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Mineral Investigations in the Aniak Mining District, Southwestern Alaska, 2003 Field Season

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Cover Photograph

BLM geologist John Hoppe and BLM volunteer Nick Enos examining mineralized rock at the Tin Creek South occurrence, northwestern Alaska Range. Photo by John J. Wandke.

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MINERAL INVESTIGATIONS
IN THE
ANIAK MINING DISTRICT,
SOUTHWESTERN ALASKA,
2003 FIELD SEASON

By

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ABBREVIATIONS USED IN THIS REPORT

@	at
cm	centimeter
cu m	cubic meter
cy	cubic yard
in	inch
ft	foot
g	gram
g/t	grams per metric ton
lb	pound
kg	kilogram
m	meter
mi	mile
mm	millimeter
oz	troy ounce
ppb	parts per billion
ppm	parts per million
%	percent
t	metric ton

MINERAL INVESTIGATIONS IN THE ANIAK MINING DISTRICT, SOUTHWESTERN ALASKA - 2003 FIELD SEASON

ABSTRACT

The Aniak Mining District study area encompasses approximately 27 million acres (11 million hectares) in southwestern Alaska and includes part of the adjacent Anvik, Iditarod, Innoko, Marshall, and McGrath mining districts. The district contains over 400 mineral deposits and prospects, including those located in the historic mining areas of Iditarod-Flat, Nyac, Crooked Creek-Donlin Creek, Candle Creek, Ganes Creek, Nixon Fork, Illinois Creek, and Red Devil. Due to the size of the study area, the district was divided into three parts: the northeastern, central, and southwestern.

In 2003, the Bureau of Land Management (BLM) began a multi-year mineral resource assessment of the Aniak Mining District by examining the northeastern part of the district. BLM geologists located, mapped, and/or sampled 100 of the 208 documented sites in this part of the study area. During the field season 351 rock, pan concentrate, stream sediment, soil, and placer samples were collected and analyzed.

Sites containing elevated metal values include: gold, silver, copper, and zinc at Badnews; silver, copper, and zinc at Bowser; nickel and copper at Chip Loy; gold, silver, and zinc at Crash North; gold, silver, copper, and zinc at Dall; placer gold at Fourth of July Creek; gold at Independence Mine area; gold and lead at Kaatz Prospect; gold at Little Creek; placer gold at Mackie Creek; placer gold at Moore Creek; gold and copper at Nixon Fork (Mespelt Mill) tailings; platinum and palladium at Roberts PGM; gold at Telephone Hill (Tele) Prospect; gold and silver at Terra/Fish Creek area; and gold, silver, copper, and tin at Win.

INTRODUCTION

In 2003, the Bureau of Land Management (BLM) Division of Energy and Solid Minerals started a 4-year mineral resource assessment of the Aniak Mining District. Mineral assessment objectives are to identify the nature, extent, and development potential of mineral resources; perform mining feasibility studies through hypothetical mine models on mineral deposits that have economic potential; and fund geophysical investigations of areas having the potential to contain concealed mineral deposits. BLM work includes locating, sampling, mapping geology and mine workings, and evaluating historic mines, prospects, and mineral occurrences. The BLM also investigates, in more detail, newly discovered prospects and deposits. The Aniak Mining District is part of BLM's mining district evaluation program authorized under Section 1010 of the Alaska National Interest Lands Conservation Act (ANILCA), which has been continued since the early 1980's.

The Aniak Mining District study area encompasses approximately 27 million acres (42,000 square miles (11 million hectares)) in southwestern Alaska and includes parts of the adjacent Anvik, Iditarod, Innoko, Marshall, and McGrath mining districts (fig. 1). The area contains over 400 mineral sites, including those located in the historic mining areas of Iditarod-Flat, Nyac, Crooked Creek-Donlin Creek, Candle Creek, Ganes Creek, Nixon Fork, Illinois Creek, and Red Devil. Due to the size of the Aniak Mining District study area, the district was divided into three parts: the northeastern, central, and southwestern.

Placer gold has been the main commodity produced from the area since the late 1800's. Placer platinum and mercury as well as lode gold and mercury, with byproduct silver and antimony, have also been mined. Other commodities prospected for in the region include barite, copper, lead, molybdenum, tin, tungsten, uranium, and zinc.¹

This report contains analytical data of samples collected during the 2003 field season. Similar reports will be published after the 2004 and 2005 field seasons. A more detailed final report with the BLM's mineral assessment of the district, all analytical data, and property summaries will be published in 2006. An economic analysis report and an industrial minerals report will also be published in 2006.

ACKNOWLEDGMENTS

The authors would like to thank the input afforded by the Aniak Mining District Working Group and both Jeff Foley and Nick Enos, geologists with Calista Corporation, for the assistance prior to and during the field program. Special gratitude is extended to Sharin Griffith, owner of the Takusko House in McGrath, and Cathy Frost, owner of the Farewell Lake Lodge, for their gracious hospitality. Maritime Helicopters, Inc., with pilot Joe Trudo and mechanic Charles Sims, provided excellent support in getting us into and out of the sites we needed to investigate.

¹ Cobb, E.H., 1973, Placer deposits of Alaska: U.S. Geological Survey Bulletin 1374, p.41-43, 51-53.

2003 FIELD SEASON REVIEW

Fieldwork during 2003 consisted of a 46 day field season during June and July, focusing on property examinations and sample collection in the northeastern part of the district (figure 1). A literature search identified 208 properties in this part of the district. Figure 2 shows the locations and densities of the mineral properties in the northeastern part of the district and identifies the properties discussed in this report. Sites for which we had more geochemical and geological data, and more precise locations, were given priority because of the volume of sites and time constraints. During the field season BLM geologists were able to look for 115 sites, locate 100 of those sites, and collect 351 rock, pan concentrate, stream sediment, soil, and placer samples in the process (Plate 1).

McGrath was used as the base for the first half of the field season and Farewell Lake was used for the second half. Areas investigated from McGrath included the Ganes Creek and Moore Creek areas to the west, Cloudy Mountain to the north, Nixon Fork to the east, and Vinasale Mountain to the south. From Farewell Lake, the Post, Windy Fork, and Middle Fork rivers draining the Alaska Range and the areas including the Lone and White mountains were investigated.

Sites containing elevated metal values include the Badnews, Bowser, Chip Loy, Crash North, Dall, Fourth of July Creek, Independence Mine area, Kaatz Prospect, Little Creek, Mackie Creek, Moore Creek, Nixon Fork (Mespelt Mill) tailings, Roberts PGM, Telephone Hill (Tele) Prospect, Terra-Fish Creek area, and Win properties. Following are brief discussions on each of these properties:

Badnews - Three distinct skarn zones that replace light gray, fine-grained limestone, trending north-northeast to east-northeast extend for several hundred feet were noted at this site. Zones consist of dark, rusty, pitch limonite weathered surface with local thin crusts of whitish zinc and copper oxides. Samples collected from the three zones contained variable concentrations of pyrrhotite, sphalerite, pyrite, and trace galena. Massive sulfide veins range from 1 to 5 ft wide (0.3 to 1 m). Samples collected from a 5.5 by 10 ft (1.7 by 3 m) exposure included a select sample (13323, map no. 99) that contained 0.584 ppm gold and 10.3 percent zinc and a 5.5 ft (1.7 m) continuous chip sample (13324, map no. 99) that contained 0.333 ppm gold and 7.31 percent zinc. Two representative chip samples collected from a 9.8-ft-wide (3.0 m) zone included sample (13246, map no. 99) which contained 0.86 oz/ton (29 g/t) gold, 0.81 oz/ton (28 g/t) silver, and 6.21 percent zinc and sample (13245, map no. 99) which contained 0.462 ppm gold and 5.3 percent zinc. A select sample from the third zone contained 3.47 oz/ton (119 g/t) silver, 3.79 percent copper, and 19.7 percent zinc (13362, map no. 99).

Bowser - Massive sulfide veins were sampled in the Bowser Creek Main area. Select sample (13267, map no. 126), from a stockpile of ore, contained 36.1 oz/ton (1,240 g/t) silver, 13.95 percent lead, and 16.2 percent zinc. A 2.3 ft (0.70 m) continuous chip sample (13268, map no. 126) of galena and sphalerite from a trench, blasted out of silicified limestone, contained 23.9 oz/ton (819 g/t) silver, 7.41 percent lead, and 11.1 percent zinc. In addition to lead and zinc mineralization in the Bowser Creek Northeast

area, continuous chip sample 13361 (map no. 124) contained 0.0318 oz/ton (1.09 g/t) gold and 1 percent copper. Float sample 13269 (map no. 122), collected from a shallow trench on the northeast edge of the quartz monzonite knob near the headwaters of Bowser Creek, contained 3.06 oz/ton (105 g/t) silver and 21.2 percent zinc.

Chip Loy - Discontinuous pods of massive chalcopyrite, pyrite, and pyrrhotite within a northeast trending shear zone, 40 to 150 ft wide (10 to 46 m), were cutting diabase and hornfels. The north end of the shear zone is cutoff by a cliff face while the south end is buried under tundra. Three of four samples collected along the mineralized zone contained elevated nickel values. At the northern end, representative chip sample 13335 (map no. 92) contained 1.34 percent nickel, 5,700 ppm copper, and 0.021 ppm gold. In the central area, select sample 13337 (map no. 92) contained 1.21 percent nickel, 9,760 ppm copper, and 0.019 ppm gold. At the southern end, sample 13338 (map no. 92) contained 2.26 percent nickel and 7,150 ppm copper.

Crash North - On the southern slope of the east trending ridge immediately north of the Crash property, sulfides contained anomalous amounts of silver, base metals, and gold. The sulfide minerals were found within vuggy quartz veins, thin veins following fractures, and in bedded silty carbonates. A spaced chip sample (13095, map no. 113) of quartz vein within a silty limestone contained 9.5 percent zinc. Near the top of the ridge a north-northeast trending breccia zone, 33 ft wide (10 m) by 164 ft (50.0 m), was truncated by low angle faults on the north side and cut by a sharp, steeply dipping fault on the west side. A 7 in (0.2 m) channel sample (13263, map no. 113) from this breccia ran as high as 0.834 ppm gold. Sulfide mineralization diffuses to the east, where sample 13321 (map no. 113) collected from 3- to 4-in-thick (0.1 m) beds of malachite stained carbonate, contained 235 ppm silver and 6,080 ppm copper.

Dall - A 10-ft-wide (3 m) zone of massive sulfide bodies interbedded with gossanous material and siliceous hornfels, was exposed for nearly 200 ft (60 m) along strike. Two continuous chip samples (13327-28, map no. 101) taken 60 ft (20 m) apart along the zone averaged 7.6 oz/ton (260 g/t) silver, 1.87 percent copper, and 1.89 percent zinc. Two select samples (13329-30, map no. 101) of the massive sulfides averaged 1.1 percent copper and 7.62 percent zinc.

Fourth of July Creek - A three-pan placer sample (13167, map no. 63) of loose gravel from a test pit contained 0.0221 oz/cy (0.899 g/cu m) gold in ragged flakes. In addition, cinnabar and scheelite were observed in the concentrate. About 61,000 cy (47,000 cu m) of gravel were processed by placer miners at this site, but gold production is unknown. There was no indication that bedrock was reached.

Independence Mine area - Rhyolite porphyry dikes exposed in recent bulldozer cuts near the Independence Mine contained 1 to 2 percent fine-grained pyrite and

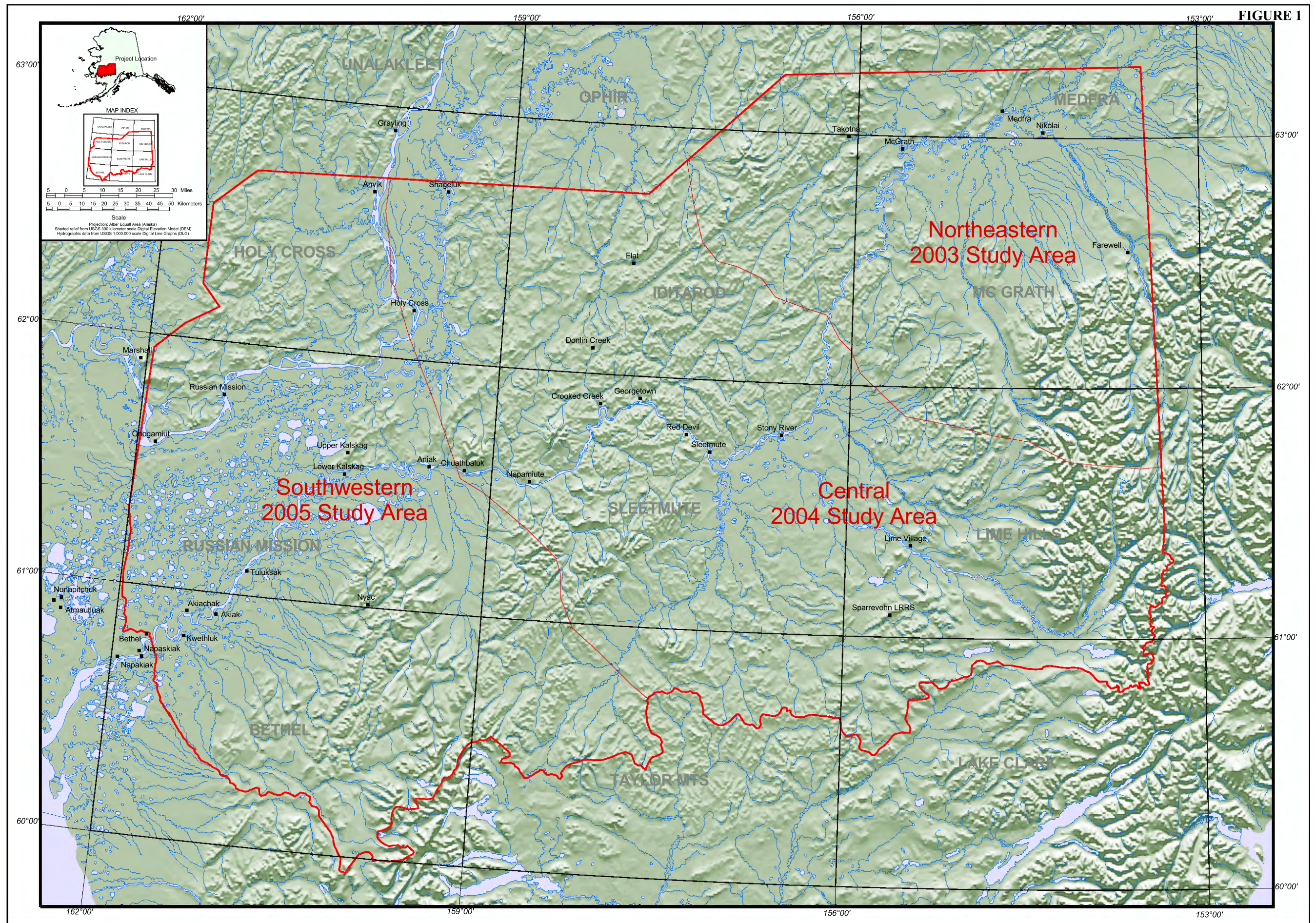


Figure 1. Study area locations of the Aniak Mining District, Alaska.

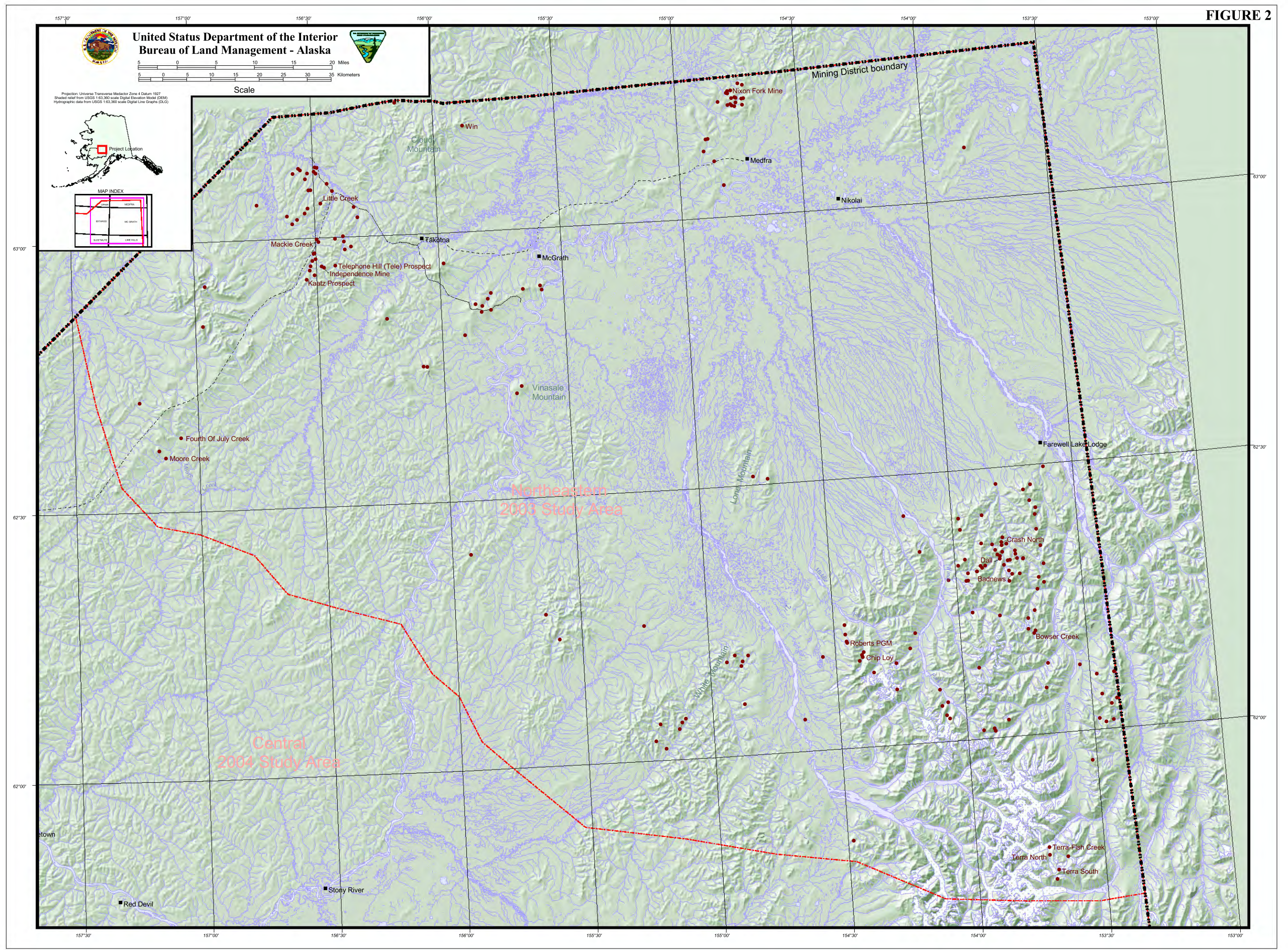


Figure 2. Property location map of the northeastern part, Aniak Mining District study area, Alaska.

arsenopyrite. Scorodite occasionally coats the fracture surfaces. One select sample from the dikes (13052, map no. 35) contained 1 ppm gold and 3,660 ppm arsenic. The dikes are up to 10 ft wide (3 m), but could not be traced for any distance due to extensive tundra cover. A select sample (13051, map no. 35) of quartz-bearing float from the adit dump contained 12.4 ppm gold. A select sample (13114, map no. 35) of quartz from the shaft dump contained 55.5 ppm gold, visible gold was occasionally observed in the quartz.

Kaatz Prospect - This site is located 1 mi (2 km) west of the Independence Mine. A select sample (13120, map no. 38) of vuggy quartz float from a caved adit dump contained 1.6 ppm gold, 1,400 ppm lead, and 1,395 ppm arsenic.

Little Creek - Rhyolitic rubblecrop was recently exposed by the property owner in a 300 by 400 ft (90 by 100 m) placer cut on Six Pup, a northern tributary of Little Creek. The rhyolite contains quartz eyes, is propylitically altered, and occasionally cut by quartz veinlets. The rhyolite contained 1 to 2 percent pyrite and arsenopyrite; scorodite coats some fracture surfaces. Sample 13222 (map no. 18) contained 1.1 ppm gold and 1,800 ppm arsenic. The rubblecrop configuration indicates a dike-like body at least 50 ft wide (15 m).

Mackie Creek - A placer sample (13164, map no. 25) of gravel and underlying shale bedrock contained 0.019 oz/cy (0.77 g/cu m) of flaky, nuggety, and wire gold. The sample was collected near the upper limit of recent placer workings where bedrock is covered by 6 to 8 ft (1.8 to 2.4 m) of overburden.

Moore Creek - Bench gravels having minimum dimensions of 100 by 400 ft (30 by 100 m) on upper Moore Creek contain significant placer gold. Fractured shale bedrock is overlain by 2 to 3 ft (0.6 to 0.9 m) of cobble gravel. Five test pans, collected on bedrock, produced 1 coarse and 4 fine flakes of nuggety gold. A pan concentrate sample (13041, map no. 69) contained 18.8 ppm gold and 1,680 ppm barium.

Nixon Fork (Mespelt Mill) tailings - A representative sample (13220, map no. 2) was collected from the historic Mespelt Mill tailings at the Nixon Fork Mine site. The sample was collected at 10 ft (3 m) intervals up the 50-ft-high (10 m) tailings dump and contained 1.13 oz/ton (38.7 g/t) gold and 2.32 percent copper. The dump dimensions average 25 ft thick (7.6 m), by 100 ft wide (30 m), by 200 ft long (60 m). A second random chip sample (13219, map no. 2) collected from chalcopyrite-rich ore at the portal of the Goldfields decline contained 1.67 oz/ton (57.3 g/t) gold and 4.43 percent copper.

Roberts PGM - A gabbro dike, cutting interbedded limestone and chert, is traceable for 950 ft (290 m) along a N. 40° W. trend near the headwaters of the Middle Fork of the Kuskokwim River. Widths vary from nearly 40 ft (10 m) on the south end to 10 ft (3 m) on the north. Near the south end the gabbro was coarse-grained, containing 10 to 15 percent pyrrhotite and chalcopyrite in disseminations and stringer-like zones with minor serpentinite. To the north the body appears more sill-like, is heavily serpentinized, and nearly barren of sulfides. A series of four continuous chip samples (13277-80, map no.

91) were collected near the south end, across a collective width of 35.5 ft (10.8 m). The samples contained a total weighted average of 0.97 ppm platinum, 1 ppm palladium, and 3,980 ppm nickel. Other rock samples collected from the site (13275-76, 13284-85, map no 91) contained from 0.012 to 0.404 ppm platinum and from 0.009 to 0.547 ppm palladium.

Telephone Hill (Tele) Prospect - Gossanous limonitic vuggy quartz breccia rubblecrop and float is exposed over a 16 by 25 ft (4.9 by 7.6 m) area along a ridge top. A select sample (13159, map no. 34) contained 7.9 ppm gold and 9,320 ppm arsenic.

Terra-Fish Creek area - This area contained three distinct mineralized properties; Terra North, Terra-Fish Creek, and Terra South. A sample (13290, map no. 145) collected of a quartz-carbonate vein 6 to 12 in wide (20 cm to 0.3 m), hosted in shale and silty shale at Terra North, contained 23.57 oz/ton (808.1 g/t) silver, 6.71 oz/ton (230 g/t) gold, and 0.2 percent arsenic. A similar vein, but hosted in monzonite, located at the Terra-Fish Creek site, 1 mi (2 km) north of Terra North, contained 7.64 oz/ton (262 g/t) silver and 6.97 oz/ton (239 g/t) gold (sample 13293, map no. 144). Terra South is a gold in soil anomaly, located 2.3 mi (3.7 km) southeast of Terra North on a narrow ridge dividing the Fish Creek and Hartman River basins. A soil sample (13372, map no. 146) and a sample of fine talus material (13295, map no. 146) contained 0.055 oz/ton (1.9 g/t) and 0.035 oz/ton (1.2 g/t) gold, respectively.

Win - Samples collected from this property contained anomalous levels of silver, tin, arsenic, antimony, copper, and zinc. A select sample (13107, map no. 5) collected from a gossanous outcrop, on the west side near an abandoned drill site, contained up to 47.1 oz/ton (1,610 g/t) silver, over 1 percent arsenic, 0.61 percent copper, 2.2 percent antimony, 3.9 percent tin, and 0.52 percent zinc. A sample (13106, map no. 9) collected of chloritic-altered sandstone rubblecrop with minor veinlets and disseminated grains of arsenopyrite contained 0.029 oz/ton (0.99 g/t) gold. A placer sample (13026, map no. 4), collected from a small north flowing stream draining the property, contained 0.01 oz/ton (0.3 g/t) gold, 0.42 oz/ton (14 g/t) silver, and 177 ppm tin.

SAMPLING AND ANALYTICAL PROCEDURES

SAMPLING METHODS

BLM personnel collected several types of rock samples during the 2003 field season. **Continuous chip** samples were chips of rock taken in a continuous line across an exposure. **Representative chip** samples were discontinuous chips of rock taken across an exposure. **Spaced chip** samples were chips of rock taken at a specified interval across an exposure. **Random chip** samples were chips of rock taken randomly across an exposure. **Grab** samples were rock chips or fragments taken more or less at random from an outcrop, float, or mine dump. **Select** samples were rock chips collected from the highest-grade portion of a mineralized zone.

Stream sediment, soil, and pan concentrate samples were collected in reconnaissance fashion to detect any anomalous metal values that may indicate the presence of mineralized rock in an area. **Stream sediment** samples were collections of silt- and clay-sized particles taken from the active portion of the streambed. For each sample approximately 1 lb (0.5 kg) of material was collected using a 10-mesh sieve. **Pan concentrate** samples were collected in streams where heavy minerals might accumulate, such as stream gradient changes from steep to moderate, the downstream side of boulders, and/or on bedrock. A 14 in (35 cm) gold pan heaped with coarse gravel, sand, and/or fine material was panned down to approximately 0.75 oz (21 g) of concentrate. The presence of heavy minerals was noted in the field and the samples were stored in sealed plastic bags.

Placer samples were collected using a portable 10 by 48 in (20 by 120 cm) sluice box. Samples typically consist of 0.1 cy (0.08 cu m) bank material run through the sluice box and panned down to produce approximately 2.5 oz (71 g) of concentrate. The samples were taken back to the BLM Campbell Tract Facility, Geology Lab where they were processed. All placer samples were air dried and all visible gold was segregated and weighed. The remaining concentrates were examined using a microscope, scintillometer, and ultraviolet light to determine the sample mineralogy. A split of, or the entire concentrate, depending on weight, was submitted and analyzed with the same methods as pan concentrate samples.

Sluice concentrate samples were collected from active placer mine wash plants to identify accessory minerals such as cinnabar, arsenopyrite, cassiterite, and scheelite. These consisted of 1 to 2 lbs (0.5 to 0.9 kg) of black sands and other heavy minerals remaining after miners had removed the majority of the placer gold. The amount of gravel washed to produce the sluice concentrate was unknown. Metal contaminants such as lead battery fragments and shot were removed with a sieve. Then, similar to placer samples, the concentrate was then examined by microscope, ultraviolet lamp, and scintillometer in order to determine mineralogy before being submitted for chemical analysis.

ANALYTICAL METHODS

This study, as with most BLM mining district studies, assesses metallic and non-metallic mineral occurrences. To analyze for elements of economic interest to our study, all geochemical samples were submitted to ALS Chemex Labs² of Vancouver, BC, Canada, via their Fairbanks, Alaska sample preparation facility. Samples were analyzed to anticipate a variety of needs when assessing the study area. Typical analysis for rocks and sediments was a 1.1 oz (31 g) Gold-Platinum-Palladium Fire Assay, then a 50 element aqua-regia digestion with a combination of Induced Coupled Plasma-Mass Spectroscopy (ICP-MS) and ultra trace Induced Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) analysis. These analyses were followed by pressed pellet X-Ray Fluorescence Spectroscopy (XRF) analysis for barite, tin, and tungsten. Samples with assay results exceeding the detection limits of the typical analysis were reanalyzed by a variety of procedures dependent on which element exceeded the detection limits.

More information about the details of the geochemical analyses of the project and ALS Chemex Labs analytical techniques can be found on the ALS Chemex Labs website: <http://www.alschemex.com>

Sample Preparation

At the ALS Chemex Labs Fairbanks sample preparation facility the soil and stream sediment samples were kiln dried, dry sieved to less than 180 microns and split down to an 8.8 oz (273 g) sample. Rock samples were crushed so more than 70 percent of the material passed through a screen with 0.08 in (2 mm) openings, then split down to an 8.8 oz (250 g) sample that was pulverized in a ring crusher until 85 percent passed through a 75-micron screen. Pan concentrate, placer, and sluice concentrate samples were dried and pulverized without screening, then split down to meet the analytical tests needs. The placer and sluice concentrate samples were then prepared for analysis in the BLM Campbell Tract Facility, Geology Lab.

² Mention of ALS Chemex Labs does not signify BLM endorsement.

DETECTION LIMITS BY ANALYTICAL TECHNIQUE

FIRE ASSAY METHODS

All samples were fire assayed with either an ICP-MS finish (ALS Chemex Labs method code: PGM-MS23) if it was a soil or sediment sample or an ICP-AES finish (ALS Chemex Labs method code: PGM-ICP23) if it was a rock sample; to detect gold, palladium, and platinum. Suspected high-grade samples were noted on the sample submittal form and were analyzed using the same ICP-MS or ICP-AES methods but the instruments were calibrated to higher detection limits (ALS Chemex Labs method code: PGM-MS27 and PGM-ICP27). Samples with gold and silver assay results that exceed their respective ICP analysis detection limits, at the discretion of the lab, were reanalyzed by fire assay with either a gravimetric finish (ALS Chemex Labs method code: Ag-GRA21 and Au-GRA21), or by Atomic Absorption Spectroscopy (AAS) (ALS Chemex Labs method code: Ag-AA46 and Au-AA25).

Element	Method code	Range (ppm)	Sample type
Ag	Ag-GRA21 ore grade	5 - 3,500	Rock
Ag	Ag-AA46 ore grade	1 - 1,500	Rock
Au	Au-CON01	0.07-900,000	Sediment
Au	Au-AA25 ore grade	0.01 - 100	Rock, Sediment
Au	Au-GRA21 ore grade	0.05 - 1,000	Rock, Sediment
Au	PGM-ICP23	0.001-10	Rock
Au	PGM-ICP27 ore grade	0.03 - 100	Rock
Au	PGM-MS23	0.001 - 1	Sediment, Soil
Pd	PGM-ICP23	0.001 - 10	Rock
Pd	PGM-ICP27 ore grade	0.03 - 100	Rock
Pd	PGM-MS23	0.001 - 1	Sediment, Soil
Pt	PGM-ICP23	0.005 - 10	Rock
Pt	PGM-ICP27 ore grade	0.03 - 100	Rock
Pt	PGM-MS23	0.0005 - 1	Sediment, Soil

INDUCTIVELY COUPLED ARGON PLASMA (ICP) SPECTROSCOPY

After the fire assay, a split of the sample pulp was partially dissolved in aqua-regia. The resulting solution was analyzed using a combination of ICP-MS and ICP-AES (ALS Chemex Labs method code: ME-MS41).

Element	Limits (ppm)	Element	Limits (ppm)	Element	Limits (ppm)
Ag	0.01 - 100	Hg	0.01 - 10,000	Sb*	0.05 - 10,000
Al*	0.01% - 15%	In*	0.005 - 500	Sc*	0.1 - 10,000
As	0.1 - 10,000	K*	0.01% - 10%	Se	0.2 - 1,000
B*	10 - 10,000	La*	0.2 - 10,000	Sr*	0.2 - 10,000
Be*	0.05 - 100	Li*	0.1 - 500	Ta*	0.01 - 500
Bi	0.01 - 10,000	Mg*	0.01% - 15%	Te*	0.01 - 500
Ca*	0.01% - 15%	Mn	5 - 10,000	Th*	0.2 - 500
Cd	0.01 - 500	Mo	0.05 - 10,000	Ti*	0.01% - 10%
Ce*	0.02 - 500	Na*	0.01% - 10%	Tl*	0.02 - 10,000
Co	0.1 - 10,000	Nb*	0.05 - 500	U	0.05 - 10,000
Cr*	1 - 10,000	Ni	0.2 - 10,000	V	1 - 10,000
Cs*	0.05 - 500	P	10 - 10,000	Y*	0.05 - 500
Cu	0.2 - 10,000	Pb	0.2 - 10,000	Zn	2 - 10,000
Fe	0.01% - 15%	Rb*	0.1 - 500	Zr*	0.5 - 500
Ga*	0.05 - 10,000	Re*	0.001 - 50		
Ge*	0.05 - 500	S*	0.01% - 10%		

* Digestion was incomplete for most sample matrices.

ATOMIC ABSORPTION SPECTROSCOPY (AAS)

AAS analysis, an analytical technique where elements, dissolved in solution and excited by intense heat were detected by the amount and selectivity of the light absorbed from a constant beam shining through the hot vapor. AAS was used for samples when non-precious metals of economic interest were over the ICP analysis detection limits. Elements of interest were antimony, arsenic, cadmium, copper, lead, mercury (cold vapor atomic absorption), nickel, and zinc.

Element	Method code	Detection limits
As	As-AA46	0.01 ppm - 30%
Cd	Cd-AA46	1 ppm - 10%
Cu	Cu-AA46	100 ppm - 30%
Hg	Hg-CV42	0.1 ppm - 10%
Pb	Pb-AA46	100 ppm - 30%
Sb	Sb-AA46	0.01 ppm - 20%
Zn	Zn-AA46	100 ppm - 30%
Zn	Zn-VOL50*	Up to 100%

* One sample (13185) that had more than 30% zinc, was reanalyzed by a volumetric titration method.

X-RAY FLUORESCENCE SPECTROSCOPY (XRF)

Because barium, tin, and tungsten were resistant to the aqua-regia used in the ICP process, all samples, except pan concentrate and placer samples, were analyzed by XRF for those elements (ALS Chemex Labs method code: ME-XRF05).

Element	Detection limits
Ba	10 ppm - 10,000 ppm
Sn	4 ppm - 10,000 ppm
W	10 ppm - 10,000 ppm

RESULTS OF PLACER AND SLUICE CONCENTRATE SAMPLE EVALUATION FOR THE 2003 FIELD SEASON

Table 1 presents the results of placer and sluice concentrate sample processing at the BLM Campbell Tract Facility, Geology Lab. Samples were dried and sieved and the coarse gold removed. Recoverable gold was weighed, measured, and described and an accurate count of the number and size of the gold particles was recorded. Remaining sample material was then examined with a microscope, noting any other conspicuous metals and minerals. Samples were also tested with a shortwave ultraviolet lamp to identify any scheelite, zircon, or other fluorescent minerals and then tested for radioactivity with a scintillometer. A split of the sample was sent in for chemical analyses and the remainder of the sample was archived. The results of the geochemical analysis are presented in Table 2.

The “Au weight (g)” column presents the weight, in grams, of gold after the separation from each placer concentrate. As much gold as possible was removed from the samples using tweezers. Any gold that was too fine to be removed manually was included in the analytical results from the geochemical analysis of material sent to the commercial laboratory. No attempt was made to determine the gold fineness values from the samples collected.

Map numbers correspond to the numbered locations shown on plate 1.

ABBREVIATIONS

Sample type:

PL	Placer sample
SC	Sluice concentrate

Miscellaneous:

NA	Not applicable
NC	Not calculated
NR	No recoverable Au

Table 1. Results of placer and sluice concentrate samples, collected in the northeastern area of the Aniak Mining District, Alaska

Map no.	Sample no.	Sample type	Location	Volume (cy)	Au weight (g)	Oz/cy	\$/cy@ \$370/oz
6	13026	PL	Win prospect	0.1	NR	NC	NC
57	13044	PL	Maybe Creek	0.1	0.0018	0.0006	0.22
20	13057	SC	Ten Pup-Little Creek	NA	NR	NC	NC
30	13131	PL	Potosie Creek	0.1	0.0008	0.0003	0.11
30	13134	PL	Potosie Creek	0.1	0.0351	0.011	4.07
25	13162	PL	Mackie Creek	0.1	0.0217	0.007	2.59
25	13164	PL	Mackie Creek	0.1	0.0589	0.019	7.03
63	13167	PL	Fourth of July Creek	0.021	0.0221	0.034	12.58
72	13207	PL	Candle Creek	0.1	0.0171	0.005	1.85
55	13304	PL	Deadwood Creek	0.1	0.0264	0.008	3.14
130	13378	PL	Windy Fork	0.1	NR	NC	NC
128	13380	PL	Windy Fork	0.1	NR	NC	NC

ANALYTICAL RESULTS FOR SAMPLES COLLECTED DURING THE 2003 FIELD SEASON

Analytical and sample data collected during the 2003 Aniak Mining District field season are presented in Table 2. In addition to the analytical results, the following information is listed in the table; map number, sample number, location name, sample type, sample method, sample site, quadrangle, township/range/section, latitude, and longitude. Results are listed by map number and shown on plate 1.

ABBREVIATIONS

Sample type:

R	rock	S	sediment
SL	soil		

Sampling method (Rock chip):

C	continuous chip	Rep	representative chip
G	grab	S	select
PC	pan concentrate	SC	spaced chip
PL	placer	SS	stream sediment
RC	random chip	Slu	sluice concentrate

Sample site:

DC	drill cuttings	OC	outcrop
FL	float	RC	rubblecrop
MD	mine dump	TP	trench, pit, or cut
MT	mine tailings	UG	underground workings

OTHER INFORMATION

Quadrangle:

Represents the 1:63,360 scale U.S. Geological Survey topographic map.

Township/Range/Section:

All northern townships are within the Seward Meridian.

All southern townships are within the Kateel River Meridian.

Latitude and Longitude:

Collected and reported in NAD 83.

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
1	13219	Nixon Fork	R	RC	MD	Medfra A4	T26S R21E Sec 13	63.23822	-154.76589	47.4	0.21	541	57.3	<10	50	0.26
2	13220	Nixon Fork	R	Rep	MT	Medfra A4	T26S R21E Sec 13	63.23031	-154.76597	32.4	0.73	821	38.7	<10	240	1.37
3	13311	Hidden Creek	S	PC		Medfra A4	T26S R22E Sec 19	63.21875	-154.74449	29.1	1.57	23.9	>1	10	870	0.53
4	13027	Win	R	RC	RC	Medfra A6	T26S R16E Sec 30	63.21405	-155.87604	196	0.08	701	0.031	60	50	0.11
5	13107	Win	R	S	OC	Medfra A6	T26S R16E Sec 30	63.21043	-155.89861	1615	0.38	>10000	0.128	<10	110	0.56
5	13108	Win	R	Rep	OC	Medfra A6	T26S R16E Sec 30	63.21038	-155.89874	476	0.17	6170	0.049	50	80	0.13
6	13026	Win	S	PL		Medfra A6	T26S R16E Sec 30	63.21008	-155.88808	14.25	1.08	1590	0.343	200	1150	1.44
7	13102	Win	R	S	RC	Medfra A6	T26S R16E Sec 30	63.20744	-155.87964	249	0.09	2300	0.05	110	40	0.29
7	13103	Win	R	Rep	RC	Medfra A6	T26S R16E Sec 30	63.20744	-155.87961	196	0.12	1170	0.104	150	50	0.34
7	13104	Win	R	CH	FL	Medfra A6	T26S R16E Sec 30	63.20738	-155.87853	82.7	0.54	382	0.017	80	300	0.22
8	13105	Win	R	RC	OC	Medfra A6	T26S R16E Sec 30	63.20398	-155.89398	0.38	0.66	124.5	0.422	30	2030	0.39
9	13106	Win	R	G	RC	Medfra A6	T26S R16E Sec 30	63.20596	-155.89937	0.41	0.32	1740	1.005	70	270	0.25
10	13109	Cloud	R	G	FL	Medfra A6	T26S R15E Sec 27	63.20338	-155.99068	0.67	2.38	17.4	0.004	10	1570	0.73
10	13110	Cloud	R	G	FL	Medfra A6	T26S R15E Sec 27	63.20454	-155.99049	1.1	0.9	2600	1.255	20	1120	0.41
11	13092	Cloud	R	S	RC	Ophir A1	T26S R14E Sec 10	63.24878	-156.15869	6.85	0.48	3400	0.062	60	130	0.75
11	13093	Cloud	R	S	RC	Ophir A1	T26S R14E Sec 10	63.24914	-156.15907	65.9	0.15	7810	0.227	170	210	0.26
11	13094	Cloud	R	S	RC	Ophir A1	T26S R14E Sec 10	63.24930	-156.15936	3.03	0.13	6650	0.163	150	210	0.22
11	13176	Cloud	R	S	RC	Ophir A1	T26S R14E Sec 10	63.24858	-156.15668	0.77	0.8	1145	0.061	60	280	0.24
12	13072	Innoko River	S	PC		Ophir A1	T27S R12E Sec 24	63.13359	-156.49107	0.26	2.01	32.5	1.57	30	900	0.88
13	13074	Victor Creek	S	PC		Ophir A1	T27S R12E Sec 25	63.12297	-156.49599	0.07	2.4	22.6	0.017	20	1160	1.2
13	13075	Victor Creek	R	RC	RC	Ophir A1	T27S R12E Sec 25	63.12302	-156.49588	0.12	1.2	22.5	0.003	<10	310	0.31
14	13223	Lower Ganes Cabin	S	PC		Ophir A1	T28S R13E Sec 17	63.06966	-156.42186	0.21	3.83	8.6	0.027	<10	1000	0.41
15	13063	Ophir and Little Creeks Divide	R	S	RC	Ophir A2	T28S R12E Sec 14	63.06551	-156.51726	0.07	1.11	35.9	0.002	<10	260	0.21
16	13040	Ophir and Little Creeks Divide	R	RC	RC	Ophir A2	T28S R12E Sec 15	63.05979	-156.53876	2.54	0.34	2320	0.424	<10	480	0.65
16	13062	Ten Pup	R	S	RC	Ophir A2	T28S R12E Sec 15	63.06060	-156.53973	0.02	0.13	10.4	0.003	<10	160	0.09
17	13061	Little/Spruce Divide at 10 Pup	R	RC	RC	Ophir C2	T28S R12E Sec 15	63.05796	-156.54558	0.13	3.69	9.9	0.007	<10	850	0.81
18	13073	Six Pup Little Creek	R	S	TP	Ophir A2	T28S R12E Sec 23	63.05450	-156.50995	2.01	0.48	1950	0.234	10	300	0.82
18	13076	Six Pup	R	S	TP	Ophir A2	T28S R12E Sec 23	63.05399	-156.51016	0.87	0.46	331	0.239	10	330	0.66
18	13221	Six Pup	R	S	FL	Ophir A2	T28S R12E Sec 23	63.05478	-156.51035	0.94	0.4	388	0.246	10	240	0.67
18	13222	Six Pup - Little Creek	R	S	TP	Ophir A2	T28S R12E Sec 23	63.05402	-156.51011	4.1	0.45	1800	1.125	10	250	1.06
19	13060	Ten Pup	R	G	RC	Ophir A2	T28S R12E Sec 23	63.05104	-156.52720	1.14	0.57	461	0.474	10	710	0.86
20	13056	Ester Creek lode	S	SC		Ophir A2	T28S R12E Sec 22	63.05322	-156.53688	7.7	0.03	42.6	488	<10	50	0.07
20	13057	Ten Pup-Little Creek	S	Slu		Ophir A2	T28S R12E Sec 23	63.05322	-156.53691	276	1.08	932	2494.95	<10	2530	0.55
20	13058	Little Creek	R	S	MT	Ophir A2	T28S R12E Sec 22	63.05251	-156.53833	2.4	0.1	24.9	0.519	<10	80	0.11
21	13053	Ester Creek lode	R	S	RC, TP	Ophir A2	T28S R12E Sec 22	63.04991	-156.54551	53.8	0.32	3210	0.767	<10	400	0.7
21	13054	Ester Creek lode	R	S	TP	Ophir A2	T28S R12E Sec 23	63.04993	-156.54544	0.38	0.33	2600	0.54	<10	330	0.62
21	13055	Ester Creek lode	R	S	TP	Ophir A2	T28S R12E Sec 22	63.04993	-156.55092	0.53	0.42	2710	0.251	10	390	0.94
23	13141	Vita	SL			Ophir A1	T34N R38W Sec 5	63.00022	-156.42720	0.06	2.77	16.1	0.002	<10	770	0.59
23	13142	Vita	SL			Iditarod D1	T34N R38W Sec 35	62.99963	-156.42687	0.05	1.42	10.2	0.002	<10	740	0.22
23	13143	Vita	SL			Iditarod D1	T34N R38W Sec 35	62.99925	-156.42696	0.05	3.26	17.2	0.005	<10	690	0.56
24	13165	Mackie Creek	R	Rep	OC	Iditarod D1	T34N R38W Sec 33	62.98876	-156.48628	0.06	2.91	16.2	0.015	<10	890	0.65
24	13166	Mackie Creek	R	C	OC	Iditarod D1	T34N R38W Sec 33	62.98896	-156.48668	0.08	2.7	50	0.002	<10	890	0.65
25	13161	Mackie Creek	S	PC		Iditarod D1	T34N R38W Sec 34	62.98786	-156.47958	0.09	3.82	26.9	0.012	30	960	1.32
25	13162	Mackie Creek	S	PL		Iditarod D1	T34N R38W Sec 33	62.98856	-156.48198	0.6	2.36	49.4	3.03	10	960	1.32
25	13163	Mackie Creek	R	S	OC	Iditarod D1	T34N R38W Sec 33	62.98826	-156.48318	0.05	0.09	44.3	0.024	<10	160	0.06
25	13164	Mackie Creek	S	PL		Iditarod D1	T34N R38W Sec 33	62.98826	-156.48198	0.9	2.07	198	9.98	<10	830	1.04

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Pb ppm	Pd ppm	Pt ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
1	13219	7.7	<0.001	<0.005	5.1	0.005	7.17	27.6	0.9	15	42	18.2	<0.01	33.4	1.3	0.01	0.2	2.16	4	<10	1.23	562	3.2
2	13220	121.5	0.001	0.006	8.2	<0.001	0.02	148	4.1	4.8	62	18.9	<0.01	29.3	8.6	0.01	1.26	16.9	60	20	16.4	648	8.6
3	13311	7.6	0.001	0.0005	13.6	<0.001	0.02	1.87	4.3	0.6	<5	25	0.01	0.03	3	0.09	0.08	0.55	51	10	11.4	61	5.4
4	13027	400	0.002	<0.005	0.6	<0.001	0.02	518	0.7	23.6	75	3.4	<0.01	23.3	4.3	<0.01	0.05	0.65	4	<10	1.96	201	7.1
5	13107	1795	0.012	<0.005	0.7	<0.001	0.19	22100	1.3	860	39200	50.2	<0.01	2.81	1.2	<0.01	0.12	0.64	10	20	8.51	5270	1
5	13108	1355	0.004	<0.005	1.4	0.001	0.09	5920	0.7	230	21800	49.2	<0.01	13.4	4.9	<0.01	0.13	0.78	6	<10	2.98	1630	5.6
6	13026	308	0.001	0.005	12.4	0.001	0.02	457	4.1	17.7	177	27.7	<0.01	34.1	5.6	0.06	0.42	2.5	53	10	14.6	700	3.3
7	13102	60.6	0.004	<0.005	1.2	0.001	0.12	225	0.5	290	3340	26.6	<0.01	13	6.5	0.01	0.2	0.82	5	30	2.18	373	4.7
7	13103	1270	0.001	<0.005	0.5	<0.001	0.05	811	0.7	56.8	1560	13.3	<0.01	58.8	3.9	<0.01	0.12	0.88	5	10	3.69	285	2.8
7	13104	369	0.002	<0.005	14.9	<0.001	0.03	310	3.3	21.6	300	10	<0.01	6.21	7.3	0.06	0.28	1.12	48	20	6.66	232	4.2
8	13105	7.4	<0.001	<0.005	11	0.002	0.07	4.57	3.2	5.8	<5	17	0.01	0.91	8.1	0.16	0.09	2.46	28	<10	10.9	46	6.7
9	13106	8.3	0.001	<0.005	0.8	0.002	0.52	5.64	2.1	19.7	<5	7.6	0.01	5.82	4.5	0.16	0.02	0.94	31	<10	9.78	23	11.7
10	13109	16.2	<0.001	<0.005	53.2	0.011	0.8	9.07	8.3	5.6	9	72.6	<0.01	0.14	7.4	0.22	0.23	1.96	69	<10	10	76	7.9
10	13110	4.9	<0.001	<0.005	12.2	0.001	0.12	719	3.8	1	10	34.6	<0.01	0.53	1.7	0.01	0.24	0.49	23	<10	3.32	28	3.7
11	13092	13.1	0.002	0.009	2.5	0.003	0.03	434	6	12	180	6.6	<0.01	0.74	2.7	0.01	0.38	1.08	37	10	10.8	732	2.3
11	13093	4010	0.003	0.013	2.5	0.001	0.22	529	1.5	7.6	52	33	<0.01	2.52	2.2	<0.01	0.06	0.94	5	50	2.39	81	2.5
11	13094	107.5	0.002	0.011	1.3	0.001	0.25	278	1.4	7.3	36	19.6	<0.01	5.59	3.1	<0.01	0.07	0.74	4	30	3.13	63	8.2
11	13176	30.3	<0.001	<0.005	3.8	0.001	0.54	308	4.6	3.4	53	22.3	<0.01	0.48	4.4	0.02	0.17	1.25	23	10	6.87	1705	13.8
12	13072	9	0.001	0.0006	22.9	0.001	0.02	1.86	7.2	0.8	<5	50.5	0.01	0.02	3.8	0.35	0.13	0.96	82	<10	16.1	91	7.1
13	13074	11.4	0.001	0.0006	31.1	0.001	<0.01	0.72	10	0.6	<5	36.8	0.01	0.07	3.3	<0.01	0.13	0.6	81	<10	9.29	126	2.8
13	13075	12.3	0.001	<0.005	5.8	0.001	0.06	0.65	5.3	0.7	<5	93.5	<0.01	0.03	1.3	<0.01	0.04	0.25	35	10	6.23	77	1.7
14	13223	6.4	0.001	0.0005	99.8	<0.001	0.02	0.96	3.5	0.7	<5	211	<0.01	0.03	13.2	0.4	0.06	2.43	78	10	13	68	12.9
15	13063	9.6	<0.001	<0.005	6.2	0.001	0.01	0.48	3.8	0.8	<5	14.4	<0.01	0.02	1.5	<0.01	0.04	0.22	37	<10	5.36	77	2.1
16	13040	22.3	<0.001	<0.005	11.6	<0.001	0.2	6.54	2	0.7	<5	17.6	<0.01	0.02	7.3	<0.01	0.07	0.36	1	10	3.75	50	5.4
16	13062	4.9	<0.001	<0.005	2.6	<0.001	<0.01	0.28	1.4	0.2	<5	7.1	<0.01	0.02	0.4	<0.01	<0.02	0.07	6	<10	1.24	21	0.8
17	13061	7.6	<0.001	<0.005	14.5	0.001	0.11	0.16	21.1	0.9	<5	313	<0.01	0.04	1.2	0.04	0.15	0.32	141	<10	9.13	85	4.8
18	13073	39.8	<0.001	0.005	23.2	<0.001	0.64	4.33	0.7	0.2	<5	10.2	<0.01	0.02	10	<0.01	0.13	2.16	2	<10	0.89	18	18.9
18	13076	25.8	<0.001	0.005	22	<0.001	0.1	0.67	0.6	0.3	<5	8.4	<0.01	0.01	10.9	<0.01	0.11	0.71	3	<10	0.65	7	14.5
18	13221	22	<0.001	<0.005	21.1	<0.001	0.06	1.41	0.5	0.5	<5	9	<0.01	0.1	7	<0.01	0.1	1.32	1	10	0.3	8	16.6
18	13222	24.9	<0.001	<0.005	20.9	<0.001	0.81	3.96	0.6	0.3	<5	7.2	<0.01	0.06	7.3	<0.01	0.1	1.82	1	10	0.67	27	20.7
19	13060	18.2	<0.001	<0.005	15.8	<0.001	0.01	0.9	1.1	0.2	<5	8.8	<0.01	0.01	10.3	<0.01	0.08	1.88	4	<10	2.17	19	10.8
20	13056	57.8	<0.001	0.008	<0.1	0.002	0.47	3.91	<0.1	6.1	66	4160	0.04	0.07	0.8	<0.01	0.05	6.37	<1	29.4%	128	8	<0.5
20	13057	297	0.001	<0.005	7	0.003	>10	77.5	3.9	40.4	177	417	<0.01	3.31	1.8	<0.01	0.21	0.91	28	62200	22.6	117	3.5
20	13058	9.9	<0.001	<0.005	2.3	0.002	<0.01	0.42	2.3	0.5	<5	36.2	<0.01	0.02	0.7	<0.01	0.02	0.09	8	<10	3.74	33	1.4
21	13053	79.6	<0.001	<0.005	13.7	0.001	0.11	14.2	0.4	0.2	<5	40.8	<0.01	0.01	7.9	<0.01	0.08	1.02	2	<10	0.9	12	16.4
21	13054	140.5	<0.001	<0.005	15.1	<0.001	0.07	19.15	0.5	0.2	<5	16.6	<0.01	0.01	9.2	<0.01	0.09	0.94	1	<10	0.69	6	15.2
22	13055	18.8	<0.001	<0.005	19.8	<0.001	0.36	4.34	0.4	0.2	<5	11.8	<0.01	0.01	10.1	<0.01	0.12	1.92	1	<10	0.91	21	12.9
23	13141	12.8	0.001	0.0006	18.9	<0.001	0.02	0.67	6.7	1	<5	4.6	0.01	0.12	3.1	0.02	0.19	0.59	99	<10	3.62	60	4.1
23	13142	8.4	0.001	0.0005	10	<0.001	0.01	0.62	1.9	0.7	<5	4.5	0.01	0.06	0.6	0.03	0.1	0.45	44	<10	2.33	46	0.5
23	13143	12.5	0.001	0.0007	8.4	0.001	0.02	0.78	4.6	1.3	<5	10.1	0.02	0.09	3.4	0.07	0.11	0.74	66	<10	5.73	56	4.6
24	13165	10.4	<0.001	<0.005	7.6	0.001	0.05	0.24	15.8	0.6	<5	178	<0.01	0.02	2.9	0.01	0.04	0.64	93	<10	10.3	75	3.3
24	13166	9.5	<0.001	<0.005	7.7	0.001	0.01	1.08	15.9	0.7	<5	61.8	<0.01	0.03	3.1	<0.01	0.04	0.57	86	<10	10.7	82	3.8
25	13161	11.3	0.001	0.0007	50.2	0.001	0.01	1.01	9.2	1.2	<5	42.8	<0.01	0.07	3.5	0.02	0.25	0.55	115	<10	6.37	120	3.2
25	13162	22.3	0.001	<0.005	28.5	0.002	0.28	4.36	7.7	5.8	<5	37.7	<0.01	0.78	3.8	0.01	0.13	0.71	79	320	10.4	122	3.6
25	13163	13.4	<0.001	<0.005	2.2	0.002	<0.01	1	1.5	0.5	<5	29.1	<0.01	0.02	0.3	<0.01	<0.02	0.05	9	<10	3.15	44	0.7
25	13164	78.5	0.002	<0.005	19.6	0.004	0.97	13.4	8.6	27.7	<5	30.5	<0.01	3.22	3.2	0.01	0.18	0.84	65	550	7.58	174	3.4

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
26	13122	French Joe Mtn.	R	S	TP	Iditarod D1	T34N R37W Sec 32	62.99254	-156.34438	0.07	0.41	601	0.019	10	930	0.27
26	13123	French Joe Mtn.	R	S	TP	Iditarod D1	T34N R37W Sec 32	62.99255	-156.34477	0.14	0.45	493	0.025	10	700	0.36
27	13157	Goss	R	S	TP	Iditarod D1	T33N R37W Sec 6	62.98500	-156.36702	0.1	0.45	1545	0.397	10	1000	0.34
27	13158	Goss	R	S	RC	Iditarod D1	T33N R37W Sec 6	62.98573	-156.36733	0.07	1.39	30.2	0.004	<10	580	0.86
28	13152	East Fork deposit	R	S	RC	Iditarod D1	T33N R38W Sec 21	62.97996	-156.39117	0.1	0.4	318	0.297	<10	1500	0.27
28	13153	East Fork deposit	R	S	RC	Iditarod D1	T33N R38W Sec 21	62.98018	-156.39136	0.1	0.28	635	0.224	<10	1410	0.2
28	13154	East Fork deposit	R	S	RC	Iditarod D1	T33N R38W Sec 21	62.98021	-156.39137	0.03	0.31	230	0.06	<10	1720	0.26
28	13155	East Fork deposit	R	S	FL	Iditarod D1	T33N R38W Sec 21	62.98088	-156.38776	0.08	0.51	327	0.118	10	1510	0.29
29	13151	East Fork deposit	R	S	RC	Iditarod D1	T33N R38W Sec 21	62.97789	-156.38954	0.08	0.35	1805	0.538	<10	650	0.2
29	13156	East Fork deposit	R	S	TP	Iditarod D1	T33N R38W Sec 21	62.97807	-156.38669	0.11	0.28	1585	0.428	<10	730	0.2
30	13131	Potosie Creek	S	PL		Iditarod D1	T33N R38W Sec 10	62.96428	-156.47621	1.24	2.28	93.1	>10	<10	1140	0.81
30	13132	Potosie Creek	S	PC		Iditarod D1	T33N R38W Sec 10	62.96453	-156.47664	0.17	3.39	32.9	0.015	30	1130	1.4
30	13133	Potosie Creek	R	RC	FL	Iditarod D1	T33N R38W Sec 10	62.96545	-156.47594	0.03	0.04	85.7	0.016	<10	20	<0.05
30	13134	Potosie Creek	S	PL		Iditarod D1	T33N R38W Sec 10	62.96606	-156.47333	0.55	2.03	117	2.55	<10	1550	0.83
31	13135	Potosie Creek	S	PC		Iditarod D1	T33N R38W Sec 9	62.96585	-156.48680	0.07	3.04	15.6	0.046	20	1060	1.15
31	13136	Potosie Creek	SL			Iditarod D1	T33N R38W Sec 9	62.96773	-156.48778	0.24	1.54	13.6	0.004	<10	850	0.38
32	13137	Potosie Creek	R	C	OC	Iditarod D2	T33N R38W Sec 4	62.97392	-156.50600	0.13	0.24	39.7	<0.001	<10	510	0.19
32	13138	Potosie Creek	R	C	OC	Iditarod D2	T33N R38W Sec 4	62.97391	-156.50600	0.12	0.49	48.3	0.001	10	980	0.35
32	13139	Potosie Creek	R	C	OC	Iditarod D2	T33N R38W Sec 4	62.97389	-156.50600	0.06	3.46	36.9	<0.001	<10	850	0.71
32	13140	Potosie Creek	R	C	OC	Iditarod D2	T33N R38W Sec 4	62.97388	-156.50600	0.11	0.35	74.2	0.002	<10	710	0.35
33	13059	Six Gulch	R	S	MT	Iditarod D2	T33N R38W Sec 9	62.96457	-156.51462	0.09	0.32	11.8	0.001	<10	160	0.09
34	13159	Telephone Hill (Tele) Prospect	R	S	RC	Iditarod D1	T33N R38W Sec 14	62.95598	-156.43259	0.54	0.37	9320	7.86	<10	800	0.3
35	13035	Independence Mine	R	G	TP	Iditarod D1	T33N R38W Sec 15	62.94716	-156.47536	4.55	0.51	1110	0.92	<10	980	0.48
35	13038	Independence Mine	R	C	OC	Iditarod D1	T33N R38W Sec 15	62.94671	-156.47632	1.96	0.34	3510	0.661	<10	770	0.34
35	13039	Independence Mine	R	RC	RC	Iditarod D1	T33N R38W Sec 15	62.94701	-156.47479	0.09	3.22	43.8	0.007	<10	920	0.75
35	13051	Independence Mine	R	S	MD	Iditarod D1	T33N R38W Sec 15	62.94645	-156.47667	0.55	0.18	501	12.35	<10	210	0.16
35	13052	Independence Mine	R	S	RC, UG	Iditarod D1	T33N R38W Sec 15	62.94641	-156.47682	1	0.36	3660	1	<10	660	0.3
35	13114	Independence Mine	R	S	MD	Iditarod D2	T33N R38W Sec 15	62.94685	-156.47642	6.91	0.08	649	55.5	<10	130	0.12
35	13115	Independence Mine	R	S	MD	Iditarod D1	T33N R38W Sec 15	62.94686	-156.47643	0.57	0.3	3130	0.56	<10	540	0.21
35	13116	Independence Mine	R	C	OC	Iditarod D1	T33N R38W Sec 15	62.94671	-156.47629	0.14	2.5	194.5	0.07	<10	670	0.73
36	13036	Independence Mine	R	RC	TP	Iditarod D1	T33N R38W Sec 15	62.94854	-156.48000	1.86	0.3	1690	0.842	<10	530	0.17
36	13037	Independence Mine	R	S	TP	Iditarod D1	T33N R38W Sec 15	62.94830	-156.47932	0.18	0.06	474	0.314	<10	50	0.05
37	13091	Glacier/Ganes confluence	S	PC		Iditarod D2	T33N R38W Sec 17	62.95343	-156.53096	11.95	2.87	12.8	>100	30	1160	1.2
38	13118	Kaatz	R	G	DC	Iditarod D2	T33N R38W Sec 21	62.93463	-156.50886	0.19	0.69	42.2	0.008	<10	720	0.5
38	13119	Kaatz	R	G	DC	Iditarod D2	T33N R38W Sec 21	62.93463	-156.50886	0.19	0.68	100	0.053	<10	350	0.44
38	13120	Kaatz	R	S	MD	Iditarod D2	T33N R38W Sec 20	62.93421	-156.51294	1.81	0.16	1395	1.55	<10	140	0.17
38	13121	Kaatz	R	S	MD	Iditarod D2	T33N R38W Sec 20	62.93421	-156.51294	0.32	0.32	32	0.009	20	60	0.62
38	13124	Kaatz/Spaulding	R	S	RC	Iditarod D2	T33N R38W Sec 20	62.93422	-156.51434	0.12	0.38	25.9	0.008	10	1450	0.33
38	13125	Kaatz/Spaulding	R	G	RC	Iditarod D2	T33N R38W Sec 20	62.93433	-156.51429	0.53	1.68	6	0.011	<10	150	0.94
38	13126	Spaulding Creek	R	Rep	RC	Iditarod D2	T33N R38W Sec 20	62.93419	-156.51424	0.13	1.74	28.5	0.003	10	1570	0.95
38	13150	Kaatz	R	S	TP	Iditarod D2	T33N R38W Sec 21	62.93443	-156.50934	0.05	0.11	58.5	0.436	<10	390	0.08
39	13129	Spaulding Creek	S	SS		Iditarod D2	T33N R38W Sec 20	62.92944	-156.52894	0.1	1.28	15.9	0.002	<10	840	1.04
39	13130	Spaulding Creek	S	PC		Iditarod D2	T33N R38W Sec 20	62.92944	-156.52894	0.06	3.07	40.5	0.014	30	1110	1.32
40	13127	Spaulding Creek	R	C	OC	Iditarod D2	T33N R38W Sec 29	62.92611	-156.53467	0.06	0.37	159	0.074	<10	1260	0.35
40	13128	Spaulding Creek	S	PC		Iditarod D2	T33N R38W Sec 29	62.92531	-156.53140	0.18	1.99	22.1	0.689	20	730	0.82
41	13160	Spaulding Creek	S	PC		Iditarod D2	T33N R38W Sec 29	62.92358	-156.53052	0.08	3	16.4	0.16	30	1070	1.27

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Pb ppm	Pd ppm	Pt ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
26	13122	12.7	<0.001	<0.005	8.3	<0.001	<0.01	5.79	0.5	0.2	<5	2.7	<0.01	0.05	5.4	<0.01	0.05	0.88	1	<10	0.8	11	3.4
26	13123	10.2	<0.001	<0.005	10.2	<0.001	<0.01	6.52	0.5	0.3	<5	2.4	<0.01	0.03	6	<0.01	0.06	1	1	10	1.1	11	4.5
27	13157	10.8	<0.001	<0.005	11.4	<0.001	0.01	44.7	1.4	0.2	<5	15.8	<0.01	0.01	4.2	<0.01	0.07	0.81	7	<10	1.76	54	4.5
27	13158	5.8	0.001	<0.005	13.6	0.001	0.09	38	20.9	1.1	<5	246	<0.01	0.03	1.8	0.03	0.11	0.41	96	<10	12.1	75	4.4
28	13152	17	<0.001	<0.005	12.2	<0.001	<0.01	2.32	0.6	0.2	<5	5	<0.01	0.01	6.3	<0.01	0.09	0.94	1	<10	1.02	40	3.7
28	13153	13.6	<0.001	<0.005	11.6	<0.001	<0.01	5.32	0.4	0.3	<5	2.5	<0.01	0.01	5.4	<0.01	0.08	0.92	<1	<10	0.45	31	5.4
28	13154	11.3	<0.001	<0.005	12.2	<0.001	<0.01	2.66	0.4	0.2	<5	3.3	<0.01	<0.01	5.9	<0.01	0.08	0.71	2	10	0.43	32	4
28	13155	15.6	<0.001	<0.005	12.1	<0.001	0.01	2.93	1.1	0.4	<5	6.4	<0.01	0.01	6	<0.01	0.09	0.71	4	<10	2.17	49	4.7
29	13151	18.8	<0.001	<0.005	10.6	0.001	<0.01	4.64	0.5	0.4	<5	8.2	<0.01	0.01	4.9	<0.01	0.07	0.94	2	<10	0.94	19	3.4
29	13156	18.5	<0.001	<0.005	11.7	<0.001	0.01	4.19	0.4	0.3	<5	6.1	<0.01	0.02	4.7	<0.01	0.07	0.97	1	10	0.57	25	3.6
30	13131	34.5	0.001	<0.005	17.3	0.004	0.2	9.68	6.1	5.5	<5	33.1	<0.01	0.99	3.4	0.01	0.21	0.55	68	610	6.57	138	1.5
30	13132	14.4	0.003	0.0016	45.3	0.002	0.01	1.61	11	0.7	<5	45.2	<0.01	0.1	3.6	0.01	0.15	0.68	100	<10	8.05	141	3.1
30	13133	0.5	<0.001	<0.005	0.4	<0.001	0.01	0.67	0.6	0.2	<5	1.1	<0.01	0.01	0.2	<0.01	<0.02	<0.05	2	<10	0.4	4	<0.5
30	13134	132	0.001	<0.005	15.9	0.003	2.1	6.08	5.9	10.6	<5	27.7	<0.01	0.93	3.9	0.01	0.14	0.57	64	340	6.94	134	2.7
31	13135	13.6	0.002	0.001	32.7	0.002	0.01	0.82	8.9	0.9	<5	25.7	<0.01	0.08	5.6	0.01	0.15	0.57	93	10	6.02	134	2.1
31	13136	12.8	0.001	0.0007	13.2	<0.001	0.03	0.56	2.4	0.9	<5	34.5	<0.01	0.05	0.6	0.03	0.16	0.52	49	<10	3.87	55	<0.5
32	13137	7.1	<0.001	<0.005	5	0.001	0.14	1.74	3.6	1	<5	23.9	<0.01	0.04	1.7	<0.01	0.02	0.26	13	<10	5.23	84	1.5
32	13138	8.5	<0.001	<0.005	8	0.001	0.03	3.02	13.4	0.8	<5	139	<0.01	0.03	3.5	<0.01	0.05	0.55	30	<10	11.8	100	3.7
32	13139	5	<0.001	<0.005	11.2	0.001	0.08	0.85	19.8	0.7	<5	196	<0.01	0.04	1.7	0.03	0.1	0.41	128	<10	10.5	82	3.6
32	13140	8.6	0.001	<0.005	6.5	0.002	0.39	2.44	4.5	1.5	<5	27.9	<0.01	0.05	2.1	<0.01	0.03	0.28	18	<10	5.57	107	1.7
33	13059	19.2	<0.001	<0.005	2	<0.001	<0.01	0.25	3.8	0.5	<5	76.1	<0.01	0.02	0.6	<0.01	<0.02	0.11	13	<10	3.75	16	1.2
34	13159	6.6	0.001	<0.005	12.6	<0.001	0.1	48	2.6	0.8	<5	51	<0.01	0.07	3.9	<0.01	0.12	0.58	14	40	3.31	34	1.6
35	13035	113	<0.03	0	11.6	<0.001	0.12	13.3	11	1	<5	699	0.03	0.03	1.1	<0.01	0.08	0.32	20	<10	9.19	71	3.3
35	13038	19	<0.001	<0.005	11.6	<0.001	0.13	10.6	0.5	1	<5	63.4	<0.01	0.14	3.5	<0.01	0.07	1.5	<1	<10	0.22	39	7.1
35	13039	6	<0.001	<0.005	11.6	0.001	0.07	0.82	21.9	0.7	<5	213	<0.01	0.03	1.7	0.03	0.11	0.41	123	<10	10.3	74	4.4
35	13051	23.6	<0.03	0	2.9	<0.001	0.03	1.78	4.1	0.3	<5	304	<0.01	0.03	0.3	<0.01	0.02	0.2	9	<10	2.76	19	1.1
35	13052	23.3	<0.001	<0.005	10	<0.001	0.12	4.68	0.8	1.8	<5	29.3	<0.01	0.35	3.4	<0.01	0.06	1.04	3	10	0.44	14	6.4
35	13114	266	<0.03	0	2.9	<0.001	0.02	1.82	1.4	0.6	<5	65.2	0.01	0.12	0.2	<0.01	0.02	0.45	3	<10	1.39	26	1.4
35	13115	68.5	<0.001	<0.005	7.5	<0.001	0.03	4.71	0.6	0.6	<5	69.2	<0.01	0.97	2.3	<0.01	0.06	0.96	2	<10	0.45	48	4.6
35	13116	8.8	<0.03	0	11.8	<0.001	0.05	5.12	17	0.8	<5	551	0.02	0.02	1.8	0.02	0.08	0.51	80	<10	11.5	54	3.6
36	13036	39.3	<0.001	<0.005	6.4	<0.001	0.02	8.64	0.3	0.5	<5	11.7	<0.01	0.3	1.8	<0.01	0.03	1.39	1	<10	0.3	19	8.1
36	13037	6.2	<0.001	<0.005	1.1	0.001	<0.01	1.99	1.4	<0.2	<5	14.1	<0.01	0.04	0.2	<0.01	<0.02	0.05	6	<10	1.32	9	0.9
37	13091	8.6	0.002	0.0016	36.9	0.002	0.01	0.93	9.4	0.6	<5	35.1	0.01	0.03	3.9	0.21	0.18	0.82	102	<10	8.84	109	4.5
38	13118	20.6	<0.001	<0.005	15	<0.001	0.01	2.29	1	0.3	<5	12.6	<0.01	0.02	7.4	<0.01	0.12	1.39	3	<10	2.02	74	5.6
38	13119	24.1	<0.001	<0.005	16.5	<0.001	0.01	1.12	0.5	<0.2	<5	19.9	<0.01	0.02	2.9	<0.01	0.12	1.24	2	<10	0.72	29	5.3
38	13120	1400	<0.001	<0.005	4.3	<0.001	0.02	458	0.6	1	<5	23.5	<0.01	0.08	1.1	<0.01	0.03	0.32	2	<10	2.18	9	2.5
38	13121	3	0.001	<0.005	1.4	0.001	0.24	2.33	5	1.7	11	135	<0.01	0.16	1.2	0.03	0.02	0.91	3	<10	32	73	4.8
38	13124	18.4	<0.001	<0.005	12.4	0.001	<0.01	9.96	0.9	0.3	<5	45.1	<0.01	0.01	5.2	<0.01	0.07	0.92	3	<10	3.11	39	3.1
38	13125	3.4	0.001	<0.005	12.1	0.002	0.8	1.21	3.3	7.9	<5	25.4	<0.01	0.26	3.2	0.05	0.12	0.53	17	<10	11.8	125	2.5
38	13126	8.6	0.004	<0.005	31	0.003	<0.01	0.9	7.6	0.9	<5	15.2	<0.01	0.04	9.1	0.06	0.23	0.9	86	<10	15.7	97	1.3
38	13150	5	<0.001	<0.005	2.5	<0.001	<0.01	1.5	1.2	<0.2	<5	10.8	<0.01	0.01	0.3	<0.01	0.02	0.15	4	<10	0.53	25	1.5
39	13129	12.6	0.001	<0.0005	29.2	<0.001	0.01	1.9	2.6	0.8	<5	14.2	0.01	0.03	9.6	0.11	0.16	3.68	49	10	15.8	51	0.6
39	13130	15.2	0.001	0.0008	38.7	0.002	0.01	1.53	8.9	1.2	<5	36.2	0.01	0.08	5.4	0.02	0.21	0.83	97	<10	8.22	126	3.1
40	13127	16.8	<0.001	<0.005	14.5	0.001	<0.01	3	0.5	<0.2	<5	5.8	<0.01	0.01	4.5	<0.01	0.09	0.91	2	<10	0.75	54	4.8
40	13128	7.9	0.001	0.0007	23.5	0.001	0.01	2.64	7.9	0.5	<5	38	<0.01	0.03	2.9	0.01	0.14	0.5	66	<10	7.26	94	3
41	13160	11.4	0.002	0.001	36.2	0.002	0.02	1.19	9.3	0.9	<5	39.7	0.01	0.05	4.4	0.01	0.18	0.51	90	<10	7.98	118	2.9

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
42	13117	Kaatz	R	G	TP	Iditarod D2	T33N R38W Sec 30	62.92481	-156.54812	0.1	1.03	66.5	0.005	<10	660	0.6
43	13064	Upper Ganes Creek	R	RC		Iditarod D2	T33N R39W Sec 25	62.92149	-156.58989	0.06	0.27	8.8	0.02	<10	340	0.13
44	13028	Unn. E. Fork Tolstoi Creek placer	S	PC		Iditarod D2	T33N R41W Sec 1	62.97245	-156.97971	0.12	1.2	2.6	0.001	20	680	1.14
44	13029	Unn. E. Fork Tolstoi Creek placer	S	SS		Iditarod D2	T33N R41W Sec 1	62.97241	-156.97963	0.09	1.3	20.4	0.005	<10	1080	0.57
44	13030	Unn. E. Fork Tolstoi Creek placer	S	PC		Iditarod D2	T33N R41W Sec 1	62.97265	-156.97873	0.1	1.5	35.1	<0.001	10	1700	0.96
45	13071	Syenite Porphyry	R	S	OC	Iditarod D3	T33N R41W Sec 28	62.92679	-157.08023	1.28	0.43	187	0.702	30	440	0.88
45	13216	Syenite Porphyry	SL			Iditarod D3	T33N R41W Sec 28	62.92552	-157.08186	0.46	3.59	24.9	0.01	<10	440	4.59
45	13217	Syenite Porphyry	SL			Iditarod D3	T33N R41W Sec 28	62.92640	-157.08043	0.41	3.45	27.2	0.006	10	540	4.04
45	13218	Syenite Porphyry	SL			Iditarod D3	T33N R41W Sec 28	62.92759	-157.08194	0.4	2.34	48.9	0.005	30	600	3.52
46	13080	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91844	-156.96832	134	0.72	102.5	0.042	10	210	1.92
46	13307	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91748	-156.97146	2.07	1.24	53	0.118	40	1490	1.58
47	13081	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91704	-156.97850	11	0.22	287	0.075	100	1570	0.27
47	13305	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91741	-156.97453	1.13	1.15	19.9	0.183	10	890	1.16
47	13306	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91761	-156.97458	0.23	0.91	11.9	0.016	40	1310	1.5
47	13308	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91708	-156.97754	6.33	0.16	115	0.035	160	20	0.38
47	13309	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91710	-156.97838	10.75	0.89	56.8	0.046	20	180	0.58
47	13310	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91689	-156.97826	31.2	0.82	133	0.104	10	2040	0.57
48	13082	Tolstoi Prospect	R	S	FL	Iditarod D2	T33N R41W Sec 25	62.91551	-156.97949	1.44	0.37	224	0.039	120	200	0.38
49	13111	Beaver Creek southwest trib	S	PC		Iditarod D2	T32N R40W Sec 3	62.89422	-156.93903	0.15	1.68	96.3	0.136	110	1470	1.31
50	13112	Beaver Creek southwest trib	S	PC		Iditarod D2	T32N R40W Sec 2	62.89268	-156.93066	0.12	1.44	121.5	0.028	100	1310	1.18
51	13113	Beaver Creek Cirque - ID034	R	S	OC	Iditarod D2	T32N R41W Sec 4	62.88773	-156.98076	0.88	3.93	33.8	0.004	10	1440	2.13
52	13050	Ganes Creek prospect	R	S	FL	Iditarod D2	T32N R40W Sec 15	62.86140	-156.93997	0.85	2.49	37.9	<0.001	10	1860	2.1
53	13034	Upper Ganes Creek	S	PC		Iditarod D2	T32N R41W Sec 13	62.85657	-156.87906	0.1	1.55	66.9	<0.001	90	1360	1.36
54	13213	Cirque	R	Rep	OC	Iditarod D2	T32N R41W Sec 21	62.84532	-156.97876	93.1	0.98	228	0.252	40	30	3.19
54	13214	Cirque	R	C	OC	Iditarod D2	T32N R41W Sec 21	62.84522	-156.97719	178	0.24	4990	2.94	10	60	0.22
54	13215	Cirque	R	C	OC	Iditarod D2	T32N R41W Sec 21	62.84527	-156.97690	595	0.19	5450	2.59	10	10	0.15
55	13303	Deadwood Creek	S	PC		Iditarod C3	T30N R42W Sec 7	62.70640	-157.24474	0.7	1.47	92.1	31.4	<10	1460	0.86
55	13304	Deadwood Creek	S	PL		Iditarod C3	T30N R42W Sec 7	62.70641	-157.24472	0.14	1.4	11.8	2.8	10	870	0.61
56	13043	Maybe Creek	S	PC		Iditarod C3	T30N R42W Sec 9	62.70715	-157.17497	0.09	3.18	18.2	0.072	20	1200	1.08
57	13044	Maybe Creek	S	PL		Iditarod C3	T30N R42W Sec 9	62.70453	-157.17496	0.09	1.73	28.4	0.661	10	1240	0.89
58	13045	Maybe Creek	S	PC		Iditarod C3	T30N R42W Sec 9	62.69996	-157.17293	0.07	1.88	75.8	0.01	10	1290	0.74
59	13147	Unnamed 10644	R	S	TP	Iditarod C3	T30N R42W Sec 16	62.69053	-157.15280	0.95	0.25	1015	0.168	60	340	0.14
59	13148	Unnamed 10644	SL			Iditarod C3	T30N R42W Sec 16	62.69037	-157.15266	0.93	1.36	1610	0.148	10	680	1.14
59	13149	Unnamed 10644	R	G	TP	Iditarod C3	T30N R42W Sec 16	62.69088	-157.15254	1.53	1.92	452	0.009	10	1880	0.76
59	13169	Unnamed Head of 4th of July Ck.	R	S	OC	Iditarod C3	T30N R42W Sec 16	62.69059	-157.15318	0.1	1.07	19.9	0.004	10	1350	0.39
59	13201	Unnamed 10644	SL			Iditarod C3	T30N R42W Sec 16	62.69112	-157.15169	0.17	2.78	159.5	0.009	<10	660	0.95
60	13068	4th of July Creek	R			Iditarod C3	T30N R42W Sec 11	62.69691	-157.09514	0.13	0.07	7	<0.001	<10	100	1.9
61	13067	4th of July Creek	R	RC	RC	Iditarod C3	T30N R42W Sec 14	62.69465	-157.09274	0.58	0.36	23.5	0.005	10	1040	0.37
62	13042	ARDF-ID060	R	S	RC	Iditarod C3	T30N R42W Sec 13	62.69508	-157.08405	0.06	0.24	12.6	0.004	<10	140	0.19
63	13144	4th of July Creek	R	Rep	OC	Iditarod C3	T30N R42W Sec 22	62.67111	-157.12213	0.08	0.53	54.5	<0.001	10	930	0.88
63	13145	4th of July Creek	S	PC		Iditarod C3	T30N R42W Sec 22	62.67101	-157.12212	0.06	1.48	21.7	0.004	10	1670	0.5
63	13167	4th of July Creek - Upper	S	PL		Iditarod C3	T30N R42W Sec 22	62.67053	-157.12221	0.09	1.68	20	1.525	10	1390	0.77
64	13168	4th of July Creek - Lower	S	PC		Iditarod C3	T30N R42W Sec 27	62.65984	-157.12499	0.05	2.74	16.3	0.025	10	1470	1.1
65	13146	4th of July Creek	S	PC		Iditarod C3	T30N R42W Sec 27	62.65813	-157.11941	0.09	2.27	20.7	>1	10	1460	0.94
66	13046	Unnamed - ID 082	R	S	RC	Iditarod C3	T29N R42W Sec 3	62.63772	-157.13512	0.33	2.58	50.8	<0.001	10	1630	0.66
66	13047	Unnamed - ID 082	R	S	RC	Iditarod C3	T29N R42W Sec 3	62.63770	-157.13512	0.03	0.34	32.8	0.007	<10	450	0.13

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
67	13048	Unnamed - ID 054	R	Rep	RC	Iditarod C3	T30N R43W Sec 36	62.65221	-157.26975	0.14	1.96	22.3	<0.001	10	2320	0.66
67	13049	Unnamed - ID 054	R	S	RC	Iditarod C3	T30N R43W Sec 36	62.65220	-157.26967	0.07	0.36	51.3	0.007	<10	470	0.13
68	13065	Broken Shovel	R	C	OC	Iditarod C3	T29N R42W Sec 9	62.61291	-157.17302	21.6	0.15	1155	0.238	30	50	0.27
68	13066	Broken Shovel	R	S	MD	Iditarod C3	T29N R42W Sec 9	62.61294	-157.17302	514	0.21	5660	1.8	20	120	0.33
68	13301	Broken Shovel	R	S	TP	Iditarod C3	T29N R42W Sec 9	62.61295	-157.17296	168	0.12	3650	1.305	20	60	0.17
68	13302	Broken Shovel	R	S	TP	Iditarod C3	T29N R42W Sec 9	62.61304	-157.17259	15.6	0.82	3220	0.752	20	730	0.82
69	13041	Moore Creek	S	PC		Iditarod C3	T29N R42W Sec 16	62.59524	-157.17052	7.34	3.29	21.1	18.75	10	1680	1.5
70	13202	Takotna Mtn.	R	S	RC	Mcgrath D6	T33N R35W Sec 18	62.94535	-155.98772	0.11	1.55	19	<0.001	30	1450	0.35
71	13203	Takotna Mtn.	R	S	FL	Mcgrath D6	T33N R35W Sec 18	62.94605	-155.97597	0.18	1.48	94.9	0.001	10	410	1.1
72	13207	Candle Creek headwaters	S	PL		Mcgrath D6	T32N R35W Sec 10	62.88005	-155.80426	0.08	0.92	9.6	4.54	<10	900	0.41
73	13212	Candle Creek headwaters	R	S	RC	Mcgrath D6	T32N R35W Sec 16	62.86940	-155.86537	0.24	4.03	9.4	0.002	<10	1550	0.45
74	13209	Candle Creek headwaters	R	C	OC	Mcgrath D6	T32N R35W Sec 15	62.86657	-155.82837	0.05	0.59	146	0.916	10	1750	0.79
74	13210	Candle Creek headwaters	R	S	FL	Mcgrath D6	T32N R35W Sec 15	62.86655	-155.82793	0.17	0.57	448	0.375	20	1040	0.62
75	13208	Candle Creek headwaters	S	PC		Mcgrath D6	T32N R35W Sec 10	62.86770	-155.81776	0.81	1.41	32.7	17.25	<10	1350	0.78
76	13204	East Candle	R	S	TP, FL	Mcgrath D6	T32N R35W Sec 14	62.85917	-155.80057	0.15	1.18	106	0.003	<10	820	2.23
76	13205	East Candle	R	SC	TP	Mcgrath D6	T32N R35W Sec 14	62.85928	-155.80014	0.08	1.45	74.9	0.003	<10	910	1.16
76	13206	East Candle	R	Rep	OC	Mcgrath D6	T32N R35W Sec 14	62.85897	-155.79848	0.11	0.66	146.5	0.006	<10	710	2.01
77	13170	Candle Creek East	R	C	OC	Mcgrath D6	T32N R35W Sec 14	62.85742	-155.80121	0.12	0.47	12.6	0.002	<10	170	0.21
77	13171	Candle Creek East	R	Rep	OC	Mcgrath D6	T32N R35W Sec 14	62.85745	-155.80124	0.17	1.3	37.7	0.004	<10	730	1.28
77	13172	Candle Creek East	R	G	FL	Mcgrath D6	T32N R35W Sec 14	62.85687	-155.80196	0.46	0.61	82.8	0.002	<10	370	1.66
78	13225	Candle Creek headwaters	R	S	FL	Mcgrath D6	T32N R35W Sec 15	62.86212	-155.82689	0.18	0.41	199	0.063	<10	840	0.64
79	13211	Candle Creek headwaters	S	PC		Mcgrath D6	T32N R35W Sec 15	62.86263	-155.83334	0.41	0.85	353	6.67	100	510	0.6
79	13224	Candle Creek headwaters	R	S	OC	Mcgrath D6	T32N R35W Sec 15	62.86264	-155.83519	0.1	1.19	90.8	0.03	<10	1540	0.53
80	13079	Candle Creek headwaters	S	PC		Mcgrath D6	T32N R35W Sec 16	62.86195	-155.83904	0.16	2.11	23.3	0.064	10	1470	0.65
80	13175	Candle Creek headwaters	S	PC		Mcgrath D6	T32N R35W Sec 16	62.86152	-155.83806	0.03	2.24	31.1	0.006	<10	1550	0.82
81	13078	Candle Creek headwaters	S	PC		Mcgrath D6	T32N R35W Sec 16	62.86030	-155.84499	0.1	2.97	37.6	0.011	10	1610	0.84
82	13077	Candle Creek	R	S	RC	Mcgrath D6	T32N R35W Sec 16	62.85897	-155.84958	0.21	2.4	28.2	0.002	<10	1900	0.56
82	13083	VABM Candle	R	RC	RC	Mcgrath D6	T32N R35W Sec 16	62.85785	-155.84824	0.18	1.58	7.7	0.002	<10	1790	0.39
82	13312	VABM Candle	R	S	RC	Mcgrath D6	T32N R35W Sec 16	62.85714	-155.84815	0.2	1.8	3.7	0.007	<10	1910	0.37
83	13174	Candle Hills Prospect	R	S	RC	Mcgrath D6	T32N R35W Sec 21	62.85073	-155.83774	0.15	2.32	15.6	<0.001	<10	1980	0.49
84	13069	Tatalina Mountain Prospect	R	S	FL	Iditarod D1	T31N R36W Sec 29	62.75223	-156.07080	76	1.1	843	0.004	30	2120	0.55
84	13070	Tatalina Mountain Prospect	R	S	RC	Iditarod D1	T31N R36W Sec 29	62.75328	-156.07121	17.1	0.3	778	<0.001	90	260	0.72
85	13173	Alder Creek Placer	S	PC		Mcgrath C6	T30N R34W Sec 7	62.69902	-155.71429	3.01	1.61	62.4	0.53	10	1410	0.91
86	13366	Red Shale	R	Rep	RC	Mcgrath C4	T28N R29W Sec 14	62.51429	-154.77803	0.68	0.12	92.7	0.037	<10	2560	0.31
86	13367	Red Shale	R	Rep	RC	Mcgrath C4	T28N R29W Sec 14	62.51400	-154.77800	0.92	0.08	87.9	0.026	<10	2910	0.11
87	13187	White Mtn. Mine	R	G	MD	Mcgrath A4	T24N R30W Sec 7	62.18324	-154.84966	0.6	0.06	609	0.011	<10	80	<0.05
87	13188	White Mtn. Mine - Central Zone	R	Rep	TP	Mcgrath A4	T24N R30W Sec 7	62.18313	-154.84975	0.36	0.04	683	0.043	<10	200	0.48
88	13189	White Mtn. Mine - South Zone	R	Rep	TP	Mcgrath A4	T24N R30W Sec 7	62.17919	-154.85484	0.36	0.04	69	0.002	<10	30	0.26
89	13190	Peggy Barbara	R	RC	OC	Mcgrath A4	T24N R30W Sec 18	62.17301	-154.85134	0.32	0.06	216	<0.001	<10	90	<0.05
90	13334	Mary Margaret; Coxcomb	R	RC	OC	Mcgrath A4	T24N R30W Sec 18	62.16148	-154.87480	0.44	0.13	583	0.002	<10	50	1.19
90	13342	Mary Margaret; Coxcomb	R	Rep	OC	Mcgrath A4	T24N R30W Sec 8	62.16175	-154.87369	0.31	0.1	85	0.001	<10	50	1.55
91	13275	Roberts PGM	R	SC	OC	Mcgrath A3	T24N R28W Sec 5	62.19321	-154.44335	1.3	1.07	2	0.064	<10	50	0.16
91	13276	Roberts PGM	R	CH	RC	Mcgrath A3	T24N R28W Sec 5	62.19390	-154.44550	0.38	3.51	5.9	0.017	40	50	0.14
91	13277	Roberts PGM	R	C	OC	Mcgrath A3	T24N R28W Sec 5	62.19323	-154.44345	1.25	1.82	3.7	0.117	10	20	<0.05
91	13278	Roberts PGM	R	C	OC	Mcgrath A3	T24N R28W Sec 5	62.19322	-154.44347	1.96	1.97	1.5	0.22	<10	20	<0.05
91	13279	Roberts PGM	R	C	OC	Mcgrath A3	T24N R28W Sec 5	62.19327	-154.44344	2.08	1.83	0.9	0.212	30	20	<0.05

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Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
91	13280	Roberts PGM	R	C	OC	Mcgrath A3	T24N R28W Sec 5	62.19330	-154.44339	2.25	2.41	0.7	0.28	10	40	0.1
91	13284	Roberts PGM	R	CH	OC, RC	Mcgrath A3	T24N R28W Sec 5	62.19365	-154.44465	0.07	2.02	2.8	0.027	30	20	0.05
91	13285	Roberts PGM	R	Rep	FL	Mcgrath A3	T24N R28W Sec 5	62.19505	-154.44745	0.04	2.34	7.3	0.003	<10	150	0.05
92	13335	Chip Loy	R	Rep	OC	Mcgrath A3	T24N R28W Sec 15	62.16796	-154.38140	6.86	2.06	7.8	0.021	<10	160	0.16
92	13336	Chip Loy	R	Rep	OC	Mcgrath A3	T24N R28W Sec 15	62.16761	-154.38220	4.36	3.62	2.4	0.038	<10	320	0.39
92	13337	Chip Loy	R	S	OC	Mcgrath A3	T24N R28W Sec 15	62.16746	-154.38293	7.68	1.01	20.7	0.019	<10	70	0.13
92	13338	Chip Loy	R	Rep	OC	Mcgrath A3	T24N R28W Sec 15	62.16734	-154.38439	3.73	0.2	138	0.004	<10	<10	0.06
93	13343	Ozzna Creek lode	R	Rep	OC	Mcgrath B2	T26N R25W Sec 32	62.29463	-153.95029	0.69	4.58	9	0.001	<10	580	0.72
93	13344	Ozzna Creek lode	R	Rep	OC	Mcgrath B2	T26N R25W Sec 32	62.29442	-153.94947	0.39	3.32	19.6	0.003	<10	1170	0.69
94	13345	Ozzna Creek lode	R	Rep	OC	Mcgrath B2	T26N R25W Sec 32	62.29303	-153.94698	1.26	4.37	94.4	0.002	<10	160	0.5
94	13346	Ozzna Creek lode	R	Rep	OC	Mcgrath B2	T26N R25W Sec 32	62.29306	-153.94525	156	3.54	110.5	0.024	<10	10	0.32
94	13347	Ozzna Creek lode	R	Rep	OC	Mcgrath B2	T26N R25W Sec 32	62.29306	-153.94525	1250	0.54	1860	0.021	<10	10	0.17
94	13348	Ozzna Creek lode	R	Rep	OC	Mcgrath B2	T26N R25W Sec 32	62.29219	-153.94389	234	1.51	76.4	0.044	<10	10	0.17
95	13191	Ozzna Creek	R	S	FL	Mcgrath B2	T26N R25W Sec 28	62.30892	-153.91511	32.7	0.18	<2	0.003	<10	310	0.18
96	13249	Ratfork Headwall	R	S	OC	Mcgrath B2	T26N R24W Sec 27	62.31239	-153.89383	7.04	1.32	140	0.033	<10	<10	0.2
97	13248	Ratfork Headwall	R	S	RC	Mcgrath B2	T26N R24W Sec 27	62.31585	-153.89367	0.28	0.14	9.5	0.12	160	10	0.87
97	13250	Ratfork Headwall	R	S	OC	Mcgrath B2	T26N R24W Sec 27	62.31587	-153.89233	2.33	1.3	34	0.02	<10	<10	0.25
97	13251	Ratfork Headwall	R	S	OC	Mcgrath B2	T26N R24W Sec 27	62.31543	-153.89006	15.45	0.59	16	0.022	<10	<10	0.22
97	13252	Ratfork Headwall	R	RC	OC	Mcgrath B2	T26N R24W Sec 27	62.31528	-153.88936	17.9	1.37	12.5	0.015	<10	30	0.41
98	13253	Ratfork Headwall	R	RC	OC	Mcgrath B2	T26N R24W Sec 27	62.31706	-153.88715	0.16	4.09	0.8	0.003	10	1910	1.46
99	13098	Badnews	R	S	OC	Mcgrath B2	T26N R24W Sec 32	62.29897	-153.76680	5.94	0.1	1	0.015	<10	<10	0.06
99	13243	Badnews	R	S	OC	Mcgrath B2	T26N R24W Sec 32	62.29924	-153.76604	5.44	0.29	1.5	0.086	<10	10	0.14
99	13244	Badnews	R	S	OC	Mcgrath B2	T26N R24W Sec 32	62.29945	-153.76639	75.3	0.57	1.4	0.218	<10	10	0.11
99	13245	Badnews	R	Rep	OC	Mcgrath B2	T26N R24W Sec 32	62.29985	-153.76766	12.5	0.2	2.2	0.462	<10	<10	0.05
99	13246	Badnews	R	Rep	OC	Mcgrath B2	T26N R24W Sec 32	62.29992	-153.76751	27.6	0.11	3.8	29.6	<10	<10	0.09
99	13323	Badnews	R	S	OC	Mcgrath B2	T26N R24W Sec 32	62.29900	-153.76564	9.29	0.21	2.9	0.584	<10	<10	0.19
99	13324	Badnews	R	C	OC	Mcgrath B2	T26N R24W Sec 32	62.29901	-153.76580	8.66	0.2	7.3	0.333	<10	<10	0.1
99	13325	Badnews	R	G	OC	Mcgrath B2	T26N R24W Sec 32	62.29918	-153.76665	2.06	0.15	3.4	0.017	<10	<10	0.11
99	13362	Badnews	R	S	OC	Mcgrath B2	T26N R24W Sec 32	62.30002	-153.76982	119	1.53	197.5	0.016	<10	10	0.3
100	13254	Sheep Creek South	R	S	OC	Mcgrath B2	T26N R24W Sec 30	62.31687	-153.79453	0.28	1.54	0.7	0.005	<10	780	0.18
100	13255	Sheep Creek South	R	S	OC	Mcgrath B2	T26N R24W Sec 30	62.31702	-153.79707	22	0.36	8.6	0.019	<10	<10	0.18
100	13256	Sheep Creek South	R	Rep	OC	Mcgrath B2	T26N R24W Sec 30	62.31709	-153.79712	0.99	5.37	4.6	<0.001	<10	1540	0.93
100	13257	Sheep Creek South	R	Rep	OC	Mcgrath B2	T26N R24W Sec 30	62.31715	-153.79712	6.38	5.68	2.9	0.001	<10	540	0.89
101	13327	Dall	R	C	OC	Mcgrath B2	T26N R24W Sec 19	62.32907	-153.81133	338	0.53	5.2	0.057	<10	80	0.27
101	13328	Dall	R	C	OC	Mcgrath B2	T26N R24W Sec 19	62.32932	-153.81090	181	0.74	11.8	0.156	<10	60	0.37
101	13329	Dall	R	C	OC	Mcgrath B2	T26N R24W Sec 19	62.32932	-153.81097	105	0.55	5.6	0.702	<10	60	0.26
101	13330	Dall	R	C	OC	Mcgrath B2	T26N R24W Sec 19	62.32907	-153.81133	93.3	1.02	7.6	0.487	<10	210	0.52
102	13258	Sheep Creek West	R	S	OC	Mcgrath B2	T26N R25W Sec 13	62.33638	-153.81484	145	0.62	204	0.015	<10	420	0.21
102	13259	Sheep Creek West	R	S	OC	Mcgrath B2	T26N R25W Sec 24	62.33712	-153.82002	80.7	0.79	31.9	0.01	<10	<10	0.46
102	13260	Sheep Creek West	R	Rep	OC	Mcgrath B2	T26N R25W Sec 13	62.33690	-153.81900	97.1	1.5	37.5	0.011	<10	880	0.68
103	13101	Sheep Creek No. 1	S	PC		Mcgrath B2	T26N R24W Sec 19	62.33580	-153.80908	0.35	2.4	14	0.002	10	1660	0.54
103	13180	Sheep Creek No. 1	R	Rep	OC	Mcgrath B2	T26N R24W Sec 18	62.33657	-153.80444	0.09	0.15	4.2	<0.001	<10	90	0.12
104	13100	Sheep Creek No. 1	R	Rep	OC	Mcgrath B2	T26N R24W Sec 19	62.33460	-153.80118	0.34	0.44	16	0.001	<10	1260	0.59
105	13181	Clough	R	S	FL	Mcgrath B2	T26N R24W Sec 19	62.32569	-153.77933	1275	0.07	1495	0.147	<10	<10	<0.05
105	13182	Hard Scramble	R	S	FL	Mcgrath B2	T26N R24W Sec 19	62.32489	-153.78072	100	0.31	10.6	0.028	<10	<10	0.24
105	13352	Hard Scramble	R	C	OC	Mcgrath B2	T26N R24W Sec 19	62.32489	-153.78072	11.5	2.95	4.3	0.008	<10	1720	0.64

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Pb ppm	Pd ppm	Pt ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
91	13280	5.8	1.29	1.12	2.8	0.022	0.77	0.29	4.4	9.7	<5	9.6	<0.01	1.71	0.5	0.08	0.05	0.42	60	<10	2.04	37	1.8
91	13284	1.3	0.017	0.017	1.6	<0.001	0.04	0.71	6.2	0.3	<5	28.6	<0.01	0.03	0.2	0.07	0.03	0.09	67	<10	2.15	36	1.2
91	13285	2.8	0.009	0.012	4.4	<0.001	0.01	0.11	3.2	0.2	<5	82.2	<0.01	0.02	0.6	0.15	0.04	0.11	42	<10	3.93	26	2.4
92	13335	56.3	0.028	0.013	28.5	0.234	>10	0.23	1.5	33.6	10	48.5	<0.01	0.63	1	0.07	0.44	0.29	19	<10	4.39	104	3.5
92	13336	50.5	0.014	0.013	16.3	0.016	1.09	0.13	3.4	10.3	<5	93.4	<0.01	0.52	2.2	0.19	0.42	0.35	25	<10	8.3	147	4.8
92	13337	11.4	0.087	0.012	13.5	0.137	>10	0.73	1.2	31.4	16	7.1	<0.01	0.63	2.1	0.06	0.32	0.22	15	<10	3.44	120	4.7
92	13338	58.6	0.002	0.017	0.3	0.317	>10	12.7	0.3	43.9	25	0.4	<0.01	1.12	<0.2	<0.01	0.2	0.15	5	<10	0.69	102	<0.5
93	13343	49.1	0.001	0.006	2.8	0.001	0.79	0.62	6.7	1.5	<5	339	0.01	0.17	3.3	0.09	0.05	0.51	81	10	10.5	113	5.7
93	13344	42	0.007	0.007	24.5	0.003	1.74	1.12	9.5	1.3	<5	194	<0.01	0.04	1.8	0.14	0.35	0.39	95	<10	7.54	136	7.1
94	13345	11.5	0.028	0.021	0.9	<0.001	3.29	1.08	8.7	0.9	<5	32	0.01	0.02	0.5	0.34	0.15	0.07	100	<10	22.3	76	10.3
94	13346	61200	0.002	0.005	0.5	0.001	>10	11.8	4.7	40.8	40	43.1	<0.01	2.56	1.8	0.08	0.06	0.15	57	<10	5.16	26100	4.1
94	13347	22.7%	0.001	0.016	3.8	0.002	>10	241	2	460	161	5.9	<0.01	282	0.6	0.01	2.37	0.06	16	<10	1.16	19200	2.4
94	13348	10.35%	0.003	0.011	2.2	<0.001	>10	124.5	4.2	240	55	9.3	<0.01	9.74	0.8	0.06	0.37	0.15	49	<10	3.71	14.25%	1.7
95	13191	3090	<0.001	<0.005	2.4	<0.001	>10	2.41	<0.1	49.9	21	595	<0.01	3.54	0.8	<0.01	0.14	1.04	4	<10	3.3	90600	3.5
96	13249	30.3	<0.001	<0.005	0.6	0.011	8.66	2.31	3.9	57	58	78.5	0.01	0.64	1.4	0.04	0.05	0.94	21	<10	3.87	4980	9.7
97	13248	18	<0.001	0.005	0.3	<0.001	0.78	5.13	1.8	2	<5	89.5	<0.01	0.31	0.2	0.01	0.03	0.76	6	<10	2.45	1265	5.6
97	13250	11.4	0.001	<0.005	0.1	0.005	3.1	0.65	4.6	10.5	35	101	0.01	0.83	2.7	0.05	0.03	1	18	<10	4.66	405	14
97	13251	262	<0.001	<0.005	0.1	<0.001	4.93	1.38	3.6	101	21	3.6	<0.01	28.5	0.7	0.02	0.04	0.91	21	<10	1.94	56100	8.9
97	13252	338	0.001	<0.005	0.4	0.001	1.1	3.35	2.4	23.4	<5	119	<0.01	2.38	1.8	0.08	0.07	1.05	26	<10	5.28	1680	13.5
98	13253	14.4	0.001	0.005	19.7	0.001	0.87	0.47	5.4	1.8	5	364	0.03	0.07	4.1	0.39	0.21	0.43	77	10	10.9	110	5.1
99	13098	22.1	<0.001	0.006	0.3	0.006	9.66	0.56	0.4	53.4	24	4	<0.01	2.57	0.8	0.01	0.04	0.3	3	<10	0.98	1285	1.2
99	13243	34.9	0.002	0.008	0.2	0.01	>10	0.71	0.6	63	15	15.2	<0.01	0.99	1.3	0.04	0.07	1.74	18	<10	5.53	46100	3.5
99	13244	74.3	0.001	<0.005	1	0.003	2.02	0.97	1.6	25.6	31	49.9	<0.01	5.41	4.3	0.11	0.05	1.37	15	<10	5.12	1710	3.5
99	13245	11	0.001	0.007	0.2	0.001	7.92	0.51	0.4	37.6	9	7.2	<0.01	1.18	0.3	0.01	0.04	0.14	2	<10	0.87	53000	1
99	13246	30.8	0.001	0.012	0.2	0.003	>10	1.12	<0.1	85.9	13	5	<0.01	65.5	0.3	0.02	0.08	0.39	2	<10	0.81	62100	1.6
99	13323	80.9	0.002	0.011	0.1	0.005	>10	0.59	0.7	88.2	20	8	<0.01	2.96	0.6	0.02	0.11	0.44	9	<10	2.06	10.35%	2.5
99	13324	47	0.001	0.006	0.1	0.006	>10	0.59	0.7	99.3	18	9	<0.01	1.56	0.8	0.04	0.07	0.53	19	<10	1.9	73100	2.3
99	13325	8.4	0.001	<0.005	0.4	0.002	>10	0.39	0.5	73.7	32	4.7	<0.01	0.43	0.6	0.01	0.04	0.26	<1	<10	0.94	9060	1.1
99	13362	389	<0.001	<0.005	3	<0.001	5.44	4.9	1.2	70.8	35	17	<0.01	1.42	0.6	0.01	0.04	0.1	10	<10	10.1	19.7%	0.7
100	13254	7.5	<0.001	<0.005	3.4	<0.001	2.63	0.47	2.5	1.9	<5	113	<0.01	0.04	1.8	0.11	0.06	0.33	26	<10	4.75	1265	5
100	13255	145	0.001	<0.005	1.5	<0.001	>10	1.52	0.7	207	27	6.2	<0.01	2.77	0.3	0.01	0.11	0.11	1	<10	1.95	12.7%	0.8
100	13256	31.9	0.001	<0.005	12.9	0.002	2.56	0.61	9	3.5	<5	161	<0.01	0.02	1.2	0.28	0.1	0.29	154	<10	6.64	4620	5.1
100	13257	266	<0.001	<0.005	9.3	0.002	5.84	0.81	6.5	14	<5	171	0.01	0.09	1	0.17	0.12	0.35	135	<10	8.28	16900	5.4
101	13327	8990	0.004	0.008	0.8	0.031	>10	3.28	1	121	24	53.8	0.01	11.9	2.6	0.06	0.27	2.87	51	<10	5.59	19700	2.7
101	13328	2210	0.003	0.006	1.6	0.026	4.03	3.23	1.4	73.6	10	25.6	<0.01	2.71	1.1	0.07	0.11	2.88	60	<10	6.89	18100	4.4
101	13329	430	0.002	0.011	3.5	0.013	>10	1.33	0.6	150	28	38.3	<0.01	4.13	0.6	0.03	0.12	1.08	26	<10	2.43	89900	2.8
101	13330	337	0.001	0.01	7.6	0.024	>10	1.9	1.2	115	15	79	<0.01	2.82	1.6	0.06	0.17	2.33	55	<10	4.9	62500	5.6
102	13258	47700	0.001	<0.005	7.5	<0.001	0.41	23.2	0.8	127	15	41.4	<0.01	1.07	2.5	0.03	0.18	0.71	11	<10	1.3	3580	4.4
102	13259	52100	0.001	0.009	0.6	0.003	>10	13.5	1.9	1140	29	44.9	0.01	0.27	1.2	<0.01	0.18	1.22	34	<10	4.98	83100	2.1
102	13260	5710	<0.001	<0.005	19.5	<0.001	4.81	5.39	1.9	186	12	119	<0.01	0.77	3.8	0.1	0.45	0.67	24	<10	5.12	20300	5.4
103	13101	50.9	0.001	<0.005	17.2	0.001	0.38	1.22	6.5	0.7	<5	403	<0.01	0.06	2.1	0.01	0.24	0.39	44	<10	11	132	2.4
103	13180	1.6	<0.001	<0.005	0.8	0.001	0.1	0.48	0.8	0.7	<5	77.7	<0.01	0.01	0.2	<0.01	0.03	1.1	9	<10	2.84	55	1.4
104	13100	21.1	0.002	<0.005	9.6	0.011	0.7	2	1.7	1.8	<5	22.1	<0.01	0.1	3	<0.01	0.18	1.32	12	<10	2.94	20	4.4
105	13181	10800	<0.001	0.015	0.3	0.001	8.8	19.9	0.1	182	44	12.8	<0.01	214	<0.2	<0.01	0.72	0.05	2	<10	0.62	14.5%	<0.5
105	13182	12800	0.002	0.009	1.2	0.001	>10	1.7	0.7	260	28	20.3	<0.01	16.5	1.1	0.02	0.79	0.53	6	<10	2.46	94600	2.2
105	13352	3430	0.001	<0.005	26.7	<0.001	1.09	1.3	5.5	15.8	<5	71.4	0.01	0.53	6.5	0.34	0.83	0.55	65	<10	9.22	5700	5.1

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
105	13353	Hard Scramble	R	S	RC	Mcgrath B2	T26N R24W Sec 19	62.32482	-153.78400	70.1	0.88	4.1	0.029	<10	40	0.36
105	13354	Hard Scramble	R	S	RC	Mcgrath B2	T26N R24W Sec 19	62.32494	-153.78270	2.8	0.38	0.8	0.092	<10	40	0.85
106	13178	Clough	R	RC	OC	Mcgrath B2	T26N R24W Sec 20	62.32556	-153.76973	0.31	1.82	6.6	<0.001	<10	3770	0.74
106	13179	Clough	R	S	OC	Mcgrath B2	T26N R24W Sec 20	62.32597	-153.77002	0.49	1.22	5.9	0.001	<10	2870	0.55
106	13331	Clough	R	S	RC	Mcgrath B2	T26N R24W Sec 20	62.32746	-153.76851	0.68	8.62	0.6	0.002	<10	2420	1.05
106	13351	Clough	R	S	OC	Mcgrath B2	T26N R24W Sec 20	62.32549	-153.76972	14.5	8.13	3.3	0.002	<10	3430	1.89
107	13247	Smith Lake	R	C	UG	Mcgrath B2	T26N R24W Sec 21	62.32763	-153.74239	10.4	1.82	<2	0.017	<10	670	0.64
108	13099	Sheep Creek No. 1	R	C	OC	Mcgrath B2	T26N R24W Sec 18	62.34152	-153.79970	1.38	0.8	29.9	0.005	<10	2240	0.62
109	13087	Crash	R	SC	OC	Mcgrath B2	T26N R24W Sec 7	62.35395	-153.80045	3.49	2.82	255	0.002	<10	1050	1.46
109	13088	Crash	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35385	-153.80061	27.1	2.72	14	0.003	<10	60	3.83
109	13089	Crash	R	SC	OC	Mcgrath B2	T26N R24W Sec 7	62.35421	-153.80077	1.54	3.2	106	0.001	<10	530	1.43
109	13090	Crash	R	C	OC	Mcgrath B2	T26N R24W Sec 7	62.35402	-153.80006	57.6	3.54	16.5	0.003	<10	1520	1.57
109	13316	Crash	R	G	OC	Mcgrath B2	T26N R24W Sec 7	62.35156	-153.79952	0.21	0.75	7	0.003	<10	640	0.53
109	13317	Crash	R	G	OC	Mcgrath B2	T26N R24W Sec 7	62.35357	-153.79826	0.3	3.18	29.3	0.005	<10	1290	1.54
110	13318	Crash	R	G	OC	Mcgrath B2	T26N R24W Sec 7	62.35415	-153.80342	0.09	2.69	12.1	0.364	10	620	1.48
110	13319	Crash	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35395	-153.80324	0.36	4.67	48.4	0.008	<10	510	1.53
110	13320	Crash	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35432	-153.80637	107	2.12	1625	0.01	<10	200	0.31
111	13322	Crash	R	G	OC	Mcgrath B2	T26N R24W Sec 7	62.35511	-153.79013	1.14	0.69	17.2	0.003	<10	2340	0.45
112	13235	Crash	R	C	OC	Mcgrath B2	T26N R24W Sec 7	62.35625	-153.80052	48.5	0.97	316	0.02	<10	130	0.34
112	13265	Crash North	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35637	-153.79736	51.6	0.34	67	0.037	<10	10	0.18
113	13095	Crash North	R	SC	OC	Mcgrath B2	T26N R24W Sec 7	62.35944	-153.79756	23.4	0.46	6.6	0.001	<10	<10	0.55
113	13096	Crash North	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35904	-153.79914	18.6	0.82	1.8	<0.001	<10	460	1.12
113	13097	Crash North	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35866	-153.79931	88.3	0.64	2.2	0.006	<10	260	1.24
113	13236	Crash North	R	CH	OC	Mcgrath B2	T26N R24W Sec 7	62.35994	-153.80036	10.85	0.35	2.5	0.834	<10	10	0.07
113	13237	Crash North	R	C	OC	Mcgrath B2	T26N R24W Sec 7	62.35994	-153.80026	99.7	1.01	8.7	0.012	<10	450	0.48
113	13238	Crash North	R	C	OC	Mcgrath B2	T26N R24W Sec 7	62.35994	-153.80031	15.25	1.4	8.2	0.002	<10	470	0.63
113	13239	Crash North	R	Rep	OC	Mcgrath B2	T26N R24W Sec 7	62.35994	-153.80019	20.3	1.44	7.2	<0.001	<10	610	0.57
113	13240	Crash North	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35994	-153.80041	41.4	0.32	4.5	0.001	<10	120	0.18
113	13241	Crash North	R	RC	OC	Mcgrath B2	T26N R24W Sec 7	62.35924	-153.79996	0.81	1.7	14.4	<0.001	<10	40	3.62
113	13242	Crash North	R	C	OC	Mcgrath B2	T26N R24W Sec 7	62.35995	-153.80029	144	0.54	4.1	0.015	<10	190	0.35
113	13321	Crash North	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.36000	-153.79787	235	0.55	14.8	0.031	<10	310	0.69
113	13356	Crash North	R	S	OC	Mcgrath B2	T26N R24W Sec 7	62.35814	-153.80196	13.3	2.06	3.2	0.002	<10	2250	2.79
114	13177	Tin Creek North	R	S	FL	Mcgrath B2	T27N R24W Sec 3	62.45626	-153.69126	11	4.58	2.5	<0.001	<10	270	0.96
115	13227	Tin Creek #2	R	C	OC	Mcgrath B2	T27S R24W Sec 14	62.43740	-153.67474	0.13	2.09	2.1	<0.001	<10	860	0.46
115	13228	Tin Creek #2	R	Rep	OC	Mcgrath B2	T27N R24W Sec 14	62.43715	-153.67349	0.07	4.18	2.7	<0.001	<10	1260	0.56
115	13229	Tin Creek #2	R	Rep	OC	Mcgrath B2	T27N R24W Sec 14	62.43696	-153.67515	0.4	2.29	1.2	<0.001	<10	580	0.81
115	13314	Tin Creek #2	R	G	OC	Mcgrath B2	T27N R24W Sec 25	62.43501	-153.67439	0.26	2.87	6.6	0.007	<10	710	0.48
116	13183	Tin Midway	R	S	FL	Mcgrath B2	T27N R24W Sec 23	62.42109	-153.66873	16.35	0.93	3	0.002	<10	<10	0.22
116	13184	Tin Midway	R	S	OC	Mcgrath B2	T27N R24W Sec 23	62.42124	-153.66881	23.4	1.62	5.7	0.026	<10	<10	0.17
116	13355	Tin Midway	R	Rep	OC	Mcgrath B2	T27N R24W Sec 23	62.42142	-153.66740	21.6	0.43	17.2	0.007	<10	10	0.13
117	13084	Tin Creek #1	R	S	OC	Mcgrath B2	T27N R24W Sec 25	62.40610	-153.65407	0.71	5.25	6	0.002	<10	1310	1.12
117	13226	Tin Creek #1	R	C	OC	Mcgrath B2	T27N R24W Sec 25	62.40658	-153.65762	0.05	1.41	3.8	0.001	<10	620	0.48
117	13313	Tin Creek #1	R	S	OC	Mcgrath B2	T27N R24W Sec 25	62.40613	-153.65476	58.1	3.03	9.6	0.011	<10	480	0.5
117	13326	Tin Creek #1	R	S	OC	Mcgrath B2	T27N R24W Sec 25	62.40687	-153.65687	395	0.65	9.4	0.016	<10	<10	0.62
118	13230	Tin Creek South	R	C	RC	Mcgrath B2	T27N R24W Sec 1	62.37906	-153.65628	30	0.76	14.7	0.002	<10	1930	0.42
118	13231	Tin Creek South	R	C	RC	Mcgrath B2	T27N R24W Sec 1	62.37906	-153.65628	120	1.14	32.9	0.01	<10	720	0.42

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
118	13232	Tin Creek South	R	S	RC	Mcgrath B2	T26N R24W Sec 1	62.37906	-153.65628	132	1	9.9	0.004	<10	500	0.24
119	13085	Veleska South	R	S	OC	Mcgrath B2	T26N R24W Sec 13	62.34800	-153.64482	0.44	0.7	0.6	<0.001	<10	870	0.16
119	13086	Veleska South	R	G	OC	Mcgrath B2	T26N R24W Sec 13	62.34901	-153.64722	0.19	3.45	3.3	0.001	<10	680	0.23
119	13233	Veleska South	R	C	OC	Mcgrath B2	T26N R23W Sec 12	62.34741	-153.64607	0.91	2.14	1	<0.001	<10	530	0.14
119	13234	Veleska South	R	RC	RC	Mcgrath B2	T26N R24W Sec 12	62.34814	-153.64509	0.55	1.02	1	<0.001	<10	1230	0.16
119	13315	Veleska South	R	G	OC	Mcgrath B2	T26N R24W Sec 13	62.34889	-153.64311	1.32	2.95	5.4	0.006	<10	900	0.31
120	13185	Hippie Creek	R	S	OC	Mcgrath B2	T25N R24W Sec 11	62.26730	-153.67247	0.89	0.21	12.6	0.003	<10	650	0.46
120	13186	Hippie Creek	R	C	OC	Mcgrath B2	T25N R24W Sec 11	62.26730	-153.67247	0.55	0.38	7	0.001	<10	600	0.28
120	13264	Hippie Creek	R	C	OC	Mcgrath B2	T25N R24W Sec 11	62.26739	-153.67115	106	0.07	229	0.053	<10	20	0.15
120	13332	Hippie Creek	R	S	OC	Mcgrath B2	T25N R24W Sec 11	62.26736	-153.67020	0.61	2.91	2	0.004	<10	240	1.15
121	13391	Unnamed - SE Windy Fork	R	Rep	OC	Mcgrath A2	T25N R25W Sec 25	62.22209	-153.83800	0.27	0.27	6.5	0.002	<10	1430	0.3
121	13392	Unnamed - SE Windy Fork	R	Rep	OC	Mcgrath A2	T25N R25W Sec 25	62.22209	-153.83800	0.19	0.53	3.6	0.003	10	2430	0.44
122	13269	Bowser Creek headwaters	R	S	FL	Mcgrath A2	T24N R24W Sec 5	62.19467	-153.72078	105	0.09	1220	0.008	<10	340	0.06
122	13270	Bowser Creek headwaters	R	S	OC	Mcgrath A2	T24N R24W Sec 5	62.19578	-153.71595	10.55	1.33	5.6	0.002	<10	540	0.1
122	13271	Bowser Creek headwaters	R	S	OC	Mcgrath A2	T24N R24W Sec 5	62.19414	-153.71696	198	0.1	11.8	0.006	<10	310	<0.05
123	13272	Bowser Creek headwaters	R	S	OC	Mcgrath A2	T24N R24W Sec 5	62.19368	-153.71551	170	0.05	2.6	0.008	<10	30	<0.05
123	13273	Bowser Creek headwaters	R	G	OC	Mcgrath A2	T24N R24W Sec 5	62.19313	-153.71410	1.48	2.21	14.1	<0.001	<10	840	0.38
123	13274	Bowser Creek headwaters	R	Rep	OC	Mcgrath A2	T24N R24W Sec 5	62.19330	-153.71451	0.72	2.26	3.4	<0.001	<10	1390	0.33
124	13360	Bowser Creek NE	R	C	OC	Mcgrath A2	T24N R24W Sec 4	62.19190	-153.69038	84.5	0.4	3.3	0.663	<10	10	0.19
124	13361	Bowser Creek NE	R	C	OC	Mcgrath A2	T24N R24W Sec 4	62.19314	-153.69136	69.6	1.73	3.3	1.09	<10	10	0.51
125	13350	Bowser Creek NE	R	C	OC	Mcgrath A2	T24N R24W Sec 9	62.19084	-153.69199	100	0.17	8.6	1.145	<10	10	0.13
125	13359	Bowser Creek NE	R	SC	OC	Mcgrath A2	T24N R24W Sec 9	62.19057	-153.69247	66.7	0.15	3.2	0.372	<10	<10	0.2
126	13266	Bowser Creek Main	R	SC	OC	Mcgrath A2	T24N R24W Sec 7	62.18397	-153.69991	18.8	0.32	30.7	0.251	<10	<10	0.21
126	13267	Bowser Creek Main	R	G	OC, MD	Mcgrath A2	T24N R24W Sec 7	62.18416	-153.69941	1240	0.12	7470	0.115	<10	<10	0.12
126	13268	Bowser Creek Main	R	C	OC	Mcgrath A2	T24N R24W Sec 7	62.18422	-153.69991	821	0.32	1285	0.054	<10	40	<0.05
126	13333	Bowser Creek	R	S	OC	Mcgrath A2	T24N R24W Sec 9	62.18395	-153.70131	33.4	1.38	15.5	0.146	<10	210	0.45
126	13357	Bowser Creek Main	R	Rep	RC	Mcgrath A2	T24N R24W Sec 9	62.18329	-153.70149	65.6	2.26	9.6	0.004	<10	110	0.87
126	13358	Bowser Creek Main	R	G	OC	Mcgrath A2	T24N R24W Sec 9	62.18204	-153.70093	0.66	5.46	2.8	0.002	<10	1020	0.94
127	13364	Windy Fork SE	R	RC	OC	Mcgrath A2	T24N R25W Sec 31	62.12993	-153.93190	1.54	0.24	23.2	0.004	10	1170	0.29
128	13380	Windy Fork Placer	S	PL		Mcgrath A3	T23N R26W Sec 20	62.07193	-154.07388	0.21	1.04	39.1	0.63	30	300	2.83
129	13365	Windy Fork Eudialite	R	G	FL	Mcgrath A3	T23N R26W Sec 20	62.06255	-154.08657	0.26	0.1	24	0.001	40	40	11.1
130	13378	Windy Fork Placer	S	PL		Mcgrath A2	T23N R26W Sec 28	62.05953	-154.05942	<0.01	0.43	119	0.829	10	230	5.38
131	13379	Windy Fork Pluton - North	R	S	FL	Mcgrath A3	T23N R26W Sec 32	62.03932	-154.06975	<0.01	0.12	17.3	0.001	20	20	12.85
132	13199	West Fork Post R. headwaters	R	RC	OC	Mcgrath A2	T22N R25W Sec 7	62.01048	-153.92319	4.04	1.06	4.5	0.002	<10	970	0.17
132	13363	West Fork Post R. headwaters	R	G	FL	Mcgrath A2	T22N R25W Sec 7	62.01184	-153.92310	2.22	0.15	9	0.018	<10	610	0.09
132	13390	West Fork Post River Head	R	Rep	OC	Mcgrath A2	T22N R25W Sec 7	62.01072	-153.92388	39.5	2.44	6.5	0.152	<10	210	0.82
133	13198	West Fork Post River	R	S	OC	Mcgrath A2	T22N R25W Sec 8	62.00795	-153.89619	0.18	0.15	5	0.001	<10	100	0.17
133	13389	West Fork Post River	R	Rep	OC	Mcgrath A2	T22N R25W Sec 8	62.00811	-153.89742	0.04	0.14	7	0.002	<10	120	0.22
134	13298	Unn West Post River	R	S	OC	Mcgrath A2	T22N R25W Sec 2	62.02839	-153.82106	0.25	0.37	17.2	0.011	<10	1330	0.4
134	13375	Unn. Post River West	R	Rep	OC	Mcgrath A2	T22N R25W Sec 2	62.02759	-153.81916	0.35	0.32	15	0.007	10	1550	0.32
135	13299	Post River Pluton	R	Rep	OC	Mcgrath A2	T23N R25W Sec 15	62.08446	-153.66751	0.16	0.18	4.3	0.074	<10	240	0.67
135	13300	Post River Pluton	R	S	RC	Mcgrath A2	T23N R24W Sec 15	62.08435	-153.66733	2.87	0.25	766	0.137	<10	410	0.95
135	13376	Post River Pluton	R	C	RC	Mcgrath A2	T23N R24W Sec 15	62.08356	-153.66562	0.18	0.18	67.5	0.003	<10	550	0.19
135	13377	Post River Pluton	R	C	OC	Mcgrath A2	T23N R24W Sec 15	62.08375	-153.66506	0.36	0.09	18.1	0.005	<10	460	0.09
136	13261	Post Lake	R	S	FL	Mcgrath A2	T24N R23W Sec 32	62.11606	-153.52758	1.16	1.14	34.3	0.042	<10	<10	0.29
136	13262	Post Lake	R	Rep	OC	Mcgrath A2	T24N R23W Sec 32	62.11626	-153.52788	0.41	4.52	4.3	0.005	10	540	1.33

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Location name	Type	Method	Site	Quadrangle	Township/Range/Section	Latitude	Longitude	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm
136	13263	Post Lake	R	Rep	OC	Mcgrath A2	T24N R23W Sec 32	62.11630	-153.52795	0.32	2.52	4.5	0.034	<10	20	0.38
137	13349	Ellie's Gold	S	PC		Mcgrath A1	T23N R23W Sec 10	62.09841	-153.45729	0.06	2.43	13	0.008	<10	810	0.62
137	13371	Ellie's Gold	S	PC		McGrath A1	T23N R23W Sec 10	62.09841	-153.45729	0.05	1.65	8.3	0.002	<10	930	0.39
138	13341	Unnamed - Terra Cotta Hill 5981	R	Rep	OC	Mcgrath A1	T23N R23W Sec 23	62.06349	-153.44638	22.7	4.92	120	0.001	<10	530	0.39
139	13339	Unnamed - Terra Cotta Sec 36	R	Rep	OC	Mcgrath A1	T23N R23W Sec 36	62.04403	-153.41270	0.74	0.97	6.5	0.008	<10	300	0.36
139	13340	Unnamed - Terra Cotta Sec 36	R	Rep	OC	Mcgrath A1	T23N R23W Sec 36	62.04233	-153.41328	3.29	0.85	13.8	0.003	<10	190	0.92
140	13192	Terra Cotta Saddle	R	RC	FL	Mcgrath A1	T22N R23E Sec 11	62.00990	-153.44164	2.27	1.37	12.7	0.005	<10	520	0.2
140	13193	Terra Cotta Saddle	R	S	FL	Mcgrath A1	T22N R23W Sec 11	62.00987	-153.44585	3.74	0.62	11300	0.676	<10	100	0.19
141	13197	Terra Cotta Mountain	R	S	FL	Lime Hills D2	T21N R23W Sec 4	61.94334	-153.50356	1.06	0.2	1330	0.469	50	190	0.08
142	13194	Terra Cotta Mountain	R	S	OC, RC	Lime Hills D2	T21N R23W Sec 4	61.94279	-153.50856	3.58	1.5	445	0.007	10	770	0.29
142	13195	Terra Cotta Mountain	R	S	OC	Lime Hills D2	T21N R23W Sec 4	61.94281	-153.50859	4.54	2.34	544	0.008	10	840	0.3
142	13196	Terra Cotta Mountain	R	S	FL	Lime Hills D2	T21N R23W Sec 4	61.94335	-153.50682	0.63	1.35	405	0.002	<10	970	0.38
142	13282	Terra Cotta Mountain	R	RC	OC	Lime Hills D1	T21N R23W Sec 4	61.94343	-153.51016	0.28	3.27	257	0.006	<10	1620	0.62
142	13283	Terra Cotta Mountain	R	Rep	FL	Lime Hills D1	T21N R23W Sec 4	61.94357	-153.50922	0.58	1.58	78.2	0.004	10	960	0.36
142	13286	Terra Cotta Mountain	R	Rep	OC	Mcgrath A3	T24N R28W Sec 4	61.94355	-153.50826	103	5.9	437	0.057	<10	200	0.31
142	13287	Terra Cotta Mountain	R	S	OC	Lime Hills D1	T21N R23W Sec 4	61.94373	-153.50839	72.2	4.31	1950	0.066	<10	110	0.1
143	13281	Terra Cotta Mountain	R	Rep	FL	Lime Hills D1	T21N R23W Sec 4	61.94170	-153.51131	0.37	0.11	534	0.011	20	90	<0.05
144	13293	Terra - Fish Creek	R	S	OC	Lime Hills D2	T19N R24W Sec 31	61.78513	-153.70751	262	0.02	314	239	<10	<10	0.06
144	13294	Terra - Fish Creek	R	C	OC	Lime Hills D2	T19N R24W Sec 31	61.78517	-153.70745	139	1.16	6020	145	<10	490	0.39
145	13288	Terra North	R	S	OC	Lime Hills D2	T19N R24W Sec 31	61.77069	-153.70764	636	0.07	1355	130.5	<10	30	<0.05
145	13289	Terra North	R	C	OC	Lime Hills D2	T19N R24W Sec 31	61.77070	-153.70764	208	0.5	16500	71.8	<10	360	0.29
145	13290	Terra North	R	S	OC	Lime Hills D2	T19N R24W Sec 31	61.77096	-153.70780	808	0.12	2030	230	<10	60	0.09
145	13291	Terra North	R	C	OC	Lime Hills D2	T19N R24W Sec 31	61.77106	-153.70798	221	0.46	11700	39.1	<10	480	0.3
145	13292	Terra North	R	C	OC	Lime Hills D2	T19N R24W Sec 31	61.77279	-153.70898	9.16	2.14	16000	6.9	<10	420	0.45
146	13295	Terra South	R	G		Lime Hills C2	T19N R24W Sec 17	61.74188	-153.67683	0.86	1.48	1195	1.195	<10	1380	0.73
146	13296	Terra South	R	S	FL	Lime Hills C2	T19N R24W Sec 17	61.74172	-153.67679	0.82	0.07	1950	0.627	<10	60	0.06
146	13372	Terra South			SL	Lime Hills C2	T19N R24W Sec 17	61.74029	-153.68004	1.68	1.63	2290	1.895	<10	1130	0.87
146	13373	Terra South	R	Rep	FL	Lime Hills C2	T19N R24W Sec 17	61.74034	-153.67860	0.14	0.09	813	0.508	<10	70	0.07
147	13297	Terra South	R	S	RC	Lime Hills C2	T19N R24W Sec 17	61.73974	-153.67470	0.25	0.09	184.5	0.09	<10	260	0.1
147	13374	Terra South	R	Rep	OC	Lime Hills C2	T19N R24W Sec 17	61.73970	-153.67270	0.18	0.11	962	0.015	<10	190	0.05

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Map no.	Sample no.	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm
136	13263	0.26	2.32	0.56	9.54	74.1	9	0.96	403	>15	5.41	0.2	0.27	0.2	0.073	0.03	5.6	8.9	0.22	260	1.12	0.06	0.39	98.2	230
137	13349	0.12	0.75	0.19	40.7	11	96	2	25.3	3.81	7.36	0.1	0.36	0.04	0.037	0.35	20.6	19.2	0.72	647	1.38	0.14	0.28	23.5	660
137	13371	0.09	0.5	0.1	25.7	7.2	102	1.78	14.6	2.66	5.96	0.09	0.56	0.05	0.033	0.26	13	19.5	0.46	409	3.34	0.13	0.23	15.8	480
138	13341	9.66	1.88	17.85	8.99	13	39	10.35	107.5	4.96	9.7	0.1	0.04	1.14	0.266	0.09	3.8	16.6	1.24	2660	2.91	0.1	0.2	12.6	820
139	13339	0.26	0.39	0.46	16.5	14.6	95	1.77	162	2.08	3.12	0.05	0.1	1.23	0.023	0.09	7.3	27.3	0.54	326	3.59	0.01	0.2	144	560
139	13340	15.45	1.04	12.95	7.73	38.9	94	0.46	219	2.72	5.31	0.15	0.05	5.08	0.597	0.02	3.7	23.5	0.68	543	0.97	0.02	<0.05	439	580
140	13192	2.55	0.33	1.2	11.6	10.4	127	1.82	197.5	2.73	4.56	0.05	0.04	74.2	0.066	0.15	5.2	22.2	0.82	307	6.25	0.03	0.25	32.1	470
140	13193	3.23	0.46	5.05	15.2	3.5	99	1.77	47.3	3.36	2.01	0.08	0.04	156	0.056	0.1	8.2	7.8	0.34	541	22.2	<0.01	<0.05	7.8	180
141	13197	25.2	0.23	0.3	9.94	121	62	0.21	177.5	2.72	0.73	0.11	0.09	6.34	0.021	0.02	4.2	3.2	0.03	75	3.3	<0.01	<0.05	90.1	1210
142	13194	2.85	0.59	0.55	27.1	32	67	1.61	500	4.84	6.05	0.14	0.24	9.89	0.526	0.18	12.8	21.6	0.72	397	2.86	0.03	<0.05	21.8	990
142	13195	4.68	0.18	6.7	16.7	69.8	32	1.35	305	9.81	8.09	0.19	0.4	9.38	0.9	0.16	7.2	27.2	0.72	1660	3.82	0.01	<0.05	18.3	820
142	13196	10.05	0.18	0.53	27.2	5.7	46	2.34	158.5	4.71	9	0.16	0.42	6.27	0.08	0.19	12.8	26.9	0.66	250	1.21	0.03	<0.05	9.9	840
142	13282	2.94	3.63	0.35	21.1	18.4	279	4.92	80.5	4.93	7.53	0.09	0.03	0.1	0.213	0.22	10.4	77.6	3.25	972	0.76	0.03	<0.05	72.6	700
142	13283	4.72	4.08	2.27	19.4	10.7	81	3.72	57	3.67	3.7	0.05	0.06	0.07	0.1	0.24	10	31.9	1.61	1105	1.56	0.01	<0.05	56.4	690
142	13286	86.1	0.14	1.87	13.2	25.1	91	1.16	5830	>15	12.9	0.27	0.07	0.21	19.1	0.12	6.6	69	1.31	1480	0.87	<0.01	<0.05	43	860
142	13287	267	0.05	0.01	23.4	7.1	94	0.63	837	>15	14.7	0.38	0.03	0.13	3.36	0.05	13.6	31.3	0.91	681	2.1	<0.01	<0.05	15.2	770
143	13281	0.29	0.9	0.61	21.9	35.2	110	0.09	160	1.26	0.43	<0.05	0.03	0.18	0.254	0.01	12.6	1.5	0.41	1005	3.35	<0.01	<0.05	148	240
144	13293	0.85	0.05	2.02	0.19	0.7	98	0.06	401	0.21	0.1	<0.05	<0.02	0.28	0.041	0.01	<0.2	0.5	0.02	28	3.36	<0.01	<0.05	4.8	<10
144	13294	1.04	0.47	0.77	7.2	13.4	139	2.11	175	1.71	3.73	0.07	0.05	0.2	0.029	0.36	3.5	23	0.9	214	0.7	0.1	0.23	26.6	340
145	13288	1.84	0.02	2.86	0.6	1.5	99	0.17	466	0.56	0.23	<0.05	<0.02	0.37	0.271	0.01	0.2	1.6	0.04	106	0.41	<0.01	<0.05	8.3	20
145	13289	0.28	0.2	2.31	17	9	64	2.04	439	2.39	1.31	<0.05	<0.02	0.12	0.032	0.11	9.3	9.7	0.18	884	2.25	0.03	<0.05	32.3	550
145	13290	0.48	0.05	1.3	2.58	3.5	100	0.44	460	0.63	0.34	<0.05	<0.02	0.32	0.032	0.03	1.2	2.8	0.06	180	0.39	0.01	<0.05	8.4	50
145	13291	2.49	0.09	3.2	17.9	10	64	1.5	417	2.62	1.36	<0.05	<0.02	0.18	0.14	0.12	9.1	10.8	0.17	477	2.11	0.02	<0.05	26.1	330
145	13292	0.45	4.22	1.26	14	23.9	267	0.62	39.1	3.92	5.57	0.07	0.02	0.09	0.057	0.14	6.6	33.1	2.85	1045	0.49	0.03	<0.05	43.7	510
146	13295	0.22	0.19	0.43	29.3	21	64	2.78	82.4	3.86	4.35	0.06	0.11	0.09	0.024	0.29	14	26.4	0.69	812	4.77	0.01	0.07	94.3	740
146	13296	0.03	0.46	0.05	7.82	4.7	93	0.31	10.8	0.78	0.29	<0.05	<0.02	0.1	0.006	0.04	4.2	0.6	0.21	173	0.62	<0.01	<0.05	12.5	180
146	13372	0.98	0.4	1.22	18.7	37.9	53	5.47	144.5	5.01	3.45	0.11	0.04	0.25	0.218	0.19	9	29	0.85	1890	5.16	0.02	0.11	123	1060
146	13373	0.22	0.59	0.54	2.86	2.3	108	0.19	12.6	1.15	0.31	<0.05	<0.02	1.02	<0.005	0.02	1.4	1.5	0.29	237	0.76	<0.01	<0.05	11.6	170
147	13297	0.01	0.28	0.14	4.62	3.4	95	0.41	27.6	0.74	0.34	<0.05	0.05	0.06	0.014	0.04	2.2	1.5	0.12	194	3.62	<0.01	<0.05	18.6	290
147	13374	0.18	0.02	0.19	1.76	2.5	91	0.13	26.1	1.54	0.45	<0.05	<0.02	0.38	<0.005	0.02	0.9	1.4	0.07	87	3.23	<0.01	<0.05	10	140

Table 2. Analytical results of rock, stream sediment, soil, placer, pan concentrate, and sluice concentrate samples, Aniak Mining District, Alaska

Map no.	Sample no.	Pb ppm	Pd ppm	Pt ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
136	13263	33.4	0.003	0.006	1.3	0.007	>10	0.53	1.6	4.7	12	81.2	0.01	0.31	1.4	0.05	0.03	0.44	13	<10	4.24	74	3.7
137	13349	7.4	0.001	0.007	20.1	0.001	<0.01	0.85	7.5	0.3	<5	73.5	<0.01	0.02	6.6	0.23	0.12	1.69	121	10	9.3	85	10.4
137	13371	6	<0.001	0.005	13.7	0.001	<0.01	0.58	5.5	0.8	<5	40.2	<0.01	0.06	5.7	0.13	0.1	1.27	72	<10	8.48	57	16.2
138	13341	4320	<0.001	<0.005	3.5	0.004	0.36	8.83	5.1	8.8	10	102	<0.01	1.22	1.2	0.11	0.12	0.12	68	<10	5.81	1755	0.7
139	13339	9	0.001	<0.005	5.5	0.003	0.24	0.42	2.6	0.5	<5	11.1	<0.01	0.04	3	0.05	0.06	0.21	41	<10	7.93	69	1.6
139	13340	31.2	<0.001	<0.005	2.3	0.009	0.63	1.8	3.2	1.7	71	20.5	<0.01	0.26	1.2	0.06	0.03	0.17	34	10	6.05	531	1.1
140	13192	20.9	<0.001	0.006	10.1	0.002	0.07	0.3	4.8	1.3	<5	29.4	<0.01	0.88	3.1	0.07	0.13	0.56	70	<10	7.2	274	0.7
140	13193	304	<0.001	<0.005	8.2	0.005	1.86	176	1.2	10.3	<5	10.8	<0.01	0.36	1.9	<0.01	0.1	0.39	21	<10	4.66	500	0.9
141	13197	19.6	0.004	<0.005	1.3	0.002	1.63	27.2	1.9	18.2	<5	6	<0.01	4.17	4	<0.01	0.55	1.24	11	<10	8.74	26	2.3
142	13194	34.8	0.001	<0.005	9.8	0.001	0.66	7.87	3.8	12.9	5	24.9	<0.01	0.09	9.2	0.01	0.22	1.6	35	<10	8.71	73	7.5
142	13195	147.5	<0.001	<0.005	7.4	0.001	0.68	8.86	2.1	15.9	16	7.4	<0.01	0.12	12.4	<0.01	0.2	4.39	21	10	9.65	496	10.8
142	13196	36.2	<0.001	<0.005	12	<0.001	1.43	2.31	2.3	21	<5	8.7	<0.01	0.28	12.8	<0.01	0.16	1.74	32	10	7.9	49	11.3
142	13282	15.8	0.014	0.011	9.3	<0.001	0.58	4.56	16.8	3.1	16	333	<0.01	0.04	1.2	<0.01	0.12	0.1	120	<10	12.7	91	0.6
142	13283	47.8	0.002	0.007	10.2	0.001	0.37	6.37	5	1.9	7	254	<0.01	0.08	1.4	0.01	0.16	0.15	50	<10	8.38	248	1.5
142	13286	251	0.002	<0.005	4.4	0.001	0.94	14.8	8.4	26	159	8.4	<0.01	0.52	2	0.01	0.13	0.25	134	10	5.07	278	2
142	13287	104	0.002	<0.005	1.6	0.001	0.69	57.7	6.4	23.7	199	3.1	<0.01	0.37	1.2	0.01	0.07	0.15	118	10	2.16	70	1.2
143	13281	33.4	0.026	0.02	0.7	0.001	0.06	8.72	0.5	1.6	5	34.4	<0.01	0.15	0.8	<0.01	<0.02	0.13	7	<10	3.19	42	0.8
144	13293	45.3	<0.001	<0.005	0.3	0.001	0.04	131.5	0.3	0.4	<5	1.5	<0.01	0.05	0.2	<0.01	<0.02	<0.05	2	<10	0.12	21	<0.5
144	13294	37.9	<0.001	0.005	17.2	<0.001	0.26	69.4	2.6	1.3	<5	32.6	<0.01	0.11	2.4	0.1	0.1	0.43	41	<10	2.81	45	0.5
145	13288	60.7	0.001	0.016	0.4	<0.001	0.05	250	0.3	0.8	8	3.3	<0.01	0.04	<0.2	<0.01	<0.02	<0.05	2	<10	0.18	37	<0.5
145	13289	39	0.001	0.01	5.6	0.001	0.2	168	3.5	1.6	<5	38.3	<0.01	0.07	1.8	0.01	0.04	0.23	23	100	3.36	85	<0.5
145	13290	80.7	0.001	0.008	1.5	<0.001	0.06	129.5	0.6	0.5	10	12.6	<0.01	0.04	0.3	<0.01	<0.02	<0.05	5	<10	0.52	42	<0.5
145	13291	276	0.001	<0.005	5.8	<0.001	0.07	103	3.3	2.1	<5	64.9	<0.01	0.13	2.9	<0.01	0.04	0.26	21	30	2.95	79	<0.5
145	13292	16.8	0.001	0.005	5.8	<0.001	0.68	14	15	1.3	<5	165	<0.01	0.04	3.9	0.01	0.04	0.52	102	60	8.65	77	<0.5
146	13295	11.3	0.002	0.005	19.8	0.002	0.11	19.6	6.3	1.6	<5	18	<0.01	0.08	10.8	0.02	0.19	1.44	63	30	8.79	108	2.7
146	13296	1.8	0.001	<0.005	3.2	<0.001	0.19	6.44	1.5	0.8	<5	53.7	<0.01	0.08	0.4	<0.01	0.04	0.09	3	10	2.28	10	<0.5
146	13372	20.7	0.005	0.005	13.9	0.002	0.24	39.1	7.6	2.8	<5	70.1	<0.01	0.43	5.3	0.02	0.28	2	54	60	11.9	231	0.8
146	13373	12.6	<0.001	0.005	1.5	<0.001	0.04	1.61	1.1	0.3	<5	62.7	<0.01	0.03	0.4	<0.01	0.03	0.09	3	10	1.78	127	<0.5
147	13297	2.1	<0.001	<0.005	3	<0.001	0.06	16.8	1.1	0.6	<5	27.5	<0.01	0.02	1.3	<0.01	0.03	0.17	7	<10	2.26	17	1
147	13374	12.2	<0.001	<0.005	1.5	<0.001	0.12	1.58	0.4	1.9	<5	6.7	<0.01	0.38	0.4	<0.01	0.02	0.12	6	10	0.7	45	<0.5

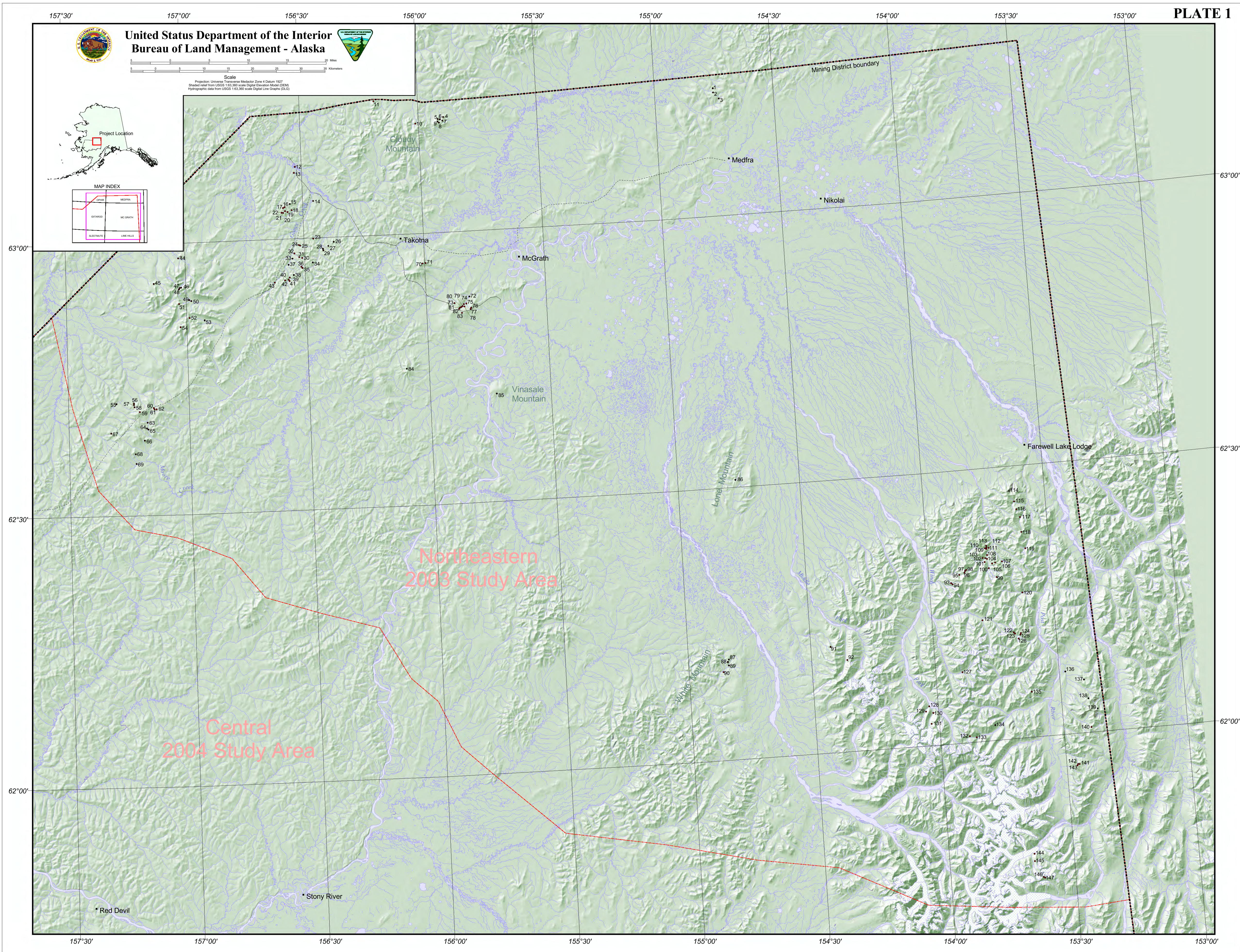


PLATE 1. Sample location map of the northeastern part, Aniak Mining District study area, Alaska.