.7 | <5 | 25 |
| 104 | 8008 | Michigan Ck | flt | sel | vein qz w/ gn, ank, sid (?), lim | 9 | | | 0.84 oz/ton | | 2.13% | <200 | <2 | <20 | <10 | <10 | | 20 |
| 104 | 8009 | Michigan Ck | flt | sel | vein qz w/ gn, ank, sid (?) | <5 | | | 2.63 oz/ton | | 4.35% | <200 | 17 | 24 | <10 | <10 | | 35 |
| 105 | 10917 | Bourbon Ck | | sed | | 12 | | | <0.2 | 53 | 14 | 107 | 2 | 55 | 19 | 0.6 | <5 | 15 |
| 105 | 10918 | Bourbon Ck | | pan | tr fine gold (?), no mag | 62 | <5 | <1 | 0.3 | 42 | 8 | 70 | 3 | 35 | 15 | 0.2 | <5 | 7 |
| 105 | 10919 | Bourbon Ck | otc | rep | calc-mica schist w/ diss po, py, cpy | <1 | | | 0.3 | 48 | 5 | 80 | 2 | 40 | 14 | 0.3 | <5 | 17 |
| 105 | 10920 | Fall Ck | flt | sel | hfls (?) w/ po bands | 3 | | | 0.8 | 84 | 13 | 87 | 4 | 37 | 11 | 1.2 | <5 | <5 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 10851 | <5 | 0.021 | 2.72 | 353 | <10 | 11 | 231 | 1 | <20 | <20 | 1 | 0.11 | 0.12 | 1.40 | 0.02 | 0.03 | 24 | 5 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 96 | 10848 | <5 | 0.011 | 0.63 | 146 | <10 | 8 | 311 | 4 | <20 | <20 | <1 | 0.17 | 0.08 | 0.07 | 0.01 | 0.02 | 3 | 2 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 96 | 10849 | <5 | <0.010 | 0.97 | 138 | <10 | 14 | 280 | 3 | <20 | <20 | 1 | 0.36 | 0.16 | 0.04 | <0.01 | 0.03 | 2 | 2 | <2 | 6 | <1 | <5 | <10 | <0.01 | <1 |
| 96 | 10852 | <5 | 0.061 | 5.30 | 1785 | <10 | 68 | 22 | 39 | <20 | <20 | 27 | 1.52 | 0.99 | 1.03 | <0.01 | 0.09 | 35 | 17 | <2 | 23 | <1 | <5 | <10 | 0.01 | <1 |
| 96 | 10853 | <5 | 0.096 | 8.28 | 554 | <10 | 53 | 187 | 62 | <20 | <20 | 18 | 1.45 | 0.99 | 5.06 | 0.03 | 0.12 | 192 | 13 | <2 | 23 | <1 | <5 | <10 | 0.08 | 3 |
| 96 | 10854 | <5 | 0.019 | 8.64 | 648 | <10 | 58 | 251 | 84 | <20 | <20 | 24 | 1.43 | 0.80 | 0.48 | 0.03 | 0.14 | 20 | 9 | <2 | 22 | 1 | <5 | <10 | 0.06 | 2 |
| 97 | 10855 | <5 | 0.012 | 8.47 | 571 | <10 | 40 | 198 | 72 | <20 | <20 | 18 | 1.78 | 1.02 | 0.31 | 0.02 | 0.15 | 16 | 8 | <2 | 34 | <1 | <5 | <10 | 0.07 | <1 |
| 98 | 10782 | <5 | 0.240 | >10.00 | 226 | <10 | <1 | 66 | 471 | <20 | <20 | 6 | 0.04 | <0.01 | 0.02 | <0.01 | <0.01 | 4 | 2 | <2 | <1 | <1 | <5 | <10 | 0.03 | 4 |
| 98 | 10856 | <5 | 0.018 | 8.57 | 790 | <10 | 43 | 191 | 76 | <20 | <20 | 24 | 1.76 | 1.07 | 0.81 | 0.03 | 0.19 | 27 | 12 | <2 | 32 | <1 | <5 | <10 | 0.07 | <1 |
| 98 | 10890 | <5 | 0.018 | 2.88 | 414 | <10 | 20 | 18 | 15 | <20 | <20 | 25 | 0.99 | 0.55 | 0.23 | <0.01 | 0.04 | 10 | 12 | <2 | 20 | <1 | <5 | <10 | <0.01 | <1 |
| 98 | 10891 | <5 | 0.025 | 4.76 | 657 | <10 | 46 | 213 | 25 | <20 | <20 | 24 | 1.85 | 0.97 | 0.24 | 0.03 | 0.18 | 14 | 14 | <2 | 37 | <1 | <5 | <10 | 0.03 | 2 |
| 98 | 10892 | <5 | 0.017 | 2.12 | 660 | <10 | 27 | 8 | 9 | <20 | <20 | 23 | 0.58 | 0.44 | 1.07 | <0.01 | 0.10 | 22 | 12 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 98 | 10893 | <5 | <0.010 | 0.66 | 177 | <10 | 35 | 19 | 2 | <20 | <20 | 1 | 0.13 | 1.52 | >10.00 | <0.01 | 0.10 | 1192 | 5 | <2 | 3 | <1 | <5 | <10 | 0.01 | 1 |
| 99 | 10857 | <5 | 0.012 | 6.33 | 717 | <10 | <1 | 50 | 132 | <20 | <20 | <1 | 3.42 | 3.27 | 1.54 | 0.01 | <0.01 | 41 | <1 | <2 | 40 | 2 | 6 | <10 | 0.16 | <1 |
| 99 | 10886 | <5 | 0.017 | 2.15 | 470 | <10 | 21 | 9 | 14 | <20 | <20 | 18 | 0.62 | 0.85 | 2.40 | <0.01 | 0.06 | 74 | 8 | <2 | 8 | <1 | <5 | <10 | 0.02 | <1 |
| 99 | 10887 | <5 | 0.103 | >10.00 | 349 | <10 | 52 | 119 | 200 | <20 | <20 | 9 | 0.67 | 0.93 | 5.33 | 0.01 | 0.08 | 194 | 8 | <2 | 9 | 2 | <5 | <10 | 0.05 | <1 |
| 99 | 10888 | <5 | 0.016 | 2.59 | 639 | <10 | 18 | 9 | 14 | <20 | <20 | 25 | 0.78 | 0.80 | 2.26 | <0.01 | 0.06 | 68 | 13 | <2 | 16 | <1 | <5 | <10 | 0.02 | <1 |
| 99 | 10889 | <5 | 0.034 | 4.45 | 523 | <10 | 34 | 157 | 27 | <20 | <20 | 18 | 1.28 | 0.98 | 4.15 | 0.02 | 0.15 | 204 | 12 | <2 | 25 | <1 | <5 | <10 | 0.05 | <1 |
| 100 | 10939 | <5 | <0.010 | 1.61 | 330 | <10 | 79 | 38 | 9 | <20 | <20 | 7 | 0.59 | 1.09 | >10.00 | 0.02 | 0.12 | 531 | 12 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 100 | 10940 | <5 | 0.021 | >10.00 | 891 | <10 | 8 | 70 | 1029 | <20 | <20 | 4 | 0.41 | 0.18 | 0.35 | <0.01 | 0.02 | 8 | 8 | <2 | 2 | 8 | <5 | <10 | 0.10 | <1 |
| 100 | 10941 | <5 | <0.010 | 2.82 | 584 | <10 | 30 | 18 | 35 | <20 | <20 | 9 | 1.12 | 1.47 | 1.60 | <0.01 | 0.06 | 27 | 7 | <2 | 11 | <1 | <5 | <10 | 0.05 | <1 |
| 100 | 10942 | <5 | <0.010 | 1.41 | 175 | <10 | 110 | 276 | 21 | <20 | <20 | 4 | 0.88 | 0.41 | 0.76 | 0.03 | 0.24 | 52 | 7 | <2 | 6 | <1 | <5 | <10 | 0.16 | 2 |
| 101 | 10773 | <5 | <0.010 | 6.55 | 976 | <10 | 2 | 99 | 194 | <20 | <20 | 6 | 2.93 | 2.56 | 6.36 | 0.01 | <0.01 | 161 | 13 | 8 | 17 | 13 | 27 | <10 | 0.09 | <1 |
| 101 | 10774 | <5 | <0.010 | 2.64 | 449 | <10 | 35 | 10 | 37 | <20 | <20 | 8 | 0.91 | 1.89 | 3.84 | <0.01 | 0.14 | 42 | 5 | <2 | 8 | 3 | <5 | <10 | 0.07 | <1 |
| 101 | 10775 | <5 | <0.010 | 7.60 | 792 | <10 | 52 | 76 | 169 | <20 | <20 | 8 | 1.77 | 1.75 | 4.07 | 0.05 | 0.07 | 76 | 9 | 3 | 11 | 12 | 5 | <10 | 0.27 | <1 |
| 102 | 10789 | <5 | <0.010 | 3.35 | 710 | <10 | 49 | 12 | 32 | <20 | <20 | 14 | 0.97 | 0.82 | 1.21 | <0.01 | 0.08 | 27 | 10 | <2 | 13 | 3 | <5 | <10 | 0.04 | 1 |
| 102 | 10790 | <5 | 0.019 | >10.00 | 2096 | <10 | 117 | 101 | 822 | <20 | <20 | 19 | 0.87 | 0.31 | 0.82 | 0.01 | 0.03 | 16 | 23 | <2 | 5 | 58 | 10 | <10 | 0.14 | 2 |
| 103 | 10936 | 23 | 0.244 | 2.27 | 102 | <10 | 23 | 320 | <1 | <20 | <20 | 2 | 0.03 | <0.01 | 0.10 | <0.01 | 0.01 | 4 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 103 | 10937 | <5 | 0.038 | 3.29 | 492 | <10 | 53 | 12 | 16 | <20 | <20 | 27 | 0.69 | 0.54 | 0.86 | <0.01 | 0.06 | 30 | 15 | <2 | 11 | <1 | <5 | <10 | 0.01 | <1 |
| 103 | 10938 | <5 | 0.039 | 3.97 | 649 | <10 | 350 | 221 | 21 | <20 | <20 | 21 | 1.19 | 0.62 | 1.10 | 0.02 | 0.11 | 37 | 15 | <2 | 16 | <1 | <5 | <10 | 0.06 | <1 |
| 104 | 8008 | 42.7 | | <0.5 | | <20 | <100 | 520 | | <200 | <2 | <5 | | | | <0.05 | | | | | | | <0.5 | <1 | | <500 |
| 104 | 8009 | 118.0 | | <0.5 | | <20 | <100 | 680 | | <200 | <2 | <5 | | | | <0.05 | | | | | | | <0.5 | <1 | | <500 |
| 105 | 10917 | <5 | 0.061 | 4.19 | 487 | <10 | 50 | 16 | 21 | <20 | <20 | 31 | 0.97 | 0.81 | 1.04 | <0.01 | 0.06 | 31 | 18 | <2 | 17 | <1 | <5 | <10 | 0.01 | <1 |
| 105 | 10918 | <5 | 0.021 | 3.97 | 609 | <10 | 31 | 135 | 17 | <20 | <20 | 14 | 0.94 | 1.31 | 7.28 | 0.03 | 0.13 | 306 | 13 | <2 | 20 | <1 | <5 | <10 | 0.02 | <1 |
| 105 | 10919 | <5 | <0.010 | 4.26 | 710 | <10 | 25 | 69 | 31 | <20 | <20 | 11 | 1.49 | 1.72 | 9.31 | 0.03 | 0.13 | 424 | 18 | <2 | 40 | <1 | <5 | <10 | 0.02 | <1 |
| 105 | 10920 | <5 | <0.010 | 2.18 | 212 | <10 | 230 | 39 | 41 | <20 | <20 | 9 | 0.76 | 0.60 | 5.66 | 0.03 | 0.20 | 225 | 10 | <2 | 12 | <1 | <5 | <10 | 0.14 | 20 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 105 | 10943 | Fall Ck | flt | sel | hfls w/ 2% po | <1 | | | 0.4 | 40 | 2 | 33 | 2 | 47 | 31 | <0.2 | <5 | <5 |
| 105 | 10944 | Fall Ck | flt | sel | rusty qz vein w/ apy (?) | 11 | | | <0.2 | 9 | 21 | 19 | 3 | 7 | 5 | <0.2 | <5 | <5 |
| 106 | 10969 | Fall Ck | | sed | | 5 | | | <0.2 | 38 | 11 | 78 | 2 | 35 | 13 | 0.2 | <5 | 10 |
| 106 | 10970 | Fall Ck | | pan | no mag, no visible Au | 3 | <5 | <1 | 0.4 | 33 | 7 | 81 | 3 | 36 | 14 | <0.2 | <5 | 13 |
| 107 | 10823 | LaRowe Ck | | sed | | <5 | | | <0.2 | 32 | 9 | 77 | <1 | 39 | 16 | 0.3 | <5 | 8 |
| 107 | 10824 | LaRowe Ck | | pan | no mag, no visible Au | <5 | <5 | <1 | <0.2 | 28 | 9 | 74 | 2 | 38 | 16 | 0.2 | <5 | 15 |
| 107 | 10825 | LaRowe Ck | | pan | no mag, no visible Au | <5 | <5 | <1 | <0.2 | 23 | 5 | 81 | 2 | 36 | 15 | 0.2 | <5 | 6 |
| 107 | 10826 | LaRowe Ck | otc | sel | qz-mica schist w/ 2% po and hem | 5 | | | 0.3 | 160 | 37 | 47 | 2 | 54 | 19 | 0.7 | <5 | <5 |
| 108 | 10794 | Horse Ck | | sed | | <5 | | | <0.2 | 44 | 10 | 141 | 1 | 86 | 40 | 0.6 | <5 | 22 |
| 108 | 10795 | Horse Ck | | pan | minor mag, no visible Au | 12 | <5 | <1 | <0.2 | 48 | 44 | 108 | 3 | 76 | 39 | 0.6 | <5 | 31 |
| 109 | 10791 | LaSalle Ck | | sed | | 10 | | | <0.2 | 62 | 13 | 141 | 1 | 74 | 32 | 0.7 | <5 | 20 |
| 109 | 10792 | LaSalle Ck | | pan | abu mag, minor py and cpy | 18 | <5 | <1 | <0.2 | 47 | 20 | 90 | <1 | 42 | 25 | 0.3 | <5 | 36 |
| 109 | 10793 | LaSalle Ck | flt | sel | micaceous qtz w/ diss py (5%), gar | <5 | | | <0.2 | 157 | 3 | 33 | 1 | 16 | 9 | <0.2 | <5 | 15 |
| 110 | 10812 | Lode and Behold | | sed | | <5 | | | <0.2 | 28 | 9 | 70 | <1 | 23 | 11 | 0.2 | <5 | 9 |
| 110 | 10813 | Lode and Behold | | pan | no mag, no visible Au | 18 | <5 | <1 | <0.2 | 28 | 9 | 77 | 1 | 36 | 12 | <0.2 | <5 | 8 |
| 110 | 10814 | Lode and Behold | flt | sel | phyllite w/ diss py, lim | 12 | | | 0.6 | 294 | 11 | 22 | 40 | 47 | 5 | <0.2 | <5 | 59 |
| 110 | 10815 | Cinco Mining | | sed | | <5 | | | <0.2 | 41 | 10 | 68 | <1 | 25 | 13 | <0.2 | <5 | 8 |
| 111 | 10798 | Ruby Ck | | sed | | 6 | | | <0.2 | 46 | 6 | 65 | <1 | 35 | 21 | <0.2 | <5 | 11 |
| 111 | 10799 | Ruby Ck | | pan | | 42 | <5 | <1 | <0.2 | 44 | 11 | 66 | 1 | 31 | 19 | <0.2 | <5 | 19 |
| 112 | 10796 | Ipnek Ck (Ice Worm) | | sed | | <5 | | | <0.2 | 28 | 14 | 69 | <1 | 22 | 11 | 0.3 | <5 | 7 |
| 112 | 10797 | Ipnek Ck (Ice Worm) | | pan | | 9 | <5 | <1 | <0.2 | 37 | 31 | 75 | <1 | 25 | 19 | <0.2 | <5 | 10 |
| 113 | 8020 | Conglomerate Ck | | pan | 2 pan comp, no visible Au | 250 | <5 | 2 | <5 | | | 210 | <2 | 42 | 25 | <10 | | 22 |
| 113 | 10819 | Cinco Mining | | pan | no mag, no visible Au | <5 | <5 | <1 | <0.2 | 20 | 5 | 65 | <1 | 22 | 10 | <0.2 | <5 | <5 |
| 113 | 10820 | Cinco Mining | | pan | no mag, no visible Au | 6 | <5 | <1 | <0.2 | 43 | 8 | 73 | <1 | 25 | 13 | <0.2 | <5 | 7 |
| 114 | 10816 | Cinco Mining | | pan | mod py, tr mag, no visible Au | 18 | <5 | <1 | <0.2 | 107 | 23 | 86 | <1 | 33 | 20 | <0.2 | <5 | 23 |
| 114 | 10817 | Cinco Mining | | pan | no mag, no visible Au | 8 | <5 | <1 | <0.2 | 31 | 5 | 74 | <1 | 25 | 13 | <0.2 | <5 | 6 |
| 114 | 10818 | Cinco Mining | | pan | no mag, no visible Au | 24 | <5 | <1 | <0.2 | 32 | 8 | 76 | <1 | 26 | 13 | <0.2 | <5 | 7 |
| 115 | 10800 | Bonanza | | sed | | <5 | | | <0.2 | 26 | 13 | 87 | <1 | 25 | 15 | <0.2 | <5 | 8 |
| 115 | 10801 | Bonanza | | pan | tr mag | 24 | <5 | <1 | <0.2 | 41 | 15 | 100 | <1 | 35 | 19 | <0.2 | <5 | 12 |
| 116 | 10821 | Tinayguk Ck | | sed | | <5 | | | <0.2 | 29 | 12 | 124 | 1 | 33 | 11 | 0.7 | <5 | 8 |
| 116 | 10822 | Tinayguk Ck | | pan | no mag, no visible Au | 8 | <5 | <1 | <0.2 | 14 | 8 | 66 | 1 | 22 | 6 | 0.3 | <5 | <5 |
| 117 | 10865 | Pass Ck | | sed | | 6 | | | 0.2 | 36 | 13 | 146 | 5 | 36 | 11 | 1.1 | <5 | 11 |
| 117 | 10866 | Pass Ck | | pan | no mag, no visible Au | 11 | <5 | <1 | <0.2 | 31 | 6 | 96 | 3 | 47 | 15 | 0.5 | <5 | 8 |
| 118 | 10880 | Bonanza Ck | otc | cont | qz vein w/ sid (?) | <5 | | | <0.2 | 10 | <2 | 104 | <1 | 10 | 4 | <0.2 | <5 | 20 |
| 118 | 10881 | Bonanza Ck | flt | sel | qz veinlets w/ tr gn, sl, sid, ank | 10 | | | 9.7 | 284 | 3438 | 3510 | 1 | 7 | 3 | 3.1 | 77 | 3772 |
| 119 | 10677 | Mascot Ck | | pan | 1 fine Au (?), 1 fine Ag (?) | 10 | | | 0.3 | 93 | 42 | 125 | 2 | 56 | 32 | <0.2 | 7 | 54 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 105 | 10943 | <5 | <0.010 | 3.68 | 280 | <10 | 61 | 90 | 37 | <20 | <20 | 6 | 1.46 | 1.09 | 1.27 | 0.05 | 0.13 | 96 | 8 | <2 | 17 | <1 | <5 | <10 | 0.36 | <1 |
| 105 | 10944 | <5 | <0.010 | 1.40 | 25 | <10 | 39 | 207 | 6 | <20 | <20 | 16 | 0.19 | 0.02 | 0.26 | 0.07 | 0.05 | 12 | 14 | <2 | <1 | 2 | <5 | <10 | 0.09 | 4 |
| 106 | 10969 | <5 | 0.036 | 3.14 | 411 | <10 | 25 | 10 | 14 | <20 | <20 | 14 | 0.68 | 0.74 | 3.37 | <0.01 | 0.07 | 91 | 11 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 106 | 10970 | <5 | <0.010 | 4.15 | 410 | <10 | 33 | 126 | 22 | <20 | <20 | 10 | 1.22 | 0.98 | 8.93 | 0.03 | 0.13 | 212 | 9 | <2 | 21 | <1 | <5 | <10 | 0.04 | 2 |
| 107 | 10823 | <5 | <0.010 | 2.84 | 336 | <10 | 18 | 18 | 19 | <20 | <20 | 16 | 0.86 | 0.70 | 1.57 | <0.01 | 0.03 | 58 | 12 | <2 | 17 | 2 | <5 | <10 | 0.02 | 2 |
| 107 | 10824 | <5 | 0.026 | 4.08 | 680 | <10 | 74 | 163 | 31 | <20 | <20 | 13 | 1.58 | 0.77 | 0.90 | 0.03 | 0.16 | 40 | 16 | 2 | 23 | 3 | 6 | <10 | 0.08 | 5 |
| 107 | 10825 | <5 | 0.017 | 3.50 | 435 | <10 | 85 | 165 | 32 | <20 | <20 | 15 | 1.57 | 0.92 | 0.89 | 0.04 | 0.18 | 42 | 11 | 3 | 26 | 3 | <5 | <10 | 0.07 | 5 |
| 107 | 10826 | <5 | 0.039 | 4.91 | 1166 | <10 | 27 | 93 | 11 | <20 | <20 | 18 | 0.68 | 0.99 | >10.00 | 0.01 | 0.04 | 619 | 19 | <2 | 15 | <1 | <5 | <10 | <0.01 | 1 |
| 108 | 10794 | <5 | 0.017 | 3.08 | 770 | <10 | 25 | 14 | 20 | <20 | <20 | 62 | 1.01 | 0.60 | 0.99 | <0.01 | 0.04 | 35 | 45 | <2 | 16 | 2 | <5 | <10 | 0.03 | 1 |
| 108 | 10795 | <5 | 0.118 | 7.82 | 3296 | <10 | 76 | 225 | 46 | <20 | <20 | 46 | 2.42 | 0.51 | 1.23 | 0.02 | 0.11 | 22 | 68 | <2 | 18 | 4 | 29 | <10 | 0.11 | 4 |
| 109 | 10791 | <5 | 0.018 | 4.50 | 896 | <10 | 33 | 23 | 31 | <20 | <20 | 79 | 1.51 | 1.08 | 1.21 | <0.01 | 0.07 | 46 | 49 | 3 | 25 | 3 | <5 | <10 | 0.04 | <1 |
| 109 | 10792 | <5 | <0.010 | 7.50 | 1641 | <10 | 40 | 132 | 60 | <20 | <20 | 20 | 1.61 | 0.71 | 1.27 | 0.03 | 0.13 | 38 | 29 | 2 | 19 | 5 | 13 | <10 | 0.09 | 3 |
| 109 | 10793 | <5 | <0.010 | 1.82 | 185 | <10 | 18 | 176 | 14 | <20 | <20 | 5 | 0.82 | 0.47 | 0.31 | 0.03 | 0.13 | 14 | 3 | <2 | 16 | 1 | <5 | <10 | 0.08 | 1 |
| 110 | 10812 | <5 | 0.024 | 3.17 | 960 | <10 | 29 | 13 | 17 | <20 | <20 | 11 | 0.95 | 0.95 | 3.22 | <0.01 | 0.03 | 92 | 7 | <2 | 22 | 1 | <5 | <10 | 0.01 | 3 |
| 110 | 10813 | <5 | 0.024 | 4.03 | 1194 | <10 | 76 | 88 | 33 | <20 | <20 | 12 | 1.58 | 1.07 | 2.75 | 0.02 | 0.14 | 102 | 8 | 3 | 30 | 2 | <5 | <10 | 0.04 | 5 |
| 110 | 10814 | 11 | 0.885 | 1.58 | 24 | <10 | 71 | 208 | 70 | <20 | <20 | 2 | 0.20 | 0.02 | 0.06 | <0.01 | 0.08 | 5 | 2 | <2 | <1 | 6 | <5 | <10 | <0.01 | 7 |
| 110 | 10815 | <5 | 0.016 | 3.28 | 1269 | <10 | 20 | 15 | 18 | <20 | <20 | 12 | 1.04 | 0.91 | 1.34 | <0.01 | 0.04 | 48 | 6 | <2 | 19 | 1 | <5 | <10 | 0.02 | 2 |
| 111 | 10798 | <5 | <0.010 | 3.66 | 882 | <10 | 21 | 21 | 27 | <20 | <20 | 21 | 1.40 | 1.00 | 0.32 | <0.01 | 0.06 | 11 | 8 | 3 | 22 | 2 | <5 | <10 | 0.03 | <1 |
| 111 | 10799 | <5 | <0.010 | 7.02 | 2118 | <10 | 51 | 171 | 53 | <20 | <20 | 19 | 2.11 | 0.84 | 0.78 | 0.03 | 0.13 | 13 | 42 | 3 | 21 | 4 | 19 | <10 | 0.10 | 2 |
| 112 | 10796 | <5 | <0.010 | 2.70 | 509 | <10 | 14 | 14 | 27 | <20 | <20 | 18 | 0.92 | 0.64 | 0.78 | <0.01 | 0.03 | 21 | 8 | <2 | 10 | 2 | <5 | <10 | 0.02 | <1 |
| 112 | 10797 | <5 | <0.010 | >10.00 | 1013 | <10 | 45 | 122 | 358 | <20 | <20 | 12 | 1.63 | 0.79 | 0.96 | 0.03 | 0.10 | 26 | 16 | <2 | 14 | 26 | 8 | <10 | 0.16 | 2 |
| 113 | 8020 | 2.5 |  | 7.4 |  | <20 | 860 | 140 |  | <200 | <2 | 49 |  |  |  | 1.40 |  |  |  |  |  |  | 17.0 | <1 |  | <500 |
| 113 | 10819 | <5 | <0.010 | 4.13 | 1273 | <10 | 33 | 76 | 30 | <20 | <20 | 12 | 1.79 | 1.46 | 1.71 | 0.02 | 0.17 | 60 | 6 | 4 | 27 | 2 | <5 | <10 | 0.02 | 3 |
| 113 | 10820 | <5 | 0.016 | 4.81 | 1314 | <10 | 80 | 92 | 33 | <20 | <20 | 12 | 1.98 | 1.53 | 1.27 | 0.02 | 0.20 | 56 | 6 | 4 | 30 | 3 | <5 | <10 | 0.03 | 3 |
| 114 | 10816 | <5 | 0.033 | 6.66 | 1542 | <10 | 66 | 79 | 45 | <20 | <20 | 10 | 2.00 | 1.59 | 1.63 | 0.02 | 0.17 | 69 | 6 | 4 | 32 | 4 | <5 | <10 | 0.05 | 4 |
| 114 | 10817 | <5 | <0.010 | 4.64 | 1440 | <10 | 51 | 58 | 31 | <20 | <20 | 12 | 1.91 | 1.54 | 1.36 | 0.02 | 0.13 | 55 | 6 | 3 | 31 | 3 | <5 | <10 | 0.03 | 3 |
| 114 | 10818 | <5 | 0.016 | 4.79 | 1362 | <10 | 42 | 78 | 32 | <20 | <20 | 12 | 1.97 | 1.56 | 1.71 | 0.02 | 0.17 | 66 | 6 | 4 | 32 | 3 | <5 | <10 | 0.02 | 3 |
| 115 | 10800 | <5 | 0.023 | 3.93 | 1171 | <10 | 22 | 18 | 22 | <20 | <20 | 13 | 1.30 | 0.86 | 0.44 | <0.01 | 0.05 | 21 | 5 | 2 | 28 | 2 | <5 | <10 | <0.01 | 2 |
| 115 | 10801 | <5 | 0.015 | 5.99 | 1503 | <10 | 65 | 151 | 46 | <20 | <20 | 17 | 2.12 | 1.20 | 0.45 | 0.04 | 0.26 | 23 | 6 | 4 | 43 | 4 | <5 | <10 | 0.02 | 6 |
| 116 | 10821 | <5 | 0.116 | 3.29 | 515 | <10 | 138 | 17 | 25 | <20 | <20 | 10 | 0.97 | 1.14 | 2.23 | <0.01 | 0.05 | 34 | 10 | <2 | 18 | 2 | <5 | <10 | <0.01 | 3 |
| 116 | 10822 | <5 | 0.070 | 2.14 | 383 | <10 | 176 | 120 | 23 | <20 | <20 | 6 | 0.82 | 0.46 | 0.55 | 0.01 | 0.11 | 21 | 5 | <2 | 13 | 2 | <5 | <10 | <0.01 | 5 |
| 117 | 10865 | <5 | 0.096 | 3.19 | 457 | <10 | 162 | 23 | 30 | <20 | <20 | 10 | 1.28 | 0.84 | 0.63 | <0.01 | 0.05 | 34 | 6 | <2 | 24 | 3 | <5 | <10 | 0.02 | 3 |
| 117 | 10866 | <5 | 0.027 | 4.32 | 607 | <10 | 555 | 101 | 48 | <20 | <20 | 11 | 2.19 | 1.51 | 0.57 | 0.01 | 0.09 | 23 | 4 | 3 | 32 | 4 | <5 | <10 | 0.02 | 6 |
| 118 | 10880 | <5 | 0.023 | 3.79 | 3124 | <10 | 4 | 74 | 2 | <20 | <20 | 6 | 0.02 | 3.79 | 9.12 | 0.01 | <0.01 | 152 | 4 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 118 | 10881 | <5 | 5.681 | 3.19 | 1762 | <10 | 2 | 151 | 2 | <20 | <20 | 4 | 0.24 | 1.98 | 5.30 | 0.14 | <0.01 | 111 | 3 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 119 | 10677 | <5 | 0.343 | 8.65 | 1488 | <10 | 38 | 74 | 38 | <20 | <20 | 17 | 2.28 | 1.8 | 0.46 | 0.01 | 0.16 | 45 | 5 | 3 | 41 | <1 | <5 | <10 | 0.02 | 4 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 119 | 10678 | Mascot Ck | | sed | | <5 | | | 0.2 | 38 | 16 | 93 | 1 | 29 | 17 | <0.2 | <5 | 21 |
| 120 | 10667 | Mascot Ck | otc | sel | siliceous mdst w/ 3-5% py | <5 | | | <0.2 | 43 | 28 | 18 | 3 | 21 | 12 | <0.2 | <5 | 24 |
| 120 | 10679 | Mascot Ck | flt | sel | qz veinlets xcut schist w/ gn (?) | <5 | | | 1.2 | <1 | 39 | 19 | 1 | 8 | 2 | <0.2 | <5 | 221 |
| 121 | 10680 | Mascot Ck | | pan | minor blk sand, nonmagnetic | 36 | | | 0.2 | 25 | 16 | 119 | 1 | 35 | 19 | <0.2 | <5 | <5 |
| 121 | 10681 | Mascot Ck | | sed | | <5 | | | 0.2 | 28 | 14 | 103 | <1 | 29 | 17 | <0.2 | <5 | <5 |
| 122 | 10682 | Mascot Ck | otc | rand | mdst w/ <1% py, lim | <5 | | | <0.2 | 47 | 45 | 8 | 4 | 17 | 4 | 0.2 | <5 | 315 |
| 123 | 10655 | Mascot Ck | | sed | | <5 | | | 0.4 | 33 | 16 | 92 | 1 | 28 | 16 | <0.2 | <5 | 33 |
| 123 | 10683 | Mascot Ck | | pan | 3 mm py cubes, no mag | 253 | | | <0.2 | 66 | 14 | 87 | 1 | 44 | 27 | <0.2 | <5 | 31 |
| 124 | 10656 | Mascot Ck | otc | rand | meta mdst w/ 1-2% diss py | <5 | | | 0.3 | 121 | 28 | 11 | 4 | 33 | 16 | <0.2 | <5 | 24 |
| 124 | 10657 | Mascot Ck | otc | rand | schistose qtz w/ <1% diss py | 6 | | | <0.2 | 95 | 21 | 15 | 2 | 57 | 35 | <0.2 | <5 | 30 |
| 125 | 10710 | Mascot Ck | | pan | no mag | 7364 | | | 1.2 | 65 | 55 | 96 | 2 | 37 | 18 | <0.2 | 7 | 36 |
| 125 | 10711 | Mascot Ck | | sed | | <5 | | | 0.2 | 48 | 17 | 89 | 2 | 36 | 17 | <0.2 | <5 | 9 |
| 126 | 10712 | Mascot Ck | otc | sel | phyllite w/ py concretions | 7 | | | 0.4 | 89 | 38 | 61 | 1 | 33 | 13 | <0.2 | <5 | 14 |
| 127 | 10713 | Mascot Ck | otc | sel | graphitic schist w/ py cubes | <5 | | | <0.2 | 48 | 15 | 109 | 3 | 41 | 22 | <0.2 | <5 | 22 |
| 128 | 10716 | Mascot Ck | | pan | | 1145 | | | 0.7 | 110 | 65 | 93 | <1 | 51 | 41 | <0.2 | <5 | 54 |
| 128 | 10717 | Mascot Ck | | sed | | <5 | | | 0.3 | 40 | 14 | 79 | <1 | 30 | 17 | <0.2 | <5 | 19 |
| 129 | 10714 | No. 1 Pup | | pan | no mag, 1 py cube (3mm) | 424.57 ppm | | | 50.6 | 40 | 105 | 122 | 2 | 42 | 23 | <0.2 | <5 | 51 |
| 129 | 10715 | No. 1 Pup | | sed | | <5 | | | 0.2 | 29 | 14 | 103 | 2 | 30 | 15 | <0.2 | <5 | 11 |
| 130 | 10668 | Mascot Ck | | plac | abu coarse Au, abu sulfides | 1.08 oz/cyd | | | 1.7 | 166 | 52 | 89 | 11 | 58 | 77 | 0.7 | 6 | 306 |
| 131 | 10671 | Discovery Pup | otc | rand | qz musc schist w/ diss po | <5 | | | <0.2 | 21 | 6 | 24 | 2 | 26 | 18 | <0.2 | <5 | 10 |
| 131 | 10672 | Discovery Pup | flt | sel | massive qz w/ <1% py, po, tr gn | <5 | | | 1.4 | 31 | 256 | 8 | 2 | 28 | 8 | 0.3 | <5 | 6 |
| 131 | 10673 | Discovery Pup | flt | sel | brecciated mdst w/ qz, py, gn | <5 | | | 1.3 | 1 | 363 | 28 | 1 | 10 | 3 | <0.2 | <5 | 10 |
| 132 | 10669 | Discovery Pup | | pan | | 10 | | | <0.2 | 44 | 33 | 109 | 2 | 36 | 18 | 0.2 | <5 | 21 |
| 132 | 10670 | Discovery Pup | | sed | | <5 | | | 0.2 | 39 | 13 | 83 | 2 | 27 | 15 | <0.2 | <5 | 19 |
| 133 | 10721 | Mascot Ck | flt | sel | granitic, igneous rock w/ gn, py | <5 | | | 4.2 | 4 | 2315 | 138 | 1 | 10 | <1 | 0.7 | <5 | <5 |
| 134 | 11304 | Mascot Ck | otc | sel | graphitic schist w/ 2% py | 23 | | | 0.9 | 34 | 44 | 32 | 3 | 22 | 11 | <0.2 | <5 | 21 |
| 135 | 10722 | O'Neil Ck | | pan | no mag | 312 | | | <0.2 | 36 | 12 | 75 | 1 | 31 | 13 | <0.2 | <5 | 12 |
| 135 | 10723 | O'Neil Ck | | sed | | <5 | | | <0.2 | 29 | 10 | 53 | <1 | 20 | 11 | <0.2 | <5 | 8 |
| 136 | 10724 | Mascot Ck | flt | sel | porphyritic andesite w/ < 1% po | <5 | | | 0.3 | 68 | 21 | 56 | 2 | 26 | 17 | <0.2 | <5 | <5 |
| 137 | 11303 | Mascot Ck | otc | sel | mica-qz schist w/ 1% py | <5 | | | 0.3 | 33 | 19 | 31 | <1 | 21 | 11 | <0.2 | <5 | 6 |
| 138 | 8019 | Mascot Ck | | pan | cupola buttons, Hg (?), blk sands | >10000 | | | >300 | | | <2200 | <340 | <570 | <37 | <460 | | <39 |
| 139 | 11285 | Knorr Ck | | sed | | <5 | | | <0.2 | 30 | 10 | 61 | <1 | 25 | 14 | <0.2 | <5 | 10 |
| 139 | 11286 | Knorr Ck | | pan | 1 v fine nuggety Au | 3831 | 7 | 8 | 0.9 | 57 | 7 | 88 | 2 | 38 | 14 | <0.2 | <5 | 11 |
| 139 | 11301 | Knorr Ck | flt | sel | blk phyllite w/ 5% py stringers | 11 | | | 0.8 | 48 | 18 | 15 | 72 | 52 | 4 | <0.2 | <5 | 75 |
| 139 | 11302 | Knorr Ck | flt | sel | green tuff w/ sulfides, amph, feld | <5 | | | 0.2 | 67 | <2 | 50 | <1 | 58 | 23 | <0.2 | <5 | <5 |
| 140 | 8017 | Mascot Ck | flt | grab | qz-carb vein w/ cpy, py, ba, ank | <5 | | | <5 | | | <200 | 6 | 75 | 49 | <10 | | 3 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 119 | 10678 | <5 | 0.067 | 3.61 | 1370 | <10 | 83 | 19 | 25 | <20 | <20 | 15 | 1.42 | 1.16 | 4.12 | 0.02 | 0.07 | 803 | 6 | 2 | 26 | <1 | <5 | <10 | 0.02 | 2 |
| 120 | 10667 | 10 | 0.048 | 2.71 | 360 | <10 | 52 | 133 | 21 | <20 | <20 | 9 | 1.06 | 0.50 | 0.21 | 0.02 | 0.18 | 10 | 3 | <2 | 17 | <1 | <5 | <10 | <0.01 | 9 |
| 120 | 10679 | 7 | 0.012 | 3.83 | 1925 | <10 | 7 | 41 | 8 | <20 | <20 | 3 | 0.10 | 6.04 | >10.00 | 0.01 | 0.07 | 408 | 4 | <2 | 8 | 7 | <5 | <10 | <0.01 | <1 |
| 121 | 10680 | <5 | 0.107 | 6.07 | 1279 | <10 | 562 | 78 | 41 | <20 | <20 | 16 | 2.54 | 2.15 | 0.27 | 0.01 | 0.14 | 20 | 5 | 4 | 36 | 1 | <5 | <10 | 0.03 | 2 |
| 121 | 10681 | <5 | 0.059 | 4.28 | 1184 | <10 | 25 | 25 | 31 | <20 | <20 | 23 | 1.75 | 1.43 | 0.38 | <0.01 | 0.06 | 26 | 8 | 2 | 33 | <1 | <5 | <10 | 0.02 | 2 |
| 122 | 10682 | 7 | 0.070 | 2.09 | 134 | <10 | 96 | 148 | 14 | <20 | <20 | 13 | 0.59 | 0.20 | 0.09 | 0.02 | 0.17 | 13 | 3 | <2 | 7 | <1 | <5 | <10 | <0.01 | 13 |
| 123 | 10655 | <5 | 0.036 | 3.99 | 1420 | <10 | 50 | 21 | 27 | <20 | <20 | 19 | 1.52 | 1.27 | 0.79 | <0.01 | 0.07 | 42 | 7 | <2 | 27 | <1 | <5 | <10 | 0.02 | 2 |
| 123 | 10683 | <5 | 0.279 | 6.42 | 1419 | <10 | 57 | 83 | 35 | <20 | <20 | 14 | 2.07 | 1.67 | 0.43 | 0.02 | 0.15 | 31 | 5 | <2 | 30 | <1 | <5 | <10 | 0.03 | 3 |
| 124 | 10656 | 20 | 0.127 | 2.42 | 204 | <10 | 62 | 121 | 15 | <20 | <20 | 9 | 0.77 | 0.28 | 0.24 | 0.03 | 0.21 | 12 | 4 | <2 | 10 | <1 | <5 | <10 | <0.01 | 17 |
| 124 | 10657 | 17 | 0.054 | 3.37 | 3223 | <10 | 68 | 111 | 16 | <20 | <20 | 8 | 0.79 | 0.79 | 1.22 | 0.03 | 0.23 | 39 | 3 | <2 | 11 | <1 | <5 | <10 | <0.01 | 9 |
| 125 | 10710 | <5 | 0.101 | 5.78 | 1428 | <10 | 388 | 80 | 34 | <20 | 21 | 16 | 2.19 | 1.72 | 0.87 | 0.02 | 0.17 | 58 | 6 | 5 | 33 | <1 | <5 | <10 | 0.02 | 4 |
| 125 | 10711 | <5 | 0.039 | 3.99 | 1264 | <10 | 27 | 19 | 24 | <20 | <20 | 20 | 1.44 | 1.18 | 1.81 | <0.01 | 0.05 | 252 | 7 | <2 | 29 | <1 | <5 | <10 | 0.01 | 2 |
| 126 | 10712 | 8 | 0.079 | 4.44 | 706 | <10 | 33 | 70 | 14 | <20 | <20 | 5 | 1.33 | 1.41 | 6.00 | 0.02 | 0.26 | 292 | 10 | <2 | 27 | 2 | <5 | <10 | <0.01 | 3 |
| 127 | 10713 | 6 | 0.055 | 6.90 | 1600 | <10 | 30 | 91 | 40 | <20 | <20 | 7 | 2.82 | 1.91 | 1.72 | 0.03 | 0.23 | 56 | 9 | 4 | 74 | 1 | <5 | <10 | <0.01 | 3 |
| 128 | 10716 | <5 | 0.126 | 8.81 | 1490 | <10 | 20 | 71 | 34 | <20 | <20 | 17 | 2.07 | 1.71 | 0.84 | 0.01 | 0.14 | 46 | 6 | 2 | 32 | <1 | <5 | <10 | 0.02 | 3 |
| 128 | 10717 | <5 | 0.043 | 3.70 | 1271 | <10 | 56 | 19 | 24 | <20 | <20 | 19 | 1.36 | 1.20 | 1.39 | <0.01 | 0.05 | 163 | 7 | <2 | 24 | <1 | <5 | <10 | 0.02 | 2 |
| 129 | 10714 | <5 | 3.453 | 5.98 | 1447 | <10 | 156 | 129 | 29 | <20 | <20 | 20 | 1.83 | 1.41 | 0.4 | 0.02 | 0.17 | 29 | 5 | <2 | 35 | 1 | <5 | <10 | 0.03 | 5 |
| 129 | 10715 | <5 | 0.060 | 3.52 | 1521 | <10 | 34 | 16 | 18 | <20 | <20 | 19 | 1.13 | 0.95 | 0.42 | <0.01 | 0.04 | 25 | 6 | <2 | 27 | <1 | <5 | <10 | 0.01 | 2 |
| 130 | 10668 | 6 | 0.192 | >10.00 | 911 | <10 | 2 | 143 | 18 | <20 | 24 | 2 | 1.38 | 0.81 | 0.49 | 0.03 | 0.27 | 16 | 7 | <2 | 24 | <1 | <5 | <10 | 0.04 | 3 |
| 131 | 10671 | 7 | 0.012 | 4.03 | 1810 | <10 | 156 | 61 | 18 | <20 | <20 | 9 | 1.12 | 1.63 | 2.76 | 0.03 | 0.19 | 94 | 8 | <2 | 22 | 1 | <5 | <10 | <0.01 | 2 |
| 131 | 10672 | 96 | 0.012 | 1.72 | 1129 | <10 | 3 | 234 | 1 | <20 | <20 | <1 | 0.06 | 0.62 | 1.94 | <0.01 | 0.02 | 111 | 7 | <2 | 1 | <1 | <5 | <10 | <0.01 | 1 |
| 131 | 10673 | 7 | 0.017 | 3.58 | 3626 | <10 | 5 | 69 | 5 | <20 | <20 | 4 | 0.09 | 3.79 | 9.08 | 0.03 | 0.04 | 168 | 6 | <2 | 2 | 3 | <5 | <10 | <0.01 | 1 |
| 132 | 10669 | <5 | 0.124 | 6.26 | 1506 | <10 | 102 | 68 | 35 | <20 | <20 | 16 | 2.24 | 1.89 | 0.81 | 0.01 | 0.13 | 47 | 5 | 3 | 36 | <1 | <5 | <10 | 0.03 | 2 |
| 132 | 10670 | <5 | 0.024 | 3.72 | 1302 | <10 | 16 | 18 | 23 | <20 | <20 | 21 | 1.31 | 1.21 | 0.71 | <0.01 | 0.05 | 43 | 8 | 2 | 24 | <1 | <5 | <10 | 0.02 | 2 |
| 133 | 10721 | 7 | 0.406 | 5.37 | 4966 | <10 | >2000 | 54 | 24 | <20 | <20 | 2 | 0.59 | 5.57 | >10.00 | <0.01 | 0.01 | >2000 | 7 | <2 | 2 | 4 | <5 | <10 | <0.01 | 1 |
| 134 | 11304 | <5 | 0.080 | 3.18 | 281 | <10 | 24 | 112 | 15 | <20 | <20 | 9 | 0.69 | 0.53 | 0.23 | 0.02 | 0.15 | 9 | 4 | <2 | 8 | <1 | <5 | <10 | <0.01 | 14 |
| 135 | 10722 | <5 | 0.061 | 4.56 | 1035 | <10 | 54 | 98 | 30 | <20 | <20 | 16 | 1.90 | 1.72 | 0.29 | 0.02 | 0.14 | 18 | 5 | 2 | 23 | <1 | <5 | <10 | 0.02 | 3 |
| 135 | 10723 | <5 | 0.019 | 2.44 | 755 | <10 | 15 | 13 | 14 | <20 | <20 | 14 | 0.87 | 0.82 | 0.29 | <0.01 | 0.03 | 21 | 5 | 2 | 13 | <1 | <5 | <10 | 0.02 | 1 |
| 136 | 10724 | <5 | 0.073 | 5.24 | 1018 | <10 | 30 | 70 | 174 | <20 | <20 | 6 | 4.78 | 1.64 | 6.12 | 0.03 | 0.05 | 87 | 13 | <2 | 21 | 6 | 12 | <10 | 0.28 | 9 |
| 137 | 11303 | <5 | 0.027 | 3.10 | 1147 | <10 | 36 | 61 | 7 | <20 | <20 | 10 | 0.48 | 1.27 | 2.76 | 0.02 | 0.28 | 69 | 6 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 138 | 8019 | 314.0 | 4.299 | <11.0 | | <3200 | <4700 | <6500 | | | <59 | 36 | | | | 2.10 | | | | | | | 19.0 | <5 | | |
| 139 | 11285 | <5 | 0.012 | 3.18 | 1021 | <10 | 15 | 18 | 19 | <20 | <20 | 16 | 1.19 | 0.87 | 0.61 | <0.01 | 0.05 | 29 | 8 | <2 | 17 | <1 | <5 | <10 | 0.01 | <1 |
| 139 | 11286 | <5 | 0.205 | 5.68 | 1181 | <10 | 91 | 324 | 59 | <20 | <20 | 29 | 3.02 | 1.87 | 0.40 | 0.09 | 0.57 | 25 | 8 | 5 | 33 | <1 | 5 | <10 | 0.06 | <1 |
| 139 | 11301 | <5 | 0.104 | 1.36 | 18 | <10 | 21 | 142 | 57 | <20 | <20 | 9 | 0.31 | 0.05 | 0.13 | 0.01 | 0.17 | 8 | 4 | <2 | 2 | <1 | <5 | <10 | <0.01 | 18 |
| 139 | 11302 | <5 | 0.020 | 5.58 | 717 | <10 | 24 | 72 | 134 | <20 | <20 | 2 | 5.29 | 2.92 | 3.92 | 0.03 | 0.07 | 44 | 8 | 6 | 34 | <1 | 7 | <10 | 0.17 | <1 |
| 140 | 8017 | 2.9 | | 6.4 | | <20 | <100 | 190 | | <200 | <2 | <5 | | | | 0.24 | | | | | | | 4.2 | <1 | | <500 |

# Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 140 | 8018 | Mascot Ck | flt | grab | vein qtz w/ py/po, apy bands | 32 | | | <5 | | | <200 | <3 | 47 | 75 | <10 | | 3130 |
| 140 | 11305 | Mascot Ck | | slu | pyrite crystals from Mascot Ck | 0.27 ppm | <70 | <70 | <0.2 | 45 | 24 | 28 | 4 | 92 | 537 | <0.2 | <5 | 15 |
| 140 | 11306 | Mascot Ck | flt | sel | qtz cobbles w/ 1% apy, 4% py | 10 | | | <0.2 | 7 | 4 | 3 | <1 | 23 | 57 | 5.4 | <5 | 2527 |
| 141 | 10867 | Washington Ck | | sed | | <5 | | | <0.2 | 31 | 10 | 76 | <1 | 24 | 14 | <0.2 | <5 | 11 |
| 141 | 10868 | Washington Ck | | pan | tr py, no visible Au | <5 | <5 | <1 | <0.2 | 37 | 6 | 93 | <1 | 31 | 17 | <0.2 | <5 | 12 |
| 141 | 10869 | Washington Ck | | sed | | <5 | | | <0.2 | 28 | 10 | 85 | <1 | 27 | 16 | <0.2 | <5 | 6 |
| 141 | 10870 | Washington Ck | | pan | no visible Au | 12 | <5 | <1 | <0.2 | 34 | 8 | 90 | <1 | 32 | 18 | <0.2 | <5 | 8 |
| 142 | 10871 | Washington Ck | | sed | | <5 | | | <0.2 | 34 | 7 | 77 | <1 | 25 | 15 | <0.2 | <5 | 6 |
| 142 | 10872 | Washington Ck | | pan | tr mag, no visible Au | 12 | <5 | <1 | <0.2 | 34 | 7 | 102 | <1 | 31 | 19 | <0.2 | <5 | 6 |
| 142 | 10873 | Washington Ck | | sed | | <5 | | | <0.2 | 32 | 10 | 88 | <1 | 27 | 16 | <0.2 | <5 | 17 |
| 142 | 10874 | Washington Ck | | pan | tr py, no visible Au | <5 | <5 | <1 | <0.2 | 36 | 8 | 91 | <1 | 30 | 17 | <0.2 | <5 | 16 |
| 143 | 11176 | Vermont Dome | otc | sel | ch phyllite w/ py | 6 | | | <0.2 | 33 | 16 | 107 | <1 | 52 | 33 | <0.2 | <5 | <5 |
| 144 | 11178 | Vermont Dome | otc | sel | meta qz w/ py-hem psuedo | <5 | | | 0.2 | 19 | 62 | 19 | 7 | 18 | 4 | <0.2 | <5 | <5 |
| 145 | 11177 | Vermont Dome | otc | sel | meta qz | <5 | | | 0.7 | 5 | 15 | 9 | <1 | 3 | 1 | <0.2 | <5 | <5 |
| 146 | 11179 | Vermont Dome | otc | sel | qz vein w/ sid | <5 | | | 0.4 | 20 | 52 | 9 | <1 | 5 | 4 | <0.2 | <5 | <5 |
| 147 | 11344 | Vermont Dome | flt | sel | qz float | <5 | | | 0.9 | 25 | 355 | 11 | 2 | 11 | 3 | <0.2 | <5 | <5 |
| 148 | 11345 | Vermont Dome | flt | rand | vein qz | <5 | | | <0.2 | 41 | 16 | 4 | 2 | 10 | 2 | <0.2 | <5 | <5 |
| 149 | 11346 | Vermont Dome | flt | rand | vein qz | <5 | | | 0.4 | 262 | 116 | 24 | 3 | 25 | 11 | <0.2 | <5 | <5 |
| 150 | 11347 | Vermont Dome | flt | rand | vein qz | <5 | | | <0.2 | 15 | <2 | 6 | 1 | 11 | 4 | <0.2 | <5 | <5 |
| 151 | 10653 | Vermont Ck | otc | rand | phyllite w/ siliceous nodules, lim | <5 | | | <0.2 | 13 | 14 | 83 | 1 | 28 | 16 | <0.2 | <5 | 15 |
| 152 | 10654 | Vermont Ck | flt | sel | massive qz w/ lim | <5 | | | <0.2 | 14 | 31 | 14 | 2 | 10 | 4 | <0.2 | <5 | 8 |
| 153 | 11275 | Muck Pup | | sed | | 7 | | | <0.2 | 30 | 7 | 55 | <1 | 21 | 14 | <0.2 | <5 | 81 |
| 153 | 11276 | Muck Pup | | pan | 1 fine and 2 v fine Au | 95.28 ppm | <70 | <70 | 4.5 | 23 | 9 | 83 | 2 | 30 | 16 | <0.2 | <5 | 633 |
| 153 | 11277 | Muck Pup | | plac | 3 fine and 5 v fine Au | 0.0008 oz/cyd | <70 | <70 | <0.2 | 31 | 12 | 82 | 2 | 33 | 16 | <0.2 | <5 | 17 |
| 153 | 11278 | Muck Pup | | plac | 2 v fine Au, tr mag | 0.07 ppm | <70 | <70 | <0.2 | 40 | 12 | 73 | 1 | 28 | 17 | <0.2 | <5 | 13 |
| 153 | 11279 | Muck Pup | | plac | 3 coarse, 4 fine, 6 v fine Au flakes | 0.006 oz/cyd | <70 | <70 | 1.9 | 38 | 16 | 78 | 2 | 31 | 18 | <0.2 | <5 | 678 |
| 154 | 11348 | Hammond River | otc | sel | qz vein w/ py and other sulfides | 93 | | | <0.2 | 155 | 96 | 45 | <1 | 59 | 34 | 0.4 | <5 | 161 |
| 155 | 10652 | Slisco Bench | flt | sel | meta qz cobbles w/ lim | <5 | | | 0.5 | 4 | 7 | 8 | 3 | 9 | 1 | <0.2 | <5 | 6 |
| 156 | 11307 | Vermont Ck | otc | sel | mica-qz schist w/ <5% py | <5 | | | <0.2 | 81 | 11 | 11 | 4 | 18 | 10 | <0.2 | <5 | 31 |
| 157 | 11396 | Vermont Ck | otc | sel | qz vein w/ carbonate, lim | 17 | | | <0.2 | 4 | 3 | 27 | 3 | 34 | 10 | 0.5 | <5 | 103 |
| 158 | 11397 | Vermont Ck | otc | rand | qz veinlets w/ sid, hem (?), py | 78 | | | 0.3 | 10 | 13 | 41 | 3 | 19 | 5 | 0.2 | <5 | 55 |
| 159 | 10735 | Vermont Ck | | sed | | <5 | | | 0.2 | 35 | 12 | 66 | 2 | 28 | 16 | <0.2 | <5 | 10 |
| 159 | 10736 | Vermont Ck | | pan | | 398 | | | <0.2 | 56 | 11 | 79 | <1 | 31 | 16 | <0.2 | <5 | 23 |
| 160 | 10734 | Right Fork | otc | rand | phyllite w/ py | 29 | | | <0.2 | 77 | 8 | 84 | 2 | 42 | 22 | <0.2 | <5 | 51 |
| 160 | 11175 | Right Fork | otc | sel | micaceous schist w/ euhedral py | 73 | | | <0.2 | 87 | 5 | 86 | 2 | 30 | 18 | 1.6 | <5 | 799 |
| 161 | 10732 | Right Fork | | pan | | 5993 | | | 0.3 | 81 | 23 | 84 | 2 | 57 | 30 | <0.2 | <5 | 369 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 140 | 8018 | 4.1 | | 4.1 | | <54 | <100 | 250 | | <450 | <2 | <5 | | | | 0.12 | | | | | | | 1.9 | <1 | | <500 |
| 140 | 11305 | <5 | 0.047 | >10.00 | 48 | <10 | <1 | 120 | 6 | <20 | <20 | 3 | 0.13 | 0.03 | 0.04 | <0.01 | 0.05 | 3 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 6 |
| 140 | 11306 | <5 | 0.015 | 2.67 | 24 | <10 | 10 | 138 | 1 | <20 | <20 | 1 | 0.08 | 0.02 | 0.01 | <0.01 | 0.04 | 1 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 141 | 10867 | <5 | 0.016 | 4.35 | 1141 | <10 | 12 | 18 | 24 | <20 | <20 | 15 | 1.31 | 1.02 | 0.81 | <0.01 | 0.03 | 40 | 8 | 2 | 30 | 2 | <5 | <10 | <0.01 | 2 |
| 141 | 10868 | <5 | 0.013 | 6.03 | 940 | <10 | 60 | 111 | 37 | <20 | <20 | 9 | 2.24 | 1.47 | 0.55 | 0.02 | 0.19 | 32 | 5 | 4 | 51 | 3 | <5 | <10 | <0.01 | 4 |
| 141 | 10869 | <5 | 0.018 | 4.45 | 1050 | <10 | 16 | 22 | 26 | <20 | <20 | 14 | 1.56 | 1.11 | 0.51 | <0.01 | 0.04 | 24 | 7 | 2 | 32 | 3 | <5 | <10 | <0.01 | 1 |
| 141 | 10870 | <5 | 0.015 | 5.85 | 1192 | <10 | 75 | 137 | 35 | <20 | <20 | 11 | 2.14 | 1.38 | 0.36 | 0.03 | 0.21 | 24 | 5 | 4 | 48 | 3 | <5 | <10 | <0.01 | 3 |
| 142 | 10871 | <5 | <0.010 | 4.32 | 871 | <10 | 10 | 22 | 29 | <20 | <20 | 16 | 1.48 | 1.12 | 0.64 | <0.01 | 0.04 | 32 | 7 | 3 | 29 | 2 | <5 | <10 | 0.02 | 1 |
| 142 | 10872 | <5 | 0.014 | 6.09 | 934 | <10 | 65 | 96 | 46 | <20 | <20 | 8 | 2.34 | 1.58 | 0.43 | 0.02 | 0.17 | 28 | 5 | 5 | 48 | 4 | <5 | <10 | 0.02 | 2 |
| 142 | 10873 | <5 | 0.016 | 4.69 | 1408 | <10 | 14 | 21 | 26 | <20 | <20 | 15 | 1.56 | 1.02 | 0.61 | <0.01 | 0.04 | 31 | 7 | 3 | 36 | 2 | <5 | <10 | <0.01 | 2 |
| 142 | 10874 | <5 | 0.011 | 5.63 | 862 | <10 | 60 | 94 | 31 | <20 | <20 | 9 | 2.04 | 1.29 | 0.37 | 0.02 | 0.17 | 23 | 4 | 4 | 47 | 3 | <5 | <10 | <0.01 | 4 |
| 143 | 11176 | <5 | 0.010 | 6.89 | 1405 | <10 | 42 | 80 | 30 | <20 | <20 | 19 | 3.20 | 1.47 | 0.13 | 0.03 | 0.23 | 9 | 12 | 5 | 64 | <1 | <5 | <10 | <0.01 | <1 |
| 144 | 11178 | <5 | <0.010 | 3.11 | 1674 | <10 | 7 | 235 | 2 | <20 | <20 | <1 | 0.07 | 0.81 | 2.14 | <0.01 | 0.03 | 225 | 7 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 145 | 11177 | <5 | <0.010 | 1.32 | 7054 | <10 | 18 | 11 | 3 | <20 | <20 | 3 | 0.24 | 0.57 | >10.00 | <0.01 | 0.04 | 1747 | 18 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 146 | 11179 | 6 | <0.010 | 1.55 | 3333 | <10 | 7 | 47 | 6 | <20 | <20 | 4 | 0.28 | 0.43 | >10.00 | <0.01 | 0.02 | 990 | 5 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 147 | 11344 | <5 | <0.010 | 1.74 | 2320 | <10 | 3 | 190 | 1 | <20 | <20 | 1 | 0.04 | 0.74 | 2.57 | <0.01 | <0.01 | 112 | 4 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 148 | 11345 | <5 | <0.010 | 0.65 | 157 | <10 | 4 | 349 | 2 | <20 | <20 | <1 | 0.07 | 0.03 | 0.18 | <0.01 | 0.01 | 7 | 1 | <2 | 1 | <1 | <5 | <10 | <0.01 | 2 |
| 149 | 11346 | <5 | <0.010 | 2.93 | 2340 | <10 | 9 | 207 | 9 | <20 | <20 | 4 | 0.57 | 0.61 | 2.73 | 0.01 | 0.03 | 124 | 7 | <2 | 10 | <1 | <5 | <10 | <0.01 | 2 |
| 150 | 11347 | <5 | <0.010 | 1.46 | 1310 | <10 | 5 | 196 | 2 | <20 | <20 | 1 | 0.06 | 0.54 | 2.35 | <0.01 | 0.01 | 135 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | 2 |
| 151 | 10653 | 18 | 0.043 | 6.06 | 1928 | <10 | 31 | 78 | 60 | <20 | <20 | 14 | 2.19 | 2.59 | 3.89 | 0.02 | 0.18 | 131 | 8 | <2 | 33 | 2 | 6 | <10 | 0.05 | 2 |
| 152 | 10654 | 36 | 0.023 | 1.33 | 1153 | <10 | 10 | 212 | 5 | <20 | <20 | 3 | 0.25 | 0.52 | 1.90 | 0.01 | 0.04 | 67 | 5 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 153 | 11275 | <5 | 0.020 | 3.15 | 724 | <10 | 23 | 19 | 31 | <20 | <20 | 10 | 1.18 | 0.88 | 0.53 | <0.01 | 0.06 | 26 | 7 | 2 | 15 | <1 | <5 | <10 | 0.02 | <1 |
| 153 | 11276 | <5 | 1.160 | 5.51 | 1165 | <10 | 67 | 294 | 80 | <20 | <20 | 9 | 2.43 | 1.47 | 0.82 | 0.09 | 0.30 | 35 | 10 | 5 | 27 | <1 | 7 | <10 | 0.11 | <1 |
| 153 | 11277 | <5 | 0.440 | 4.53 | 1100 | <10 | 52 | 187 | 47 | <20 | <20 | 5 | 1.35 | 0.94 | 1.53 | 0.02 | 0.13 | 51 | 6 | <2 | 20 | <1 | <5 | <10 | 0.06 | <1 |
| 153 | 11278 | <5 | 0.063 | 5.20 | 1604 | <10 | 33 | 108 | 47 | <20 | <20 | 10 | 1.68 | 1.48 | 2.99 | 0.03 | 0.16 | 133 | 11 | 3 | 22 | <1 | <5 | <10 | 0.06 | <1 |
| 153 | 11279 | <5 | 0.630 | 5.48 | 1125 | <10 | 57 | 213 | 61 | <20 | <20 | 9 | 1.90 | 1.37 | 1.22 | 0.03 | 0.17 | 48 | 9 | 3 | 23 | <1 | <5 | <10 | 0.08 | <1 |
| 154 | 11348 | 24 | 0.321 | 5.27 | 17637 | <10 | 20 | 155 | 7 | <20 | <20 | 4 | 0.29 | 1.91 | 5.88 | <0.01 | 0.06 | 365 | 13 | <2 | 5 | <1 | <5 | <10 | <0.01 | 2 |
| 155 | 10652 | 27 | 0.026 | 0.76 | 332 | <10 | 8 | 137 | 2 | <20 | <20 | 2 | 0.14 | 0.34 | 7.27 | <0.01 | 0.02 | 210 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 156 | 11307 | <5 | 0.036 | 1.04 | 554 | <10 | 51 | 127 | 9 | <20 | <20 | 7 | 0.27 | 0.08 | 0.13 | 0.02 | 0.16 | 11 | 1 | <2 | 2 | <1 | <5 | <10 | <0.01 | 3 |
| 157 | 11396 | 11 | 0.045 | 4.26 | 3064 | <10 | 13 | 160 | 9 | <20 | <20 | <1 | 0.49 | 2.44 | 6.00 | 0.01 | 0.10 | 640 | 13 | <2 | 10 | <1 | 6 | <10 | <0.01 | <1 |
| 158 | 11397 | 9 | 0.066 | 3.13 | 1901 | <10 | 11 | 174 | 8 | <20 | <20 | 2 | 0.56 | 1.53 | 4.29 | 0.01 | 0.06 | 338 | 9 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 159 | 10735 | <5 | 0.029 | 3.56 | 1731 | <10 | 11 | 17 | 22 | <20 | <20 | 19 | 1.19 | 1.15 | 0.72 | <0.01 | 0.03 | 43 | 7 | <2 | 20 | <1 | <5 | <10 | 0.02 | 1 |
| 159 | 10736 | <5 | 0.063 | 5 | 1545 | <10 | 27 | 74 | 34 | <20 | <20 | 17 | 1.96 | 1.7 | 0.7 | 0.01 | 0.12 | 40 | 5 | <2 | 28 | <1 | <5 | <10 | 0.03 | 2 |
| 160 | 10734 | 14 | 0.069 | 5.83 | 1835 | <10 | 46 | 65 | 46 | <20 | <20 | 11 | 3.02 | 2.25 | 0.90 | 0.02 | 0.25 | 60 | 5 | 4 | 36 | 2 | <5 | <10 | <0.01 | 2 |
| 160 | 11175 | 8 | 0.018 | 5.85 | 2286 | <10 | 51 | 65 | 36 | <20 | <20 | 15 | 2.33 | 1.75 | 1.46 | 0.02 | 0.28 | 93 | 10 | 3 | 27 | <1 | <5 | <10 | <0.01 | <1 |
| 161 | 10732 | 11 | 0.285 | 5.82 | 4667 | <10 | 120 | 91 | 24 | <20 | <20 | 15 | 0.83 | 0.82 | 0.89 | 0.02 | 0.13 | 54 | 6 | <2 | 12 | <1 | <5 | <10 | <0.01 | 3 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 10733 | Right Fork | | sed | | 14 | | | <0.2 | 36 | 13 | 66 | 1 | 32 | 17 | <0.2 | <5 | 54 |
| 162 | 11283 | Friday the 13th Pup | flt | sel | phyllite w/ 2% euhedral py | 13 | | | <0.2 | 29 | 4 | 75 | <1 | 30 | 13 | <0.2 | <5 | 70 |
| 163 | 10731 | Friday the 13th Pup | flt | grab | phyllite w/ py | 38 | | | 0.3 | 33 | 18 | 63 | <1 | 25 | 9 | <0.2 | <5 | 149 |
| 164 | 10727 | Friday the 13th Pup | otc | grab | qz veinlets w/ py, po, lim | **1790** | | | 0.2 | 22 | 29 | 32 | 2 | 19 | 7 | 0.3 | <5 | 412 |
| 164 | 10728 | Friday the 13th Pup | otc | grab | qz veinlet w/ py, po (?), apy (?) | 521 | | | <0.2 | 11 | 22 | 77 | 4 | 23 | 8 | 0.3 | <5 | 368 |
| 164 | 10729 | Friday the 13th Pup | otc | sel | qz lense in phyllite w/ stb | 6 | | | 1.3 | <1 | 1657 | 269 | <1 | 6 | 3 | 0.9 | <5 | 15 |
| 164 | 10730 | Friday the 13th Pup | otc | grab | qz veinlet | 63.56 ppm | | | 3.9 | 6 | 114 | 23 | 6 | 25 | 5 | <0.2 | <5 | 183 |
| 165 | 11267 | Friday the 13th Pup | | sed | | <5 | | | <0.2 | 25 | 9 | 52 | <1 | 24 | 13 | <0.2 | <5 | 24 |
| 165 | 11268 | Friday the 13th Pup | | pan | minor py and mag | 1750 | 9 | 7 | <0.2 | 63 | 20 | 88 | 4 | 59 | 29 | 0.5 | <5 | 199 |
| 166 | 11284 | Friday the 13th Pup | otc | ran | qz veinlet | **26.07 ppm** | | | <0.2 | 7 | 154 | 31 | <1 | 17 | 4 | 0.3 | <5 | 126 |
| 167 | 11264 | Right Fork | otc | ran | qz veinlet | 2948 | | | 0.9 | 56 | 34 | 29 | <1 | 15 | 5 | 0.3 | <5 | 181 |
| 167 | 11265 | Right Fork | otc | ran | qz veinlet w/ 5% py | 415 | | | <0.2 | 12 | 112 | 14 | <1 | 9 | 4 | 9.1 | <5 | 3802 |
| 167 | 11266 | Right Fork | otc | ran | qz veinlet w/ 1% py, visible Au | **17.82 ppm** | | | 4.4 | 16 | 24 | 32 | <1 | 21 | 5 | 0.6 | <5 | 289 |
| 168 | 11263 | Right Fork | otc | sel | qz veinlet w/ minor hem and py | 9 | | | <0.2 | 59 | 23 | 52 | <1 | 23 | 16 | <0.2 | <5 | 54 |
| 169 | 11160 | Nolan Ck | otc | ran | meta qz | <5 | | | 0.3 | 11 | 19 | 21 | 2 | 19 | 6 | <0.2 | <5 | <5 |
| 170 | 11159 | Nolan Ck | otc | ran | folded meta qz | <5 | | | <0.2 | 13 | 34 | 10 | 4 | 19 | 4 | <0.2 | <5 | <5 |
| 171 | 11087 | Nolan Ck | | sed | | 3 | | | <0.2 | 29 | 3 | 59 | <1 | 25 | 16 | <0.2 | <5 | 8 |
| 171 | 11088 | Nolan Ck | | pan | | 14.99 ppm | 2 | <5 | 0.8 | 39 | 15 | 112 | 2 | 29 | 17 | <0.2 | <5 | 13 |
| 172 | 11089 | Vermont Pass | | sed | | 6 | | | <0.2 | 30 | 5 | 67 | 1 | 28 | 18 | <0.2 | <5 | 10 |
| 172 | 11206 | Vermont Pass | | pan | | 47 | 2 | 6 | <0.2 | 72 | 6 | 170 | 4 | 48 | 23 | <0.2 | <5 | 15 |
| 173 | 11123 | Montana Gulch | | sed | | 2 | | | <0.2 | 39 | 6 | 67 | 1 | 31 | 19 | <0.2 | <5 | 17 |
| 173 | 11124 | Montana Gulch | | pan | mod po and py, minor mag | 10 | 3 | <5 | <0.2 | 94 | 9 | 121 | 3 | 46 | 33 | <0.2 | <5 | 42 |
| 174 | 11392 | Montana Mountain | flt | sel | vein qz w/ sid, hem | <5 | | | <0.2 | 4 | 10 | 32 | 2 | 5 | 4 | <0.2 | <5 | <5 |
| 175 | 11378 | Acme Ck | otc | sel | meta qz | 6 | | | 0.4 | 25 | 85 | 17 | 2 | 12 | 3 | <0.2 | <5 | <5 |
| 176 | 11090 | Acme Ck | | sed | | 4 | | | <0.2 | 30 | 10 | 57 | 1 | 26 | 15 | <0.2 | <5 | 7 |
| 176 | 11091 | Acme Ck | | pan | tr mag, no visible Au | 25 | 3 | <5 | <0.2 | 47 | <2 | 139 | 3 | 33 | 16 | <0.2 | <5 | 9 |
| 177 | 8035 | Nolan Ck, Silverado | | slu | placer con | >10000 | | | 31 | | | <390 | 38 | 390 | 130 | <50 | | 100 |
| 177 | 10674 | Nolan Ck, Silverado | | slu | py cubes from sluice con | 20 | | | 0.2 | 38 | 59 | 5 | 4 | 102 | 425 | <0.2 | <5 | 99 |
| 177 | 10675 | Nolan Ck, Silverado | | slu | py concretions from sluice con | 79 | | | 5.0 | 137 | 136 | 23 | 47 | 144 | 33 | 0.7 | <5 | 294 |
| 178 | 10747 | Smith Ck | trn | sel | stb vein in schist | 12.20 ppm | | | <0.2 | 22 | <2 | 33 | <1 | <1 | 2 | 1.8 | <5 | 295 |
| 178 | 11372 | Smith Ck | otc | sel | qz vein w/ stb | 1804 | | | <0.2 | 16 | <2 | 34 | <1 | <1 | 3 | 5.2 | <5 | 1365 |
| 179 | 11280 | Smith Ck | otc | sel | qz veinlets w/ 50% Sb, 10% sid | 9836 | | | <0.2 | 69 | <2 | 51 | <1 | <1 | 5 | 2.3 | <5 | 924 |
| 180 | 10748 | Smith Ck | drum | sel | massive stb w/ yellow alt mineral | 577 | | | 0.6 | 13 | <2 | 3 | <1 | <1 | <1 | 4.7 | <5 | 15 |
| 181 | 10749 | Smith Ck | otc | rep | qz-musc schist w/ tr py, lim | 8 | | | <0.2 | 64 | 15 | 75 | 3 | 35 | 20 | <0.2 | <5 | 40 |
| 182 | 10725 | Smith Ck | pit | sel | 1.5 " stb vein w/ val | 1115 | | | <0.2 | 40 | <2 | 44 | <1 | <1 | 2 | 2.6 | <5 | 16 |
| 182 | 10726 | Smith Ck | otc | sel | qz veinlet w/ ank margins | 151 | | | 0.6 | 26 | 8 | 32 | 2 | 11 | 5 | 0.5 | <5 | 702 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 10733 | <5 | 0.085 | 2.82 | 2234 | <10 | 23 | 10 | 13 | <20 | <20 | 14 | 0.63 | 0.55 | 0.55 | <0.01 | 0.03 | 37 | 5 | <2 | 11 | <1 | <5 | <10 | <0.01 | 1 |
| 162 | 11283 | 7 | 0.064 | 3.99 | 821 | <10 | 39 | 37 | 12 | <20 | <20 | 10 | 1.00 | 1.55 | 3.96 | 0.02 | 0.27 | 135 | 5 | <2 | 18 | <1 | <5 | <10 | <0.01 | <1 |
| 163 | 10731 | 20 | 0.111 | 3.52 | 1173 | <10 | 36 | 40 | 8 | <20 | <20 | 11 | 0.58 | 1.44 | 5.28 | 0.02 | 0.27 | 211 | 8 | <2 | 6 | <1 | <5 | <10 | <0.01 | 2 |
| 164 | 10727 | 748 | 0.057 | 2.08 | 959 | <10 | 34 | 161 | 5 | <20 | <20 | 10 | 0.31 | 0.86 | 2.99 | 0.02 | 0.21 | 85 | 5 | <2 | 2 | <1 | <5 | <10 | <0.01 | 2 |
| 164 | 10728 | 46 | 0.075 | 1.27 | 2017 | <10 | 5 | 202 | 2 | <20 | <20 | <1 | 0.05 | 0.55 | 1.25 | <0.01 | 0.02 | 68 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 2 |
| 164 | 10729 | 61 | 0.339 | 4.82 | >20000 | <10 | 8 | 77 | <1 | <20 | <20 | 5 | 0.07 | 2.68 | 9.92 | 0.01 | 0.04 | 509 | 10 | <2 | 1 | 2 | <5 | <10 | <0.01 | <1 |
| 164 | 10730 | 62 | 1.359 | 0.73 | 401 | <10 | 15 | 252 | 1 | <20 | <20 | 2 | 0.07 | 0.12 | 0.78 | 0.01 | 0.04 | 41 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 165 | 11267 | <5 | 0.054 | 2.68 | 1777 | <10 | 22 | 13 | 16 | <20 | <20 | 14 | 0.84 | 0.53 | 0.32 | <0.01 | 0.04 | 21 | 6 | <2 | 12 | <1 | <5 | <10 | <0.01 | <1 |
| 165 | 11268 | <5 | 0.173 | 5.67 | 5504 | <10 | 145 | 424 | 41 | <20 | <20 | 12 | 1.80 | 0.79 | 0.69 | 0.08 | 0.42 | 59 | 8 | 3 | 19 | <1 | <5 | <10 | 0.02 | <1 |
| 166 | 11284 | 80 | 0.128 | 0.69 | 208 | <10 | 10 | 211 | 2 | <20 | <20 | 1 | 0.06 | 0.07 | 0.31 | 0.01 | 0.03 | 26 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 167 | 11264 | 20 | 0.100 | 1.29 | 535 | <10 | 28 | 161 | 3 | <20 | <20 | 2 | 0.19 | 0.61 | 1.99 | 0.02 | 0.11 | 61 | 3 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 167 | 11265 | 33 | 0.023 | 1.42 | 799 | <10 | 22 | 127 | 1 | <20 | <20 | <1 | 0.06 | 0.38 | 1.26 | 0.01 | 0.03 | 36 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 167 | 11266 | 7 | 0.795 | 1.40 | 818 | <10 | 14 | 149 | 2 | <20 | <20 | 1 | 0.14 | 0.42 | 1.73 | 0.01 | 0.07 | 63 | 3 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 168 | 11263 | 10 | 0.032 | 3.16 | 3532 | <10 | 44 | 107 | 13 | <20 | <20 | 10 | 1.01 | 1.11 | 1.79 | 0.03 | 0.18 | 132 | 5 | <2 | 16 | <1 | <5 | <10 | <0.01 | <1 |
| 169 | 11160 | <5 | <0.010 | 1.34 | 439 | <10 | 29 | 207 | 12 | <20 | <20 | <1 | 0.58 | 0.32 | 3.37 | 0.02 | 0.16 | 158 | 3 | <2 | 7 | <1 | <5 | <10 | 0.05 | <1 |
| 170 | 11159 | <5 | 0.018 | 0.69 | 714 | <10 | 14 | 310 | 4 | <20 | <20 | 1 | 0.20 | 0.16 | 0.22 | 0.01 | 0.04 | 8 | <1 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 171 | 11087 | <5 | 0.026 | 3.66 | 1098 | <10 | 14 | 20 | 28 | <20 | <20 | 13 | 1.33 | 0.93 | 0.39 | <0.01 | 0.06 | 23 | 8 | <2 | 22 | <1 | <5 | <10 | 0.01 | <1 |
| 171 | 11088 | <5 | 0.350 | 5.05 | 2843 | <10 | 169 | 258 | 74 | <20 | <20 | 11 | 2.51 | 1.35 | 0.77 | 0.12 | 0.37 | 39 | 17 | 3 | 27 | <1 | 10 | <10 | 0.22 | <1 |
| 172 | 11089 | <5 | 0.046 | 4.00 | 2085 | <10 | 27 | 26 | 40 | <20 | <20 | 11 | 1.47 | 1.11 | 0.56 | <0.01 | 0.07 | 36 | 8 | <2 | 17 | 1 | <5 | <10 | 0.01 | <1 |
| 172 | 11206 | <5 | 0.036 | 4.38 | 6650 | <10 | 150 | 424 | 45 | <20 | <20 | 14 | 2.13 | 0.89 | 0.29 | 0.11 | 0.40 | 32 | 18 | 3 | 15 | <1 | 8 | <10 | 0.04 | <1 |
| 173 | 11123 | <5 | 0.034 | 3.96 | 1945 | <10 | 20 | 21 | 29 | <20 | <20 | 10 | 1.41 | 1.02 | 0.40 | <0.01 | 0.06 | 26 | 6 | <2 | 22 | <1 | <5 | <10 | <0.01 | <1 |
| 173 | 11124 | <5 | 0.038 | 5.51 | 5896 | <10 | 110 | 255 | 55 | <20 | <20 | 14 | 2.57 | 1.33 | 0.57 | 0.08 | 0.49 | 36 | 13 | 3 | 24 | <1 | 8 | <10 | 0.05 | <1 |
| 174 | 11392 | <5 | <0.010 | 7.27 | 5641 | <10 | <1 | 61 | 1 | <20 | <20 | 1 | 0.03 | 3.29 | 9.44 | <0.01 | 0.01 | 616 | 35 | <2 | 1 | <1 | 8 | <10 | <0.01 | <1 |
| 175 | 11378 | 62 | 0.012 | 0.59 | 171 | <10 | 17 | 280 | 1 | <20 | <20 | <1 | 0.09 | 0.04 | 0.07 | <0.01 | 0.02 | 2 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 176 | 11090 | <5 | 0.035 | 3.66 | 994 | <10 | 11 | 23 | 30 | <20 | <20 | 16 | 1.43 | 1.17 | 0.82 | <0.01 | 0.04 | 40 | 8 | <2 | 19 | <1 | <5 | <10 | 0.02 | <1 |
| 176 | 11091 | <5 | 0.046 | 5.22 | 1664 | <10 | 134 | 247 | 77 | <20 | <20 | 12 | 3.33 | 1.68 | 0.86 | 0.16 | 0.67 | 54 | 12 | 5 | 30 | <1 | 10 | <10 | 0.15 | <1 |
| 177 | 8035 | 196.0 | | >10.0 | | <200 | 520 | 760 | | <2000 | 445 | 11 | | | | <0.12 | | | | | | | 3.3 | <1 | | <1500 |
| 177 | 10674 | 19 | 0.073 | >10.00 | 45 | <10 | <1 | 111 | 2 | <20 | <20 | 3 | 0.17 | 0.02 | 0.06 | <0.01 | 0.07 | 5 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 4 |
| 177 | 10675 | 91 | 0.010 | >10.00 | 59 | <10 | <1 | 74 | <1 | <20 | <20 | <1 | 0.04 | 0.03 | 0.09 | <0.01 | 0.02 | 3 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 2 |
| 178 | 10747 | 15.83% | 1.049 | 1.17 | 1077 | <10 | 24 | 97 | <1 | <20 | <20 | 2 | 0.17 | 0.49 | 0.93 | <0.01 | 0.08 | 57 | 3 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 178 | 11372 | 2000 | 0.234 | 1.30 | 1088 | <10 | 18 | 138 | 3 | <20 | <20 | 1 | 0.13 | 0.53 | 1.42 | <0.01 | 0.06 | 122 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 179 | 11280 | 42.42% | 0.457 | 1.08 | 912 | <10 | <1 | 69 | 2 | <20 | <20 | <1 | 0.06 | 0.68 | 1.89 | <0.01 | 0.02 | 163 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 180 | 10748 | 66.41% | 0.465 | 0.08 | 30 | <10 | 4 | 20 | <1 | 40 | 56 | <1 | 0.02 | 0.02 | 0.15 | <0.01 | <0.01 | 15 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 181 | 10749 | 30 | 0.127 | 4.12 | 2252 | <10 | 30 | 107 | 16 | <20 | <20 | 7 | 0.96 | 1.07 | 1.10 | 0.02 | 0.19 | 53 | 5 | <2 | 12 | <1 | <5 | <10 | <0.01 | 7 |
| 182 | 10725 | 41.28% | 0.175 | 1.51 | 715 | <10 | 16 | 60 | <1 | <20 | 28 | <1 | 0.21 | 0.62 | 0.52 | <0.01 | 0.12 | 22 | 2 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 182 | 10726 | 483 | 0.100 | 3.93 | 3746 | <10 | 15 | 78 | 7 | <20 | <20 | 4 | 0.23 | 3.72 | 8.80 | 0.02 | 0.09 | 510 | 11 | <2 | 2 | 3 | <5 | <10 | <0.01 | 2 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 182 | 11402 | Smith Ck | otc | sel | qz vein w/ stb, carbonate | 1716 | | | <0.2 | 4 | 3 | 21 | <1 | <1 | 1 | 5.9 | <5 | 1207 |
| 182 | 11403 | Smith Ck | otc | rand | qz veinlets w/ stb, carbonate | 393 | | | 0.3 | 7 | 7 | 35 | 2 | 7 | 2 | 2.0 | <5 | 441 |
| 182 | 11404 | Smith Ck | otc | sel | qz vein w/ stb, carbonate | 501 | | | 0.4 | 10 | <2 | 30 | <1 | <1 | <1 | 2.3 | <5 | 51 |
| 183 | 10746 | Smith Ck | otc | rep | qz-musc schist w/ lim | 7 | | | <0.2 | 54 | 21 | 60 | 1 | 18 | 9 | <0.2 | <5 | 64 |
| 184 | 11163 | Smith Ck | otc | sel | blk schist w/ euhedral py | 13 | | | <0.2 | 72 | 22 | 58 | 4 | 44 | 18 | <0.2 | <5 | 23 |
| 184 | 11164 | Smith Ck | otc | sel | qz vein | 463 | | | <0.2 | 6 | 3 | 67 | 4 | 12 | 2 | 2.4 | <5 | 1028 |
| 184 | 11165 | Smith Ck | otc | ran | qz veins w/ sulfides, Sb | 1532 | | | <0.2 | 30 | 43 | 41 | 3 | 17 | 8 | 12.3 | <5 | 5772 |
| 185 | 11166 | Smith Ck | otc | ran | qz veins w/ sulfides, Sb | 1958 | | | <0.2 | 23 | 29 | 25 | 7 | 13 | 4 | 9.0 | <5 | 3933 |
| 185 | 11167 | Smith Ck | otc | sel | meta qtz w/ euhedral py | 14 | | | 1.3 | 22 | 359 | 4004 | 7 | 20 | 6 | 16.9 | <5 | 54 |
| 186 | 10743 | Smith Ck | otc | rep | qz vein xcut qz-mica schist | <5 | | | 0.4 | 34 | 6 | 65 | 1 | 12 | 11 | <0.2 | <5 | 89 |
| 187 | 10744 | Smith Ck | | pan | minor mag, no visible Au | 22 | | | <0.2 | 45 | 14 | 63 | 2 | 45 | 20 | <0.2 | 7 | 57 |
| 187 | 10745 | Smith Ck | | sed | | <5 | | | <0.2 | 23 | 11 | 57 | 1 | 25 | 12 | <0.2 | <5 | 15 |
| 188 | 10742 | Smith Creek Dome | otc | sel | schistose qtz w/ py, mal (?) | 9 | | | <0.2 | 62 | 17 | 17 | 10 | 25 | 9 | <0.2 | <5 | 153 |
| 189 | 10720 | Smith Creek Dome | otc | sel | qz-musc schist w/ py cubes, lim | 2234 | | | 7.2 | 171 | 3500 | 95 | 4 | 44 | 28 | 0.3 | 23 | 123 |
| 189 | 10741 | Smith Creek Dome | otc | sel | qz vein cutting qz-mica schist | 46 | | | <0.2 | 47 | 23 | 39 | 2 | 16 | 9 | <0.2 | <5 | 47 |
| 190 | 10718 | Smith Creek Dome | otc | sel | schistose qtz w/ tr py, lim | <5 | | | <0.2 | 27 | 178 | 65 | 114 | 45 | 5 | 0.7 | <5 | 81 |
| 191 | 11158 | Smith Creek Dome | otc | sel | meta qz w/ py | 11 | | | <0.2 | 10 | <2 | 33 | 2 | 16 | 10 | <0.2 | <5 | 12 |
| 192 | 11247 | Smith Dome Bench | | soil | 0.025 cubic yards, schist-rich soil | 2.33 ppm | <70 | <70 | <0.2 | 41 | 14 | 92 | 1 | 34 | 22 | <0.2 | <5 | 111 |
| 193 | 10764 | Smith Dome Bench | | soil | probable contamination | 387.62 ppm | | | 83.7 | 161 | >10000 | 73 | 2 | 69 | 50 | <0.2 | 135 | 737 |
| 194 | 11144 | Swede Channel | | pan | 1 fine and 1 coarse Au, mod py | 217.63 ppm | 3 | <5 | 6.1 | 58 | 10 | 161 | 5 | 38 | 27 | <0.2 | <5 | 58 |
| 195 | 11068 | Archibald Ck | | sed | | 5 | | | <0.2 | 32 | 7 | 53 | <1 | 30 | 18 | <0.2 | <5 | 21 |
| 195 | 11069 | Archibald Ck | | pan | tr mag, no visible Au | 14 | 3 | <5 | <0.2 | 107 | 7 | 223 | 3 | 41 | 22 | <0.2 | <5 | 34 |
| 196 | 11168 | Archibald Ck | otc | sel | qz veinlet within blk py schist | 27 | | | 0.3 | 14 | 5 | 15 | 5 | 20 | 3 | <0.2 | <5 | 37 |
| 197 | 11116 | Nolan Ck | otc | ran | qz veinlets xcut phyllite | 4 | | | 0.2 | 93 | 36 | 51 | 4 | 29 | 12 | <0.2 | <5 | 26 |
| 198 | 11379 | Nolan Ck | otc | rand | qz veinlets in graphitic schist | 37 | | | 0.3 | 17 | 10 | 13 | 4 | 11 | 1 | <0.2 | <5 | 14 |
| 199 | 11117 | Nolan Ck | | pan | 1 fine and 12 v fine Au, no mag | 11740 | 1 | <5 | 5.1 | 43 | 32 | 115 | 3 | 31 | 18 | <0.2 | <5 | 38 |
| 199 | 11118 | Nolan Ck | | sed | | 2 | | | <0.2 | 25 | 4 | 55 | <1 | 23 | 15 | <0.2 | <5 | 15 |
| 200 | 11119 | Nolan Ck | flt | grab | diorite w/ tr po | 3 | | | 0.2 | 89 | <2 | 39 | 1 | 41 | 21 | <0.2 | <5 | <5 |
| 201 | 11120 | Nolan Ck | flt | grab | diorite w/ <1% fine py, lim | 2 | | | <0.2 | 126 | <2 | 58 | 1 | 25 | 26 | <0.2 | <5 | <5 |
| 202 | 11121 | Webster Gulch | | pan | no mag | 26 | <1 | <5 | <0.2 | 30 | <2 | 106 | 2 | 23 | 17 | <0.2 | <5 | 42 |
| 202 | 11122 | Webster Gulch | | sed | | 4 | | | <0.2 | 27 | 7 | 72 | <1 | 25 | 17 | <0.2 | <5 | 59 |
| 203 | 11261 | Right Fork | | sed | | <5 | | | <0.2 | 37 | 14 | 82 | <1 | 45 | 18 | <0.2 | <5 | 16 |
| 203 | 11262 | Right Fork | | pan | tr mag, tr py | 43 | 6 | 7 | <0.2 | 40 | 13 | 155 | 3 | 42 | 20 | <0.2 | <5 | 24 |
| 204 | 11259 | Right Fork | | sed | | <5 | | | <0.2 | 18 | 10 | 53 | <1 | 21 | 12 | <0.2 | <5 | 24 |
| 204 | 11260 | Right Fork | | pan | abu euhedral mag | 40 | 6 | 7 | <0.2 | 50 | 13 | 78 | 4 | 57 | 23 | <0.2 | <5 | 51 |
| 205 | 11281 | Right Fork | otc | sel | qz veinlets w/ 50 % ca | 6 | | | 0.5 | 28 | 44 | 43 | <1 | 19 | 6 | <0.2 | <5 | 17 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 182 | 11402 | >2000 | 0.066 | 1.22 | 961 | <10 | 5 | 109 | 3 | <20 | <20 | <1 | 0.12 | 0.85 | 2.12 | 0.01 | 0.05 | 147 | 4 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 182 | 11403 | 169 | 0.079 | 3.42 | 1550 | <10 | 14 | 144 | 8 | <20 | <20 | <1 | 0.33 | 3.31 | 7.12 | 0.02 | 0.13 | 623 | 7 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 182 | 11404 | >2000 | 0.153 | 0.81 | 661 | <10 | 3 | 43 | 1 | <20 | 32 | <1 | 0.06 | 0.71 | 1.45 | <0.01 | 0.02 | 87 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 183 | 10746 | 22 | 0.135 | 4.29 | 3232 | <10 | 60 | 38 | 15 | <20 | <20 | 19 | 0.65 | 1.79 | 2.33 | 0.03 | 0.30 | 154 | 6 | <2 | 5 | <1 | <5 | <10 | <0.01 | 1 |
| 184 | 11163 | 9 | 0.052 | 3.66 | 1830 | <10 | 51 | 108 | 16 | <20 | <20 | 4 | 0.93 | 1.00 | 0.96 | 0.03 | 0.20 | 52 | 3 | <2 | 15 | <1 | <5 | <10 | <0.01 | <1 |
| 184 | 11164 | >2000 | 0.124 | 1.05 | 727 | <10 | 14 | 272 | 3 | <20 | <20 | <1 | 0.11 | 0.76 | 1.71 | <0.01 | 0.02 | 172 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 184 | 11165 | >2000 | 0.079 | 1.47 | 1201 | <10 | 21 | 246 | 4 | <20 | <20 | 2 | 0.22 | 0.49 | 1.15 | 0.01 | 0.08 | 95 | 2 | <2 | 1 | 1 | <5 | <10 | <0.01 | <1 |
| 185 | 11166 | >2000 | 0.068 | 1.15 | 266 | <10 | 18 | 249 | 4 | <20 | <20 | 2 | 0.21 | 0.15 | 0.26 | 0.01 | 0.07 | 53 | <1 | <2 | 2 | <1 | <5 | <10 | <0.01 | 1 |
| 185 | 11167 | 48 | 5.685 | 1.40 | 867 | <10 | 7 | 397 | 1 | <20 | <20 | <1 | 0.06 | 0.16 | 0.34 | 0.02 | 0.02 | 16 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 186 | 10743 | 42 | 0.125 | 4.52 | 1613 | <10 | 22 | 86 | 8 | <20 | <20 | 7 | 0.27 | 2.71 | 6.76 | 0.02 | 0.15 | 619 | 11 | <2 | 1 | 1 | <5 | <10 | <0.01 | 1 |
| 187 | 10744 | 15 | 0.16 | 7.96 | 2252 | <10 | 44 | 114 | 53 | <20 | <20 | 21 | 0.70 | 0.34 | 0.12 | 0.01 | 0.10 | 20 | 5 | <2 | 6 | 1 | <5 | <10 | <0.01 | 3 |
| 187 | 10745 | 10 | 0.192 | 2.27 | 1363 | <10 | 28 | 13 | 15 | <20 | <20 | 15 | 0.71 | 0.53 | 0.13 | <0.01 | 0.03 | 24 | 5 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 188 | 10742 | 46 | 0.057 | 0.96 | 288 | <10 | 35 | 174 | 3 | <20 | <20 | 5 | 0.18 | 0.08 | 0.05 | 0.01 | 0.09 | 9 | 1 | <2 | 2 | <1 | <5 | <10 | <0.01 | 3 |
| 189 | 10720 | 156 | 0.920 | 3.79 | 3371 | <10 | 248 | 150 | 7 | <20 | <20 | 9 | 0.43 | 0.50 | 0.51 | 0.01 | 0.27 | 66 | 3 | <2 | 4 | <1 | <5 | <10 | <0.01 | 2 |
| 189 | 10741 | 31 | 0.168 | 2.34 | 2096 | <10 | 112 | 122 | 8 | <20 | <20 | 15 | 0.49 | 0.56 | 0.47 | <0.01 | 0.18 | 89 | 4 | <2 | 3 | <1 | <5 | <10 | <0.01 | 2 |
| 190 | 10718 | 9 | 0.483 | 1.23 | 171 | <10 | 89 | 211 | 8 | <20 | <20 | 3 | 0.33 | 0.07 | 0.01 | 0.01 | 0.11 | 5 | 2 | <2 | 3 | <1 | <5 | <10 | <0.01 | 6 |
| 191 | 11158 | <5 | 0.226 | 1.23 | 2133 | <10 | 88 | 230 | 3 | <20 | <20 | <1 | 0.12 | 0.49 | 1.09 | <0.01 | 0.08 | 106 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 192 | 11247 | 96 | 0.230 | 5.79 | 1354 | <10 | 63 | 207 | 80 | <20 | <20 | 9 | 2.01 | 1.26 | 1.11 | 0.08 | 0.19 | 70 | 8 | 5 | 29 | <1 | 9 | <10 | 0.01 | <1 |
| 193 | 10764 | 199 | IS | >10.00 | 1226 | 33 | 9 | 129 | 35 | 38 | 37 | 56 | 1.12 | 0.84 | 1.13 | 0.02 | 0.11 | 65 | 7 | 3 | 13 | <1 | <5 | <10 | 0.01 | 4 |
| 194 | 11144 | 25 | 3.220 | 6.67 | 2924 | <10 | 110 | 309 | 54 | <20 | <20 | 9 | 1.95 | 0.82 | 1.20 | 0.11 | 0.38 | 56 | 13 | <2 | 21 | <1 | 7 | <10 | 0.07 | <1 |
| 195 | 11068 | 18 | 0.038 | 2.60 | 1837 | <10 | 18 | 12 | 16 | <20 | <20 | 8 | 0.81 | 0.62 | 0.43 | <0.01 | 0.04 | 27 | 6 | <2 | 11 | <1 | <5 | <10 | 0.01 | <1 |
| 195 | 11069 | 45 | 0.035 | 5.15 | 3968 | <10 | 118 | 364 | 52 | <20 | <20 | 9 | 2.10 | 0.96 | 0.58 | 0.14 | 0.36 | 33 | 15 | 2 | 21 | <1 | 9 | <10 | 0.1 | <1 |
| 196 | 11168 | 150 | 0.095 | 0.94 | 71 | <10 | 18 | 393 | 5 | <20 | <20 | 3 | 0.20 | 0.01 | 0.04 | <0.01 | 0.06 | 10 | <1 | <2 | 1 | <1 | <5 | <10 | <0.01 | 4 |
| 197 | 11116 | 6 | 0.016 | 2.02 | 2211 | <10 | 26 | 260 | 9 | <20 | <20 | 3 | 0.41 | 0.69 | 0.94 | 0.03 | 0.11 | 61 | 2 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 198 | 11379 | 27 | 0.086 | 0.84 | 99 | <10 | 21 | 200 | 8 | <20 | <20 | 5 | 0.19 | 0.09 | 0.04 | 0.03 | 0.08 | 10 | 1 | <2 | 1 | <1 | <5 | <10 | <0.01 | 5 |
| 199 | 11117 | 11 | 0.770 | 5.01 | 3965 | <10 | 107 | 293 | 78 | <20 | <20 | 14 | 2.58 | 1.25 | 0.79 | 0.15 | 0.42 | 40 | 20 | 4 | 24 | <1 | 11 | <10 | 0.19 | <1 |
| 199 | 11118 | <5 | 0.026 | 3.27 | 1362 | <10 | 16 | 19 | 30 | <20 | <20 | 10 | 1.15 | 0.86 | 0.40 | <0.01 | 0.06 | 24 | 6 | <2 | 17 | <1 | <5 | <10 | 0.02 | <1 |
| 200 | 11119 | <5 | <0.010 | 3.77 | 625 | <10 | 17 | 94 | 74 | <20 | <20 | <1 | 3.12 | 1.69 | 2.21 | 0.05 | 0.04 | 25 | 8 | 3 | 20 | <1 | <5 | <10 | 0.24 | <1 |
| 201 | 11120 | <5 | <0.010 | 4.43 | 632 | <10 | 25 | 67 | 95 | <20 | <20 | 3 | 2.18 | 1.33 | 1.17 | 0.06 | 0.03 | 30 | 11 | <2 | 14 | <1 | <5 | <10 | 0.29 | <1 |
| 202 | 11121 | <5 | 0.024 | 4.52 | 1775 | <10 | 89 | 208 | 91 | <20 | <20 | 9 | 2.22 | 1.32 | 1.00 | 0.17 | 0.28 | 55 | 14 | 3 | 20 | <1 | 10 | <10 | 0.2 | <1 |
| 202 | 11122 | <5 | 0.046 | 3.56 | 1382 | <10 | 23 | 21 | 42 | <20 | <20 | 8 | 1.22 | 0.95 | 0.56 | <0.01 | 0.06 | 34 | 5 | <2 | 15 | <1 | <5 | <10 | 0.02 | <1 |
| 203 | 11261 | <5 | 0.050 | 3.13 | 1490 | <10 | 17 | 10 | 9 | <20 | <20 | 14 | 0.65 | 0.48 | 0.67 | <0.01 | 0.04 | 31 | 7 | <2 | 15 | <1 | <5 | <10 | <0.01 | <1 |
| 203 | 11262 | <5 | 0.105 | 4.79 | 3897 | <10 | 187 | 405 | 47 | <20 | <20 | 12 | 1.80 | 0.76 | 1.18 | 0.13 | 0.46 | 77 | 8 | 3 | 20 | <1 | 5 | <10 | <0.01 | <1 |
| 204 | 11259 | <5 | 0.023 | 2.20 | 2681 | <10 | 14 | 8 | 10 | <20 | <20 | 15 | 0.59 | 0.40 | 1.06 | <0.01 | 0.03 | 35 | 6 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 204 | 11260 | <5 | 0.090 | 5.64 | 3974 | <10 | 134 | 585 | 47 | <20 | <20 | 11 | 1.96 | 0.63 | 1.45 | 0.13 | 0.53 | 81 | 10 | 3 | 21 | <1 | 6 | <10 | 0.01 | <1 |
| 205 | 11281 | 161 | 0.047 | 2.14 | 822 | <10 | 25 | 66 | 6 | <20 | <20 | 3 | 0.52 | 0.80 | >10.00 | 0.02 | 0.14 | 733 | 16 | <2 | 10 | <1 | <5 | <10 | <0.01 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 205 | 11282 | Right Fork | flt | sel | phyllite w/ 2% euhedral py | 10 | | | 0.3 | 38 | 8 | 65 | <1 | 33 | 11 | <0.2 | <5 | 47 |
| 206 | 10649 | Thompson headwaters | flt | sel | massive qz w/ py, po | <5 | | | <0.2 | 6 | <2 | 10 | 2 | 13 | 3 | <0.2 | <5 | 23 |
| 207 | 10647 | Thompson headwaters | otc | rand | qz veinlets in phyllite w/ lim | 186 | | | 0.4 | 55 | 13 | 22 | 5 | 20 | 6 | <0.2 | <5 | 73 |
| 207 | 10648 | Thompson headwaters | otc | rand | qz veinlet in phyllite w/ lim | 122 | | | <0.2 | 78 | 20 | 142 | 3 | 62 | 27 | 0.5 | <5 | 294 |
| 208 | 11060 | Thompson Pup | flt | sel | multiple phase alt qz w/ lim | 4 | | | 0.4 | 2 | 31 | 50 | 1 | 16 | 10 | <0.2 | <5 | 7 |
| 208 | 11207 | Thompson Pup | otc | cont | qz veinlet w/ apy | 152 | | | <0.2 | 23 | <2 | 49 | 2 | 20 | 10 | 1.2 | <5 | 434 |
| 208 | 11214 | Thompson Pup | flt | sel | ch schist w/ 5% py, po | 65 | | | <0.2 | 60 | 31 | 44 | 4 | 47 | 33 | 2.1 | <5 | 683 |
| 208 | 11215 | Thompson Pup | otc | sel | 4.0 ft-wide qz vein w/ py, po, ch | 30 | | | 0.4 | 116 | 12 | 76 | 4 | 32 | 19 | 2.3 | <5 | 765 |
| 208 | 11360 | Thompson Pup | otc | sel | qz vein | <5 | | | <0.2 | 17 | 26 | 21 | 3 | 19 | 8 | <0.2 | <5 | 61 |
| 208 | 11361 | Thompson Pup | otc | sel | qz vein w/ py, lim | <5 | | | <0.2 | 13 | <2 | 12 | 1 | 9 | 3 | <0.2 | <5 | <5 |
| 209 | 11395 | Thompson Pup | flt | sel | vein qz w/ sid, py | 9 | | | <0.2 | 7 | 7 | 21 | 2 | 10 | 3 | <0.2 | <5 | 16 |
| 210 | 11208 | Thompson Pup | flt | sel | vein qz (?) w/ tr cpy (?) | 12 | | | <0.2 | 3062 | 11 | 79 | 2 | 21 | 26 | 0.8 | <5 | 191 |
| 211 | 11362 | Thompson Pup | otc | sel | qz vein | 6 | | | <0.2 | 10 | <2 | 11 | 4 | 16 | 3 | <0.2 | <5 | 52 |
| 212 | 11363 | Thompson Pup | otc | rand | qz vein | <5 | | | <0.2 | 13 | 8 | 26 | 1 | 11 | 6 | <0.2 | <5 | 36 |
| 213 | 11061 | Thompson Pup | flt | sel | qtz cobble w/ 3% py, cpy (?), lim | 25 | | | <0.2 | 3059 | 20 | 88 | 1 | 6 | 8 | 0.3 | <5 | 46 |
| 213 | 11364 | Thompson Pup | otc | sel | qz vein | 13 | | | <0.2 | 12 | <2 | 35 | 1 | 32 | 10 | 0.4 | <5 | 113 |
| 214 | 11062 | Thompson Pup | | sed | | 82 | | | <0.2 | 33 | 7 | 45 | 1 | 22 | 15 | <0.2 | <5 | 65 |
| 214 | 11063 | Thompson Pup | | pan | 4 v fine Au, minor mag | 15.80 ppm | 3 | 7 | 3.2 | 108 | 25 | 262 | 6 | 44 | 23 | 1.1 | <5 | 374 |
| 215 | 11365 | Thompson Pup | otc | rand | qz vein w/ py, apy | 17 | | | <0.2 | 11 | 4 | 20 | 2 | 14 | 6 | <0.2 | <5 | 51 |
| 215 | 11366 | Thompson Pup | otc | rand | qz vein w/ py, lim | 8 | | | <0.2 | 20 | 12 | 26 | 2 | 20 | 8 | <0.2 | <5 | 36 |
| 215 | 11367 | Thompson Pup | otc | rand | qz vein | 83 | | | <0.2 | 24 | 45 | 74 | 1 | 20 | 11 | <0.2 | <5 | 41 |
| 215 | 11368 | Thompson Pup | otc | sel | meta qz | 38 | | | <0.2 | 14 | <2 | <1 | 4 | 19 | 3 | <0.2 | <5 | 18 |
| 216 | 10676 | Thompson Pup | | slu | apy xls from sluice con | 1964 | | | 99.9 | 35 | >10000 | 4 | 6 | 258 | 122 | 275.3 | 228 | >10000 |
| 216 | 11064 | Thompson Pup | otc | rep | multiple phase qz vein | 9 | | | 0.7 | 3 | <2 | 37 | 2 | 2 | 2 | <0.2 | <5 | 94 |
| 216 | 11065 | Thompson Pup | | pan | apy con | IS | IS | IS | 0.3 | 42 | 17 | 141 | 7 | 245 | 393 | 406.2 | <5 | >10000 |
| 216 | 11213 | Thompson Pup | flt | sel | silicified schist w/ py, po, sid | 11 | | | <0.2 | 4768 | 8 | 108 | <1 | 7 | 7 | 0.3 | <5 | 28 |
| 217 | 11155 | Fay Ck | otc | sel | phyllite w/ euhedral py | 4 | | | <0.2 | 43 | 8 | 50 | 2 | 31 | 23 | <0.2 | <5 | 15 |
| 217 | 11209 | Fay Ck | otc | ran | qz veinlet w/ 10% sid, tr cpy, sl, stb | 7 | | | <0.2 | 43 | 213 | 49 | 2 | 23 | 11 | <0.2 | <5 | 19 |
| 217 | 11210 | Fay Ck | otc | sel | 1.1 ft-wide qz vein w/ stb, gn, py | 16 | | | 0.3 | 117 | 59 | 25 | 2 | 41 | 20 | <0.2 | <5 | 25 |
| 217 | 11211 | Fay Ck | otc | sel | qz vein margin w/ py, po, tr stb, cpy | 60 | | | 1 | 170 | 1033 | 23 | 3 | 100 | 58 | 0.4 | 6 | 163 |
| 218 | 11156 | Fay Ck | otc | sel | folded qtz w/ abu py | 7 | | | <0.2 | 83 | 22 | 52 | 4 | 66 | 39 | <0.2 | <5 | 32 |
| 219 | 11157 | Fay Ck | otc | sel | meta qz w/ sulfides | 40 | | | 0.2 | 18 | 16 | 23 | 2 | 14 | 9 | <0.2 | <5 | 90 |
| 219 | 11212 | Fay Ck | otc | sel | phyllite w/ 5% po | 26 | | | 0.2 | 102 | 60 | 53 | 5 | 61 | 37 | <0.2 | <5 | 35 |
| 220 | 11066 | Fay Ck | | sed | | 4 | | | <0.2 | 29 | 7 | 43 | 1 | 26 | 16 | <0.2 | <5 | 30 |
| 220 | 11067 | Fay Ck | | pan | 1 fine Au, from bedrock | 1120 | 3 | <5 | <0.2 | 49 | 5 | 130 | 3 | 26 | 11 | <0.2 | <5 | 100 |
| 221 | 11369 | Fay Ck | otc | sel | qz vein w/ py, lim | 44 | | | <0.2 | 18 | 45 | 64 | <1 | 15 | 8 | <0.2 | <5 | 35 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 205 | 11282 | 16 | 0.034 | 3.58 | 658 | <10 | 31 | 47 | 11 | <20 | <20 | 6 | 1.04 | 1.21 | 5.52 | 0.02 | 0.22 | 309 | 9 | <2 | 20 | <1 | <5 | <10 | <0.01 | <1 |
| 206 | 10649 | 372 | 0.062 | 0.69 | 515 | <10 | 13 | 290 | 2 | <20 | <20 | 1 | 0.08 | 0.02 | 0.10 | <0.01 | 0.04 | 10 | <1 | <2 | 2 | <1 | <5 | <10 | <0.01 | 1 |
| 207 | 10647 | 0.35% | 0.358 | 1.64 | 3452 | <10 | 76 | 234 | 3 | <20 | <20 | 5 | 0.20 | 0.62 | 1.42 | <0.01 | 0.10 | 113 | 4 | <2 | 2 | <1 | <5 | <10 | <0.01 | 2 |
| 207 | 10648 | 204 | 0.116 | 2.72 | 4992 | <10 | 70 | 155 | 5 | <20 | <20 | 8 | 0.41 | 0.18 | 1.01 | 0.01 | 0.12 | 72 | 11 | <2 | 5 | <1 | <5 | <10 | <0.01 | 2 |
| 208 | 11060 | <5 | <0.010 | 4.49 | 10454 | <10 | 12 | 71 | 6 | <20 | <20 | 1 | 0.05 | 5.78 | >10.00 | 0.01 | 0.03 | 351 | 5 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 208 | 11207 | 5 | 0.148 | 2.03 | 2925 | <10 | 87 | 180 | 8 | <20 | <20 | 6 | 0.38 | 0.37 | 0.77 | 0.02 | 0.17 | 41 | 3 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 208 | 11214 | 19 | 0.093 | 2.73 | 9418 | <10 | 94 | 161 | 4 | <20 | <20 | 3 | 0.30 | 0.73 | 2.52 | 0.01 | 0.21 | 102 | 4 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 208 | 11215 | 16 | 0.201 | 2.32 | 8629 | <10 | 64 | 257 | 5 | <20 | <20 | 6 | 0.35 | 0.44 | 1.66 | <0.01 | 0.16 | 130 | 9 | <2 | 6 | <1 | <5 | <10 | <0.01 | <1 |
| 208 | 11360 | 20 | 0.045 | 1.93 | 6614 | <10 | 46 | 368 | 5 | <20 | <20 | 7 | 0.24 | 0.39 | 0.95 | 0.02 | 0.10 | 59 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | 4 |
| 208 | 11361 | <5 | <0.010 | 1.02 | 599 | <10 | 36 | 215 | 4 | <20 | <20 | 3 | 0.34 | 0.29 | 1.86 | 0.01 | 0.03 | 45 | 3 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 209 | 11395 | <5 | <0.010 | 2.24 | 6409 | <10 | 15 | 161 | 6 | <20 | <20 | <1 | 0.05 | 1.77 | 4.43 | <0.01 | 0.02 | 142 | 3 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 210 | 11208 | <5 | 0.171 | >10.00 | >20000 | <10 | 12 | 148 | <1 | <20 | <20 | 3 | 0.11 | 0.46 | 0.51 | 0.01 | 0.05 | 88 | 6 | <2 | <1 | <1 | <5 | 12 | <0.01 | <1 |
| 211 | 11362 | 5 | <0.010 | 1.00 | 1216 | <10 | 32 | 309 | 3 | <20 | <20 | 2 | 0.12 | 0.18 | 0.39 | <0.01 | 0.04 | 24 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 2 |
| 212 | 11363 | 5 | 0.050 | 2.96 | 3775 | <10 | 39 | 196 | 16 | <20 | <20 | 3 | 0.39 | 1.85 | 4.72 | 0.03 | 0.07 | 139 | 7 | <2 | 8 | 1 | <5 | <10 | <0.01 | 5 |
| 213 | 11061 | <5 | 0.205 | >10.00 | >20000 | <10 | 3 | 114 | <1 | <20 | <20 | 1 | 0.06 | 0.90 | 0.63 | 0.01 | 0.02 | 10 | 5 | <2 | 1 | <1 | <5 | 15 | <0.01 | <1 |
| 213 | 11364 | 8 | 0.034 | 2.61 | 1811 | <10 | 29 | 245 | 10 | <20 | <20 | 5 | 0.64 | 0.58 | 0.57 | 0.02 | 0.13 | 29 | 3 | <2 | 10 | <1 | <5 | <10 | <0.01 | 5 |
| 214 | 11062 | <5 | 0.036 | 2.30 | 2805 | <10 | 20 | 7 | 12 | <20 | <20 | 8 | 0.44 | 0.33 | 0.67 | <0.01 | 0.02 | 36 | 5 | <2 | 6 | <1 | <5 | <10 | <0.01 | <1 |
| 214 | 11063 | 104 | 1.070 | 8.00 | 5114 | <10 | 160 | 398 | 69 | <20 | <20 | 12 | 1.85 | 0.52 | 0.91 | 0.14 | 0.41 | 62 | 15 | <2 | 17 | <1 | 7 | <10 | 0.03 | <1 |
| 215 | 11365 | 9 | 0.044 | 3.29 | 2431 | <10 | 26 | 126 | 7 | <20 | <20 | 5 | 0.32 | 2.06 | 6.46 | 0.02 | 0.15 | 332 | 9 | <2 | 3 | <1 | <5 | <10 | <0.01 | 1 |
| 215 | 11366 | 14 | 0.056 | 4.10 | 5940 | <10 | 31 | 145 | 9 | <20 | <20 | 4 | 0.28 | 2.16 | 5.30 | 0.02 | 0.11 | 410 | 6 | <2 | 3 | <1 | <5 | <10 | <0.01 | 2 |
| 215 | 11367 | 56 | 0.134 | 3.77 | 5911 | <10 | 35 | 128 | 13 | <20 | <20 | 5 | 0.73 | 1.39 | 6.27 | 0.02 | 0.18 | 512 | 16 | <2 | 8 | <1 | <5 | <10 | <0.01 | <1 |
| 215 | 11368 | <5 | 0.014 | 0.82 | 546 | <10 | 3 | 323 | <1 | <20 | <20 | <1 | 0.03 | 0.16 | 0.52 | <0.01 | 0.01 | 30 | 1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 177 | 10676 | 830 | <0.010 | >10.00 | 168 | 101 | <1 | 102 | <1 | <20 | <20 | 7 | 0.06 | <0.01 | 0.06 | <0.01 | 0.03 | 30 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 3 |
| 216 | 11064 | <5 | 0.034 | 9.95 | 3497 | <10 | 3 | 8 | 5 | <20 | <20 | <1 | 0.07 | 4.90 | >10.00 | 0.02 | 0.03 | 1166 | 19 | <2 | 2 | <1 | 12 | <10 | <0.01 | <1 |
| 216 | 11065 | 777 | 0.081 | >10.00 | 129 | 70 | <1 | 272 | 3 | <20 | <20 | 5 | 0.20 | 0.04 | 0.39 | 0.04 | 0.06 | 35 | 2 | <2 | <1 | <1 | <5 | <10 | 0.02 | 5 |
| 216 | 11213 | <5 | 0.249 | >10.00 | >20000 | <10 | 15 | 111 | <1 | <20 | <20 | 3 | 0.09 | 0.73 | 0.47 | 0.02 | 0.06 | 17 | 5 | <2 | 1 | <1 | <5 | 16 | <0.01 | <1 |
| 217 | 11155 | <5 | 0.049 | 3.45 | 4936 | <10 | 34 | 106 | 15 | <20 | <20 | 3 | 0.85 | 1.10 | 1.14 | 0.03 | 0.17 | 44 | 5 | <2 | 14 | <1 | <5 | <10 | <0.01 | <1 |
| 217 | 11209 | 95 | 0.089 | 2.46 | 8810 | <10 | 41 | 113 | 6 | <20 | <20 | 17 | .0.37 | 0.85 | 2.02 | 0.05 | 0.18 | 116 | 5 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 217 | 11210 | <5 | 0.133 | 1.88 | 3362 | <10 | 17 | 210 | 7 | <20 | <20 | 9 | 0.24 | 0.47 | 1.52 | <0.01 | 0.07 | 97 | 9 | <2 | 7 | <1 | <5 | <10 | <0.01 | <1 |
| 217 | 11211 | 589 | 0.751 | 3.16 | 1116 | <10 | 1 | 255 | <1 | <20 | <20 | <1 | 0.02 | 0.22 | 0.38 | <0.01 | <0.01 | 43 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 218 | 11156 | <5 | 0.033 | 3.87 | 19649 | <10 | 51 | 132 | 13 | <20 | <20 | 8 | 0.51 | 1.37 | 3.63 | 0.04 | 0.23 | 231 | 8 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 219 | 11157 | <5 | 0.048 | 3.40 | 3677 | <10 | 16 | 160 | 7 | <20 | <20 | <1 | 0.30 | 1.23 | 3.76 | 0.02 | 0.06 | 229 | 8 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 219 | 11212 | <5 | 0.080 | 5.19 | 7732 | <10 | 57 | 75 | 30 | <20 | <20 | 4 | 1.28 | 1.21 | 2.33 | 0.03 | 0.30 | 164 | 3 | <2 | 13 | <1 | <5 | <10 | <0.01 | <1 |
| 220 | 11066 | 8 | 0.059 | 2.44 | 2139 | <10 | 23 | 10 | 14 | <20 | <20 | 10 | 0.55 | 0.43 | 0.42 | <0.01 | 0.03 | 27 | 6 | <2 | 7 | <1 | <5 | <10 | <0.01 | <1 |
| 220 | 11067 | 35 | 0.048 | 3.65 | 1518 | <10 | 97 | 298 | 32 | <20 | <20 | 9 | 2.16 | 1.16 | 2.66 | 0.09 | 0.53 | 136 | 8 | 3 | 22 | <1 | <5 | <10 | 0.02 | <1 |
| 221 | 11369 | 23 | 0.084 | 5.43 | 2459 | <10 | 264 | 95 | 15 | <20 | <20 | 6 | 0.53 | 3.02 | 8.23 | 0.03 | 0.17 | 552 | 14 | <2 | 5 | <1 | <5 | <10 | <0.01 | 2 |

## Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 221 | 11371 | Fay Ck | otc | sel | qz vein w/ lim | 167 | | | <0.2 | 45 | 29 | 39 | 2 | 30 | 15 | <0.2 | <5 | 21 |
| 222 | 11370 | Fay Ck | otc | sel | qz vein | <5 | | | <0.2 | 14 | 31 | 69 | 1 | 15 | 7 | 0.2 | <5 | 59 |
| 223 | 11132 | Fay Ck | | sed | | 8 | | | <0.2 | 20 | 6 | 40 | <1 | 18 | 11 | <0.2 | <5 | 29 |
| 223 | 11133 | Fay Ck | | pan | minor mag | 28 | 2 | <5 | <0.2 | 113 | 13 | 219 | 6 | 52 | 33 | <0.2 | <5 | 84 |
| 224 | 10719 | Smith Creek Dome | flt | sel | qz veinlet in qz-musc schist | 70 | | | <0.2 | 27 | 7 | 34 | 2 | 27 | 17 | <0.2 | <5 | 56 |
| 225 | 11401 | Smith Creek Dome | otc | sel | qz veinlet w/ lim | 8 | | | <0.2 | 63 | <2 | 35 | <1 | 21 | 11 | <0.2 | <5 | 20 |
| 226 | 11400 | Smith Creek Dome | otc | sel | qz veinlet w/ lim | <5 | | | <0.2 | 6 | 11 | 11 | <1 | 12 | 4 | <0.2 | <5 | <5 |
| 227 | 10701 | Smith Creek Dome | otc | sel | qz-mica schist w/ ba (?), lim | 11 | | | <0.2 | 175 | 18 | 468 | 2 | 10 | 5 | 2.4 | <5 | 37 |
| 228 | 11050 | Swift Ck | otc | sel | schist w/ black nodules | 10 | | | <0.2 | 165 | 140 | 40 | <1 | 13 | 12 | <0.2 | <5 | 14 |
| 229 | 11169 | Swift Ck | otc | sel | qz vein w/ lim | 18 | | | <0.2 | 28 | 131 | 20 | 9 | 24 | 9 | 0.3 | <5 | 99 |
| 230 | 10666 | Smith Creek Dome | trn | sel | vein qz w/ stb, yellow alt mineral | 436 | | | <0.2 | 36 | <2 | 13 | <1 | <1 | <1 | 2.6 | <5 | 297 |
| 231 | 10665 | Smith Creek Dome | flt | sel | vein qz w/ apy, lim | 93 | | | <0.2 | 12 | <2 | 4 | 5 | 14 | 1 | <0.2 | <5 | 226 |
| 232 | 10663 | The Fortress | trn | sel | meta qz w/ apy, lim | 27 | | | <0.2 | 10 | <2 | 4 | 5 | 18 | 4 | 2.4 | <5 | 3035 |
| 232 | 10664 | The Fortress | trn | rand | meta qz w/ apy, lim | <5 | | | <0.2 | 5 | <2 | <1 | 1 | 6 | <1 | <0.2 | <5 | 44 |
| 232 | 11218 | The Fortress | otc | sel | qz veinlet w/ 1% py, lim | 31 | | | <0.2 | 29 | 8 | 23 | 3 | 23 | 14 | 0.4 | <5 | 138 |
| 233 | 11134 | The Fortress | otc | rep | 1 in-wide qz vein w/ py-hem psuedo | 30 | | | <0.2 | 21 | 4 | 37 | 3 | 14 | 6 | <0.2 | <5 | 41 |
| 233 | 11135 | The Fortress | otc | rep | 1 in-wide qz vein w/ hem, py | 5 | | | <0.2 | 18 | 63 | 31 | 1 | 11 | 9 | <0.2 | <5 | <5 |
| 233 | 11217 | The Fortress | otc | ran | qz veinlets | 58 | | | <0.2 | 22 | 116 | 46 | 3 | 26 | 13 | <0.2 | <5 | 51 |
| 233 | 11399 | The Fortress | otc | sel | qz veinlet w/ sid | 14 | | | <0.2 | 3 | 3 | 11 | <1 | 6 | 6 | <0.2 | <5 | 16 |
| 234 | 11216 | The Fortress | otc | sel | qz veinlet w/ 20% sid | 8 | | | <0.2 | 35 | 3 | 40 | 2 | 9 | 4 | <0.2 | <5 | 28 |
| 235 | 11136 | The Fortress | otc | rep | qz veinlets w/ py | 9 | | | <0.2 | 29 | <2 | 26 | 2 | 13 | 4 | <0.2 | <5 | 44 |
| 236 | 11398 | The Fortress | otc | sel | qz veinlet w/ sid after py | 52 | | | <0.2 | 23 | 15 | 6 | <1 | 6 | 1 | <0.2 | <5 | 26 |
| 237 | 10650 | The Fortress | otc | cont | qz vein in phyllite w/ hem, py | **8301** | | | <0.2 | 62 | 5 | 40 | 3 | 49 | 31 | 1.0 | <5 | 1134 |
| 238 | 10651 | Peak 2845 | otc | rand | phyllite | <5 | | | <0.2 | 22 | 13 | 38 | <1 | 23 | 11 | <0.2 | <5 | 16 |
| 239 | 10765 | Buckeye Gulch | | slu | py concretions from sluice con | 259 | | | 1.0 | 303 | 21 | 20 | 152 | 37 | 3 | <0.2 | 9 | 207 |
| 239 | 11308 | Buckeye Gulch | | sed | | <5 | | | <0.2 | 52 | 11. | 65 | <1 | 44 | 29 | <0.2 | <5 | 27 |
| 239 | 11309 | Buckeye Gulch | | pan | | 28 | 10 | 8 | <0.2 | 72 | 7 | 93 | 2 | 64 | 30 | <0.2 | <5 | 25 |
| 239 | 11393 | Buckeye Gulch | otc | sel | qz vein | <5 | | | <0.2 | 35 | 55 | 20 | 3 | 21 | 7 | <0.2 | <5 | 7 |
| 239 | 11394 | Buckeye Gulch | otc | sel | meta qz | <5 | | | <0.2 | 13 | 6 | 15 | 2 | 22 | 6 | <0.2 | <5 | <5 |
| 240 | 10763 | Hammond River | | slu | placer con | 430.43 ppm | | | 27.7 | 70 | 473 | 165 | 2 | 44 | 23 | <0.2 | 7 | 597 |
| 240 | 11357 | Hammond River | flt | sel | phyllite w/ mag properties (?) | <5 | | | <0.2 | 4 | 3 | 2 | 6 | 5 | <1 | <0.2 | <5 | <5 |
| 241 | 11377 | Steep Gulch | otc | sel | porphyry greenstone w/ py | <5 | | | 0.2 | 36 | <2 | 55 | 1 | 113 | 28 | <0.2 | <5 | 6 |
| 242 | 11355 | Steep Gulch | | sed | | 8 | | | <0.2 | 43 | 12 | 64 | <1 | 34 | 20 | <0.2 | <5 | 30 |
| 242 | 11356 | Steep Gulch | | pan | tr mag | 276 | 8 | 8 | <0.2 | 142 | 9 | 76 | 4 | 50 | 21 | 0.2 | <5 | 76 |
| 243 | 11380 | Gold Bottom Gulch | otc | sel | qtz schist w/ py | <5 | | | <0.2 | 48 | 3 | 57 | 1 | 41 | 20 | <0.2 | <5 | <5 |
| 243 | 11381 | Gold Bottom Gulch | otc | sel | qz veinlet in banded graphitic schist | 33 | | | <0.2 | 91 | 4 | 44 | 2 | 22 | 9 | <0.2 | <5 | 37 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 221 | 11371 | 15 | 0.041 | 4.50 | 3281 | <10 | 231 | 146 | 22 | <20 | <20 | 6 | 0.89 | 1.83 | 3.80 | 0.03 | 0.21 | 292 | 6 | <2 | 9 | 1 | <5 | <10 | <0.01 | 2 |
| 222 | 11370 | 21 | 0.285 | 2.07 | 2462 | <10 | 67 | 227 | 6 | <20 | <20 | 7 | 0.34 | 0.41 | 0.87 | 0.01 | 0.12 | 61 | 2 | <2 | 6 | <1 | <5 | <10 | <0.01 | 2 |
| 223 | 11132 | 10 | 0.139 | 1.60 | 1403 | <10 | 43 | 8 | 10 | <20 | <20 | 8 | 0.39 | 0.24 | 0.17 | <0.01 | 0.03 | 15 | 3 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 223 | 11133 | 23 | 2.269 | 6.08 | 9569 | <10 | 229 | 490 | 44 | <20 | <20 | 19 | 1.87 | 0.23 | 0.48 | 0.09 | 0.43 | 53 | 29 | <2 | 15 | <1 | 10 | <10 | 0.01 | <1 |
| 224 | 10719 | 13 | 0.122 | 2.83 | 2905 | <10 | 126 | 147 | 7 | <20 | <20 | 15 | 0.45 | 0.12 | 0.32 | 0.02 | 0.21 | 38 | 6 | <2 | 4 | <1 | <5 | <10 | <0.01 | 2 |
| 225 | 11401 | 24 | 0.153 | 2.74 | 2221 | <10 | 111 | 69 | 9 | <20 | <20 | 11 | 0.29 | 0.04 | 0.12 | 0.01 | 0.14 | 10 | 4 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 226 | 11400 | 25 | 0.085 | 0.60 | 735 | <10 | 22 | 139 | 2 | <20 | <20 | <1 | 0.10 | 0.04 | 0.08 | <0.01 | 0.04 | 7 | 1 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 227 | 10701 | 7 | 0.580 | 0.63 | 212 | <10 | 145 | 182 | 4 | <20 | <20 | 9 | 0.39 | 0.01 | 0.62 | <0.01 | 0.11 | 106 | 14 | <2 | 2 | <1 | <5 | <10 | <0.01 | 2 |
| 228 | 11050 | <5 | <0.010 | 7.92 | >20000 | <10 | 16 | 75 | <1 | <20 | <20 | 7 | 0.40 | 1.85 | 2.95 | 0.01 | 0.05 | 151 | 14 | <2 | 2 | <1 | <5 | 14 | <0.01 | <1 |
| 229 | 11169 | 66 | 0.031 | 1.46 | 2952 | <10 | 32 | 253 | 5 | <20 | <20 | 4 | 0.26 | 0.25 | 0.58 | 0.01 | 0.08 | 54 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 230 | 10666 | 28.09% | 0.794 | 0.46 | 234 | <10 | 13 | 101 | <1 | <20 | 26 | <1 | 0.10 | <0.01 | 0.11 | <0.01 | 0.03 | 6 | <1 | <2 | 8 | <1 | <5 | <10 | <0.01 | <1 |
| 231 | 10665 | 23 | 0.030 | 0.36 | 60 | <10 | <1 | 268 | <1 | <20 | <20 | <1 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <1 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 232 | 10663 | 44 | 0.069 | 0.61 | 179 | <10 | 6 | 277 | <1 | <20 | <20 | <1 | 0.04 | 0.02 | 0.04 | <0.01 | 0.01 | 10 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 232 | 10664 | 17 | 0.015 | 0.26 | 67 | <10 | 3 | 247 | <1 | <20 | <20 | <1 | 0.02 | <0.01 | <0.01 | <0.01 | <0.01 | <1 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 232 | 11218 | 32 | 0.092 | 1.20 | 1401 | <10 | 27 | 286 | 2 | <20 | <20 | 2 | 0.09 | 0.19 | 0.56 | <0.01 | 0.03 | 39 | 1 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 233 | 11134 | 9 | 0.081 | 1.64 | 3390 | <10 | 35 | 170 | 4 | <20 | <20 | 2 | 0.18 | 1.00 | 2.93 | 0.01 | 0.07 | 221 | 4 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 233 | 11135 | <5 | 0.034 | 2.27 | >20000 | <10 | 45 | 132 | 1 | <20 | <20 | 6 | 0.25 | 1.84 | 6.34 | 0.02 | 0.13 | 187 | 7 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 233 | 11217 | 89 | 0.069 | 1.89 | 2880 | <10 | 57 | 239 | 7 | <20 | <20 | 6 | 0.32 | 0.19 | 1.02 | <0.01 | 0.13 | 65 | 4 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 233 | 11399 | <5 | 0.041 | 1.60 | 3525 | <10 | 10 | 79 | 2 | <20 | <20 | <1 | 0.06 | 1.29 | 3.34 | <0.01 | 0.02 | 215 | 4 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 234 | 11216 | 7 | 0.134 | 1.83 | 3395 | <10 | 59 | 217 | 4 | <20 | <20 | 4 | 0.27 | 0.83 | 1.71 | 0.02 | 0.16 | 184 | 4 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 235 | 11136 | <5 | 0.027 | 1.84 | 3090 | <10 | 48 | 207 | 6 | <20 | <20 | 6 | 0.26 | 0.04 | 0.16 | 0.01 | 0.13 | 21 | 2 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 236 | 11398 | 9 | 0.042 | 0.91 | 1378 | <10 | 19 | 116 | 2 | <20 | <20 | 1 | 0.10 | 0.30 | 0.75 | <0.01 | 0.05 | 55 | 1 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 237 | 10650 | 68 | 0.705 | 2.18 | 1690 | <10 | 52 | 176 | 10 | <20 | <20 | 5 | 0.35 | 0.10 | 0.16 | 0.02 | 0.10 | 78 | 1 | <2 | 4 | <1 | <5 | <10 | <0.01 | 3 |
| 238 | 10651 | 35 | 0.079 | 2.03 | 1697 | <10 | 64 | 107 | 13 | <20 | <20 | 11 | 0.85 | 0.46 | 0.43 | 0.01 | 0.16 | 27 | 4 | <2 | 9 | <1 | <5 | <10 | <0.01 | 2 |
| 239 | 10765 | 10 | 0.229 | >10.00 | 13 | <10 | <1 | 51 | <1 | <20 | <20 | <1 | 0.04 | <0.01 | 0.01 | <0.01 | 0.03 | 2 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 239 | 11308 | 9 | 0.048 | 2.95 | 3647 | <10 | 34 | 12 | 15 | <20 | <20 | 13 | 0.67 | 0.46 | 0.24 | <0.01 | 0.05 | 23 | 5 | <2 | 8 | <1 | <5 | <10 | <0.01 | <1 |
| 239 | 11309 | 7 | 0.049 | 5.68 | 5382 | <10 | 154 | 323 | 57 | <20 | <20 | 17 | 2.43 | 1.11 | 0.29 | 0.07 | 0.48 | 35 | 10 | 4 | 22 | <1 | 7 | <10 | 0.05 | <1 |
| 239 | 11393 | <5 | 0.016 | 1.69 | 3783 | <10 | 25 | 252 | 9 | <20 | <20 | 2 | 0.35 | 0.15 | 0.37 | 0.01 | 0.08 | 39 | 4 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 239 | 11394 | <5 | 0.020 | 1.17 | 2651 | <10 | 26 | 247 | 6 | <20 | <20 | 2 | 0.32 | 0.13 | 0.12 | 0.01 | 0.08 | 14 | 2 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 240 | 10763 | <5 | 8.277 | 5.35 | 1920 | <10 | 86 | 91 | 36 | <20 | 47 | 22 | 1.19 | 0.98 | 2.85 | 0.02 | 0.11 | 106 | 8 | <2 | 16 | <1 | <5 | <10 | 0.05 | 3 |
| 240 | 11357 | <5 | 0.288 | 0.23 | 18 | <10 | 100 | 128 | 31 | <20 | <20 | 5 | 0.14 | 0.02 | 0.03 | <0.01 | 0.07 | 2 | <1 | <2 | 1 | <1 | <5 | <10 | <0.01 | 3 |
| 241 | 11377 | <5 | <0.010 | 4.96 | 755 | <10 | 18 | 154 | 59 | <20 | <20 | <1 | 3.17 | 3.24 | 2.56 | 0.02 | 0.06 | 46 | 6 | <2 | 36 | 2 | <5 | <10 | 0.20 | <1 |
| 242 | 11355 | <5 | 0.036 | 3.16 | 2996 | <10 | 28 | 12 | 17 | <20 | <20 | 15 | 0.72 | 0.49 | 0.51 | <0.01 | 0.05 | 35 | 6 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 242 | 11356 | <5 | 0.037 | 5.08 | 3609 | <10 | 110 | 429 | 44 | <20 | <20 | 13 | 1.79 | 0.74 | 0.52 | 0.07 | 0.39 | 39 | 8 | 2 | 17 | <1 | 5 | <10 | 0.02 | <1 |
| 243 | 11380 | <5 | 0.010 | 3.33 | 1946 | <10 | 226 | 115 | 20 | <20 | <20 | 13 | 0.85 | 0.56 | 0.48 | 0.04 | 0.17 | 34 | 9 | <2 | 10 | <1 | <5 | <10 | 0.01 | <1 |
| 243 | 11381 | 52 | 0.362 | 2.53 | 3035 | <10 | 199 | 134 | 6 | <20 | <20 | 4 | 0.46 | 0.68 | 1.34 | 0.01 | 0.18 | 134 | 4 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 243 | 11382 | Gold Bottom Gulch | otc | sel | qz veinlet | 61 | | | 0.6 | 506 | 9 | 101 | 3 | 25 | 6 | <0.2 | <5 | 19 |
| 244 | 11353 | Gold Bottom Gulch | | sed | | <5 | | | <0.2 | 35 | 12 | 58 | <1 | 29 | 16 | <0.2 | <5 | 35 |
| 244 | 11354 | Gold Bottom Gulch | | pan | 2 coarse, 3 fine, 3 v fine Au, abu mag | 407.59 ppm | 9 | 14 | 27.0 | 53 | 11 | 66 | 3 | 48 | 22 | 0.3 | <5 | 154 |
| 245 | 11352 | Hammond River | rub | rand | greenstone, greenschist w/ py, po | <5 | | | <0.2 | 79 | <2 | 44 | <1 | 88 | 25 | <0.2 | <5 | 23 |
| 246 | 11329 | Lofty Gulch | | sed | | <5 | | | <0.2 | 28 | 11 | 57 | <1 | 26 | 14 | <0.2 | <5 | 38 |
| 246 | 11330 | Lofty Gulch | | pan | 1 v fine Au, abu mag, from cutbank | 13.33 ppm | 16 | 14 | 0.8 | 62 | 12 | 74 | 4 | 60 | 23 | 0.6 | <5 | 176 |
| 246 | 11351 | Lofty Gulch | flt | sel | greenstone w/ fine, euhedral py | <5 | | | <0.2 | 44 | 19 | 58 | 1 | 43 | 21 | <0.2 | <5 | 45 |
| 247 | 11376 | Hammond River | otc | sel | qz vein | 23 | | | <0.2 | 5 | 18 | 1 | 1 | 14 | 6 | 4.1 | <5 | 2127 |
| 248 | 11058 | Swift Ck | | pan | 1 v fine Au | 5869 | 2 | 5 | <0.2 | 75 | 6 | 159 | 3 | 47 | 22 | 1.3 | <5 | 520 |
| 249 | 11057 | Swift Ck | otc | rep | blk qz-mica schist w/ py | 29 | | | 0.3 | 51 | 19 | 53 | 1 | 26 | 11 | 2.6 | <5 | 874 |
| 250 | 11053 | Swift Ck | | sed | | 4 | | | <0.2 | 23 | 6 | 44 | <1 | 23 | 13 | <0.2 | <5 | 27 |
| 250 | 11054 | Swift Ck | | pan | tr mag, from bedrock | 25 | 3 | 11 | <0.2 | 72 | 5 | 139 | 4 | 58 | 26 | 0.9 | <5 | 344 |
| 250 | 11055 | Swift Ck | otc | rand | blk qz-mica schist w/ py (?) | 3 | | | 0.2 | 24 | 4 | 99 | 2 | 77 | 26 | <0.2 | <5 | 31 |
| 250 | 11056 | Swift Ck | flt | sel | qtz cobble w/ 1% diss py, cpy (?) | 5 | | | <0.2 | 76 | 123 | 24 | 6 | 19 | 12 | <0.2 | <5 | 10 |
| 250 | 11170 | Swift Ck | otc | sel | qz vein | <5 | | | <0.2 | 11 | 301 | 39 | 4 | 19 | 4 | <0.2 | <5 | 18 |
| 251 | 11051 | Swift Ck | | sed | | 5 | | | <0.2 | 33 | 8 | 51 | 1 | 31 | 16 | <0.2 | <5 | 28 |
| 251 | 11052 | Swift Ck | | pan | no mag, no visible Au | 5 | 1 | <5 | <0.2 | 54 | 8 | 92 | 4 | 44 | 23 | <0.2 | <5 | 73 |
| 252 | 11359 | Midnight Dome | otc | sel | qz vein w/ py, lim | 6 | | | <0.2 | 12 | <2 | 50 | 2 | 19 | 12 | <0.2 | <5 | 50 |
| 253 | 10702 | Midnight Dome | otc | sel | qtz lense w/ tr py | 11 | | | 0.6 | 152 | 29 | 76 | 1 | 12 | 6 | 0.6 | <5 | 25 |
| 254 | 11172 | Midnight Dome | otc | sel | qz veinlets w/ py-hem psuedo | 37 | | | <0.2 | 4 | 6 | 30 | 6 | 18 | 6 | <0.2 | <5 | 26 |
| 255 | 11171 | Midnight Dome | otc | sel | 3 in-wide qz vein | 11 | | | <0.2 | 3 | <2 | 4 | 3 | 15 | 2 | <0.2 | <5 | 9 |
| 256 | 11161 | Midnight Dome | otc | ran | meta qz w/ sulfides | <5 | | | <0.2 | 16 | <2 | 20 | 4 | 22 | 4 | <0.2 | <5 | 6 |
| 257 | 11059 | Midnight Dome | otc | sel | qz vein w/ euhedral py, lim | 62 | | | <0.2 | 19 | 4 | 51 | 2 | 26 | 14 | <0.2 | <5 | 70 |
| 258 | 11162 | Gold Bottom Gulch | otc | sel | qz vein w/ py-hem psuedo | 810 | | | <0.2 | 55 | 6 | 24 | 8 | 36 | 14 | <0.2 | <5 | 28 |
| 259 | 11383 | Confederate Gulch | otc | rand | qz veinlets | 27 | | | 0.5 | 6 | 37 | 43 | 2 | 57 | 9 | 0.3 | <5 | 88 |
| 260 | 11384 | Confederate Gulch | otc | sel | qz vein w/ sid, lim | 11 | | | 0.2 | 21 | 3 | 37 | 2 | 25 | 6 | <0.2 | <5 | 49 |
| 260 | 11385 | Confederate Gulch | flt | sel | vein qz w/ lim | <5 | | | 0.3 | 25 | 5 | 53 | 1 | 72 | 10 | <0.2 | <5 | 55 |
| 261 | 11386 | Confederate Gulch | otc | sel | qz vein | 11 | | | <0.2 | 11 | 7 | 48 | 2 | 20 | 7 | <0.2 | <5 | 30 |
| 262 | 11391 | Confederate Gulch | otc | rand | qz vein w/ sid | <5 | | | 0.9 | <1 | 9 | 13 | <1 | 3 | <1 | <0.2 | <5 | 19 |
| 263 | 11389 | Confederate Gulch | otc | sel | qz vein | 13 | | | <0.2 | 48 | 13 | 29 | 2 | 27 | 10 | 0.6 | <5 | 101 |
| 263 | 11390 | Confederate Gulch | otc | rand | qz vein w/ sid, lim after py | <5 | | | <0.2 | 37 | <2 | 29 | 2 | 28 | 19 | 0.2 | <5 | 47 |
| 264 | 11388 | Confederate Gulch | otc | sel | meta qz | 33 | | | <0.2 | 8 | 9 | 21 | 2 | 10 | 3 | <0.2 | <5 | 5 |
| 265 | 11387 | Confederate Gulch | otc | sel | qz w/ lim after py | 9 | | | <0.2 | 6 | <2 | 24 | 2 | 16 | 5 | 2.9 | <5 | 591 |
| 266 | 11143 | Union Gulch | otc | grab | blk mica schist w/ 3% py | 5 | | | <0.2 | 31 | 7 | 89 | 1 | 33 | 14 | <0.2 | <5 | 10 |
| 267 | 11137 | Union Gulch | flt | sel | vein qz w/ tr py, lim | 13 | | | <0.2 | 20 | 5 | 13 | 2 | 15 | 7 | 3.1 | <5 | 1023 |
| 268 | 11138 | Union Gulch | | sed | | 6 | | | <0.2 | 23 | 7 | 54 | <1 | 23 | 13 | <0.2 | <5 | 36 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 243 | 11382 | 338 | 2.112 | 1.79 | 2033 | <10 | 40 | 357 | 4 | <20 | <20 | 3 | 0.20 | 0.44 | 0.59 | <0.01 | 0.08 | 58 | 2 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 244 | 11353 | <5 | 0.054 | 2.74 | 2228 | <10 | 26 | 10 | 14 | <20 | <20 | 12 | 0.51 | 0.45 | 0.80 | <0.01 | 0.04 | 43 | 6 | <2 | 7 | <1 | <5 | <10 | <0.01 | <1 |
| 244 | 11354 | <5 | 5.320 | 5.10 | 3452 | <10 | 133 | 373 | 42 | <20 | <20 | 12 | 1.38 | 0.70 | 0.89 | 0.08 | 0.29 | 50 | 11 | <2 | 13 | <1 | 5 | <10 | 0.03 | <1 |
| 245 | 11352 | <5 | <0.010 | 4.09 | 677 | <10 | 9 | 147 | 46 | <20 | <20 | <1 | 2.79 | 2.78 | 2.13 | 0.03 | 0.02 | 27 | 6 | <2 | 21 | <1 | <5 | <10 | 0.22 | <1 |
| 246 | 11329 | <5 | 0.075 | 2.30 | 1970 | <10 | 42 | 10 | 15 | <20 | <20 | 10 | 0.59 | 0.35 | 0.39 | <0.01 | 0.04 | 25 | 5 | <2 | 8 | <1 | <5 | <10 | <0.01 | <1 |
| 246 | 11330 | <5 | 0.540 | 9.04 | 9063 | <10 | 107 | 454 | 71 | <20 | <20 | 15 | 1.59 | 0.31 | 0.44 | 0.06 | 0.30 | 37 | 26 | <2 | 11 | <1 | 10 | <10 | 0.03 | <1 |
| 246 | 11351 | <5 | 0.019 | 2.42 | 2729 | <10 | 48 | 66 | 20 | <20 | <20 | 11 | 1.06 | 0.62 | 0.31 | 0.02 | 0.11 | 14 | 4 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 247 | 11376 | 18 | 0.034 | 1.24 | 714 | <10 | 14 | 248 | 4 | <20 | <20 | 3 | 0.24 | 0.31 | 0.61 | <0.01 | 0.07 | 47 | 1 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 248 | 11058 | 55 | 1.070 | 5.56 | 2355 | <10 | 130 | 315 | 43 | <20 | <20 | 15 | 2.13 | 0.87 | 0.49 | 0.09 | 0.50 | 42 | 7 | 3 | 19 | <1 | 6 | <10 | <0.01 | <1 |
| 249 | 11057 | 11 | 0.033 | 3.39 | 1062 | <10 | 45 | 84 | 9 | <20 | <20 | 5 | 0.94 | 0.97 | 5.46 | 0.02 | 0.30 | 270 | 8 | <2 | 12 | <1 | <5 | <10 | <0.01 | <1 |
| 250 | 11053 | <5 | 0.027 | 2.16 | 2040 | <10 | 15 | 8 | 9 | <20 | <20 | 11 | 0.36 | 0.25 | 0.24 | <0.01 | 0.02 | 17 | 4 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 250 | 11054 | 168 | 4.285 | 6.32 | 1864 | <10 | 226 | 488 | 53 | <20 | <20 | 23 | 3.26 | 0.43 | 0.27 | 0.07 | 1.02 | 45 | 8 | 4 | 22 | <1 | 7 | <10 | <0.01 | <1 |
| 250 | 11055 | <5 | 0.034 | 5.56 | 1694 | <10 | 43 | 121 | 24 | <20 | <20 | 9 | 0.72 | 1.82 | 3.52 | 0.03 | 0.26 | 131 | 6 | <2 | 10 | <1 | <5 | <10 | <0.01 | <1 |
| 250 | 11056 | <5 | <0.010 | 1.23 | 790 | <10 | 123 | 207 | 11 | <20 | <20 | 4 | 0.61 | 0.49 | 0.26 | 0.02 | 0.06 | 9 | 5 | <2 | 5 | <1 | <5 | <10 | 0.03 | <1 |
| 250 | 11170 | 148 | 0.041 | 3.73 | 2590 | <10 | 7 | 249 | 2 | <20 | <20 | <1 | 0.06 | 0.96 | 3.33 | <0.01 | 0.04 | 378 | 12 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 251 | 11051 | <5 | 0.045 | 2.54 | 2679 | <10 | 22 | 14 | 11 | <20 | <20 | 10 | 0.47 | 0.32 | 0.35 | <0.01 | 0.03 | 22 | 5 | <2 | 5 | <1 | <5 | <10 | <0.01 | <1 |
| 251 | 11052 | 143 | 0.031 | 4.78 | 1587 | <10 | 114 | 287 | 28 | <20 | <20 | 15 | 1.29 | 0.37 | 0.17 | 0.04 | 0.30 | 23 | 6 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 252 | 11359 | 19 | 0.086 | 3.42 | 1838 | <10 | 5 | 154 | 5 | <20 | <20 | 2 | 0.09 | 2.17 | 5.87 | <0.01 | 0.03 | 506 | 5 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 253 | 10702 | 7 | 0.152 | 3.06 | 10816 | <10 | 46 | 20 | 6 | <20 | <20 | 13 | 0.45 | 3.93 | >10.00 | 0.05 | 0.22 | 244 | 20 | <2 | 1 | 3 | <5 | <10 | <0.01 | 2 |
| 254 | 11172 | 6 | 0.025 | 2.09 | 3298 | <10 | 25 | 177 | 11 | <20 | <20 | 4 | 0.31 | 0.68 | 1.94 | 0.03 | 0.11 | 128 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 255 | 11171 | 21 | 0.034 | 0.43 | 154 | <10 | 6 | 341 | <1 | <20 | <20 | <1 | 0.03 | <0.01 | 0.01 | <0.01 | 0.01 | 2 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 256 | 11161 | <5 | 0.261 | 0.81 | 399 | <10 | 29 | 367 | 4 | <20 | <20 | 1 | 0.15 | 0.10 | 0.21 | 0.01 | 0.05 | 19 | <1 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 257 | 11059 | 8 | 0.595 | 2.93 | 2526 | <10 | 79 | 215 | 8 | <20 | <20 | 7 | 0.40 | 0.55 | 1.13 | 0.03 | 0.22 | 86 | 4 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 258 | 11162 | 22 | 0.320 | 2.13 | 1610 | <10 | 166 | 268 | 12 | <20 | <20 | 8 | 0.47 | 0.23 | 0.29 | 0.02 | 0.22 | 49 | 4 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 259 | 11383 | 7 | 0.016 | 4.65 | 1753 | <10 | 20 | 123 | 16 | <20 | <20 | 1 | 1.11 | 2.74 | 8.11 | 0.02 | 0.17 | 476 | 13 | <2 | 19 | <1 | <5 | <10 | <0.01 | <1 |
| 260 | 11384 | 6 | 0.014 | 3.19 | 962 | <10 | 30 | 78 | 10 | <20 | <20 | 1 | 0.74 | 1.73 | 4.51 | 0.02 | 0.21 | 229 | 10 | <2 | 8 | <1 | <5 | <10 | <0.01 | <1 |
| 260 | 11385 | 13 | 0.021 | 5.16 | 1188 | <10 | 24 | 112 | 23 | <20 | <20 | <1 | 1.77 | 3.49 | 5.93 | 0.01 | 0.18 | 288 | 6 | <2 | 32 | <1 | 5 | <10 | <0.01 | <1 |
| 261 | 11386 | 6 | 0.023 | 2.16 | 817 | <10 | 19 | 199 | 9 | <20 | <20 | 5 | 0.72 | 0.55 | 0.70 | 0.02 | 0.12 | 51 | 3 | <2 | 7 | <1 | <5 | <10 | <0.01 | <1 |
| 262 | 11391 | <5 | 0.014 | 1.13 | 281 | <10 | 22 | 24 | 2 | <20 | <20 | <1 | 0.10 | 0.40 | >10.00 | <0.01 | 0.06 | 1029 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 263 | 11389 | 28 | 0.025 | 1.55 | 1943 | <10 | 25 | 175 | 5 | <20 | <20 | 4 | 0.31 | 0.26 | 0.63 | 0.01 | 0.13 | 34 | 2 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 263 | 11390 | 6 | 0.032 | 2.94 | 1278 | <10 | 26 | 143 | 12 | <20 | <20 | 10 | 0.52 | 0.28 | 0.19 | 0.01 | 0.13 | 12 | 3 | <2 | 4 | <1 | <5 | <10 | <0.01 | <1 |
| 264 | 11388 | <5 | <0.010 | 2.51 | 2518 | <10 | 4 | 175 | 3 | <20 | <20 | 1 | 0.20 | 0.93 | 3.23 | <0.01 | 0.03 | 333 | 26 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 265 | 11387 | <5 | 0.026 | 1.65 | 1649 | <10 | 27 | 180 | 3 | <20 | <20 | 2 | 0.22 | 0.60 | 1.32 | 0.01 | 0.12 | 95 | 2 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 266 | 11143 | <5 | 0.019 | 4.43 | 463 | <10 | 61 | 39 | 13 | <20 | <20 | 10 | 1.66 | 0.90 | 1.56 | 0.02 | 0.32 | 74 | 5 | <2 | 28 | <1 | <5 | <10 | <0.01 | <1 |
| 267 | 11137 | 12 | <0.010 | 0.65 | 1933 | <10 | 3 | 286 | <1 | <20 | <20 | <1 | 0.02 | 0.09 | 0.35 | <0.01 | <0.01 | 20 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 268 | 11138 | 5 | 0.107 | 2.65 | 1021 | <10 | 12 | 15 | 14 | <20 | <20 | 16 | 1.03 | 0.73 | 0.30 | <0.01 | 0.04 | 22 | 8 | <2 | 12 | <1 | <5 | <10 | <0.01 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 268 | 11139 | Union Gulch | | pan | 1 v fine Au, 1 py cube, abu mag | 1471 | 3 | <5 | <0.2 | 98 | 8 | 188 | 4 | 52 | 27 | <0.2 | <5 | 72 |
| 269 | 11140 | Union Gulch | | pan | abu mag | 17.24 ppm | 2 | <5 | 0.7 | 84 | 8 | 159 | 4 | 74 | 40 | 0.4 | <5 | 209 |
| 270 | 11141 | Union Gulch | | pan | mod sulfides, abu mag | 1559 | 5 | 9 | <0.2 | 79 | 11 | 346 | 4 | 54 | 40 | 0.3 | <5 | 128 |
| 270 | 11142 | Union Gulch | | sed | | 2 | | | <0.2 | 24 | 6 | 57 | <1 | 24 | 13 | <0.2 | <5 | 43 |
| 271 | 10703 | Midnight Dome | trn | sel | massive stb w/ yellow alt mineral | 14 | | | <0.2 | 25 | <2 | 24 | <1 | <1 | 2 | 2.5 | <5 | <5 |
| 271 | 10704 | Midnight Dome | rub | sel | qz veinlet w/ < 1% py, lim | 37 | | | <0.2 | 50 | 61 | 53 | 1 | 18 | 7 | 0.2 | <5 | 46 |
| 272 | 11349 | Midnight Dome | otc | sel | qz vein | <5 | | | <0.2 | 7 | <2 | 37 | 3 | 26 | 13 | <0.2 | <5 | 19 |
| 273 | 10709 | Midnight Dome | rub | sel | schistose qtz w/ py, lim | <5 | | | <0.2 | 27 | 82 | 15 | 6 | 16 | 5 | <0.2 | <5 | 15 |
| 274 | 10706 | Midnight Dome | otc | sel | qz-mica schist w/ 5% py | <5 | | | <0.2 | 67 | 36 | 66 | 2 | 37 | 29 | <0.2 | <5 | 15 |
| 274 | 10707 | Midnight Dome | otc | rand | carb-qz lense w/in schist | <5 | | | 0.3 | 17 | 13 | 23 | 2 | 10 | 6 | <0.2 | <5 | 8 |
| 274 | 10708 | Midnight Dome | flt | sel | vein qz w/ py, mal, lim | 179 | | | 0.6 | 1469 | 35 | 34 | 2 | 9 | 4 | 0.2 | <5 | 16 |
| 274 | 11358 | Midnight Dome | otc | rand | qz vein w/ py, lim | **532** | | | <0.2 | 67 | 7 | 33 | <1 | 37 | 19 | <0.2 | <5 | 44 |
| 275 | 11350 | Midnight Dome | flt | rand | vein qz | <5 | | | 0.3 | 34 | 99 | 4 | 1 | 7 | 1 | <0.2 | <5 | <5 |
| 276 | 10705 | Midnight Dome | flt | sel | vein qz w/ unknown metallic, lim | <5 | | | <0.2 | 62 | 6 | 25 | 5 | 16 | 3 | <0.2 | <5 | 23 |
| 277 | 11173 | Midnight Dome | otc | sel | qz vein w/ py voids | 291 | | | <0.2 | 8 | 87 | 21 | 3 | 26 | 16 | 0.7 | <5 | 317 |
| 278 | 11174 | Midnight Dome | flt | grab | vein qz w/ sid, py | 18 | | | 0.2 | 30 | 64 | 14 | 3 | 14 | 3 | <0.2 | <5 | 15 |
| 279 | 11373 | Peak 3415 | flt | rand | vein qz w/ sid | <5 | | | <0.2 | 4 | <2 | 19 | 1 | 16 | 4 | <0.2 | <5 | <5 |
| 280 | 11375 | Peak 3415 | otc | sel | qz vein w/ py, sid, hem, lim | 19 | | | <0.2 | 12 | <2 | 16 | <1 | 10 | 3 | 0.3 | <5 | 88 |
| 281 | 11374 | Peak 3415 | otc | sel | meta qz | <5 | | | <0.2 | 13 | <2 | 2 | 3 | 13 | 1 | <0.2 | <5 | <5 |
| 282 | 8022 | Grotto Mtn | otc | grab | carbonaceous slate | <5 | | | <5 | | | <200 | 16 | <20 | <10 | <10 | | 21 |
| 283 | 8021 | Grotto Mtn | flt | grab | vein qz w/ schist breccia, ank | <5 | | | <5 | | | <200 | 11 | <20 | <10 | <10 | | 4 |
| 284 | 8032 | Vi Ck | otc | sel | qz vein w/ < 1% cpy, gn | <5 | | | <5 | | | <200 | 22 | 160 | 52 | <15 | | 140 |
| 284 | 8033 | Vi Ck | flt | sel | vein qz w/ < 1% cpy, gn | <5 | | | <5 | | | 580 | <2 | <20 | <10 | <10 | | 35 |
| 285 | 8031 | Sleepy Ck | rub | grab | graphitic schist w/ qz, lim box | <65 | | | <13 | | | <480 | 18 | <90 | <10 | <74 | | 337 |
| 286 | 10875 | BVK | | sed | | <5 | | | <0.2 | 32 | 10 | 94 | 1 | 29 | 10 | 0.7 | <5 | 9 |
| 286 | 10876 | BVK | | pan | mod sulfides, no mag, no visible Au | 18 | <5 | <1 | 0.3 | 66 | 145 | 84 | 2 | 43 | 25 | 0.4 | <5 | 37 |
| 286 | 10877 | BVK | flt | sel | schist w/ 1% py | <5 | | | <0.2 | 21 | 3 | 56 | <1 | 15 | 13 | <0.2 | <5 | 78 |
| 287 | 11084 | Snowden Ck | otc | sel | Skajit ls w/ cal vein | 7 | 1 | <5 | 0.8 | 354 | 4 | 9 | 3 | 4 | 3 | <0.2 | <5 | 6 |
| 287 | 11085 | Snowden Ck | flt | sel | Skajit ls w/ qz, cal, py, cpy | 2 | <1 | <5 | 1.5 | 3 | 9 | 6 | 1 | 2 | <1 | <0.2 | <5 | 6 |
| 287 | 11086 | Snowden Ck | flt | sel | qz-ch schist w/ 5% euhedral py | 8 | | | 0.2 | 19 | 16 | 42 | 2 | 28 | 8 | 0.2 | <5 | 93 |
| 288 | 11150 | Snowden Mtn | rub | rep | cal, gyp vein w/ euhedral py | <5 | <5 | <1 | 0.2 | 92 | <2 | 66 | 1 | 42 | 31 | <0.2 | <5 | <5 |
| 288 | 11151 | Snowden Mtn | otc | sel | cal, gyp vein w/ euhedral py | <5 | <5 | <1 | 0.2 | 52 | <2 | 59 | <1 | 57 | 29 | <0.2 | <5 | 6 |
| 289 | 11148 | Mathews River | | sed | | 7 | | | 0.4 | 29 | 11 | 78 | 2 | 27 | 10 | 0.4 | <5 | 9 |
| 289 | 11149 | Mathews River | | pan | no mag, no visible Au | 8 | <5 | 7 | 0.7 | 21 | 7 | 60 | 2 | 21 | 6 | 0.2 | <5 | 7 |
| 290 | 11145 | Mathews River, upper | flt | sel | dol w/ py, qz veinlets | 6 | | | <0.2 | 5 | 6 | 42 | 8 | 12 | 4 | <0.2 | <5 | 8 |
| 290 | 11146 | Mathews River, upper | | sed | | 9 | | | 0.2 | 47 | 13 | 139 | 5 | 46 | 14 | 0.5 | <5 | 13 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 268 | 11139 | <5 | 0.099 | >10.00 | 1332 | <10 | 108 | 249 | 124 | <20 | <20 | 17 | 2.40 | 0.87 | 0.20 | 0.12 | 0.61 | 36 | 9 | <2 | 22 | <1 | 6 | <10 | 0.06 | <1 |
| 269 | 11140 | <5 | 0.330 | >10.00 | 933 | <10 | 68 | 220 | 297 | <20 | <20 | 16 | 1.52 | 0.47 | 0.10 | 0.11 | 0.43 | 26 | 7 | <2 | 15 | <1 | <5 | <10 | 0.04 | <1 |
| 270 | 11141 | <5 | 0.130 | >10.00 | 1219 | <10 | 114 | 334 | 123 | <20 | <20 | 15 | 2.49 | 0.82 | 0.14 | 0.14 | 0.66 | 32 | 9 | <2 | 22 | <1 | 6 | <10 | 0.07 | <1 |
| 270 | 11142 | <5 | 0.059 | 2.79 | 887 | <10 | 13 | 15 | 15 | <20 | <20 | 16 | 1.12 | 0.79 | 0.25 | <0.01 | 0.04 | 18 | 8 | <2 | 13 | <1 | <5 | <10 | <0.01 | <1 |
| 271 | 10703 | 33.13% | 26.468 | 0.26 | 199 | 14 | 11 | 80 | <1 | <20 | 29 | <1 | 0.20 | <0.01 | 0.04 | <0.01 | 0.03 | 3 | <1 | <2 | 21 | <1 | <5 | <10 | <0.01 | <1 |
| 271 | 10704 | 25 | 1.020 | 2.05 | 980 | <10 | 54 | 201 | 6 | <20 | <20 | 11 | 0.41 | 0.05 | 0.10 | 0.01 | 0.26 | 14 | 3 | <2 | 7 | <1 | <5 | <10 | <0.01 | 1 |
| 272 | 11349 | 8 | 0.113 | 1.49 | 1575 | <10 | 34 | 206 | 5 | <20 | <20 | 5 | 0.28 | 0.05 | 0.16 | 0.01 | 0.12 | 18 | 2 | <2 | 2 | <1 | <5 | <10 | <0.01 | 2 |
| 273 | 10709 | 31 | 0.044 | 0.92 | 1463 | <10 | 81 | 183 | 3 | <20 | <20 | 4 | 0.21 | 0.17 | 0.69 | 0.02 | 0.09 | 34 | 2 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 274 | 10706 | <5 | 0.048 | 3.75 | 7765 | <10 | 31 | 137 | 18 | <20 | <20 | 14 | 1.23 | 0.96 | 0.82 | 0.04 | 0.26 | 79 | 6 | <2 | 18 | <1 | <5 | <10 | 0.03 | 4 |
| 274 | 10707 | <5 | 0.019 | 1.87 | 10141 | <10 | 9 | 83 | 4 | <20 | <20 | 7 | 0.14 | 1.76 | 4.54 | 0.02 | 0.08 | 357 | 5 | <2 | 2 | 1 | <5 | <10 | <0.01 | 1 |
| 274 | 10708 | 230 | 5.090 | 0.68 | 388 | <10 | 2 | 270 | <1 | <20 | <20 | <1 | 0.03 | 0.09 | 0.24 | <0.01 | 0.01 | 8 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 274 | 11358 | 29 | 0.232 | 2.70 | 2556 | <10 | 49 | 140 | 10 | <20 | <20 | 7 | 0.38 | 0.55 | 0.91 | 0.02 | 0.14 | 77 | 3 | <2 | 3 | <1 | <5 | <10 | <0.01 | 1 |
| 275 | 11350 | <5 | 0.047 | 0.45 | 160 | <10 | 2 | 208 | 1 | <20 | <20 | <1 | 0.07 | 0.04 | 0.12 | <0.01 | <0.01 | 9 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 276 | 10705 | 7 | 0.046 | 0.56 | 874 | <10 | 6 | 246 | 2 | <20 | <20 | 1 | 0.13 | 0.05 | 0.10 | <0.01 | 0.03 | 5 | 2 | <2 | 1 | <1 | <5 | <10 | <0.01 | 1 |
| 277 | 11173 | 30 | 0.010 | 0.90 | 492 | <10 | 15 | 271 | 7 | <20 | <20 | 4 | 0.32 | 0.21 | 0.08 | 0.01 | 0.08 | 11 | 1 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 278 | 11174 | 45 | 0.029 | 1.69 | 1215 | <10 | 6 | 265 | 2 | <20 | <20 | <1 | 0.14 | 0.57 | 1.83 | <0.01 | 0.03 | 59 | 3 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 279 | 11373 | 158 | <0.010 | 1.55 | 760 | <10 | 15 | 228 | 8 | <20 | <20 | 4 | 0.71 | 0.52 | 3.87 | <0.01 | 0.08 | 233 | 7 | <2 | 8 | <1 | <5 | <10 | <0.01 | 1 |
| 280 | 11375 | 1101 | 0.010 | 1.51 | 348 | <10 | 10 | 117 | 2 | <20 | <20 | 4 | 0.15 | 0.19 | >10.00 | <0.01 | 0.08 | 1340 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | 3 |
| 281 | 11374 | 28 | <0.010 | 0.39 | 234 | <10 | 8 | 276 | 2 | <20 | <20 | <1 | 0.06 | 0.04 | 0.14 | <0.01 | 0.01 | 8 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 282 | 8022 | 30.7 | | 0.5 | | <20 | 460 | 170 | | <200 | <2 | 6 | | | | 0.06 | | | | | | | 5.7 | <1 | | <500 |
| 283 | 8021 | 13.0 | | 1.4 | | <20 | <100 | 280 | | <200 | <2 | <5 | | | | 0.55 | | | | | | | 4.0 | <1 | | <500 |
| 284 | 8032 | 356.0 | | 1.4 | | <20 | <100 | 310 | | <200 | <2 | <5 | | | | 0.07 | | | | | | | 0.9 | <1 | | <500 |
| 284 | 8033 | 151.0 | | 1.0 | | <20 | <100 | 320 | | <200 | <2 | <5 | | | | 0.18 | | | | | | | 1.9 | <1 | | <500 |
| 285 | 8031 | 2960.0 | | 1.1 | | <290 | 4700 | <260 | | <2600 | 15 | 9 | | | | <0.45 | | | | | | | 5.5 | <2 | | <1800 |
| 286 | 10875 | <5 | 0.051 | 2.94 | 461 | <10 | 27 | 13 | 15 | <20 | <20 | 13 | 0.93 | 1.02 | 7.05 | <0.01 | 0.02 | 174 | 7 | <2 | 36 | <1 | <5 | <10 | <0.01 | 4 |
| 286 | 10876 | <5 | 0.082 | 7.05 | 547 | <10 | 13 | 77 | 25 | <20 | <20 | 7 | 1.33 | 1.14 | 5.91 | 0.02 | 0.15 | 141 | 6 | <2 | 36 | 2 | <5 | <10 | 0.01 | 7 |
| 286 | 10877 | 5 | 0.023 | 5.01 | 5658 | <10 | 37 | 66 | 44 | <20 | <20 | 9 | 1.27 | 1.53 | 4.01 | 0.03 | 0.16 | 138 | 7 | 3 | 25 | 4 | 8 | <10 | <0.01 | 2 |
| 287 | 11084 | <5 | 0.013 | 6.57 | 1136 | <10 | 18 | 62 | 30 | <20 | <20 | 17 | 1.16 | 0.06 | 6.51 | 0.02 | <0.01 | 298 | 5 | <2 | <1 | 1 | <5 | <10 | 0.1 | 2 |
| 287 | 11085 | <5 | <0.010 | 1.01 | 425 | <10 | 52 | 6 | 1 | <20 | <20 | <1 | 0.04 | 0.24 | >10.00 | <0.01 | 0.02 | 435 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 287 | 11086 | <5 | 0.017 | 4.23 | 80 | <10 | 23 | 211 | 23 | <20 | <20 | 3 | 0.69 | 0.21 | 0.42 | 0.04 | 0.09 | 30 | 3 | <2 | 9 | <1 | <5 | <10 | <0.01 | 12 |
| 288 | 11150 | <5 | <0.010 | 8.05 | 1027 | <10 | 2 | 227 | 212 | <20 | <20 | <1 | 4.61 | 3.63 | 3.30 | 0.02 | <0.01 | 69 | 5 | 8 | 162 | <1 | 30 | <10 | 0.01 | <1 |
| 288 | 11151 | <5 | 0.017 | 7.09 | 988 | <10 | <1 | 204 | 161 | <20 | <20 | <1 | 4.29 | 3.89 | 4.43 | 0.02 | <0.01 | 80 | 7 | 7 | 140 | <1 | 26 | <10 | 0.02 | <1 |
| 289 | 11148 | <5 | 0.058 | 2.61 | 495 | <10 | 20 | 12 | 13 | <20 | <20 | 5 | 0.83 | 0.96 | 8.27 | <0.01 | 0.02 | 119 | 6 | <2 | 20 | <1 | <5 | <10 | <0.01 | 2 |
| 289 | 11149 | <5 | 0.034 | 2.31 | 398 | <10 | 121 | 124 | 24 | <20 | <20 | 7 | 1.46 | 1.28 | >10.00 | 0.05 | 0.33 | 229 | 7 | <2 | 20 | <1 | <5 | <10 | <0.01 | 4 |
| 290 | 11145 | <5 | 0.020 | 7.45 | 8789 | <10 | 24 | 51 | 9 | <20 | <20 | <1 | 0.09 | 2.72 | >10.00 | <0.01 | 0.04 | 219 | 15 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 290 | 11146 | <5 | 0.058 | 3.31 | 503 | <10 | 23 | 12 | 18 | <20 | <20 | 11 | 0.95 | 0.66 | 3.31 | <0.01 | 0.03 | 62 | 7 | <2 | 22 | <1 | <5 | <10 | <0.01 | 4 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 290 | 11147 | Mathews River, upper | | pan | no mag, no visible Au | 9 | 9 | 7 | <0.2 | 48 | 17 | 127 | 5 | 60 | 15 | 0.4 | <5 | 10 |
| 291 | 10698 | Luna | flt | sel | calc-qz-ser schist w/ 15% cpy, py | 553 | | | 44.6 | 4.50% | 16 | 375 | 2 | 896 | 745 | 3.5 | <5 | 848 |
| 291 | 10699 | Luna | flt | sel | qz-ser schist w/ 60% sl, 5% cpy, py | 385 | | | 18.6 | 8338 | 34 | 8320 | <1 | 622 | 1767 | 1283.9 | <5 | 2133 |
| 291 | 10700 | Luna | flt | sel | qz-ser schist w/ 45% cpy & py, sl | 1129 | | | 98.4 | 10.20% | 71 | 8447 | 6 | 1325 | 1103 | 66.4 | 12 | 2931 |
| 291 | 10761 | Luna | flt | sel | ep skarn w/ < 1% cpy, mag, gar | 13 | | | 3.2 | 2149 | 12 | 59 | 1 | 32 | 52 | 0.6 | <5 | 219 |
| 292 | 8044 | Demos | otc | sel | skarn w/ 25% cpy, py, lim, MnO | 390 | | | 32 | 2.44% | | 840 | <2 | 73 | 120 | <10 | | 138 |
| 292 | 8045 | Demos | flt | grab | skarn w/ gar, ep | <5 | | | <5 | | | <200 | <2 | 28 | <10 | <10 | | 49 |
| 292 | 8046 | Demos | otc | sel | skarn w/ 25% cpy, 25% mag | 290 | | | 12 | 1.09% | | 450 | <2 | 180 | 380 | <10 | | 121 |
| 293 | 11204 | Demos | flt | sel | ser-qz schist w/ py, cpy | 9 | | | <0.2 | 90 | 41 | 62 | 1 | 33 | 13 | 0.3 | <5 | 64 |
| 293 | 11205 | Demos | flt | sel | skarn w/ abu mag, 1% cpy | <5 | | | 0.8 | 622 | <2 | 17 | 1 | 3 | 4 | <0.2 | <5 | 80 |
| 293 | 11243 | Demos | otc | sel | Skajit ls (?) w/ 2% cpy, mal, az | 56 | | | 4.0 | 3871 | 16 | 22 | 2 | 5 | 4 | <0.2 | <5 | 76 |
| 294 | 11251 | Ginger | otc | sel | calc silicate w/ py, cpy, qz, ep, mal | 1201 | | | 17.5 | 2.80% | 18 | 118 | 9 | 93 | 144 | 1.8 | <5 | 115 |
| 295 | 11047 | Ginger | otc | sel | felsic ser schist w/ 2% py, cpy (?) | 16 | | | 1.2 | 1043 | 35 | 55 | 4 | 26 | 33 | 1.2 | <5 | 266 |
| 295 | 11048 | Ginger | otc | ran | diabase sill w/ <1% diss po | 3 | | | <0.2 | 57 | <2 | 38 | 1 | 148 | 35 | <0.2 | <5 | <5 |
| 296 | 8041 | Ginger | otc | sel | skarn w/ < 10% cpy, py, mal | 548 | | | 42 | 3.61% | | <200 | <2 | 210 | 78 | <10 | | 166 |
| 296 | 8042 | Ginger | otc | grab | skarn w/ < 1% cpy, gar, ep | <5 | | | <5 | 0.04% | | <200 | <2 | <20 | 11 | <10 | | 34 |
| 296 | 8043 | Ginger | rub | sel | skarn w/ 30% cpy, ep, qz | 78 | | | <5 | 1.00% | | <200 | 4 | 79 | 25 | <10 | | 41 |
| 297 | 11219 | Ginger | otc | ran | skarn w/ 20% py, 5% cpy | 99 | | | 12.7 | 2.90% | <2 | 75 | 13 | 65 | 53 | 0.9 | <5 | 229 |
| 297 | 11220 | Ginger | otc | spac | ep grossularite skarn w/ cpy, py, po | 41 | | | 3.3 | 3709 | 2 | 22 | 10 | 13 | 11 | <0.2 | <5 | 33 |
| 298 | 11107 | Evelyn Lee | trn | rep | skarn w/ 3% cpy, mal, gar | 82 | | | 18.5 | 7.00% | 12 | 148 | 4 | 15 | 5 | 0.5 | 76 | 15 |
| 298 | 11108 | Evelyn Lee | rub | sel | skarn w/ cpy, ep, gar, qz | 32 | | | 3.1 | 4637 | 5 | 33 | 109 | 11 | 6 | <0.2 | <5 | <5 |
| 299 | 8036 | Evelyn Lee | otc | grab | skarn w/ <5% cpy, gar, ep, mal, az | <5 | | | <5 | 1.46% | | 210 | 36 | 25 | 37 | <10 | | 17 |
| 299 | 8037 | Evelyn Lee | otc | grab | gar-rich skarn w/ mal | <5 | | | <5 | | | <200 | <2 | <20 | <10 | <10 | | 9 |
| 299 | 8038 | Evelyn Lee | rub | sel | skarn w/ < 10% cpy | 82 | | | 28 | 6.42% | | <200 | <2 | 100 | 32 | <10 | | 16 |
| 299 | 8039 | Evelyn Lee | otc | grab | brn gar skarn w/ no sulfides | 17 | | | <5 | | | <200 | 97 | 48 | 28 | <10 | | 33 |
| 299 | 8040 | Evelyn Lee | flt | sel | skarn w/ 50% cpy, gar, ca | 200 | | | 13 | 5.01% | | <200 | 7 | 41 | <10 | <10 | | 25 |
| 299 | 11046 | Evelyn Lee | otc | sel | skarn w/ 1% cpy, <5% py, mal, az | 1896 | | | 8.6 | 3.50% | <2 | 165 | 4 | 27 | 34 | 0.5 | 63 | 21 |
| 299 | 11104 | Evelyn Lee | otc | sel | qz vein w/ 1% cpy, 1% po | 5 | | | 0.9 | 1407 | <2 | 32 | 7 | 8 | 2 | <0.2 | <5 | <5 |
| 299 | 11105 | Evelyn Lee | otc | sel | skarn w/ 10% cpy, mal, az | 270 | | | 35.7 | 4.60% | <2 | 77 | 11 | 11 | 5 | 0.3 | 110 | 38 |
| 299 | 11106 | Evelyn Lee | otc | sel | ser calc rock w/ qz, cpy, mal, az | 41 | | | 4 | 1.90% | <2 | 38 | 3 | 12 | 5 | <0.2 | <5 | <5 |
| 300 | 11183 | Victor | otc | sel | Skajit ls w/ py, qz veins | 4 | | | 1.2 | 5 | 3 | 17 | <1 | 4 | 2 | <0.2 | <5 | <5 |
| 300 | 11184 | Victor | flt | sel | ep-gar-qz skarn w/ 3% mag | 3 | | | 1.6 | 2 | <2 | 7 | <1 | <1 | <1 | <0.2 | <5 | <5 |
| 301 | 11187 | Peak 4737 | otc | cont | ep-qz skarn w/ 5% cpy, mal, az | 49 | | | 2.5 | 2999 | <2 | 47 | 4 | 12 | 45 | 0.4 | <5 | 15 |
| 302 | 11185 | Peak 4737 | otc | cont | ep-gar-qz skarn w/ 5% cpy, mal, az | 101 | | | 10.8 | 5695 | <2 | 72 | 12 | 23 | 16 | 0.7 | <5 | 18 |
| 302 | 11186 | Peak 4737 | otc | cont | ep-gar-qz skarn w/ cpy, py, mal, az | 321 | | | 12.5 | 1.22% | 3 | 102 | 13 | 51 | 30 | 0.9 | 7 | 50 |
| 302 | 11188 | Peak 4737 | otc | rep | ep-gar-qz skarn w/ cpy, py, mal, az | <5 | | | 0.7 | 455 | 6 | 56 | 4 | 13 | 5 | <0.2 | <5 | 37 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 290 | 11147 | <5 | 0.042 | 4.72 | 587 | <10 | 569 | 426 | 56 | <20 | <20 | 21 | 2.60 | 1.12 | 3.09 | 0.09 | 0.45 | 105 | 8 | 4 | 39 | <1 | <5 | <10 | 0.03 | 10 |
| 291 | 10698 | 6 | <0.010 | >10.00 | 668 | <10 | 18 | 34 | 24 | <20 | <20 | 38 | 0.96 | 0.44 | 9.14 | <0.01 | 0.47 | 137 | 2 | <2 | 6 | 1 | <5 | <10 | 0.03 | 2 |
| 291 | 10699 | <5 | <0.010 | >10.00 | 1262 | 23 | <1 | 38 | 4 | <20 | 87 | 18 | 0.21 | 0.12 | 0.34 | <0.01 | 0.21 | 20 | 2 | <2 | 1 | <1 | <5 | <10 | <0.01 | 1 |
| 291 | 10700 | 60 | 0.012 | >10.00 | 524 | <10 | <1 | 60 | 8 | <20 | <20 | 12 | 0.57 | 0.22 | 1.48 | <0.01 | 0.43 | 107 | 5 | <2 | 4 | 4 | <5 | 12 | 0.02 | 9 |
| 291 | 10761 | <5 | 0.079 | >10.00 | 944 | <10 | 153 | 38 | 21 | <20 | 64 | 4 | 0.70 | 0.12 | >10.00 | <0.01 | 0.02 | 265 | 1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 2 |
| 292 | 8044 | 14.0 | | 7.4 | | <20 | <100 | <50 | | <200 | <2 | <5 | | | | 0.15 | | | | | | | 0.9 | <1 | | <500 |
| 292 | 8045 | 18.0 | | 10.0 | | <20 | <100 | 110 | | <200 | 17 | <5 | | | | 0.13 | | | | | | | 6.5 | <1 | | <500 |
| 292 | 8046 | 23.7 | | >10.0 | | <20 | <100 | <50 | | <200 | <2 | <5 | | | | 0.14 | | | | | | | 1.5 | <1 | | <500 |
| 293 | 11204 | <5 | 0.034 | 1.67 | 158 | <10 | 53 | 76 | 9 | <20 | <20 | 6 | 0.65 | 0.36 | 0.22 | 0.02 | 0.23 | 14 | 2 | <2 | 5 | <1 | <5 | <10 | <0.01 | 3 |
| 293 | 11205 | <5 | 0.010 | >10.00 | 996 | <10 | 5 | 12 | 39 | <20 | <20 | 1 | 0.81 | 0.09 | >10.00 | <0.01 | <0.01 | 58 | 4 | <2 | <1 | <1 | <5 | <10 | 0.02 | <1 |
| 293 | 11243 | <5 | 0.047 | 8.60 | 1145 | <10 | 18 | 26 | 67 | <20 | <20 | 1 | 1.45 | 0.11 | >10.00 | <0.01 | 0.09 | 177 | 9 | 2 | 2 | <1 | <5 | <10 | 0.04 | 7 |
| 294 | 11251 | <5 | 0.861 | >10.00 | 950 | <10 | 5 | 34 | 25 | <20 | 57 | 2 | 0.85 | 0.17 | 6.34 | <0.01 | 0.01 | 113 | 6 | <2 | 1 | <1 | <5 | <10 | 0.11 | <1 |
| 295 | 11047 | 43 | 0.463 | 0.71 | 319 | <10 | 42 | 65 | 6 | <20 | <20 | 9 | 0.36 | 0.71 | 2.70 | 0.06 | 0.25 | 292 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | 9 |
| 295 | 11048 | <5 | <0.010 | 5.16 | 654 | <10 | 10 | 155 | 87 | <20 | <20 | 2 | 4.28 | 4.64 | 2.69 | 0.12 | 0.01 | 38 | 12 | 4 | 34 | <1 | <5 | <10 | 0.17 | <1 |
| 296 | 8041 | 33.2 | | >10.0 | | <20 | 170 | 92 | | <200 | <2 | <5 | | | | 0.14 | | | | | | | 7.8 | <1 | | <500 |
| 296 | 8042 | 28.0 | | 7.3 | | <20 | <100 | 160 | | <200 | 3 | 13 | | | | 0.14 | | | | | | | 12.0 | <1 | | <500 |
| 296 | 8043 | 16.0 | | 8.7 | | <20 | 320 | 89 | | <200 | 25 | 71 | | | | 0.41 | | | | | | | 14.0 | <1 | | 610 |
| 297 | 11219 | <5 | 0.583 | 6.52 | 660 | <10 | 27 | 37 | 25 | <20 | <20 | 60 | 1.43 | 0.18 | 7.05 | <0.01 | 0.06 | 200 | 9 | 2 | 4 | <1 | <5 | <10 | 0.14 | 20 |
| 297 | 11220 | <5 | 0.141 | 3.85 | 467 | <10 | 30 | 57 | 26 | <20 | 42 | 6 | 0.98 | 0.20 | 3.28 | 0.02 | 0.36 | 110 | 6 | 2 | 6 | <1 | <5 | <10 | 0.15 | 14 |
| 298 | 11107 | <5 | 0.712 | >10.00 | 1128 | 14 | 4 | 87 | 16 | <20 | <20 | 4 | 1.18 | 0.24 | 8.47 | <0.01 | <0.01 | 35 | 6 | <2 | <1 | <1 | <5 | 14 | 0.06 | 12 |
| 298 | 11108 | <5 | 0.083 | 2.04 | 1016 | <10 | 39 | 80 | 14 | <20 | <20 | <1 | 0.94 | 0.47 | >10.00 | <0.01 | 0.01 | 261 | 3 | <2 | 2 | <1 | <5 | <10 | 0.11 | <1 |
| 299 | 8036 | 33.9 | | >10.0 | | <20 | <100 | 66 | | <200 | <2 | 7 | | | | 0.36 | | | | | | | 7.2 | <1 | | <500 |
| 299 | 8037 | 29.5 | | >10.0 | | <20 | <100 | 91 | | <200 | 2 | 18 | | | | <0.05 | | | | | | | 1.9 | <1 | | <500 |
| 299 | 8038 | 81.7 | | >10.0 | | <20 | <100 | 110 | | <200 | <2 | 16 | | | | 0.35 | | | | | | | 4.9 | <1 | | <500 |
| 299 | 8039 | 27.5 | | 4.7 | | <20 | <100 | 160 | | <200 | 3 | 18 | | | | 1.00 | | | | | | | 13.0 | 1 | | <500 |
| 299 | 8040 | 22.2 | | >10.0 | | <20 | <100 | 97 | | <200 | <2 | 13 | | | | 0.13 | | | | | | | 8.2 | <1 | | <500 |
| 299 | 11046 | <5 | 0.170 | 7.05 | 1479 | <10 | 5 | 61 | 16 | <20 | <20 | 2 | 1.08 | 0.06 | 7.65 | 0.01 | 0.02 | 43 | 6 | <2 | <1 | <1 | <5 | <10 | 0.08 | 12 |
| 299 | 11104 | <5 | 0.074 | 1.02 | 537 | <10 | 16 | 246 | 2 | <20 | <20 | <1 | 0.12 | 0.03 | 4.98 | <0.01 | 0.08 | 126 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 299 | 11105 | 453 | 0.370 | >10.00 | 1370 | <10 | <1 | 75 | 2 | <20 | 93 | 42 | 0.41 | 0.04 | >10.00 | <0.01 | <0.01 | 7 | 3 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 299 | 11106 | <5 | 0.103 | 4.58 | 1012 | <10 | 4 | 70 | 38 | <20 | <20 | 1 | 0.60 | 0.03 | 9.30 | <0.01 | <0.01 | 81 | 4 | <2 | <1 | <1 | <5 | <10 | 0.06 | 4 |
| 300 | 11183 | <5 | <0.010 | 0.98 | 272 | <10 | 10 | 22 | 5 | <20 | <20 | 2 | 0.30 | 0.45 | >10.00 | 0.01 | 0.06 | >2000 | 7 | <2 | 9 | <1 | <5 | <10 | <0.01 | 2 |
| 300 | 11184 | <5 | <0.010 | 0.11 | 56 | <10 | 12 | 2 | 2 | <20 | <20 | <1 | 0.03 | 0.15 | >10.00 | <0.01 | 0.01 | 119 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 301 | 11187 | 19 | 0.058 | 2.06 | 846 | <10 | 9 | 43 | 11 | <20 | <20 | <1 | 0.91 | 0.06 | 7.59 | 0.06 | 0.02 | 84 | 4 | <2 | <1 | <1 | <5 | <10 | 0.11 | 5 |
| 302 | 11185 | <5 | 0.117 | 4.50 | 1069 | <10 | 7 | 74 | 18 | <20 | <20 | <1 | 1.33 | 0.14 | 9.08 | <0.01 | 0.03 | 59 | 5 | <2 | 1 | <1 | <5 | <10 | 0.08 | 11 |
| 302 | 11186 | <5 | 0.204 | 3.36 | 693 | <10 | 3 | 75 | 9 | <20 | <20 | <1 | 0.87 | 0.07 | 8.21 | 0.03 | 0.01 | 158 | 4 | <2 | <1 | <1 | <5 | <10 | 0.04 | 6 |
| 302 | 11188 | <5 | 0.037 | 2.02 | 1213 | <10 | 11 | 43 | 20 | <20 | <20 | 2 | 1.65 | 0.20 | >10.00 | 0.38 | 0.03 | 263 | 8 | 3 | 4 | <1 | <5 | <10 | 0.12 | 2 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 303 | 11189 | Aero-Mag Anomaly | flt | sel | calc hfls w/ 3% po, abu lim | <5 | | | 0.4 | 58 | <2 | 23 | 3 | 12 | 3 | <0.2 | <5 | 34 |
| 303 | 11190 | Aero-Mag Anomaly | flt | sel | calc silicate rock w/ 3% cpy | 8 | | | 0.8 | 1.20% | <2 | 37 | 3 | 9 | 4 | <0.2 | <5 | <5 |
| 304 | 11191 | Peak 5274 | otc | rep | ser granite w/ abu lim | 10 | | | <0.2 | 86 | <2 | 33 | 1 | 18 | 12 | <0.2 | <5 | 23 |
| 305 | 8028 | Peak 5274 | rub | grab | skarn w/ cpy, py, mal, az | 979 | | | 22 | 4.68% | | <340 | 52 | 80 | 44 | <34 | | 248 |
| 305 | 8029 | Peak 5274 | otc | grab | skarn w/ cpy, gar, ep | <5 | | | <5 | 0.14% | | <200 | 7 | 23 | 13 | <10 | | 50 |
| 305 | 8030 | Peak 5274 | rub | sel | massive sulfide (cpy) | 1020 | | | 15 | 7.76% | | 300 | 21 | 98 | 97 | <20 | | 122 |
| 306 | 11182 | Venus | otc | sel | calc hfls w/ diss cpy, py, ep (?) | 6 | | | <0.2 | 86 | <2 | 32 | 1 | 35 | 15 | <0.2 | <5 | 13 |
| 307 | 11129 | Venus | otc | grab | skarn near aero-mag anomaly | 2 | | | <0.2 | 38 | 3 | 58 | 1 | 29 | 12 | <0.2 | <5 | <5 |
| 308 | 8047 | Venus | core | grab | monz, hfls, skarn | 7 | | | <5 | 0.09% | | <200 | 160 | 35 | 20 | <10 | | 8 |
| 308 | 8048 | Venus | flt | grab | skarn w/ 40% py, gar | 55 | | | <5 | | | <200 | 4 | 60 | 61 | <10 | | 23 |
| 308 | 8050 | Venus | rub | sel | granite ? w/ cpy, moly | 8 | | | <5 | 0.05% | | <200 | 236 | <20 | <10 | <10 | | 4 |
| 308 | 11109 | Venus | otc | rep. | silicious rock w/ 3% cpy | 10 | | | 0.7 | 2073 | 2 | 16 | 9 | 14 | 16 | <0.2 | <5 | <5 |
| 308 | 11130 | Venus | flt | sel | massive sulfide w/ lim, MnO | 441 | | | 2.4 | 0.47% | <2 | 171 | 3 | 2 | 14 | <0.2 | <5 | 27 |
| 308 | 11131 | Venus | flt | sel | massive cpy | 43 | | | 1.8 | 2030 | 5 | 37 | 11 | 59 | 82 | <0.2 | <5 | 65 |
| 308 | 11180 | Venus | otc | grab | ser granite w/ cpy, py, mal, lim | 14 | | | 1. | 1382 | <2 | 22 | 3 | 21 | 16 | <0.2 | <5 | 6 |
| 308 | 11181 | Venus | otc | ran | skarn w/ >20% cpy, py, mag, po (?) | 39 | | | 2.2 | 0.17% | <2 | 36 | 4 | 9 | 57 | <0.2 | <5 | 16 |
| 309 | 11128 | Venus | otc | grab | rhyolite (?) w/ cpy, po | 3 | | | <0.2 | 150 | <2 | 33 | 2 | 23 | 8 | <0.2 | <5 | <5 |
| 310 | 11110 | Venus | otc | sel | 0.25 ft-wide qz vein w/ 2% cpy, lim | 5 | | | 0.7 | 1609 | <2 | 56 | 3 | 68 | 3 | <0.2 | <5 | <5 |
| 310 | 11125 | Venus | otc | rep | meta granite w/ 3% cpy | 4 | | | 0.2 | 272 | <2 | 12 | 2 | 20 | 12 | <0.2 | <5 | 9 |
| 310 | 11126 | Venus | otc | grab | sericitized prophyry w/ 3% cpy | 3 | | | <0.2 | 179 | <2 | 10 | 2 | 20 | 7 | <0.2 | <5 | <5 |
| 310 | 11127 | Venus | otc | grab | black fine-grained rock w/ cpy, py | 5 | | | 0.3 | 607 | <2 | 34 | 1 | 10 | 18 | <0.2 | <5 | <5 |
| 311 | 11221 | Sheep Ck | | sed | | <5 | | | 0.2 | 29 | 8 | 56 | <1 | 28 | 10 | <0.2 | <5 | 14 |
| 311 | 11222 | Sheep Ck | | pan | minor mag, from bedrock | 14 | <5 | 5 | 0.4 | 81 | 22 | 85 | 3 | 40 | 14 | 0.3 | <5 | 46 |
| 311 | 11223 | Sheep Ck | otc | grab | ch-qz schist w/ py, po | <5 | | | 0.8 | 44 | 9 | 77 | 3 | 29 | 6 | 0.6 | <5 | 5 |
| 311 | 11224 | Sheep Ck | | pan | 1 v fine Au, mod mag and py | 678 | 10 | 7 | 0.5 | 78 | 21 | 81 | 3 | 52 | 21 | 0.6 | <5 | 130 |
| 311 | 11225 | Robert Ck | | sed | | <5 | | | <0.2 | 48 | 12 | 76 | 1 | 29 | 11 | <0.2 | <5 | 16 |
| 311 | 11226 | Robert Ck | | pan | mod mag, gar (?), lim cube (?) | 259 | 8 | 3 | <0.2 | 91 | 16 | 78 | 5 | 35 | 13 | 0.5 | <5 | 35 |
| 312 | 11227 | Robert Ck | otc | sel | meta qz w/ 1% po, cpy (?), lim | <5 | | | 0.3 | 59 | 39 | 40 | <1 | 29 | 13 | 0.3 | <5 | <5 |
| 313 | 11194 | Big Jim Ck (Sulak) | | sed | | <5 | | | <0.2 | 26 | 11 | 66 | 2 | 25 | 8 | 0.4 | <5 | 27 |
| 313 | 11195 | Big Jim Ck (Sulak) | | pan | no mag, no visible Au | 10 | 7 | 7 | <0.2 | 25 | 16 | 42 | 4 | 24 | 6 | 0.4 | <5 | 20 |
| 314 | 11235 | Phoebe Ck | | sed | | 53 | | | <0.2 | 29 | 12 | 67 | 1 | 26 | 11 | 0.3 | <5 | 20 |
| 314 | 11236 | Phoebe Ck | | pan | minor mag | 316 | 9 | 6 | <0.2 | 43 | 13 | 74 | 5 | 33 | 9 | 0.8 | <5 | 35 |
| 315 | 11232 | Phoebe Ck | | sed | | <5 | | | 0.3 | 25 | 9 | 52 | 1 | 21 | 8 | <0.2 | <5 | 12 |
| 315 | 11233 | Phoebe Ck | | pan | minor mag | 12 | 10 | 7 | 0.3 | 34 | 11 | 45 | 2 | 23 | 8 | 0.3 | <5 | 24 |
| 315 | 11234 | Phoebe Ck | flt | sel | blk mica schist w/ po, py | <5 | | | 0.9 | 11 | 6 | 30 | 2 | 16 | 4 | 0.2 | <5 | <5 |
| 316 | 11228 | Robert Ck | | pan | mod mag, minor py | 1219 | 5 | 6 | 1.7 | 34 | 15 | 73 | 2 | 37 | 13 | <0.2 | <5 | 40 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 303 | 11189 | <5 | <0.010 | 3.60 | 1439 | <10 | 4 | 88 | 33 | <20 | <20 | <1 | 2.43 | 0.34 | 9.66 | 0.01 | <0.01 | 105 | 10 | 5 | 1 | <1 | 5 | <10 | 0.12 | 17 |
| 303 | 11190 | <5 | 0.072 | 1.60 | 55 | <10 | 8 | 215 | 2 | <20 | <20 | 3 | 0.10 | <0.01 | 0.50 | 0.02 | 0.05 | 18 | 4 | <2 | <1 | <1 | <5 | <10 | <0.01 | 3 |
| 304 | 11191 | <5 | 0.010 | 1.99 | 338 | <10 | 44 | 116 | 25 | <20 | <20 | 6 | 1.36 | 0.89 | 0.77 | 0.03 | 0.21 | 116 | 3 | <2 | 9 | <1 | <5 | <10 | 0.19 | <1 |
| 305 | 8028 | 1440.0 | | >10.0 | | <130 | < 270 | <120 | | < 1200 | 150 | <5 | | | | <0.20 | | | | | | | 4.8 | <1 | | <970 |
| 305 | 8029 | 258.0 | | >10.0 | | <20 | 140 | <50 | | <200 | 80 | <5 | | | | 0.10 | | | | | | | 6.3 | <1 | | <500 |
| 305 | 8030 | 555.0 | | >10.0 | | <58 | <100 | 89 | | <530 | 19 | 6 | | | | 0.47 | | | | | | | 21.0 | <1 | | <500 |
| 306 | 11182 | <5 | <0.010 | 1.68 | 337 | <10 | 42 | 48 | 30 | <20 | <20 | 7 | 1.19 | 0.46 | 2.74 | 0.03 | 0.49 | 254 | 10 | 2 | 13 | <1 | <5 | <10 | 0.27 | 3 |
| 307 | 11129 | <5 | <0.010 | 2.74 | 648 | <10 | 24 | 80 | 28 | <20 | <20 | 10 | 1.74 | 1.30 | 1.61 | 0.05 | 0.17 | 49 | 7 | 2 | 22 | <1 | <5 | <10 | 0.07 | <1 |
| 308 | 8047 | 11.0 | | 4.2 | | <20 | 520 | 130 | | <200 | 7 | 26 | | | | 2.10 | | | | | | | 14.0 | <1 | | <500 |
| 308 | 8048 | 14.0 | | >10.0 | | <20 | <100 | 90 | | <200 | <2 | 14 | | | | 0.39 | | | | | | | 11.0 | <1 | | <500 |
| 308 | 8050 | 14.0 | | 2.8 | | <20 | 660 | 180 | | <200 | 13 | 25 | | | | 2.20 | | | | | | | 9.4 | 1 | | <500 |
| 308 | 11109 | <5 | <0.010 | 1.92 | 75 | <10 | 73 | 68 | 21 | <20 | <20 | 6 | 0.76 | 0.29 | 0.58 | 0.05 | 0.31 | 54 | 6 | <2 | 3 | <1 | <5 | <10 | 0.12 | 3 |
| 308 | 11130 | 609 | 0.024 | >10.00 | 525 | <10 | <1 | 10 | 11 | <20 | <20 | <1 | 0.02 | 8.94 | <0.01 | <0.01 | <0.01 | 3 | <1 | <2 | <1 | 1 | <5 | <10 | <0.01 | <1 |
| 308 | 11131 | <5 | 0.030 | >10.00 | 224 | <10 | <1 | 61 | 14 | <20 | <20 | 2 | 0.30 | 0.24 | 0.61 | 0.03 | 0.06 | 37 | 2 | <2 | 2 | <1 | <5 | <10 | 0.06 | <1 |
| 308 | 11180 | <5 | 0.015 | 3.09 | 129 | <10 | 49 | 68 | 11 | <20 | <20 | 4 | 0.73 | 0.44 | 1.49 | 0.04 | 0.35 | 41 | 5 | <2 | 5 | <1 | <5 | <10 | 0.09 | 5 |
| 308 | 11181 | 239 | 0.020 | 32.14% | 814 | <10 | <1 | 100 | 21 | <20 | <20 | 2 | 0.56 | 0.03 | 5.76 | <0.01 | <0.01 | 11 | 4 | <2 | <1 | <1 | <5 | <10 | 0.04 | 5 |
| 309 | 11128 | <5 | <0.010 | 1.68 | 273 | <10 | 61 | 53 | 26 | <20 | <20 | 7 | 1.31 | 0.73 | 0.84 | 0.08 | 0.24 | 72 | 4 | <2 | 4 | <1 | <5 | <10 | 0.14 | 4 |
| 310 | 11110 | <5 | 0.026 | 4.25 | 418 | <10 | 4 | 197 | 17 | <20 | <20 | <1 | 2.62 | 3.02 | 0.44 | <0.01 | 0.01 | 14 | <1 | <2 | 14 | <1 | <5 | <10 | 0.01 | <1 |
| 310 | 11125 | <5 | <0.010 | 1.64 | 81 | <10 | 70 | 63 | 17 | <20 | <20 | 8 | 0.92 | 0.40 | 0.70 | 0.06 | 0.27 | 68 | 4 | <2 | 3 | <1 | <5 | <10 | 0.11 | 5 |
| 310 | 11126 | <5 | <0.010 | 0.97 | 85 | <10 | 80 | 29 | 16 | <20 | <20 | 12 | 0.75 | 0.20 | 0.66 | 0.07 | 0.33 | 82 | 5 | <2 | 3 | <1 | <5 | <10 | 0.11 | 2 |
| 310 | 11127 | <5 | <0.010 | 3.09 | 321 | <10 | 5 | 12 | 6 | <20 | <20 | 2 | 0.76 | 1.18 | 1.21 | 0.03 | 0.05 | 28 | 6 | <2 | 3 | <1 | <5 | <10 | 0.06 | <1 |
| 311 | 11221 | <5 | 0.011 | 2.85 | 647 | <10 | 10 | 13 | 12 | <20 | <20 | 11 | 1.02 | 1.09 | 6.66 | <0.01 | 0.05 | 344 | 8 | <2 | 18 | <1 | <5 | <10 | <0.01 | <1 |
| 311 | 11222 | <5 | 0.027 | 4.42 | 762 | <10 | 127 | 190 | 30 | <20 | <20 | 15 | 1.71 | 1.59 | >10.00 | 0.05 | 0.37 | 605 | 13 | 2 | 23 | <1 | <5 | <10 | 0.05 | 4 |
| 311 | 11223 | <5 | <0.010 | 2.11 | 407 | <10 | 184 | 44 | 38 | <20 | <20 | 6 | 1.58 | 1.96 | >10.00 | <0.01 | 0.21 | 512 | 7 | <2 | 26 | <1 | <5 | <10 | 0.06 | 2 |
| 311 | 11224 | <5 | 0.030 | 4.01 | 653 | <10 | 177 | 185 | 36 | <20 | <20 | 17 | 1.66 | 1.68 | >10.00 | 0.04 | 0.40 | 570 | 12 | <2 | 24 | <1 | <5 | <10 | 0.05 | 4 |
| 311 | 11225 | <5 | 0.013 | 3.04 | 628 | <10 | 12 | 15 | 16 | <20 | <20 | 13 | 1.12 | 1.10 | 4.49 | <0.01 | 0.04 | 216 | 8 | 2 | 20 | <1 | <5 | <10 | 0.02 | <1 |
| 311 | 11226 | <5 | 0.032 | 6.62 | 2234 | <10 | 68 | 299 | 40 | <20 | <20 | 52 | 2.03 | 0.98 | 7.47 | 0.07 | 0.24 | 290 | 42 | <2 | 15 | <1 | 16 | <10 | 0.15 | <1 |
| 312 | 11227 | <5 | <0.010 | 2.51 | 502 | <10 | 5 | 138 | 8 | <20 | <20 | <1 | 0.62 | 0.42 | 1.44 | <0.01 | 0.03 | 56 | 4 | <2 | 10 | <1 | <5 | <10 | <0.01 | <1 |
| 313 | 11194 | <5 | 0.012 | 1.94 | 384 | <10 | 42 | 15 | 25 | <20 | <20 | 22 | 0.95 | 0.64 | 0.50 | <0.01 | 0.22 | 18 | 21 | 2 | 20 | <1 | <5 | <10 | 0.06 | <1 |
| 313 | 11195 | <5 | 0.018 | 2.34 | 588 | <10 | 80 | 487 | 39 | <20 | <20 | 23 | 1.92 | 0.40 | 2.07 | 0.11 | 0.31 | 105 | 23 | 4 | 8 | <1 | 5 | <10 | 0.11 | 2 |
| 314 | 11235 | <5 | 0.016 | 2.46 | 465 | <10 | 26 | 13 | 19 | <20 | <20 | 13 | 0.96 | 0.69 | 0.99 | <0.01 | 0.10 | 39 | 10 | <2 | 17 | <1 | <5 | <10 | 0.04 | <1 |
| 314 | 11236 | <5 | 0.016 | 6.86 | 5007 | <10 | 69 | 531 | 51 | <20 | <20 | 25 | 3.12 | 0.61 | 2.67 | 0.12 | 0.22 | 63 | 78 | 2 | 14 | <1 | 39 | <10 | 0.15 | <1 |
| 315 | 11232 | <5 | 0.014 | 1.95 | 515 | <10 | 18 | 9 | 12 | <20 | <20 | 9 | 0.67 | 0.83 | 6.13 | <0.01 | 0.06 | 180 | 8 | <2 | 11 | <1 | <5 | <10 | 0.02 | <1 |
| 315 | 11233 | <5 | 0.021 | 2.63 | 886 | <10 | 74 | 199 | 25 | <20 | <20 | 15 | 1.06 | 1.06 | >10.00 | 0.06 | 0.22 | 329 | 15 | <2 | 10 | <1 | <5 | <10 | 0.10 | 1 |
| 315 | 11234 | <5 | 0.012 | 1.45 | 310 | <10 | 57 | 18 | 3 | <20 | <20 | 4 | 0.19 | 1.19 | >10.00 | 0.01 | 0.11 | 962 | 9 | <2 | 4 | <1 | <5 | <10 | <0.01 | 3 |
| 316 | 11228 | <5 | 0.052 | 3.87 | 1010 | <10 | 78 | 245 | 29 | <20 | <20 | 21 | 1.77 | 1.39 | 6.50 | 0.07 | 0.37 | 302 | 16 | 2 | 21 | <1 | <5 | <10 | 0.09 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 316 | 11229 | Robert Ck | | sed | | <5 | | | <0.2 | 60 | 11 | 80 | 1 | 34 | 15 | <0.2 | <5 | 16 |
| 316 | 11230 | Robert Ck | otc | ran | ch-qz schist w/ tr py, lim | <5 | | | <0.2 | 39 | 22 | 75 | <1 | 29 | 12 | <0.2 | <5 | <5 |
| 317 | 11077 | Mule Ck | | pan | tr rusty sulfides | 235 | 3 | <5 | 0.7 | 120 | 19 | 249 | 4 | 33 | 15 | 0.6 | <5 | 87 |
| 317 | 11078 | Bettles River | | pan | | 718 | <1 | 9 | 0.3 | 70 | 14 | 155 | 3 | 21 | 9 | 0.3 | <5 | 26 |
| 318 | 11097 | Limestone Ck | | pan | minor mag, no visible Au | 18 | 5 | <5 | 0.6 | 76 | 8 | 247 | 3 | 23 | 7 | 0.3 | <5 | 20 |
| 318 | 11098 | Bettles River | | pan | 1 v fine Au, tr mag | 2247 | 4 | 14 | 0.7 | 95 | 32 | 122 | 5 | 27 | 13 | 0.4 | <5 | 46 |
| 318 | 11099 | Eightmile Ck | | sed | | 3 | | | 0.4 | 32 | 10 | 78 | 3 | 37 | 12 | 0.5 | <5 | 25 |
| 318 | 11100 | Eightmile Ck | | pan | tr mag, from bedrock | 19 | 3 | 18 | 0.4 | 46 | 6 | 133 | 4 | 28 | 9 | 0.5 | <5 | 23 |
| 318 | 11101 | Eightmile Ck | | pan | tr mag, no visible Au | 1434 | 5 | 12 | 1 | 84 | 22 | 147 | 4 | 74 | 20 | 0.8 | <5 | 80 |
| 319 | 11102 | Garnet Ck | | sed | | 3 | | | <0.2 | 44 | 11 | 96 | 2 | 42 | 19 | 0.2 | <5 | 20 |
| 319 | 11103 | Garnet Ck | | pan | tr mag, no visible Au | 57 | 4 | 6 | 0.2 | 53 | 15 | 111 | 4 | 23 | 9 | 0.2 | <5 | 26 |
| 320 | 11095 | Limestone Ck | flt | sel | massive cpy w/ mal and az | 77 | | | 3.3 | 1.41% | <2 | 43 | 2 | 19 | 82 | <0.2 | <5 | 8 |
| 320 | 11096 | Limestone Ck | | pan | | 15 | 5 | 19 | 1 | 108 | 9 | 270 | 10 | 59 | 22 | 1.2 | <5 | 94 |
| 321 | 11073 | Mule Ck | flt | sel | qtz cobble w/ 3% po, 1% cpy, 1% py | 47 | | | 0.6 | 217 | 7 | 14 | <1 | 13 | 11 | <0.2 | <5 | <5 |
| 321 | 11074 | Mule Ck | | sed | | 3 | | | 0.3 | 44 | 11 | 87 | 3 | 35 | 11 | 0.4 | <5 | 39 |
| 321 | 11075 | Mule Ck | | pan | tr mag, 1 fine Au | >10000 | 2 | <5 | 6.4 | 43 | 10 | 160 | 4 | 26 | 9 | 0.2 | <5 | 30 |
| 321 | 11076 | Mule Ck | | pan | 1 v fine Au (?) | 32 | 3 | 6 | 0.6 | 60 | 9 | 101 | 4 | 31 | 11 | 0.3 | <5 | 54 |
| 322 | 11092 | Limestone Ck | otc | sel | Skajit ls w/ 1% diss sulfides | 4 | | | 1.3 | 12 | 5 | 15 | 5 | 9 | 1 | 0.4 | <5 | 142 |
| 322 | 11093 | Limestone Ck | | sed | | 2 | | | 0.7 | 24 | 6 | 42 | 1 | 17 | 7 | <0.2 | <5 | 15 |
| 322 | 11094 | Limestone Ck | | pan | tr fine sulfides (?) | 14 | 3 | 8 | 1.3 | 21 | 2 | 51 | 1 | 5 | 2 | <0.2 | <5 | 15 |
| 323 | 8049 | Wiehl Mtn | rub | sel | qz vein in schist w/ < 1% gn | <5 | | | <5 | | | <200 | 16 | <20 | <10 | <10 | | 6 |
| 324 | 11152 | Brockman Ck | otc | ran | Skajit ls w/ 3% py | 7 | | | 1.0 | 23 | 60 | 84 | 3 | 47 | 6 | 0.3 | <5 | 119 |
| 324 | 11153 | Brockman Ck | | sed | | 8 | | | <0.2 | 27 | 6 | 79 | <1 | 27 | 15 | <0.2 | <5 | 8 |
| 324 | 11154 | Brockman Ck | | pan | 1 v fine Au (?), no mag | 12 | 8 | 7 | <0.2 | 53 | 9 | 84 | 5 | 45 | 17 | <0.2 | <5 | 12 |
| 324 | 11192 | Brockman Ck | otc | rep | graphitic calc schist w/ 2% py | <5 | | | 0.5 | 16 | 8 | 36 | 2 | 14 | 4 | <0.2 | <5 | <5 |
| 325 | 11193 | Brockman Ck | | pan | mod euhedral py | 55 | 8 | 6 | 0.4 | 48 | 10 | 82 | 3 | 39 | 16 | <0.2 | <5 | 20 |
| 326 | 11082 | Brockman Ck | | pan | minor sulfides, from cutbank | 16 | 3 | <5 | 0.7 | 51 | 4 | 141 | 3 | 23 | 10 | <0.2 | <5 | 22 |
| 327 | 11083 | Brockman Ck | | pan | tr sulfides | 12 | 2 | 5 | <0.2 | 37 | 4 | 105 | 3 | 31 | 18 | <0.2 | <5 | 13 |
| 328 | 8034 | Wiehl Mtn | otc | grab | hfls w/ lim, < 1% po, tr cpy | <5 | | | <5 | | | <200 | <2 | 42 | 11 | <10 | | 85 |
| 329 | 8027 | Sukakpak Mtn | otc | sel | stb vein | | | | | | | | | | | | | |
| 329 | 11049 | Sukakpak Mtn | otc | chip | 3.2 ft wide stb and qz vein | 16.14 ppm | | | 6.2 | 63 | 209 | 26 | 1 | <1 | <1 | 3.0 | <5 | 10 |
| 329 | 11111 | Sukakpak Mtn | otc | chip | 2.4 ft-wide qz vein w/ massive Sb | 14.71 ppm | | | 2.3 | 38 | 6 | 44 | 3 | <1 | <1 | 2.2 | <5 | 56 |
| 329 | 11112 | Sukakpak Mtn | flt | sel | massive stb | 47.26 ppm | | | 31.9 | 60 | 4 | 7 | 1 | <1 | <1 | 5.2 | <5 | 16 |
| 329 | 11113 | Sukakpak Mtn | flt | rand | vein qz w/ 30% Sb, Sb alteration | 43.24 ppm | | | 3.1 | 35 | 37 | 49 | 3 | <1 | <1 | 2.5 | <5 | 63 |
| 330 | 8023 | Sukakpak Mtn | otc | grab | gossan zone w/ hem | <57 | | | <14 | | | <600 | 160 | <150 | <10 | <67 | | 3880 |
| 330 | 8024 | Sukakpak Mtn | flt | sel | vein qz w/ stb, val | | | | | | | | | | | | | |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 316 | 11229 | <5 | 0.017 | 3.68 | 698 | <10 | 13 | 19 | 19 | <20 | <20 | 16 | 1.39 | 1.24 | 3.88 | <0.01 | 0.04 | 196 | 7 | 2 | 26 | <1 | <5 | <10 | 0.02 | <1 |
| 316 | 11230 | <5 | 0.011 | 4.11 | 903 | <10 | 43 | 77 | 19 | <20 | <20 | 19 | 1.75 | 1.45 | 0.52 | 0.02 | 0.27 | 28 | 10 | 2 | 26 | <1 | <5 | <10 | 0.03 | <1 |
| 317 | 11077 | 20 | 0.070 | 4.50 | 727 | <10 | 122 | 200 | 35 | <20 | <20 | 12 | 1.95 | 1.17 | 7.73 | 0.11 | 0.53 | 206 | 11 | 2 | 20 | <1 | <5 | <10 | 0.08 | 4 |
| 317 | 11078 | 13 | 0.018 | 3.89 | 1113 | <10 | 87 | 190 | 31 | <20 | <20 | 41 | 1.83 | 1.07 | 7.47 | 0.08 | 0.31 | 250 | 24 | <2 | 14 | <1 | 10 | <10 | 0.09 | 1 |
| 318 | 11097 | 25 | 0.015 | 2.68 | 527 | <10 | 204 | 216 | 36 | <20 | <20 | 15 | 1.76 | 1.32 | >10.00 | 0.10 | 0.49 | 264 | 12 | 2 | 18 | <1 | <5 | <10 | 0.06 | 5 |
| 318 | 11098 | 7 | 0.060 | 6.51 | 1521 | <10 | 78 | 164 | 35 | <20 | <20 | 38 | 2.26 | 0.83 | 8.42 | 0.08 | 0.28 | 266 | 34 | <2 | 13 | <1 | 15 | <10 | 0.11 | 2 |
| 318 | 11099 | <5 | 0.013 | 2.88 | 497 | <10 | 22 | 12 | 13 | <20 | <20 | 11 | 0.82 | 1.43 | 4.97 | <0.01 | 0.03 | 135 | 9 | <2 | 14 | <1 | <5 | <10 | 0.01 | <1 |
| 318 | 11100 | 10 | <0.010 | 3.39 | 833 | <10 | 298 | 271 | 45 | <20 | <20 | 18 | 2.18 | 1.38 | 7.91 | 0.11 | 0.57 | 273 | 19 | 3 | 18 | <1 | 8 | <10 | 0.08 | 2 |
| 318 | 11101 | 11 | 0.029 | 4.50 | 832 | <10 | 158 | 216 | 36 | <20 | <20 | 22 | 1.72 | 1.84 | 8.34 | 0.08 | 0.40 | 254 | 17 | <2 | 13 | <1 | 6 | <10 | 0.1 | 5 |
| 319 | 11102 | <5 | 0.016 | 4.36 | 698 | <10 | 22 | 20 | 17 | <20 | <20 | 23 | 1.27 | 1.15 | 1.79 | <0.01 | 0.06 | 58 | 10 | <2 | 15 | <1 | <5 | <10 | <0.01 | <1 |
| 319 | 11103 | <5 | 0.012 | 3.01 | 832 | <10 | 137 | 253 | 35 | <20 | <20 | 28 | 1.74 | 0.88 | 5.08 | 0.11 | 0.41 | 169 | 15 | 2 | 12 | <1 | 5 | <10 | 0.09 | <1 |
| 320 | 11095 | 109 | 0.131 | 5.46 | 231 | <10 | 23 | 83 | 21 | <20 | <20 | 6 | 0.91 | 0.30 | 1.43 | 0.02 | 0.03 | 125 | 6 | <2 | 2 | <1 | <5 | <10 | 0.2 | 2 |
| 320 | 11096 | 13 | 0.015 | 7.27 | 342 | <10 | 57 | 202 | 77 | <20 | <20 | 5 | 1.92 | 1.57 | >10.00 | 0.06 | 0.61 | 297 | 8 | <2 | 21 | <1 | <5 | <10 | 0.03 | 17 |
| 321 | 11073 | <5 | <0.010 | 2.16 | 1199 | <10 | 4 | 64 | 14 | <20 | <20 | <1 | 1.00 | 0.22 | 9.64 | <0.01 | <0.01 | 167 | 6 | <2 | <1 | <1 | <5 | <10 | 0.11 | <1 |
| 321 | 11074 | <5 | 0.039 | 3.25 | 479 | <10 | 19 | 9 | 11 | <20 | <20 | 17 | 0.73 | 1.10 | 5.09 | <0.01 | 0.06 | 136 | 11 | <2 | 13 | <1 | <5 | <10 | <0.01 | 2 |
| 321 | 11075 | 21 | 0.553 | 3.01 | 644 | <10 | 113 | 167 | 27 | <20 | <20 | 13 | 1.63 | 0.82 | 7.90 | 0.08 | 0.42 | 229 | 10 | 2 | 15 | <1 | <5 | <10 | 0.05 | 7 |
| 321 | 11076 | 89 | 0.032 | 3.30 | 600 | <10 | 148 | 188 | 29 | <20 | 25 | 12 | 1.52 | 0.79 | 8.85 | 0.10 | 0.40 | 256 | 10 | <2 | 12 | <1 | <5 | <10 | 0.05 | 10 |
| 322 | 11092 | <5 | 0.017 | 1.64 | 425 | <10 | 17 | 18 | 8 | <20 | <20 | 3 | 0.09 | 0.37 | >10.00 | <0.01 | 0.04 | 212 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 322 | 11093 | <5 | 0.012 | 2.14 | 425 | <10 | 13 | 9 | 12 | <20 | <20 | 8 | 0.80 | 1.56 | >10.00 | <0.01 | 0.04 | 74 | 7 | <2 | 12 | <1 | <5 | <10 | <0.01 | <1 |
| 322 | 11094 | 10 | 0.015 | 0.72 | 189 | <10 | 16 | 28 | 6 | <20 | <20 | <1 | 0.35 | 1.66 | >10.00 | 0.02 | 0.11 | 127 | 3 | <2 | 3 | <1 | <5 | <10 | <0.01 | <1 |
| 323 | 8049 | 19.0 | | 1.0 | | <20 | 310 | 200 | | <200 | <2 | 32 | | | | 1.80 | | | | | | | 1.9 | 1 | | <500 |
| 324 | 11152 | <5 | 0.532 | 5.87 | 136 | <10 | 4 | 12 | 2 | <20 | <20 | <1 | 0.07 | 0.25 | >10.00 | 0.01 | 0.05 | 117 | 5 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 324 | 11153 | <5 | 0.025 | 4.28 | 1296 | <10 | 9 | 18 | 26 | <20 | <20 | 11 | 1.49 | 1.01 | 0.87 | <0.01 | 0.04 | 23 | 7 | 3 | 19 | <1 | <5 | <10 | <0.01 | <1 |
| 324 | 11154 | <5 | 0.033 | 6.42 | 1336 | <10 | 120 | 523 | 68 | <20 | <20 | 12 | 2.91 | 1.40 | 3.21 | 0.12 | 0.78 | 67 | 8 | 4 | 22 | <1 | 8 | <10 | 0.02 | <1 |
| 324 | 11192 | <5 | 0.016 | 1.89 | 701 | <10 | 29 | 55 | 9 | <20 | <20 | 11 | 0.86 | 0.64 | >10.00 | 0.04 | 0.15 | 366 | 14 | <2 | 11 | <1 | <5 | <10 | <0.01 | 4 |
| 325 | 11193 | <5 | 0.072 | 5.38 | 927 | <10 | 67 | 257 | 38 | <20 | <20 | 6 | 1.87 | 1.10 | 8.66 | 0.06 | 0.41 | 94 | 6 | 2 | 18 | <1 | <5 | <10 | <0.01 | 2 |
| 326 | 11082 | 6 | 0.030 | 3.51 | 668 | <10 | 97 | 116 | 43 | <20 | <20 | 7 | 2.07 | 1.93 | >10.00 | 0.07 | 0.54 | 101 | 6 | 3 | 18 | <1 | 6 | <10 | 0.02 | 2 |
| 327 | 11083 | 5 | 0.011 | 5.30 | 1640 | <10 | 71 | 167 | 54 | <20 | <20 | 10 | 2.55 | 1.46 | 4.28 | 0.08 | 0.52 | 61 | 6 | 3 | 30 | <1 | 7 | <10 | 0.03 | <1 |
| 328 | 8034 | 220.0 | | 5.6 | | <20 | <100 | 230 | | <200 | 2 | 8 | | | | 0.21 | | | | | | | 22.0 | <1 | | <500 |
| 329 | 8027 | 48.87% | | | | | | | | | | | | | | | | | | | | | | | | |
| 329 | 11049 | 40.25% | 1.180 | 0.14 | 52 | 10 | 3 | 82 | <1 | <20 | 44 | <1 | 0.01 | <0.01 | 1.61 | <0.01 | <0.01 | 26 | 1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 329 | 11111 | 14.33% | 0.420 | 0.30 | 87 | <10 | 9 | 192 | 1 | <20 | 27 | <1 | 0.03 | 0.02 | 3.09 | <0.01 | 0.02 | 84 | 3 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 329 | 11112 | 65.21% | 2.130 | 0.04 | 8 | 14 | 2 | 24 | <1 | <20 | 69 | <1 | 0.02 | <0.01 | 0.02 | <0.01 | <0.01 | 2 | <1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 329 | 11113 | 18.66% | 0.640 | 0.29 | 31 | <10 | 5 | 217 | 1 | <20 | 32 | <1 | 0.03 | <0.01 | 0.30 | <0.01 | 0.02 | 7 | 1 | <2 | <1 | <1 | <5 | <10 | <0.01 | <1 |
| 330 | 8023 | 2000.0 | | >10.0 | | <290 | <530 | <260 | | <2400 | <8 | 7 | | | | <0.27 | | | | | | | <1.0 | <2 | | <1800 |
| 330 | 8024 | 30.23% | | | | | | | | | | | | | | | | | | | | | | | | |

## Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 330 | 8025 | Sukakpak Mtn | flt | sel | vein qz w/ 1-2% stb | <440 | | | <85 | | | < 3500 | <200 | <520 | <85 | <450 | | 2010 |
| 330 | 8026 | Sukakpak Mtn | flt | grab | massive stb boulders | | | | | | | | | | | | | |
| 331 | 11114 | Whiel Mtn | | sed | | 2 | | | 0.6 | 35 | 8 | 47 | 1 | 21 | 10 | <0.2 | <5 | 15 |
| 331 | 11115 | Whiel Mtn. | | pan | minor mag | 12 | <1 | 9 | 1.1 | 32 | 11 | 63 | 1 | 14 | 5 | <0.2 | <5 | 12 |
| 332 | 11231 | Linda Creek Pass | otc | ran | bio-qz schist near aero-mag anomaly | <5 | | | <0.2 | 14 | <2 | 39 | <1 | 20 | 16 | <0.2 | <5 | 8 |
| 333 | 11079 | Emery Ck | | sed | | 4 | | | 0.3 | 36 | 5 | 69 | 2 | 30 | 16 | <0.2 | <5 | 16 |
| 333 | 11080 | Emery Ck | | pan | minor rusty sulfides | 65 | 4 | <5 | 0.5 | 40 | 9 | 92 | 4 | 30 | 12 | <0.2 | <5 | 45 |
| 333 | 11081 | Emery Ck | | pan | from upper bench (clay) | 16 | 6 | 6 | 0.5 | 61 | 12 | 86 | 3 | 35 | 17 | 0.2 | <5 | 41 |
| 334 | 10740 | Gold Ck | flt | grab | diorite | <5 | | | <0.2 | 60 | <2 | 41 | 1 | 71 | 25 | <0.2 | <5 | <5 |
| 335 | 11293 | Gold Ck | | slu | from 500 cubic yards of gravel | 0.17 ppm | <70 | <70 | 0.4 | 37 | 221 | 59 | 4 | 32 | 15 | <0.2 | <5 | 1399 |
| 336 | 10697 | Linda Ck | | slu | no mag, v fine Au visible | 88713 ppm | | | 8914.6 | 1237 | >10000 | 275 | 3 | 174 | 291 | <0.2 | 100 | 6366 |
| 337 | 11257 | Sheep Ck | | sed | | <5 | | | <0.2 | 26 | 9 | 67 | 2 | 22 | 12 | <0.2 | <5 | 18 |
| 337 | 11258 | Sheep Ck | | pan | tr sulfides, from tailings | 446 | 6 | 6 | <0.2 | 30 | 45 | 64 | 3 | 29 | 11 | <0.2 | <5 | 19 |
| 338 | 11341 | Magnet Ck | | sed | | <5 | | | <0.2 | 17 | 8 | 56 | <1 | 19 | 10 | <0.2 | <5 | 8 |
| 338 | 11342 | Magnet Ck | | pan | 1 coarse, 1 fine, 1 v fine Au | 267.41 ppm | <5 | 3 | 12.8 | 23 | 9 | 48 | 2 | 27 | 10 | <0.2 | <5 | 11 |
| 339 | 11294 | Gold Ck | | slu | from 300 cubic yards of gravel | | <70 | <70 | 2.1 | 54 | 339 | 101 | 2 | 45 | 31 | <0.2 | <5 | 189 |
| 340 | 11405 | Gold Ck | | slu | from 200 cyd of sluiced gravel | | 22 | 12 | 96.2 | 282 | 8361 | 120 | 9 | 140 | 166 | 4.8 | 47 | 2570 |
| 341 | 11255 | Glacier River trib. | | sed | | <5 | | | <0.2 | 32 | 9 | 74 | <1 | 33 | 15 | <0.2 | <5 | 13 |
| 341 | 11256 | Glacier River trib. | | pan | no visible Au, from bedrock | 69 | 7 | 6 | <0.2 | 57 | 7 | 85 | 2 | 38 | 21 | <0.2 | <5 | 16 |
| 342 | 11198 | Last Chance 1-2 | | sed | | <5 | | | <0.2 | 28 | 10 | 85 | 1 | 34 | 11 | 0.3 | <5 | 15 |
| 342 | 11199 | Last Chance 1-2 | | pan | | 16 | 5 | 6 | <0.2 | 21 | 7 | 69 | 4 | 30 | 8 | <0.2 | <5 | 10 |
| 343 | 11196 | Billy Glen Ck | | sed | | <5 | | | <0.2 | 34 | 12 | 93 | <1 | 26 | 18 | <0.2 | <5 | 15 |
| 343 | 11197 | Billy Glen Ck | | pan | no visible Au, from bedrock | 13 | 9 | 6 | <0.2 | 36 | 6 | 106 | 3 | 34 | 15 | <0.2 | <5 | 11 |
| 344 | 11272 | Lake Ck | | sed | | <5 | | | 0.2 | 23 | 9 | 56 | 2 | 21 | 9 | 0.3 | <5 | 14 |
| 344 | 11273 | Lake Ck | | pan | v fine py and mag | 24 | 10 | 6 | 0.3 | 22 | 8 | 57 | 3 | 28 | 8 | 0.2 | <5 | 13 |
| 344 | 11274 | Lake Ck | flt | grab | greenstone w/ 1% euhedral mag | 6 | | | <0.2 | 17 | <2 | 87 | 1 | 28 | 31 | <0.2 | <5 | <5 |
| 345 | 11237 | Lake Ck | | pan | 2 fine Au, minor mag and py | 61.36 ppm | 5 | 5 | 4.8 | 35 | 10 | 85 | 4 | 34 | 13 | 0.4 | <5 | 33 |
| 345 | 11238 | Lake Ck | | sed | | <5 | | | 0.4 | 26 | 8 | 48 | 1 | 21 | 8 | 0.3 | <5 | 16 |
| 345 | 11239 | Lake Ck | | pan | 1 fine and 1 v fine Au, tr mag | 94.28 ppm | 7 | 5 | 6.6 | 35 | 11 | 66 | 3 | 31 | 11 | 0.4 | <5 | 32 |
| 345 | 11269 | Lake Ck | flt | sel | black phyllite w/ 1% py | 9 | | | 0.7 | 75 | 17 | 121 | 11 | 54 | 11 | 3.1 | <5 | 37 |
| 345 | 11270 | Lake Ck | | plac | 12 coarse, 28 fine, 28 v fine Au | 0.067 oz/cyd | <70 | <70 | 1.3 | 86 | 203 | 181 | 4 | 49 | 30 | 0.7 | <5 | 215 |
| 345 | 11271 | Lake Ck | flt | sel | black phyllite w <1% py | <5 | | | 1.3 | 33 | 13 | 80 | 10 | 21 | 3 | 1.4 | <5 | 22 |
| 346 | 11244 | Holy Moses Ck | | sed | | <5 | | | <0.2 | 31 | 9 | 96 | 2 | 34 | 14 | 0.3 | <5 | 18 |
| 346 | 11245 | Holy Moses Ck | | pan | | 193 | 9 | 8 | <0.2 | 19 | 8 | 73 | 3 | 36 | 10 | 0.3 | <5 | 11 |
| 347 | 11246 | Shamrock Ck | | sed | | <5 | | | <0.2 | 40 | 17 | 134 | 2 | 42 | 15 | 0.8 | <5 | 29 |
| 348 | 11252 | Wakeup Ck | tail | sel | phyllite w/ 1% diss py | <5 | | | 0.9 | 96 | 6 | 32 | 4 | 13 | 3 | <0.2 | <5 | 14 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 330 | 8025 | 2.54% | | 5.3 | | <2800 | <3700 | <2500 | | <18000 | <50 | 27 | | | | <3.00 | | | | | | | <7.2 | <11 | | |
| 330 | 8026 | 62.52% | | | | | | | | | | | | | | | | | | | | | | | | |
| 331 | 11114 | <5 | 0.026 | 2.19 | 469 | <10 | 20 | 18 | 19 | <20 | <20 | 9 | 0.97 | 1.40 | >10.00 | <0.01 | 0.05 | 61 | 6 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 331 | 11115 | <5 | 0.014 | 1.67 | 326 | <10 | 47 | 48 | 20 | <20 | <20 | 1 | 1.02 | 1.51 | >10.00 | 0.05 | 0.18 | 123 | 4 | <2 | 7 | <1 | <5 | <10 | 0.04 | <1 |
| 332 | 11231 | <5 | 0.012 | 4.44 | 965 | <10 | 59 | 64 | 79 | <20 | <20 | 13 | 2.08 | 1.46 | 1.49 | 0.03 | 0.10 | 80 | 9 | 5 | 15 | <1 | 7 | <10 | 0.05 | <1 |
| 333 | 11079 | 6 | 0.035 | 3.97 | 1084 | <10 | 23 | 18 | 24 | <20 | <20 | 7 | 1.22 | 1.31 | 3.96 | <0.01 | 0.06 | 86 | 6 | <2 | 17 | <1 | <5 | <10 | <0.01 | <1 |
| 333 | 11080 | 15 | 0.050 | 4.22 | 1155 | <10 | 85 | 190 | 36 | <20 | <20 | 4 | 1.63 | 1.46 | 6.66 | 0.07 | 0.39 | 113 | 6 | <2 | 16 | <1 | <5 | <10 | 0.02 | <1 |
| 333 | 11081 | 17 | 0.058 | 4.28 | 1170 | <10 | 62 | 178 | 30 | <20 | <20 | 4 | 1.31 | 1.15 | 7.24 | 0.06 | 0.31 | 132 | 7 | <2 | 13 | <1 | <5 | <10 | 0.02 | <1 |
| 334 | 10740 | 19 | 0.014 | 3.73 | 535 | <10 | 7 | 91 | 50 | <20 | <20 | 2 | 2.74 | 2.30 | 1.10 | 0.03 | 0.07 | 17 | 8 | <2 | 15 | 3 | <5 | <10 | 0.24 | 1 |
| 335 | 11293 | 56 | 0.150 | 4.55 | 827 | <10 | 48 | 120 | 25 | <20 | <20 | 6 | 1.00 | 0.97 | 5.08 | 0.02 | 0.13 | 116 | 7 | <2 | 12 | <1 | <5 | <10 | 0.02 | <1 |
| 336 | 10697 | 91 | IS | >10.00 | 2601 | 31 | 14 | 120 | 52 | 247 | 979 | 51 | 0.37 | 0.5 | 1.43 | <0.01 | 0.02 | 52 | 18 | <2 | 3 | 8 | <5 | <10 | 0.08 | 9 |
| 337 | 11257 | <5 | 0.024 | 3.20 | 900 | <10 | 18 | 14 | 17 | <20 | <20 | 12 | 0.91 | 0.68 | 1.12 | <0.01 | 0.04 | 36 | 7 | <2 | 12 | <1 | <5 | <10 | <0.01 | <1 |
| 337 | 11258 | <5 | 0.035 | 3.56 | 1090 | <10 | 74 | 298 | 36 | <20 | <20 | 8 | 1.58 | 1.01 | 4.41 | 0.08 | 0.35 | 140 | 7 | 2 | 15 | <1 | <5 | <10 | 0.02 | <1 |
| 338 | 11341 | <5 | 0.014 | 2.75 | 666 | <10 | 18 | 14 | 20 | <20 | <20 | 14 | 0.92 | 0.60 | 0.43 | <0.01 | 0.04 | 16 | 6 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 338 | 11342 | <5 | 2.725 | 3.04 | 770 | <10 | 49 | 384 | 29 | <20 | <20 | 9 | 1.32 | 0.64 | 1.15 | 0.13 | 0.21 | 33 | 7 | <2 | 12 | <1 | <5 | <10 | 0.04 | <1 |
| 339 | 11294 | <5 | 0.140 | 6.73 | 1162 | <10 | 40 | 125 | 31 | <20 | <20 | 5 | 1.14 | 1.11 | 3.27 | 0.02 | 0.15 | 86 | 7 | <2 | 14 | <1 | <5 | <10 | 0.01 | <1 |
| 340 | 11405 | 95 | 5.940 | >10.00 | 916 | 16 | 3 | 89 | 49 | 22 | 1066 | 62 | 0.40 | 0.28 | 1.42 | 0.01 | 0.05 | 39 | 21 | <2 | 4 | <1 | <5 | <10 | 0.10 | 4 |
| 341 | 11255 | <5 | 0.022 | 3.48 | 904 | <10 | 19 | 24 | 23 | <20 | <20 | 16 | 1.35 | 1.06 | 0.75 | <0.01 | 0.06 | 41 | 11 | 2 | 15 | <1 | <5 | <10 | 0.01 | <1 |
| 341 | 11256 | <5 | 0.010 | 4.98 | 1207 | <10 | 81 | 266 | 55 | <20 | <20 | 21 | 2.84 | 1.59 | 0.69 | 0.10 | 0.69 | 41 | 15 | 5 | 19 | <1 | 6 | <10 | 0.07 | <1 |
| 342 | 11198 | <5 | 0.022 | 2.68 | 856 | <10 | 41 | 14 | 17 | <20 | <20 | 12 | 1.03 | 0.67 | 1.73 | <0.01 | 0.04 | 36 | 8 | <2 | 14 | <1 | <5 | <10 | <0.01 | <1 |
| 342 | 11199 | <5 | 0.022 | 3.12 | 604 | <10 | 105 | 476 | 34 | <20 | <20 | 8 | 1.53 | 1.09 | 3.66 | 0.05 | 0.27 | 72 | 6 | 2 | 16 | <1 | <5 | <10 | 0.03 | 3 |
| 343 | 11196 | <5 | 0.036 | 4.02 | 2479 | <10 | 77 | 20 | 32 | <20 | <20 | 19 | 1.59 | 0.86 | 0.32 | <0.01 | 0.08 | 14 | 10 | 3 | 18 | <1 | <5 | <10 | <0.01 | <1 |
| 343 | 11197 | <5 | 0.020 | 5.01 | 1600 | <10 | 84 | 473 | 65 | <20 | <20 | 10 | 2.78 | 1.30 | 0.36 | 0.16 | 0.62 | 22 | 12 | 5 | 17 | <1 | 9 | <10 | 0.09 | <1 |
| 344 | 11272 | <5 | 0.013 | 1.97 | 511 | <10 | 26 | 8 | 12 | <20 | <20 | 7 | 0.64 | 0.93 | 5.71 | <0.01 | 0.04 | 96 | 6 | <2 | 9 | <1 | <5 | <10 | <0.01 | <1 |
| 344 | 11273 | <5 | 0.018 | 2.75 | 633 | <10 | 180 | 306 | 40 | <20 | <20 | 5 | 1.47 | 1.41 | 7.50 | 0.05 | 0.32 | 153 | 7 | <2 | 14 | <1 | <5 | <10 | 0.02 | 1 |
| 344 | 11274 | <5 | <0.010 | 5.99 | 793 | <10 | <1 | 23 | 83 | <20 | <20 | 4 | 3.09 | 2.85 | 1.17 | 0.02 | <0.01 | 67 | 5 | 5 | 19 | <1 | <5 | <10 | 0.26 | <1 |
| 345 | 11237 | <5 | 0.229 | 3.81 | 638 | <10 | 159 | 279 | 37 | <20 | <20 | 6 | 1.32 | 1.33 | 8.01 | 0.04 | 0.27 | 149 | 7 | <2 | 13 | <1 | <5 | <10 | 0.03 | 2 |
| 345 | 11238 | <5 | 0.014 | 1.74 | 488 | <10 | 22 | 6 | 9 | <20 | <20 | 6 | 0.45 | 0.84 | 6.88 | <0.01 | 0.03 | 116 | 6 | <2 | 6 | <1 | <5 | <10 | <0.01 | <1 |
| 345 | 11239 | <5 | 0.188 | 3.24 | 667 | <10 | 160 | 233 | 36 | <20 | <20 | 6 | 1.12 | 1.23 | 8.78 | 0.04 | 0.22 | 154 | 8 | <2 | 11 | <1 | <5 | <10 | 0.05 | 2 |
| 345 | 11269 | 5 | 0.081 | 2.07 | 125 | <10 | 71 | 87 | 37 | <20 | <20 | 7 | 0.28 | 1.15 | 5.02 | 0.01 | 0.11 | 214 | 9 | <2 | 2 | <1 | <5 | <10 | <0.01 | 9 |
| 345 | 11270 | <5 | 0.240 | 7.24 | 609 | <10 | 24 | 150 | 43 | 111 | 185 | 5 | 0.86 | 1.16 | 7.30 | 0.02 | 0.11 | 114 | 7 | <2 | 10 | <1 | <5 | <10 | 0.04 | 1 |
| 345 | 11271 | 9 | 0.032 | 0.98 | 158 | <10 | 316 | 47 | 26 | <20 | <20 | 3 | 0.17 | 0.99 | >10.00 | <0.01 | 0.07 | 626 | 8 | <2 | 2 | <1 | <5 | <10 | <0.01 | 4 |
| 346 | 11244 | <5 | 0.014 | 3.83 | 784 | <10 | 30 | 24 | 23 | <20 | <20 | 17 | 1.53 | 1.13 | 1.34 | <0.01 | 0.03 | 25 | 10 | 3 | 19 | <1 | <5 | <10 | <0.01 | <1 |
| 346 | 11245 | <5 | 0.013 | 3.24 | 684 | <10 | 131 | 402 | 37 | <20 | <20 | 10 | 1.82 | 1.35 | 3.92 | 0.09 | 0.29 | 81 | 7 | 2 | 20 | <1 | <5 | <10 | 0.04 | <1 |
| 347 | 11246 | <5 | 0.027 | 3.79 | 725 | <10 | 50 | 21 | 25 | <20 | <20 | 18 | 1.51 | 1.22 | 1.08 | <0.01 | 0.06 | 28 | 12 | 2 | 21 | <1 | <5 | <10 | 0.02 | <1 |
| 348 | 11252 | <5 | 0.012 | 1.24 | 148 | <10 | 115 | 15 | 11 | <20 | <20 | 3 | 0.25 | 0.45 | >10.00 | <0.01 | 0.05 | 1694 | 11 | <2 | 4 | <1 | <5 | <10 | <0.01 | 3 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 348 | 11253 | Wakeup Ck | | sed | | <5 | | | <0.2 | 29 | 10 | 120 | 1 | 31 | 16 | 0.5 | <5 | 142 |
| 348 | 11254 | Wakeup Ck | | pan | | 95 | 9 | 6 | <0.2 | 23 | 7 | 65 | 3 | 36 | 10 | 2.2 | <5 | 932 |
| 349 | 11240 | Jim Pup | | sed | | <5 | | | <0.2 | 26 | 10 | 82 | 1 | 29 | 12 | 0.3 | <5 | 19 |
| 349 | 11241 | Jim Pup | | pan | 1 fine Au, tr mag | 22.59 ppm | 8 | 7 | 0.7 | 38 | 9 | 100 | 4 | 40 | 14 | <0.2 | <5 | 18 |
| 349 | 11242 | Jim Pup | flt | sel | blk hfls w/ 2% diss po | 7 | | | <0.2 | 25 | 3 | 90 | 10 | 34 | 7 | 0.3 | <5 | 34 |
| 350 | 11202 | Califorina Ck | | sed | | <5 | | | <0.2 | 37 | 13 | 107 | 2 | 34 | 21 | <0.2 | <5 | 25 |
| 350 | 11203 | Califorina Ck | | pan | from cutbank | 23 | 11 | 5 | <0.2 | 41 | 12 | 114 | 5 | 54 | 14 | 0.4 | <5 | 21 |
| 351 | 11200 | Califorina Ck | flt | sel | granite w/ <1% po | 8 | | | <0.2 | 55 | 7 | 101 | 1 | 40 | 13 | 0.7 | <5 | 9 |
| 351 | 11201 | Califorina Ck | | pan | tr mag | 7 | 7 | 5 | <0.2 | 46 | 19 | 109 | 4 | 50 | 14 | 0.5 | <5 | 48 |
| 352 | 11288 | Sawlog Ck | | sed | | <5 | | | <0.2 | 28 | 10 | 95 | 2 | 33 | 17 | 0.4 | <5 | 11 |
| 352 | 11289 | Sawlog Ck | | pan | no visible Au | 18 | 8 | 5 | <0.2 | 28 | 8 | 95 | 5 | 47 | 20 | 0.8 | <5 | 10 |
| 353 | 11250 | Dennys Gulch | | sed | | 8 | | | <0.2 | 30 | 9 | 93 | 2 | 28 | 12 | 0.2 | <5 | 12 |
| 353 | 11287 | Dennys Gulch | | pan | | 936 | 13 | 7 | 0.3 | 55 | 17 | 137 | 5 | 60 | 18 | 0.5 | <5 | 30 |
| 354 | 11248 | Dennys Gulch | | pan | 2 coarse angular Au pieces | 235.11 ppm | 10 | 10 | 21.2 | 94 | 133 | 222 | 4 | 110 | 35 | 0.8 | <5 | 39 |
| 354 | 11249 | Dennys Gulch | otc | rep | qz vein w/ abu lim | <5 | | | <0.2 | 62 | 5 | 163 | 3 | 38 | 7 | <0.2 | <5 | 7 |
| 354 | 11290 | Dennys Gulch | otc | sel | qz vein w/ cpy (?), abu lim | <5 | | | <0.2 | 46 | <2 | 124 | <1 | 44 | 13 | 0.5 | <5 | <5 |
| 355 | 11291 | Minnie Ck | | sed | | 7 | | | <0.2 | 66 | 13 | 125 | 1 | 57 | 23 | 0.5 | <5 | 25 |
| 355 | 11292 | Minnie Ck | | pan | 1 v fine Au, minor sulfides | 6899 | 9 | 6 | 0.6 | 65 | 12 | 138 | 2 | 68 | 24 | 0.6 | <5 | 27 |
| 355 | 11332 | Minnie Ck | | sed | | 18 | | | <0.2 | 108 | 16 | 161 | 2 | 75 | 29 | 0.4 | <5 | 13 |
| 355 | 11333 | Minnie Ck | | pan | minor sulfides | 44 | 8 | 5 | <0.2 | 61 | 12 | 125 | 3 | 59 | 17 | 0.3 | <5 | 10 |
| 355 | 11334 | Minnie Ck | flt | sel | blk mica schist w/ 1% py | <5 | | | <0.2 | 66 | 3 | 120 | <1 | 61 | 21 | <0.2 | <5 | 15 |
| 355 | 11343 | Minnie Ck | flt | sel | orthogneiss or meta granite w/ po | <5 | | | <0.2 | 20 | 4 | 92 | <1 | 34 | 10 | 0.3 | <5 | 7 |
| 356 | 11295 | Minnie Ck | otc | sel | qz nodule w/ tr hem (?) | <5 | | | 0.9 | 2 | 5 | 725 | 1 | 5 | <1 | 5.4 | <5 | 8 |
| 356 | 11296 | Minnie Ck | | sed | | 60 | | | <0.2 | 37 | 10 | 103 | 2 | 60 | 20 | 0.6 | <5 | 31 |
| 356 | 11297 | Minnie Ck | | pan | no visible Au | 36 | 7 | 6 | <0.2 | 17 | 9 | 71 | 3 | 36 | 9 | 0.2 | <5 | 11 |
| 357 | 11298 | Minnie Ck | | sed | | <5 | | | <0.2 | 62 | 11 | 135 | 1 | 90 | 36 | 1.5 | <5 | 15 |
| 357 | 11299 | Minnie Ck | | pan | minor v fine py and po | 19 | 7 | 7 | <0.2 | 43 | 9 | 140 | 4 | 94 | 36 | 1.0 | <5 | 30 |
| 357 | 11300 | Minnie Ck | flt | sel | marble xcut by qz w/ py, po (?) | <5 | | | 1.1 | 3 | 9 | 15 | <1 | 3 | <1 | <0.2 | <5 | <5 |
| 357 | 11331 | Minnie Ck | otc | ran | qz-mica schist w/ 1% py | <5 | | | 0.2 | 24 | 9 | 40 | 1 | 33 | 10 | <0.2 | <5 | 10 |
| 358 | 10750 | Howard Ck | flt | sel | qz lense in schist w/ lim | <5 | | | <0.2 | 9 | 15 | 24 | 5 | 22 | 3 | <0.2 | <5 | 6 |
| 358 | 10751 | Howard Ck | flt | sel | vein qz w/ ank (?), lim | <5 | | | <0.2 | 19 | 41 | 22 | 2 | 15 | 4 | <0.2 | <5 | <5 |
| 358 | 10752 | Howard Ck | rub | sel | calc-qz-mica schist w/ lim | <5 | | | <0.2 | 21 | 8 | 75 | 2 | 51 | 23 | 0.6 | <5 | 32 |
| 358 | 10753 | Howard Ck | otc | rep | marble w/ minor lt-green alt | <5 | | | 2.1 | <1 | <2 | 1 | <1 | <1 | <1 | <0.2 | <5 | <5 |
| 358 | 10754 | Howard Ck | rub | sel | marble w/ hem (?) | <5 | | | 1.9 | <1 | <2 | 6 | 1 | 2 | <1 | <0.2 | <5 | <5 |
| 359 | 10760 | Howard Ck | flt | sel | qz-mica schist w/ hem | 19 | | | <0.2 | 80 | 16 | 86 | 2 | 47 | 13 | 0.8 | <5 | 8 |
| 360 | 10755 | Howard Ck | rub | sel | marble w/ lim, lt-green alt | <5 | | | 1.9 | <1 | 5 | 9 | <1 | <1 | <1 | <0.2 | <5 | <5 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 348 | 11253 | <5 | 0.089 | 7.96 | 5928 | <10 | 178 | 14 | 19 | <20 | <20 | 10 | 0.97 | 0.73 | 1.78 | <0.01 | 0.04 | 54 | 9 | <2 | 11 | <1 | <5 | <10 | <0.01 | <1 |
| 348 | 11254 | <5 | 0.066 | 3.47 | 958 | <10 | 153 | 412 | 36 | <20 | <20 | 8 | 1.46 | 1.15 | 2.77 | 0.05 | 0.28 | 60 | 6 | 2 | 13 | <1 | <5 | <10 | 0.02 | <1 |
| 349 | 11240 | <5 | 0.016 | 3.04 | 606 | <10 | 32 | 19 | 21 | <20 | <20 | 14 | 1.22 | 0.84 | 0.89 | <0.01 | 0.03 | 20 | 8 | <2 | 14 | <1 | <5 | <10 | 0.01 | <1 |
| 349 | 11241 | <5 | 0.057 | 4.13 | 887 | <10 | 151 | 489 | 54 | <20 | <20 | 17 | 2.64 | 1.10 | 1.17 | 0.20 | 0.61 | 39 | 11 | 4 | 18 | <1 | 6 | <10 | 0.06 | 1 |
| 349 | 11242 | <5 | <0.010 | 2.34 | 964 | <10 | 37 | 48 | 29 | 53 | <20 | 11 | 1.08 | 0.49 | 4.04 | 0.01 | <0.01 | 261 | 7 | 4 | 14 | <1 | <5 | <10 | 0.09 | <1 |
| 350 | 11202 | <5 | 0.033 | 5.00 | 736 | <10 | 42 | 26 | 25 | <20 | <20 | 28 | 1.59 | 1.01 | 0.63 | <0.01 | 0.04 | 26 | 11 | 3 | 19 | <1 | <5 | <10 | <0.01 | <1 |
| 350 | 11203 | <5 | 0.011 | 4.52 | 505 | <10 | 196 | 469 | 53 | <20 | <20 | 21 | 2.76 | 1.23 | 0.83 | 0.12 | 0.56 | 55 | 13 | 4 | 28 | <1 | <5 | <10 | 0.06 | 8 |
| 351 | 11200 | <5 | 0.015 | 3.65 | 720 | <10 | 13 | 86 | 28 | <20 | <20 | 16 | 1.44 | 0.70 | 1.73 | 0.05 | 0.03 | 67 | 12 | 2 | 22 | <1 | <5 | <10 | 0.04 | 2 |
| 351 | 11201 | <5 | 0.019 | 4.19 | 485 | <10 | 123 | 359 | 39 | <20 | <20 | 17 | 2.08 | 1.05 | 4.26 | 0.09 | 0.37 | 177 | 14 | 3 | 22 | <1 | <5 | <10 | 0.04 | 7 |
| 352 | 11288 | <5 | 0.027 | 2.92 | 675 | <10 | 87 | 24 | 28 | <20 | <20 | 14 | 1.26 | 0.68 | 0.26 | <0.01 | 0.04 | 16 | 7 | 2 | 20 | <1 | <5 | <10 | 0.02 | <1 |
| 352 | 11289 | <5 | 0.012 | 4.17 | 1864 | <10 | 274 | 629 | 46 | <20 | <20 | 11 | 2.00 | 0.71 | 0.70 | 0.07 | 0.31 | 30 | 17 | 2 | 20 | <1 | 8 | <10 | 0.05 | <1 |
| 353 | 11250 | <5 | 0.045 | 3.53 | 437 | <10 | 52 | 21 | 30 | <20 | <20 | 20 | 1.22 | 0.64 | 0.23 | <0.01 | 0.03 | 15 | 8 | 2 | 18 | <1 | <5 | <10 | 0.02 | <1 |
| 353 | 11287 | <5 | 0.165 | 6.69 | 955 | <10 | 266 | 424 | 68 | <20 | <20 | 30 | 2.66 | 0.70 | 0.60 | 0.11 | 0.50 | 51 | 15 | 3 | 26 | <1 | 6 | <10 | 0.06 | 8 |
| 354 | 11248 | <5 | 0.482 | 8.56 | 690 | <10 | 116 | 383 | 55 | 93 | <20 | 46 | 2.42 | 0.63 | 0.72 | 0.10 | 0.45 | 46 | 18 | <2 | 28 | <1 | <5 | <10 | 0.03 | 11 |
| 354 | 11249 | <5 | 0.026 | 7.52 | 154 | <10 | 6 | 199 | 84 | <20 | <20 | 8 | 1.94 | 1.24 | 0.05 | 0.02 | 0.01 | 2 | 8 | <2 | 34 | <1 | 10 | <10 | <0.01 | <1 |
| 354 | 11290 | <5 | 0.026 | 3.84 | 376 | <10 | 40 | 155 | 39 | <20 | <20 | 2 | 1.88 | 1.45 | 0.44 | 0.02 | 0.04 | 11 | 3 | <2 | 44 | <1 | <5 | <10 | <0.01 | <1 |
| 355 | 11291 | <5 | 0.011 | 4.39 | 496 | <10 | 22 | 19 | 21 | <20 | <20 | 26 | 1.48 | 0.96 | 1.86 | <0.01 | 0.04 | 67 | 16 | 2 | 29 | <1 | <5 | <10 | <0.01 | <1 |
| 355 | 11292 | <5 | 0.023 | 5.45 | 661 | <10 | 108 | 273 | 40 | <20 | <20 | 20 | 2.48 | 1.45 | 2.26 | 0.11 | 0.48 | 89 | 13 | 3 | 32 | <1 | <5 | <10 | 0.02 | 4 |
| 355 | 11332 | <5 | <0.010 | 4.84 | 593 | <10 | 21 | 24 | 29 | <20 | <20 | 34 | 1.93 | 0.91 | 0.64 | <0.01 | 0.04 | 29 | 25 | 3 | 41 | <1 | <5 | <10 | 0.01 | <1 |
| 355 | 11333 | <5 | 0.040 | 5.10 | 713 | <10 | 106 | 251 | 47 | <20 | <20 | 17 | 2.59 | 1.09 | 1.66 | 0.09 | 0.34 | 69 | 18 | 4 | 39 | <1 | <5 | <10 | 0.07 | 7 |
| 355 | 11334 | <5 | 0.018 | 4.09 | 218 | <10 | 102 | 47 | 31 | <20 | <20 | 32 | 2.13 | 0.90 | 0.26 | 0.05 | 0.32 | 20 | 16 | 3 | 38 | <1 | <5 | <10 | 0.07 | 8 |
| 355 | 11343 | <5 | <0.010 | 3.31 | 404 | <10 | 35 | 62 | 30 | <20 | <20 | 10 | 1.63 | 0.74 | 1.09 | 0.05 | 0.10 | 22 | 10 | 2 | 32 | <1 | <5 | <10 | 0.03 | 3 |
| 356 | 11295 | <5 | 0.127 | 0.70 | 134 | <10 | 27 | 18 | 2 | <20 | <20 | <1 | 0.07 | 1.10 | >10.00 | <0.01 | 0.04 | 819 | 5 | <2 | 1 | <1 | <5 | <10 | <0.01 | <1 |
| 356 | 11296 | <5 | 0.029 | 3.46 | 619 | <10 | 41 | 20 | 22 | <20 | <20 | 21 | 1.51 | 1.35 | 2.28 | <0.01 | 0.04 | 56 | 14 | 2 | 28 | <1 | <5 | <10 | 0.01 | <1 |
| 356 | 11297 | <5 | 0.012 | 3.10 | 504 | <10 | 117 | 351 | 35 | <20 | <20 | 10 | 1.97 | 1.05 | 3.93 | 0.15 | 0.32 | 122 | 9 | 3 | 25 | <1 | <5 | <10 | 0.06 | 5 |
| 357 | 11298 | <5 | 0.019 | 3.77 | 770 | <10 | 40 | 15 | 15 | <20 | <20 | 20 | 1.04 | 0.85 | 0.98 | <0.01 | 0.04 | 39 | 15 | <2 | 19 | <1 | <5 | <10 | <0.01 | <1 |
| 357 | 11299 | <5 | 0.014 | 5.34 | 798 | <10 | 178 | 459 | 57 | <20 | <20 | 18 | 3.08 | 1.09 | 0.69 | 0.21 | 0.60 | 54 | 11 | 5 | 37 | <1 | <5 | <10 | 0.04 | 7 |
| 357 | 11300 | <5 | <0.010 | 0.50 | 93 | <10 | 11 | 24 | 3 | <20 | <20 | <1 | 0.09 | 1.46 | >10.00 | <0.01 | 0.04 | 1036 | 4 | <2 | 2 | <1 | <5 | <10 | <0.01 | <1 |
| 357 | 11331 | <5 | <0.010 | 2.94 | 502 | <10 | 34 | 52 | 6 | <20 | <20 | 9 | 0.67 | 1.62 | 6.73 | 0.02 | 0.20 | 179 | 11 | <2 | 10 | <1 | <5 | <10 | <0.01 | <1 |
| 358 | 10750 | 7 | 0.028 | 0.82 | 74 | <10 | 34 | 215 | 9 | <20 | <20 | 4 | 0.53 | 0.15 | 0.09 | 0.02 | 0.09 | 9 | 3 | <2 | 6 | <1 | <5 | <10 | <0.01 | 4 |
| 358 | 10751 | 9 | 0.018 | 1.03 | 110 | <10 | 29 | 238 | 8 | <20 | <20 | 12 | 0.44 | 0.11 | 0.30 | 0.02 | 0.08 | 31 | 12 | <2 | 5 | <1 | <5 | <10 | <0.01 | 10 |
| 358 | 10752 | 6 | 0.026 | 3.32 | 996 | <10 | 26 | 76 | 28 | <20 | <20 | 51 | 1.39 | 0.73 | >10.00 | 0.02 | 0.05 | 167 | 36 | 3 | 18 | 2 | <5 | <10 | <0.01 | 3 |
| 358 | 10753 | <5 | 0.018 | 0.05 | 34 | <10 | 3 | <1 | <1 | <20 | <20 | 1 | <0.01 | 0.13 | >10.00 | <0.01 | <0.01 | 274 | <1 | <2 | <1 | 3 | <5 | <10 | <0.01 | <1 |
| 358 | 10754 | <5 | 0.024 | 0.26 | 50 | <10 | 1 | <1 | <1 | <20 | <20 | 1 | 0.01 | 0.08 | >10.00 | <0.01 | <0.01 | 124 | 2 | <2 | <1 | 2 | <5 | <10 | <0.01 | <1 |
| 359 | 10760 | 10 | 0.019 | >10.00 | 4397 | <10 | 22 | 121 | 61 | <20 | <20 | 73 | 1.66 | 0.11 | 2.64 | <0.01 | <0.01 | 139 | 67 | <2 | 11 | <1 | <5 | <10 | 0.03 | 2 |
| 360 | 10755 | <5 | 0.017 | 0.25 | 249 | <10 | <1 | 1 | 2 | <20 | <20 | 2 | <0.01 | 4.42 | >10.00 | <0.01 | <0.01 | 231 | 2 | <2 | <1 | 6 | <5 | <10 | <0.01 | <1 |

## Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 10756 | Howard Ck | rub | sel | calc-qz-mica schist w/ lim | <5 | | | 1.5 | 7 | 6 | 41 | <1 | 10 | 2 | <0.2 | <5 | 6 |
| 360 | 10757 | Howard Ck | rub | sel | qz-chl schist w/ py, lim | <5 | | | <0.2 | 16 | 39 | 455 | 1 | 3 | 4 | 1.7 | <5 | <5 |
| 360 | 10758 | Howard Ck | flt | sel | phyllite w/ diss py, tr lim | 19 | | | 0.3 | 56 | 20 | 7 | 21 | 60 | 39 | <0.2 | <5 | 131 |
| 360 | 10759 | Howard Ck | flt | sel | marble w/ py, lim | <5 | | | 2.3 | 86 | 16 | 165 | 3 | 28 | 4 | 0.8 | <5 | 23 |
| 361 | 11335 | Marion Ck | | sed | | <5 | | | <0.2 | 44 | 13 | 109 | 2 | 32 | 13 | <0.2 | <5 | 14 |
| 361 | 11336 | Marion Ck | | pan | 1 fine Au flake | 3739 | 10 | 7 | <0.2 | 44 | 11 | 103 | 3 | 36 | 12 | <0.2 | <5 | 15 |
| 361 | 11337 | Marion Ck | flt | sel | dark gray qtz w/ 1% po | <5 | | | <0.2 | 8 | 5 | 72 | <1 | 27 | 7 | 0.2 | <5 | 12 |
| 361 | 11338 | Marion Ck trib. | | sed | | <5 | | | <0.2 | 35 | 12 | 107 | <1 | 31 | 14 | <0.2 | <5 | 24 |
| 361 | 11339 | Marion Ck trib. | | pan | 1 coarse, 6 fine, 2 v fine Au | 81.80 ppm | 9 | 7 | 7.2 | 65 | 17 | 147 | 3 | 50 | 16 | 0.3 | <5 | 60 |
| 361 | 11340 | Marion Ck trib. | | plac | 4 fine, 24 v fine Au | 0.006 oz/cyd | <70 | <70 | 4.1 | 69 | 90 | 137 | 2 | 53 | 31 | 0.3 | <5 | 601 |
| 362 | 10737 | Sawyer Ck | | sed | | <5 | | | 0.2 | 36 | 29 | 100 | 1 | 33 | 13 | 0.3 | <5 | 29 |
| 362 | 10738 | Sawyer Ck | | pan | no mag | 1632 | | | 0.5 | 64 | 36 | 114 | 2 | 76 | 29 | <0.2 | <5 | 51 |
| 362 | 10739 | Sawyer Ck | flt | sel | ch-qz schist w/ py, lim | <5 | | | <0.2 | 123 | 5 | 60 | 1 | 68 | 35 | <0.2 | <5 | <5 |
| 363 | 10882 | Emma Dome | rub | sel | vein qz w/ tm, hem, sid | <5 | | | <0.2 | 11 | 4 | 13 | 1 | 7 | 3 | <0.2 | <5 | 17 |
| 364 | 11319 | Kelly's Gulch | | sed | | 27 | | | <0.2 | 28 | 13 | 64 | 1 | 35 | 13 | <0.2 | <5 | 11 |
| 364 | 11320 | Kelly's Gulch | | pan | no mag, from gravel bar | 73 | 6 | 6 | 0.2 | 51 | 22 | 103 | 3 | 71 | 24 | 0.3 | <5 | 19 |
| 365 | 11317 | Clara Ck | | sed | | 21 | | | <0.2 | 63 | 17 | 88 | 1 | 73 | 20 | 0.3 | <5 | 12 |
| 365 | 11318 | Clara Ck | | pan | 1 coarse, subround Au flake | 198.93 ppm | 8 | 7 | 13.5 | 50 | 15 | 146 | 3 | 108 | 71 | 1.1 | <5 | 9 |
| 366 | 11310 | Myrtle Ck | | sed | | <5 | | | <0.2 | 44 | 17 | 130 | 1 | 43 | 20 | <0.2 | <5 | 13 |
| 366 | 11311 | Myrtle Ck | | pan | 2 fine Au | 9790 | 11 | 8 | 0.9 | 72 | 19 | 154 | 3 | 67 | 22 | 0.3 | <5 | 21 |
| 366 | 11312 | Myrtle Ck | | slu | placer con | 0.230 grams | <70 | <70 | 14.1 | 80 | 1099 | 106 | 10 | 115 | 146 | 0.9 | <5 | 710 |
| 366 | 11313 | Myrtle Ck | flt | sel | bio-qz schist w/ 20% py | 23 | | | 0.2 | 55 | 71 | 166 | 33 | 113 | 21 | 1.2 | <5 | 80 |
| 367 | 11321 | Porcupine Ck | | slu | from 3,000 cyd of sluiced gravel | | 16 | 5 | 15.2 | 168 | 7896 | 427 | 41 | 170 | 63 | 7.1 | 14 | 69 |
| 367 | 11322 | Porcupine Ck | otc | sel | qz-mica schist w/ <10% euhedral py | 33 | | | 0.5 | 97 | 30 | 98 | 27 | 61 | 18 | 1.1 | <5 | 97 |
| 367 | 11323 | Porcupine Ck | | sed | | <5 | | | <0.2 | 52 | 13 | 88 | 2 | 49 | 18 | 0.4 | <5 | 13 |
| 367 | 11324 | Porcupine Ck | | pan | from bedrock | 26.82 ppm | <5 | 5 | 5.2 | 86 | 27 | 152 | 4 | 112 | 36 | 0.7 | <5 | 18 |
| 367 | 11325 | Quartz Ck | | sed | | <5 | | | <0.2 | 56 | 14 | 132 | 2 | 71 | 26 | 0.6 | <5 | 13 |
| 367 | 11326 | Quartz Ck | | pan | from gravel bar | 135 | 6 | 5 | <0.2 | 48 | 11 | 109 | 3 | 62 | 20 | 0.4 | <5 | 10 |
| 368 | 11314 | Rosie Ck | | sed | | <5 | | | <0.2 | 35 | 12 | 114 | 2 | 40 | 16 | 0.3 | <5 | 10 |
| 368 | 11315 | Rosie Ck | | pan | 1 fine, angular Au flake | 2668 | 7 | 8 | <0.2 | 38 | 9 | 103 | 4 | 52 | 16 | 0.5 | <5 | 10 |
| 368 | 11316 | Rosie Ck | flt | sel | meta qtz w/ 2% euhedral py | 30 | | | <0.2 | 45 | 12 | 65 | 1 | 28 | 20 | <0.2 | <5 | 12 |
| 369 | 11327 | Twelvemile Ck | | sed | | <5 | | | <0.2 | 14 | 9 | 74 | <1 | 26 | 10 | <0.2 | <5 | 6 |
| 369 | 11328 | Twelvemile Ck | | pan | 6 fine, flat Au flakes | 170.61 ppm | 5 | 6 | 11.0 | 33 | 9 | 110 | 2 | 59 | 18 | 0.3 | <5 | 8 |
| 370 | 10640 | Tramway Bar | coal sample (see text) | | | | | | | | | | | | | | | |
| 371 | 10549 | Tramway Bar | coal sample (see text) | | | | | | | | | | | | | | | |
| 371 | 10550 | Tramway Bar | coal sample (see text) | | | | | | | | | | | | | | | |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 10756 | <5 | 0.011 | 2.21 | 282 | <10 | 14 | 23 | 10 | <20 | <20 | 8 | 1.34 | 1.09 | >10.00 | 0.02 | 0.05 | 165 | 7 | <2 | 23 | 4 | <5 | <10 | <0.01 | <1 |
| 360 | 10757 | <5 | 0.233 | 1.64 | 746 | <10 | 72 | 88 | 2 | <20 | <20 | 24 | 0.44 | 0.35 | 2.92 | 0.03 | 0.27 | 402 | 13 | <2 | 2 | <1 | <5 | <10 | <0.01 | 10 |
| 360 | 10758 | 11 | 0.232 | 6.90 | 24 | <10 | 8 | 51 | 15 | <20 | <20 | 10 | 0.44 | <0.01 | 0.03 | 0.03 | 0.23 | 10 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 11 |
| 360 | 10759 | 9 | 0.220 | 8.26 | 66 | <10 | 16 | 3 | 4 | <20 | <20 | 4 | 0.17 | 0.08 | >10.00 | 0.03 | 0.03 | 185 | 5 | <2 | 1 | <1 | <5 | <10 | <0.01 | 5 |
| 361 | 11335 | <5 | 0.026 | 4.01 | 308 | <10 | 26 | 18 | 22 | <20 | <20 | 24 | 1.36 | 0.62 | 0.14 | <0.01 | 0.05 | 13 | 11 | <2 | 29 | <1 | <5 | <10 | <0.01 | <1 |
| 361 | 11336 | <5 | 0.041 | 4.72 | 384 | <10 | 149 | 329 | 37 | <20 | <20 | 19 | 2.00 | 0.72 | 0.15 | 0.07 | 0.40 | 22 | 9 | 3 | 31 | <1 | <5 | <10 | 0.02 | 9 |
| 361 | 11337 | <5 | <0.010 | 2.57 | 141 | <10 | 52 | 109 | 28 | <20 | <20 | 13 | 1.31 | 0.58 | 0.11 | 0.03 | 0.11 | 8 | 8 | <2 | 29 | <1 | <5 | <10 | 0.04 | 4 |
| 361 | 11338 | <5 | 0.017 | 3.50 | 313 | <10 | 21 | 16 | 21 | <20 | <20 | 24 | 1.13 | 0.53 | 0.13 | <0.01 | 0.04 | 15 | 10 | <2 | 23 | <1 | <5 | <10 | <0.01 | <1 |
| 361 | 11339 | <5 | 0.140 | 5.69 | 574 | <10 | 212 | 433 | 55 | <20 | <20 | 27 | 2.81 | 0.69 | 0.17 | 0.13 | 0.62 | 39 | 14 | 4 | 31 | <1 | <5 | <10 | 0.05 | 10 |
| 361 | 11340 | <5 | 18.930 | 7.70 | 930 | <10 | 82 | 229 | 46 | <20 | 49 | 25 | 1.55 | 0.49 | 0.29 | 0.03 | 0.17 | 26 | 18 | <2 | 22 | <1 | <5 | <10 | 0.05 | 4 |
| 362 | 10737 | <5 | 0.063 | 2.80 | 690 | <10 | 28 | 12 | 15 | <20 | <20 | 19 | 0.72 | 1.38 | 2.65 | <0.01 | 0.03 | 58 | 10 | <2 | 10 | <1 | <5 | <10 | <0.01 | 1 |
| 362 | 10738 | <5 | 0.131 | 6.32 | 632 | <10 | 39 | 101 | 23 | <20 | <20 | 25 | 1.27 | 1.35 | 5.25 | 0.02 | 0.12 | 82 | 10 | <2 | 15 | <1 | <5 | <10 | 0.03 | 4 |
| 362 | 10739 | 10 | 0.031 | 5.79 | 457 | <10 | 37 | 132 | 124 | <20 | <20 | 3 | 3.38 | 3.34 | 0.72 | 0.03 | 0.04 | 22 | 11 | <2 | 38 | 4 | 6 | <10 | 0.35 | <1 |
| 363 | 10882 | <5 | 0.013 | 0.69 | 110 | <10 | 1 | 228 | 1 | <20 | <20 | <1 | 0.01 | 0.31 | 0.75 | <0.01 | <0.01 | 15 | 1 | <2 | <1 | <1 | <5 | <10 | <0.01 | 1 |
| 364 | 11319 | <5 | 0.019 | 2.68 | 389 | <10 | 39 | 15 | 13 | <20 | <20 | 21 | 0.79 | 0.66 | 0.75 | <0.01 | 0.04 | 26 | 11 | <2 | 10 | <1 | <5 | <10 | <0.01 | <1 |
| 364 | 11320 | <5 | 0.055 | 6.04 | 496 | <10 | 184 | 271 | 40 | <20 | <20 | 17 | 2.24 | 1.29 | 0.94 | 0.08 | 0.40 | 43 | 12 | 3 | 25 | <1 | <5 | <10 | 0.04 | 5 |
| 365 | 11317 | <5 | 0.106 | 3.12 | 226 | <10 | 117 | 13 | 20 | <20 | <20 | 93 | 1.14 | 0.44 | 0.44 | <0.01 | 0.09 | 26 | 23 | 2 | 18 | <1 | <5 | <10 | <0.01 | <1 |
| 365 | 11318 | <5 | 0.953 | 5.18 | 1560 | <10 | 150 | 335 | 42 | <20 | <20 | 53 | 2.17 | 0.79 | 0.33 | 0.08 | 0.39 | 35 | 22 | 4 | 33 | <1 | <5 | <10 | 0.02 | <1 |
| 366 | 11310 | <5 | 0.055 | 4.81 | 504 | <10 | 59 | 23 | 26 | <20 | <20 | 41 | 1.48 | 0.68 | 0.16 | <0.01 | 0.05 | 16 | 9 | 3 | 30 | <1 | <5 | <10 | <0.01 | <1 |
| 366 | 11311 | <5 | 0.492 | 7.84 | 489 | <10 | 180 | 328 | 55 | <20 | <20 | 59 | 3.15 | 0.91 | 0.18 | 0.16 | 0.54 | 39 | 14 | 4 | 45 | <1 | <5 | <10 | <0.01 | 10 |
| 366 | 11312 | <5 | 4.410 | >10.00 | 756 | <10 | 2 | 200 | 43 | 91 | 59 | 62 | 0.93 | 0.31 | 0.28 | 0.02 | 0.10 | 26 | 20 | <2 | 16 | <1 | <5 | <10 | 0.04 | 7 |
| 366 | 11313 | <5 | 0.323 | >10.00 | 216 | <10 | 6 | 107 | 9 | <20 | <20 | 17 | 0.39 | 0.17 | 0.37 | 0.01 | 0.20 | 20 | 9 | <2 | 3 | <1 | <5 | <10 | <0.01 | 11 |
| 367 | 11321 | 13 | 21.800 | >10.00 | 1292 | <10 | 26 | 285 | 303 | <20 | 418 | 11 | 0.35 | 0.15 | 0.13 | <0.01 | 0.04 | 9 | 7 | <2 | 5 | 14 | <5 | <10 | 0.02 | 6 |
| 367 | 11322 | <5 | 0.271 | 6.60 | 128 | <10 | 13 | 131 | 17 | <20 | <20 | 5 | 1.01 | 0.64 | 0.15 | 0.02 | 0.22 | 8 | 5 | <2 | 16 | <1 | <5 | <10 | <0.01 | 14 |
| 367 | 11323 | <5 | 0.029 | 3.38 | 508 | <10 | 22 | 15 | 16 | <20 | <20 | 26 | 0.8 | 0.80 | 2.62 | <0.01 | 0.04 | 88 | 16 | <2 | 14 | <1 | <5 | <10 | <0.01 | <1 |
| 367 | 11324 | <5 | 0.430 | 7.40 | 821 | <10 | 186 | 280 | 47 | <20 | <20 | 36 | 2.35 | 1.10 | 1.70 | 0.10 | 0.49 | 79 | 19 | 3 | 30 | <1 | <5 | <10 | 0.02 | 7 |
| 367 | 11325 | <5 | 0.035 | 4.70 | 680 | <10 | 51 | 30 | 34 | <20 | <20 | 36 | 1.64 | 0.88 | 0.22 | <0.01 | 0.07 | 15 | 18 | 2 | 30 | <1 | <5 | <10 | 0.02 | <1 |
| 367 | 11326 | <5 | 0.028 | 4.94 | 845 | <10 | 190 | 353 | 58 | <20 | <20 | 15 | 2.29 | 0.97 | 0.64 | 0.08 | 0.37 | 44 | 17 | 3 | 29 | <1 | <5 | <10 | 0.08 | 5 |
| 368 | 11314 | <5 | 0.132 | 3.60 | 675 | <10 | 352 | 24 | 43 | <20 | <20 | 9 | 1.53 | 0.62 | 0.35 | <0.01 | 0.05 | 18 | 7 | 3 | 26 | <1 | <5 | <10 | 0.02 | <1 |
| 368 | 11315 | <5 | 0.087 | 5.38 | 1558 | <10 | 904 | 462 | 100 | <20 | <20 | 19 | 2.74 | 0.85 | 1.22 | 0.12 | 0.40 | 47 | 16 | 5 | 26 | <1 | 8 | <10 | 0.18 | 7 |
| 368 | 11316 | <5 | 0.033 | 4.66 | 235 | <10 | 40 | 100 | 38 | <20 | <20 | 10 | 1.46 | 1.00 | 0.16 | 0.04 | 0.12 | 8 | 14 | 2 | 26 | <1 | <5 | <10 | <0.01 | 2 |
| 369 | 11327 | <5 | 0.028 | 2.59 | 390 | <10 | 60 | 17 | 22 | <20 | <20 | 19 | 1.21 | 0.59 | 0.22 | <0.01 | 0.04 | 15 | 6 | <2 | 22 | <1 | <5 | <10 | <0.01 | <1 |
| 369 | 11328 | <5 | 1.416 | 5.43 | 740 | <10 | 158 | 278 | 57 | <20 | <20 | 16 | 2.89 | 1.35 | 0.38 | 0.08 | 0.38 | 30 | 9 | 4 | 48 | <1 | <5 | <10 | 0.04 | 7 |
| 370 | 10640 | coal sample (see text) | | | | | | | | | | | | | | | | | | | | | | | | |
| 371 | 10549 | coal sample (see text) | | | | | | | | | | | | | | | | | | | | | | | | |
| 371 | 10550 | coal sample (see text) | | | | | | | | | | | | | | | | | | | | | | | | |

## Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 371 | 10551 | Tramway Bar | | pan | from qz pebble cgl, no visible Au | 2494 | | | <0.2 | 23 | 9 | 115 | 2 | 43 | 11 | 0.5 | <5 | 9 |
| 372 | 8007 | Gold Bench Mine | | slu | placer con | 7 | <5 | <1 | <5 | | | <200 | <2 | 61 | 15 | <10 | | 7 |
| 373 | 11009 | Douglas Ck | | sed | | 8 | | | <0.2 | 117 | 6 | 128 | 3 | 50 | 25 | 0.5 | <5 | 13 |
| 373 | 11010 | Douglas Ck | | pan | no mag, no visible Au | 7 | 14 | 6 | <0.2 | 115 | 4 | 133 | 3 | 63 | 28 | 0.7 | <5 | 12 |
| 373 | 11011 | Douglas Ck | | pan | mod fine and coarse mag | 9 | 8 | 6 | <0.2 | 106 | <2 | 124 | 3 | 60 | 29 | 0.7 | <5 | 11 |
| 373 | 11012 | Douglas Ck | | pan | from colluvium | 14 | 9 | 3 | <0.2 | 99 | 10 | 117 | 6 | 59 | 25 | 0.8 | <5 | 17 |
| 374 | 10661 | Prospect Ck | tail | rand | pyroxenite ? | 10 | | | <0.2 | 106 | <2 | 81 | <1 | 629 | 64 | <0.2 | <5 | <5 |
| 374 | 10662 | Prospect Ck | otc | rand | pyroxenite w/ tr py | <5 | | | <0.2 | 98 | <2 | 63 | <1 | 56 | 28 | <0.2 | <5 | <5 |
| 375 | 11014 | Jim River | | pan | 1 v fine Au, abu fine mag | 1590 | 5 | 1 | <0.2 | 19 | 6 | 50 | 4 | 31 | 12 | <0.2 | <5 | 10 |
| 375 | 11015 | Jim River | | plac | 13 v fine Au, zircon | 0.0003 oz/cyd | 5 | 3 | <0.2 | 21 | 6 | 54 | 2 | 23 | 13 | <0.2 | <5 | 11 |
| 376 | 11031 | Jim River | | pan | from bedrock, 4 v fine Au | 1231 | <5 | 5 | <0.2 | 86 | 8 | 115 | 5 | 79 | 25 | 0.5 | <5 | 12 |
| 376 | 11032 | Jim River | | sed | | 3 | | | <0.2 | 21 | 6 | 76 | 1 | 22 | 11 | <0.2 | <5 | 7 |
| 376 | 11033 | Jim River | otc | ran | silicious volcanic rock w/ lim | <1 | | | <0.2 | 33 | 4 | 32 | 7 | 27 | 7 | <0.2 | <5 | <5 |
| 377 | 10999 | N Fork Bonanza Ck | | sed | | 8 | | | <0.2 | 15 | 7 | 80 | 1 | 23 | 13 | <0.2 | <5 | 8 |
| 377 | 11000 | N Fork Bonanza Ck | | pan | abu mag | 4 | 5 | <1 | <0.2 | 8 | 3 | 41 | 4 | 14 | 8 | <0.2 | <5 | 5 |
| 378 | 11007 | Bonanza Ck | | sed | | 29 | | | <0.2 | 19 | 7 | 84 | 2 | 27 | 14 | 0.2 | <5 | 7 |
| 378 | 11008 | Bonanza Ck | | pan | | 12 | <5 | <1 | <0.2 | 13 | 5 | 45 | 4 | 19 | 9 | <0.2 | <5 | 7 |
| 379 | 10987 | Bonanza | trn | sel | skarn w/ <10% po, tr cpy and sch | 12 | | | 16.0 | 404 | 732 | 1438 | 4 | 16 | 5 | 123.1 | 45 | 165 |
| 379 | 10988 | Bonanza | trn | sel | skarn w/ <1% po, tr gn, tr cpy | 13 | | | 24.3 | 44 | 936 | 746 | 2 | 9 | 2 | 9.6 | 96 | 16 |
| 379 | 10989 | Bonanza | trn | sel | skarn w/ diss po, lim | 2 | | | 8.7 | 203 | 260 | 554 | 5 | 18 | 6 | 60.2 | 34 | 8 |
| 379 | 11030 | Bonanza | otc | cont | 3.5 ft-wide skarn w/ <1% po, tr cpy | <1 | | | 0.6 | 65 | 13 | 97 | 2 | 57 | 15 | 2.4 | <5 | 8 |
| 380 | 8005 | Caribou Mtn | otc | rand | chromite lenses in dunite | <5 | <5 | <1 | <5 | | | 680 | <2 | 2180 | 230 | <10 | | 12 |
| 380 | 8006 | Caribou Mtn | rub | grab | chromite lenses in dunite | <5 | <5 | <1 | <5 | | | 540 | <2 | 1700 | 240 | <10 | | 2 |
| 381 | 8003 | Sithylemenkat Pluton | flt | grab | greisen vein w/ cst, ser, tm (?) | <5 | <5 | <1 | <5 | | | 2400 | <2 | 23 | <10 | <10 | | 1 |
| 381 | 8004 | Sithylemenkat Pluton | flt | grab | greisen vein w/ cst, ser, tm (?) | <5 | <5 | <1 | <5 | | | 300 | 8 | <20 | <10 | <10 | | 6 |
| 382 | 8001 | Sithylemenkat Lake | rub | grab | serp gabbro, pyroxenite, dunite | <5 | <5 | <1 | <5 | | | <200 | <2 | 960 | 78 | <10 | | 2 |
| 382 | 8002 | Sithylemenkat Lake | rub | grab | serp dunite w/ mag | <5 | 6 | 1 | <5 | | | <200 | <2 | 2140 | 120 | <10 | | 3 |
| 383 | 10565 | Lake Todatonten | | sed | | <5 | | | <0.2 | 21 | 9 | 87 | <1 | 38 | 15 | 0.2 | <5 | 9 |
| 384 | 10564 | Lake Todatonten | | sed | unidentifiable 3 mm rock chips | <5 | | | <0.2 | 23 | 10 | 84 | <1 | 35 | 13 | 0.2 | <5 | 10 |
| 385 | 10563 | Lake Todatonten | | sed | | <5 | | | <0.2 | 36 | 10 | 98 | <1 | 45 | 16 | 0.2 | <5 | 8 |
| 386 | 10562 | Lake Todatonten | | sed | | <5 | | | <0.2 | 31 | 11 | 97 | <1 | 40 | 15 | 0.4 | <5 | 7 |
| 387 | 10561 | Lake Todatonten | | sed | | <5 | | | <0.2 | 26 | 9 | 93 | <1 | 38 | 15 | 0.3 | <5 | 7 |
| 388 | 10586 | Lake Todatonten | flt | grab | medium to fine grained gwy | <5 | | | <0.2 | 37 | 7 | 109 | <1 | 47 | 19 | 0.4 | <5 | 7 |
| 388 | 10587 | Lake Todatonten | | soil | lt-tan clayey soil | 9 | | | <0.2 | 35 | 11 | 83 | 3 | 33 | 13 | <0.2 | <5 | 11 |
| 389 | 10584 | Lake Todatonten | flt | grab | slts, coarse grained gwy | <5 | | | <0.2 | 32 | 9 | 85 | <1 | 49 | 15 | 0.3 | <5 | 6 |
| 389 | 10585 | Lake Todatonten | | soil | orange-brn clayey soil | <5 | | | <0.2 | 30 | 14 | 59 | 2 | 19 | 6 | <0.2 | <5 | 38 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 371 | 10551 | <5 | 0.043 | 4.73 | 379 | <10 | 126 | 239 | 35 | <20 | <20 | 14 | 2.02 | 0.57 | 0.12 | 0.05 | 0.34 | 16 | 5 | 3 | 23 | 1 | <5 | <10 | <0.01 | 7 |
| 372 | 8007 | 2.3 | | 4.8 | | <20 | 690 | 180 | | <200 | 4 | 30 | | | | 1.50 | | | | | | | 16.0 | 1 | | <500 |
| 373 | 11009 | <5 | 0.147 | 5.06 | 1534 | <10 | 501 | 51 | 124 | <20 | <20 | 10 | 3.04 | 1.36 | 0.94 | 0.02 | 0.08 | 36 | 11 | 3 | 21 | 2 | 8 | <10 | 0.17 | <1 |
| 373 | 11010 | <5 | 0.031 | 6.59 | 2049 | <10 | 252 | 135 | 169 | <20 | <20 | 5 | 3.27 | 1.91 | 2.01 | 0.04 | 0.08 | 31 | 10 | 4 | 20 | <1 | 9 | <10 | 0.35 | <1 |
| 373 | 11011 | <5 | 0.033 | 6.21 | 1590 | <10 | 220 | 118 | 161 | <20 | <20 | 5 | 3.26 | 1.87 | 2.11 | 0.04 | 0.09 | 27 | 10 | 4 | 19 | <1 | 9 | <10 | 0.34 | 4 |
| 373 | 11012 | <5 | 0.090 | 5.63 | 1125 | <10 | 270 | 172 | 165 | <20 | <20 | 11 | 3.02 | 1.56 | 2.04 | 0.03 | 0.20 | 33 | 12 | 5 | 18 | <1 | 11 | <10 | 0.38 | 14 |
| 374 | 10661 | <5 | 0.015 | 6.65 | 823 | <10 | 81 | 259 | 36 | 29 | <20 | 2 | 2.27 | 8.69 | 1.05 | 0.09 | 0.14 | 52 | 3 | 4 | 5 | <1 | <5 | <10 | 0.05 | 3 |
| 374 | 10662 | <5 | <0.010 | 5.21 | 690 | <10 | 114 | 54 | 158 | <20 | <20 | 5 | 3.86 | 2.04 | 3.05 | 0.08 | 0.05 | 41 | 8 | 10 | 22 | 4 | 9 | <10 | 0.30 | 12 |
| 375 | 11014 | <5 | 0.023 | 8.59 | 1064 | <10 | 89 | 285 | 249 | <20 | <20 | 77 | 1.33 | 0.53 | 1.20 | 0.05 | 0.12 | 36 | 36 | <2 | 12 | 3 | <5 | <10 | 0.32 | 9 |
| 375 | 11015 | <5 | 0.282 | >10.00 | 1295 | <10 | 93 | 226 | 429 | <20 | <20 | 96 | 1.21 | 0.44 | 1.24 | 0.04 | 0.08 | 28 | 43 | 4 | 10 | <1 | 5 | <10 | 0.33 | 10 |
| 376 | 11031 | <5 | 0.080 | 5.65 | 1664 | <10 | 1227 | 165 | 148 | <20 | <20 | 20 | 2.96 | 2.21 | 1.13 | 0.03 | 0.28 | 50 | 16 | 3 | 36 | 2 | 12 | <10 | 0.28 | 15 |
| 376 | 11032 | <5 | 0.032 | 2.97 | 477 | <10 | 187 | 26 | 64 | <20 | <20 | 22 | 1.38 | 0.65 | 0.51 | 0.02 | 0.15 | 25 | 7 | <2 | 21 | 1 | <5 | <10 | 0.10 | <1 |
| 376 | 11033 | <5 | 0.085 | 1.15 | 415 | <10 | 223 | 218 | 15 | <20 | <20 | 2 | 0.82 | 0.30 | 0.34 | 0.01 | 0.10 | 17 | 3 | <2 | 6 | <1 | <5 | <10 | 0.03 | 4 |
| 377 | 10999 | <5 | 0.025 | 3.40 | 385 | <10 | 165 | 31 | 77 | <20 | <20 | 27 | 1.95 | 0.84 | 0.47 | 0.02 | 0.37 | 38 | 8 | 3 | 27 | 2 | <5 | <10 | 0.14 | <1 |
| 377 | 11000 | <5 | <0.010 | 6.64 | 656 | <10 | 67 | 289 | 183 | <20 | <20 | 60 | 0.93 | 0.44 | 0.81 | 0.05 | 0.25 | 21 | 52 | <2 | 12 | 4 | <5 | <10 | 0.34 | 8 |
| 378 | 11007 | <5 | 0.025 | 2.91 | 347 | <10 | 81 | 26 | 39 | <20 | <20 | 19 | 1.76 | 0.71 | 0.27 | 0.02 | 0.11 | 23 | 5 | 2 | 29 | <1 | <5 | <10 | 0.04 | <1 |
| 378 | 11008 | <5 | <0.010 | 1.99 | 397 | <10 | 46 | 324 | 20 | <20 | <20 | 23 | 0.85 | 0.31 | 0.21 | 0.02 | 0.10 | 9 | 7 | <2 | 14 | 1 | <5 | <10 | 0.09 | 1 |
| 379 | 10987 | 38 | 0.051 | 4.06 | 590 | <10 | 3 | 100 | 21 | <20 | 1.44% | 7 | 0.92 | 0.33 | 2.12 | 0.07 | 0.02 | 78 | 5 | <2 | 7 | <1 | <5 | <10 | 0.08 | 7 |
| 379 | 10988 | <5 | 0.085 | 1.29 | 753 | <10 | 10 | 145 | 31 | <20 | 0.11% | 8 | 1.97 | 0.14 | 5.53 | 0.01 | 0.03 | 79 | 5 | 6 | 4 | <1 | <5 | <10 | 0.12 | 11 |
| 379 | 10989 | <5 | <0.010 | 3.00 | 426 | <10 | 22 | 111 | 33 | <20 | 0.54% | 12 | 2.73 | 0.49 | 2.94 | 0.15 | 0.13 | 249 | 10 | 4 | 16 | <1 | <5 | <10 | 0.13 | 9 |
| 379 | 11030 | <5 | <0.010 | 3.88 | 715 | <10 | 69 | 109 | 84 | <20 | <20 | 17 | 3.25 | 2.16 | 3.04 | 0.07 | 0.25 | 201 | 9 | 7 | 82 | 2 | 9 | <10 | 0.08 | <1 |
| 380 | 8005 | 1.8 | | >10.0 | | <20 | <100 | >30000 | | <200 | <2 | <5 | | | | 0.18 | | | | | | | 4.7 | <1 | | <500 |
| 380 | 8006 | 1.5 | | >10.0 | | <20 | <100 | >30000 | | <200 | <2 | <5 | | | | 0.15 | | | | | | | 7.6 | <1 | | <500 |
| 381 | 8003 | 0.7 | | >10.0 | | <20 | 140 | 140 | | 1900 | 27 | 46 | | | | 0.08 | | | | | | | 2.6 | 2 | | <500 |
| 381 | 8004 | 0.8 | | 5.1 | | <20 | <100 | 160 | | <200 | <2 | 6 | | | | 0.37 | | | | | | | 1.8 | 2 | | <500 |
| 382 | 8001 | 1.4 | | 4.4 | | <20 | <100 | 3100 | | <200 | <2 | <5 | | | | 0.22 | | | | | | | 18.0 | <1 | | <500 |
| 382 | 8002 | 1.6 | | 5.7 | | <20 | <100 | 5020 | | <200 | 6 | <5 | | | | 0.20 | | | | | | | 5.2 | <1 | | <500 |
| 383 | 10565 | <5 | 0.041 | 3.83 | 280 | <10 | 116 | 40 | 64 | <20 | <20 | 21 | 2.14 | 0.71 | 0.45 | 0.01 | 0.06 | 36 | 10 | <2 | 27 | 3 | 5 | <10 | 0.10 | 5 |
| 384 | 10564 | <5 | 0.061 | 3.58 | 264 | <10 | 147 | 37 | 60 | <20 | <20 | 19 | 2.22 | 0.64 | 0.35 | 0.01 | 0.07 | 23 | 10 | <2 | 25 | 3 | 5 | <10 | 0.05 | 3 |
| 385 | 10563 | <5 | 0.166 | 3.95 | 322 | <10 | 161 | 50 | 70 | <20 | <20 | 16 | 2.73 | 0.80 | 0.32 | 0.01 | 0.09 | 23 | 11 | 4 | 34 | 4 | 7 | <10 | 0.04 | 3 |
| 386 | 10562 | <5 | 0.125 | 3.51 | 326 | <10 | 155 | 43 | 59 | <20 | <20 | 17 | 2.46 | 0.74 | 0.43 | 0.02 | 0.09 | 34 | 11 | 3 | 30 | 4 | 6 | <10 | 0.04 | 3 |
| 387 | 10561 | <5 | 0.049 | 3.36 | 516 | <10 | 161 | 38 | 57 | <20 | <20 | 16 | 2.14 | 0.69 | 0.48 | 0.02 | 0.09 | 27 | 10 | <2 | 24 | 3 | 5 | <10 | 0.05 | 4 |
| 388 | 10586 | <5 | 0.213 | 4.21 | 679 | <10 | 123 | 92 | 89 | <20 | <20 | 8 | 2.23 | 1.46 | 0.42 | 0.02 | 0.12 | 14 | 9 | 5 | 35 | 10 | 8 | <10 | 0.12 | 12 |
| 388 | 10587 | <5 | 0.067 | 5.59 | 387 | <10 | 128 | 59 | 120 | <20 | <20 | 10 | 2.82 | 0.69 | 0.10 | <0.01 | 0.12 | 10 | 4 | <2 | 39 | 8 | 7 | <10 | 0.06 | 3 |
| 389 | 10584 | <5 | 0.240 | 4.65 | 388 | <10 | 103 | 82 | 84 | <20 | <20 | 4 | 2.36 | 1.20 | 0.15 | 0.02 | 0.12 | 8 | 6 | 5 | 32 | 10 | 6 | <10 | 0.03 | 11 |
| 389 | 10585 | <5 | 0.082 | 5.36 | 183 | <10 | 140 | 38 | 104 | <20 | <20 | 9 | 2.25 | 0.31 | 0.08 | <0.01 | 0.06 | 10 | 2 | 7 | 20 | 3 | <5 | <10 | <0.01 | 2 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390 | 10567 | Lake Todatonten | rub | grab | gwy | <5 | | | <0.2 | 42 | 15 | 131 | <1 | 60 | 27 | 0.3 | <5 | 13 |
| 391 | 10566 | Lake Todatonten | rub | grab | fissle gwy and slts | <5 | | | <0.2 | 44 | 16 | 144 | <1 | 61 | 24 | 0.4 | <5 | 12 |
| 392 | 10559 | Lake Todatonten | | sed | | <5 | | | <0.2 | 20 | 7 | 70 | <1 | 35 | 13 | <0.2 | <5 | 6 |
| 392 | 10560 | Lake Todatonten | | pan | mod mag | <5 | | | <0.2 | 9 | 7 | 21 | <1 | 16 | 7 | <0.2 | <5 | <5 |
| 393 | 10527 | Lake Todatonten | flt | grab | fine grained gwy | <5 | | | <0.2 | 54 | 8 | 118 | <1 | 74 | 28 | 0.5 | <5 | 6 |
| 393 | 10528 | Lake Todatonten | | soil | lt-brn clayey soil | <5 | | | <0.2 | 21 | 9 | 77 | 1 | 21 | 11 | <0.2 | <5 | 11 |
| 394 | 10580 | Lake Todatonten | flt | grab | gwy/ slts, shows graded bedding | <5 | | | <0.2 | 67 | 7 | 107 | <1 | 77 | 28 | 0.4 | <5 | 13 |
| 394 | 10581 | Lake Todatonten | | soil | red-brn clayey soil | <5 | | | <0.2 | 18 | 7 | 86 | <1 | 27 | 11 | <0.2 | <5 | 9 |
| 395 | 10582 | Lake Todatonten | flt | grab | 50% slts, 50% mudstone | <5 | | | <0.2 | 60 | 9 | 104 | <1 | 55 | 18 | 0.2 | <5 | 10 |
| 395 | 10583 | Lake Todatonten | | soil | lt-brn soil w/ low clay content | <5 | | | 0.2 | 14 | 9 | 69 | 1 | 15 | 10 | <0.2 | <5 | 8 |
| 396 | 10557 | Lake Todatonten | | pan | abu mag, abu qz grains | <5 | | | <0.2 | 8 | 9 | 23 | 1 | 16 | 9 | <0.2 | <5 | 6 |
| 396 | 10558 | Lake Todatonten | | sed. | | <5 | | | <0.2 | 17 | 6 | 65 | <1 | 33 | 11 | <0.2 | <5 | <5 |
| 397 | 10571 | Lake Todatonten | rub | grab | gwy w/ shale partings | 8 | | | <0.2 | 42 | 11 | 99 | 1 | 56 | 23 | 0.4 | <5 | 9 |
| 398 | 10568 | Lake Todatonten | rub | grab | slightly calc gwy | <5 | | | <0.2 | 53 | 8 | 120 | <1 | 73 | 30 | 0.4 | <5 | 7 |
| 399 | 10569 | Lake Todatonten | rub | grab | black, fissle shale, minor gwy | <5 | | | <0.2 | 69 | 18 | 132 | <1 | 66 | 17 | 0.4 | <5 | 14 |
| 400 | 10570 | Lake Todatonten | | soil | red-brn clayey soil w/ shale chips | <5 | | | <0.2 | 14 | 11 | 94 | <1 | 22 | 10 | <0.2 | <5 | 8 |
| 401 | 10555 | Lake Todatonten | | sed | | <5 | | | 0.2 | 40 | 9 | 108 | <1 | 57 | 18 | 0.2 | <5 | 8 |
| 401 | 10556 | Lake Todatonten | | pan | minor mag, abu qz grains | 397 | | | <0.2 | 21 | 13 | 64 | 1 | 42 | 15 | <0.2 | <5 | 9 |
| 401 | 10945 | Lake Todatonten | | sed | confirmation sample | 3 | | | 0.2 | 38 | 9 | 104 | 1 | 53 | 16 | <0.2 | <5 | 8 |
| 401 | 10946 | Lake Todatonten | | pan | confirmation sample | 5 | <5 | 1 | <0.2 | 30 | 9 | 99 | 3 | 53 | 17 | <0.2 | <5 | 11 |
| 402 | 10554 | Lake Todatonten | | sed | | <5 | | | <0.2 | 37 | 9 | 108 | <1 | 52 | 18 | 0.3 | <5 | 8 |
| 403 | 10578 | Lake Todatonten | flt | grab | medium to fine grained gwy | <5 | | | <0.2 | 50 | 13 | 100 | <1 | 53 | 22 | 0.3 | <5 | 13 |
| 403 | 10579 | Lake Todatonten | | soil | brn clayey soil, w/ gwy chips | <5 | | | <0.2 | 14 | 8 | 39 | 1 | 12 | 4 | <0.2 | <5 | 7 |
| 404 | 10577 | Lake Todatonten | flt | grab | medium to fine grained gwy | <5 | | | <0.2 | 23 | 19 | 92 | 1 | 37 | 15 | <0.2 | <5 | 13 |
| 405 | 10575 | Lake Todatonten | flt | grab | gwy, medium to fine grained | <5 | | | <0.2 | 42 | 8 | 118 | <1 | 53 | 26 | 0.5 | <5 | 10 |
| 405 | 10576 | Lake Todatonten | | soil | red-orange soil w/ gwy chips | <5 | | | <0.2 | 16 | 8 | 114 | <1 | 20 | 10 | 0.3 | <5 | 7 |
| 406 | 10572 | Lake Todatonten | flt | grab | gwy | <5 | | | <0.2 | 29 | 12 | 95 | 1 | 37 | 14 | 0.3 | <5 | 7 |
| 407 | 10573 | Lake Todatonten | flt | grab | gwy, intermediate grain size | 9 | | | <0.2 | 45 | 8 | 107 | 1 | 52 | 27 | 0.4 | <5 | 15 |
| 408 | 10574 | Lake Todatonten | | soil | red-brn clayey soil | <5 | | | <0.2 | 30 | 12 | 142 | 1 | 37 | 18 | <0.2 | <5 | 13 |
| 409 | 10619 | Gen Ck | | sed | | <5 | | | <0.2 | 23 | 8 | 90 | <1 | 38 | 17 | 0.2 | <5 | 7 |
| 409 | 10620 | Gen Ck | | pan | | <5 | | | <0.2 | 51 | 22 | 139 | <1 | 88 | 40 | 0.3 | <5 | 16 |
| 410 | 10624 | Discovery Ck | | pan | 3 pan comp, 1 fine Au, minor mag | <5 | | | <0.2 | 9 | 12 | 38 | 1 | 19 | 13 | 0.3 | <5 | 10 |
| 410 | 10625 | Discovery Ck | | sed | | <5 | | | <0.2 | 17 | 4 | 67 | <1 | 29 | 13 | <0.2 | <5 | 6 |
| 411 | 10621 | Red Mtn | rub | rand | latite porphyry w/ <1% po, lim | 25 | | | <0.2 | 55 | 5 | 38 | 3 | 23 | 11 | <0.2 | <5 | 20 |
| 411 | 10622 | Red Mtn | otc | rand | qtz/ v fine intr (?) w/ 1% po | 13 | | | <0.2 | 86 | <2 | 63 | <1 | 68 | 22 | <0.2 | <5 | 9 |
| 411 | 10623 | Red Mtn | flt | grab | latite porpyry | 13 | | | <0.2 | 63 | 5 | 51 | 3 | 45 | 17 | 0.2 | <5 | 19 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390 | 10567 | <5 | 0.042 | 5.41 | 688 | <10 | 125 | 99 | 101 | <20 | <20 | 21 | 2.83 | 1.41 | 0.66 | 0.02 | 0.16 | 19 | 13 | 6 | 43 | 12 | 10 | <10 | 0.28 | 24 |
| 391 | 10566 | <5 | 0.035 | 5.41 | 871 | <10 | 132 | 93 | 78 | <20 | <20 | 25 | 2.91 | 1.24 | 0.59 | 0.02 | 0.16 | 19 | 13 | 6 | 42 | 10 | 8 | <10 | 0.17 | 14 |
| 392 | 10559 | <5 | 0.091 | 2.74 | 244 | <10 | 103 | 39 | 52 | <20 | <20 | 14 | 1.80 | 0.66 | 0.44 | 0.01 | 0.07 | 30 | 8 | <2 | 22 | 3 | <5 | <10 | 0.08 | 4 |
| 392 | 10560 | <5 | 0.021 | 1.24 | 146 | <10 | 57 | 127 | 24 | <20 | <20 | 16 | 0.66 | 0.21 | 0.30 | 0.03 | 0.07 | 16 | 8 | <2 | 7 | 3 | <5 | <10 | 0.11 | 6 |
| 393 | 10527 | <5 | 0.137 | 5.18 | 762 | <10 | 210 | 133 | 127 | <20 | <20 | 14 | 2.76 | 2.11 | 0.66 | 0.02 | 0.14 | 19 | 12 | 5 | 41 | 14 | 12 | <10 | 0.35 | 20 |
| 393 | 10528 | <5 | 0.059 | 3.80 | 351 | <10 | 142 | 42 | 124 | <20 | <20 | 10 | 2.16 | 0.42 | 0.18 | <0.01 | 0.06 | 11 | 3 | <2 | 22 | 6 | 5 | <10 | 0.18 | 3 |
| 394 | 10580 | <5 | 0.196 | 6.04 | 724 | <10 | 114 | 127 | 137 | <20 | <20 | 17 | 3.13 | 2.28 | 0.61 | 0.02 | 0.14 | 15 | 11 | 6 | 44 | 15 | 13 | <10 | 0.37 | 22 |
| 394 | 10581 | <5 | 0.034 | 3.92 | 318 | <10 | 136 | 43 | 99 | <20 | <20 | 12 | 2.30 | 0.53 | 0.19 | <0.01 | 0.07 | 13 | 3 | <2 | 29 | 5 | <5 | <10 | 0.12 | 3 |
| 395 | 10582 | <5 | 0.139 | 5.02 | 439 | <10 | 109 | 76 | 87 | <20 | <20 | 13 | 2.70 | 1.38 | 0.35 | 0.01 | 0.13 | 11 | 9 | 6 | 33 | 11 | 7 | <10 | 0.17 | 15 |
| 395 | 10583 | <5 | 0.037 | 3.19 | 934 | <10 | 156 | 34 | 93 | <20 | <20 | 14 | 1.96 | 0.31 | 0.16 | <0.01 | 0.07 | 12 | 3 | 3 | 10 | 3 | <5 | <10 | 0.07 | <1 |
| 396 | 10557 | <5 | 0.017 | 1.84 | 282 | <10 | 48 | 162 | 57 | <20 | <20 | 63 | 0.65 | 0.24 | 0.48 | 0.02 | 0.05 | 18 | 23 | 2 | 6 | 8 | <5 | <10 | 0.25 | 11 |
| 396 | 10558 | <5 | 0.120 | 2.59 | 223 | <10 | 91 | 38 | 51 | <20 | <20 | 15 | 1.60 | 0.63 | 0.38 | 0.01 | 0.06 | 19 | 8 | <2 | 19 | 3 | <5 | <10 | 0.09 | 4 |
| 397 | 10571 | <5 | 0.179 | 4.54 | 1422 | <10 | 122 | 119 | 102 | <20 | <20 | 10 | 2.36 | 1.42 | 0.44 | 0.02 | 0.16 | 13 | 11 | 5 | 31 | 12 | 9 | <10 | 0.20 | 16 |
| 398 | 10568 | <5 | 0.182 | 5.66 | 896 | <10 | 171 | 115 | 119 | <20 | <20 | 13 | 2.93 | 1.86 | 0.72 | 0.02 | 0.15 | 21 | 13 | 6 | 43 | 13 | 12 | <10 | 0.22 | 17 |
| 399 | 10569 | <5 | 0.152 | 5.83 | 338 | <10 | 125 | 74 | 89 | <20 | <20 | 4 | 3.33 | 1.35 | 0.08 | 0.02 | 0.18 | 8 | 5 | 7 | 52 | 11 | 7 | <10 | <0.01 | 14 |
| 400 | 10570 | <5 | 0.050 | 3.77 | 799 | <10 | 138 | 38 | 87 | <20 | <20 | 12 | 2.55 | 0.38 | 0.12 | <0.01 | 0.08 | 10 | 2 | 6 | 25 | 2 | <5 | <10 | 0.02 | <1 |
| 401 | 10555 | <5 | 0.245 | 4.29 | 409 | <10 | 142 | 63 | 84 | <20 | <20 | 12 | 2.98 | 1.01 | 0.69 | 0.01 | 0.10 | 45 | 14 | <2 | 41 | 4 | 9 | <10 | 0.08 | 4 |
| 401 | 10556 | <5 | 0.045 | 3.65 | 359 | <10 | 116 | 148 | 72 | <20 | <20 | 17 | 1.88 | 0.72 | 0.48 | 0.04 | 0.14 | 24 | 8 | 4 | 25 | 8 | 6 | <10 | 0.18 | 11 |
| 401 | 10945 | <5 | 0.261 | 4.04 | 473 | <10 | 153 | 58 | 82 | <20 | <20 | 13 | 2.61 | 1.07 | 0.64 | 0.01 | 0.10 | 42 | 13 | 3 | 43 | 1 | 7 | <10 | 0.06 | <1 |
| 401 | 10946 | <5 | 0.073 | 4.67 | 476 | <10 | 144 | 246 | 96 | <20 | <20 | 11 | 2.35 | 1.11 | 0.54 | 0.03 | 0.17 | 26 | 10 | 3 | 35 | 2 | 7 | <10 | 0.17 | 7 |
| 402 | 10554 | <5 | 0.129 | 3.78 | 434 | <10 | 166 | 52 | 69 | <20 | <20 | 17 | 2.48 | 0.90 | 0.63 | 0.02 | 0.10 | 37 | 12 | <2 | 29 | 4 | 7 | <10 | 0.09 | 5 |
| 403 | 10578 | <5 | 0.054 | 5.39 | 842 | <10 | 102 | 79 | 91 | <20 | <20 | 19 | 2.89 | 1.28 | 0.51 | 0.02 | 0.18 | 15 | 12 | 6 | 36 | 11 | 9 | <10 | 0.21 | 20 |
| 403 | 10579 | <5 | 0.045 | 2.36 | 182 | <10 | 58 | 25 | 85 | <20 | <20 | 14 | 1.51 | 0.24 | 0.15 | <0.01 | 0.06 | 10 | 3 | 4 | 7 | 4 | <5 | <10 | 0.04 | <1 |
| 404 | 10577 | <5 | 0.023 | 3.48 | 464 | <10 | 155 | 68 | 67 | <20 | <20 | 34 | 2.11 | 1.13 | 0.62 | 0.02 | 0.22 | 22 | 10 | 5 | 26 | 8 | 7 | <10 | 0.25 | 28 |
| 405 | 10575 | <5 | 0.035 | 6.00 | 872 | <10 | 145 | 110 | 163 | <20 | <20 | 12 | 3.10 | 2.10 | 0.91 | 0.03 | 0.09 | 33 | 12 | 8 | 43 | 18 | 15 | <10 | 0.34 | 23 |
| 405 | 10576 | <5 | 0.043 | 3.84 | 568 | <10 | 169 | 40 | 114 | <20 | <20 | 12 | 2.47 | 0.43 | 0.20 | <0.01 | 0.07 | 16 | 3 | 3 | 27 | 4 | <5 | <10 | 0.11 | 1 |
| 406 | 10572 | <5 | 0.034 | 4.11 | 413 | <10 | 104 | 61 | 45 | <20 | <20 | 16 | 2.25 | 0.89 | 0.39 | 0.02 | 0.18 | 11 | 11 | 5 | 30 | 6 | <5 | <10 | 0.16 | 11 |
| 407 | 10573 | <5 | 0.042 | 5.36 | 890 | <10 | 294 | 95 | 140 | <20 | <20 | 16 | 2.82 | 1.92 | 1.15 | 0.03 | 0.13 | 44 | 14 | 7 | 41 | 16 | 15 | <10 | 0.32 | 25 |
| 408 | 10574 | <5 | 0.032 | 4.94 | 630 | <10 | 264 | 54 | 126 | <20 | <20 | 11 | 3.32 | 0.80 | 0.29 | <0.01 | 0.06 | 20 | 3 | <2 | 45 | 5 | 7 | <10 | 0.19 | 4 |
| 409 | 10619 | <5 | 0.055 | 3.31 | 415 | <10 | 183 | 42 | 63 | <20 | <20 | 19 | 2.31 | 0.79 | 0.58 | 0.02 | 0.09 | 37 | 11 | <2 | 24 | 4 | 6 | <10 | 0.09 | 3 |
| 409 | 10620 | <5 | 0.040 | 7.57 | 1065 | <10 | 179 | 107 | 106 | <20 | <20 | 17 | 3.42 | 1.83 | 0.46 | 0.02 | 0.15 | 21 | 10 | 8 | 50 | 12 | 9 | <10 | 0.18 | 17 |
| 410 | 10624 | <5 | 0.130 | 5.60 | 1701 | <10 | 167 | 115 | 98 | <20 | <20 | 160 | 1.96 | 0.40 | 1.49 | 0.01 | 0.03 | 38 | 43 | 7 | 9 | 10 | 15 | <10 | 0.21 | 10 |
| 410 | 10625 | <5 | 0.034 | 2.83 | 552 | <10 | 87 | 30 | 54 | <20 | <20 | 15 | 1.69 | 0.70 | 0.63 | <0.01 | 0.05 | 30 | 9 | <2 | 20 | 3 | 5 | <10 | 0.10 | 3 |
| 411 | 10621 | <5 | 0.021 | 3.43 | 253 | <10 | 151 | 65 | 42 | <20 | <20 | 11 | 2.32 | 1.11 | 0.80 | 0.16 | 0.14 | 103 | 4 | 6 | 14 | 6 | <5 | <10 | 0.10 | 11 |
| 411 | 10622 | <5 | <0.010 | 5.74 | 562 | <10 | 121 | 67 | 70 | <20 | <20 | 17 | 2.93 | 1.33 | 0.27 | 0.03 | 0.49 | 17 | 16 | 5 | 20 | 8 | <5 | <10 | <0.01 | 9 |
| 411 | 10623 | <5 | 0.261 | 3.38 | 269 | <10 | 106 | 74 | 41 | <20 | <20 | 12 | 2.13 | 1.14 | 1.03 | 0.12 | 0.16 | 78 | 6 | 4 | 13 | 6 | <5 | <10 | 0.08 | 13 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 412 | 10539 | Fish Ck | | pan | 4 pan comp, mod mag | 309 | | | <0.2 | 19 | 16 | 63 | 6 | 35 | 23 | 0.5 | <5 | 33 |
| 412 | 10540 | Fish Ck | | sed | | <5 | | | <0.2 | 24 | 7 | 87 | <1 | 36 | 16 | <0.2 | <5 | 8 |
| 413 | 10541 | Atla Ck | | sed | | <5 | | | <0.2 | 23 | 4 | 44 | 3 | 15 | 10 | <0.2 | <5 | <5 |
| 413 | 10542 | Atla Ck | | pan | mod mag | <5 | | | <0.2 | 9 | 9 | 34 | 6 | 18 | 16 | 0.3 | <5 | 10 |
| 414 | 10606 | Raven Ck | | sed | | <5 | | | <0.2 | 27 | 3 | 47 | 1 | 31 | 12 | <0.2 | <5 | 9 |
| 414 | 10607 | Raven Ck | | pan | mod mag | 22 | | | <0.2 | 9 | 8 | 44 | 5 | 27 | 17 | 0.3 | <5 | 10 |
| 415 | 10505 | Raven Ck | flt | sel | meta gwy | <5 | | | <0.2 | 40 | 4 | 64 | 1 | 18 | 21 | 0.5 | <5 | 217 |
| 415 | 10626 | Raven Ck | rub | sel | brecciated hfls, near intr contact | <5 | | | <0.2 | 52 | 4 | 36 | 2 | 21 | 18 | <0.2 | <5 | 21 |
| 415 | 10627 | Raven Ck | flt | sel | banded hfls w/ lim, near intr contact | <5 | | | <0.2 | 50 | 5 | 18 | 6 | 16 | 9 | <0.2 | <5 | 16 |
| 415 | 10628 | Raven Ck | rub | rand | hfls w/ lim, near intr contact | <5 | | | <0.2 | 152 | <2 | 41 | 3 | 28 | 28 | 0.3 | <5 | 146 |
| 415 | 10629 | Raven Ck | rub | sel | hfls w/ lim, near intr contact | <5 | | | <0.2 | 15 | 3 | 24 | 2 | 25 | 15 | <0.2 | <5 | 56 |
| 416 | 10588 | Indian River | | plac | 1 fine and 20 v fine Au flakes | 24.32 ppm | | | <0.2 | 48 | 13 | 48 | 225 | 27 | 17 | <0.2 | <5 | 24 |
| 417 | 11005 | Black Ck | rub | sel | hypabyssal dike w/ 2% cpy, qz, feld | 16 | | | 0.8 | 888 | 3 | 15 | 9 | 3 | 3 | <0.2 | <5 | 9 |
| 418 | 11006 | Black Ck | flt | sel | hfls w/ cpy, lim, MnO | 9 | | | 0.5 | 1336 | <2 | 38 | 5 | 11 | 7 | 0.3 | <5 | 111 |
| 419 | 10605 | Black Ck | flt | sel | hfls w/ qz veins, < 5% py | 12 | | | 3.3 | 2121 | 8 | 31 | 10 | 7 | 10 | <0.2 | 473 | 20 |
| 420 | 10994 | Black Ck | flt | sel | brecciated hfls w/ 1% cpy, qz matrix | 31 | | | 2.3 | 1442 | <2 | 43 | 3 | 12 | 10 | <0.2 | <5 | 5 |
| 420 | 10995 | Black Ck | rub | sel | brecciated hfls w/ 1% cpy, qz matrix | 16 | | | 2.4 | 1661 | <2 | 46 | 2 | 14 | 8 | <0.2 | <5 | 6 |
| 421 | 11023 | Black Ck | flt | sel | blk hfls w/ cpy | 2 | | | <0.2 | 98 | 7 | 39 | 4 | 9 | 9 | 0.3 | <5 | 71 |
| 422 | 11024 | Black Ck | flt | sel | hfls w/ diss cpy (?) | 2 | | | <0.2 | 89 | <2 | 32 | 1 | 11 | 14 | <0.2 | <5 | 15 |
| 423 | 10959 | Black Ck | flt | sel | hfls mdst w/ 2% po | 4 | | | 0.2 | 363 | <2 | 51 | 3 | 33 | 37 | 2.0 | <5 | 595 |
| 423 | 10960 | Black Ck | | sed | | 11 | | | <0.2 | 38 | 6 | 76 | 2 | 23 | 14 | <0.2 | <5 | 62 |
| 424 | 10961 | Black Ck | flt | sel | hfls mdst w/ diss and stringer py/po | 8 | | | 0.3 | 189 | <2 | 43 | 2 | 12 | 13 | <0.2 | <5 | 60 |
| 425 | 10962 | Black Ck | rub | sel | hfls mdst, brecciated gwy w/ 3% py | <1 | | | <0.2 | 196 | <2 | 16 | 2 | 11 | 14 | <0.2 | <5 | 8 |
| 425 | 10963 | Black Ck | rub | sel | latitic dike w/ po (?), bio, qz, feld | <1 | | | <0.2 | 10 | 4 | 23 | 3 | 14 | 2 | <0.2 | <5 | 6 |
| 426 | 10602 | Black Ck | | pan | 1 fine Au flake, mod mag | 36 | | | <0.2 | 142 | 5 | 35 | 7 | 16 | 21 | <0.2 | <5 | 98 |
| 426 | 10603 | Black Ck | | sed | | <5 | | | <0.2 | 210 | <2 | 72 | 9 | 22 | 25 | 0.2 | <5 | 89 |
| 426 | 10604 | Black Ck | flt | grab | coarse arkosic ss w/ 10% py | <5 | | | <0.2 | 161 | 9 | 39 | 3 | 11 | 18 | <0.2 | <5 | 15 |
| 427 | 10958 | Black Ck | flt | sel | diorite (?) w/ 5% po, lim | 5 | | | <0.2 | 343 | <2 | 39 | 2 | 13 | 25 | <0.2 | <5 | 42 |
| 428 | 10957 | Black Ck | tail | sel | gray hfls w/ 1% po, tr cpy | 2 | | | <0.2 | 92 | <2 | 32 | 2 | 7 | 8 | <0.2 | <5 | 27 |
| 429 | 11003 | Black Ck | rub | rep | gwy w/ diss cpy, lim, MnO | 10 | | | <0.2 | 242 | 4 | 48 | 4 | 14 | 21 | <0.2 | <5 | 11 |
| 429 | 11004 | Black Ck | flt | sel | hfls w/ 5% cpy, lim, MnO | 4 | | | <0.2 | 129 | <2 | 29 | 3 | 29 | 17 | <0.2 | <5 | 5 |
| 430 | 10981 | Black Ck | | soil | eastern soil traverse | 6 | | | <0.2 | 132 | 6 | 55 | 2 | 18 | 8 | <0.2 | <5 | 14 |
| 431 | 10972 | Black Ck | | soil | eastern soil traverse | 323 | | | <0.2 | 79 | 7 | 72 | 2 | 24 | 10 | <0.2 | <5 | 49 |
| 431 | 10973 | Black Ck | | soil | eastern soil traverse | 41 | | | <0.2 | 111 | 4 | 63 | 2 | 21 | 13 | <0.2 | <5 | 27 |
| 431 | 10974 | Black Ck | | soil | eastern soil traverse | 38 | | | <0.2 | 104 | 4 | 61 | 2 | 17 | 12 | <0.2 | <5 | 26 |
| 431 | 10975 | Black Ck | | soil | eastern soil traverse | 15 | | | <0.2 | 77 | 4 | 55 | 3 | 15 | 8 | <0.2 | <5 | 22 |

## Appendix B - Analytical Results

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 412 | 10539 | <5 | 0.033 | >10.00 | 1198 | <10 | 102 | 261 | 410 | <20 | 36 | 1201 | 1.51 | 0.49 | 1.03 | 0.09 | 0.15 | 89 | 40 | 24 | 12 | 39 | 23 | <10 | 0.23 | 19 |
| 412 | 10540 | <5 | 0.042 | 3.63 | 469 | <10 | 169 | 40 | 64 | <20 | <20 | 22 | 2.36 | 0.82 | 0.57 | 0.02 | 0.10 | 64 | 9 | <2 | 28 | 4 | 5 | <10 | 0.08 | 2 |
| 413 | 10541 | <5 | 0.032 | 2.51 | 309 | <10 | 283 | 20 | 59 | <20 | <20 | 22 | 2.00 | 0.55 | 0.58 | 0.04 | 0.12 | 96 | 5 | <2 | 15 | 4 | <5 | <10 | 0.09 | <1 |
| 413 | 10542 | <5 | 0.018 | >10.00 | 390 | <10 | 87 | 201 | 346 | <20 | 81 | 512 | 0.57 | 0.19 | 0.47 | 0.05 | 0.07 | 42 | 11 | 15 | 4 | 32 | 8 | <10 | 0.10 | 8 |
| 414 | 10606 | <5 | 0.027 | 2.81 | 382 | <10 | 149 | 44 | 75 | <20 | <20 | 25 | 1.93 | 0.72 | 0.48 | 0.02 | 0.22 | 58 | 6 | <2 | 14 | 4 | <5 | <10 | 0.10 | 1 |
| 414 | 10607 | <5 | 0.010 | >10.00 | 503 | <10 | 57 | 185 | 323 | <20 | 33 | 286 | 0.71 | 0.32 | 0.48 | 0.05 | 0.14 | 31 | 15 | 14 | 6 | 31 | 6 | <10 | 0.15 | 9 |
| 415 | 10505 | <5 | <0.010 | 5.08 | 668 | <10 | 468 | 65 | 123 | <20 | <20 | 15 | 2.78 | 1.51 | 0.53 | 0.20 | 1.74 | 25 | 11 | 7 | 23 | 14 | 13 | <10 | 0.41 | 10 |
| 415 | 10626 | <5 | <0.010 | 3.67 | 403 | <10 | 243 | 74 | 129 | <20 | <20 | 15 | 2.66 | 1.01 | 0.82 | 0.26 | 1.10 | 62 | 15 | 7 | 15 | 14 | 11 | <10 | 0.31 | 7 |
| 415 | 10627 | <5 | <0.010 | 1.93 | 321 | <10 | 78 | 125 | 54 | <20 | <20 | 15 | 0.95 | 0.49 | 0.60 | 0.11 | 0.22 | 24 | 11 | 2 | 7 | 6 | 7 | <10 | 0.12 | 20 |
| 415 | 10628 | <5 | <0.010 | 5.58 | 569 | <10 | 326 | 81 | 146 | <20 | <20 | 12 | 3.03 | 1.27 | 0.58 | 0.26 | 1.52 | 41 | 10 | 8 | 18 | 16 | 14 | <10 | 0.34 | 6 |
| 415 | 10629 | <5 | <0.010 | 2.29 | 350 | <10 | 76 | 101 | 76 | <20 | <20 | 16 | 1.74 | 0.55 | 1.21 | 0.26 | 0.49 | 37 | 10 | 4 | 7 | 9 | <5 | <10 | 0.26 | 6 |
| 416 | 10588 | <5 | 0.053 | >10.00 | 655 | <10 | 95 | 250 | 447 | <20 | 1127 | 665 | 0.89 | 0.35 | 0.87 | 0.14 | 0.18 | 65 | 20 | <2 | 6 | 31 | 11 | <10 | 0.18 | 6 |
| 417 | 11005 | <5 | <0.010 | 1.49 | 152 | <10 | 56 | 82 | 28 | <20 | <20 | 50 | 0.77 | 0.27 | 0.46 | 0.10 | 0.21 | 21 | 7 | 2 | 5 | 1 | <5 | <10 | 0.12 | 10 |
| 418 | 11006 | <5 | <0.010 | 5.54 | 597 | <10 | 322 | 105 | 204 | <20 | <20 | 6 | 2.62 | 1.71 | 0.14 | 0.08 | 2.07 | 17 | 4 | 5 | 20 | <1 | 19 | <10 | 0.39 | <1 |
| 419 | 10605 | 7 | 0.015 | 3.88 | 207 | 45 | 124 | 102 | 66 | <20 | <20 | 10 | 1.87 | 0.79 | 0.29 | 0.06 | 0.64 | 16 | 6 | 5 | 28 | 8 | 6 | <10 | 0.13 | 5 |
| 420 | 10994 | <5 | 0.014 | 3.75 | 435 | <10 | 242 | 138 | 98 | <20 | <20 | 11 | 1.85 | 1.18 | 0.41 | 0.14 | 1.21 | 44 | 11 | 4 | 14 | <1 | 10 | <10 | 0.30 | 4 |
| 420 | 10995 | <5 | 0.012 | 3.40 | 423 | <10 | 219 | 172 | 96 | <20 | <20 | 12 | 1.78 | 1.05 | 0.26 | 0.12 | 1.16 | 41 | 9 | 4 | 11 | <1 | 10 | <10 | 0.26 | 15 |
| 421 | 11023 | <5 | 0.017 | 2.22 | 559 | <10 | 64 | 108 | 38 | <20 | <20 | 45 | 1.87 | 0.41 | 1.36 | 0.31 | 0.34 | 101 | 21 | 4 | 9 | 1 | <5 | <10 | 0.17 | 62 |
| 422 | 11024 | <5 | <0.010 | 3.19 | 465 | <10 | 138 | 92 | 75 | <20 | <20 | 15 | 3.70 | 0.68 | 2.20 | 0.54 | 0.72 | 251 | 16 | 8 | 16 | <1 | 7 | <10 | 0.28 | 3 |
| 423 | 10959 | <5 | <0.010 | 7.71 | 691 | <10 | 70 | 101 | 161 | <20 | <20 | 5 | 4.05 | 1.71 | 0.94 | 0.38 | 2.17 | 136 | 5 | 6 | 46 | <1 | 17 | <10 | 0.33 | <1 |
| 423 | 10960 | <5 | 0.053 | 3.56 | 617 | <10 | 213 | 29 | 72 | <20 | <20 | 14 | 3.11 | 0.83 | 0.35 | 0.02 | 0.29 | 84 | 7 | 5 | 24 | 2 | 5 | <10 | 0.10 | <1 |
| 424 | 10961 | <5 | <0.010 | 6.83 | 521 | <10 | 46 | 107 | 96 | <20 | 40 | 7 | 2.34 | 0.74 | 1.43 | 0.32 | 0.51 | 89 | 9 | 3 | 10 | <1 | 7 | <10 | 0.23 | <1 |
| 425 | 10962 | <5 | 0.011 | 3.08 | 245 | <10 | 62 | 91 | 43 | <20 | <20 | 13 | 2.10 | 0.34 | 1.72 | 0.40 | 0.21 | 124 | 15 | 4 | 5 | <1 | <5 | <10 | 0.23 | 6 |
| 425 | 10963 | <5 | 0.011 | 2.51 | 246 | <10 | 308 | 73 | 56 | <20 | <20 | 19 | 1.63 | 0.84 | 1.05 | 0.23 | 0.52 | 233 | 5 | 3 | 16 | 2 | <5 | <10 | 0.16 | 14 |
| 426 | 10602 | <5 | 0.033 | 9.36 | 559 | <10 | 125 | 65 | 157 | <20 | <20 | 48 | 2.12 | 0.75 | 0.31 | 0.04 | 0.65 | 26 | 12 | 5 | 23 | <1 | 9 | <10 | 0.18 | 17 |
| 426 | 10603 | <5 | 0.044 | 5.46 | 621 | <10 | 181 | 38 | 125 | <20 | <20 | 28 | 4.37 | 1.19 | 0.44 | 0.03 | 0.82 | 51 | 14 | <2 | 29 | 7 | 13 | <10 | 0.25 | 7 |
| 426 | 10604 | <5 | <0.010 | 3.83 | 299 | <10 | 86 | 50 | 60 | <20 | <20 | 21 | 1.64 | 0.97 | 0.11 | 0.10 | 0.88 | 8 | 13 | 5 | 17 | 7 | 8 | <10 | 0.22 | 32 |
| 427 | 10958 | <5 | <0.010 | 3.95 | 728 | <10 | 60 | 66 | 76 | <20 | <20 | 16 | 1.12 | 0.79 | 1.73 | 0.18 | 0.29 | 27 | 17 | <2 | 5 | <1 | 7 | <10 | 0.28 | <1 |
| 428 | 10957 | <5 | 0.012 | 4.43 | 411 | <10 | 240 | 80 | 88 | <20 | <20 | 12 | 2.85 | 1.41 | 0.55 | 0.13 | 1.68 | 56 | 7 | 5 | 45 | <1 | 7 | <10 | 0.26 | 1 |
| 429 | 11003 | <5 | 0.013 | 4.18 | 322 | <10 | 79 | 73 | 88 | <20 | <20 | 19 | 1.43 | 0.79 | 0.94 | 0.17 | 0.61 | 31 | 18 | 3 | 10 | <1 | <5 | <10 | 0.35 | 3 |
| 429 | 11004 | <5 | <0.010 | 3.58 | 232 | <10 | 51 | 120 | 111 | <20 | <20 | 9 | 1.40 | 0.69 | 0.70 | 0.16 | 0.62 | 18 | 10 | 3 | 5 | <1 | <5 | <10 | 0.27 | 2 |
| 430 | 10981 | <5 | 0.088 | 2.63 | 207 | <10 | 197 | 25 | 65 | <20 | <20 | 13 | 1.91 | 0.64 | 0.17 | 0.02 | 0.17 | 30 | 4 | 3 | 12 | 2 | <5 | <10 | 0.11 | <1 |
| 431 | 10972 | <5 | 0.037 | 3.59 | 326 | <10 | 183 | 31 | 88 | <20 | <20 | 17 | 2.48 | 0.80 | 0.26 | 0.02 | 0.25 | 33 | 6 | 4 | 17 | 2 | 5 | <10 | 0.13 | <1 |
| 431 | 10973 | <5 | 0.034 | 3.40 | 604 | <10 | 273 | 28 | 99 | <20 | <20 | 18 | 2.56 | 1.00 | 0.57 | 0.02 | 0.33 | 82 | 6 | 5 | 16 | 3 | 6 | <10 | 0.17 | <1 |
| 431 | 10974 | <5 | 0.032 | 3.48 | 543 | <10 | 242 | 28 | 101 | <20 | <20 | 16 | 2.45 | 0.93 | 0.34 | 0.02 | 0.19 | 58 | 5 | 6 | 14 | 2 | 5 | <10 | 0.16 | <1 |
| 431 | 10975 | <5 | 0.039 | 2.89 | 432 | <10 | 187 | 25 | 89 | <20 | <20 | 12 | 1.97 | 0.68 | 0.28 | 0.02 | 0.20 | 45 | 4 | 6 | 11 | 2 | <5 | <10 | 0.15 | <1 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 431 | 10976 | Black Ck | | soil | eastern soil traverse | 8 | | | <0.2 | 32 | 4 | 73 | 1 | 7 | 2 | <0.2 | <5 | <5 |
| 431 | 10977 | Black Ck | | soil | eastern soil traverse | 10 | | | 0.3 | 34 | 4 | 42 | 2 | 17 | 3 | 0.3 | <5 | 6 |
| 431 | 10978 | Black Ck | | soil | eastern soil traverse | 7 | | | <0.2 | 47 | 5 | 47 | 2 | 13 | 4 | <0.2 | <5 | 10 |
| 431 | 10979 | Black Ck | | soil | eastern soil traverse | 8 | | | 0.2 | 41 | 7 | 54 | 3 | 26 | 6 | <0.2 | <5 | 16 |
| 431 | 10980 | Black Ck | | soil | eastern soil traverse | 7 | | | <0.2 | 25 | 5 | 25 | 1 | 10 | 2 | <0.2 | <5 | 8 |
| 432 | 11002 | Black Ck | flt | sel | gwy w/ diss cpy, lim, MnO | 611 | | | 6.4 | 3912 | 7 | 84 | 3 | 20 | 42 | 0.5 | <5 | 50 |
| 433 | 11001 | Black Ck | rub | sel | hfls w/ 1% diss cpy, lim, MnO | 1 | | | <0.2 | 164 | 14 | 45 | <1 | 16 | 16 | 0.2 | <5 | 10 |
| 434 | 10530 | Black Ck | rub | grab | hfls w/ po, py, lim | 6 | | | <0.2 | 277 | 6 | 46 | 3 | 13 | 18 | <0.2 | <5 | 7 |
| 434 | 10531 | Black Ck | flt | sel | hfls w/ < 5% po, py, lim | 9 | | | <0.2 | 50 | 3 | 40 | 2 | 11 | 43 | <0.2 | <5 | 20 |
| 434 | 10532 | Black Ck | otc | rand | hfls w/ < 2% po, py, lim | <5 | | | <0.2 | 61 | 3 | 83 | 1 | 22 | 21 | 0.2 | <5 | 6 |
| 435 | 10501 | Black Ck | flt | grab | arkosic ss w/ <1% sulfides | <5 | | | <0.2 | 21 | 6 | 53 | 2 | 18 | 15 | <0.2 | <5 | 9 |
| 436 | 10502 | Black Ck | flt | grab | coarse ss w/ py, po | <5 | | | <0.2 | 60 | 9 | 53 | 3 | 11 | 16 | <0.2 | <5 | 6 |
| 437 | 10503 | Black Ck | flt | sel | brecciated hfls w/ py, po | <5 | | | <0.2 | 62 | 6 | 60 | <1 | 18 | 18 | 0.2 | <5 | 9 |
| 438 | 10533 | Black Ck | flt | grab | hfls w/ 2% po, py, gypsum | <5 | | | <0.2 | 33 | 3 | 51 | 1 | 18 | 22 | 0.4 | <5 | 110 |
| 438 | 10534 | Black Ck | flt | sel | hfls w/ < 3% po, py, lim | <5 | | | <0.2 | 57 | 3 | 48 | 1 | 18 | 21 | <0.2 | <5 | 23 |
| 439 | 10986 | Black Ck | | soil | headlands soil sample | 10 | | | <0.2 | 141 | 9 | 76 | 3 | 21 | 13 | 0.3 | <5 | 58 |
| 440 | 10985 | Black Ck | | soil | headlands soil sample | 5 | | | <0.2 | 62 | 7 | 54 | 3 | 12 | 6 | <0.2 | <5 | 33 |
| 441 | 10600 | Black Ck | | sed | | <5 | | | <0.2 | 53 | 7 | 60 | 2 | 17 | 16 | <0.2 | <5 | 42 |
| 441 | 10601 | Black Ck | | pan | | 6 | | | <0.2 | 26 | 9 | 32 | 3 | 20 | 12 | <0.2 | <5 | 19 |
| 442 | 10591 | Black Ck | flt | grab | hfls near intr contact w/ py, cpy | <5 | | | <0.2 | 406 | 3 | 55 | 1 | 14 | 26 | 1.8 | <5 | 1198 |
| 442 | 10592 | Black Ck | otc | sel | hfls w/ 1-2% py, po | <5 | | | <0.2 | 97 | 7 | 104 | 3 | 15 | 10 | 0.2 | <5 | 10 |
| 443 | 11022 | Black Ck | | pan | from colluvium, abu fine mag | 1014 | <5 | 2 | <0.2 | 38 | 5 | 52 | 7 | 29 | 16 | <0.2 | 112 | 46 |
| 444 | 10529 | Black Ck | otc | sel | fine grained monz intr | <5 | | | <0.2 | 39 | 9 | 44 | 2 | 16 | 12 | 0.2 | <5 | 6 |
| 444 | 10589 | Black Ck | | plac | abu coarse Au, sch & zircon | 0.835 oz/cyd | | | 0.4 | 127 | 12 | 63 | 16 | 38 | 33 | 3.8 | 100 | 813 |
| 444 | 10590 | Black Ck | | plac | abu fine Au, sch & zircon | 0.061 oz/cyd | | | 7.0 | 65 | 10 | 64 | 17 | 35 | 23 | 0.4 | 139 | 249 |
| 444 | 10638 | Black Ck | | plac | abu fine Au, sch & zircon | 0.230 oz/cyd | | | 15.6 | 35 | 82 | 70 | 37 | 63 | 30 | <0.2 | 489 | 174 |
| 444 | 10639 | Black Ck | flt | sel | qz veinlet in hfls (?) w/ 10% py, cpy | 21 | | | 3.3 | 1485 | 5 | 49 | 3 | 13 | 12 | 0.4 | <5 | <5 |
| 445 | 10996 | Black Ck | flt | sel | gwy w/ <1% diss py | 6 | | | <0.2 | 157 | <2 | 40 | 1 | 5 | 9 | <0.2 | <5 | 5 |
| 446 | 10993 | Black Ck | flt | sel | dark gry hfls w/ 1-2% diss py | <1 | | | <0.2 | 72 | <2 | 29 | 2 | 13 | 9 | <0.2 | <5 | 9 |
| 447 | 10982 | Black Ck | | soil | western soil traverse | 7 | | | <0.2 | 35 | 7 | 70 | 1 | 22 | 11 | 0.3 | <5 | 85 |
| 447 | 10983 | Black Ck | | soil | western soil traverse | 9 | | | 0.2 | 13 | 6 | 59 | 1 | 18 | 5 | <0.2 | <5 | 31 |
| 447 | 10984 | Black Ck | | soil | western soil traverse | 9 | | | 0.2 | 9 | 3 | 32 | <1 | 6 | 2 | <0.2 | <5 | 10 |
| 448 | 10598 | Black Ck | | pan | | 6 | | | <0.2 | 49 | 15 | 95 | 1 | 25 | 18 | 0.8 | <5 | 362 |
| 448 | 10599 | Black Ck | | sed | | <5 | | | <0.2 | 49 | 10 | 87 | 1 | 25 | 21 | 0.4 | <5 | 149 |
| 448 | 11027 | Black Ck | rub | sel | hfls w/ 1% diss cpy | 4 | | | <0.2 | 37 | <2 | 56 | 1 | 18 | 17 | 0.8 | <5 | 254 |
| 449 | 11026 | Black Ck | flt | sel | qz-hfls breccia w/ no sulfides | <1 | | | <0.2 | 24 | 2 | 38 | 1 | 16 | 12 | <0.2 | <5 | 59 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 431 | 10976 | <5 | 0.047 | 0.92 | 219 | <10 | 85 | 11 | 17 | <20 | <20 | 5 | 0.63 | 0.14 | 0.16 | 0.01 | 0.09 | 19 | 2 | <2 | 2 | <1 | <5 | <10 | 0.05 | <1 |
| 431 | 10977 | <5 | 0.073 | 1.41 | 100 | <10 | 199 | 15 | 29 | <20 | <20 | 8 | 1.18 | 0.20 | 0.23 | 0.01 | 0.08 | 39 | 3 | 3 | 4 | <1 | <5 | <10 | 0.05 | <1 |
| 431 | 10978 | <5 | 0.050 | 1.93 | 104 | <10 | 124 | 16 | 46 | <20 | <20 | 12 | 1.40 | 0.26 | 0.19 | 0.01 | 0.08 | 29 | 3 | 3 | 5 | 2 | <5 | <10 | 0.08 | <1 |
| 431 | 10979 | <5 | 0.085 | 2.81 | 253 | <10 | 185 | 26 | 74 | <20 | <20 | 12 | 1.90 | 0.60 | 0.15 | 0.01 | 0.14 | 30 | 3 | 4 | 12 | 2 | <5 | <10 | 0.09 | <1 |
| 431 | 10980 | <5 | 0.055 | 1.16 | 58 | <10 | 113 | 16 | 29 | <20 | <20 | 9 | 1.17 | 0.17 | 0.14 | <0.01 | 0.07 | 22 | 3 | 3 | 4 | 1 | <5 | <10 | 0.07 | <1 |
| 432 | 11002 | <5 | 0.022 | 6.11 | 639 | <10 | 31 | 52 | 82 | <20 | <20 | 27 | 1.12 | 0.55 | 1.58 | 0.17 | 0.10 | 43 | 12 | <2 | 8 | <1 | 5 | <10 | 0.25 | 9 |
| 433 | 11001 | <5 | <0.010 | 2.90 | 312 | <10 | 86 | 61 | 47 | <20 | <20 | 11 | 0.94 | 0.27 | 0.87 | 0.17 | 0.21 | 208 | 22 | <2 | 5 | 1 | <5 | <10 | 0.25 | 10 |
| 434 | 10530 | <5 | 0.013 | 5.29 | 596 | <10 | 30 | 48 | 83 | <20 | <20 | 11 | 3.46 | 0.90 | 1.45 | 0.36 | 0.98 | 522 | 6 | 10 | 27 | 10 | 6 | <10 | 0.18 | 13 |
| 434 | 10531 | <5 | 0.011 | 5.71 | 476 | <10 | 28 | 38 | 82 | <20 | <20 | 12 | 3.15 | 1.17 | 1.50 | 0.38 | 0.81 | 209 | 6 | 10 | 34 | 11 | <5 | <10 | 0.23 | 12 |
| 434 | 10532 | <5 | <0.010 | 5.37 | 1002 | <10 | 70 | 75 | 106 | <20 | <20 | 11 | 3.61 | 1.51 | 1.30 | 0.42 | 1.43 | 141 | 10 | 9 | 50 | 13 | 10 | <10 | 0.29 | 15 |
| 435 | 10501 | <5 | <0.010 | 3.62 | 505 | <10 | 157 | 48 | 68 | <20 | <20 | 14 | 3.70 | 0.94 | 1.84 | 0.46 | 0.86 | 144 | 13 | 9 | 24 | 10 | 5 | <10 | 0.28 | 9 |
| 436 | 10502 | <5 | 0.011 | 4.01 | 396 | <10 | 76 | 47 | 71 | <20 | <20 | 14 | 3.99 | 0.78 | 1.99 | 0.50 | 0.82 | 307 | 14 | 10 | 17 | 10 | 6 | <10 | 0.28 | 12 |
| 437 | 10503 | <5 | <0.010 | 4.61 | 669 | <10 | 108 | 49 | 90 | <20 | <20 | 10 | 2.42 | 1.06 | 0.94 | 0.23 | 0.92 | 99 | 12 | 8 | 21 | 11 | 8 | <10 | 0.32 | 8 |
| 438 | 10533 | <5 | <0.010 | 4.82 | 392 | <10 | 218 | 91 | 132 | <20 | <20 | 9 | 4.28 | 1.37 | 1.35 | 0.44 | 1.55 | 68 | 8 | 10 | 31 | 15 | 16 | <10 | 0.29 | 14 |
| 438 | 10534 | <5 | <0.010 | 5.07 | 456 | <10 | 124 | 65 | 109 | <20 | <20 | 9 | 3.66 | 1.38 | 0.99 | 0.40 | 1.49 | 74 | 8 | 9 | 39 | 13 | 14 | <10 | 0.28 | 27 |
| 439 | 10986 | <5 | 0.060 | 4.46 | 414 | <10 | 117 | 29 | 79 | <20 | <20 | 19 | 3.19 | 0.67 | 0.17 | 0.02 | 0.18 | 34 | 7 | 5 | 26 | 3 | <5 | <10 | 0.11 | 3 |
| 440 | 10985 | <5 | 0.077 | 4.38 | 307 | <10 | 88 | 30 | 110 | <20 | <20 | 14 | 2.73 | 0.64 | 0.07 | 0.02 | 0.30 | 22 | 5 | 6 | 15 | 5 | 6 | <10 | 0.17 | 4 |
| 441 | 10600 | <5 | 0.059 | 3.06 | 501 | <10 | 146 | 24 | 63 | <20 | <20 | 15 | 2.42 | 0.50 | 0.26 | 0.02 | 0.17 | 58 | 6 | <2 | 13 | 4 | <5 | <10 | 0.09 | 2 |
| 441 | 10601 | <5 | 0.013 | 7.26 | 286 | <10 | 63 | 172 | 175 | <20 | <20 | 75 | 0.84 | 0.25 | 0.39 | 0.06 | 0.11 | 40 | 7 | 8 | 5 | 18 | <5 | <10 | 0.10 | 5 |
| 442 | 10591 | <5 | <0.010 | 4.58 | 338 | <10 | 81 | 46 | 112 | <20 | <20 | 10 | 2.53 | 1.43 | 0.67 | 0.23 | 1.30 | 45 | 7 | 7 | 25 | 13 | 12 | <10 | 0.28 | 5 |
| 442 | 10592 | <5 | 0.010 | 3.40 | 673 | <10 | 353 | 71 | 36 | <20 | <20 | 32 | 4.53 | 0.92 | 1.71 | 0.64 | 1.13 | 216 | 12 | 3 | 18 | 7 | 7 | <10 | 0.19 | 24 |
| 443 | 11022 | <5 | 0.016 | >10.00 | 523 | 64 | 86 | 276 | 332 | <20 | 79 | 117 | 0.99 | 0.41 | 0.60 | 0.08 | 0.22 | 43 | 9 | <2 | 9 | 4 | <5 | <10 | 0.12 | 1 |
| 444 | 10529 | <5 | <0.010 | 2.34 | 313 | <10 | 340 | 48 | 55 | <20 | <20 | 27 | 2.68 | 0.83 | 1.08 | 0.34 | 0.71 | 195 | 4 | 4 | 13 | 7 | <5 | <10 | 0.18 | 7 |
| 444 | 10589 | <5 | 0.966 | >10.00 | 705 | <10 | 107 | 297 | 562 | <20 | 445 | 100 | 0.95 | 0.33 | 0.53 | 0.07 | 0.25 | 42 | 9 | <2 | 9 | 32 | <5 | <10 | 0.09 | 2 |
| 444 | 10590 | <5 | 0.219 | >10.00 | 784 | 63 | 117 | 231 | 526 | <20 | 557 | 130 | 1.16 | 0.46 | 0.64 | 0.10 | 0.34 | 50 | 10 | <2 | 11 | 30 | 6 | <10 | 0.13 | 4 |
| 444 | 10638 | <5 | 0.107 | >10.00 | 1063 | 209 | 30 | 425 | 1188 | 30 | >2000 | 190 | 0.27 | 0.12 | 0.80 | 0.03 | 0.08 | 24 | 15 | <2 | 3 | 67 | 5 | <10 | 0.12 | 1 |
| 444 | 10639 | <5 | <0.010 | 3.32 | 404 | <10 | 323 | 59 | 65 | <20 | <20 | 28 | 2.72 | 0.99 | 0.91 | 0.34 | 0.94 | 158 | 5 | 7 | 9 | 3 | <5 | <10 | 0.22 | 5 |
| 445 | 10996 | <5 | <0.010 | 3.23 | 713 | <10 | 107 | 38 | 84 | <20 | <20 | 17 | 1.03 | 0.78 | 1.50 | 0.16 | 0.39 | 17 | 13 | 3 | 11 | <1 | 7 | <10 | 0.25 | <1 |
| 446 | 10993 | <5 | <0.010 | 4.33 | 459 | <10 | 224 | 99 | 143 | <20 | <20 | 4 | 3.62 | 1.44 | 0.97 | 0.39 | 1.77 | 137 | 7 | 7 | 17 | <1 | 16 | <10 | 0.29 | <1 |
| 447 | 10982 | <5 | 0.051 | 3.26 | 351 | <10 | 179 | 29 | 70 | <20 | <20 | 14 | 2.87 | 0.71 | 0.27 | 0.02 | 0.20 | 53 | 7 | 5 | 20 | 2 | <5 | <10 | 0.10 | <1 |
| 447 | 10983 | <5 | 0.107 | 1.73 | 204 | <10 | 106 | 23 | 39 | <20 | <20 | 7 | 1.43 | 0.26 | 0.09 | 0.01 | 0.12 | 17 | 3 | 3 | 8 | 2 | <5 | <10 | 0.06 | <1 |
| 447 | 10984 | <5 | 0.065 | 0.45 | 48 | <10 | 68 | 5 | 12 | <20 | <20 | 2 | 0.36 | 0.06 | 0.22 | 0.01 | 0.06 | 35 | 1 | <2 | <1 | <1 | <5 | <10 | 0.03 | <1 |
| 448 | 10598 | <5 | 0.033 | 4.95 | 689 | <10 | 196 | 100 | 92 | <20 | <20 | 25 | 2.60 | 0.88 | 0.44 | 0.09 | 0.71 | 45 | 10 | 8 | 30 | 10 | 8 | <10 | 0.19 | 14 |
| 448 | 10599 | <5 | 0.069 | 3.93 | 708 | <10 | 186 | 32 | 74 | <20 | <20 | 17 | 3.58 | 0.74 | 0.38 | 0.03 | 0.31 | 81 | 9 | <2 | 21 | 4 | 6 | <10 | 0.11 | 2 |
| 448 | 11027 | <5 | <0.010 | 4.18 | 621 | <10 | 419 | 105 | 153 | <20 | <20 | 9 | 2.68 | 1.33 | 0.72 | 0.29 | 1.44 | 76 | 9 | 6 | 28 | <1 | 13 | <10 | 0.29 | 9 |
| 449 | 11026 | 5 | <0.010 | 2.10 | 392 | <10 | 182 | 100 | 65 | <20 | <20 | 13 | 3.67 | 0.56 | 2.55 | 0.33 | 0.61 | 266 | 9 | 8 | 11 | <1 | 5 | <10 | 0.22 | 5 |

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 450 | 10965 | Black Ck | | sed | | 13 | | | <0.2 | 22 | 6 | 68 | 1 | 20 | 12 | 0.3 | <5 | 86 |
| 450 | 10966 | Black Ck | | pan | tr mag, no visible Au | 29 | 6 | <1 | <0.2 | 42 | 3 | 81 | 2 | 25 | 17 | 0.5 | <5 | 112 |
| 451 | 10964 | Black Ck | rub | ran | aplite w/ green mineral (ch ?) | 42 | | | <0.2 | 8 | 7 | 19 | <1 | 5 | 10 | 1.7 | <5 | 537 |
| 451 | 10992 | Black Ck | flt | ran | felsic dike w/ tr po (?), lim | <1 | | | <0.2 | 27 | 3 | 48 | 2 | 16 | 9 | <0.2 | <5 | 12 |
| 452 | 10967 | Black Ck | flt | sel | brn hfls w/ xcut qz, diss po | 6 | | | 0.2 | 120 | <2 | 37 | <1 | 12 | 8 | 0.7 | <5 | 223 |
| 452 | 10968 | Black Ck | rub | sel | blk hfls w/ diss po (?) | <1 | | | <0.2 | 38 | <2 | 46 | 2 | 19 | 17 | <0.2 | <5 | 40 |
| 452 | 10990 | Black Ck | rub | ran | porphyritic andesite | 9 | | | <0.2 | 7 | 3 | 38 | 2 | 11 | 6 | 0.7 | <5 | 169 |
| 452 | 10991 | Black Ck | flt | sel | qz-feldspar breccia | 3 | | | <0.2 | 48 | 8 | 34 | 3 | 6 | 7 | 0.6 | <5 | 151 |
| 453 | 10597 | Black Ck | flt | grab | hfls breccia w/ <1% py, lim | 69 | | | <0.2 | 76 | 10 | 43 | 4 | 14 | 16 | 3.5 | <5 | 2676 |
| 454 | 10971 | Black Ck | flt | ran | dark gray hfls w/ 1% po, lim | 4 | | | <0.2 | 77 | 4 | 98 | 8 | 27 | 25 | 4.4 | <5 | 1311 |
| 455 | 11025 | Black Ck | flt | sel | gwy w/ diss cpy | <1 | | | <0.2 | 14 | 2 | 34 | 3 | 20 | 16 | <0.2 | <5 | 6 |
| 456 | 10997 | Black Ck | flt | sel | dark gray hfls w/ 1% diss po | <1 | | | <0.2 | 38 | <2 | 71 | 1 | 14 | 11 | <0.2 | <5 | 5 |
| 456 | 10998 | Black Ck | flt | sel | hfls w/ 1% po, xcut qz, lim | 1 | | | <0.2 | 40 | 2 | 84 | 2 | 42 | 16 | <0.2 | <5 | <5 |
| 457 | 10595 | Black Ck | flt | grab | felsic volc? w/ diss py, fine hbl | <5 | | | <0.2 | 5 | 9 | 17 | <1 | 2 | 1 | 0.4 | <5 | 181 |
| 457 | 10596 | Black Ck | flt | grab | porphyritic andesite w/ po | 57 | | | <0.2 | 88 | 5 | 67 | 2 | 17 | 23 | 1.0 | <5 | 564 |
| 458 | 10594 | Black Ck | flt | grab | dioritic intr w/ 1% po, lim | <5 | | | <0.2 | 40 | 11 | 84 | 2 | 11 | 13 | 0.3 | <5 | 18 |
| 459 | 11021 | Black Ck | flt | sel | hfls w/ tr po, py | 2 | | | <0.2 | 48 | 3 | 48 | 2 | 12 | 14 | <0.2 | <5 | 24 |
| 460 | 10593 | Black Ck | rub | grab | hfls w/ diss and stringer po | <5 | | | <0.2 | 81 | 10 | 81 | 5 | 19 | 17 | 0.4 | <5 | 82 |
| 461 | 10953 | Black Ck | | sed | | 12 | | | <0.2 | 39 | 12 | 86 | <1 | 20 | 15 | 0.4 | <5 | 97 |
| 461 | 10954 | Black Ck | | pan | no mag | 14 | <5 | <1 | <0.2 | 34 | 7 | 120 | 2 | 19 | 14 | 0.5 | <5 | 69 |
| 462 | 10952 | Black Ck | flt | sel | black hfls w/ py | 1 | | | <0.2 | 152 | 8 | 62 | 2 | 29 | 18 | 0.4 | <5 | 108 |
| 463 | 10950 | Black Ck | | sed | | 12 | | | <0.2 | 40 | 15 | 85 | <1 | 21 | 13 | 0.4 | <5 | 80 |
| 463 | 10951 | Black Ck | | pan | minor mag, possible sulfides | 8 | <5 | 2 | <0.2 | 37 | 9 | 90 | 2 | 20 | 13 | 0.5 | <5 | 92 |
| 464 | 10543 | Indian River | flt | grab | andesite w/ mag, qz, lim | <5 | | | <0.2 | 76 | 5 | 64 | <1 | 19 | 22 | 0.2 | <5 | 8 |
| 464 | 10630 | Indian River | flt | sel | vuggy andesite w/ qz veinlets, lim | <5 | | | <0.2 | 74 | 3 | 55 | 2 | 16 | 20 | <0.2 | <5 | 9 |
| 465 | 10506 | Indian River | flt | sel | andesite | <5 | | | <0.2 | 50 | <2 | 63 | <1 | 16 | 21 | 0.2 | <5 | <5 |
| 465 | 10544 | Indian River | flt | grab | andesite w/ mag, qz, ep, lim | <5 | | | <0.2 | 61 | 4 | 58 | 1 | 23 | 23 | 0.3 | <5 | <5 |
| 465 | 10545 | Indian River | flt | grab | andesite w/ lim, ep (?) | <5 | | | <0.2 | 30 | 7 | 58 | 1 | 28 | 20 | 0.4 | <5 | <5 |
| 465 | 10631 | Indian River | flt | sel | andesite/ andesite breccia w/ lim | <5 | | | <0.2 | 16 | 3 | 34 | 1 | 18 | 14 | 0.2 | <5 | 7 |
| 466 | 10507 | Indian River | flt | sel | andesite w/ lim, MnO | <5 | | | <0.2 | 33 | 3 | 45 | 1 | 12 | 17 | <0.2 | <5 | 6 |
| 466 | 10546 | Indian River | flt | grab | andesite w/ qz veinlets, ep, lim | <5 | | | <0.2 | 38 | 6 | 38 | 1 | 16 | 19 | 0.2 | <5 | 5 |
| 466 | 10632 | Indian River | flt | sel | andesite brecc w/ lim | <5 | | | <0.2 | 30 | 7 | 48 | 1 | 19 | 18 | <0.2 | <5 | 8 |
| 467 | 10947 | Indian River | flt | sel | green andesite w/ qz vein | <1 | | | <0.2 | 58 | 3 | 26 | 2 | 8 | 6 | <0.2 | <5 | <5 |
| 468 | 10633 | Indian River | flt | sel | felsic intr w/ py, gray metallic (?) | 8290 | | | 11.5 | 794 | 1771 | 998 | 2 | 3 | 3 | 5.8 | <5 | 27 |
| 468 | 10634 | Indian River | | pan | no visible Au, no mag | <5 | | | <0.2 | 30 | 18 | 66 | <1 | 17 | 18 | 0.3 | <5 | 9 |
| 468 | 10635 | Indian River | | sed | | <5 | | | <0.2 | 33 | 11 | 80 | <1 | 20 | 14 | 0.3 | <5 | 7 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 450 | 10965 | <5 | 0.048 | 2.96 | 458 | <10 | 146 | 26 | 60 | <20 | <20 | 17 | 2.35 | 0.65 | 0.32 | 0.02 | 0.23 | 61 | 7 | 4 | 20 | 1 | <5 | <10 | 0.09 | <1 |
| 450 | 10966 | <5 | 0.010 | 4.64 | 730 | <10 | 289 | 108 | 111 | <20 | <20 | 20 | 3.20 | 1.25 | 0.67 | 0.08 | 1.07 | 79 | 11 | 6 | 32 | 2 | 11 | <10 | 0.23 | 5 |
| 451 | 10964 | <5 | <0.010 | 0.65 | 117 | <10 | 80 | 73 | 14 | <20 | <20 | 44 | 1.23 | 0.14 | 0.77 | 0.25 | 0.13 | 47 | 20 | 4 | 5 | 2 | <5 | <10 | 0.14 | 49 |
| 451 | 10992 | <5 | <0.010 | 2.86 | 781 | <10 | 178 | 82 | 43 | <20 | <20 | 12 | 2.13 | 1.06 | 0.64 | 0.12 | 0.07 | 113 | 4 | 4 | 14 | <1 | <5 | <10 | 0.10 | 15 |
| 452 | 10967 | <5 | <0.010 | 3.09 | 413 | <10 | 293 | 79 | 104 | <20 | <20 | 14 | 2.97 | 1.08 | 1.27 | 0.42 | 1.15 | 149 | 8 | 8 | 27 | <1 | <5 | <10 | 0.24 | 5 |
| 452 | 10968 | <5 | <0.010 | 3.61 | 455 | <10 | 409 | 97 | 122 | <20 | <20 | 6 | 3.19 | 1.11 | 1.27 | 0.45 | 1.17 | 176 | 9 | 6 | 27 | 1 | 8 | <10 | 0.23 | <1 |
| 452 | 10990 | <5 | 0.023 | 2.26 | 464 | <10 | 178 | 52 | 60 | <20 | <20 | 44 | 1.84 | 0.69 | 1.07 | 0.19 | 0.46 | 125 | 9 | 5 | 21 | <1 | <5 | <10 | 0.20 | 8 |
| 452 | 10991 | <5 | <0.010 | 2.35 | 503 | <10 | 64 | 52 | 56 | <20 | <20 | 19 | 1.39 | 0.27 | 1.67 | 0.26 | 0.16 | 54 | 13 | 5 | 5 | <1 | 8 | <10 | 0.17 | 8 |
| 453 | 10597 | <5 | <0.010 | 3.75 | 366 | <10 | 192 | 72 | 102 | <20 | <20 | 18 | 3.08 | 0.77 | 1.13 | 0.37 | 0.67 | 110 | 9 | 10 | 25 | 12 | 10 | <10 | 0.17 | 24 |
| 454 | 10971 | <5 | <0.010 | 6.39 | 553 | <10 | 120 | 80 | 227 | <20 | <20 | 7 | 3.53 | 1.64 | 0.78 | 0.35 | 1.51 | 126 | 8 | 7 | 37 | 1 | 15 | <10 | 0.19 | 7 |
| 455 | 11025 | <5 | 0.011 | 2.57 | 510 | <10 | 180 | 73 | 49 | <20 | <20 | 11 | 2.11 | 0.92 | 1.14 | 0.23 | 0.42 | 190 | 4 | 4 | 15 | <1 | <5 | <10 | 0.16 | 16 |
| 456 | 10997 | <5 | <0.010 | 3.61 | 1104 | <10 | 209 | 128 | 117 | <20 | <20 | 13 | 3.16 | 1.45 | 0.88 | 0.38 | 1.34 | 91 | 8 | 7 | 45 | <1 | 13 | <10 | 0.23 | 5 |
| 456 | 10998 | <5 | <0.010 | 4.14 | 986 | <10 | 132 | 139 | 121 | <20 | <20 | 10 | 3.23 | 2.32 | 0.92 | 0.35 | 1.66 | 77 | 9 | 6 | 45 | <1 | 9 | <10 | 0.26 | 11 |
| 457 | 10595 | <5 | <0.010 | 0.40 | 102 | <10 | 93 | 51 | 2 | <20 | <20 | 11 | 0.40 | 0.09 | 0.08 | 0.09 | 0.09 | 8 | 5 | 2 | 4 | 2 | <5 | <10 | 0.02 | 25 |
| 457 | 10596 | <5 | <0.010 | 4.92 | 617 | <10 | 384 | 56 | 77 | <20 | <20 | 42 | 3.55 | 1.18 | 1.26 | 0.42 | 1.64 | 175 | 7 | 11 | 49 | 11 | 7 | <10 | 0.31 | 17 |
| 458 | 10594 | <5 | <0.010 | 4.73 | 602 | <10 | 222 | 69 | 117 | <20 | <20 | 8 | 3.87 | 1.41 | 1.26 | 0.44 | 1.23 | 170 | 8 | 9 | 28 | 14 | 14 | <10 | 0.23 | 6 |
| 459 | 11021 | <5 | <0.010 | 3.49 | 453 | <10 | 141 | 108 | 105 | <20 | <20 | 9 | 1.72 | 1.15 | 0.66 | 0.21 | 0.83 | 56 | 9 | 4 | 26 | 1 | 10 | <10 | 0.29 | 2 |
| 460 | 10593 | 6 | <0.010 | 4.32 | 500 | <10 | 318 | 81 | 173 | <20 | <20 | 7 | 3.25 | 1.29 | 0.78 | 0.33 | 1.32 | 100 | 6 | 8 | 44 | 19 | 16 | <10 | 0.22 | 6 |
| 461 | 10953 | <5 | 0.035 | 2.81 | 534 | <10 | 185 | 23 | 62 | <20 | <20 | 18 | 2.36 | 0.68 | 0.39 | 0.02 | 0.29 | 75 | 8 | 4 | 18 | <1 | <5 | <10 | 0.10 | <1 |
| 461 | 10954 | <5 | 0.010 | 3.38 | 861 | <10 | 276 | 142 | 74 | <20 | <20 | 18 | 2.06 | 0.85 | 0.45 | 0.07 | 0.71 | 35 | 11 | 5 | 23 | 1 | 6 | <10 | 0.20 | 4 |
| 462 | 10952 | <5 | <0.010 | 3.90 | 562 | <10 | 255 | 89 | 147 | <20 | <20 | 24 | 2.52 | 1.38 | 0.95 | 0.23 | 1.19 | 129 | 6 | 4 | 35 | <1 | 6 | <10 | 0.24 | 5 |
| 463 | 10950 | <5 | 0.037 | 2.89 | 459 | <10 | 176 | 26 | 65 | <20 | <20 | 21 | 2.32 | 0.70 | 0.40 | 0.02 | 0.32 | 73 | 9 | 4 | 18 | 2 | <5 | <10 | 0.11 | <1 |
| 463 | 10951 | <5 | 0.016 | 3.50 | 763 | <10 | 203 | 190 | 84 | <20 | <20 | 31 | 1.81 | 0.79 | 0.44 | 0.07 | 0.51 | 38 | 10 | 4 | 18 | <1 | 6 | <10 | 0.17 | <1 |
| 464 | 10543 | <5 | <0.010 | 4.22 | 590 | <10 | 158 | 48 | 106 | <20 | <20 | 14 | 2.44 | 1.92 | 1.11 | 0.06 | 0.61 | 75 | 7 | 4 | 10 | 12 | 5 | <10 | 0.23 | 16 |
| 464 | 10630 | <5 | <0.010 | 4.13 | 786 | <10 | 214 | 51 | 116 | <20 | <20 | 14 | 2.88 | 1.72 | 3.33 | 0.15 | 0.78 | 96 | 8 | 4 | 8 | 13 | <5 | <10 | 0.24 | 19 |
| 465 | 10506 | <5 | <0.010 | 3.92 | 632 | <10 | 109 | 35 | 93 | <20 | <20 | 9 | 2.29 | 1.93 | 0.79 | 0.04 | 0.29 | 33 | 6 | 3 | 11 | 10 | 5 | <10 | 0.20 | 13 |
| 465 | 10544 | <5 | <0.010 | 3.14 | 422 | <10 | 23 | 62 | 82 | <20 | <20 | 16 | 3.17 | 2.37 | 1.89 | 0.03 | 0.06 | 113 | 5 | 4 | 18 | 11 | 6 | <10 | 0.23 | 15 |
| 465 | 10545 | <5 | <0.010 | 3.47 | 732 | <10 | 81 | 62 | 89 | <20 | <20 | 21 | 2.54 | 1.70 | 2.28 | 0.03 | 0.09 | 102 | 8 | 5 | 10 | 11 | 7 | <10 | 0.20 | 17 |
| 465 | 10631 | <5 | 0.012 | 2.24 | 631 | <10 | 47 | 87 | 71 | <20 | <20 | 17 | 2.37 | 0.97 | 2.75 | 0.03 | 0.02 | 103 | 5 | 6 | 5 | 9 | 5 | <10 | 0.18 | 25 |
| 466 | 10507 | <5 | 0.011 | 3.64 | 546 | <10 | 83 | 35 | 100 | <20 | <20 | 20 | 1.78 | 1.04 | 1.43 | 0.08 | 0.07 | 108 | 8 | 5 | 6 | 11 | <5 | <10 | 0.22 | 19 |
| 466 | 10546 | <5 | <0.010 | 2.34 | 546 | <10 | 38 | 65 | 84 | <20 | <20 | 11 | 2.56 | 1.89 | 2.36 | 0.02 | 0.02 | 203 | 5 | <2 | 12 | 11 | <5 | <10 | 0.20 | 10 |
| 466 | 10632 | <5 | 0.010 | 3.17 | 565 | <10 | 37 | 55 | 82 | <20 | <20 | 36 | 2.68 | 1.28 | 1.42 | 0.05 | 0.04 | 99 | 8 | 5 | 9 | 9 | 6 | <10 | 0.27 | 31 |
| 467 | 10947 | <5 | <0.010 | 1.28 | 364 | <10 | 35 | 181 | 48 | <20 | <20 | 11 | 1.30 | 0.48 | 1.94 | 0.03 | 0.03 | 67 | 4 | 4 | 3 | 1 | <5 | <10 | 0.11 | 10 |
| 468 | 10633 | <5 | 2.509 | 2.73 | 49 | <10 | 161 | 41 | 15 | <20 | <20 | 57 | 0.94 | 0.11 | 0.06 | 0.01 | 0.24 | 27 | 5 | 7 | 1 | 2 | <5 | <10 | <0.01 | 6 |
| 468 | 10634 | <5 | 0.024 | 4.81 | 571 | <10 | 106 | 68 | 105 | <20 | <20 | 26 | 2.39 | 0.85 | 1.07 | 0.03 | 0.11 | 100 | 7 | 6 | 13 | 11 | 6 | <10 | 0.13 | 9 |
| 468 | 10635 | <5 | 0.050 | 3.17 | 496 | <10 | 223 | 26 | 66 | <20 | <20 | 19 | 2.98 | 0.79 | 0.71 | 0.02 | 0.10 | 55 | 8 | <2 | 17 | 4 | <5 | <10 | 0.06 | 1 |

## Appendix B - Analytical Results

| Map No. | Field No. | Location | Sample Site | Sample Type | Sample Description | Au ppb | Pt ppb | Pd ppb | Ag ppm | Cu ppm | Pb ppm | Zn ppm | Mo ppm | Ni ppm | Co ppm | Cd ppm | Bi ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 468 | 10948 | Indian River | flt | sel | andesite w/ lim | 16 | | | 0.2 | 36 | 508 | 396 | 1 | 3 | 6 | 0.5 | <5 | 27 |
| 468 | 10949 | Indian River | flt | sel | vuggy, lim rock | 13 | | | 0.5 | 46 | 737 | 218 | <1 | 3 | <1 | 0.4 | <5 | 6 |
| 469 | 10508 | Indian River | flt | sel | vein qz w/ py, lim, box | 30 | | | 0.8 | 15 | 44 | 10 | 74 | 5 | 2 | 0.2 | <5 | <5 |
| 469 | 10509 | Indian River | | soil | red-brn soil | 28 | | | 0.4 | 158 | 110 | 232 | <1 | 4 | 5 | 0.3 | <5 | 17 |
| 469 | 10510 | Indian River | otc | sel | volc agglomerate w/ lim | 10 | | | <0.2 | 281 | <2 | 207 | <1 | 1 | 5 | 0.5 | <5 | <5 |
| 469 | 10511 | Indian River | flt | sel | vein qz w/ 5% py, lim, sco (?) | 593 | | | 21.6 | 692 | 221 | 78 | 7 | 8 | 6 | 0.7 | 7 | 67 |
| 470 | 10608 | Utopia Ck | tail | rand | barite/ dolomite w/ < 5% py | 1141 | | | 2.4 | 486 | 40 | 10 | 13 | 15 | 11 | <0.2 | <5 | 58 |
| 470 | 10609 | Utopia Ck | tail | sel | barite w/ 2% py, tet (?) | 5565 | | | 342 | 750 | 4846 | 1108 | 6 | 3 | 2 | 8.4 | <5 | 344 |
| 470 | 10610 | Utopia Ck | | sed | | 14 | | | 0.6 | 26 | 55 | 118 | 1 | 18 | 10 | 0.7 | <5 | 12 |
| 470 | 10611 | Utopia Ck | | pan | | 33 | | | <0.2 | 31 | 143 | 194 | 1 | 16 | 25 | 1.4 | <5 | 20 |
| 470 | 10612 | Utopia Ck | flt | sel | gossaneous, fault breccia w/ lim | 100 | | | 4.4 | 160 | 1.95% | 599 | 9 | 3 | 4 | 4.8 | <5 | 529 |
| 471 | 10504 | Utopia Ck | flt | sel | andesite w/ ep, qz veinlets | <5 | | | <0.2 | 12 | 9 | 10 | 1 | 6 | 7 | 0.2 | <5 | 6 |
| 471 | 10535 | Utopia Ck | flt | sel | hfls w/ 1% py, lim | <5 | | | <0.2 | 36 | 10 | 57 | 3 | 17 | 14 | 0.2 | <5 | 8 |
| 471 | 10537 | Utopia Ck | flt | sel | andesite w/ po, ep, lim | <5 | | | <0.2 | 90 | 4 | 61 | 1 | 32 | 25 | 0.2 | <5 | 7 |
| 471 | 10613 | Utopia Ck | otc | rand | andesitic breccia w/ tet, mal, ep | 9 | | | <0.2 | 194 | 43 | 16 | 3 | 7 | 8 | 0.3 | <5 | 12 |
| 472 | 10536 | Utopia Ck | flt | sel | fine grained andesite w/ 5% po | <5 | | | <0.2 | 21 | 16 | 199 | 2 | 4 | 12 | 0.9 | <5 | 12 |
| 473 | 10618 | Pocahontus Ck | | pan | 3 pan comp, mod mag | 23 | | | <0.2 | 4 | 15 | 47 | 2 | 51 | 24 | 0.4 | <5 | 18 |
| 474 | 10614 | Macaroni Ck | rub | rand | hydro alt rhyolite w/ py pits | <5 | | | <0.2 | 4 | 28 | 4 | 8 | 4 | <1 | <0.2 | <5 | 13 |
| 474 | 10615 | Macaroni Ck | trn | sel | hydro alt rhyolite w/ 5% py | 36 | | | 0.3 | 32 | 13 | 12 | 5 | 11 | 16 | <0.2 | <5 | 14 |
| 474 | 10616 | Macaroni Ck | | soil | red soil | 91 | | | 1.8 | 52 | 166 | 14 | 10 | 3 | <1 | 0.4 | <5 | 291 |
| 475 | 10538 | VABM Cone | flt | grab | andesite | <5 | | | <0.2 | 10 | 17 | 57 | <1 | 7 | 8 | 0.2 | <5 | 5 |
| 475 | 10617 | VABM Cone | flt | grab | andesite w/ minor lim | <5 | | | <0.2 | 14 | 11 | 57 | <1 | 15 | 8 | <0.2 | <5 | <5 |
| 476 | 10636 | Little Indian R | flt | sel | banded tuff at obsidian quarry site | <5 | | | <0.2 | 4 | 11 | 23 | 2 | 3 | 2 | <0.2 | <5 | <5 |

| Map No. | Field No. | Sb ppm | Hg ppm | Fe pct | Mn ppm | Te ppm | Ba ppm | Cr ppm | V ppm | Sn ppm | W ppm | La ppm | Al pct | Mg pct | Ca pct | Na pct | K pct | Sr ppm | Y ppm | Ga ppm | Li ppm | Nb ppm | Sc ppm | Ta ppm | Ti pct | Zr ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 468 | 10948 | <5 | 0.089 | 1.52 | 514 | <10 | 357 | 89 | 15 | <20 | <20 | 61 | 0.87 | 0.05 | 0.21 | 0.02 | 0.33 | 16 | 8 | <2 | <1 | <1 | <5 | <10 | <0.01 | 4 |
| 468 | 10949 | <5 | 0.106 | 1.63 | 684 | <10 | 728 | 75 | 13 | <20 | <20 | 70 | 0.95 | 0.08 | 0.17 | 0.02 | 0.38 | 25 | 7 | <2 | <1 | <1 | <5 | <10 | <0.01 | 4 |
| 469 | 10508 | <5 | 0.012 | 0.70 | 21 | <10 | 104 | 126 | 4 | <20 | <20 | 9 | 0.23 | 0.03 | <0.01 | <0.01 | 0.09 | 100 | 2 | <2 | <1 | <1 | <5 | <10 | <0.01 | 3 |
| 469 | 10509 | <5 | 0.038 | >10.00 | 144 | <10 | 246 | 11 | 42 | <20 | <20 | 13 | 1.40 | 0.32 | 0.12 | <0.01 | 0.09 | 18 | 6 | <2 | 3 | 4 | <5 | <10 | 0.04 | 5 |
| 469 | 10510 | 5 | 0.012 | >10.00 | 64 | <10 | 86 | 6 | 10 | <20 | <20 | <1 | 0.51 | 0.18 | 0.04 | <0.01 | 0.04 | 6 | <1 | 21 | 1 | <1 | <5 | <10 | 0.05 | 19 |
| 469 | 10511 | <5 | 0.068 | 3.85 | 26 | <10 | 16 | 150 | 8 | <20 | <20 | 2 | 0.14 | 0.01 | <0.01 | 0.01 | 0.07 | 80 | 1 | 2 | <1 | <1 | <5 | <10 | <0.01 | 4 |
| 470 | 10608 | <5 | 0.126 | 6.02 | 8 | <10 | 37.09% | 89 | <1 | <20 | <20 | <1 | 0.02 | <0.01 | <0.01 | <0.01 | <0.01 | 104 | <1 | 4 | <1 | <1 | <5 | <10 | <0.01 | 4 |
| 470 | 10609 | 173 | 1.631 | 3.15 | 20 | <10 | 53.71% | 91 | 31 | <20 | <20 | 6 | 0.37 | 0.01 | 0.02 | <0.01 | 0.08 | 338 | 1 | 3 | 1 | 3 | <5 | <10 | <0.01 | 4 |
| 470 | 10610 | <5 | 0.074 | 3.37 | 778 | <10 | 839 | 27 | 65 | <20 | <20 | 21 | 2.59 | 0.55 | 0.69 | 0.01 | 0.09 | 50 | 15 | 4 | 17 | 3 | <5 | <10 | 0.03 | <1 |
| 470 | 10611 | <5 | 0.048 | 7.18 | 1265 | <10 | >2000 | 39 | 117 | <20 | <20 | 27 | 2.81 | 1.09 | 0.83 | 0.02 | 0.11 | 137 | 9 | 7 | 13 | 13 | 8 | <10 | 0.13 | 15 |
| 470 | 10612 | <5 | 0.368 | >10.00 | 44 | <10 | 179 | 40 | 134 | <20 | <20 | 43 | 1.36 | 0.04 | 0.06 | <0.01 | 0.29 | 63 | 6 | 9 | 1 | 12 | 6 | <10 | <0.01 | 5 |
| 471 | 10504 | <5 | <0.010 | 1.84 | 291 | <10 | 9 | 70 | 54 | <20 | <20 | 18 | 2.09 | 0.22 | 2.76 | 0.01 | <0.01 | 271 | 6 | 6 | 1 | 8 | 6 | <10 | 0.20 | 18 |
| 471 | 10535 | <5 | 0.011 | 2.98 | 422 | <10 | 93 | 117 | 42 | <20 | <20 | 43 | 1.11 | 0.71 | 0.55 | 0.12 | 0.03 | 64 | 16 | 6 | 3 | 5 | 8 | <10 | 0.24 | 60 |
| 471 | 10537 | <5 | <0.010 | 4.66 | 566 | <10 | 66 | 64 | 130 | <20 | <20 | 53 | 2.51 | 2.05 | 2.98 | 0.06 | 0.05 | 224 | 9 | 8 | 7 | 15 | 7 | <10 | 0.28 | 16 |
| 471 | 10613 | <5 | 0.016 | 2.67 | 300 | <10 | 529 | 111 | 80 | <20 | <20 | 22 | 2.86 | 0.34 | 3.44 | 0.02 | <0.01 | 375 | 9 | 7 | 2 | 10 | 6 | <10 | 0.23 | 10 |
| 472 | 10536 | <5 | 0.024 | 4.49 | 994 | <10 | 171 | 46 | 44 | <20 | <20 | 39 | 1.59 | 0.91 | 1.25 | 0.12 | 0.07 | 38 | 25 | 10 | 4 | 6 | 12 | <10 | 0.33 | 20 |
| 473 | 10618 | <5 | 0.070 | >10.00 | 530 | <10 | 29 | 302 | 666 | <20 | <20 | 168 | 0.42 | 0.10 | 0.98 | 0.02 | 0.03 | 23 | 18 | 23 | 4 | 61 | <5 | <10 | 0.16 | 17 |
| 474 | 10614 | <5 | 0.015 | 0.46 | 6 | <10 | 519 | 74 | 7 | <20 | <20 | 2 | 0.76 | <0.01 | <0.01 | <0.01 | <0.01 | 18 | <1 | <2 | 2 | <1 | <5 | <10 | <0.01 | 8 |
| 474 | 10615 | <5 | 0.024 | 6.61 | 18 | <10 | 7 | 69 | 5 | <20 | <20 | 1 | 0.89 | <0.01 | <0.01 | <0.01 | 0.01 | 26 | <1 | 5 | 3 | <1 | <5 | <10 | <0.01 | 12 |
| 474 | 10616 | 7 | 0.065 | 7.10 | 29 | <10 | 517 | 15 | 59 | <20 | <20 | 9 | 1.36 | 0.05 | 0.01 | <0.01 | 0.08 | 28 | 1 | 6 | 1 | 2 | <5 | <10 | <0.01 | 9 |
| 475 | 10538 | <5 | 0.011 | 2.36 | 554 | <10 | 89 | 35 | 24 | <20 | <20 | 42 | 1.72 | 0.77 | 0.48 | 0.03 | 0.22 | 12 | 10 | 4 | 26 | 5 | <5 | <10 | 0.17 | 19 |
| 475 | 10617 | <5 | 0.013 | 2.81 | 649 | <10 | 167 | 43 | 33 | <20 | <20 | 41 | 1.82 | 0.85 | 1.04 | 0.04 | 0.24 | 34 | 10 | 4 | 29 | 5 | <5 | <10 | 0.02 | 10 |
| 476 | 10636 | <5 | 0.014 | 0.86 | 247 | <10 | 10 | 35 | 4 | <20 | <20 | 19 | 0.96 | 0.04 | 0.02 | 0.11 | 0.17 | 1 | 22 | 3 | 12 | 6 | <5 | <10 | 0.03 | 36 |

## *Appendix C - Placer Gold Production in the Koyukuk Mining District

| Year | Gold (refined oz) | Silver (refined oz) | Producing mines | Comments |
|---|---|---|---|---|
| 1900 | 5128.2 | 310.0 | 13 | gold discovered on Hammond River and Gold Creek |
| 1903 | 13352.7 | 874.0 | 13 | mining on Mascot Creek |
| 1904 | 8176.1 | 580.0 | 18 | |
| 1905 | 7943.9 | 567.0 | 13 | deep placers discovered on Nolan Creek |
| 1906 | 7581.0 | 411.0 | 10 | rush to Chandalar district takes miners from Koyukuk district |
| 1907 | 10446.5 | 490.0 | 9 | |
| 1908 | 50529.0 | 693.0 | 11 | |
| 1909 | 42644.7 | 1214.0 | 13 | |
| 1910 | 5542.1 | 464.0 | ? | |
| 1911 | 4578.9 | 406.0 | ? | |
| 1912 | 256.5 | 1385.0 | ? | over 400 men in district with most production from Hammond River |
| 1913 | 5527.5 | 2770.0 | ? | 300-400 men in district |
| 1914 | 9846.5 | 1800.0 | ? | 139 oz gold nugget found on Hammond River |
| 1915 | 4934.1 | 1902.0 | 30 | |
| 1916 | 7085.2 | 2147.0 | 35 | |
| 1917 | 1387.5 | 1700.0 | 29 | most production from Hammond River and Nolan Creek |
| 1918 | 2613.6 | 860.0 | 20 | 150 men engaged in district |
| 1919 | 2159.1 | 760.0 | 18 | gold reported on Birch Creek |
| 1920 | 2602.9 | 146.0 | 25 | most production from Myrtle, Nolan, Jay, and Smith Creeks |
| 1921 | 3383.8 | 119.0 | 37 | most production from Nolan Creek |
| 1922 | 3992.5 | 214.0 | 36 | most production from Nolan Creek |
| 1923 | 1126.2 | ? | 16 | |
| 1924 | 2082.0 | ? | 27 | |
| 1925 | 1643.5 | ? | ? | Detroit Mining Co. acquires claims on Hammond River |
| 1926 | 1598.2 | ? | ? | most production from Nolan Creek |
| 1927 | 2185.7 | 37.0 | 14 | gold discovered on Bettles River |

*Sources: U.S. Geological Survey Bulletins, U.S. Bureau of Mines Mineral Yearbooks, Alaska Division of Geological and Geophysical Survey records, and U.S. Mint records.

## *Appendix C - Placer Gold Production in the Koyukuk Mining District

| Year | Gold (refined oz) | Silver (refined oz) | Producing mines | Comments |
|---|---|---|---|---|
| 1928 | 1407.4 | 3.0 | 9 | |
| 1929 | 960.7 | 31.0 | 20 | |
| 1930 | 2216.4 | ? | ? | low water year |
| 1931 | 1119.2 | ? | ? | most production from Nolan Creek, Hammond and Wild Rivers |
| 1932 | 1425.5 | ? | ? | |
| 1933 | 1411.2 | ? | 20 | low water year |
| 1934 | 1102.5 | ? | ? | gold price increased from $20-$35/oz |
| 1935 | 1873.8 | ? | ? | most production from Nolan and Archibald Creeks |
| 1936 | 584.4 | ? | ? | |
| 1937 | 2948.3 | ? | 50 | low water year |
| 1938 | 1486.7 | ? | ? | |
| 1939 | 2094.9 | ? | ? | |
| 1940 | 737.0 | 271.0 | 25 | most production from Myrtle Creek with mechanical equipment; 23 oz gold nugget found |
| 1941 | 3851.1 | 583.0 | ? | |
| 1942 | 822.8 | ? | ? | PL208 enacted 10/8/42, six tons Sb ore mined on Smith Creek |
| 1943 | 361.3 | ? | 8 | |
| 1944 | 18.1 | ? | ? | |
| 1945 | 971.4 | 246.0 | ? | most production by S. Fork Mining Co. from Gold Bench claims |
| 1946 | 45.3 | 51.0 | ? | largest production from Gold Bench on South Fork Koyukuk River |
| 1947 | 569.0 | 449.0 | 16 | Gold Bench on South Fork Koyukuk and Myrtle Creek |
| 1948 | 215.7 | 215.0 | 14 | Gold Bench on South Fork Koyukuk and Myrtle Creek |
| 1949 | 834.0 | 228.0 | 15 | Gold Bench on South Fork Koyukuk and Myrtle Creek |
| 1950 | 8566.1 | 346.0 | 17 | Myrtle Creek largest producer followed by Vermont Creek |
| 1951 | 383.7 | 27.0 | 11 | South Fork Mining Co. largest producer |
| 1952 | 820.0 | 66.0 | 10 | Myrtle and Vermont Creeks largest producers |
| 1953 | 1683.5 | 75.0 | 9 | Myrtle Creek largest producer |
| 1954 | 423.0 | 31.0 | 8 | Mascot Creek largest producer |
| 1955 | 496.0 | 37.0 | 10 | Mascot Creek largest producer |
| 1956 | 364.0 | 32.0 | 3 | |

## *Appendix C - Placer Gold Production in the Koyukuk Mining District

| Year | Gold (refined oz) | Silver (refined oz) | Producing mines | Comments |
|---|---|---|---|---|
| 1957 | 288.0 | 22.0 | 3 | |
| 1958 | 144.0 | 11.0 | 4 | |
| 1959 | 140.0 | 9.0 | 4 | |
| 1960 | 203.0 | 20.0 | 3 | |
| 1961 | 386.0 | 35.0 | 5 | |
| 1962 | 649.0 | 64.0 | 3 | |
| 1963 | 0.0 | | | no data |
| 1964 | 11817.0 | | | Nolan Creek largest producer |
| 1965 | 0.0 | | | no data |
| 1966 | 0.0 | | | no data |
| 1967 | 0.0 | | | no data |
| 1968 | 0.0 | | | no data |
| 1969 | 0.0 | | | no data |
| 1970 | 0.0 | | | no data |
| 1971 | 0.0 | | | no data |
| 1972 | 0.0 | | | no data |
| 1973 | 0.0 | | | no data |
| 1974 | 0.0 | | | no data |
| 1975 | 0.0 | | | no data |
| 1976 | 212.0 | ? | ? | |
| 1977 | 300.0 | ? | ? | Mascot Creek |
| 1978 | 0.0 | 112.0 | 2 | Nolan and Mascot Creeks |
| 1979 | 14.3 | 280.0 | 5 | Nolan, Vermont, Union, and Mascot Creeks |
| 1980 | 2.9 | 398.0 | 4 | Nolan and Mascot Creeks |
| 1981 | 1399.7 | 880.0 | 13 | Porcupine, Emma, Linda, Archibald, Vermont, Union, Nolan and Mascot Creeks |
| 1982 | 0.0 | 390.0 | 12 | Porcupine, Emma, Linda, Archibald, Vermont, Union, Nolan and Mascot Creeks |
| 1983 | 0.0 | 700.0 | 9 | Porcupine, Emma, Linda, Archibald, Vermont, Union, Nolan and Mascot Creeks |
| 1984 | 579.8 | 1500.0 | 15 | Porcupine, Emma, Linda, Archibald, Vermont, Union, Nolan and Mascot Creeks |
| 1985 | 0.0 | 570.0 | 6 | Emma, Linda, Archibald and Nolan Creeks |

## *Appendix C - Placer Gold Production in the Koyukuk Mining District

| Year | Gold (refined oz) | Silver (refined oz) | Producing mines | Comments |
|---|---|---|---|---|
| 1986 | 0.0 | 198.0 | 4 | Emma, Linda, Archibald and Nolan Creeks |
| 1987 | 753.4 | 367.0 | 10 | Archibald Creek largest producer |
| 1988 | 11.4 | 552.0 | 12 | Emma, Linda, Archibald, Smith, Nolan, Union, Mascot and Vermont Creeks |
| 1989 | 18.1 | 414.0 | 13 | Emma, Linda, Archibald, Smith, Nolan, Union, Mascot and Vermont Creeks |
| 1990 | 103.6 | 385.0 | 9 | Emma, Linda, Archibald, Smith, Nolan, Union, Mascot and Vermont Creeks |
| 1991 | 209.0 | 510.0 | 10 | Sheep, Nolan, Mascot, Archibald, Linda and Vermont Creeks |
| 1992 | 389.5 | 220.0 | 5 | Myrtle, Nolan, Chapman Creeks and Tramway Bar |
| 1993 | 285.0 | 260.0 | 6 | Slate, Linda, Nolan Creeks and Hammond River |
| 1994 | 8023.7 | 1340.0 | 4 | Linda, Vermont and Nolan Creeks |
| 1995 | 4485.0 | 395.0 | 4 | Myrtle, Davis, Nolan and Linda Creeks |
| 1996 | 368.7 | 80.0 | 3 | Davis, Linda and Nolan Creeks |
| 1997 | 540.0 | ? | ? | Linda Creek, Gold Creek and Hammond River |
| 1998 | 243.0 | ? | ? | Linda Creek, Gold Creek, Porcupine Creek, Nolan Creek and Hammond River |
| Total | 297558.4 | 33336.0 | | |

## Appendix D - Geophysics Program

The Bureau of Land Management (BLM) through a cooperative agreement with the Alaska Division of Geological & Geophysical Surveys (DGGS) completed an airborne geophysical survey in the northeast portion of the Koyukuk mining district. The BLM selected the area to be flown and provided the funding for a contractor to perform the work while the DGGS oversaw the processes of bid solicitation and selection as well as execution of the field survey.

The area contains polymetallic vein, copper skarn, porphyry copper, and volcanogenic massive sulfide occurrences. The survey may reveal concealed deposits of these types or significant associated geologic structures. The geophysical methods chosen included induced electromagnetic conductivity (EM) at multiple frequencies as well as the total magnetic field. Flight lines were flown at a line spacing of ¼ mile with the sensors 200 feet above ground. An area of 533 square miles was covered with approximately 2200 line miles flown. On-Line Exploration Service, Inc., was the primary contractor. Subcontractors on the project were SIAL Geosciences, Inc., and Evergreen Helicopters.

The field survey was completed in October of 1997. Processing of the data and the preparation of maps was completed in April of 1998. The data and maps were released to the public the following May(Burns and Liss, 1998).

Ground geophysics studies were included in the mining district study to corroborate the airborne survey and aid in the identification of mineral potential in the district. Several methods were considered based on the following factors: time required to conduct a survey, manpower required to conduct a survey, amount of information that would result, and whether a given method was appropriate to the presumed target and environment. Two methods were selected for the 1998 field season; ground penetrating radar (GPR) and a portable magnetometer combined with a very low frequency (VLF) electromagnetic receiver. The GPR was selected to test the capability of the method at determining depth to bedrock and channel locations at selected placer deposits. Seismic methods were considered but discarded based on the manpower and time requirements. The use magnetometer with VLF was selected based on the ease of use and robustness in the field, and for the ability to correlate field surveys with anomalies identified in the airborne data.

### Ground Penetrating Radar

The purpose of this study was to test the feasibility of using geophysical methods to measure depth to bedrock in placer gravel deposits. The GPR method was selected because it provides high resolution information and is very easy to use. The equipment can be set up in a very short time, requires only one operator, and does not require making physical contact with ground thus allowing rapid acquisition of data. The resulting data are straightforward to interpret with minimal processing.

<u>Methodology</u>
The GPR pulse-echo method records the reflected energy of a radar pulse that propagates into the earth. The system is analogous to reflection seismic imaging, but uses radar waves rather than seismic waves. The energy requirements for generating these radar waves is very small, and a transmitted pulse can be generated by a portable battery-powered unit.

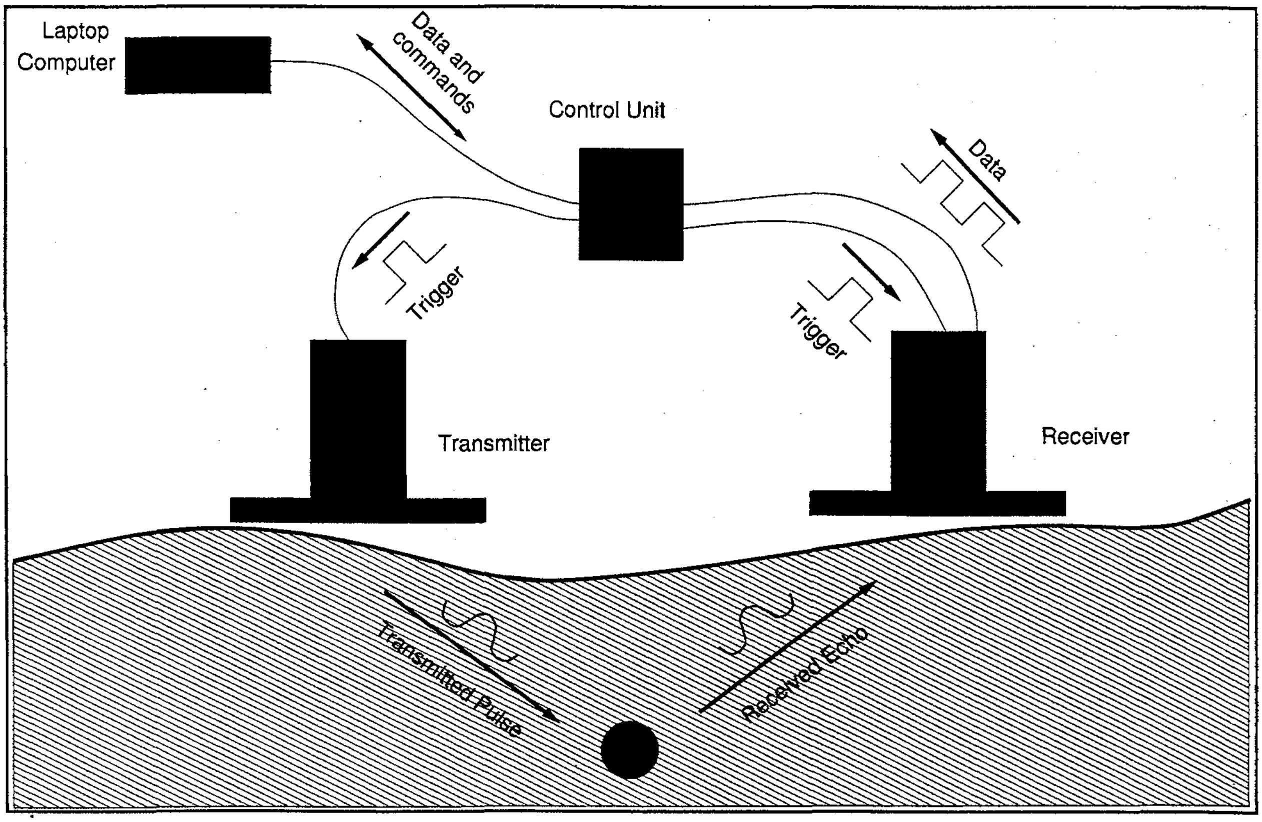


**Figure 1** Diagram of GPR system components. The control unit connects to the parallel port of the laptop computer. The antennas connect to the control unit with fiber optic cables (after RAMAC/GPR operating manual, MALA Geoscience

The GPR system used was a RAMAC/GPR unit manufactured by [1]MALA Geoscience of Sweden. It is composed of a backpack-mounted control unit, a transmitting antenna unit, and a receiving antenna unit (Figure 1). Communication between the control unit and the antenna units is through fiber optic links. The transmitting unit can transmit at frequencies of 50, 100, 200, and 400 MHz depending on the set of antennas in use. The receiver unit records digital samples of the reflected signal at rates from 300 to 6000 MHz. The analog to digital converter has 16 bit resolution, with a dynamic range of 150 dB. The system requires a laptop computer to operate the control unit and store information to disk.

Field measurements were of two types: walkaway soundings and profiles. The walkaway sounding, or walkaway test, provides useful information on the gravel material at the site and important calibration information. The profile is conducted by recording while traversing a line on the ground and yields a cross-section of the underlying geologic structure. When performing a walkaway sounding the receiver antenna is placed on the ground with the transmitting antenna a short distance away. Recording is initiated and the transmitting antenna is slowly moved away up to the maximum distance supported by the fiber optic cable. This yields a collection of data traces that reveal two distinct sets

[1] Mention of a specific brand name or manufacturer is for information purposes only and does not imply endorsement by the Bureau of Land Management.

of waveforms. The inverse of the slope of each waveform indicates the speed at which the wave traveled. The first arrival, a gently sloping waveform, indicates the arrival of the direct wave that travels through the air from the transmitter to the receiver. The second arrival, with a steeper slope, is the arrival from the radar wave transmitted through the earth. It provides an accurate estimate of the velocity through the earth at that location. The velocity is needed to convert from travel times to depths. The walkaway test has an additional benefit in that the inverse of slope of the first arrival is the speed of light, a known quantity of 300 meters per microsecond (300 m/us). This can be compared with the calculated velocity to adjust system timing calibration.

For a profile the transmitting and receiving antennas are held a fixed distance apart and moved concurrently along a path over the ground while recording. This is facilitated by mounting the antennas to a carrying frame which can be held by the operator. The operator selects the transmitting frequency by using the desired set of antennas.

All other parameters of data acquisition can be selected from within the computer program that performs the transmitting and recording. Recording is initiated and the operator walks along the profile carrying the antennas a small distance above the ground, ideally just a few inches but occasionally higher to allow for brush. At a predetermined spacing along the profile line the control unit transmits a radar pulse and records reflected energy signals. The recorded signal trace is saved to disk, and while the operator continues walking the process repeats at each increment of the desired spacing.

The resulting compilation of traces can be viewed on the computer screen to see a two-dimensional representation of the geological cross-section. The horizontal dimension is distance along the profile line. The vertical dimension is traveltime. If a reliable estimate of the propagation velocity is known (e.g.. from a walkaway test), the traveltime can be converted to depth.

The reflected signals recorded in a GPR profile indicate changes in electrical properties in the earth. If these changes occur coherently, as seen at the water table, in the transition from one sedimentary layer to another, or in the transition from unconsolidated material to bedrock, then the resulting GPR profile will indicate a strong continuous reflection.

If the underlying material is jumbled as in glacial till then the radar reflections will be incoherent, and it will be difficult to identify structural features in the GPR section. The depth of penetration of the radar signal is limited by the electrical conductivity of the ground. In more conductive rock the signal attenuates at shallower depths. This can severely limit the depth of penetration in conductive soils. However, in resistive soils overlaying conductive bedrock, the sudden attenuation of the signal may indicate the bedrock interface.

Switching to lower frequency antennas will increase the depth of penetration, but since the wavelength increases with lower frequencies, the vertical resolution will decrease. Under ideal conditions the attenuation and diffraction of the radar pulse may provide information as to the material composition of the subsurface, but in field applications this is not practical.

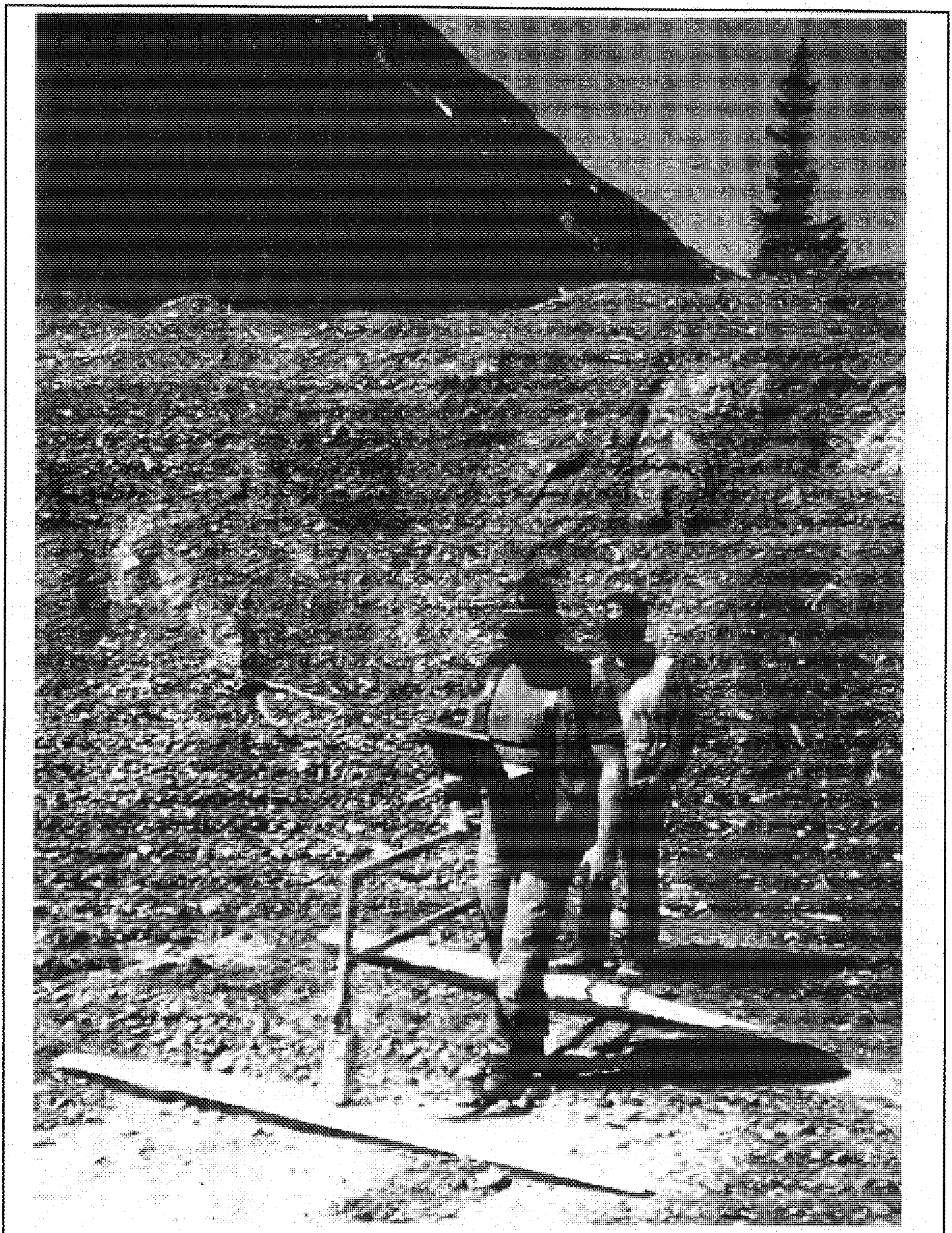

**Figure 2** Operation of GPR equipment utilizing 50 MHz antennas

GPR Data Acquisition Figure 2 shows the GPR system in use. The operator is carrying the control unit on his back, a portable computer on his chest, and the 50 MHz antennas mounted on a carrying frame. Antenna frequencies of 50 and 100 MHz were used. Sample recording was triggered by a digital hip chain that transmitted a trigger pulse to the GPR control unit.

GPR Data Processing The raw GPR data was processed using software developed by BLM to meet the specific needs of this project. The processing steps were as follows:

> Remove Offset: one of the peculiarities of the RAMAC GPR system is the addition of an integer offset to digitized data. Traces that should oscillate around zero instead oscillate around the offset value. This creates havoc with filtering routines, so the offset was removed.
>
> Generate and Interpret Power Spectrum: the power spectrum shows the relative strength of different frequencies in the recorded data. The spectrum should show a peak at the antenna frequency; peaks at other frequencies are due to 'noise' in the data.
>
> Apply Frequency Domain Filter: if the power spectrum showed a significant amount of energy at frequencies different from the antenna frequency, then a frequency domain filter was applied to reduce the noise at these frequencies.

After processing the raw data, velocities were calculated for the walkaway tests. These velocities were applied to the time sections of the profiles to convert to depth. The resulting depth section was interpreted to identify features such as bedrock and the water table.

## Field Sites and Results

Slisco Bench Slisco Bench is located between Buckeye Gulch Creek and Vermont Creek on the south side of the Hammond River (Fairbanks Meridian, township 31N, range 12W, section 13). The area has been mined since the early 1900's and hosts several current placer claims. The bench consists of unconsolidated gravels to depths of at least 33 meters(100 feet) (TriCon well logs). Access was via helicopter, but depending on road conditions one can drive within 1/4 mile of the site via the Hammond River. A profile was conducted from the south extent of the bench bearing north, along line SB0, as shown in figure 3. The objective at this site was to determine if GPR could identify depth to bedrock. Measurements were attempted with both 100 MHz and 50 MHz antennas, but the 100 MHz antennas could not get sufficient penetration.

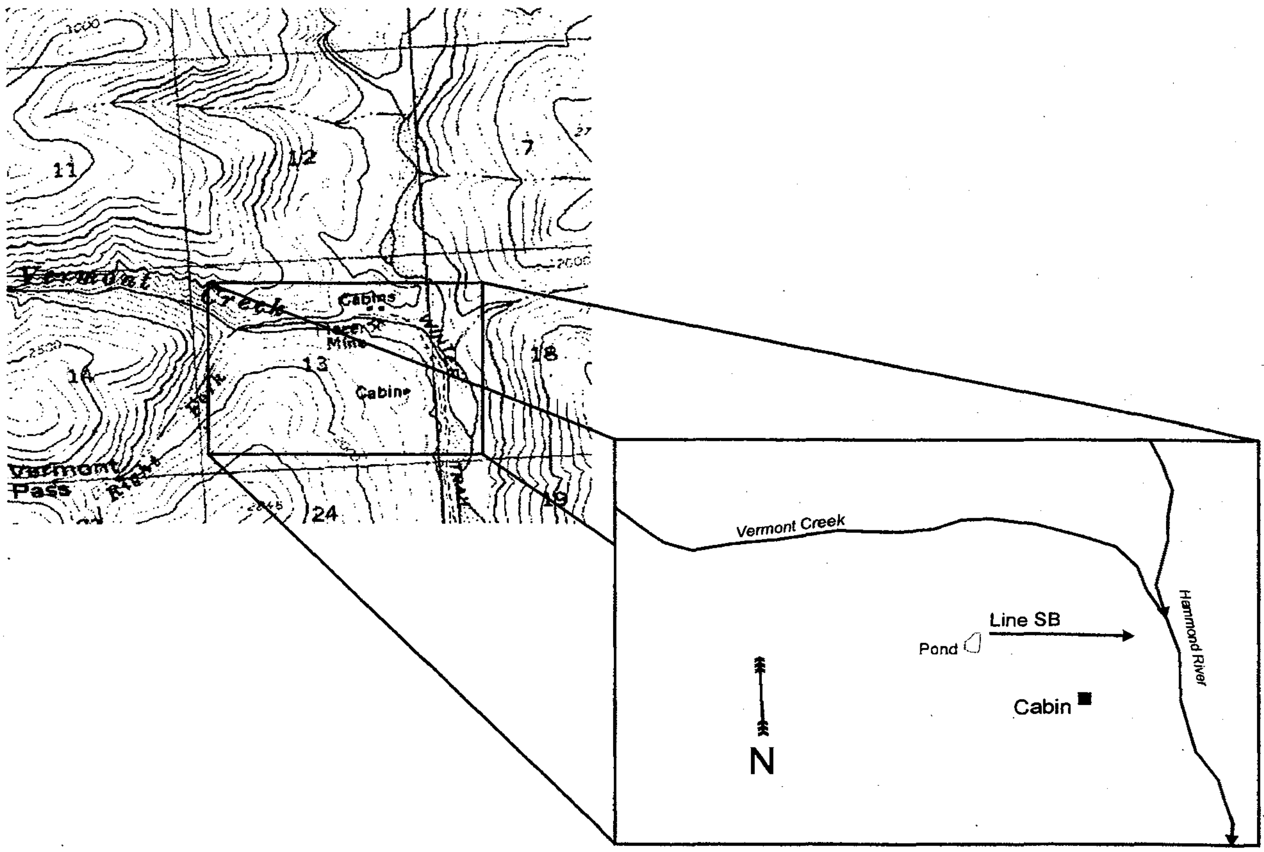


**Figure 3** Profile location at Slisco Bench.

The depth to bedrock at this location is too great to see with the GPR. Figure 4 shows the results of the lower half of line SB0, from the pond bearing north to the bluff. Processing included the removal of DC offset and conversion from time to depth. A value of 80 m/ns was used for depth conversion, selected from diffraction hyperbolae evident in the time section.

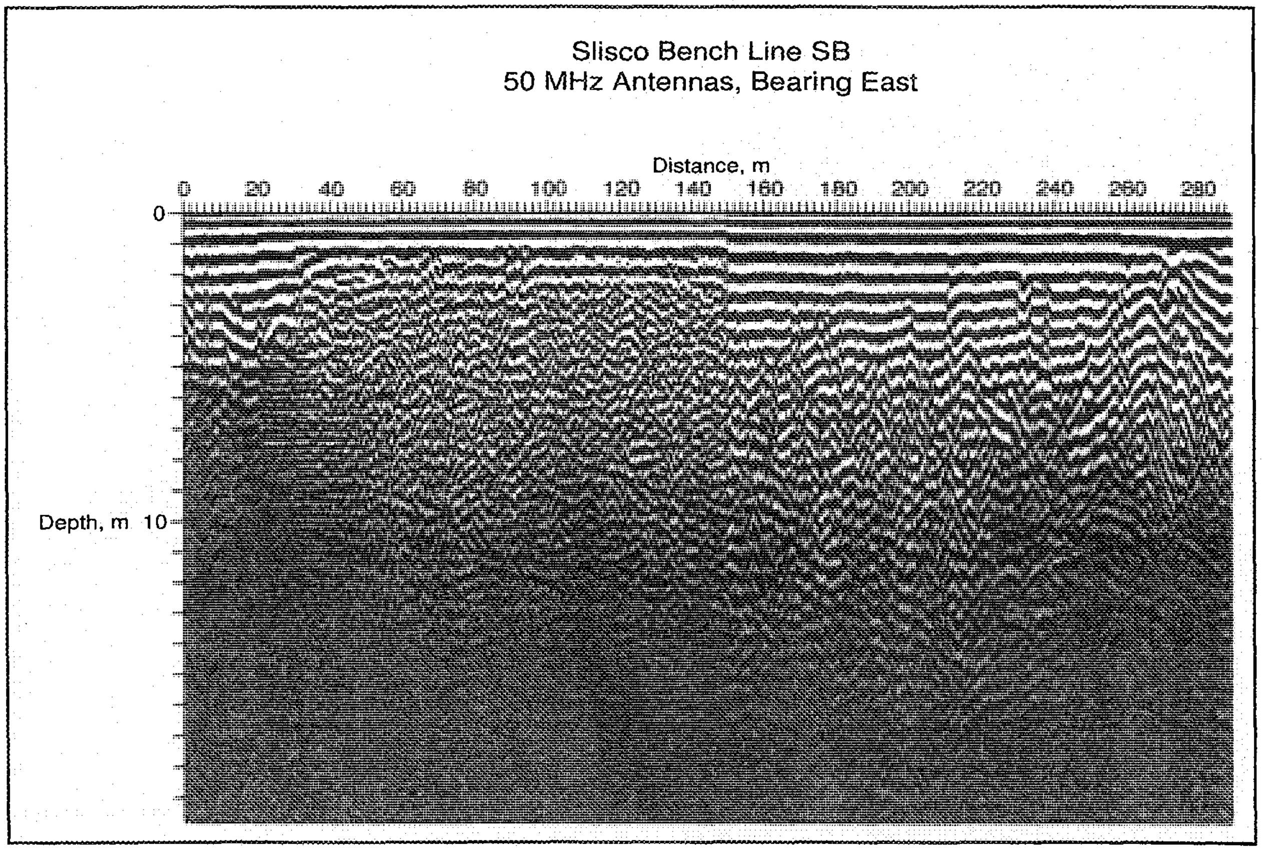


**Figure 4** Slisco Bench profile along line SB from pond bearing east. Some reflections are evident at a depth of approximately 10 m, most likely sand or clay layers. The signal attenuates completely by 15 m, making it impossible to determine depth to bedrock (2933 traces sampled horizontally every 0.1 m, 517 time samples per trace with a sampling frequency of 1041.67 MHz using 50 MHz antennas).

Workman Bench Workman Bench is located just south of the confluence of Smith Creek and Nolan Creek (Fairbanks meridian, township 31N, range 12W, section 33). Access was via 4WD vehicle. The objective at this site was to locate a channel that had been worked to the north but the location of which was unknown as it plunged to the south. A profile was conducted along a bulldozer track perpendicular to the suspected channel, as shown in figure 5. Bedrock was evident at the surface at the beginning of the profile.

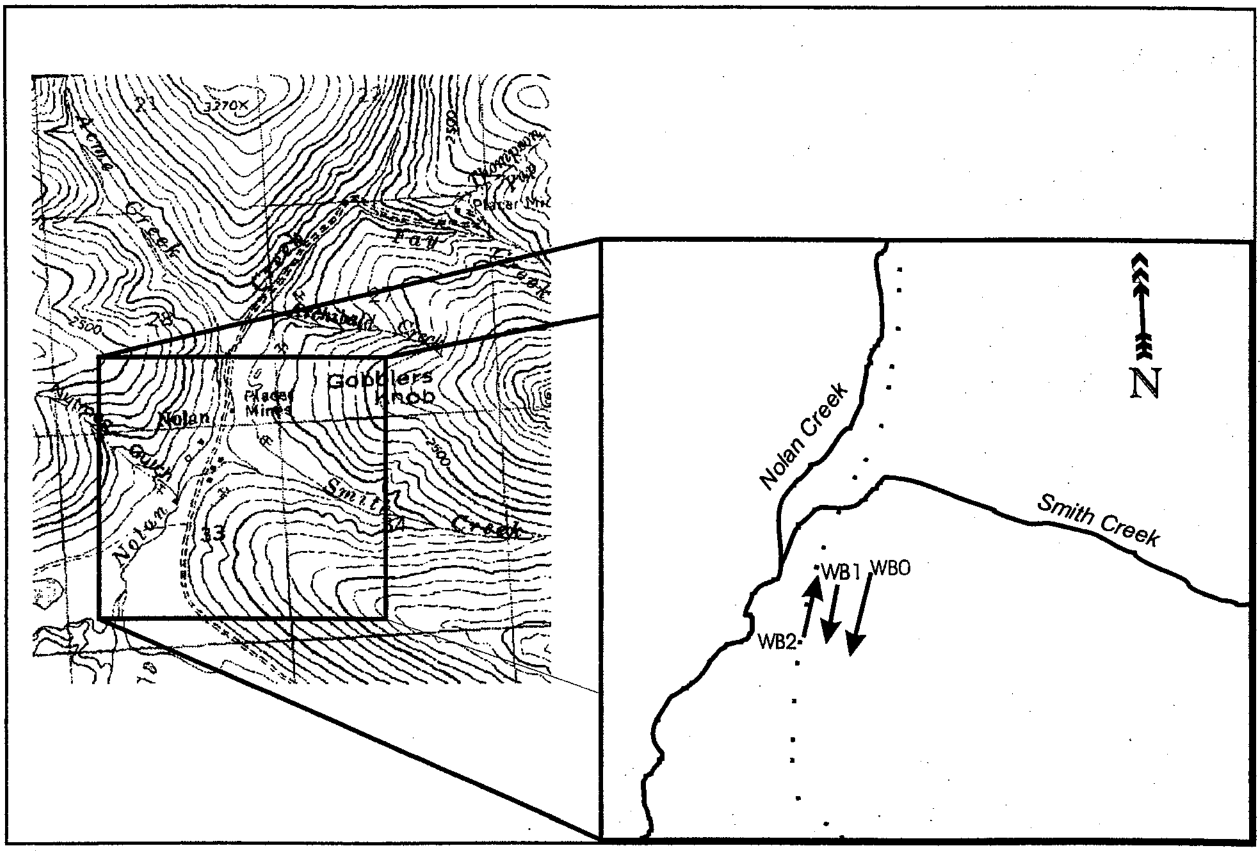


**Figure 5** Location of Workman Bench profiles.

Figure 6 shows the depth section for line WB0. The strong horizontal lines are the effect of ringing in the system, and don't indicate actual ground conditions. Bedrock is present at or near the surface at the beginning of the profile, and can be seen dipping down beginning at 90 m along the profile. The interpreted bedrock profile is shown in figure 7.

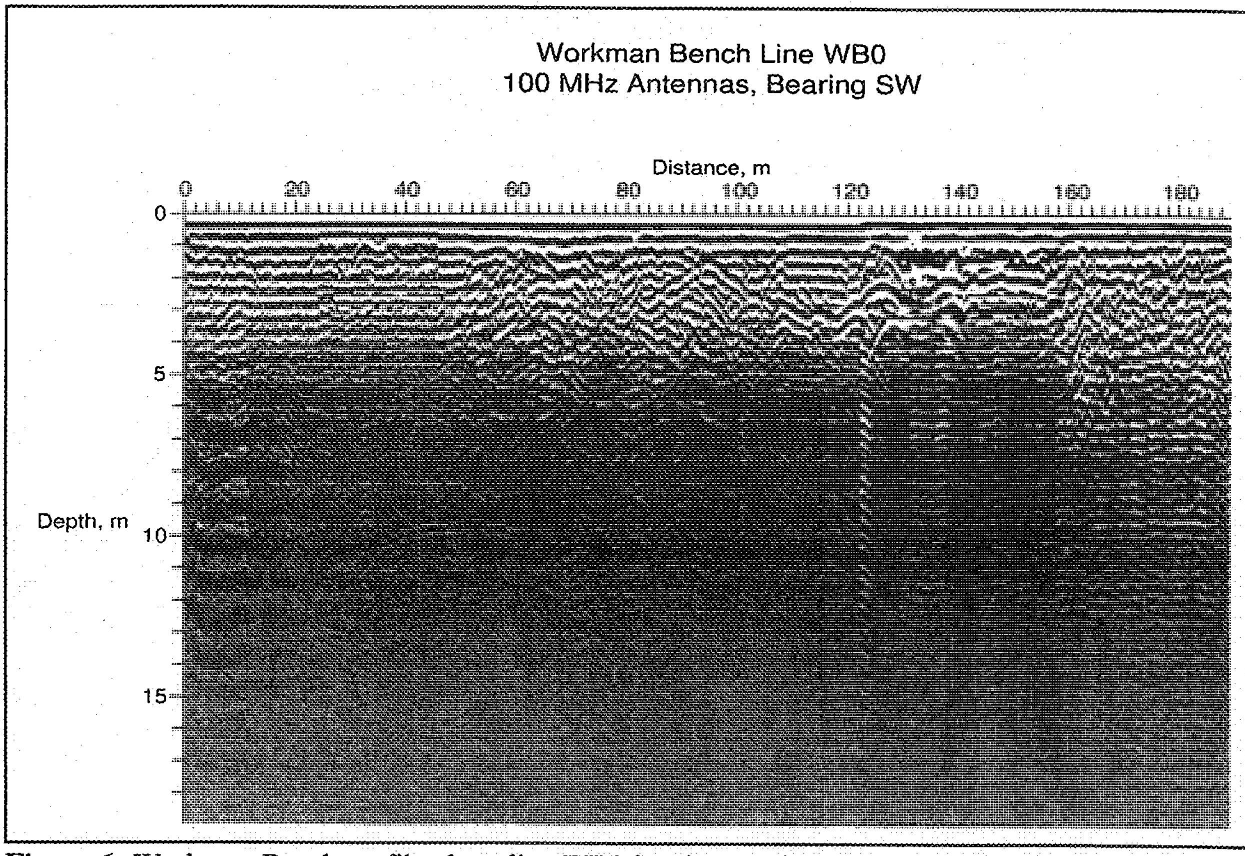


**Figure 6** Workman Bench profile along line WB0 bearing southwest. Bedrock is visible at 90 m along the profile as it dips down to a depth of 3 m (1940 traces sampled horizontally every 0.1 m, 696 time samples per trace with a sampling frequency of 1651.76 MHz using 100 MHz antennas).

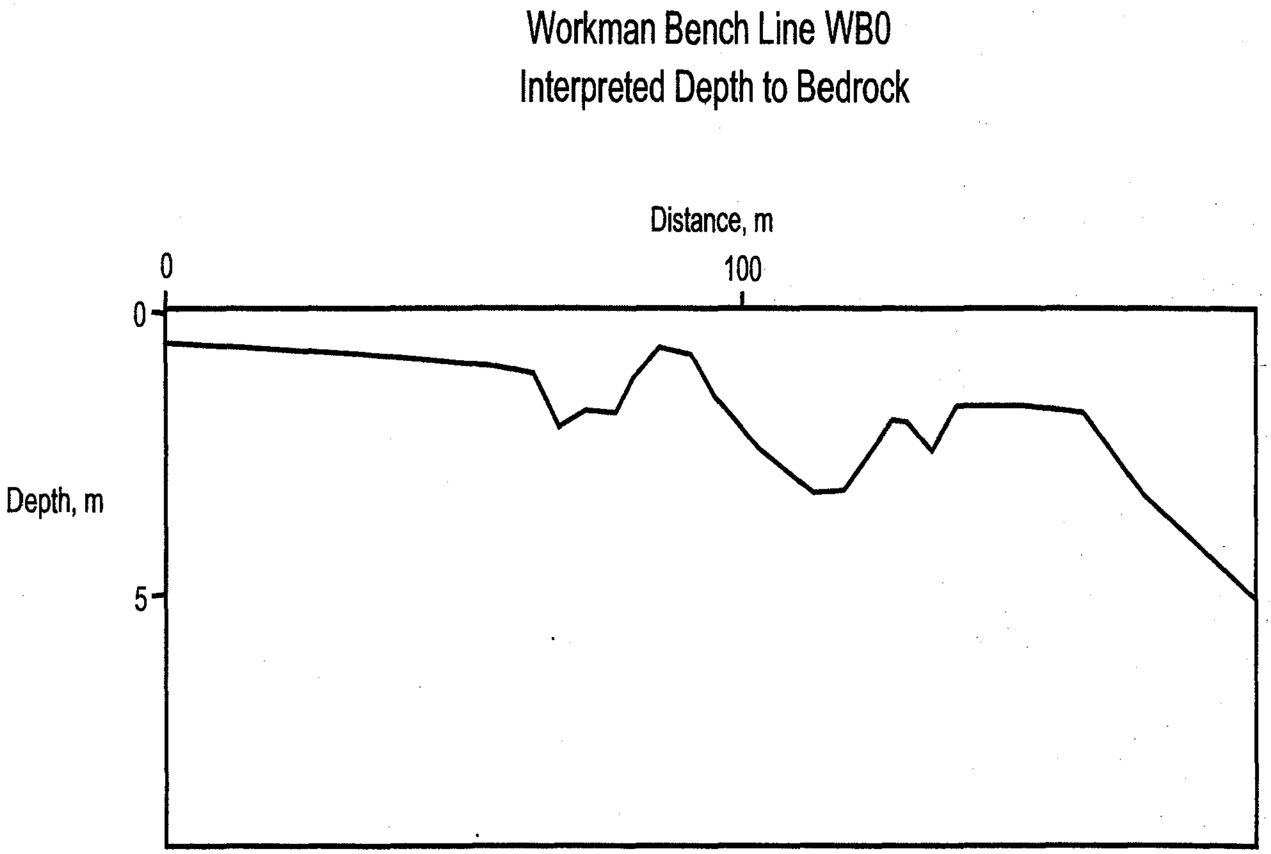


**Figure 7** Interpreted depth to bedrock for profile WB0

Additional profiles were conducted parallel to line WB0. Figures 8 and 9 show the converted depth sections for these profiles. With no continuous reflectors evident it is not possible to determine depth to bedrock. The signal attenuates completely at a depth of 7 m, indicating bedrock lies beyond that depth.

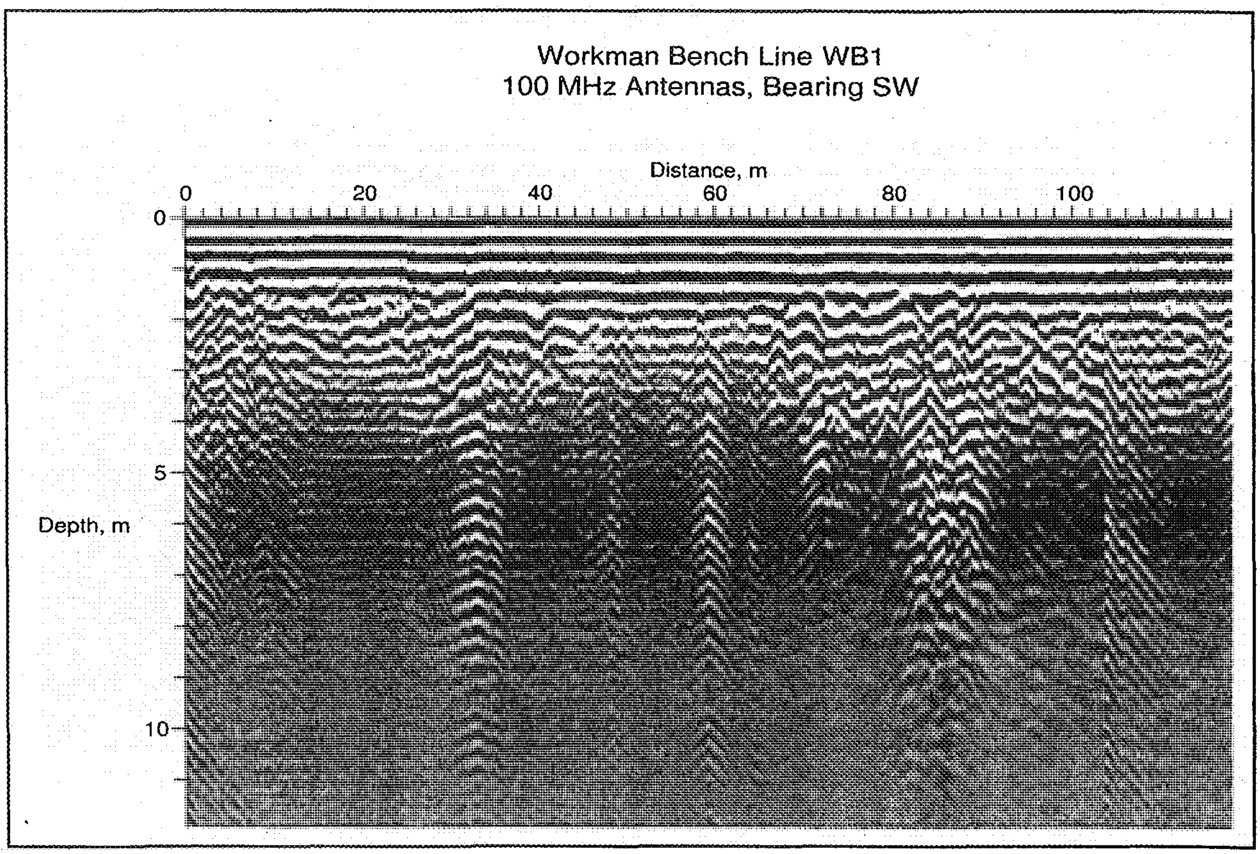


**Figure 8** Depth section for profile WB1.

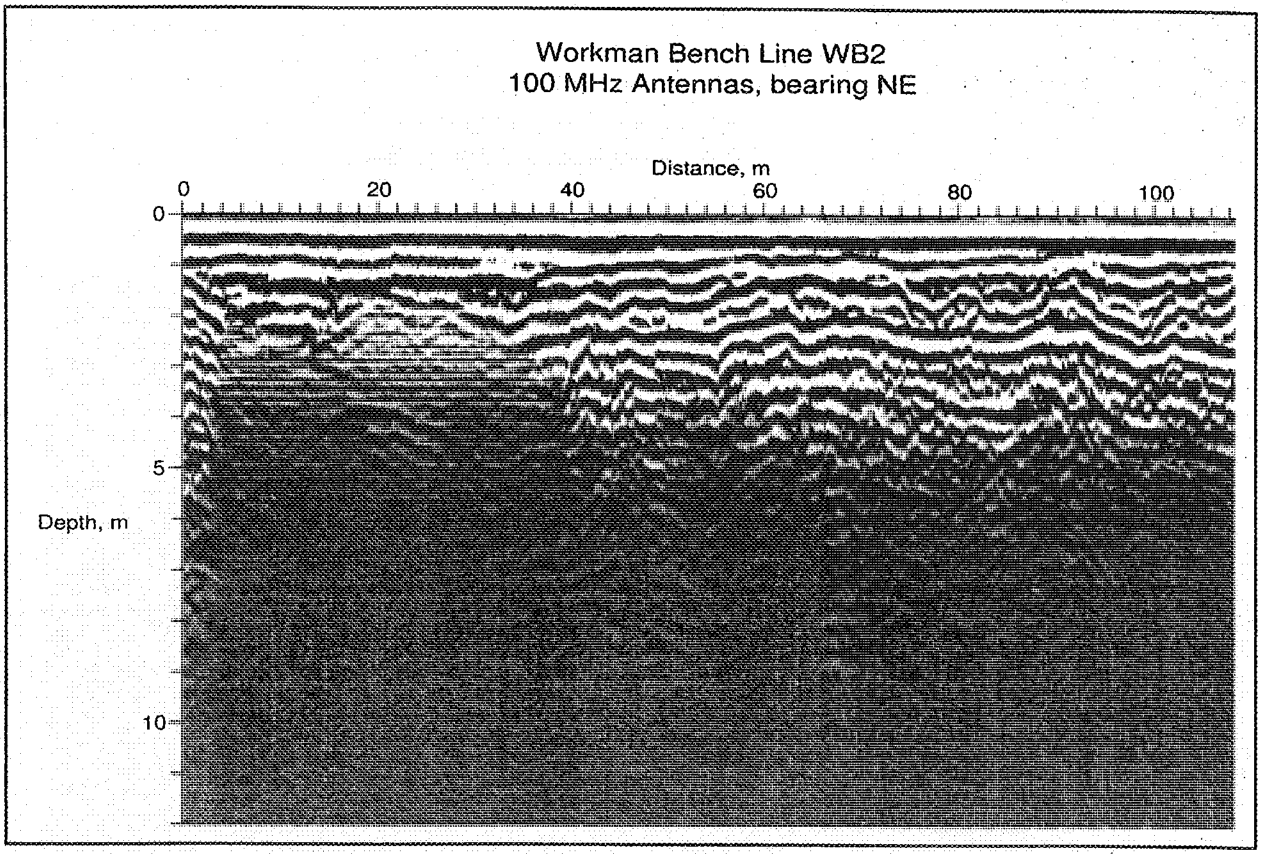


**Figure 9** Depth section for profile WB2.

Linda Creek The Linda Creek profile is located at the Linda Creek Mine, over the underground placer workings that follow an ancestral channel of Gold Creek covered by glacial drift (Fairbanks meridian, township 31N, range 10W, section 7). The objective of this profile was to identify depth to bedrock and perhaps locate mine workings. In addition to the profile a walkaway sounding was conducted at the mine site. Figure 10 shows the profile location.

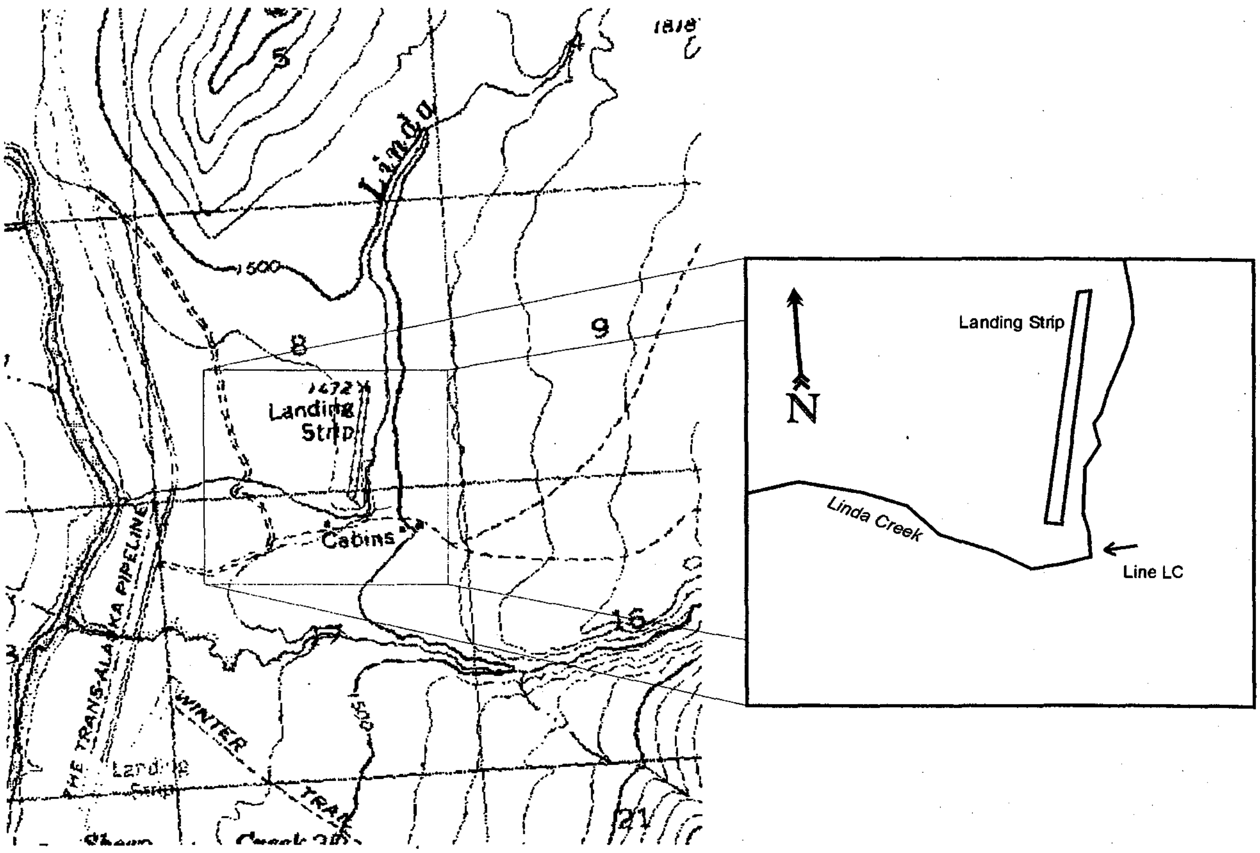

**Figure 10** Location of line LC. Profile started at east end bearing west.

Processing of the time section data was limited to DC offset removal and conversion to depth. A velocity of 103 m/ns was determined from the velocity sounding and used for the depth conversion. Figure 11 shows the converted depth section. A strong continuous reflector is evident across the profile, starting at a depth of 25 m at the beginning of the profile and ending at 17 m at the end of the profile. This reflector could be bedrock, but the presence of additional small weak reflectors at greater depth along the profile suggest deeper sediments. The strong continuous reflector is most likely a distinctive layer of sand or clay that varies significantly from the surrounding material.

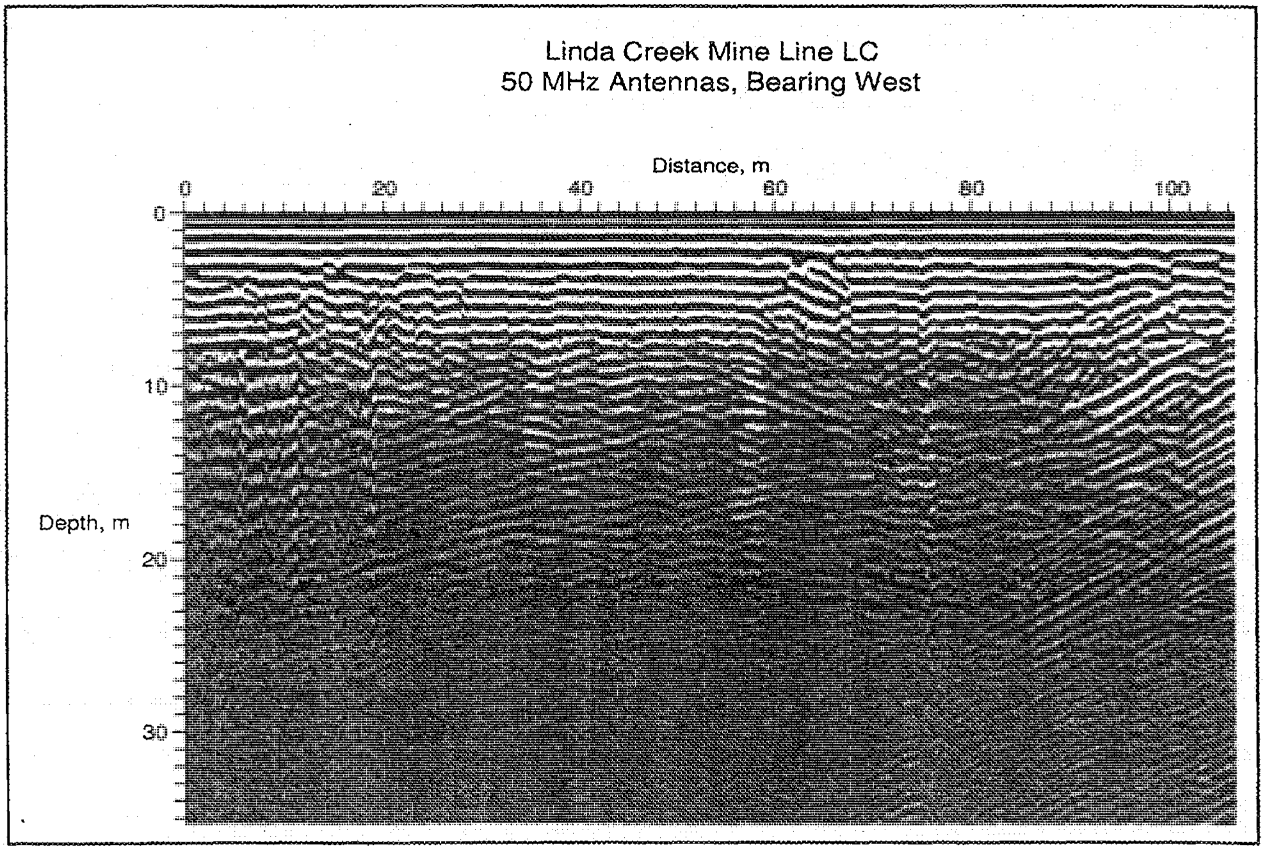


**Figure 11** Depth section of Linda Creek Profile.

## Magnetics and VLF Conductivity

Methodology

A magnetometer measures magnetic flux density, which is proportional to the earth's magnetic field. It is a single point measure at the location of the sensor. Static distortions in the earth's magnetic field are due to magnetic minerals in the rock, such as magnetite or pyrrhotite. A proton precession magnetometer uses a fluid rich in hydrogen atoms such as kerosene or methanol. A small magnetic field is generated to polarize the hydrogen nuclei along a new orientation. As the nuclei return to normal they spin, or precess, around the new axis. The frequency of this precession can be measured and correlates with the magnetic flux density.

VLF surveying makes use of the radio signals broadcast from navigational stations throughout the world. These signals are deflected in the vicinity of a conductive body. The sensors record the signal strengths of the horizontal and vertical components of selected frequencies. By observing the changes in the VLF fields the location and size of a conductor or ore body can be determined.

Data Acquisition The equipment used included a GEM systems GSM-19 Overhauser magnetometer with gradiometer and VLF options. The GEM Systems manual reports a sensitivity of 0.02 nT and a sampling rate of up to 5 Hz. This backpack-mounted system can be operated by an individual. The gradiometer option allows for a second sensor mounted 0.5 m above the first sensor and measures the vertical gradient of the total magnetic field. Gradiometer data collected in this manner is more sensitive to near surface anomalies. The VLF feature includes an omnidirectional antenna mounted at the base of the backpack. VLF readings measure the vertical and horizontal field strengths at selected frequencies for known VLF signals. In the presence of a conductive body the electric field vector shifts, resulting in distinctive changes in the in-phase and quadrature components.

Station location control was maintained with a differentially corrected global positioning system (DGPS) unit. A Trimble Pathfinder Pro XL unit was used to record coordinates for every fifth station and differentially corrected via post processing. Coordinates for intervening stations that did not have a GPS reading were interpolated. While this introduced some error into station location coordinates, it provided for rapid profiling. This is essentially the same procedure used in airborne magnetometer surveys. Figure 12 shows the magnetometer and GPS units in use.

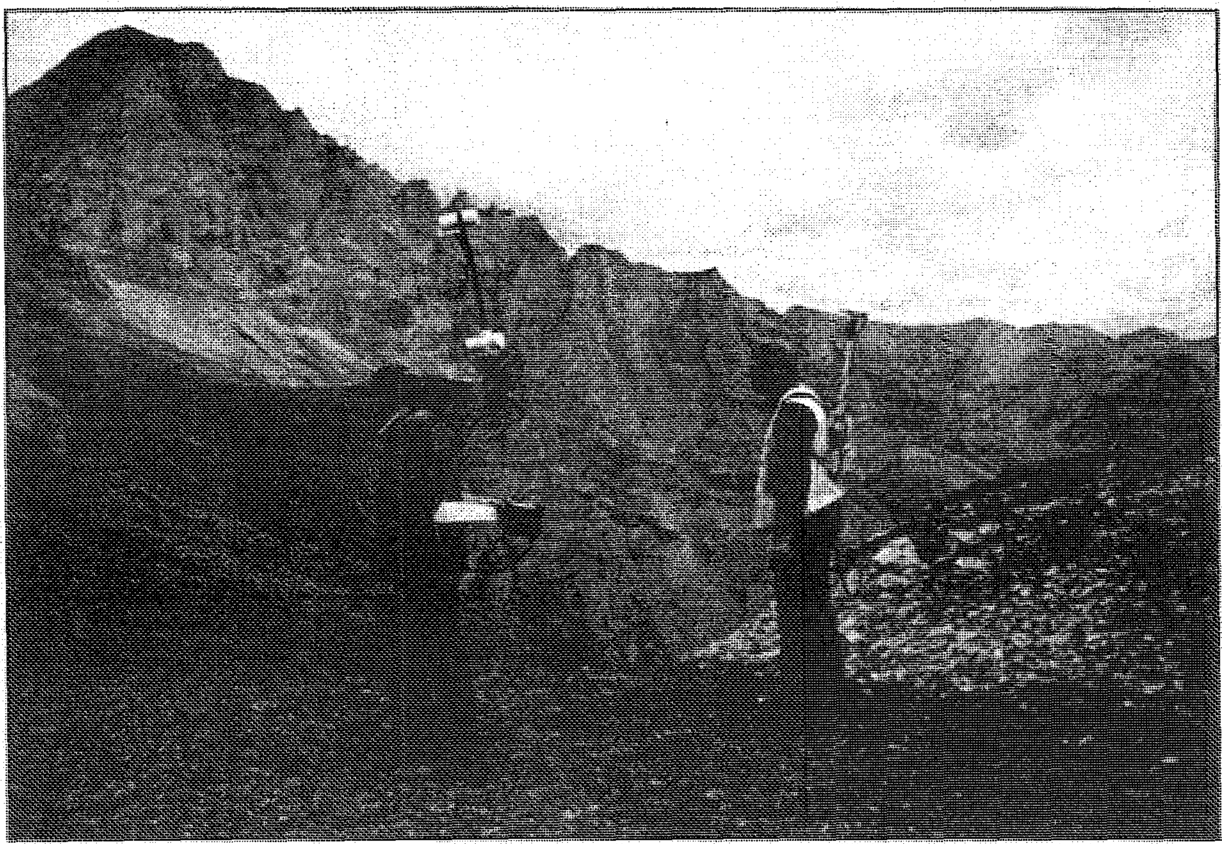

**Figure 12** Field operation of the GSM-19 magnetometer with VLF and gradiometer options.

Two operators were used in this arrangement for performing the mag/VLF data acquisition. The magnetometer operator would flag the start of the line and take a reading. The operator would then proceed along the selected bearing a fixed number of paces and take another reading. At the same time the GPS operator was getting a location reading for the flagged location. At a selected number of stations, usually every 5 stations, the magnetometer operator would flag the location and the GPS operator would get a location at that station. In this manner the magnetometer operator could proceed at a fast rate without having to wait for the GPS readings, which could take several minutes. Diurnal drift in the magnetic field was accommodated by reoccupying the first location or a selected base location at the end of each profile.

<u>Data Processing</u> The data were processed using Oasis MONTAJ software published by Geosoft. Three processes were applied to the data:

Removal of drift - Diurnal fluctuations in the magnetic field and instrument drift were removed by reoccupying a base station before and after a survey and noting these times. Magnetic field readings taken during the survey are adjusted by interpolating the difference based on the time of the reading and subtracting that difference.

Gridding - Once the data are corrected for drift, they can be interpreted directly by plotting profiles. To combine several profiles into a map it is necessary to generate a grid of the data. A computer software program, Geosoft Oasis, was used to generate the grids and prepare the maps. A minimum curvature gridding technique was selected.

Identifying VLF anomalies - The VLF data collected synchronously with the magnetic data can identify areas of anomalous electrical conductivity. Profiles of the VLF data are reviewed manually, comparing the in-phase and quadrature channels, as shown in Figure 13.

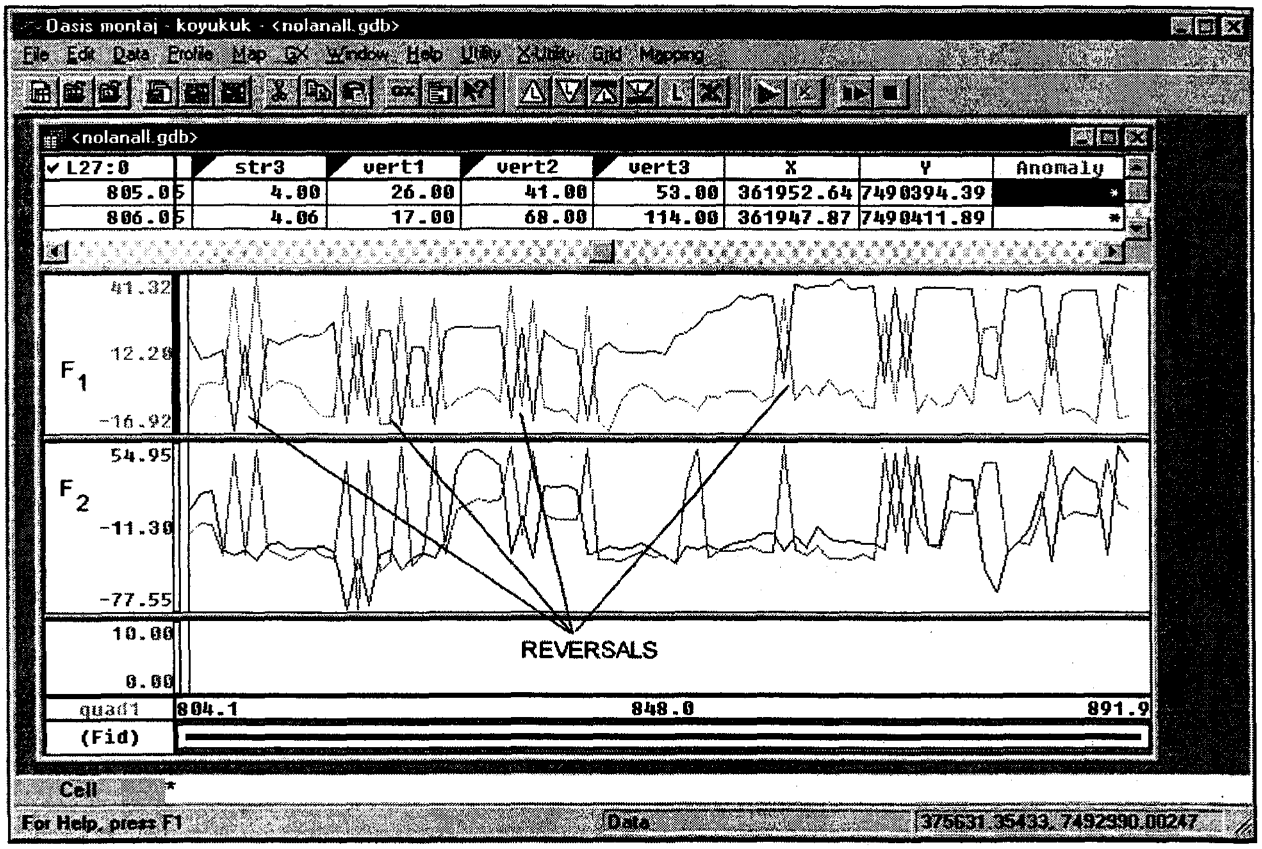


**Figure 13** Screen capture of software program to aid in the identification of VLF anomalies. The reversals in the in-phase and quadrature components indicate a conductor near the surface.

## Field Sites and Results

### Linda Pass

The site at Linda Pass was selected based on an anomalous magnetic high as seen in the airborne data. It is located in the saddle east of Linda Creek, as shown in figure 14 (Fairbanks meridian, township 32N, range 10W, section 35). The anomaly is hosted in Devonian sediments and bisected by a suspected thrust fault striking east-west (Dillon and Reifenstuhl, 1995). Chloritic siltstone to the north is overlain by black phyllite to the south. Access was via helicopter. The objective at this site was to confirm the presence of an anomalous magnetic high and determine its extent. Measurements were taken along three parallel lines oriented N-S, with six cross lines oriented E-W.

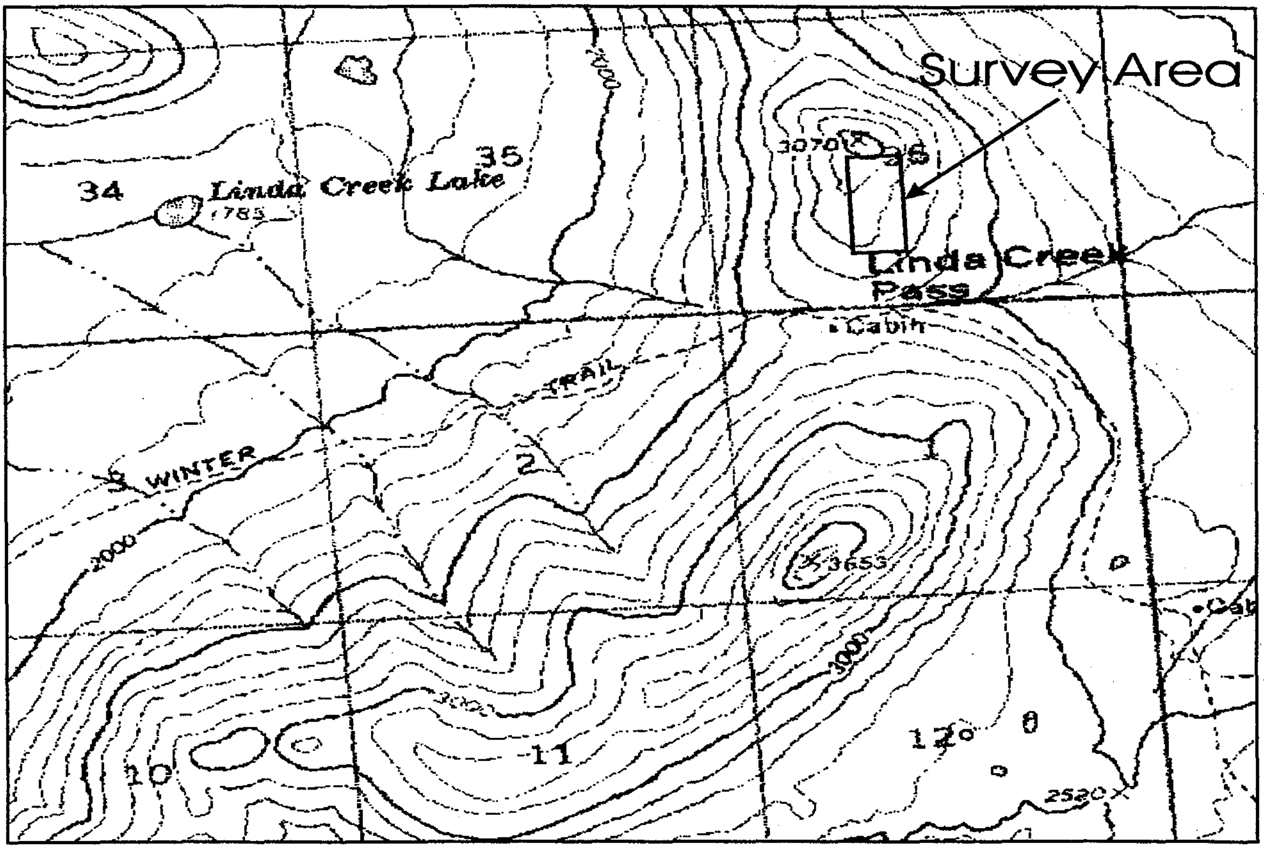


**Figure 14** Location of Linda Pass magnetic survey.

Figures 15, 16, and 17 show the gridded total magnetic field, gridded magnetic gradient, and plot of VLF anomalies. The total field magnetic data show two distinct magnetic highs at the west boundary of the survey area. The gradient plot shows these same highs, in addition to some smaller features. The vertical gradient measurement is sensitive to near surface variations and hence appears as a noisier image. The VLF anomalies identified are located on the north and east boundaries of the survey area.

Hypothesizing as to the geologic features generating this local magnetic high and the conductive anomalies surrounding it is highly speculative without further investigation. Mineralization along the fault could be from altered chloritic siltstone, or may result from leaching of rocks deeper in the stratigraphic sequence. However there appears to be good structural control for defining the fault zone contacts at the north and south limits of the magnetic anomaly. The conductive anomalies identified by the VLF occur both in the fault zone and north of the fault zone and are inconclusive with respect to distinguishing between conductive minerals and groundwater.

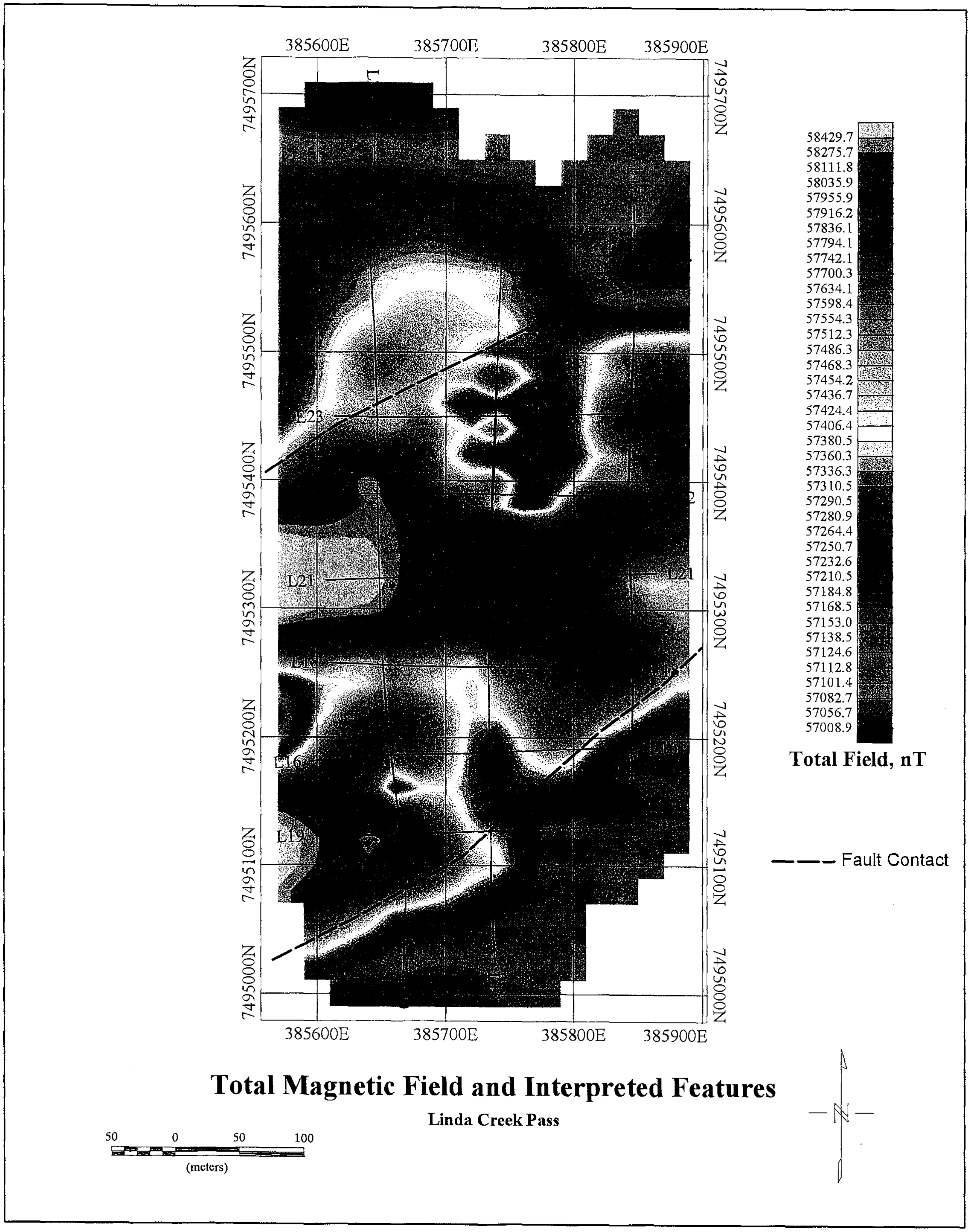


**Figure 15** Linda Pass total magnetic field. Coordinates are in UTM zone 5.

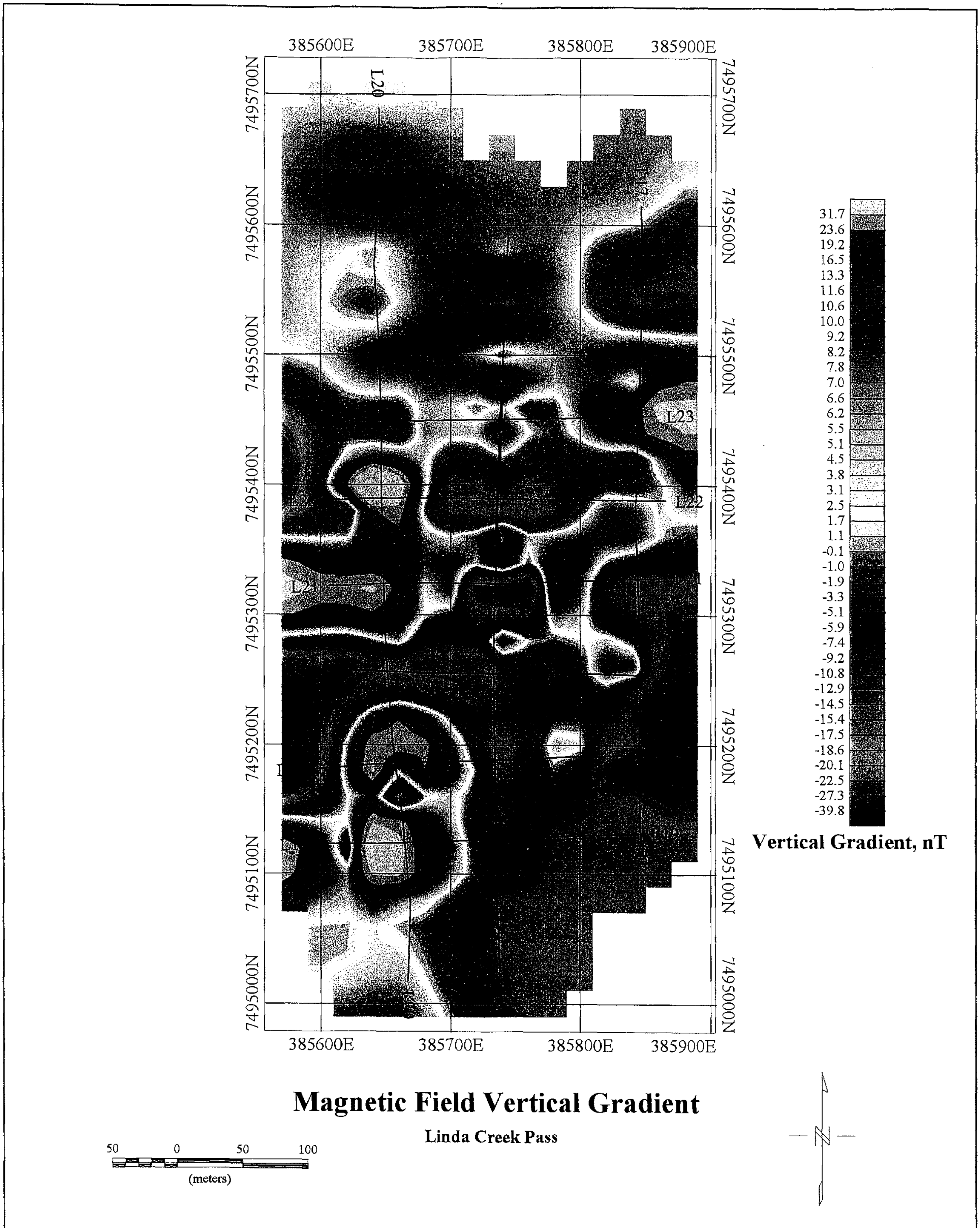


**Figure 16** Linda Pass vertical magnetic gradient. Coordinates are in UTM zone 5.

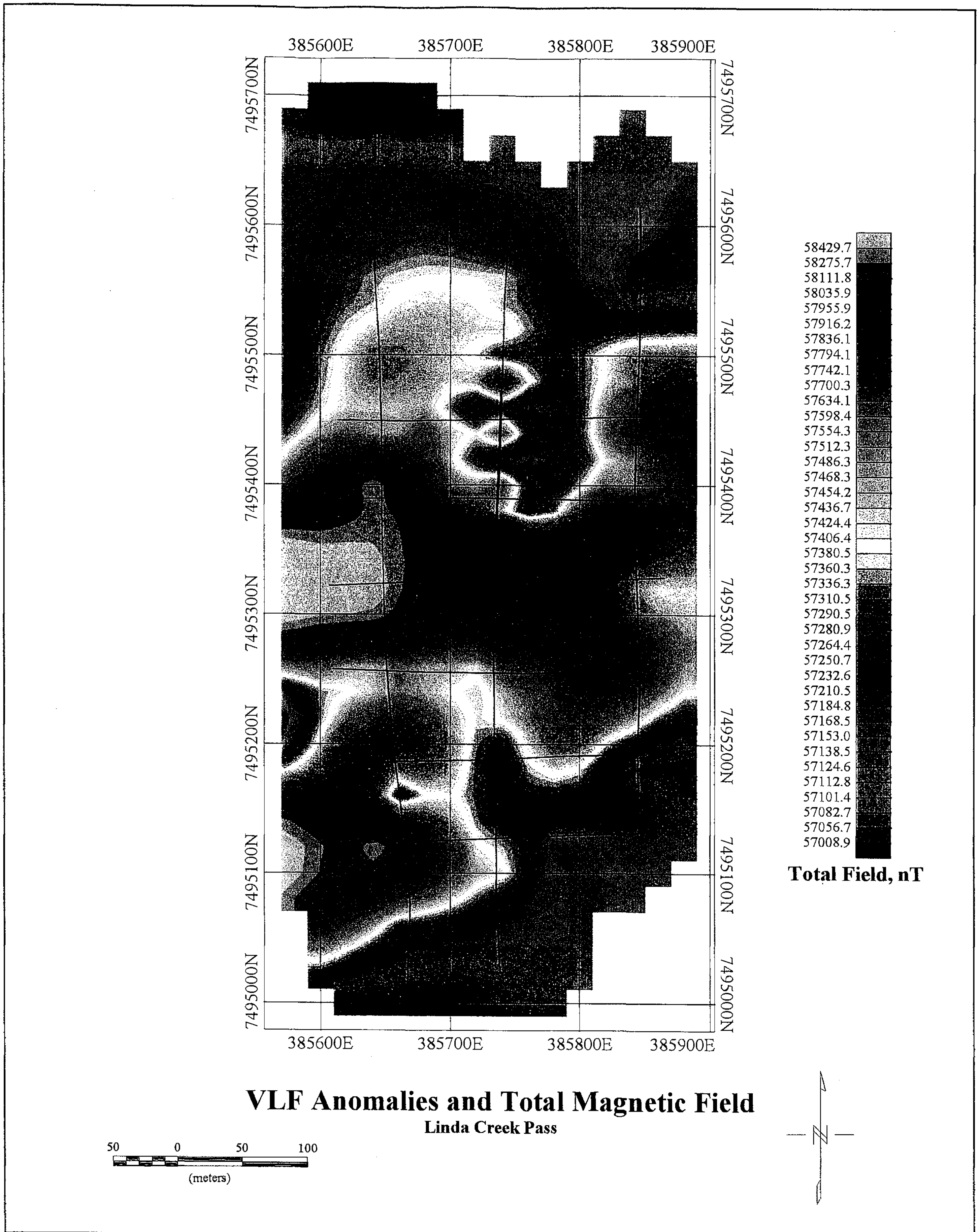


**Figure 17** Linda Pass VLF anomalies. Coordinates are in UTM zone 5.

Venus Prospect

The Venus Prospect is located west of the confluence of Big Spruce Creek and an unnamed drainage, as shown in Figure 18 (Fairbanks meridian, township 32N, range 8W, sections 3 and 4). It consists of an altered granite porphyry that contains disseminated chalcopyrite and has been the target of several previous exploration efforts. Airborne magnetometer measurements indicate that the altered granite is depleted of magnetic minerals. Tactite has been mapped along the flank of the intrusive, with some minor skarn mineralization noted containing massive magnetite and pyrrhotite(WGM progress report). Airborne geophysics data show two magnetic highs southwest of the intrusive. The objective of the ground geophysics at this site was to determine how readily the magnetic anomaly from the airborne data could be delineated on the ground. Access was via helicopter. A survey consisting of profiles along eleven lines was performed, as shown in figure 19.

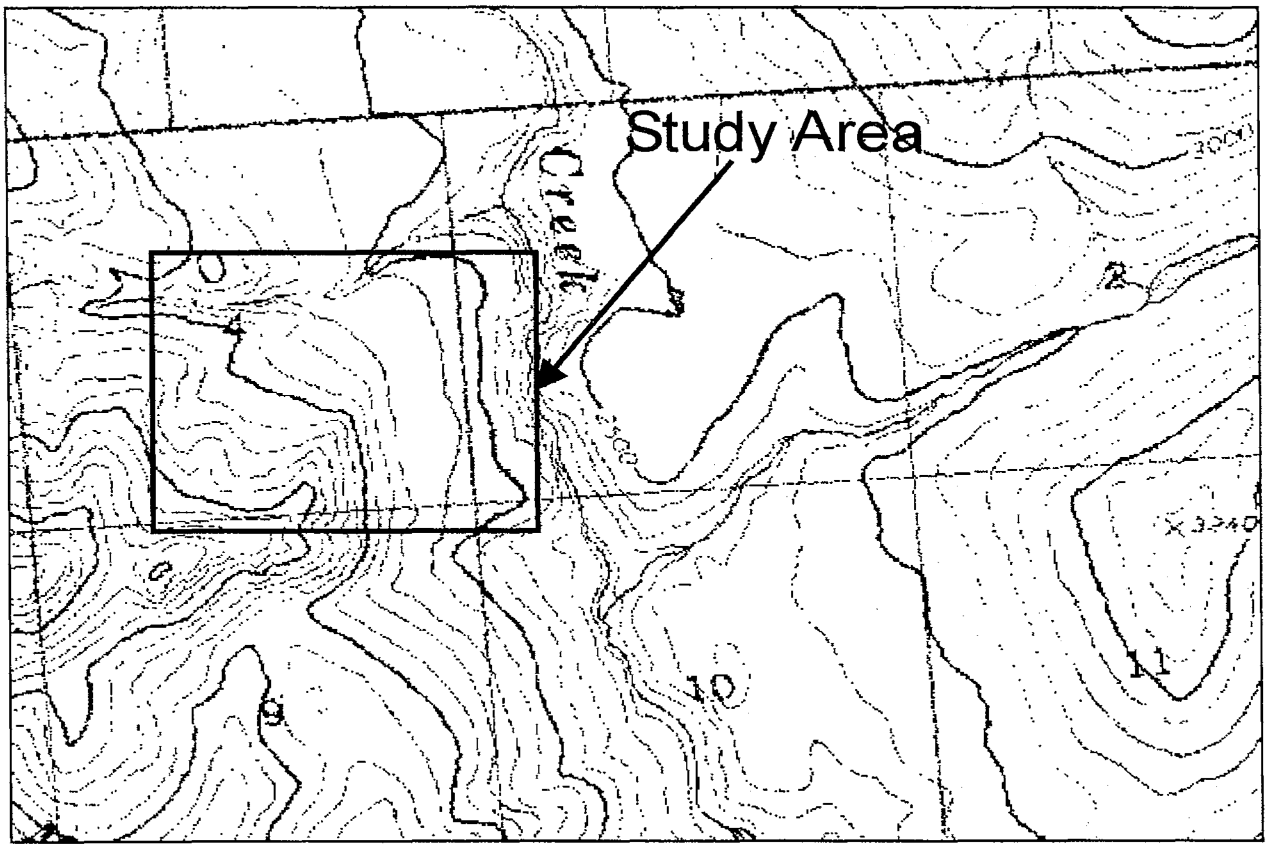

**Figure 18** Location of Venus Prospect site.

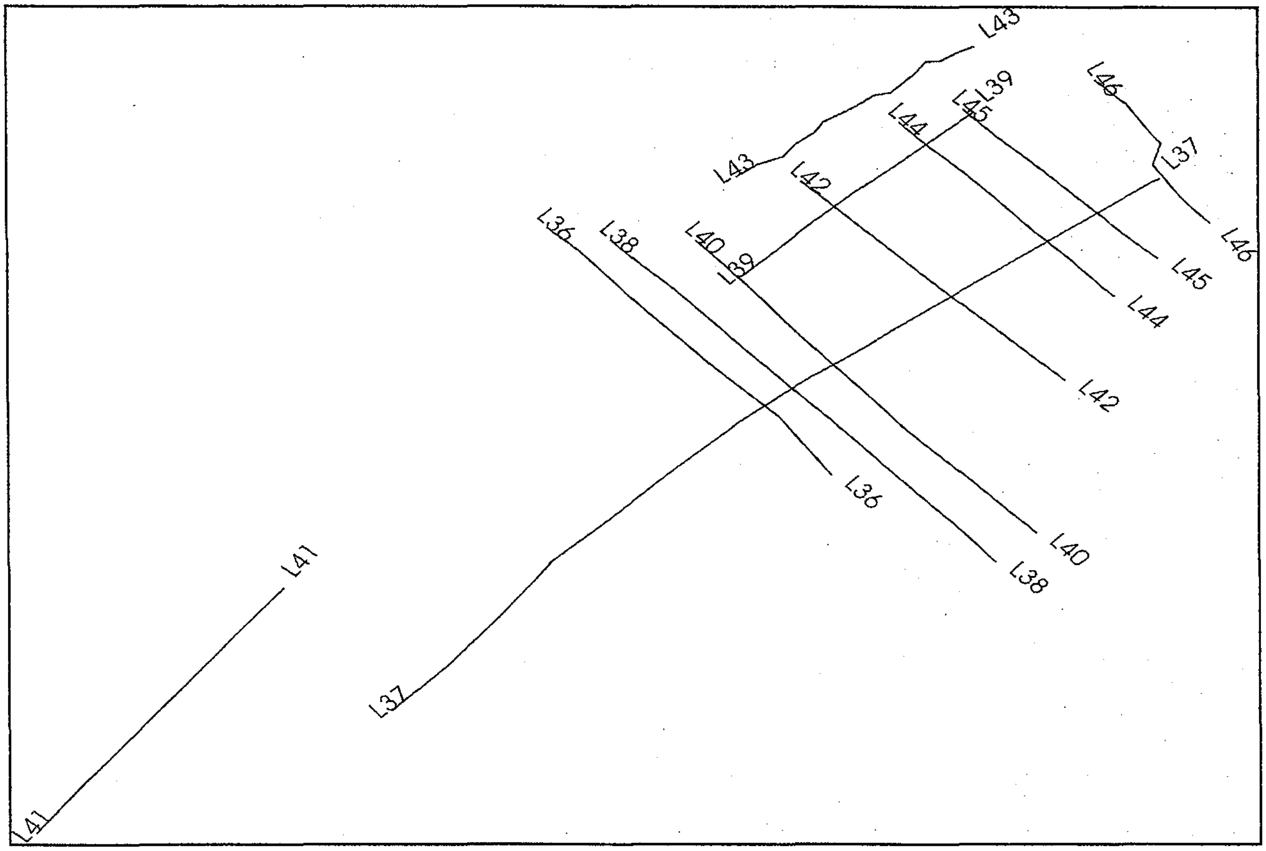

**Figure 19** Survey lines for Venus Prospect.

Figures 20, 21, and 22 show the gridded total magnetic field, gridded magnetic gradient, and plot of VLF anomalies. The profiles intersected two distinct magnetic anomalies as shown in the total magnetic field data. Although coverage over the body to the southwest is incomplete, some inferences can be made by comparing the total field and gradient data. The total field anomaly for the northeast body is much higher in magnitude than for what was observed in the southwest body. In addition, the gradient data show much greater gradient over the northeast feature. The continuous high gradient over the southwest body suggests that it may be deeper than the body to the northeast. These conclusions are drawn from the limited data that intersect the southwest body and as such are highly speculative. Conductive anomalies appear throughout the entire survey area, with the exception of the center of the northeast body. While the anomalies may be due to mineralization, they may also be due to saturated surface soils. The highs seen in the total magnetic field may indicate more extensive skarn mineralization than was previously identified.

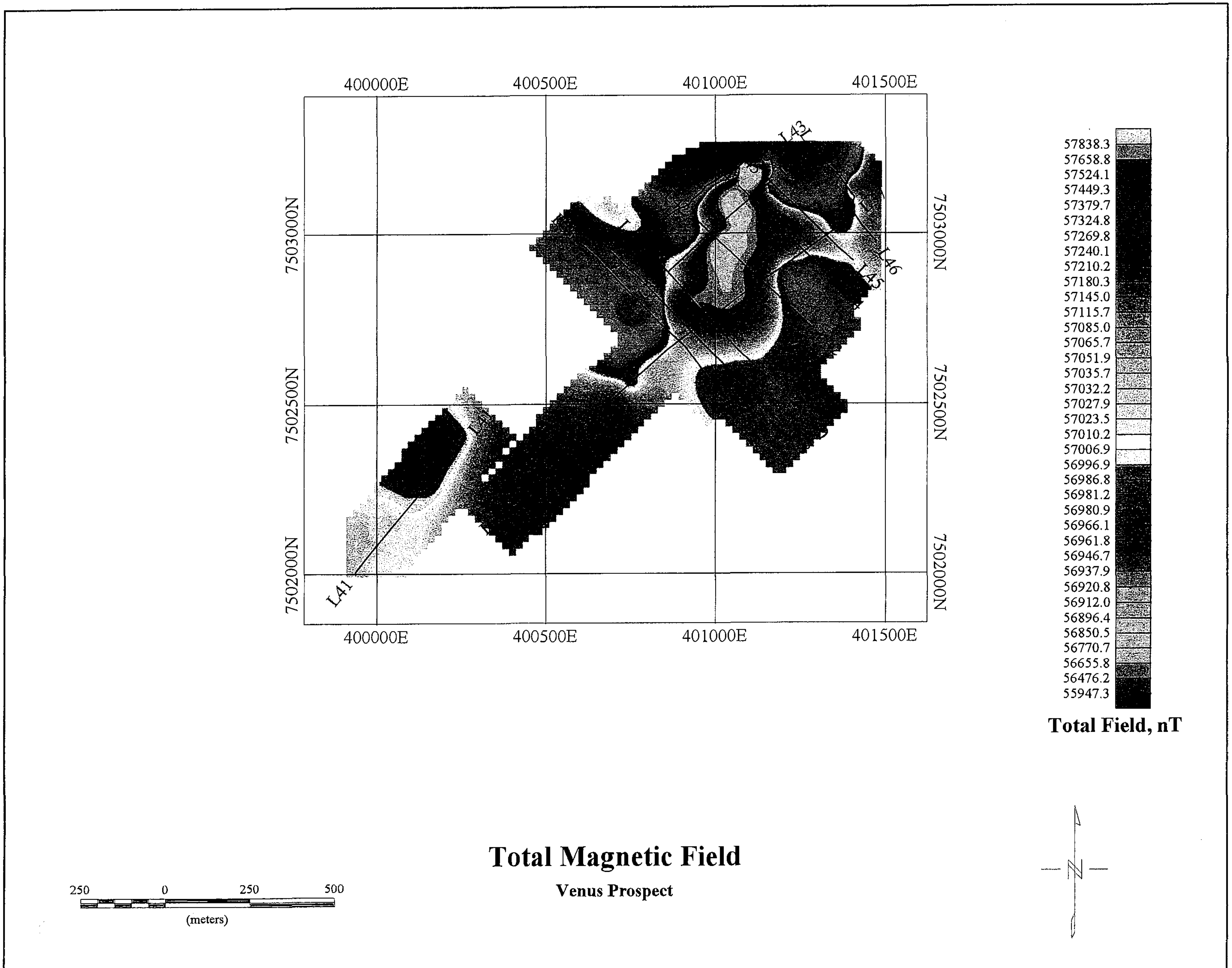


**Figure 20** Venus Prospect total magnetic field. Coordinates are in UTM zone 5.

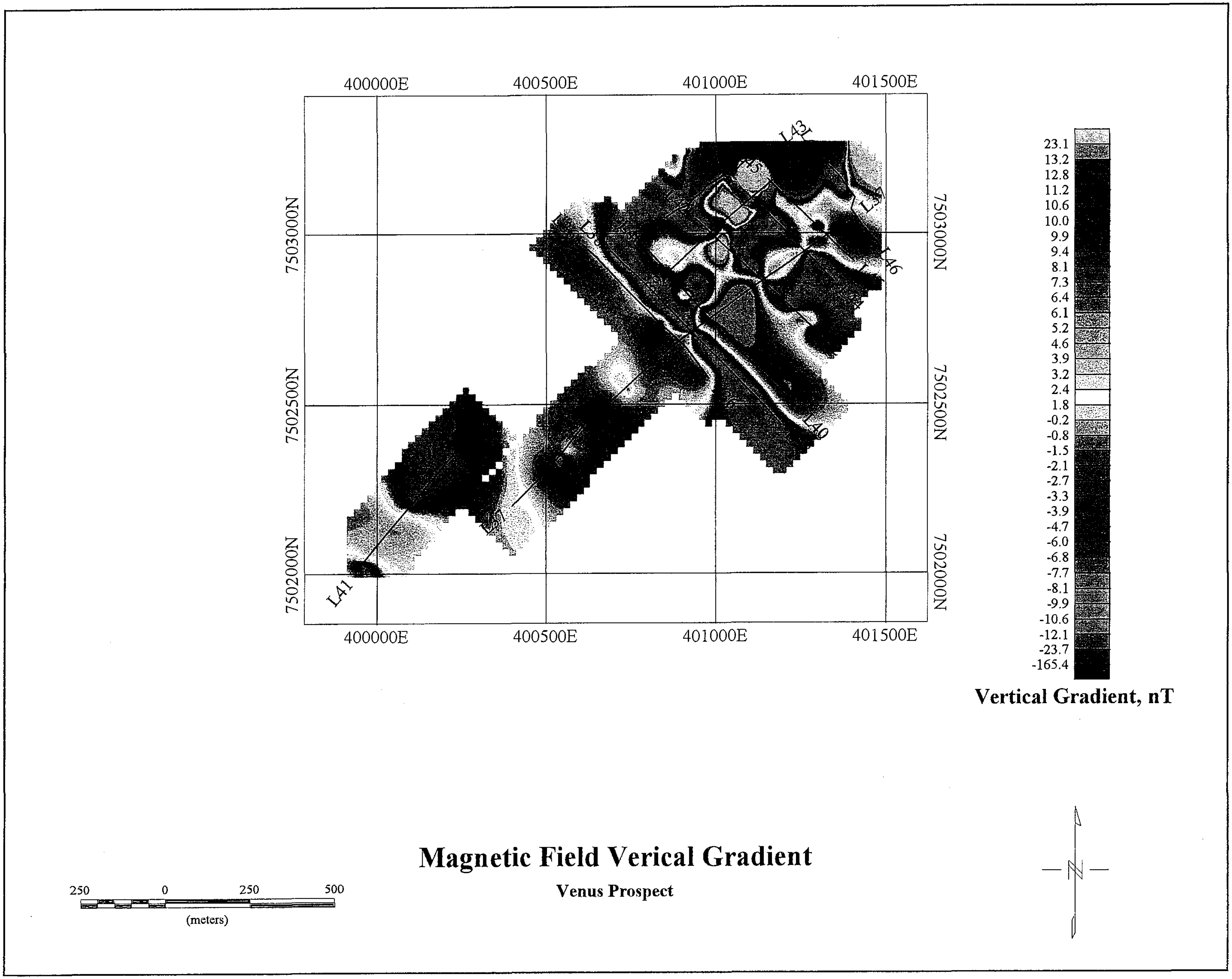


**Figure 21** Venus Prospect vertical magnetic gradient. Coordinates are in UTM zone 5.

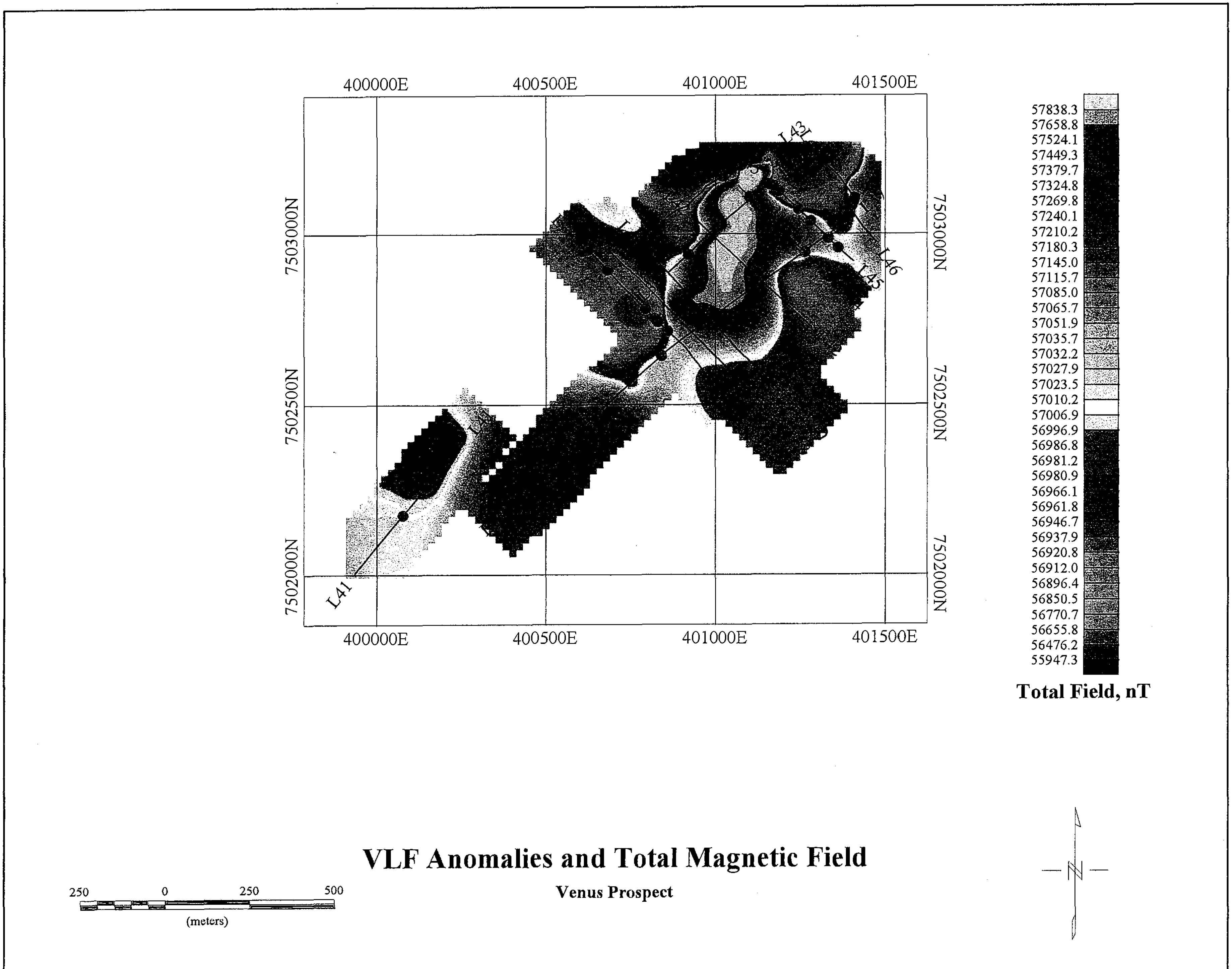


**Figure 22** Venus Prospect interpreted VLF anomalies. Coordinates are in UTM zone 5.

Nolan Creek Basin

This site consists of several profiles along Nolan Creek, Fay Creek, and Montana Gulch, as shown in figure 23 (Fairbanks meridian, township 31N, range 12W). The geology consists of Devonian metasediments that have been subjected to several faulting episodes and glacial scouring. The area has been placer mined for gold since 1901 and along with the Hammond River to the north has been the most productive area in the Brooks range. Access was via 4WD vehicle and helicopter. The objective of this survey was to identify any distinguishing features in a large conductive anomaly as seen in the airborne data.

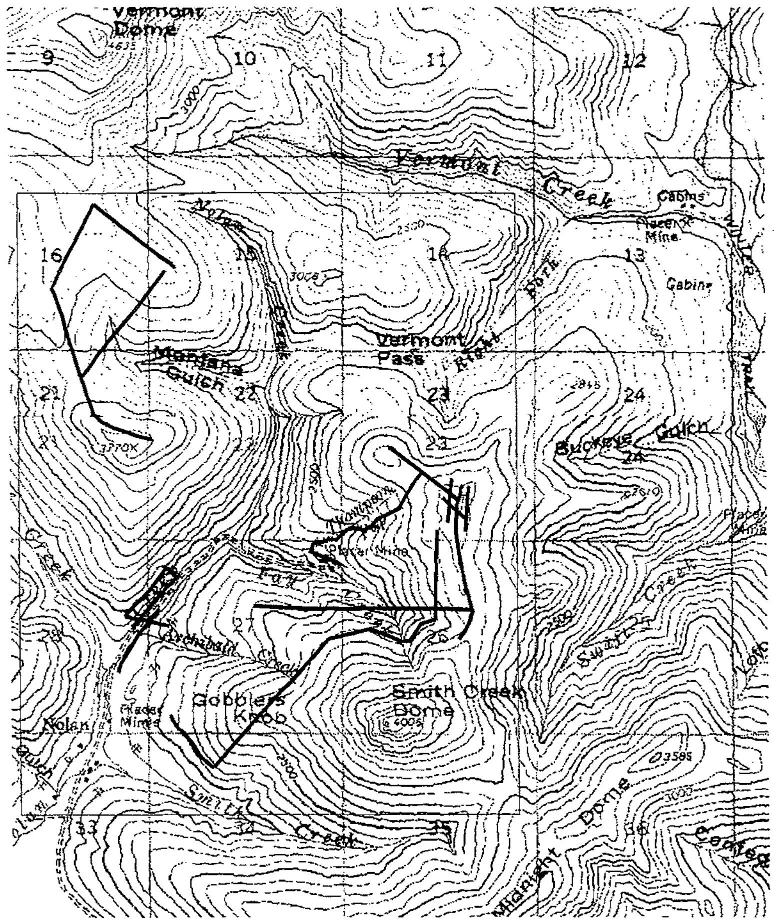


**Figure 23** Location of profiles at Nolan Creek Basin.

Figures 24, 25, and 26 show the gridded total magnetic field, gridded magnetic gradient, and plot of VLF anomalies. The data are presented without much interpretation as the coverage is incomplete, making it difficult to adequately interpolate where there is no coverage. The magnetic highs and conductive anomalies present in the southwest portion of the survey may be the result of cultural influences, as there has been significant mining along Nolan Creek

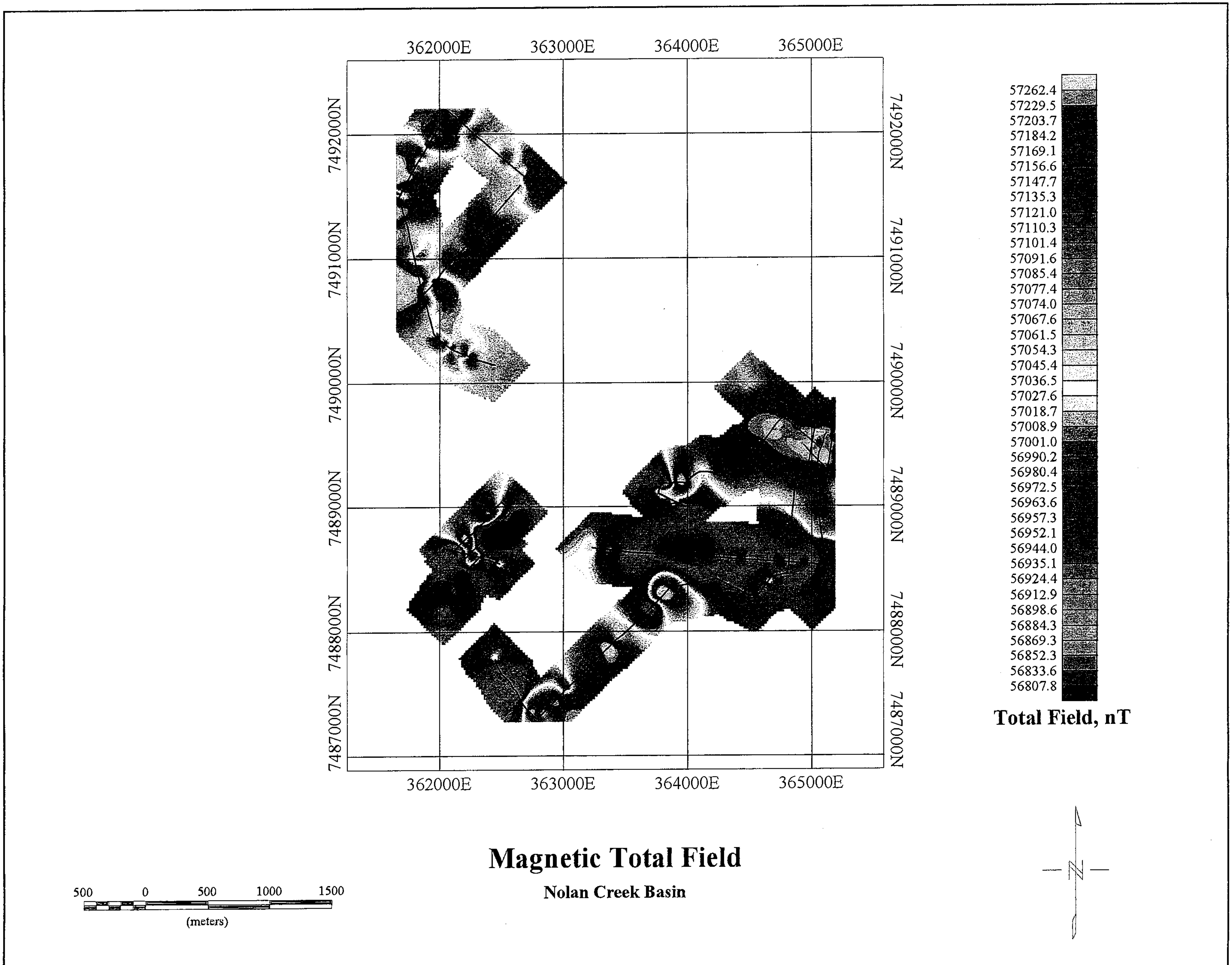


**Figure 24** Nolan Creek Basin total magnetic field. Coordinates are in UTM zone 5.

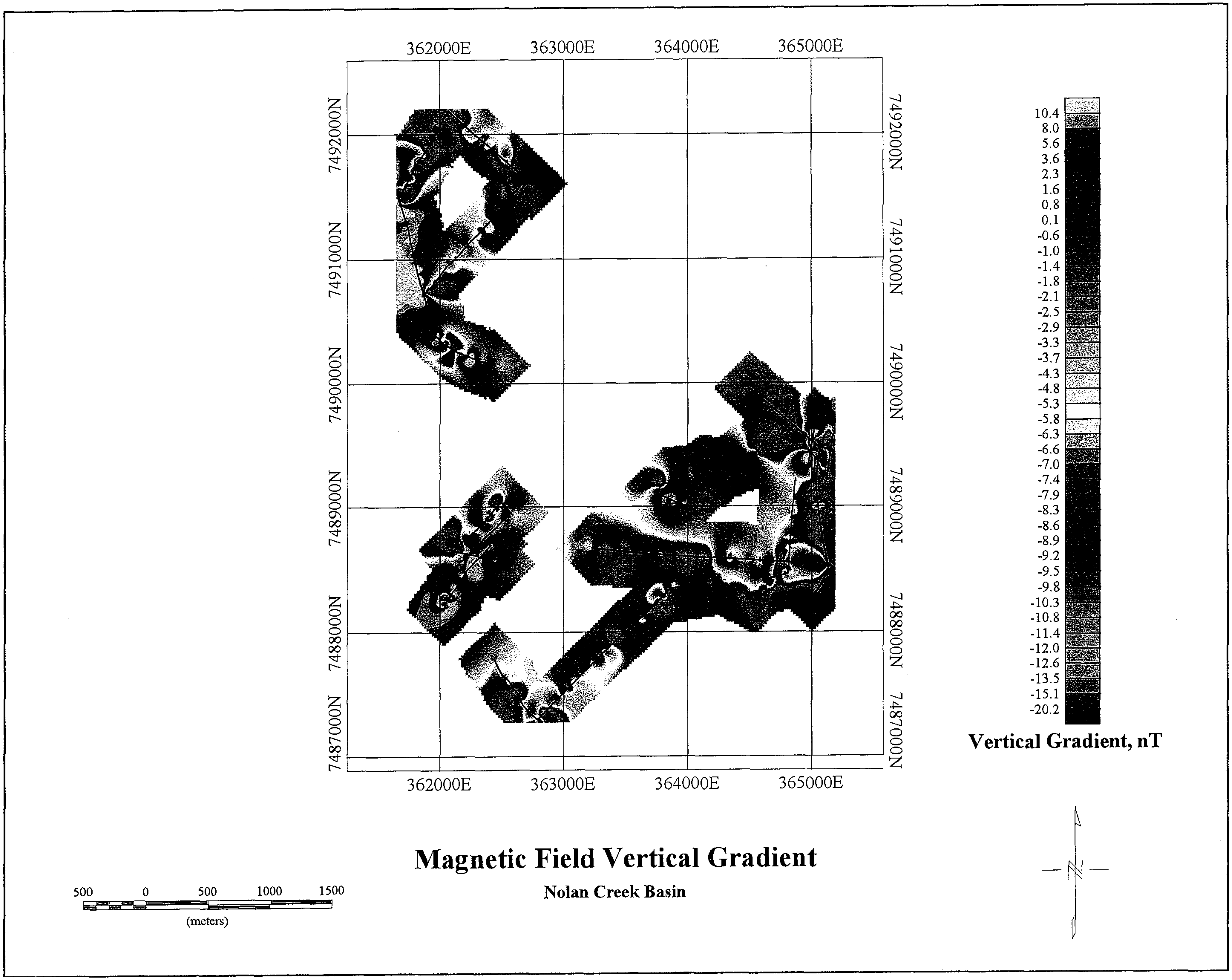


**Figure 25** Nolan Creek Basin vertical magnetic gradient. Coordinates are in UTM zone 5.

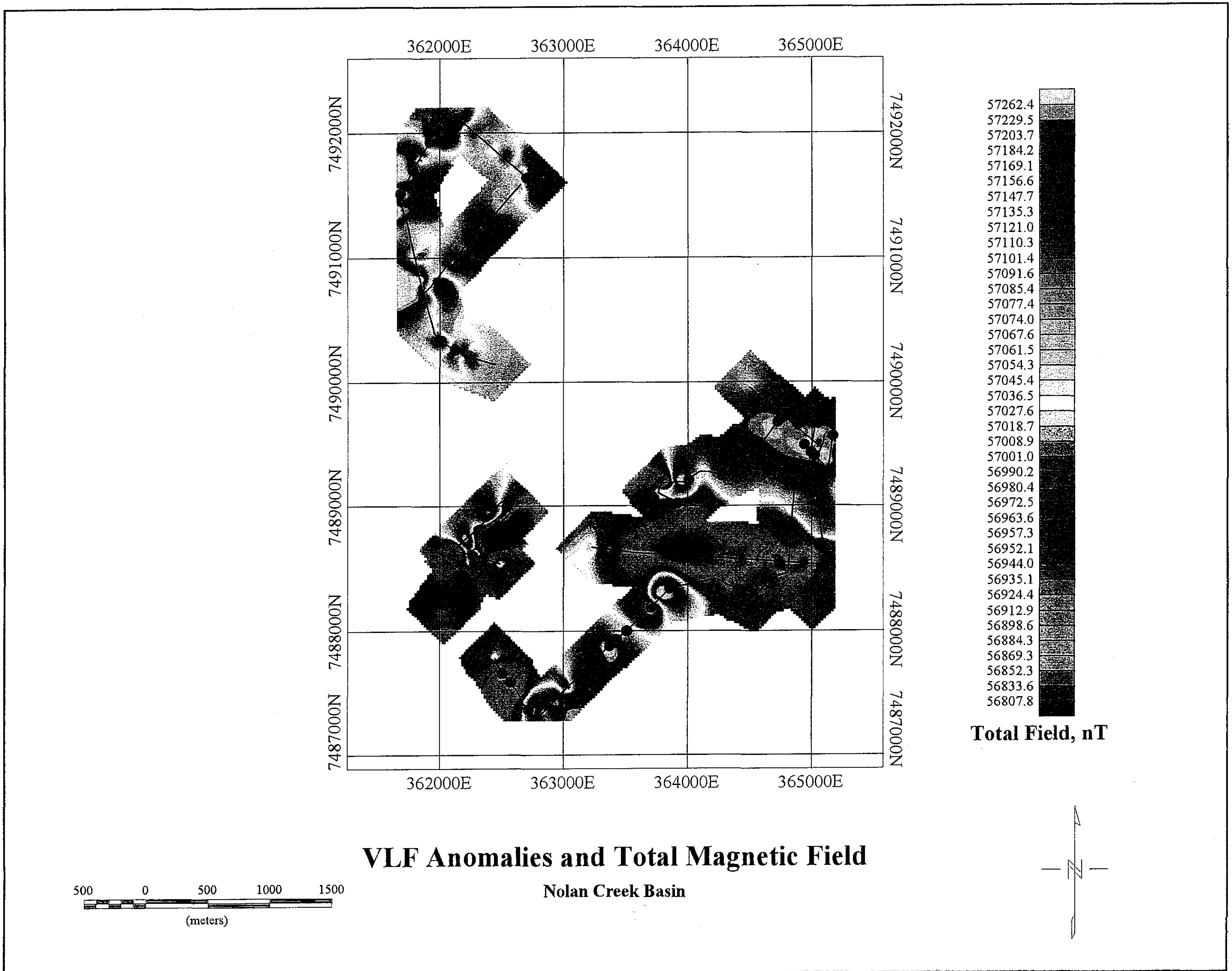


**Figure 26** Nolan Creek Basin interpreted VLF anomalies. Coordinates are in UTM zone 5.

CONCLUSIONS

Ground based magnetic surveys identified and delineated magnetic anomalies at two locations: Linda Creek Pass and Venus Prospect. Coupled with additional information such as geologic mapping and geochemical sampling, the delineation of possible mineralized zones can narrow the focus of further exploration efforts. The possibility of additional skarn deposits at Venus Prospect could be estimated by conducting additional magnetic measurements with a denser line spacing, or through drilling. The Linda Pass anomaly could be better defined through soil sampling or additional geophysical methods such as induced polarization (IP) or controlled source audio-magneto telluric (CSAMT) to detect sulfides. Ground-based measurements have correlated with airborne data. In larger areas such as the Nolan Creek basin there is simply too much land to cover, making it difficult to provide detailed geophysical maps. The further complication of rugged topography practically rules out ground-based geophysics for geologic mapping. When a suspected target is identified, a detailed grid can be performed in a short amount of time.

Ground penetrating radar can successfully identify depth to bedrock in placer gravels under ideal conditions. The practical depth of investigation in gravels seen along the Middle Fork is approximately 20 meters (66 feet), although bedrock was only identified down to a depth of 5 meters (16 feet). The radar signal cannot penetrate any deeper. One factor limiting penetration is surface conductivity due to surface water. Further investigation in winter when the ground is frozen may yield greater depths of penetration.