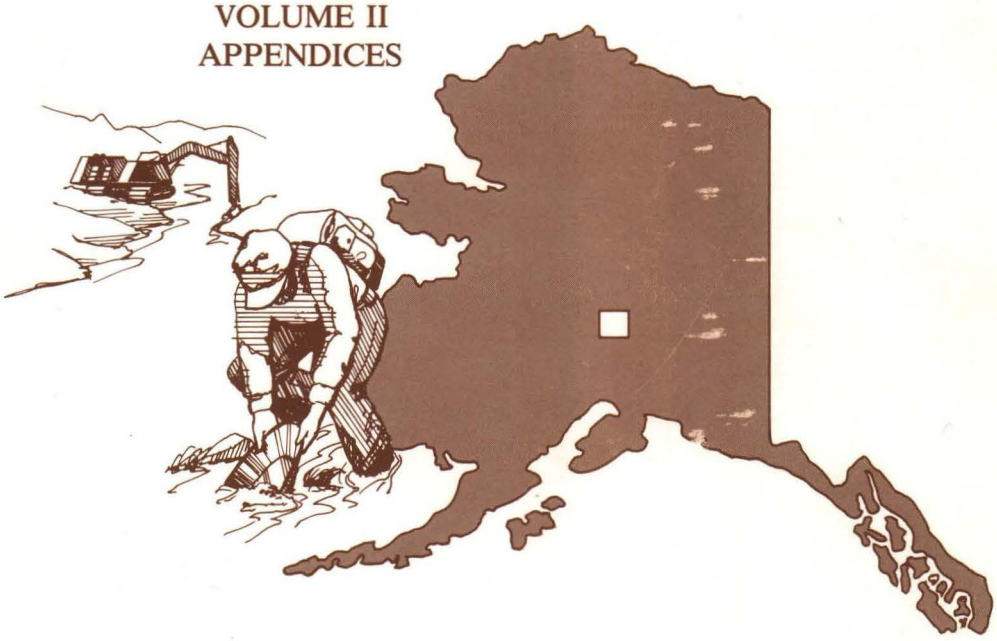
1983 Mineral Resource Studies

# Kantishna Hills and Dunkle Mine Areas Denali National Park and Preserve, Alaska

VOLUME II
APPENDICES



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Salisbury & Dietz, Inc.

# APPENDIX A

# PLACER

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# PLACER

## MINE MONITORING

Twenty-one separate mining operations were monitored during the 1983 season. Mine locations are shown on plates 3 and 7. The primary purpose of mine monitoring was to determine the grade of gold in the mined placer deposits. It also allowed us to observe the character of the surficial deposits, distribution and character of the recovered gold, and the mining methods and technology being utilized. The results represent the recoverable gold from deposits currently being mined. These large samples, usually hundreds to thousands of cubic yards, tend to offset deposit irregularities, average the high and low gold concentrations that affect smaller samples, and therefore give reliable data for estimation of the grade of the placer deposits.

Details on the observations made and work accomplished at each mine site can be found in the following section "Placer Mine Operations Reports".

The active mine cuts were mapped and the volume of mined gravel measured at 12 operations. In two other examinations, in which a backhoe was utilized to feed the washing plant, a bucket count was kept to determine the volume of gravel mined. At two small operations the volume of gravel mined per hour was used to determine the volume of a sample. If the volume of excavated gravel was not physically measured, an estimate of the gravel mined was made and the operator's reported gold recovery was used to estimate the grade of the deposit. In three instances the operations were not at a mining stage and the value of the deposit was not determined.

After determining the volume of gravel mined and weighing the recovered placer gold, the grade of gold in the ground was determined in oz/cy. Usually, the gold was recovered at the miner's camp utilizing his facilities; in a few cases the concentrates were processed at the field laboratory at Kantishna.

In order to place a value on the placer gold extracted from a mine, the following factors must be considered:

1) Fineness - The proportion of gold in a natural alloy, expressed in parts per thousand. Placer gold is not 100% pure and contains varying proportions of silver, copper, and other substances.

2) Spot price - Gold is openly bid for on the market and spot price is this report is the price buyers are willing to pay for it as quoted on the New York COMEX.

3) Size of gold particles.

   a) "Jewelry" gold - Gold over 1/16 in. in size including larger nuggets. Because of its size the gold can be worked naturally into a jewelry design.

   b) Nuggets - Nugget gold refers to gold over 1/4 in. in size in this report. This gold usually brings even higher prices because of its intrinsic value and greater marketability.

A wide range of gold particle size is present. Commonly, a large percentage of the gold recovered was coarse "jewelry" grade gold. An allowance must be made for the worth of "jewelry" gold because it brings higher prices on the market regardless of its fineness. An average of the selling price obtained for different sizes and character of jewelry gold was obtained from the miners during the course of the field season. If the percentage of each size fraction were known a formula was applied to determine an adjustment factor. The factor can be multiplied by the price of gold to determine a realistic value for the contained placer gold in each deposit. Gold grains measuring 1/16 tc 1/4-in. were found to return up to 1.5 times spot price, regardless of their fineness. For evaluation this size fraction was considered to be worth spot price. Nugget gold (greater than 1/4 in.) was found to be worth from 1.5 to 2.0 times the spot price for gold and was considered to be 1.5 times its spot value. Fine gold (less than 1/16

in.) was valued by multiplying the weight of the placer gold recovered by fineness figures quoted by the operator, who in most cases has had the fine gold smelter assayed. Therefore, the following formula was used:

| | | |
|---|---|---|
| [weight percent fine placer gold (less than 1/16 in.] x [gold fineness] x [spot price of gold] | = | Value A fraction |
| [weight percent jewelry gold (1/16 to 1/4 in.)] x [spot price of gold] | = | Value B fraction |
| [weight percent nugget gold (greater than 1/4 in.)] x [1.5 x spot price of gold] | = | Value C fraction |
| 100% | | Total Value |

| | | |
|---|---|---|
| Total Value/100% | = | Value of Gold |
| Gold Value/Spot Price | = | Price Adjustment Factor |

Overall the value of all placer gold extracted and sold from the Kantishna District will conservatively average 0.83 times the spot price of gold.

Of the mining operations observed, the placer gold grades of the deposits ranged from 0.005 to 0.062 oz/cy and averaged 0.022 oz/cy. Gold content ranged from 0.004 to 0.045 oz/cy and averaged 0.016 oz/cy.

Two values were obtained for the gold content in the placer ground at three of the smaller operations. A value was calculated for the total volume of gravel present in the deposit and another value for the smaller volume of gravel actually mined and processed through the mine plant.

Production information for other deposits mined prior to the 1983 examination, was obtained by reviewing actual production records made available by the operator, or from operator's knowledge about the area.

Identifiable mine cuts excavated prior to the 1983 season were measured whenever possible to help evaluate the actual grade of the deposit.

Table K-3 shows pertinent production data from placer mining operations observed in 1983.

Table K-3 - Kantishna Mining District placer mine monitoring summary

| Mine Location Number | A Placer Gold (oz) | B Fineness (.000) | C A • B (oz) | D Gravel Volume Mined (cy) | Placer Gold Grade (A/D) (oz/cy) | Gold Grade (C/D) (oz/cy) | Fine Gold (Wt. %) | Jewelry Gold (Wt. %) | Nugget Gold (Wt. %) | Adj. Factor* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 41.00 | 0.700 | 28.700 | 3300 | 0.012 | 0.009 | 73 | ? | 27 | 0.92 |
| 2 | 3.10 | 0.800 | 2.480 | 100 | 0.031 | 0.025 | 18 | 30 | 52 | 1.22 |
| 3 | 0.21 | 0.800 | 0.168 | 40 | 0.005 | 0.004 | 100 | | | 0.80 |
| 4A | 312.00 | 0.710 | 221.520 | 5000 | 0.062 | 0.044 | ? | ? | ? | |
| 4B | 364.86 | 0.710 | 259.051 | 14000 | 0.026 | 0.019 | 72 | 15 | 13 | 0.86 |
| 4C | 210.64 | 0.710 | 149.554 | 25000 | 0.008 | 0.006 | ? | ? | ? | |
| 5 | 65.46 | 0.700 | 45.822 | 2200 | 0.030 | 0.021 | 51 | 19 | 30 | 1.00 |
| 6 | 354.30 | 0.680 | 240.924 | 13000 | 0.027 | 0.019 | 86 | 11 | 3 | 0.74 |
| 7 | 110.70 | 0.700 | 77.490 | 2400 | 0.046 | 0.032 | 87 | 7 | 6 | 0.77 |
| 8 | 173.60 | 0.800 | 138.880 | 9400 | 0.018 | 0.015 | 60 | 34 | 6 | 0.91 |
| 9 | 41.87 | 0.800 | 33.496 | 2300 | 0.018 | 0.015 | 71 | 29 | ? | 0.86 |
| 10 | 106.35 | 0.700 | 74.445 | 2800 | 0.038 | 0.027 | 85 | 15 | ? | 0.75 |
| 11 | 12.79 | 0.777 | 9.938 | 220 | 0.058 | 0.045 | 65 | 35 | ? | 0.86 |
| 12 | 126.78 | 0.750 | 95.085 | 5500 | 0.023 | 0.017 | 65 | 35 | ? | 0.84 |
| 13 | 47.90 | 0.760 | 36.404 | 2100 | 0.023 | 0.017 | 85 | 15 | ? | 0.80 |
| 14 | 1.50 | 0.760 | 1.140 | 60 | 0.025 | 0.019 | 100 | ? | | 0.76 |
| 15 | 0.10 | 0.760 | 0.076 | 2 | 0.050 | 0.038 | 1 | 99 | ? | 1.00 |
| 16 | 200.00 | 0.760 | 152.000 | 14000 | 0.014 | 0.011 | 50 | 50 | ? | 0.88 |
| 17 | 350.00 | 0.780 | 273.000 | 15000 | 0.023 | 0.018 | ? | ? | ? | |
| TOTAL | 2523.16 | | 1840.17 | 116422 | | | | | | |
| AVERAGE | | 0.729 | | | 0.022 | 0.016 | | | | 0.83 |

* [weight % fine-grain gold (less than 1/16 in.)] x [gold fineness] x [spot price of gold] = Value A fraction

[weight % jewelry gold (1/16 in. to 1/4 in.)] x [spot price of gold] = Value B fraction

[weight % nugget gold (greater than 1/4 in.)] x [1.5 x spot price of gold] = Value C fraction

100% Total Value

Total Value/100% = Value of Gold

Gold Value/Spot Price = Price Adjustment Factor

# PLACER MINE OPERATIONS REPORT

PROPERTY: Location 1, Yellow Creek, NW Sec. 3, T16S, R17W

DEPOSIT DESCRIPTION: Coarse, subangular to subrounded alluvium an average of 5-ft deep. Bedrock schist and marble bedrock are mined to an average of 6-in. deep. The relatively narrow drainage was being mined at the juncture of Yellow and Ruby Creeks adjacent to a mine cut made in 1982 by the present operators. The creek is from 30- to 80-ft wide and the stream gradient averaged 4 to 5 degrees.

Gold is concentrated in the lower 2 to 3 ft of gravels and into bedrock. The gold is usually very rough and often crystalline and dendritic or wiry and quartz bearing nuggets are also common.

MINING EQUIPMENT: Two D-8 Cat® dozers, Cat® 955 loader, 60 cy/hr. capacity shaker screen and sluice plant (stationary), 10-in. pump and collapsible hose, 45 KW generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two (living) trailers, one camper, two 4x4 pickups, one pickup, two-ton flatbed truck, welding equipment, fuel tanks.

MINING AND CLEANUP PROCESSING METHOD: Washing plant is set up downstream and ramped from above for feeding pay gravels with the loader. Dozer pushes pay gravels up to 400 ft downstream to loader. Other dozer removes and levels tailings. Creek is dammed above for washing water and settling ponds constructed below plant. The plant has a 4 ft x 20 ft long sluice which utilizes expanded metal riffling above a rubber matting for capturing gold.

The concentrates are screened to minus 4 mesh and hand picked. The remaining concentrate is run over a Carter shaking table. Some of this final concentrate is hand picked, the rest is sent to the smelter.

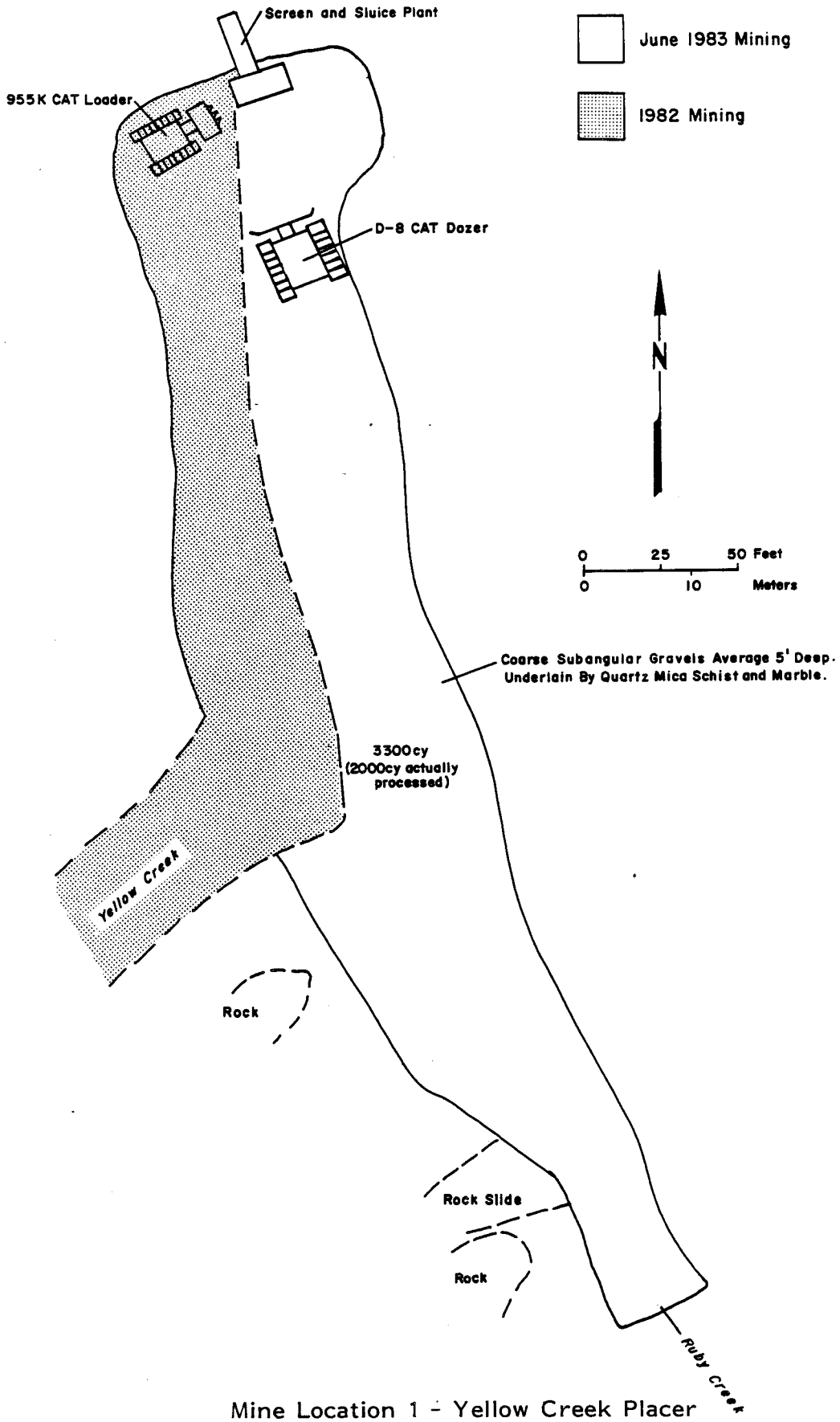
WORK ACCOMPLISHED: The cut was mapped and a total volume of material moved was calculated at 3,300 cy. Only the lower 3 ft of gravel and bedrock were actually mined. Total volume of material actually mined was approximately 2,000 cy. The cleanup was processed in camp. After 11 oz of very coarse gold were separated, the rest of the concentrate was taken to Anchorage for smelting. A total of 41 oz of placer gold was recovered. The placer gold grade of the gravels is 0.012 oz/cy or 0.02 oz/cy for the gravel actually mined. Gold content based on 700 fine is 0.009 oz Au/cy or 0.014 oz Au/cy for the gravel actually mined. Eleven ounces of the gold were very rough nuggets, often crystalline jewelry grade material.

| | | | |
|---|---|---|---|
| 27% | @ $600 | = | $16200 |
| 73% | @ $280 | = | $20440 |
| 100% | | | $36640/100 = 366.4/400 = 0.92 factor |

A factor of 0.92 can be multiplied by the spot price of gold to determine the approximate value of placer gold produced in the area.

REMARKS: Coarse nugget gold was very rough and often crystalline or dendritic gold of remarkable quality. This gold is especially valuable and can be sold for over $1,000/oz at the present world price for gold. The value of the coarse gold enhances the value of the mined ground considerably.

At least 1/2 mile of 20- to 30-ft-wide virgin gravels of a similar nature are present upstream and test very well according to the miners and a small pan test by the author. Several areas of considerable size are left on the sides of present cuts on Yellow Creek. These can probably be mined by small scale hydraulic or dredge methods.




Mine Location 1 - Yellow Creek Placer
N.E. Sec.3, T.16 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 2, Eureka Creek, SE Sec. 13, T16S, R18W

DEPOSIT DESCRIPTION: Shallow stream deposits 50- to 75-ft wide. Approximately 80% of the lower creek has been mined several times over although the owner reports he will mine it again. A few areas of virgin gravels still remain on the sides of the drainage and a narrow gorge approximately 1/2 mile upstream from the mouth is up to 25-ft wide and contains mostly virgin gravels (some handworked) from 2- to 5-ft deep. Gravels are coarse, subangular with up to 2% large boulders. Stream gradient is at or below 5 degrees. Gravels near the mouth contain mostly local gravels but also contain some glacial clasts indicating glacier from Moose Creek at one time filled the mouth.

Present mine cut on the steep sidebanks of the drainage approximately 15 ft above present stream level. A 3- to 5-ft-deep perched gravel deposit on bedrock was uncovered by the dozer. This is in turn overlain by a variable thickness of soil and colluvium. Alluvial material is evident on the steep side hills all along the length of the claims; steep reefs of brittle schist bedrock underlie the perched gravels.

A flat terrace over 100 ft above the mouth of the stream on both sides of the drainage is underlain by gold-bearing alluvial material. This alluvium is both of glacial and local origin. Test pitting by the owner indicates good gold values.

Fifty-two percent of the gold recovered from the recent mine cut was over 1/4 in. in size and fairly rough, although some of the larger pieces were well worn and rounded. Another 30% of the gold was over 1/16 in. in size. Abundant pyrite, galena, and magnetite in the concentrates.

MINING EQUIPMENT: Medium capacity stationary shaker screen and sluice plant, Cat® D-8 bulldozer, D-4 dozer, 955K Cat® loader, PH® 1 1/2 cy bucket excavator, 6-in. pump and collapsible hose, 75 KW ONAN® generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: 4x4 one-ton fuel truck, 4x4 Blazer, large boom truck, three living trailers, three wood buildings, welding equipment.

MINING AND CLEANUP PROCESSING METHOD: Two men work 12 hr/d with the help of four children. Washing plant is setup above creek level and fed with bucket. Dozer is used to excavate and push pay gravels to the plant. Small dozer is used to remove and level tailings. Sump is constructed above for wash water and settling pond constructed below plant.

WORK ACCOMPLISHED: The author monitored a cut that was made into the steep hillside to uncover the source of alluvial float. A mixture of bedrock, alluvium, and mostly colluvial material was excavated and run through the washing plant. A bucket count was made as mining progressed and using a swell factor approximately 100 cy of bank run material were washed through the plant in 3 hr.

The sluice was cleaned and all material was screened to minus 1 mesh and run over mini-sluice. Mini-sluice concentrates were hand picked. Rest of concentrate was screened to 1/16 in. and hand picked material below 1/16 in. was run over the Deister table and spiral wheel and tailings were amalgamated. Total placer gold weighed was 3.1 oz. Placer gold grade of the deposit is 0.031 oz/cy. At 800 fine the gold content is 0.025 oz Au/cy.

| | | |
|---|---|---|
| 1.613 | oz were over 1/4 in. in size | (52%) |
| 0.93 | oz were over 1/16 in. in size | (30%) |
| 0.46 | oz were under 1/16 in. | (18%) |

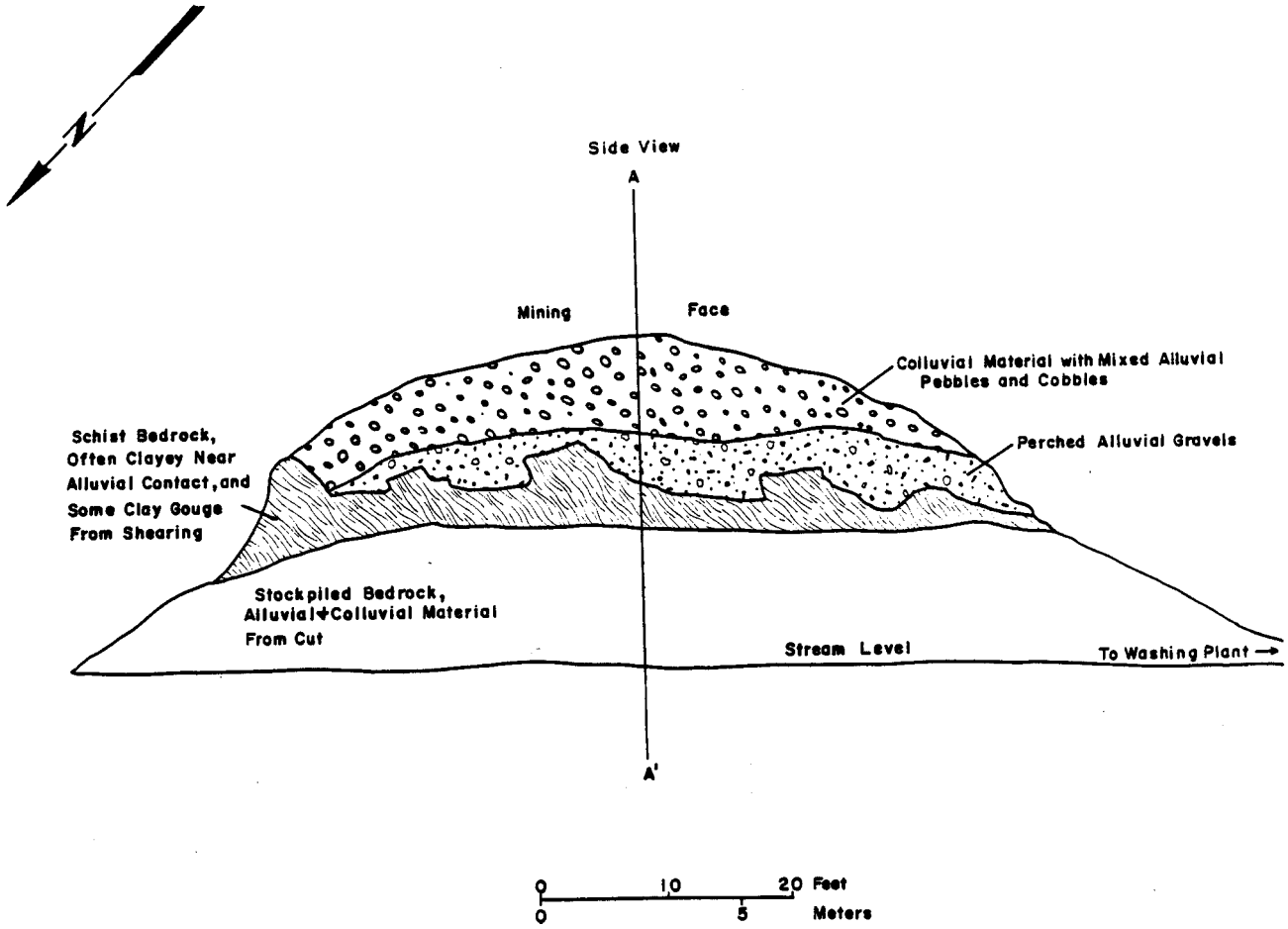
52% @ $600 = $31200
30% @ $400 = $12000
18% @ $320 = $ 5760
$48960/100 = 489.6/400 = 1.22 factor

A factor of 1.22 can be multiplied by the spot price of gold to determine the approximate value of placer gold produced in the area.

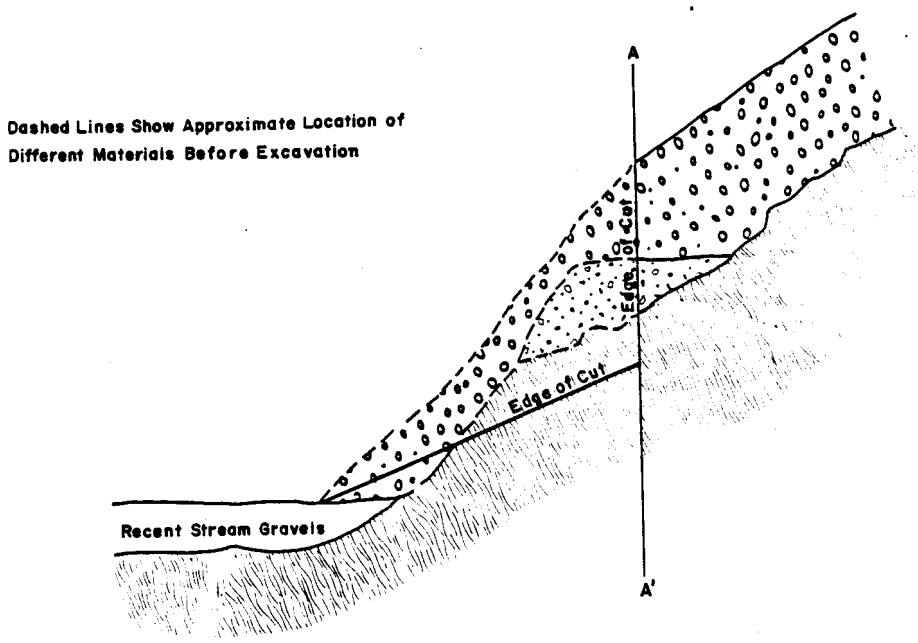
REMARKS: Subsequent test of material on the large terrace above the stream indicates gravels of economic grade are present. The owner was planning to build a road to that area for next season's (1984) mining.

The plant was moved to the mouth of the gulch upstream to mine virgin gravels at that location. The results are unknown at this time. A small scale hydraulic monitor and sluice operation were being prepared to mine the perched terrace gravels described above.

The owner also plans on mining sidepay areas left behind by previous mining using small scale methods. The areas that have been mined (tailings) still show good tests by panning and occasional nuggets are panned from previously worked gravels.




Cross Section Sketch Mine Location 2




Sketch of Mine Location 2
S.E.Sec.13, T.16 S.,R.18 W.

## PLACER MINE OPERATIONS REPORT

PROPERTY: Location 3, Spruce Creek, NW Sec. 16, T16S, R16W

DEPOSIT DESCRIPTION: Subangular to subrounded gravels, 3- to 15-ft deep overlie a schist bedrock. The present stream is incised into a large alluvial fan which overlies glacial outwash deposits from Moose Creek. The gravels are commonly overlain by 1 to 6 ft of silty overburden.

Narrow mine cuts near the present stream channel indicate pay-streaks have developed and probably reconcentrated fan and/or glacial gold. Two fairly large cuts were observed in wide areas where the stream gradient had flattened considerably.

Present mining was on a test basis on the margin of a former cut near the mouth of the stream. Gravel being mined was 3- to 5-ft deep overlying a fissile mica schist. Gold recovered is bright and flaky and concentrated on and into the bedrock surface. Most gold is under 16 mesh in size.

MINING EQUIPMENT: JD® 890 1 3/8 cy bucket excavator, Cat® D-6 bulldozer, Case® 450B front end loader, 10-in. pump and flexible hose, 50 cy/hr capacity shaker screen and sluice plant (tire mounted).

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Large living trailer, one-ton service truck, welding equipment, two 4x4 pickups.

MINING AND CLEANUP PROCESSING METHOD: Two men are working the property. The ground is stripped of overburden. Plant is setup and leveled and fed by bucket. The Cat® can be used to push gravels to the bucket if needed. Loader used to remove tailings.

WORK ACCOMPLISHED: The author measured a 40 cy test cut. The sluice concentrate was taken to the lab and processed over the Deister table and spiral concentrating wheel. Tailings were amalgamated. Total placer gold recovered weighed 0.21 ozs. The placer gold grade of the deposit is 0.005 oz/cy. According to the owner the gold is approximately 800 fine. The contained gold in the cut is 0.004 oz/cy.

100% @ $320 = 32000/100 = 320/400 = 0.8 factor

A factor of 0.8 can be multiplied by the spot price of gold to determine an approximate value of placer gold produced in the area.

REMARKS: The miners continued to excavate small mine cuts near the same area. Subsequent visits indicated gold recovery was about the same. A private consultant tested several pit samples in the area. Some holes were over 18 ft and bedrock had not been hit. A report showing his results will also be used in this study and is forthcoming.

A pit excavated by the author upstream from the test area indicates gold is accumulated on and into bedrock. A 2-ft section on bedrock contained 0.011 oz/cy of gold. The hole was 9-ft deep and total value of the gravel was 0.005 oz Au/cy.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 4, Friday Creek, SE Sec. 11, T16S, R18W

DEPOSIT DESCRIPTION: Forty- to sixty-ft-deep bench paralleling Friday Creek. A cut averaging 50-ft wide and 40-ft deep on the side of the bench was observed. The lower 10 to 15 ft of the cut consists of coarse, well sorted glaciofluvial bench gravel from an upper Moose Creek bench. These bench gravels are in turn overlain by coarse, largely unsorted subangular to subrounded gravels derived from Friday Creek. This material is probably from an alluvial fan. The whole deposit is underlain by a false clay and/or silt and pebble bedrock of glacial origin. Upstream, the gravels are underlain by a steeply dipping weathered schist and greenstone bedrock. The bench lies at the mouth of Friday Creek Canyon where the creek emerges from the steep narrow canyon into the broad, flat-lying Moose Creek drainage. A bench-fan complex of similar nature is present on the other side of Friday Creek.

The best values have come from just above the false bedrock although appreciable gold was recovered from the Friday Creek gravels. Approximately 30% of the gold is rough, often rudely crystalline nuggets which usually contain attached quartz. A nugget weighing 3.25 oz was recovered this year and several nuggets are in the 1/2 to 1 oz range. The gold is often dendritic or wirey. Most gold shows very little rounding or wear. Concentrates contain galena, magnetite, pyrite, scheelite, with occasional stibnite. Most of the gold has moderate iron stain coatings.

Present cut is immediately adjacent to the large area that was mined last year which contained gravels of a similar nature and geometry. A small area within last years cut was also mined this year.

Another cut was made downstream but at a lower stratigraphic horizon on the bench. Gravels in this cut were of the same composition and geometry but the underlying glaciofluvial gravels are representative of a lower Moose Creek bench than that mined above. These bench gravels are correlative with a large bench on Moose Creek exposed downstream from the present cut.

Overburden is 1- to 6-ft deep and partially frozen.

MINING EQUIPMENT: Cat® 235 2 cy bucket excavator, Cat® D-7 dozer, Cat® D-8H bulldozer, tire mounted 100 cy/hr capacity shaker screen-sluice plant, two Deutz 6-in. pumps, several hundred feet of aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: 206 Cessna aircraft, welding trucks, three 4x4 pickups, 6,000 gal capacity fuel tanks, three large trailer vans, three large mobile homes, one small trailer, two school buses, cleanup equipment - 24-in. Sweco vibrating screen, 12-in. Knelson bowl hydrostatic centrifugal concentrator, 48-in. spiral concentrating wheel, cement mixer/amalgam tumbler, retort.

MINING METHOD: Wash water was pumped from Moose Creek, and settling ponds constructed below mine site. The washing plant is pushed ahead of the bucket excavator. Dozers are used to strip overburden and level tailings. All tailings are directed into a previous cut as mining progresses upstream. Dozers are also used to push pay gravel to the excavator if needed. Up to 120 cy/hr were being mined.

Four men work two 12-hour shifts per day. Another catskinner prepares ground for mining, and levels tailings. One man is employed to process cleanups totally on site. The owner and another man perform support and expediting functions. Several other family members perform camp and logistical tasks.

WORK ACCOMPLISHED: The author monitored mining and cleanup activities on three different mine cuts in 1983. Last years cut and three 1983 cuts were mapped and volumes of gravel mined were measured.

Last years cut measured approximately 120,000 cy of material. A look at production records showed 2700.66 oz of gold recovered. Another 112 oz of gold were amalgamated this year from last years cleanup tailings and more amalgamating remained to be done at the close of the study season. The operator has stated that in the last mining season he averaged over $500/oz for all of the gold mined because of the premium prices he received for jewelry gold regardless of its purity. The last three seasons he has averaged the spot price for gold. Because of this it could be assumed that the gold is 1000 fine, which is probably conservative. Placer gold grade is approximately 0.023 oz/cy. At 710 fine the contained gold is 0.017 oz/cy.

The small area left behind in the above cut was mined this year and contained approximately 5,000 cy of material. Three hundred twelve ounces of gold were recovered. Placer gold grade is 0.062. Using 710 fine, contained gold is 0.044 oz Au/cy.

Approximately 14,000 cy of gravel were mined from the large bench cut. Fine gold recovered (below 14 mesh) weighed 264.34 oz. Jewelry grade gold between 14 and 4 mesh in size weighed 55.79 oz. Gold nuggets over 1/4 in. in size weighed 44.73 oz. Total gold recovered was 364.86 oz. Placer gold grade for this deposit is 0.026 oz/cy. Contained gold grade at 710 fine is 0.019 oz Au/cy.

72% @ $284 = 20448
15% @ $400 = 6000
13% @ $600 = 7800
34248/100 - 342.48/400 = 0.86 factor

A factor of 0.86 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

Approximately 25,000 cy were mined from the lower bench cut and 210.64 oz of gold were recovered. The placer gold grade of the deposit is approximately 0.008 oz/cy. At 710 fine the contained gold grade is 0.006 oz Au/cy.

Total material mined this year and last is 164,000 cy and total gold recovered to date is 3,700.16 oz.

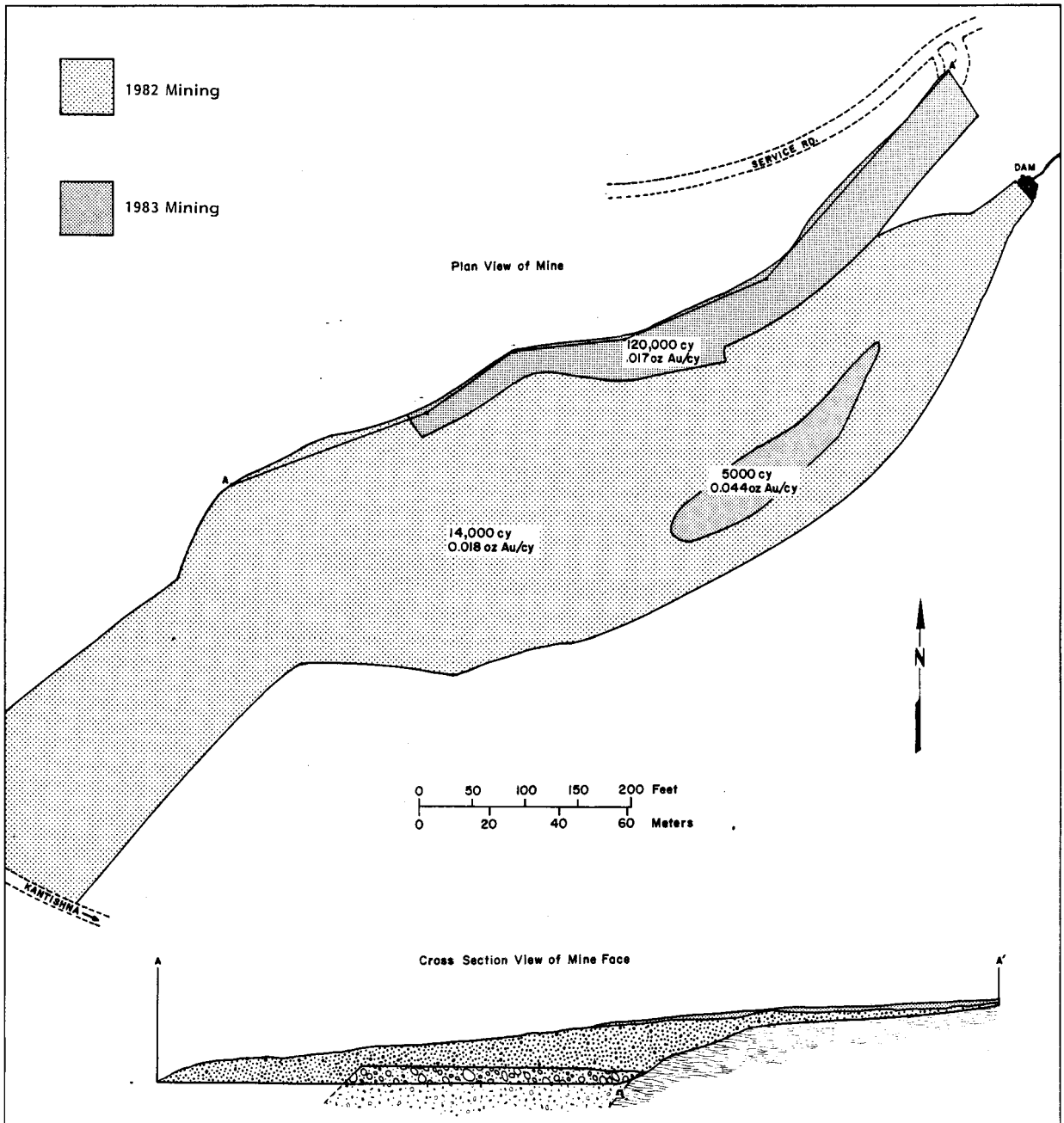
Average placer gold grade of all the material mined is 0.022 oz/cy. The average contained gold grade is 0.016 oz Au/cy.

Two channel samples were taken of the two different gravel types in the bench. The Friday Creek test yielded little gold although bedrock was not reached. An 18-ft sample in glaciofluvial material in the left limit bench contained 0.01 oz Au/cy and contained a 4-ft interval that contained 0.038 oz/cy.

REMARKS: A breakdown of prices obtained for jewelry gold:

14 mesh - $10 under spot price
12-8 mesh - spot to $50 over spot price
8-4 mesh - $100 over spot price
4 mesh and above - $1000/oz

A substantial volume of physically minable material is still available to mining on the benches. The area downstream from present mining to Moose Creek also represents an excellent prospect for mining.







Soil and muck.
Friday Creek fan deposit; unsorted, angular to subangular gravels.
Moose Creek terrace deposit; well-sorted, rounded, glaciofluvial gravels.
Unsorted glacial outwash; false bedrock of clay, silt, or semiconsolidated, clayey gravel.
Chloritic phyllite (Pscp) bedrock.

**Mine Location 4 – Friday Creek Placer Mine**

**S.E. Section 11, T. 16 S., R. 18 W.**

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 5, Yellow Creek, NW Sec. 3, T16S, R17W

DEPOSIT DESCRIPTION: Coarse subangular gravels an average of 40- to 50-ft wide and 7- to 10-ft deep. Gravels contain less than 10% boulders on bedrock. Bedrock is generally flat-lying schist with occasional low reef of marble. Stream gradient is relatively steep - just over 5%. In most areas observed the gravels continue under side slope colluvium and are not mined due to amount of overburden that would have to be removed.

Coarse gold is concentrated just above and into the bedrock. The gold is very rough and often rudely to perfectly crystalline. Most of the gold is heavily Mn or Fe stained and larger pieces commonly contain abundant quartz. Concentrates contain abundant galena, magnetite, pyrite with occasional stibnite and hematite. Several pieces of gold recovered to date are in the 1/2-oz range and one nugget weighed 3/4 oz. Nineteen percent of gold from present cut was from 1/16 to 1/4 in. in size. Another 30% are above 1/4-in. nuggets.

The present mining areas show evidence of being handworked by "old timers". A 1/2-mile section of creek downstream is much steeper and narrower and also shows evidence of handworking.

MINING EQUIPMENT: 40 cy/hr shaker screen and sluice plant, Case® 1150B bulldozer, Case® 350 loader, 4-in. pump and collapsible hose, generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: School bus, camper, two 4x4 pickups, welding equipment, cabin, fuel tanks. A road was built over 1 mile to gain access to mine site.

MINING AND CLEANUP PROCESSING METHOD: Most upper gravel to within a foot or two of bedrock is scraped downstream. The plant is built on skids and pay gravels are pushed downstream with dozer and loaded with loader in short sets. The plant is moved up as each set is completed. A sump is built upstream and settling pond below.

Cleanups are made when box becomes loaded and screened and handpicked to 16 mesh. The rest of concentrates are run over a mini-sluice and gold removed.

WORK ACCOMPLISHED: A 250-ft-long cut was mapped by the author and total volume of gravel calculated at 2,200 cy. Only the lower 2 ft of gravel and bedrock were actually mined. Material run through the plant was approximately 550 cy. Approximately 28 hr were spent mining this section and 65.46 oz of placer gold was produced. The placer gold grade of the deposit is 0.03 oz/cy or 0.119 oz/cy for the material actually mined. Contained gold grades are 0.03 oz Au/cy and 0.083 oz Au/cy, respectively using 700 fine.

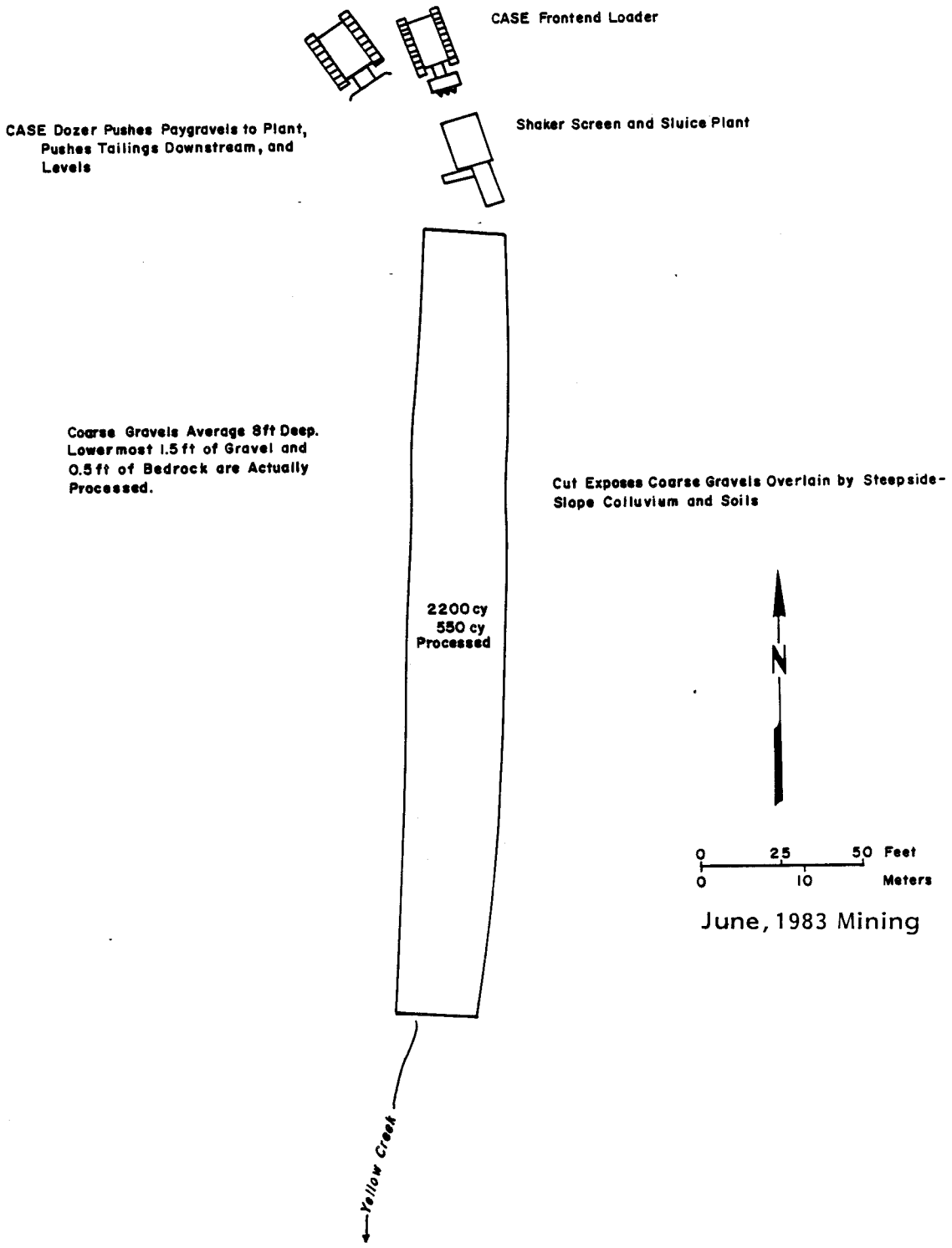
The gold recovered was sieved to 16 mesh and handpicked. The minus 16 mesh material was processed over the Deister table and spiral wheel concentrator and tailings amalgamated. Just over 30% of the gold was over 1/4 in. nuggets, and 19% was over 1/16 in. in size. This fraction of the gold was very rough and often remarkably coarsely crystalline leaves and wires and is sold by the owner at well over twice the spot price for gold.

51% @ $280 = 14280
19% @ $400 = 7600
30% @ $600 = 18000
39880/100 = 398.8/400 = 1.0 factor

A factor of 1.0 can be multiplied by the spot price for gold to determine an approximate value for placer gold produced in the area.

REMARKS: One-half mile of narrow, steep alluvium is present downstream and is probably very rich grade. Several areas upstream of similar character to presently mined gravels reportedly test very well. A lack of water precluded mining this year.

Subsequent mining of similar gravels adjacent to the present mine cut resulted in similar production.




Mine Location 5 - Yellow Creek Mining
N.W.Sec.3,T.16 S.,R.17 W.

# PLACER MINE OPERATIONS REPORT

PROPERTY: Location 6, Lower Caribou Creek, SE Sec. 24, T14S, R18W

DEPOSIT DESCRIPTION: Four to seven feet of coarse, rounded to subrounded gravels on relatively flat-lying weathered, clayey schist. Occasional low reefs of harder bedrock. Gravels near edge of drainage partially frozen. Stream gradient 1% to 2%.

Area being mined is wide flat-lying deposit 100- to 200-ft wide by 1,000-ft long. Gold does not appear to be concentrated on bedrock and only 6 in. or so of bedrock are being mined. One to two feet of gravel above bedrock is iron stained and slightly tight.

Gold is very fine and flaky but occasional rough to slightly rounded quartz-bearing nugget was recovered. Slight to moderate Fe and Mn stain on gold. Abundant garnets in concentrate.

Shallow bench deposits above cliffs on drainage nearby also carry significant gold. These gravels are identical to those being mined in the creek bottom and are extensions of the Lee Bench upstream which the present operator also holds lease on.

A cut made in 1975 exposed gravels in the Lee Bench. The gravels were 4- to 10-ft deep and showed moderate sorting. Most of the gravel is stained a reddish brown and is subangular to subrounded. The gravels are underlain by a quartz-mica schist. Two- to three-percent boulders up to 3-ft across are randomly distributed throughout the gravel. Another exposure of the gravel approximately 1/2 mile downstream shows 10- to 15-ft-deep gravel underlain by Tertiary quartz-rich sediments. Pits nearby show a blue (glacial?) clay on top of the spoils piles indicating a possible lake sediment may be present in places. Most exposures however show 5 to 10 in. of gravels overlying bedrock cliffs, 50 to 70 ft above the present valley floor. The bedrock at the mine cut slopes gently towards the present stream drainage and could possibly keep that slope. If so the muck and gravels on the Lee Bench may not be exceptionally deep.

MINING EQUIPMENT: 100 cy/hr capacity, rubber-tire mounted shaker screen-sluice plant, Cat® 235 2 cy bucket excavator, Cat® D8H dozer, Deutz diesel 6-in. pump, several hundred feet aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Cessna 206 aircraft, fuel tanks, two service trucks, welding equipment, two mobile homes, four living trailers, two truck trailer vans, landing strip for fixed wing access.

Cleanup equipment - screens, mini-sluice, 48-in. spiral concentrating wheel, amalgam tumbler.

MINING AND CLEANUP PROCESSING METHOD: Washing plant is pushed ahead of the excavator as mining progresses. Tailings are directed into the previous cut. Dozer is employed to prepare ground and removal and leveling of tailings. The wash water is pumped out of river upstream and settling ponds are constructed downstream in previous cut.

Four men are employed to work two 12 hour shifts. The owner and another man perform support functions and expediting. Wives and other family members process cleanups and perform camp functions.

The concentrates are screened to 1/4 in. and handpicked. Under 1/4 in. is run over spiral wheel and reconcentrated, then screened to minus 6, minus 10, minus 12, minus 20 and sent over wheel again to remove all gold. The tails are amalgamated.

WORK ACCOMPLISHED: The present cut was mapped by the author and a volume of gravel calculated at 13,000 cy. Total placer gold weighed from the processing was 354.3 oz, resulting in a placer gold grade of 0.027 oz/cy. Gold content at 680 fine is 0.019 oz Au/cy. Over 86% of the placer gold was minus 20 mesh in size. Eleven percent is jewelry grade overlay gold and 3% of the placer gold is over 1/4 in. in size. The overlay gold can probably be sold at an average of the world market price so is considered here to be 1000 fine. The plus 1/4 in. gold can be sold at between spot price for gold and $1000/oz depending on the character, and is considered here to be 1500 fine or 1.5 times its weight. The rest of the gold is 680 fine according to the operator. The following is a breakdown of the recovered gold.

| | | | |
|---|---|---|---|
| 86% | @ $272 | = | 23392 |
| 11% | @ $400 | = | 4400 |
| 3% | @ $600 | = | 1800 |

29592/100 = 295.9/400 = 0.74 factor

A factor of 0.74 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

Majority of gold over 1/4 in. was flat and rounded but a few very rough, quartz bearing nuggets were observed indicating some possible veins nearby. One quartz-filled shear zone was observed in the present mine cut.

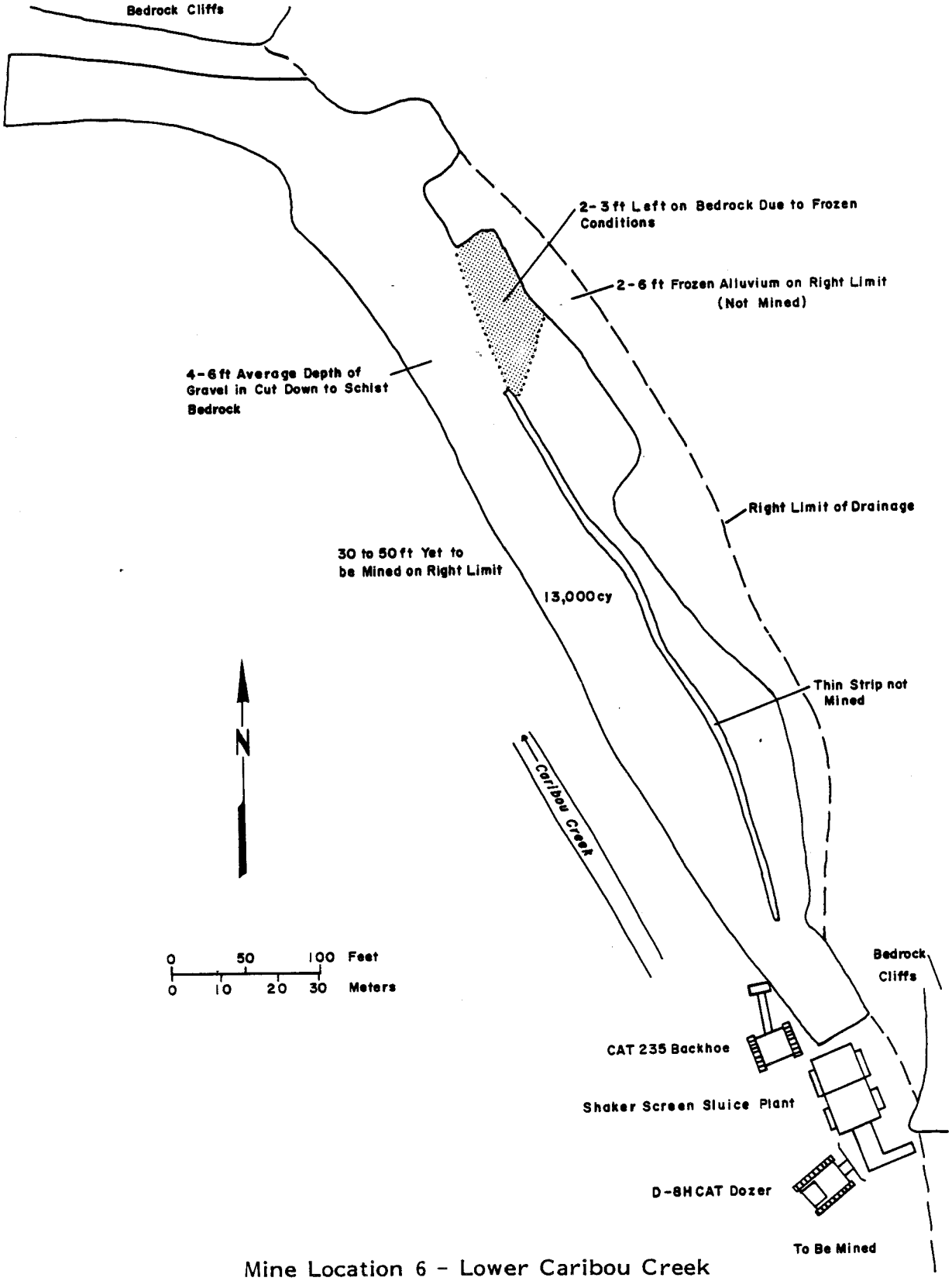
A portion of the Lee Bench was mined by another operator in 1975. The operator's records showed that 70.5 oz of fine gold was recovered from the mine cut. The author measured the cut and approximately 2,700 cy of coarse gravel was mined after removing 2 to 3 ft of frozen muck and tundra. The placer gold grade is 0.026 oz/cy. At 700 fine the contained gold grade is approximately 0.019 oz Au/cy.

REMARKS: Several areas of physically minable ground are available to mining up and downstream. Testing upstream near the present campsite with a small portable floating dredge indicates good values for mining next season.

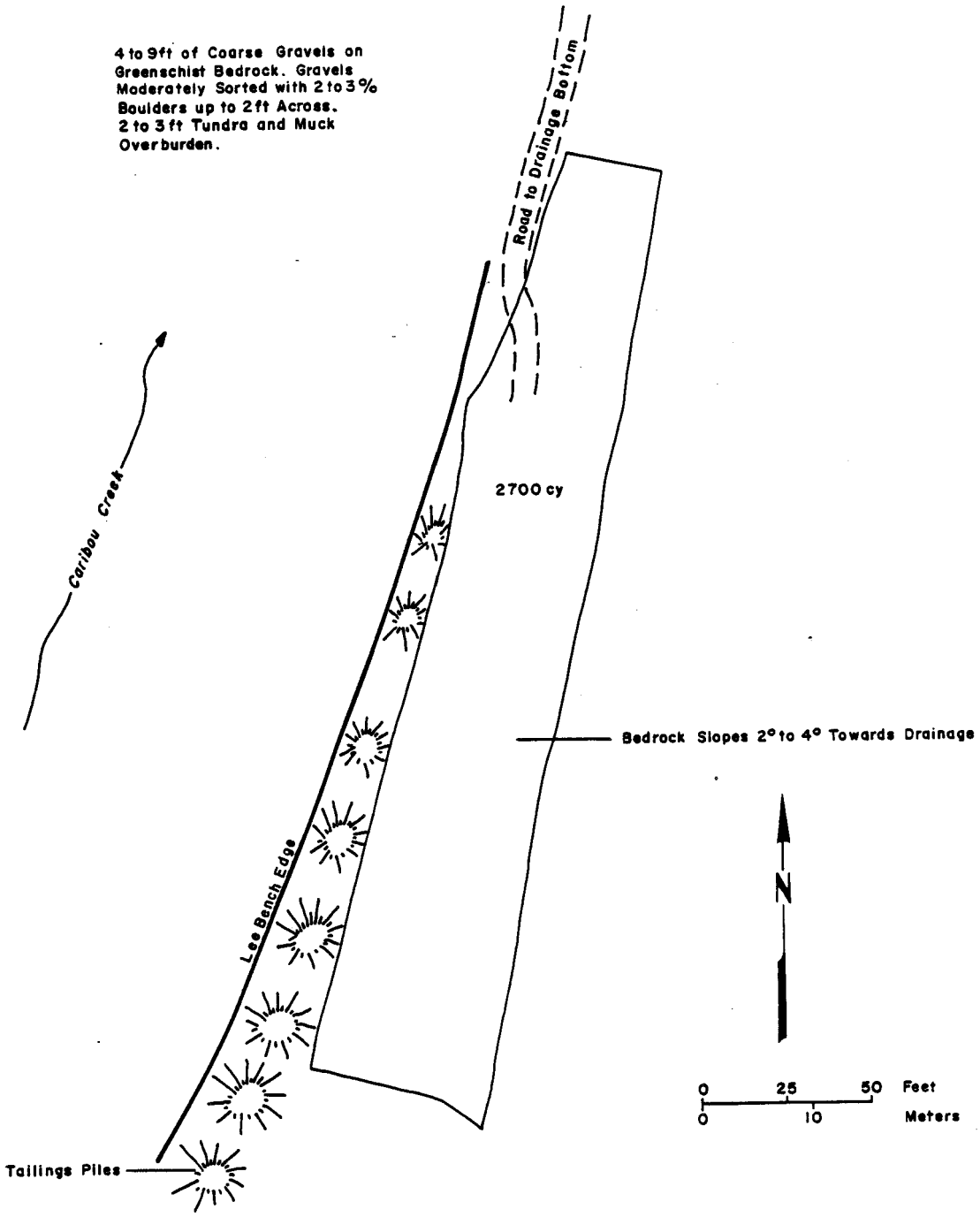
Subsequent mining after this examination produced better gold values as mining progressed away from the drainage sides. Over 1000 oz had been produced by 8/30/83.

The Lee Bench is available to mining in the future and extensions of the bench near the present mine site were tested by panning by the author. Good colors showed up in random pan sampling of recent test cuts. The bench deposits extend from where Caribou Creek emerges from the Kantishna Hills to over 5 miles downstream to the Bearpaw River. A huge amount of gravels could be present on the bench and would represent several years of large scale mining activity. Other operators in the district have also expressed an interest in mining the bench gravels.

The operator anticipates several more seasons of mining the present stream channel gravels and would like to test the present bench gravels in more detail.




Mine Location 6 - Lower Caribou Creek
S.E. Sec.24, T.14 S.,R.18 W.




Mine Location 6 A - Lee Bench, 1975 Mining
S.W.Sec.6, T.15 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 7, Middle Caribou Creek, NW Sec. 7, T15S, R17W

DEPOSIT DESCRIPTION: Coarse, subrounded gravels 2- to 5-ft deep on drainage edge and up to 9-ft deep towards the center. Flat-lying area up to 150 ft across and over 600 ft long, located on a large meander of the creek was stripped and prepared for mining. Gravels lie on a clayey, weathered schist bedrock. The bottom 2 to 3 ft are iron-stained and slightly tight. Gold appears to be fairly well distributed throughout the gravels but concentrated near bedrock. An average of 6 in. of bedrock is also mined.

Gold is very flaky and over 87% of the gold produced from the present cut was under minus 14 mesh size. Very few nuggets are found and most are well worn. All the gold is moderately to heavily tarnished with Mn or Fe oxides.

Thirty- to fifty-foot-high bedrock cliffs rim the stream bottom and are capped by subrounded gravels over 5-ft deep. These bench gravels are correlative with the Lee Bench deposit a mile downstream.

MINING EQUIPMENT: Medium sized trommel and sluice plant (50-100 cy/hr). HD44 Allis Chalmers® dozer, Drott® 1/4 cy bucket excavator, 6-in. pump and several hundred feet of aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two 4x4′ service trucks, welding equipment, school bus, two 3-wheelers, small living trailer, small trailer van for cleanups, large trailer van for parts and supplies, fuel tanks, pickup truck, mini-sluice, 48-in. spiral concentrating wheel.

MINING AND CLEANUP PROCESSING METHOD: Two men mine an average of 10 hr/d. The washing plant is mounted on skids and moved ahead of bucket as mining progresses upstream. Dozer is used to strip thin veneer of overburden and to remove and level tailings. Settling pond is excavated below mine workings.

Cleanups are screened, run over a mini-sluice, demagnetized and run over a spiral concentrating wheel for final separation of the gold.

Approximately 20% of the area mined had been handworked in "earlier" days.

WORK ACCOMPLISHED: The present mine cut was measured by the author and approximately 2,400 cy of material were mined. Fifty-eight hours mining time was spent on the cut. 110.7 oz were recovered from the cleanup. Placer gold grade of the deposit is 0.046 oz/cy. Contained gold grade at 700 fine is 0.032 oz Au/cy.

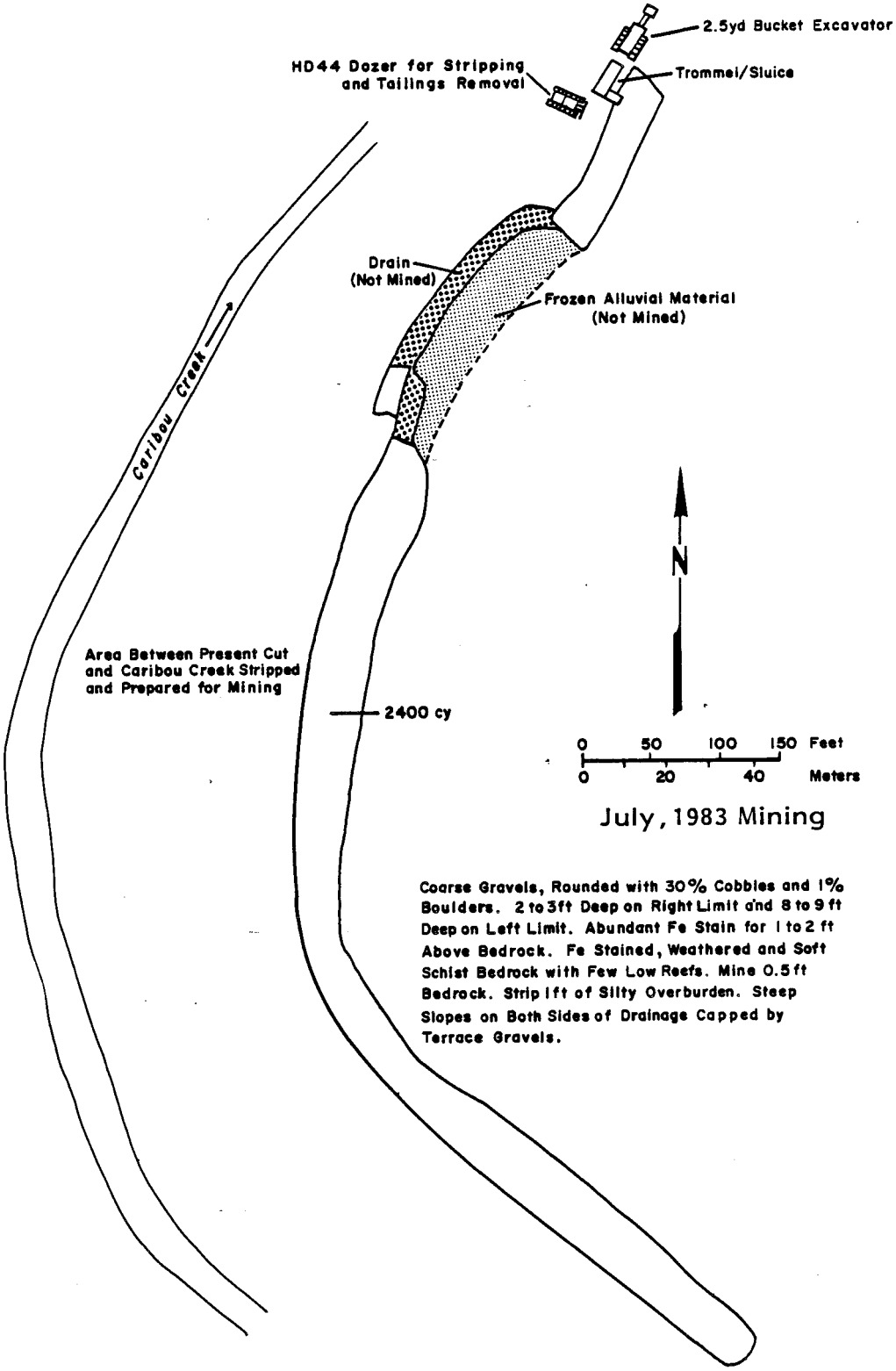
95.65 oz (87%) were below minus 14 mesh size, 7.62 oz were between 14 and 10 in mesh size and 7.0 oz were plus 10 mesh. The 14.62 oz of jewelry grade gold will be considered to be 1000 fine as the proportion of nuggets was not recorded. The 95.65 oz of fine gold is 700 fine according to the operator.

87% @ $280 = 24360
13% @ $400 = 5200
29560/100 = 295.6/400 = 0.74 factor

A factor of 0.74 can be multiplied by the spot price of gold to determine the approximate value of placer gold produced in the area.

The operator's production was approximately 1.9 oz/hr at the time of this examination. As mining progressed across the point bar of the stream the tenor increased considerably and the operator states that he was mining over 2.5 oz/hr.

REMARKS: The first half of the mining season was spent hauling equipment and camp facilities to Caribou Creek, preparing a permanent base camp and preparing the mine site. Similar creek bottom deposits are located up and downstream from the mine site and several mining seasons are anticipated on the middle section of Caribou Creek by the operator.




Mine Location 7 - Middle Caribou Creek
N.W.Sec.7, T.15 S., R.17 W.

## PLACER MINE OPEATIONS REPORT

PROPERTY: Location 8, East Fork Glen Creek, NW Sec. 6, T16S, R16W

DEPOSIT DESCRIPTION: Relatively flat-lying deposit of gravel 100- to 200-ft across and over 1/2-mile long. Gravels are coarse, subangular and average 4- to 5-ft deep. The gravels are mined to a weathered clayey schist bedrock with occasional low reefs of harder rock. Occasionally a thin layer of glacial(?) clay is present on top of bedrock. Shallow troughs below low reefs are commonly overlain by iron stained rich pockets of gravel.

Approximately 40% of the gold recovered is coarse jewelry grade gold plus 14 mesh. The gold is rough showing little sign of wear and often contains quartz and shows crystalline dendritic and wire structures. Most of the gold is slightly to moderately stained with Mn or Fe. Concentrates contained abundant galena, magnetite, pyrite, with stibnite, scheelite, and occasional rhodonite.

MINING EQUIPMENT: 100 cy/hr shaker screen and sluice plant (tire mounted), GM Terex® dozer, Koehring® 2 cy bucket excavator, Deutz® diesel 6-in. pump with collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Six-wheel fuel truck, two 4x4 service trucks, welding equipment, Case® 350B loader/backhoe (test pitting), log cabin, camp generator, 40-ft truck trailer parts van, large Quonset hut. Large wood frame building. Landing strip for fixed wing access.

MINING AND CLEANUP PROCESSING METHOD: Shaker plant is pushed ahead of bucket as mining progresses upstream. Tailings are directed into last cut. Dozer is used to strip thin veneer of overburden and to level tailings. Sump pond excavated upstream for wash water and settling ponds below.

Four men are employed to mine 24 hr/d in two 12 hr shifts. Two men are employed to test pit ahead of mining and to test the rest of Glen Creek holdings. The owner performs support functions for the mining operation.

WORK ACCOMPLISHED The present mine cut was measured by the author and a volume of gravel calculated at 9,400 cy. The concentrate was screened into several splits to minus 20 mesh screen. Each split was run over a Carter shaker table and the concentrate handpicked. The minus 20 material was run over a spiral concentrating wheel.

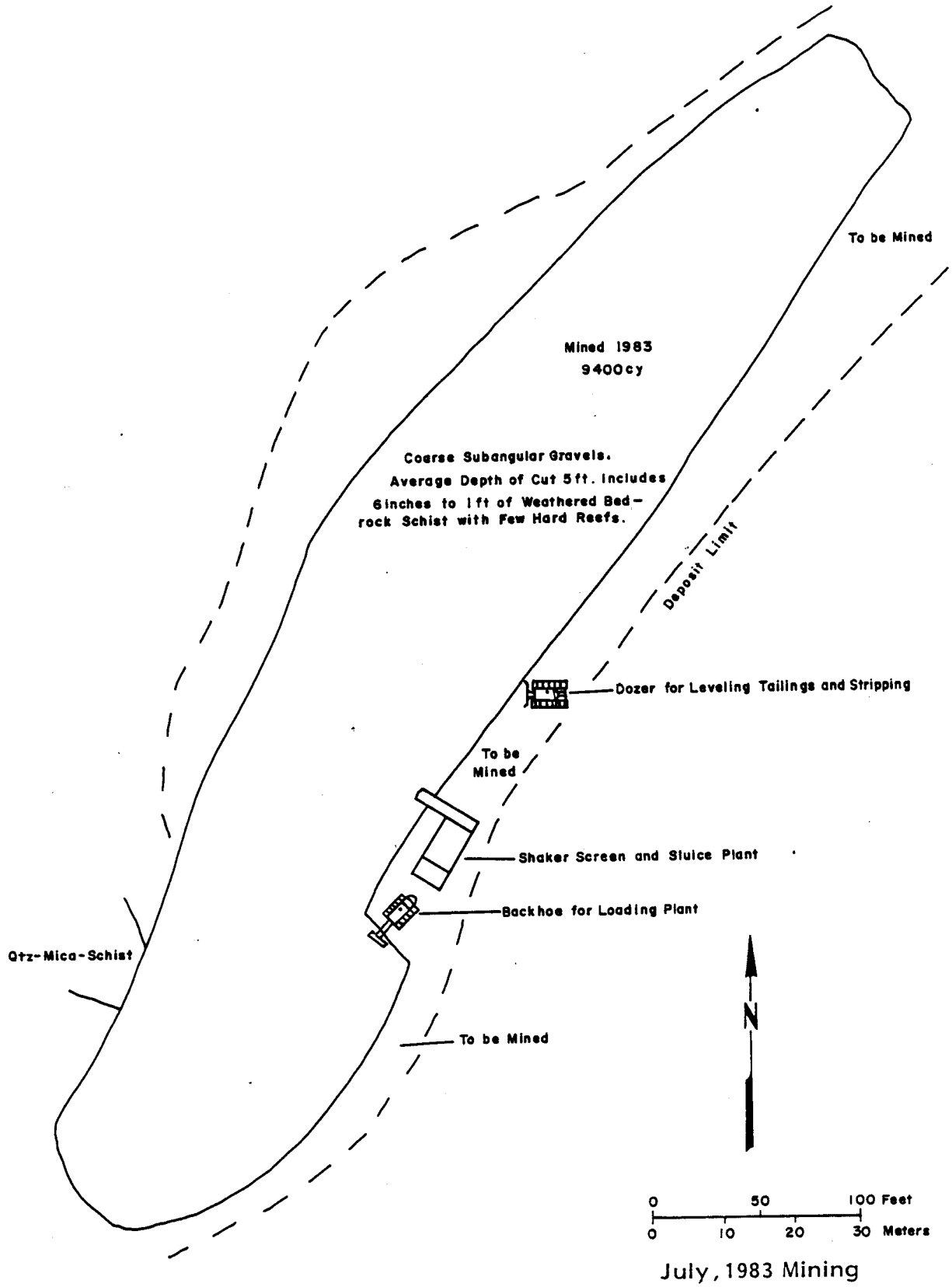
173.6 oz of placer gold were recovered for a placer gold grade of 0.018 oz Au/cy. Contained gold grade at 800 fine is 0.015 oz Au/cy. Approximately 40% of the gold recovered was jewelry grade gold over 14 screen in size. Eleven oz were over 1/4 in. in size and one nugget weighed 0.8 oz.

60% @ $320 = 19200
34% @ $400 = 13600
6% @ $600 = 3600
36400/100 = 364/400 = 0.91 factor

A factor of 0.91 can be multiplied times the spot price of gold to determine the approximate value of placer gold produced in the area.

REMARKS: A consulting geologist was employed to test pit the Glen Creek stream and bench gravels. Initial test results for the area just mined agree very well with production results. All pit results for upper Glen Creek will be forthcoming. Initial pit testing on the bench deposit on West Fork indicates approximately 1.5 million cy may be present with average values of 0.002 oz/cy.

Gold tenor of gravels mined subsequent to the cut studied was reportedly higher. The mining was done over an area of old hand workings and in an area where test pitting had indicated low values could be expected. The low test pit values were probably due to nugget effect. A 1.5 and 0.75 oz nugget have been recovered in subsequent cleanups.




July, 1983 Mining

Mine Location 8 - East Fork Glen Creek Mining
N.W.Sec.6,T.16 S.,R.16 W.

PLACER MINE OPEARTIONS REPORT

PROPERTY: Location 9, Upper Glen Creek at W. and E. Fork Juncture, SW Sec. 6, T16S, R16W

DEPOSIT DESCRIPTION: A deep accumulation of coarse gravels is present at the juncture of west and east forks of Glen Creek. A previous cut exposes 20 to 35 ft of gravel. The immediate area of the "basin" is over 200,000 sq ft. If the gravels average 25-ft deep, approximately 160,000 cy of material is present. Pay gravels being pushed to the plant from one area of the cut were being excavated from over 20 ft down and bedrock had not been exposed.

A glacial(?) clay is occasionally exposed in parts of the old cut and up to 2 ft of iron stained gravel was usually present above that horizon. The gravels are moderately sorted to unsorted and contain up to 1% large boulders. Virgin gravels over 15-ft deep are present up and down stream from the immediate vicinity of the cleared basin deposit.

Bedrock exposed on the sides of the existing cuts dip steeply into the basin. The bedrock is a deeply weathered clayey schist and in many places appears to be badly sheared. The shears are full of a blue clayey gouge and often contain pockets of ground up vein(?) quartz.

Gold is typically very rough, often rudely crystalline and commonly the larger pieces contain attached quartz. Most gold is slightly to heavily stained with Mn and Fe oxides. The gold is apparently distributed throughout the depth of the gravels, as bedrock had not been reached, and each time mining ceased, new nuggets could be picked from the sluice box. Concentrates contain abundant magnetite, galena, and pyrite with stibnite, scheelite, and occasional rhodonite. A few nuggets in the 1/2 oz size range were found and nuggets over 1 oz in size have commonly been recovered in the past.

MINING EQUIPMENT: Stationary shaker screen and sluice plant (150 cy/hr capacity), portable conveyor belt 30 x 3 ft wide, Insley® 3 cy bucket excavator, D-6 Cat® dozer, Cat® 3.5 cy loader, 75 KW generator, 6-in. pump with collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Cat® road grader, two 4x4 vehicles, six-wheel fuel truck, welding equipment, large shop building, two large living trailers, two cabins, cleanup shack and equipment, fuel tanks, large landing strip for fixed wing access.

MINING AND CLEANUP PROCESSING METHOD: Dozer pushes pay gravels over 200 ft to bucket which in turn feeds the conveyor belt. Over 150 cy/hr can be processed. Front end loader removes tailings and distributes downstream. Sump is excavated upstream for mine wash water and settling pond downstream.

Four men operate the mine. The fourth man services and monitors the sluice plant and other equipment.

WORK ACCOMPLISHED: The basin area prepared for mining was mapped and studied by the author. A bucket count was kept as mining progressed and a volume of gravel mined was calculated at approximately 2,300 cy. The sluice was cleaned out and processing of the cleanup yielded 41.87 oz of placer gold, 12.32 oz of which were plus 10 mesh in size. All of the gold was not recovered from the fine fraction and it is estimated that another 2 or 3 oz will be recovered later. Placer gold grade of the deposit is 0.018 oz/cy. Contained gold grade using a fineness of 800 is 0.015 oz Au/cy. When bedrock is reached the tenor of the deposit should increase as the gold should be concentrated there.

The 12.32 oz of jewelry gold is conservatively considered here to be 1000 fine as the average price received from sales will probably be over the spot price for gold.

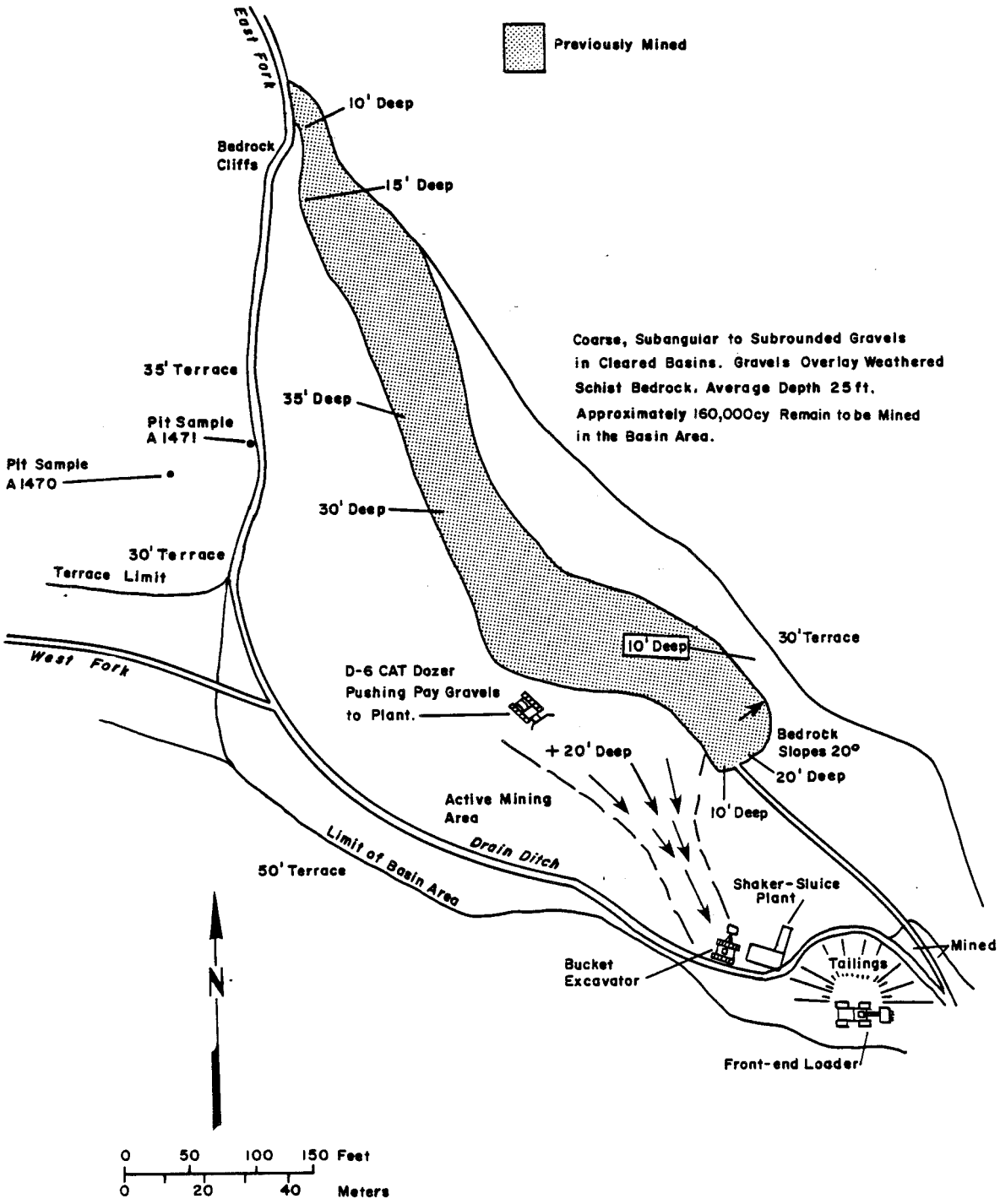
The other 29.55 oz recovered is reportedly 800 fine by the miners. Fineness tests run on gold from the west fork pit testing was over 800 fine.

71% @ $320 = 22720
29% @ $400 = 11600
34320/100 = 343.2/400 = 0.86 factor

A factor of 0.86 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

REMARKS: Several areas of rich shallow gravels remain to be mined on the upper Glen Creek holdings. In the past, smaller scale mining methods of rich pay zones have resulted in very lucrative payoffs and an unusual amount of coarse gold, with nuggets over 1 oz common.

A consulting geologist is test pitting all the Glen Creek stream and bench gravels. The results of which will be made available to this study. A substantial bench deposit is present on the property and tests so far have indicated an average value of 0.002 oz/cy for an estimated 1.5 million cy of material. The bench contains an average of 25 ft of coarse unsorted alluvial and colluvial gravels.




Mine Location 9 - Upper Glen Creek Mining
S.W.Sec.6,T.16 S.,R.16 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 10, Middle Caribou Creek, NW Sec. 7, T15S, R17W

DEPOSIT DESCRIPTION: Two hundred- to three hundred-ft-wide, relatively flat-lying gravel bar being mined. The cut mapped is on the very outside corner of the present stream meander. Gravels in the cut are 2- to 6-ft deep, becoming deeper towards the center of the drainage. Subsequent mining exposed gravels averaging 6- to 8-ft deep. Gravels are subrounded to rounded, loose and coarse except for lower 1 to 2 ft which are usually iron stained and fairly tight. Gravels lie on weathered clayey schist bedrock with occasional layers of harder, less weathered quartz mica schist. An occasional clayey gouge-shear zone with ground up vein quartz was observed in the bedrock. Gravels are virtually frost free although an occasional small patch is present.

The stream gradient is between 1% and 2% and virgin deposits in the vicinity alternate between relatively narrow (20 to 50 ft) canyon deposits to broad flat-lying bars similar to the one being mined. Most of the middle Caribou is lined by bedrock cliffs which are in turn overlain by gravel deposits 5- to 10-ft deep.

An average of 85% of the gold is less than minus 14 mesh in size and very flaky. Approximately 1/2 of the gold plus 14 mesh is also thin and flaky. Three dimensional gold is well rounded and contains very little quartz. Most nuggets are small - being in the 1/4- to 1/2-in. range but subsequent mining recovered 1 1/2 and 3/4 oz well worn nuggets. All gold is moderately to heavily tarnished with Mn and Fe oxides. Gold appears to be distributed throughout the gravel but concentrated on or near bedrock. Concentrates contain abundant garnet and magnetite.

MINING EQUIPMENT: Portable, 100 cy/hr, all hydraulic operated shaker screen and sluice plant - designed and built by the owner, Allis Chalmers® and Fiat Allis® dozers, Drott-Proclain® 2 cy bucket excavator, 6-in. Deutz® centrifugal pump, several hundred feet of aluminum pipe (Deutz® motors in washing plant, excavator and pump with a spare - all interchangeable).

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Large leveled permanent campsite, airstrip for fixed wing traffic, 206 Cessna aircraft, 4x4 truck, articulating rubber tired Nodwell for freighting across tundra, school bus, 40-ft truck-trailer van, 20-ft truck-trailer van, cleanup accessories - 48-in. spiral concentrating wheel - mini-sluice, 4-wheeler vehicle, fuel tanks.

MINING AND CLEANUP PROCESSING METHOD: Two men mine one shift for 10 to 12 hr/d. Dozer strips thin veneer of vegetation and soil. Cut started on left limit and dug well into bedrock for good drainage. Parallel cuts are made to the first cut with all tailings directed into

prior cuts. Washing plant is pushed ahead of excavator as mining progresses upstream. Tailings are leveled with dozer. Mine water pumped out of Caribou Creek and settling ponds are prepared downstream prior to mining. Three to six inches of bedrock are mined depending on the hardness of the rock.

Cleanups are screened, run over mini-sluice, demagnetized, and final gold separation made on the spiral concentrating wheel.

WORK ACCOMPLISHED: The first cut was mapped by the author and a volume of 2,800 cy of excavated material measured. Processing of the cleanup recovered 106.35 oz of mostly fine flaky gold. Fifteen percent of the gold was plus 14 mesh size jewelry gold (15.95 oz). The gold averages 700 fine according to the owner. Placer gold grade of the deposit is 0.038 oz/cy. Contained gold grade is 0.027 oz Au/cy.

The 15.95 oz of jewelry grade gold will be sold on an average over the spot price for gold and is conservatively considered here to be 1000 fine.

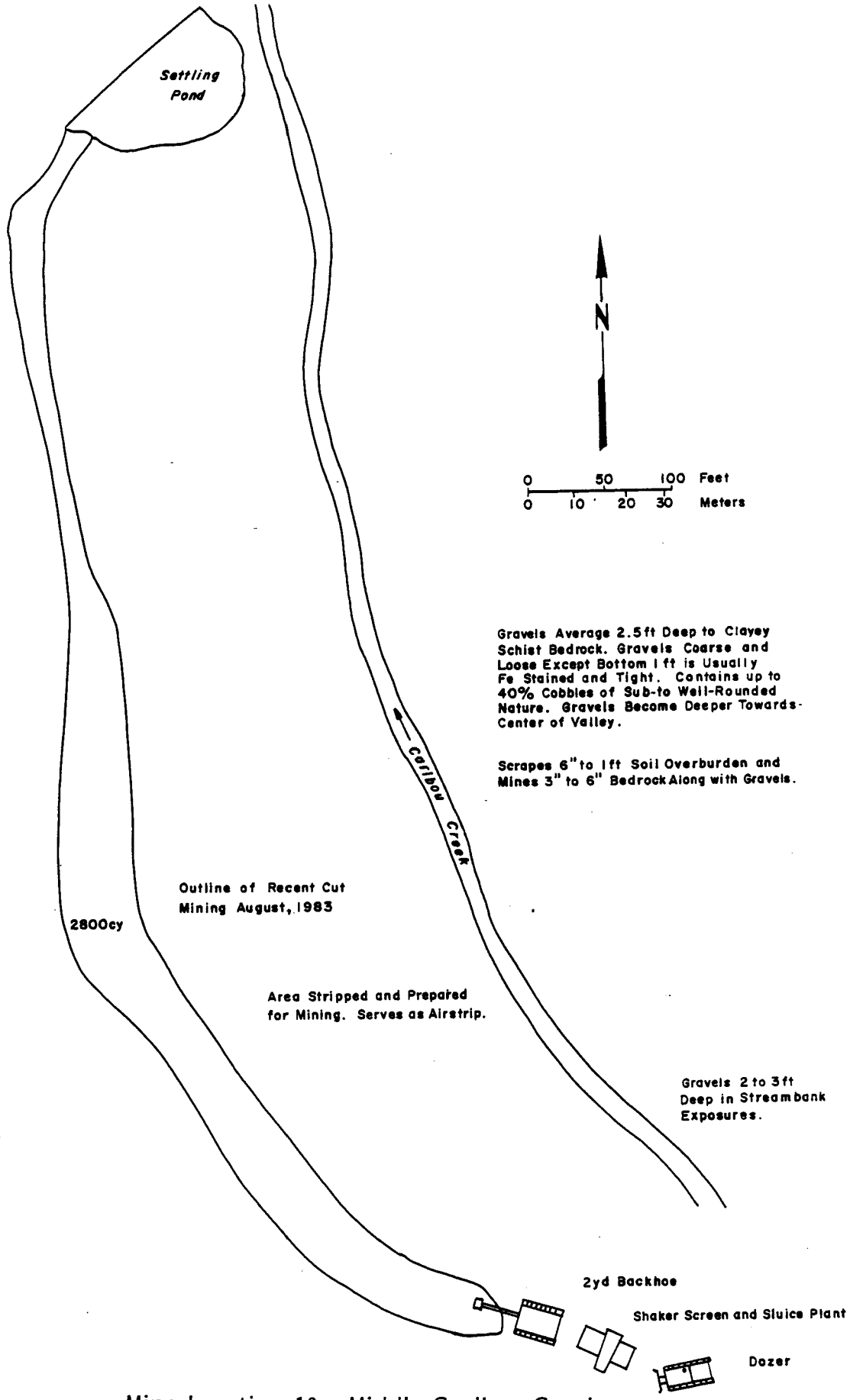
85% @ $280 = 23800
15% @ $400 = 6000
29800/100 = 298/400 = 0.75 factor

A factor of 0.75 can be multiplied by the spot price of gold to determine an approximate value of the placer gold produced in the area.

Approximately 70 hr were spent mining the cut studied and resulted in over 1.5 oz Au/hr of mining. The next cleanup produced over 2.1 oz/hr of operation according to the owner. The last cleanup produced 235 oz Au at over 2.5 oz/hr. The tenor of the deposit increased as mining approached the middle of the point bar deposit.

REMARKS: The owner has established an efficient and comfortable permanent camp and anticipates several more seasons of mining. The mine operation is very efficient and one in which most large-scale mining in the district has been patterned after. The washing plant is virtually problem-free and a model in engineering. This and previous plants built by the owner are in fact models for most of the other mine plants in the district.

It is anticipated that the narrow canyon deposits on the property, which are impractical to mine with the larger scale equipment, will be mined by similar but smaller-scale methods. Bench deposits overlying bedrock cliffs that border the drainage are largely unprospected and present a considerable resource. These benches are correlative with the Lee Bench deposits and probably contain economic concentrations of gold.




Mine Location 10 - Middle Caribou Creek
N.W.Sec.7, T.15 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 11, Eureka Creek, SE Sec. 12, T16S, R18W

DEPOSIT DESCRIPTION: Shallow gravel, 5- to 6-ft deep was being mined in a 30- to 100-ft-wide area on the stream bottom. Gravels are very coarse, subangular to angular with 5% boulders up to 3-ft across. Gravels are underlain by relatively hard quartz mica schist. Evidence of handworkings is common in the area. Unmined alluvium commonly continues underneath steep side slope overburden.

Gold recovered is rough to slightly worn and often rudely crystalline. Dendritic textures are common. Approximately 25% of the gold is slightly stained with Fe and Mn oxides. Concentrates contain abundant garnet and magnetite with galena, scheelite, stibnite and some cassiterite.

MINING EQUIPMENT: Hopper-grizzly-sluice washing plant (stationary) 955K Cat® front end loader, Evans® 6-in. pump with several hundred feet collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: 4x4 pickup, welding equipment. Approximately 1 mile of road built up stream bottom to property.

MINING AND CLEANUP PROCESSING METHOD: Gravels are excavated with loader and transported to a stationary plant. As much bedrock as practical is also mined. Plant is constructed of old truck bed hopper set at a fairly steep angle with spray bars mounted above to wash material over rail grizzly and into the head of a 25 ft x 30 in. sluice box. Oversize and tailings are periodically removed with the loader.

Sluice concentrates are run over a mini-sluice and further concentrated by hand panning. All tailings are put back into sluice box.

Two men (father and son) work the deposit on a daily basis.

WORK ACCOMPLISHED: The cut was mapped by the author and a volume of 220 cy calculated. The sluice was cleaned out and rough processed on site. Concentrates were screened, demagnetized and concentrated on the spiral concentrating wheel in the lab. Tails were amalgamated. Total placer gold recovered weighed 12.79 oz. Thirty-five percent or 4.43 oz of gold was plus 12 mesh size jewelry grade. This portion of the gold is considered conservatively to be 1000 fine. The remaining 8.36 oz of gold will assay approximately 777 fine according to the owner. Placer gold grade of the deposit is 0.058 oz/cy. Contained gold grade is 0.045 oz Au/cy.

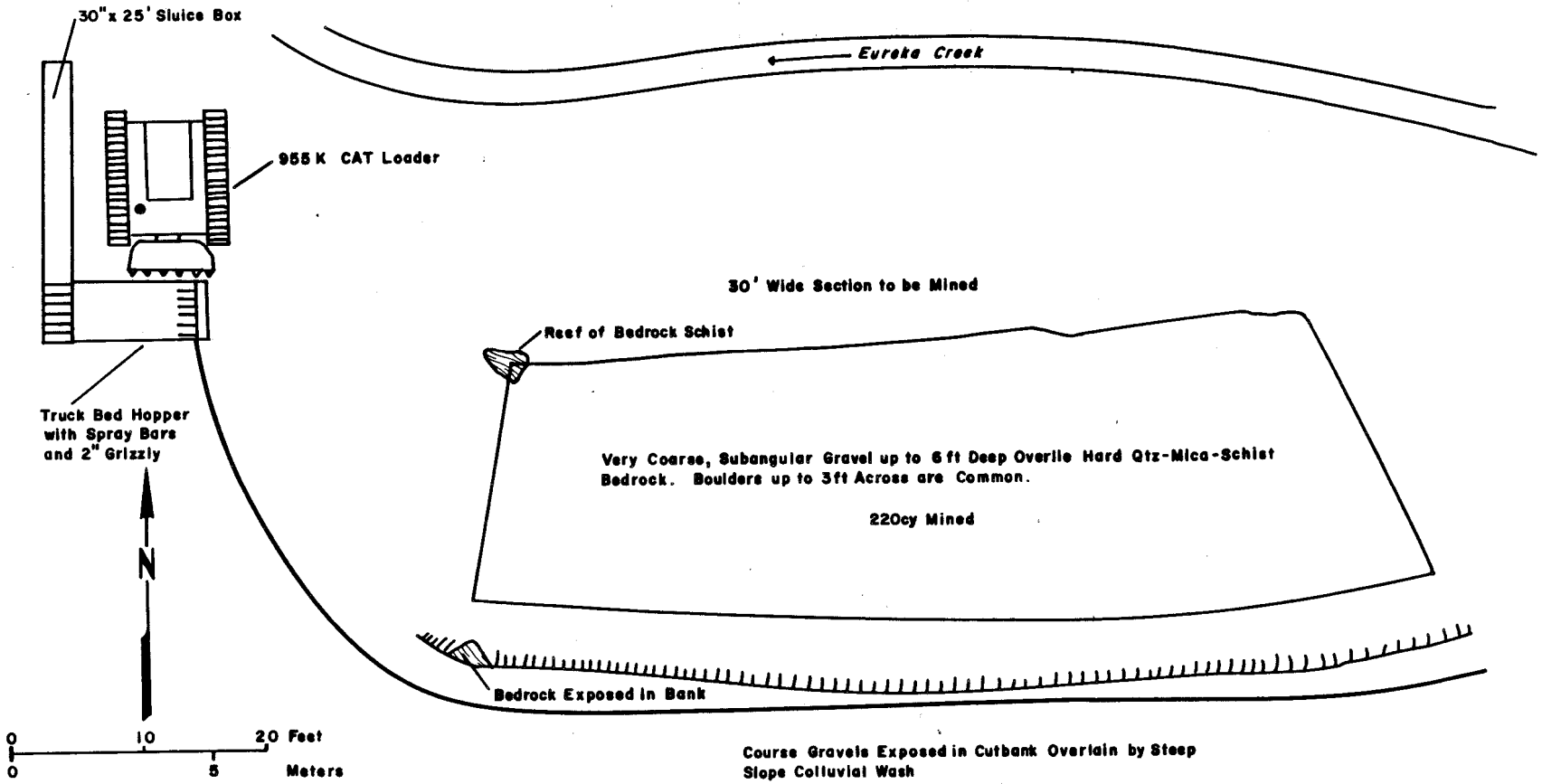
65% @ $311 = 20215
35% @ $400 = 14000
34215/100 = 342.15/400 = 0.86 factor

A factor of 0.86 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

The owner anticipates averaging the world price for gold on all the gold recovered.

REMARKS: Both father and son anticipate several mining seasons on the deposit. They own several patented claims in the district and have a permanent summer home in Kantishna.

Subsequent mining recovered a 3.33 oz nugget. The nugget was fairly well rounded, covered with abundant black oxide stain and contained no visible quartz. This is the largest nugget recovered in the district this season. The next biggest being 3.25 oz recovered from Friday Creek. The nugget was recovered from coarse alluvial and colluvial material excavated from under steep sidehill slope wash. Most of Eureka Creek is lined by similar, buried gravels of this nature.




August, 1983 Mining

Mine Location 11 - Eureka Creek Mining
S.E.Sec.12,T.16 S.,R.18 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 12, Glacier Creek (Lower Canyon), SW Sec. 19, T1S, R17W

DEPOSIT DESCRIPTION: Deposit lies just above mouth of the lower canyon, where the creek emerges on to a broad flat-lying valley. Stream gradient averages 3%. Gravels are coarse, subangular to subrounded and moderately sorted with less than 1% large boulders over 3 ft in size. The gravels overlie a weathered clayey schist. A few shear zones are exposed in the bedrock. These contain clayey gouge and lenses of shattered vein(?) quartz. The bedrock undulates slightly creating low reefs and shallow troughs. Gravels are relatively deep ranging from 4 to 13 ft. Area being mined is 100- to 150-ft across and is bordered by bedrock cliffs. The low cliffs are overlain by bench gravels 4- to 8-ft deep.

Gold recovered was bright to slightly stained, rough and rudely crystalline to slightly worn. Thirty-five percent of the gold is plus 12 mesh and considered jewelry quality. Garnet and magnetite common in the concentrates.

MINING EQUIPMENT: 100 cy/hr shaker screen-sluice plant, Cat® D8H dozer, Cat® D-7 dozer, Cat® front-end loader (5 cy?), Cat® 235 2 cy bucket excavator, Deutz® 8 x 6 in. pump, several hundred feet of aluminum pipe and collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Go-Tract® fuel vehicle 4x4 service truck, welding equipment, motorcycle, 4-wheeler, fuel tanks, truck-trailer van for material and supplies, several wood frame cabins, airstrip, cleanup equipment - spiral concentrating wheel, 12-in. Knelson bowl hydrostatic centrifugal concentrator.

MINING AND CLEANUP PROCESSING METHOD: Ground stripped of thin veneer of overburden. Cut is started on left limit. Mining progresses with parallel cuts. The plant is pushed upstream ahead of excavator and tailings are directed into previous mine cut. and leveled with dozer. Small sump constructed upstream. Settling ponds excavated downstream.

Mining is done in two 12 hr shifts, 24 hr/d.

WORK ACCOMPLISHED: The cut was mapped by the author and a measured volume of 5,500 cy of material calculated. Processing of the cleanup recovered 126.78 oz placer gold. The placer gold grade of the deposit is 0.023 oz/cy. Contained gold grade at 750 fine is 0.017 oz Au/cy. Approximately 35% or 44.37 oz of the gold is coarse jewelry grade gold and is considered here to be at least 1000 fine. Gold fineness averages 750 according to owner.

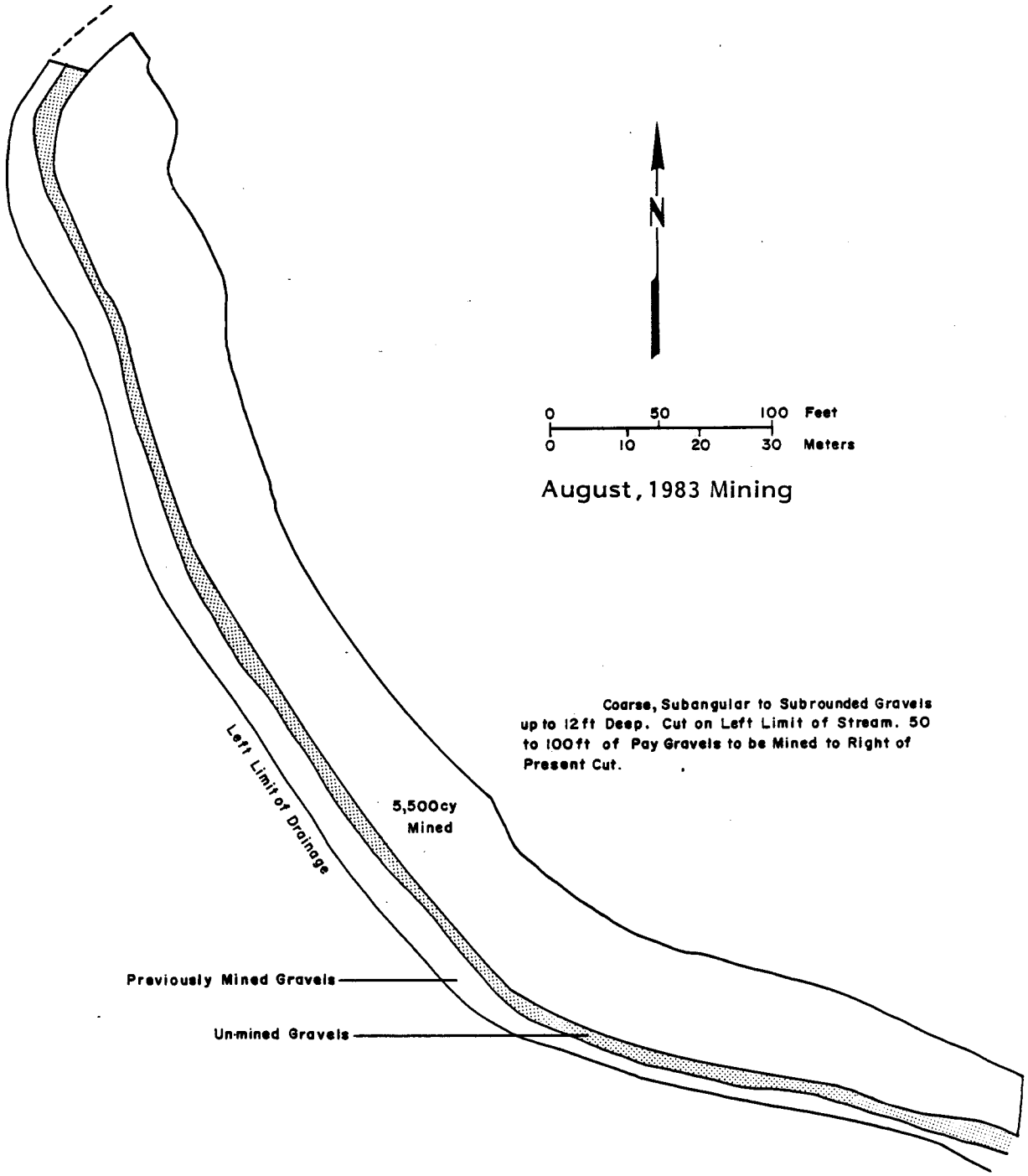
65% @ $300 = 19500
35% @ $400 = 14000
33500/100 = 335/400 = 0.84 factor

A factor of 0.84 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

Eighty-four hours were spent mining the cut resulting in 1.5 oz Au/hr operation.

REMARKS: At least eight men were involved with this family oriented, 24 hr/d operation. Wives and other family members are living in camp and perform support functions. Several high bench deposits are present on the claims and mining of the bench adjacent to the previous cut was undertaken after the above deposit was mined. Results were reportedly not as high grade but satisfactory. The stream bottom deposit tenor increased as they mined away from the valley sides.

Mining the stream and bench deposits is planned for next season. The owner of the claims has been mining the higher bench deposits since 1965 using small scale methods with reportedly very rich production of coarse gold. Large nuggets are common.




Mine Location 12 - Glacier Creek
S.W.Sec.19,T.1 S.,R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 13, Glacier Creek (lower), NW Sec. 19, T15S, R17W

DEPOSIT DESCRIPTION: Four- to six-foot deep, subrounded, reddish-brown stained, loose gravels overlie an oxidized, iron-stained, clay-rich Tertiary gravel. Gravels are fairly well sorted and contain few boulders. Mine area is approximately 1/2 mile downstream from the narrow canyon mouth where Glacier Creek emerges onto the present broad, flat-lying valley floor. Stream gradient is less than 2%. The deposit is 200- to 300-ft wide at the present mining area and becomes progressively wider downstream. The valley bottom is bordered by large gravel capped benches up to 50- to 75-ft high.

Mine cuts downstream expose similar gravels up to 10-ft deep. Prospect trenching on the bench gravels expose 4 to 8 ft of gravels very similar to the present stream gravels.

Gold recovered from recent mining is very bright flake gold 85% of which will pass through a 12 mesh. Less than 1% of the gold observed was over 1/2-in. across. Most gold is well worn but a few pieces show remnant crystal, wire or dendritic textures and a few pieces contained attached quartz. Concentrates contained abundant garnet and magnetite.

Gold obtained from panning and churn drilling the bench gravels is more three dimensional and rough.

A dragline operated between the present cut and the canyon mouth in the early 1940's. The huge area mined has been leveled and an airstrip built on top. Virgin gravels 20- to 50-ft wide are present on the side of this old mining area.

MINING EQUIPMENT: Medium capacity shaker screen-sluice plant (tire mounted), H1500 Insley® bucket excavator, D8H Cat® dozer, Deutz® 8 in. x 6 in. pump with collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two 4x4 service trucks, 5,000 gals fuel storage, three 3-wheelers, eight wood frame buidings for personnel and equipment, large truck-trailer van, welding equipment, cleanup equipment-screening-sluice box, spiral concentrating wheel.

2,000 ft airstrip to be lengthened to 3,000 ft next year.

MINING AND CLEANUP PROCESSING METHOD: Nine men perform mining, maintenance and support functions on this 24 hr/day operation. The mine area is stripped of 1 to 2 ft of overburden. The present plant was designed to push ahead of the excavator as mining progressed. A structural problem prohibited this form of operation at the time of this examination. A large cut was excavated and pay

gravels were stockpiled. The windrowed material was then fed into washing plant which was transported behind the excavator. Tailings are directed into previous cut and leveled with dozer. Wash water is pumped out of creek and settling ponds are constructed below the mine cut.

Cleanups are screened and run over a mini-sluice, final separation of gold is made using a spiral concentrating wheel, all tailings will be heap leached.

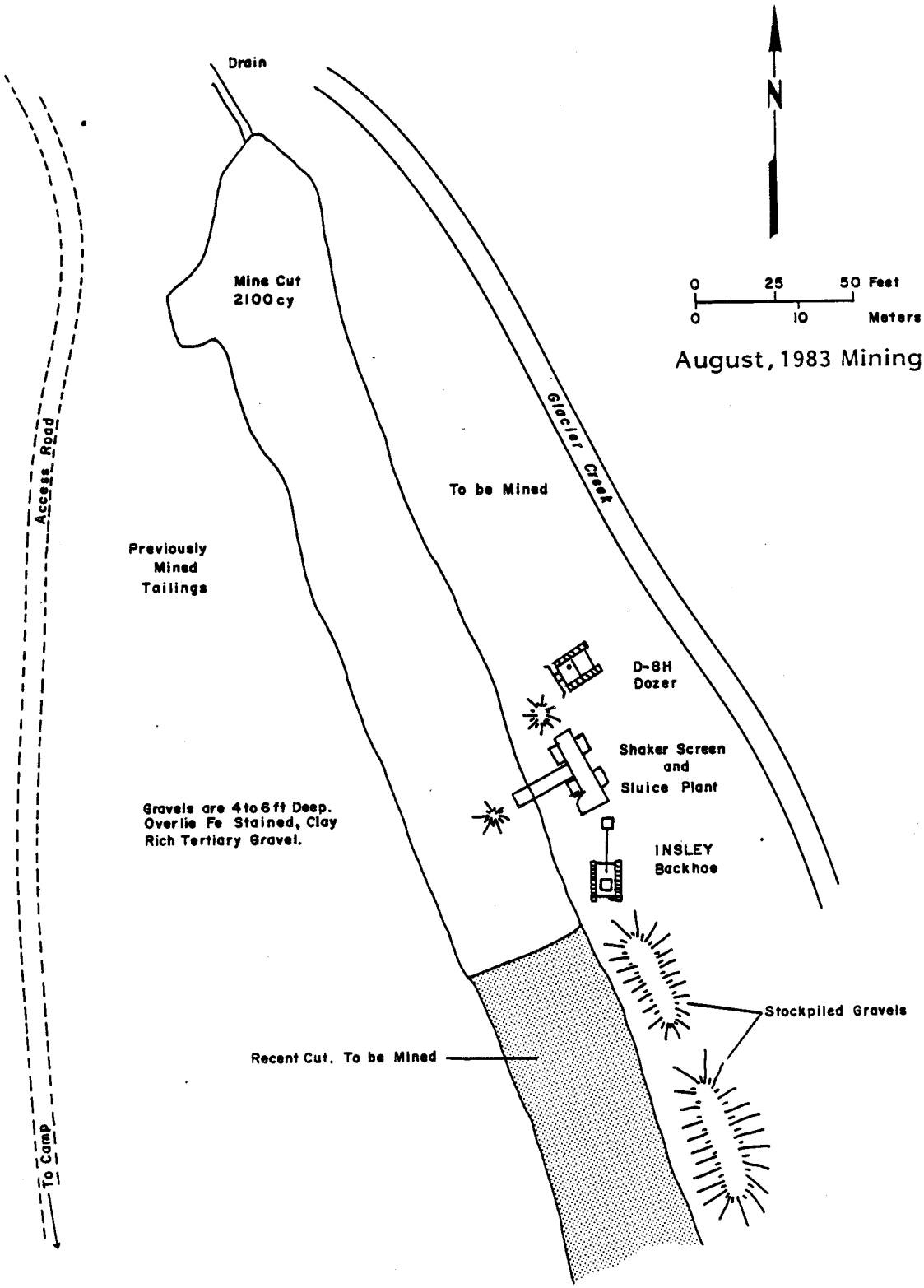
WORK ACCOMPLISHED: The cut was measured by the author and approximately 2,100 cy of material was mined. Processing of the cleanup recovered 47.9 oz of placer gold. Placer gold grade of the deposit is 0.023 oz/cy. Using a fineness of 760 the contained gold is 0.017 oz Au/cy. Fifteen percent or 7.2 oz was coarse jewelry grade gold and is considered to be 1000 fine. Assays of previously mined gold are between 740 and 780 and the other 40.7 oz of fine placer gold calculated at 760 equals 30.9 oz.

85% @ $304 = 25840
15% @ $400 = 6000
31840/100 = 318.4/400 = 0.8 factor

A factor of 0.8 can be multiplied by the spot price of gold to determine an approximate value of the placer gold mined.

REMARKS: Approximately 2 miles of stream bottom gravels of a similar nature have yet to be mined downstream. Tests by the owner are reportedly good. The Glacier Creek bench gravels have been tested by the owner, the results of which are better than the gravels presently being mined. A large area has been stripped of muck in preparaton for mining later this season. Several more seasons are anticipated by the owner to mine the present stream and bench gravels.

One of the men with the help of his son operates a small shaker-screen sluice plant similar to the large plant that can process 20 cy/hr. This plant is mining side-pay areas left behind by previous large scale mining. See Location 14 report for results. This plant is averaging approximately 1/2 oz of gold per hour of operation.




Mine Location 13 - Lower Glacier Creek
N.W.Sec.19, T.15 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 14, Lower Glacier Creek, SW Sec. 19, T15S, R17W

DEPOSIT DESCRIPTION: Shallow (3 to 4 ft), coarse gravels on edge of old tailings area. The area was worked with a dragline in the early 1940's and is located below the mouth of the Glacier Creek Canyon where the stream gradient flattens considerably. Twenty- to fifty-ft-wide virgin gravels remain on side of old tailings. Gravels are underlain by a weathered, clayey to brittle schist bedrock. The deposit is over 200-ft wide at the canyon mouth and very flat (1 to 2%) stream gradient.

Gold observed in the sluice box was rough to slightly worn and nuggety. A few pieces of 1/4 in. in size were observed. Garnets and magnetite were also observed.

MINING EQUIPMENT: Small shaker screen-sluice plant (20 cy/hr capacity), small 1/8 cy (?) hydraulic backhoe mounted on track mounted bombardier, 2-in. centrifugal pump with collapsible hose, Cat® diesel generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: The operator utilizes the claimowners tools and service vehicles for the most part.

MINING AND CLEANUP PROCESSING METHOD: The sluice plant is mounted on wheels so maneuverability is very good. It is then moved into position with the bombardier and leveled, and then loaded with the backhoe. Oversize tailings are directed into a prior cut. When observed, the plant was mining mine sidepay left behind by a dragline operation.

The plant is a small shaker screen which screens to 1 1/4 in. Oversize material transported on a conveyor belt and over the cutbank. The plant is set up with a 3/8-in. punch plate on the upper end of the sluice to create an undercurrent effect. Astroturf below expanded metal with a nugget trap is utilized to recover gold.

Three to four hours are spent mining, the rest of the day is spent setting up, on maintenance and cleanup of the mined concentrate. Cleanup is accomplished by screening and running over a mine sluice-demagnetizing and panning or spiral wheel concentrating the final concentrate.

WORK ACCOMPLISHED: The operation was monitored periodically over a weeks time while monitoring two large scale operations on either side of the mine-site. A cleanup was made after a 3 hr mine shift. A little over 1.5 oz of placer gold was recovered for a placer gold grade of 0.025 oz/cy. Using an average of 20 cy/hr and a 760 fine figure, the contained gold grade of the ground was calculated at approximately 0.019 oz Au/cy.

Because the percentage of jewelry gold is not known, a factor of at least 0.76 can be multiplied by the spot price of gold to determine the approximate value of placer gold produced in the area.

REMARKS: The washing plant is uniquely adapted to work small mine side pay areas too small for the larger plants to attempt mining economically. The operator would like to get a small dozer and backhoe to improve maneuverability and mining efficiency. The plant would also prove useful in mining narrow gulch or canyon deposits present in the district.

Before cleanup the operator stated he had been averaging 2 oz per 4 hr mine shift which compared very well with the 1.5 oz recovered from 3 hr of mining.

The man is helped periodically by his son. The plant was engineered and built by the operators and utilizes the same principles as the large scale washing plants in the area.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 15, Upper Glacier Creek, NE Sec. 30, T15S, R17W

DEPOSIT DESCRIPTION: Shallow and generally narrow bedrock walled creek alluvial and colluvial deposits. Gravel is 2 to 6 ft to bedrock and ranges from 25- to 100-ft across. The wider areas usually include shallow stream bottom benches immediately adjacent to stream. Gravels are coarse and angular to subangular and subrounded and usually up to 1% large boulders.

Gold is coarse and rough and often crystalline. Concentrates contain abundant galena and garnets with magnetite. Only 1% of gold recovered is under minus 16 mesh. The gold is usually in the 0.05 to 0.25 oz range and 1/4- to 1/2-oz nuggets are common. A 4.5-oz nugget was recovered last year.

MINING EQUIPMENT: Four-inch floating suction dredge, hydraulic backhoe (1/8 cy?)

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Cushman® trackster, large track vehicle, fuel storage, tool shed, cabin. Cleanup accessories.

MINING AND CLEANUP PROCESSING METHOD: Suction dredge is floated in creek and hose from dredge sucks alluvial material off bedrock. Most stripping or removal of overlying material and large boulders is done by hand or with comalongs.

WORK ACCOMPLISHED: The area being mined was visited when the operator was gone to observe mining method and the deposit geology. The operator ran a test prior to the examination. Approximately 2 cy of material was run through the dredge and just over 0.1 oz of gold recovered. One of the nuggets recovered weighed 0.5 g. Because most of the gold recovered by the operator is very coarse jewelry grade gold he at least averages the world price for gold. The placer gold grade is 0.05 oz/cy. The contained gold grade is 0.038 oz Au/cy. A factor of 1.0 can be multiplied by the spot price of gold to determine an approximate value for placer gold mined in the area, as only 1% of the gold is below jewelry size.

REMARKS: These claims have been worked by the owner in much the same manner with similar results for nearly 20 yr. At the present rate of mining, at least 30 more years are anticipated by the owner. The gold is very coarse and several nuggets above the 1-oz range have been obtained. One nugget recovered weighed over 4 1/2 oz. A small to medium sized operation could probably be supported on the creek.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 16, Juncture of 22 Gulch and Glacier Creek, N 1/2 Sec. 32, T15S, R17W

DEPOSIT DESCRIPTION: Three to six feet of coarse, subangular to subrounded gravel on quartz mica schist bedrock. The present cut is located at the juncture of Glacier Creek and 22 Gulch and both gravels were mined. Glacier Creek is over 80-ft wide at this location and relatively shallow gradient (less than 5 degrees). Part of the cut had been hand mined extensively in the past as evidenced by large piles of hand stacked rocks.

The gold recoverd was variable in appearance and texture. Much of the gold was rudely to coarsely crystalline, dendritic and wire in nature. Some nuggets were very gnarly and most showed little wear or worn edges. After bedrock had been scraped in some localities, the rock could be hand picked for visible nuggets. Bedrock hardness is variable and areas which are harder and more brittle due to quartz content usually tend to concentrate larger amounts of nugget gold. Many of the nuggets recovered are in the 1/4- to 1/2-oz range. Abundant garnets, galena with stibnite and occasional tourmaline in concentrates.

In most areas along the stream, alluvial material continues underneath steep side slope scree and soil cover.

MINING EQUIPMENT: 110B Case® dozer, 350 Case® loader, 40 cy/hr shaker screen sluice plant, 4-in. pump with collapsible hose, generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Renovated school bus, truck camper, welding equipment, two 4x4 trucks. A road was built from Yellow Creek down the Glacier drainage to the mine site (2 miles).

MINING AND CLEANUP PROCESSING METHOD: Most of the upper gravel and large boulders are scraped off and is not mined. Usually the lowermost 1 or 2 ft of alluvium and an average of 1 ft of bedrock is mined.

The dozer pushes pay material up to 50 ft to the plant and is loaded by the loader into the plant. The plant is skidded upstream as mining progresses.

Three men work the deposit 10 to 12 hr/d and move 20 to 40 cy/hr through the plant.

WORK ACCOMPLISHED: As the end of the mining season was drawing to a close, it was decided not to map a specific cut and perform a cleanup of the concentrates as it would consume valuable mining time. The gravels were observed and coarse placer gold (jewelry)

picked from the concentrates to date weighed over 100 oz. It is estimated that at least that amount of finer placer gold remained in the concentrate. The cut was estimated to contain approximately 14,000 cy, 3,400 of which was actually mined. If 200 oz of placer gold are recovered the cut would contain 0.014 oz/cy of placer gold. The material actually mined would have a placer gold grade of 0.059 oz/cy. Using a fineness of 760 the contained gold grade is 0.011 oz Au/cy or 0.045 for material processed.

50% @ $304 = 15200
50% @ $400 = 20000
35200/100 = 352/400 = 0.86 factor

A very conservative factor (much of the gold is sold at over two times the spot price) of 0.88 can be multiplied by the spot price of gold to determine an approximate value for placer gold recovered in the area.

REMARKS: Glacier Creek narrows to 10- or 20-ft wide in a few places but ranges from 50- to 250-ft wide for over 2 miles of the stream length. Several areas show signs of handworking in the past and old reports indicate the "earlier" miners mined rich, coarse-gold pay-streaks. Very good production results were obtained by mining previously hand mined areas at the present mine site. This is probably a good indication that similar results can be expected from future mining on Glacier Creek.

Approximately half of the gravels on 22 Gulch were mined by hand methods in the early days. Extensive piles of hand stacked rocks are evident today. This creek is unclaimed but probably represents a very high grade placer resource. Sidepay areas and low bench deposits would probably support a small to medium sized mining operation.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 17, Friday Creek, SE Sec. 11, T16S, R18W

DEPOSIT DESCRIPTION: Unsorted alluvial and colluvial mixture alluvial fan(?). Mining right limit of stream into hillside. Bedrock schist slopes into hill. Deposit located at the head end of alluvial fan where Friday Creek emerges from narrow canyon. The slope of hill rises rather quickly and the gravels on right limit of cut are over 30-ft deep. Bedrock is exposed uphill 200 ft from edge of cut and gravels could extend into the hill up to 150 ft.

The material above bedrock contained significantly less gold than that mined on and into bedrock but appeared to still be economic. Once bedrock was reached, gold production went up considerably. The gold is typically very rough and often rudely crystalline showing dendritic and wire-like textures and often contains considerable quartz. Several large nuggets were observed including a 2.75, 1.25, and two 1-oz nuggets. Gold found on bedrock is usually iron stained and shows little sign of wear. Abundant galena along with magnetite, pyrite, garnet and some scheelite is found in the concentrate.

Gravels usually covered by 4 to 8 ft of overburden with 25% cobbles subangular to rounded and 1% boulders up to 4-ft across. Bench-fan(?) deposits of a similar nature extend upstream over 700 ft to the narrow canyon mouth.

MINING EQUIPMENT: Two D-8 Cat® dozers, 955 Cat® loader, 60 cy/hr shaker screen-sluice plant (stationary), 10-in. pump and collapsible hose, 45 KW generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two trailers, one camper, two 4x4 pickups, one pickup, two ton truck, welding equipment, fuel tanks, cleanup accessories.

MINING AND CLEANUP PROCESSING METHOD: The washing plant was set on a steep slope and a ramp built to feed hopper. D-8 used to strip overburden and push pay gravel to loader which in turn feeds plant. Tailings are pushed downstream from plant and contoured. Dam constructed on stream for wash water. Settling pond constructed below.

Cleanups are sieved to minus 4 mesh and hand picked. Remaining concentrate is run over Carter shaking table and most of the coarse gold is hand picked from this new concentrate.

Two to three men worked the deposit 10 to 12 hr/d.

WORK ACCOMPLISHED: Several visits were made to the property as mining progressed and the geology was observed. Two hundred and fifty hr had been spent mining the cut. At 60 cy/hr production approximately 15,000 cy of material had been mined. Over 350 oz were estimated from cleanups to date (a large portion of the concentrates will be processed for gold later in the winter). The placer gold grade is estimated to be 0.023 oz/cy. Using a 780 fine figure the contained gold grade is 0.018 oz Au/cy. Approximately 50% of the gold is considered to be jewelry grade. Many pieces over 1/2 oz in size will obtain a price of 1000 to 1500 dollars/oz for "character" gold. The operators reported that they will probably average the world price for the total amount of gold recovered. Because percentage of size fractions is not known, a factor was not calculated.

REMARKS: A few more seasons of mining are anticipated on this deposit. The deposit would not have been apparent unless mining was undertaken under the slope wash exposing the gravels. Several areas upstream from this cut are probably underlain by similar deposits.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 18, Upper Caribou, SE Sec. 18, T15S, R16W

DEPOSIT DESCRIPTION: Three to five feet of coarse, angular to sub-angular and subrounded material. The deposit is immediately upstream from the last dragline tailings. The drainage at this point is up to 300-ft wide and relatively flat. The gravel was being mined to a 6-in. sandy layer above a clayey weathered mica schist bedrock. The bedrock was cut several times by shears which contained mostly clayey gouge and small pods of crushed quartz containing some pyrite.

Gold observed in the sluice box was rough and one piece showed dendritic texture with attached quartz. Abundant garnets were observed in the concentrate.

MINING EQUIPMENT: Cat® 235 two cy bucket excavator, Cat® D-7 dozer, Cat® D7H dozer, tire mounted 100 cy/hr capacity shaker screen sluice plant, two Deutz® diesel 6-in. pumps, several hundred feet of aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: 206 Cessna aircraft, welding truck, three large mobile homes, one small trailer, two school buses, three large truck trailer vans.

Cleanup equipment - Sweco 24-in. vibrating screens, 12-in. Knelson bowl hydrostatic centrifugal concentrator, 48-in. spiral concentrating wheel, cement mixer/amalgam tumbler, mercury retort, 6,000 gal capacity fuel tanks.

Approximately 6 miles of road was constructed in July to freight all equipment to mine site. An airstrip was leveled for fixed wing access and a large camp site was prepared near the mine site.

MINING AND CLEANUP PROCESSING METHOD: A sump was excavated for mine wash water. Several acres of relatively flat alluvial deposit was stripped of a thin veneer of soil cover. The plant is pushed ahead of the bucket as mining progresses upstream. Approximately 40-ft-wide cuts are made and tailings are directed into the previous cut. Mine water is directed into previously excavated settling ponds.

Mining is accomplished on a 24-hr basis. Four men mine two 12 hr shifts. Another man is employed to process all cleanups completely on site. One catskinner to prepare ground and level tailings. The owner and one other man perform support functions. Several other family members perform camp logistics.

WORK ACCOMPLISHED: The mining had just begun at the time of the author's visit. The previous two weeks had been spent freighting all equipment and the camp to the mine site and preparing ground for mining. A look at the sluice box showed rough gold was being

recovered. Tenor of the deposit could not be estimated. One piece of coarse (1/2 in. x 1 in.) gold showing rough dendritic texture with attached quartz was observed. Production subsequent to this visit was reportedly satisfactory.

REMARKS: The operator anticipates several seasons of mining on the upper Caribou drainage. Several bench deposits 20- to 50-ft above the creek level have never been tested and represent a substantial gold resource.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 19, Rainy Creek, SW Sec. 14, T16S, R17W

DEPOSIT DESCRIPTION: Up to 15-ft deep unsorted alluvial and colluvial gravels. Deposit is up to 200-ft wide by 1,000-ft long. Stream gradient is less than 5% and the deposit is located at the mouth of Rainy Creek Canyon where the stream emerges onto a broad, open fan deposit. Gravels being mined are at the head end of the alluvial fan.

MINING EQUIPMENT: 1.25 cy bucket excavator, D-6 Cat® dozer, medium sized shaker screen-sluice plant, 6-in. pump, generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Large tractor truck, 4x4 pickup and camper, four cabins, flatbed truck trailer, large trailer van, welding equipment, camp generator.

MINING AND CLEANUP PROCESSING METHOD: Area was cleared of brush and thin veneer of soil. A drainage ditch was excavated to bedrock schist. A cut will be made moving the washing plant ahead of the bucket excavator. Several men and their families were involved in the operation.

WORK ACCOMPLISHED: The area had been stripped and prepared for mining at the time of the author's visit and no mining had been accomplished at that point.

REMARKS: Upstream from the mine site, the stream becomes fairly narrow and shallow until the head of the drainage where 30- to 50-ft minable widths are present and the gravel is relatively shallow. Some handworking from "earlier" days are evident in the upper canyon. A small area was mined downstream from the present site where the present stream drainage is incised into the huge alluvial fan. Results of that mining are unknown.

Table A-1 - Composition (Fineness) of Placer Gold Collected from Pit and Cable Tool Samples, Kantishna Study Area

| Drainage | Sample # | Composition | |
|---|---|---|---|
| | | Gold | Silver + Base |
| Moose | A1452 | 763 | 237 |
| Moose | A1453 | 779 | 221 |
| Moose | A1454 | 775 | 225 |
| Eureka Fan | A1457 | 746 | 254 |
| Eureka | A1458 | 744 | 256 |
| Moose/Friday Terrace | A1459 | 911 | 89 |
| Friday | A1460 | 769 | 231 |
| Spruce | A1466 | 790 | 210 |
| Upper Glen | A1467 | 808 | 192 |
| Glen Terrace | A1471 | 907 | 93 |
| Lower Glen | A1473 | 786 | 214 |
| Moose Terrace/ Rainy | A1474 | 850 | 150 |
| Eldorado | A1476 | 835 | 165 |
| Moose Terrace | CDH-2 (A1477) | 709 | 291 |
| Moose Terrace | CDH-3 | 889 | 111 |
| Glacier Terrace | CDH-10 (A1478) | 872 | 128 |
| Glacier Terrace | CDH-11-16 | 752 | 248 |
| Moose Terrace | CDH-17 | 915 | 85 |

Table A-1a - Composition and Gold/Silver Ratios of Placer Gold Collected from the Kantishna/Dunkle Mine Study Areas (Compiled by Robert B. Hoekzema, U. S. Bureau of Mines, Anchorage)

| Stream (Kantishna Area) | Sample # | Composition | | | Au/Ag | Au/ Au+Ag |
|---|---|---|---|---|---|---|
| | | Au | Ag | Base | | |
| Banjo Dump | A3032 | 635 | 81 | 284 | 7.8 | 887 |
| Bearpaw River | A0989 | 759 | 111 | 130 | 6.8 | 872 |
| Bearpaw River | A1406 | 623 | 88 | 289 | 7.1 | 876 |
| Caribou Creek (Upper) | A3048 | 654 | 115 | 231 | 5.7 | 850 |
| Caribou Creek (Lower) | A1402 | 660 | 178 | 162 | 3.7 | 788 |
| Crevice Creek | A0978 | 631 | 149 | 220 | 4.2 | 809 |
| Crevice Creek | A0980 | 613 | 30 | 357 | 20.4 | 953 |
| Eldorado Creek | A3022 | 787 | 74 | 139 | 10.6 | 914 |
| Eldorado Creek | A3056 | 829 | 40 | 131 | 20.7 | 954 |
| Eldorado Creek Tributary | A3052 | 952 | 48 | | 19.8 | 952 |
| Little Moose Cr. | A3026 | 579 | 351 | 70 | 1.6 | 623 |
| Little Moose Cr. | A3027 | 537 | 280 | 183 | 1.9 | 657 |
| Moose Creek | A3058 | 713 | 112 | 175 | 6.4 | 864 |
| Moose Creek | A3069 | 738 | 86 | 176 | 8.6 | 896 |
| Moose Creek | A3094 | 717 | 283 | | 2.5 | 717 |
| Moose Creek | A0958 | 760 | 32 | 208 | 23.8 | 960 |
| Moose Creek | A0961 | 630 | 370 | | 1.7 | 630 |
| Moose Creek | A0962 | 724 | 30 | 246 | 24.1 | 960 |
| Myrtle Creek | A3072 | 614 | 50 | 336 | 12.3 | 925 |
| Myrtle Creek | A3077 | 735 | 108 | 157 | 6.8 | 872 |
| Myrtle Creek | A3084 | 827 | 11 | 162 | 75.2 | 987 |
| Myrtle Creek | A3085 | 768 | 232 | | 3.3 | 768 |
| Rainy Creek | A3043 | 743 | 48 | 209 | 15.5 | 939 |
| Rock Creek Trib. | A0995 | 831 | 169 | | 4.9 | 831 |
| Rock Creek | A1400 | 801 | 153 | 46 | 5.2 | 840 |
| Stampede Creek | A3029 | 532 | 322 | 146 | 1.7 | 623 |

Table A-1a - Composition and Gold/Silver Ratios of Placer Gold Collected from the Kantishna/Dunkle Mine Study Areas

| Stream (Dunkle Area) | Sample # | Composition | | | Au/Ag | Au/ Au+Ag |
|---|---|---|---|---|---|---|
| | | Au | Ag | Base | | |
| Bull River | A1418 | 706 | 130 | 164 | 5.4 | 844 |
| Colorado Creek | A2424 | 640 | 166 | 194 | 3.9 | 794 |
| Colorado Creek | A2429 | 626 | 170 | 204 | 3.7 | 786 |
| Costello Creek | A1417 | 670 | 151 | 149 | 4.4 | 816 |
| Costello Creek | A2431 | 496 | 17 | 487 | 29.2 | 967 |

## BACKHOE PITTING AND SAMPLING PROCEDURES

Pits were excavated in 1-ft vertical intervals using a John Deere® 450-D, track mounted backhoe which had a 13-ft reach. As each vertical foot of material was excavated, a representative 4 x 3 ft bucket full of material was sampled. Each bucket was heaped in order to closely approximate an original volume of bank alluvium. Sampling was limited to relatively shallow deposits by the reach capacity of the backhoe. The heavy minerals and gold in the sample were concentrated by a small, portable Denver Gold Saver® trommel/sluice washing plant capable of processing approximately 1 cy of material hourly. The washing plant was run by a 3.5 hp Honda engine. Wash water was supplied to the plant from a 3.5 hp 150 gpm Honda centrifugal pump via 1.5-in. polypipe.

Material from the backhoe was placed onto and washed through a 2-in. screened hopper. Oversize material was discarded manually while undersize (less than 2 in.) material flowed into a 3/16-in. screened trommel and was washed continuously by a spray bar. The undersize (less than 3/16 in.) material flowed through a laterally agitated 2 ft x 1 ft riffle sluice section. Tailings from this primary sluice flowed over an extended 10 ft x 1 ft sluice containing 1-in. transverse riffles overlying a Nomad® indoor-outdoor carpet. The extended sluice was utilized as a safeguard to trap gold not collected in the primary riffles. As the season progressed, only the upper 2 ft of the extended sluice was utilized as the primary riffles effectively trapped the gold.

At 4-ft vertical intervals or at significant changes in the characteristics of the deposit being sampled, the wash plant was shut down and concentrates from the primary riffles were screened. Material larger than 10 mesh was inspected for nuggets. Material smaller than 10 mesh was carefully hand-panned in a large wash tub. Gold colors were counted, described and recorded. The concentrate was saved for further processing. By sampling in set intervals or at definitive breaks, the distribution and concentration of the gold could be recorded. Concentration from the extended sluice section was processed in the same manner at the conclusion of the hole.

Larger excavation equipment, belonging to miners in the area, was used for collecting some samples. In these instances, a large single sample was excavated and piled next to the washing plant. A representative 1 cy sample was taken from the pile and processed through the washing plant.

Free gold was extracted from concentrates from the pit sample in the field laboratory. Coarse gold (greater than 30 mesh) was removed manually. The remaining gold in the concentrate was then amalgamated with mercury in a rock tumbler for a minimum of 2 hr. The amalgam was removed from the concentrate using a spiral wheel concentrator, and digested in a nitric acid solution to dissolve the mercury. The yielded gold was washed with distilled water and then heated to remove any excess mercury. Then both hand-picked and amalgamated gold was weighed to determine the total gold in the sample.

The fineness of selected gold samples from each drainage was determined by Silver Valley Labs in Osburn, Idaho. Approximately half of the sample concentrates were analyzed using an optical emission spectrograph to determine the content of 31 elements. The remaining samples were assayed for selected elements to test the possibility of other potentially economically concentrated metals. Table A-2 summarizes pit sampling results.

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001450 | Lower Moose Creek | 3,481, 590 | 343,340 | SW 13 T16S R18W | *800 | 0.001 | 0 - 4' | Coarse glaciofluvial gravels. Very fine gold in sample. One 24 cu ft sample contained 34.9 mg of gold. | Hit water at 3 ft in hole, sampling stopped at 4 ft due to cave. Bedrock was not reached, inconclusive results. Fair sample location. |
| A001451 | Lower Moose Creek | 3,482, 636 | 341,962 | SW13 T16S R18W | *763 | 0.0002 | 1-10.5' | Poorly-sorted, coarse, glaciofluvial gravel. Very fine gold. One 60 cu ft sample contained 21.2 mg of gold. | Sample taken adjacent to large mine cuts. Stopped at blue clay false bedrock. Fair sample location although pay-streaks are common in this area. |
| A001452 | Lower Moose Creek | 3,482 937 | 341,668 | SE14 T16S R18W | 763 | 0.009 | 0-8' | Poorly sorted coarse glaciofluvial gravel. Hit large tight boulders at 6' which could not be excavated - abandoned hole. Very fine flaky gold increased considerably near bottom of hole. Two samples with a total volume of 54 cu ft contained 82.9 mg of gold. | Boulders at bottom of hole and increasing gold content at bottom of hole at indicate it was abandoned relatively close to bedrock. Inconclusive test. Fair sample location. |
| A001453 | Lower Moose Creek | 3,488 309 | 337,844 | SW11 T16S R18W | 779 | 0.0016 | 0-6' | Loose sandy glaciofluvial gravel. Hit permafrost at 6' and abandoned hole before hitting bedrock. Very fine flaky gold. Two samples with a total volume of 36 cu ft contained 84.5 mg of gold. | Inconclusive test because bedrock not reached. Fair sample location. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001454 | Lower Moose Creek | 3,487 150 | 338,822 | SW11 T16S R18W | 775 | 0.017 (incl. 1/4" nugget) 0.014 (w/o nugget) | 0-6' 6-9.5' | Fine soil overburden (no sample) Sandy glaciofluvial gravel to iron stained quartz sand false bedrock. Gold coarse and rough. Two samples total volume of 36 cu ft, contained 946.1 mg gold. | Deep overburden at sample pit not characteristic of area and was not used to calculate concentration Good sample location. A mining operation nearby is recovering 30% nuggets from a similar deposit and first concentration value is considered representative. |
| A001455 | Eureka Creek | 3,489 032 | 354,844 | SW8 T16S R17W | *744 | 0.0007 | 0-1' 1-5' | Soil (no sample) Disturbed colluvium contained manmade articles and petroleum contamination includes 1' of bedrock. 30 cu ft sample contained 33.4 mg of gold. | Sample probably from old tailings near cabin site and results are inconclusive Poor sample location |
| A001456 | Eureka Creek | 3,489 153 | 354,685 | NW8 T16S R17W | *746 | 0.0088 | 0-1.5' 1.5-2.5' | Coarse, subangular alluvial and colluvial fan gravel. Fine gold. Schist bedrock. One sample with a volume of 12 cu ft contained 161.6 mg of gold. | Sample from nose of alluvial fan above Eureka Creek. Fan heads near Banjo Mine. Fan possibly 30-40' deep. Fair sample location. |
| A001457 | Eureka Creek | 3,489 311 | 354,442 | NW8 T16S R17W | 746 | 0.0048 | 0-3' 3-13.5' | Colluvium (no sample). Coarse, subangular alluvial and colluvial fan gravel. gold. Includes 8mm wire. Three samples total volume of 72 cu ft contained 573.5 mg of gold. | Sample from top of fan, approximately 70' above A001456. Bedrock not reached because of backhoe limitation. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001458 | Eureka Creek | 3,488 530 | 353,068 | NW8 T16S R17W | 744 | 0.0027 | 0-2'<br>2-12.5' | Soil and tundra overburden (no sample)<br>Coarse colluvial and alluvial gravel. Fine to coarse gold. Three samples with a total volume of 66 cu ft contained 277.8 mg of gold. | Sample from low bench adjacent to stream bottom tailings. Bedrock not reached and results are probably low. Fair sample location. |
| A001459 | Friday Creek | 3,487 560 | 340,120 | SE11 T16S R18W | 911 | 0.0117 | 0-2'<br>2-18' | Tundra and soil overburden (no sample)<br>Sandy glaciofluvial gravel Very fine to coarse colors. Four samples with a total volume of 2.6 cu ft contained 37.2 mg of gold. | Sample from buried Moose Creek terrace gravels adjacent to recent mine cut. Hand dug channel sample from vertical bank exposure. Did not reach bedrock. Good sample location. |
| A001460 | Friday Creek | 3,487 880 | 340,350 | SE11 T16S R18W | 769 | 0.0013 | 0-2'<br>3-18' | Tundra and soil overburden<br>Coarse, unsorted, subangular colluvial and alluvial fan gravels. Fine gold. Four samples with a total volume of 2.4 cu ft contained 4.0 mg of gold. | Hand dug channel sample from vertical mine cut in fan gravel. Bedrock was not reached. Poor sample location. |
| A001461 | Lower Moose Creek | 3,484 233 | 340,806 | NE14 T16S R18W | *763 | 0.0012 | 0-8'<br>3-10.5' | Tundra and silty muck overburden (no sample)<br>Loose sandy, unsorted glacio-fluvial gravel. Very fine to fine gold. Two samples with a total volume of 60 cu ft contained 118.1 mg of gold. | Reached limit of backhoe before reaching bedrock inconclusive results. Fair sample location. |
| A001462 | Upper Spruce Creek | 3,489 583 | 391,063 | NW9 T16S R16W | *790 | 0.0001 | 0-3'<br>3-7' | Soil and sandy muck (no sample)<br>Sandy, subrounded gravels water in hole at 3' and ice at 7'. One sample with a volume of 24 cu ft contained 4.7 mg of gold. | Bedrock was not reached and sample is inconclusive as values should be concentrated there. Fair sample location. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001463 | Upper Spruce Creek | 3,489 634 | 391,245 | NW9 T16S R16W | *790 | 0.0005 | 0-1' 1-11.5' | Soil (no sample) Loose, fine, sandy gravel Very few fine colors. 63 cu ft sample contained 4.7 mg of gold. | Reached limit of backhoe before hitting bedrock. Inconclusive sample as values historically on bedrock. Probably close as big boulders occur at bottom of hole. Fair sample location. |
| A001464 | Upper Spruce Creek | 3,488 359 359 | 389,976 | NW9 T16S R16W | *790 | 0.00008 | 0-3' 3-11' | Tundra and muck (no sample) Subangular colluvial and alluvial gravel of local origin with 10% rounded glacial clasts. Very few colors. One sample with a volume of 36 cu ft contained 4.1 mg of gold. | Sample from saddle between Glen and Spruce Creeks proved existence of old channel between the two creeks. Poor fine sample location. |
| A001465 | Upper Spruce Creek | 3,487 998 | 389,787 | SW9 T16S R16W | *790 | 0.0002 | 0-1' 1-13' | Tundra and muck (no sample) Mostly wellrounded clasts of glacial origin on blue clay outwash bedrock. Lower section of gravel contained large amounts of clay. Very few fine to coarse colors. Three samples with a total volume of 72 cu ft contained 17.2 mg of gold. | Sample near A001464. Apparently reworked glacio till/terrace gravels. Poor sample location. |
| A001466 | Lower Spruce Creek | 3,485 662 | 390,289 | SW9 T16S R16W | 790 | 0.0051 | 1-8.5' 8.5-9' | Coarse subangular to subrounded gravel. Fine to coarse gold concentrated near bedrock. Decomposed clayey schist bedrock. Three samples with a total volume of 90 cu ft contained 808.2 mg of gold. | Good sample location. Gold is very bright and flaky. Probably contains reworked glacial gold. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001467 | West Fork Glen Creek | 3,493 526 | 377,233 | NE1 T16S | 808 | 0.0127 | 0-1'<br>1-4' | Soil (no sample)<br>Coarse subangular to subrounded gravels. Fine to coarse gold colors. One sample with a volume of 13.2 cu ft contained 238.8 mg of gold. | Good sample location. |
| A001468 | West Fork Glen Creek | 3,493 593 | 377,242 | NE1 T16S R17W | *808 | 0.0043 | 0-1'<br>1-5' | Soil (no sample)<br>Coarse subangular and subrounded gravels to decomposed schist bedrock Large boulders on bedrock. One sample with a volume of 26.4 cu ft contained 163.8 mg of gold. | Good sample location. Taken 200' upstream from recent mining cut. |
| A001469 | West Fork Glen Creek | 3,493 508 | 377,211 | NE1 T16S R17W | *808 | 0.0199 | 0-3'<br>3-4' | Coarse subangular to subrounded gravel with large boulders at bedrock. Fine to coarse gold colors.<br>Bedrock schist with pyrite bearing quartz vein. Fine to coarse gold colors. One sample with a volume of 26.4 cu ft contained 747.9 mg of gold. | Good sample location. Taken 100' from A001468. |
| A001470 | Upper Glen Creek | 3,492 906 | 379,023 | SW6 T16S R16W | *907 | 0.0027 | 0-5' | Coarse, unsorted, subangular colluvial and alluvial gravel. One sample with a volume of 26.4 cu ft contained 93.2 mg of gold. | Sample taken from top five feet of 30' deep bench above main creek. Poor sample location. |
| A001471 | Upper Glen Creek | 3,492 866 | 379,168 | SW6 T16S R16W | 907 | 0.0093 | 20- 27' | Coarse unsorted, subangular alluvial gravels with 10% boulders. Fine to coarse gold colors and one 3/16" nugget. One sample with volume of 26.4 cu ft contained 311.4 mg of gold. | Sapmle from bottom of same bench as sample A001470. Seven feet sample taken above but not on bedrock. Fair sample location. |

TABLE A-2 - KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001472 | Lower Glen Creek | 3,483 178 | 384,520 | NW17 T16S R16W | *786 | 0.0063 | 0-8.5' | Coarse subangular to subrounded gravel. Fine to coarse colors and one 1/4" nugget. | Fair sample location. |
| | | | | | | | 8.5-9.5' | Decomposed schist bedrock fine to coarse colors. Three samples with a total volume of 54 cu ft contained 601.7 mg of gold. | |
| A001473 | Lower Glen Creek | 3,483 462 | 384,617 | NW17 T16S R16W | 786 | 0.0228 | 0-.5' | Soil (no sample) | Fair sample location. 200' upstream from A001472. |
| | | | | | | | .5-5.5' | Coarse sandy, subangular to subrounded gravels fine to coarse gold colors. | |
| | | | | | | | 5.5'-6' | Hard schist bedrock. Two samples with a total volume of 36 cu ft contained 1373.8 mg of gold. | |
| A001474 | Upper Moose Creek | 3,478 301 | 368,748 | NW23 T16S R17W | 850 | 0.0013 | 0-1' | Soil (no sample) | Sample taken at mouth of Rainey Creek from bench adjacent to Moose Creek. Taken 10' from R.P. samples A003045 and A003046. Fair sample location. |
| | | | | | | | 1-23' | Coarse, well sorted, well rounded glaciofluvial gravel. Fine gold colors. | |
| | | | | | | | 23-24' | Schist bedrock. Few fine colors. Three samples with a total volume of 138 cu ft contained 238.6 mg of gold. | |
| A001475 | Rainy Creek | 3,480, 841 | 371,029 | SW14 T16S R17W | *800 | 0.0004 | 0-12' | Subangular to subrounded sandy gravel. Some clasts of glacial till ? origin. Few fine colors. Three samples with a total volume of 72 cu ft contained 27.4 mg of gold. | Appears to be slightly reworked glacial till and local gravels in fan complex. Poor sample location. |

TABLE A-2 - KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001476 | Lower Eldorado | 3,481, 581 | 343,340 | NW23 T16S R18W | 835 | 0.0077 | 0-4.5' | Subangular to subrounded gravel of local origin with FeOx stain. | Good sample location. |
| | | | | | | | 4.5-7.5' | Rounded glaciofluvial gravel fine to coarse colors. | |
| | | | | | | | 7.5-8.0' | Blue clay outwash material False bedrock. Two samples with a total volume of 48 cu ft contained 509.8 mg of gold. | |
| A001476 | Lower Eldorado Creek | 3,481 589 | 343,340 | NW23 T16S R18W | 835 | 0.0116 | 0-2.5' | Subangular to subrounded gravel (no sample) | Good sample location. Taken adjacent to above sample to determine if gold is concentrated at contact of different gravels. |
| | | | | | | | 2.5-5' | Subangular to subrounded gravel with fine to coarse gold. One 1/4" nugget. | |
| | | | | | | | 5-7.5' | Rounded, coarse glaciofluvial gravel. Fine to coarse gold colors. Three samples with a total volume of 24 cu ft contained 363.7 mg of gold. | |

* Fineness value is that of another pit sample from same drainage.

** Sample locations described as to their relative ability to concentrate gold:

Good: Good location for gold to concentrate. Probably paystreak sample and gold concentration is probably above value of gravels in immediate area.

Fair: Fair area for gold to concentrate. Concentration probably representative of value of gravels in immediate area.

Poor: Poor location for gold to accumulate and concentration may understate value of gravels in immediate area.

# FIELD LOG -- PIT SAMPLING

Sample # A001450

Project Kantishna

Line

Claim Ashbrook Homesite - Moose Creek

Hole 1

Bucket Size 6 cubic feet

Elevation 1650

Coordinates N 3481570
E 343375

20' from Moose Cr. @ xing - on RL Moose Cr.

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/20/83 | 1:00 PM | 0 | 4 | 4 | Loose coarse gravel - few small colors from surface |
| | | | | | glaciofluvial material |
| | | | | | Stop @ 4' - hole caving water @ 3' |

Overburden 0 ft.

Gravel 4 ft.

Bedrock 0 ft.

Water Level @ 3 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001451

Project Kantishna

Line

Claim Moose Creek 1

Hole 2

Bucket Size 6 cubic feet

Elevation 1680

Coordinates N 3482610
E 342250

Below Eldorado Creek
approx. 50' south of road on N-5
prospect and drain ditch

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| | | | | | Trench on virgin ground. Scraped by Sonny Kragnes of surfac muck. Never mined however. Area to north 50' has all been mined in last 5 yrs |
| 6/22/83 | Beg. 11:30 AM | 0 | 4 | 4 | Poorly sorted med. to coarse gravel, approx. 12 colors, |
| | | | | | small - 2 mg |
| | 1:00 PM | 4 | 8 | 4 | Poorly sorted med. to coarse gravel, approx. 25 colors - |
| | | | | | 5 mg |
| | 1:40 PM | 8 | 10.5 | 2 | Poorly sorted med. to coarse gravel, approx. 20 colors, |
| | | | | | few boulders |
| | 2:20 PM | Finish | | | Stopped @ blue clay-false bedrock |
| | | | | | *NOTE: All cons. added to one sample |

Overburden 0 ft.

Gravel 10.5 ft.

Bedrock 10.5 ft. blue clay

Water Level @ 8 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001452

Project Kantishna

Line

Claim L-57 Moose Creek

Hole 3

Bucket Size 6 cubic feet

Elevation 1680

Coordinates N 3482950 E 341700

Approx. 80' south of south side line of MC#2

Approx. 2' tundra and soil already scraped off

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/22/83 | Start 4:30 | 0 | 4 | 4 | Coarse sand, gravel, boulder, dark gray clay @ 1 1/2' |
| | | | | | tight, coarse gravel @ 3' - 10 small colors - 1 mg |
| | 5:20 | 4 | 8 | 5 | Gets few big boulders @ 6" and becomes tighter. Some |
| | | | | | sluff from above, water rose 1/2', approx. 75 colors - 35 mg |

Overburden 0 ft. Already scraped

Gravel 8+ ft.

Bedrock ? ft.

Water Level @ 2 1/2 ft.

J. Levell

Probably close to bedrock because large boulders evident near bedrock in trench 200' away

# FIELD LOG -- PIT SAMPLING

Sample # A001453

Project Kantishna

Line

Claim Approx. 200' NE Chinook #4

Hole #4

Bucket Size 6 cubic feet

Elevation 1550

Coordinates N 3488450
E 337800

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/24/83 | 11:50 AM | 0 | 4 | 4 | Loose sandy gravel w/5% of up to 1.5' across boulders |
| | | | | | approx. 100 fine colors - 3 up to 2 mms across |
| | | 4 | 6 | 2 | Loose sandy gravel - boulders the same. Hit water 5' |
| | | | | | hit ice @ 6', approx 50 fine colors - 2 up to 3 mm across |
| | Finish 3:30 | | | | |
| | | 0 | 6 | | Sluice - lots of blacks (magnetite) 5 colors |

Overburden 1 ft. Scraped off

Gravel 6 ft.

Bedrock ? ft.

Water Level @ 5 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001454

Project Kantishna

Line

Claim Chinook 3 or Alder 6

Hole #5

Bucket Size 6 cubic feet

Elevation 1560

Coordinates N 3487360
E 338770

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/24/83 | | 0 | 6 | | No sample, fine sand and clay |
| 6/25/83 | 11:00 AM | 6 | 8.5 | 4 | Stopped at red sand/false bedrock, approx 300, approx. 50 over 3 mm across, one round flat flake 1mm x 6 mm |
| 6/25/83 | 1:00 PM | 8.5 | 9.5 | 2 | Red sand and some sand and gravel from above, 150 colors, 25 approx. above 3 ml, 1 nugget 1/8" across |
| 6/25/83 | | 6 | 9.5 | | Sluice sample, lots of black sand and lots of very fine colors |

Overburden 6 ft. fine soil

Gravel 3.5 ft.

Bedrock 9.5 ft.

Water Level @ - ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001455

Project Kantishna

Line

Claim Eureka Creek 6

Hole #6

Bucket Size 6 cubic feet

Elevation 2350

Coordinates N 3484040
E 354900

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/27/83 | 4:15 PM | 0 | 1 | | No sample |
| | 4:15 PM | 1 | 5 | 5 | 3 ft colluvium, 1 ft bedrock, colluvium disturbed |
| | | | | | heavy diesel contamination approx 10 coarse colors |
| | Sluice | 2 | 5 | 5 | 100 fine colors, one 1/8" flake |

Overburden 1 ft.

Gravel 4 ft.

Bedrock 4 ft.

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001456

Project Kantishna

Line

Claim Eureka Creek 6 (Eureka Creek)

Hole #7

Bucket Size 6 cubic feet

Elevation 2400

Coordinates N 3484120
E 354575

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/28/83 | 12:30 | 0 | 2.5 | 2 | Hit bedrock @ 1.5 ft, dug 1 ft into bedrock |
| | | | | | 70 fine colors |
| | Sluice | 0 | 2.5 | 2 | 70 very fine colors |

Overburden 0 ft.

Gravel 2.5 ft.

Bedrock 2.5 ft.

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001457

Project Kantishna

Line

Claim Eureka Creek 6

Hole #8

Bucket Size 6 cubic feet

Elevation 2430

Coordinates N 3484240
E 354380

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/29/83 | | 0 | 3 | | Overburden, colluvium |
| | 12:30 PM | 3 | 7 | 4 | 30 very fine colors |
| | 2:00 PM | 7 | 10.5 | 4 | 8 mm wire, 30 coarse, 100 fine, 100 very fine |
| | 4:00 PM | 10.5 | 13.5 | 4 | 17 coarse, 200 fine, 300 very fine |
| | Sluice | 3 | 13.5 | 12 | 1 fine, 100 very fine |

Overburden 3 ft.

Gravel 10.5 ft.

Bedrock - ft. never hit

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001458

Project Kantishna

Line

Claim Eureka Creek 5

Hole #9

Bucket Size 6 cubic feet

Elevation 2300

Coordinates N 3483720
E 353460

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/30/83 | | 0 | 2 | | Overburden, no sample |
| | 12:00noon | 2 | 6 | 4 | 2 fine, 65 very fine |
| | 1:35 PM | 6 | 9.5 | 4 | 20 fine, 200 very fine |
| | 2:30 PM | 9.5 | 12.5 | 3 | 4 coarse, 25 fine, +100 very fine |
| | | | | | |
| | Sluice | 2 | 12.5 | 11 | 20 very fine colors |

Overburden 2 ft.

Gravel 10.5 ft.

Bedrock - ft. didn't hit

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001459

Project Kantishna

Line

Claim Friday Discovery

~~Hole~~ Bank Channel 10

Bucket Size cubic feet 1 pan/vert. ft

Elevation 1680

Coordinates N 3487560
E 340120

| Date | Time | Sample From | Sample To | No. of ~~Buckets~~ Pans | Remarks |
|---|---|---|---|---|---|
| | | | | | From blue glaciofluvial gravels on left limit terrace |
| ~~7/1/83~~ | ~~12:00~~ | ~~0~~ | ~~2~~ | | ~~No sample - OB~~ |
| | | 2 | 6 | 4 | 20% rounded cobbles, few boulders up to 4' across |
| | | | | | 1 fine, 14 very fine |
| | | 6 | 10 | 4 | Same - no boulders, 1 fine, 6 very fine |
| | | 10 | 14 | 4 | Same - no boulders, 2 coarse, 1 fine, 8 very fine |
| | | 14 | 18 | 4 | Fe stnd, pea gravel in bottom 2 ft, should be near |
| | | | | | false bedrock as active cut across stream channel |
| | | | | | has similar material above false bedrock |
| | Tails sluice | | | | |
| | | ~~2~~ | ~~18~~ | | ~~11 very fine~~ |

Overburden 2 ft.

Gravel 16 ft.

Bedrock ? ft.

Water Level @ 16 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001460

Project Kantishna

Line

Claim Friday Discovery

~~Hole~~ Bank Channel 11

Bucket Size cubic feet 1 pan/vert. ft

Elevation 1710

Coordinates N 3487880
E 340350

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| | | | | | Subangular Friday Creek fan gravels from rt. limit terrace above present, active mine cut, few boulders up to 2 ft across. |
| 7/1/83 | 2:00 | 0 | 3 | 0 | Dirt - no sample |
| | A | 3 | 7 | 4 | Subangular gravels, 14 very fine |
| | B | 7 | 11 | 4 | Subangular, 10 very fine colors |
| | C | 11 | 15 | 4 | Subangular, 14 very fine colors |
| | D | 15 | 18 | 3 | Bedrock present in near vicinity and should have |
| | | | | | been close to or near it in bottom foot of sample |
| | | | | | 1 fine, 16 very fine |

Overburden 3 ft.

Gravel 15 ft.

Bedrock 0 ft.

Water Level @ 0 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001461
Project Kantishna
Claim Liberty Moose Creek
Bucket Size 6 cubic feet
Coordinates N 3484230
E 340810
240' S50E from CP-4

Line
Hole 12
Elevation 1500

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/2/83 | 11:30 | 0 | 3 | 5 | No sample - muck and sandy overburden |
| | 12:30 | 3 | 7 | 5 | Loose sandy gravel with very rounded cobbles of glacio- |
| | | | | | fluvial origin. Rock types vary widely. 10% boulders |
| | | | | | up to 3' across. 1 coarse, 6 fine, 200+ very fine |
| | 2:00 | 7 | 10.5 | 5 | 2 coarse, 40 fine, +200 very fine much black sands |
| | | | | | 50% + 1 1/2", 20% + 3/16, 20% fine sand |
| | Sluice sample | 3 | 10.5 | 15 | 75 very fine colors |

Overburden 3 ft.

Gravel 7.5 ft.

Bedrock ? ft.

Water Level @ - ft.

W. Srock

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001462

Project Kantishna

Line

Claim Spruce

Hole 13

Bucket Size 6 cubic feet

Elevation 2550

Coordinates N 3490100
E 391300

Near rt. limit of valley - 10' west of road

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/6/83 | 10:30 AM | 0 | 3 | - | Soil and sandy muck - no sample |
| | | 3 | 7 | 4 | Loose sandy alluvium - small cobbles. Water @ 3'. Hole |
| | | | | | blocked at 7' on something hard - possibly ice? But also |
| | | | | | ran into big boulders and a 4" clayey gravel layer. 20 very |
| | | | | | fine colors |
| | | | | | 20 very fine colors in tailings sluice |

Overburden 3 ft.

Gravel 4+ ft.

Bedrock ? ft.

Water Level @ 3 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001464

Project Kantishna

Line

Claim Spruce

Hole 14

Bucket Size 6 cubic feet

Elevation 2550

Coordinates N 3490200
E 391500
Approx. 150' east of #13

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/6/83 | 3:00 PM | 0 | 1 | | Soil |
| | | 1 | 5 | 4 | Very loose sandy gravel - 8" silty clay layer @ |
| | | | | | 3.5', 20 very fine colors, lots coarse magnetite |
| | | 5 | 9 | 4 | 10 very fine colors, hit water @ 8 ft, abundant |
| | | | | | coarse magnetite |
| | | 9 | 11.5 | 2.5 | Coarser, 5% boulders up to 2' across. Quit hole because |
| | | | | | bucket can't go deeper. 10 very fine colors, 1 fine |

Overburden 1 ft.

Gravel 10.5+ ft.

Bedrock - ft.

Water Level @ 8 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001464

Project Kantishna

Claim Spruce Creek #5

Bucket Size 6 cubic feet

Coordinates N 3488200
E 390200
Bench above S5

Line

Hole #15

Elevation 2480

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/8/83 | | 0 | 3 | | Overburden - no sample |
| | | 3 | 7 | 4 | 10% 1 1/2"+, 10% 1 1/2"-3/16", high clay content, |
| | | | | | 1, 2 mm color 90% of cobbles are angular schist, 10% |
| | | | | | rounded of various lithologies |
| | | 7 | 11 | 4 | Hit bedrock @ 10', 20% 1.5"+, 25% 1.5"-3/16", |
| | | | | | 1 fine, 6 very fine. Much black sand, 90% of cobbles |
| | | | | | are subangular schist, 10% rounded of varying lithologies |
| | | 11 | 12 | 1 | Bedrock decomposed schist, no colors |
| | | Tailings Sluice Sample | | | |
| | | 3 | 12 | 9 | No colors |

Overburden 3 ft.

Gravel 8 ft.

Bedrock 12 ft.

Water Level @ _____ ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001465

Project Kantishna

Line

Claim Spruce Creek 5

Hole #16

Bucket Size 6 cubic feet

Elevation 2470

Coordinates N 3487600
E 390150
Bench above S5

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/8/83 | | 0 | 1 | | Overburden no sample |
| | | 1 A | 5 | 4 | Well rounded cobbles, 20% 1.5"+, 20% 1.5"-3/16", |
| | | | | | 3 fine colors, 10 very fine |
| | | 5 B | 9 | 4 | Well rounded cobbles of various lithologies, 25% 1.5"+, |
| | | | | | 25% 1.5"=3/16", little clay, 1 coarse, 4 fine, 1+ very fine. |
| | | 9 C | 13 | 4 | Stopped @ blue clay, high clay, 1 fine, 10 very fine |
| | | Tailing Sluice Sample | | | |
| | | 1 | 13 | 12 | |

Overburden 1 ft.

Gravel 12 ft.

Bedrock 13? ft.

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001466

Project Kantishna

Line

Claim Spruce 4

Hole 17

Bucket Size 6 cubic feet

Elevation 2350

Coordinates N 3485450
E 390350

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| | | | | | Near Ashbrook's cut from 1982. Bedrock near surface 100' away |
| 7/9/83 | | 0 A | 4 | 4 | 30% 1.5", 30% 1.5"-3/16", some clay, water @ 2.3' |
| | | | | | approx. 100 fine, +100 very fine, high magnetite |
| | | 4 B | 7 | 6 | 3 coarse, 100 fine, 100+ very fine, much magnetite |
| | | | | | sloughing of hole |
| | | | | 10 | Sluice sample of 7 ft |
| | | | | | |
| 7/10/83 | | | | | Widened hole to go deeper |
| 7/11/83 | | 7 C | 9 | 5 | Hit bedrock @ 8.5' - orange clayey schists, big |
| | | | | | boulders on bed rock, 7 very coarse, 15 coarse, +100 fine, |
| | | | | | +150 very fine. |
| | | 9 D | 9.5 | 4 | Tried to go deeper, but made little headway and started |
| | | | | | pulling out slough, but bedrock and big boulders in |
| | | | | | each bucket, 5 very coarse (one up to 4mms), 25 coarse, |
| | | | | | 100 fine, +150 very fine |
| | | | | 8 | Sluice sample of last 2.5' |
| | | | | | Showed lots of gold, but had a washout accident during |
| | | | | | sample D. Should not include sample D or sluice in calculations. |

Overburden 0 ft. scraped off last year probably close to a ft deep originally

Gravel 8.5 ft.

Bedrock 8.5 ft.

Water Level @ 2 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001467

Project Kantishna

Line

Claim Gold King 8

Hole #18

Bucket Size 1.2 cubic feet

Elevation 2800

Coordinates N 3493400
E 377500

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/12/83 | | 0 | 1 | | Overburden |
| | | 1 | 4 | 11 | Hit bedrock @ 3 ft. 6 coarse, + 50 fine, 50 very fine |
| | | | | | 25% 1.5", 25% 3/16"-1.5" |

Overburden 1 ft.

Gravel 3 ft.

Bedrock 3 ft.

Water Level @ 3 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001468

Project Kantishna

Line

Claim Gold King 8

Hole 19

Bucket Size 1.2 cubic feet

Elevation 2800

Coordinates N 3493450
E 377500

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/13/83 | | 0 | 1 | | Overburden |
| | | 1 | 5 | 22 | Hit bedrock @ 4', 6 coarse, +25 fine, +100 very fine, |
| | | | | | less black sands than #18. Bedrock is decomposed |
| | | | | | schist (buff colored) 30% +1.5", 30% 3/16=1.5", many |
| | | | | | large boulders @ bedrock |

Overburden 1 ft.

Gravel 3 ft.

Bedrock 4 ft.

Water Level @ ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001469

Project Kantishna

Line

Claim Gold King 8

Hole #20

Bucket Size 1.2 cubic feet

Elevation 2800

Coordinates N 3493400
E 377450

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/13/83 | | 0 | 4 | 22 | Hit bedrock @ 3 ft, sample site situated on a bedrock depression w/pyrite rich vein material showing @ bottom. Much bedrock in sample. Large boulders near bedrock. Much pyrite in sample 10 coarse, +100 fine, +100 very fine |

Overburden 0 ft.

Gravel 3 ft.

Bedrock 4 ft.

Water Level @ ____ ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001470

Project Kantishna

Claim Glen Creek 6

Bucket Size 1.2 cubic feet bank run

Coordinates N 3492400
E 379250

Line

Hole #21

Elevation 2700

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/14/83 | | / | / | 22 | 6 coarse, 75 fine, +100 very fine schist float, angular |
| | | | | | to subangular and subrounded gravel |
| | | Tailings sluice | | | Sample from 30' bench. Top 5' below grass roots 3 1/2 |
| | | | | | yd bucket struck - 1 yd run through gold saver. 10% |
| | | | | | boulders up to 1' across. Rest is fairly fine |
| | | | | | w/another 10% cobbles. Most rocks have hard clay glueing |
| | | | | | pebbles to sides |

Overburden 1 ft.

Gravel 5 ft.

Bedrock None ft.

Water Level @ ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001471

Project Kantishna

Line

Claim Gold King 5

Hole #22

Bucket Size 1.2 cubic feet bank run

Elevation 2660

Coordinates N 3492400
E 379300

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/14/83 | | Random loader bucket from bench | | | ~~One 3/16" nugget, 6 coarse, 50 fine, +75 very fine~~ |
| | | | | | 10% large boulders, 15% +1.5", 25% 3/16-1.5" |
| | | | | | Sample from lower 7' on bottom of 30' bench near |
| | | | | | weathered schist bedrock. 10% cobbles up to 1 ft across, |
| | | | | | 1% boulders up to 4 ft across. Imbricate structure normal |
| | | | | | to East Fork of Glen Creek. 1 yd sample run from |
| | | | | | 3 1/2 yd struck bucket. |

Overburden - ft.

Gravel 7 ft. vertical

Bedrock 2 ft. below sample

Water Level @ - ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001472

Project Kantishna

Line

Claim Glen Creek (lower)

Hole #25

Bucket Size 6 cubic feet

Elevation 2240

Coordinates N 3483300
E 384300 Glen Creek

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/17/83 | | 0 | 3.5 | 3 | 1 coarse (3/8"x1/2"), 1 fine, +100 very fine, hit clay |
| | | | | | and vegetable material @ 3', 40% + 1.5", 30% 3/16"-1.5". |
| | | | | | Possible tailings |
| | | 3.5 | 8.0 | 4 | 4 fine, +200 very fine, stopped 6" above bedrock |
| | | 8.0 | 9.5 | 2 | Decomposed schist bedrock and material just above |
| | | | | | bedrock, 10 coarse, 20 fine, approx. 70 very fine. |
| | | Tailings sluice | | | |
| | | 0 | 9.5 | 9 | No color |

Overburden 0 ft.

Gravel 8.5 ft.

Bedrock 8.5 ft.

Water Level @ 0 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001473

Project Kantishna

Line

Claim Glen Creek

Hole #24

Bucket Size 6 cubic feet

Elevation 2240

Coordinates N 3483500
E 384850 Lower Glen Creek

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/18/83 | | 0 | .5 | | No sample overburden |
| | | 0.5 | 4.5 | 4 | Well washed gravel 20% 1.5"+, 40% 3/16"-1.5", 5 coarse, |
| | | | | | +20 fine, +100 very fine, hit water @ 4.0 ft. |
| | | 4.5 | 6 | 2 | 12 coarse, approx. 100 fine, +100 very fine, hit |
| | | | | | bedrock @ 5.5' hard to dig, semi-decomposed schist |
| | | Sluice sample | | | |
| | | 0.5 | 5 | 5 | |

Overburden 0 ft.

Gravel 5.5 ft.

Bedrock 5.5 ft.

Water Level @ 4 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001474

Project Kantishna

Line

Claim Liberty Moose Creek

Hole #25

Bucket Size 6 cubic feet

Elevation 1890

Coordinates N 3478100
E 368800

Mouth of Rainy Creek on Moose Creek Bench

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/21/83 | | 0 | 1 | | Overburden, no sample |
| | | 1 A | 5 | 4 | 65% +1.5", 15% 3/16"-1.5", well-rounded cobbles of various lithologies, 1 coarse, 5 fine, approx. 20 very fine |
| | | 5 B | 9 | 4 | 35% + 1.5", 40% 3/16"-1.5", approx. 20 very fine, well-rounded cobbles of various lithologies |
| | | 9 C | 13 | 4 | Approx. 20 very fine |
| | | 13 D | 17 | 4 | Well washed 30% +1.5", 30% 3/16-1.5", 10 fine, +75 very fine, many very fine, non-mag black sands |
| | | 17 E | 21 | 4 | Well sorted, well washed 30% +1.5", 30% 3/16"-1.5", 1 coarse, 15 fine, +50 very fine, many very fine non-mag black sands |
| | | 21 F | 24 | 3 | Some clay, hit bedrock @ 23', 10 fine, +50 very fine |
| | | Sluice Sample | | | |
| | | 1 | 24 | 23 | Moose Creek gravels. |

Overburden 1 ft.

Gravel 22 ft.

Bedrock 1 ft.

Water Level @ 0 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001475

Project Kantishna

Line

Claim Rainy Creek-Bench adjacent to creek

Hole #26

Bucket Size 6 cubic feet

Elevation 2080

Coordinates N 3480650
E 370850 Rainy Creek

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/22/83 | | 0 A | 4 | 4 | Subangular to subrounded, 35% 1.5", 30% 3/16-1.5", some |
| | | | | | clay, schist material, 15 fines, +50 very fine |
| | | 4 B | 8 | 4 | Well washed sandy material 10% +1.5", 30% 3/16-1.5" |
| | | | | | 10 very fine |
| | | 8 C | 12 | 4 | Did not hit bedrock, 5 very fine |
| | | Sluice sample | | | |
| | | 0 | 12 | 12 | No color |

Overburden 0 ft.

Gravel 12 ft.

Bedrock - ft. didn't hit

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A 001476

Project Kantishna

Claim

Bucket Size 6 cubic feet

Coordinates N 3479850
E 339450 Eldorado

Line

Hole #27 & #28

Elevation 1700

| Date | Time | Sample From | | To | No. of Buckets | Remarks |
|---|---|---|---|---|---|---|
| 7/23/83 | | 0 | A | 4 | 4 | 50% 1.5"+, 25% 3/16-1.5", subangular to subrounded schist a few erratics, very Fe ox stained, little black sand, 3 coarse, 12 fine, 30 very fine |
| | | 4 | B | 8 | 4 | Hit blue gravel @ 4.5', blue gravel has 25% of+1.5", 30% 3/16-1.5", hit bedrock (blue clay @ 7.5') 10 coarse, +100 fine, +100 very fine |
| | | Sluice Sample 0 | | 8 | 8 | 2 very fine |
| TEST #28 Subsequent test taken to determine if values from B interval were concentrated at interface between Fe ox stained gravels and blue clay bearing gravels | | | | | | |
| | | 2.5 | C | 5.5 | 2 | 1-1/4" coarse, 1 coarse, 12 fine, +25 very fine Fe ox stained gravels and 6" blue clay bearing gravels. |
| | | 5.5 | D | 6.5 | 1 | Contact between stained gravels and blue clay gravels dips, so sample contains both. 4 coarse, 12 fine, +50 very fine |
| | | 6.5 | E | 7.5 | 1 | Blue clay rich gravels, glacial origin, granite cobbles, 1 coarse, 1 fine, many sulfides |

Overburden 0 ft.

Gravel 7.5 ft.

Bedrock 7.5 ft.

Water Level @ ft.

W. Srock

# PLACER MINE OPERATIONS REPORT

PROPERTY: Location 6, Lower Caribou Creek, SE Sec. 24, T14S, R18W

DEPOSIT DESCRIPTION: Four to seven feet of coarse, rounded to subrounded gravels on relatively flat-lying weathered, clayey schist. Occasional low reefs of harder bedrock. Gravels near edge of drainage partially frozen. Stream gradient 1% to 2%.

Area being mined is wide flat-lying deposit 100- to 200-ft wide by 1,000-ft long. Gold does not appear to be concentrated on bedrock and only 6 in. or so of bedrock are being mined. One to two feet of gravel above bedrock is iron stained and slightly tight.

Gold is very fine and flaky but occasional rough to slightly rounded quartz-bearing nugget was recovered. Slight to moderate Fe and Mn stain on gold. Abundant garnets in concentrate.

Shallow bench deposits above cliffs on drainage nearby also carry significant gold. These gravels are identical to those being mined in the creek bottom and are extensions of the Lee Bench upstream which the present operator also holds lease on.

A cut made in 1975 exposed gravels in the Lee Bench. The gravels were 4- to 10-ft deep and showed moderate sorting. Most of the gravel is stained a reddish brown and is subangular to subrounded. The gravels are underlain by a quartz-mica schist. Two- to three-percent boulders up to 3-ft across are randomly distributed throughout the gravel. Another exposure of the gravel approximately 1/2 mile downstream shows 10- to 15-ft-deep gravel underlain by Tertiary quartz-rich sediments. Pits nearby show a blue (glacial?) clay on top of the spoils piles indicating a possible lake sediment may be present in places. Most exposures however show 5 to 10 in. of gravels overlying bedrock cliffs, 50 to 70 ft above the present valley floor. The bedrock at the mine cut slopes gently towards the present stream drainage and could possibly keep that slope. If so the muck and gravels on the Lee Bench may not be exceptionally deep.

MINING EQUIPMENT: 100 cy/hr capacity, rubber-tire mounted shaker screen-sluice plant, Cat® 235 2 cy bucket excavator, Cat® D8H dozer, Deutz diesel 6-in. pump, several hundred feet aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Cessna 206 aircraft, fuel tanks, two service trucks, welding equipment, two mobile homes, four living trailers, two truck trailer vans, landing strip for fixed wing access.

Cleanup equipment - screens, mini-sluice, 48-in. spiral concentrating wheel, amalgam tumbler.

MINING AND CLEANUP PROCESSING METHOD: Washing plant is pushed ahead of the excavator as mining progresses. Tailings are directed into the previous cut. Dozer is employed to prepare ground and removal and leveling of tailings. The wash water is pumped out of river upstream and settling ponds are constructed downstream in previous cut.

Four men are employed to work two 12 hour shifts. The owner and another man perform support functions and expediting. Wives and other family members process cleanups and perform camp functions.

The concentrates are screened to 1/4 in. and handpicked. Under 1/4 in. is run over spiral wheel and reconcentrated, then screened to minus 6, minus 10, minus 12, minus 20 and sent over wheel again to remove all gold. The tails are amalgamated.

WORK ACCOMPLISHED: The present cut was mapped by the author and a volume of gravel calculated at 13,000 cy. Total placer gold weighed from the processing was 354.3 oz, resulting in a placer gold grade of 0.027 oz/cy. Gold content at 680 fine is 0.019 oz Au/cy. Over 86% of the placer gold was minus 20 mesh in size. Eleven percent is jewelry grade overlay gold and 3% of the placer gold is over 1/4 in. in size. The overlay gold can probably be sold at an average of the world market price so is considered here to be 1000 fine. The plus 1/4 in. gold can be sold at between spot price for gold and $1000/oz depending on the character, and is considered here to be 1500 fine or 1.5 times its weight. The rest of the gold is 680 fine according to the operator. The following is a breakdown of the recovered gold.

| | | | |
|---|---|---|---|
| 86% | @ $272 | = | 23392 |
| 11% | @ $400 | = | 4400 |
| 3% | @ $600 | = | 1800 |

29592/100 = 295.9/400 = 0.74 factor

A factor of 0.74 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

Majority of gold over 1/4 in. was flat and rounded but a few very rough, quartz bearing nuggets were observed indicating some possible veins nearby. One quartz-filled shear zone was observed in the present mine cut.

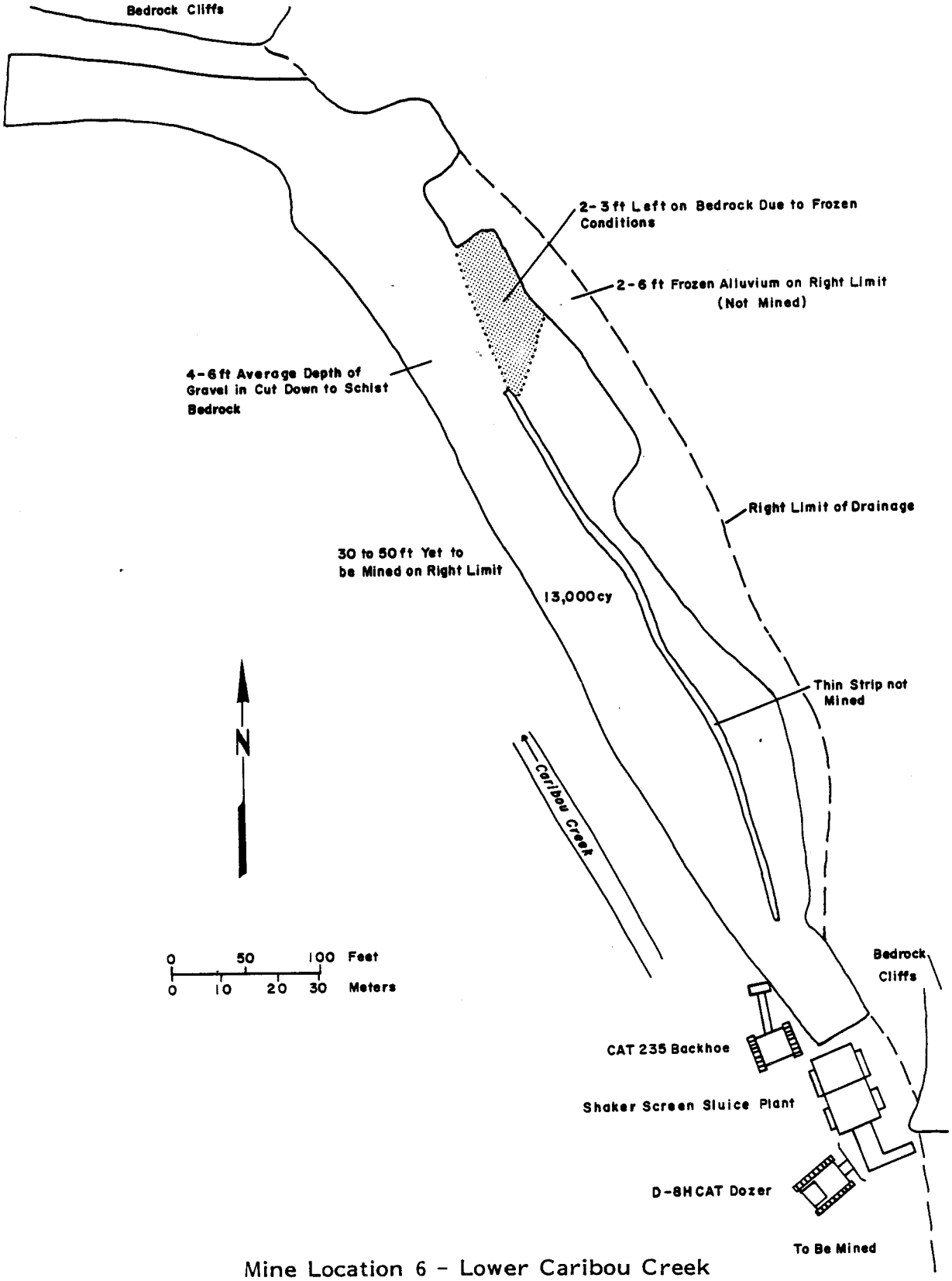
A portion of the Lee Bench was mined by another operator in 1975. The operator's records showed that 70.5 oz of fine gold was recovered from the mine cut. The author measured the cut and approximately 2,700 cy of coarse gravel was mined after removing 2 to 3 ft of frozen muck and tundra. The placer gold grade is 0.026 oz/cy. At 700 fine the contained gold grade is approximately 0.019 oz Au/cy.

REMARKS: Several areas of physically minable ground are available to mining up and downstream. Testing upstream near the present campsite with a small portable floating dredge indicates good values for mining next season.

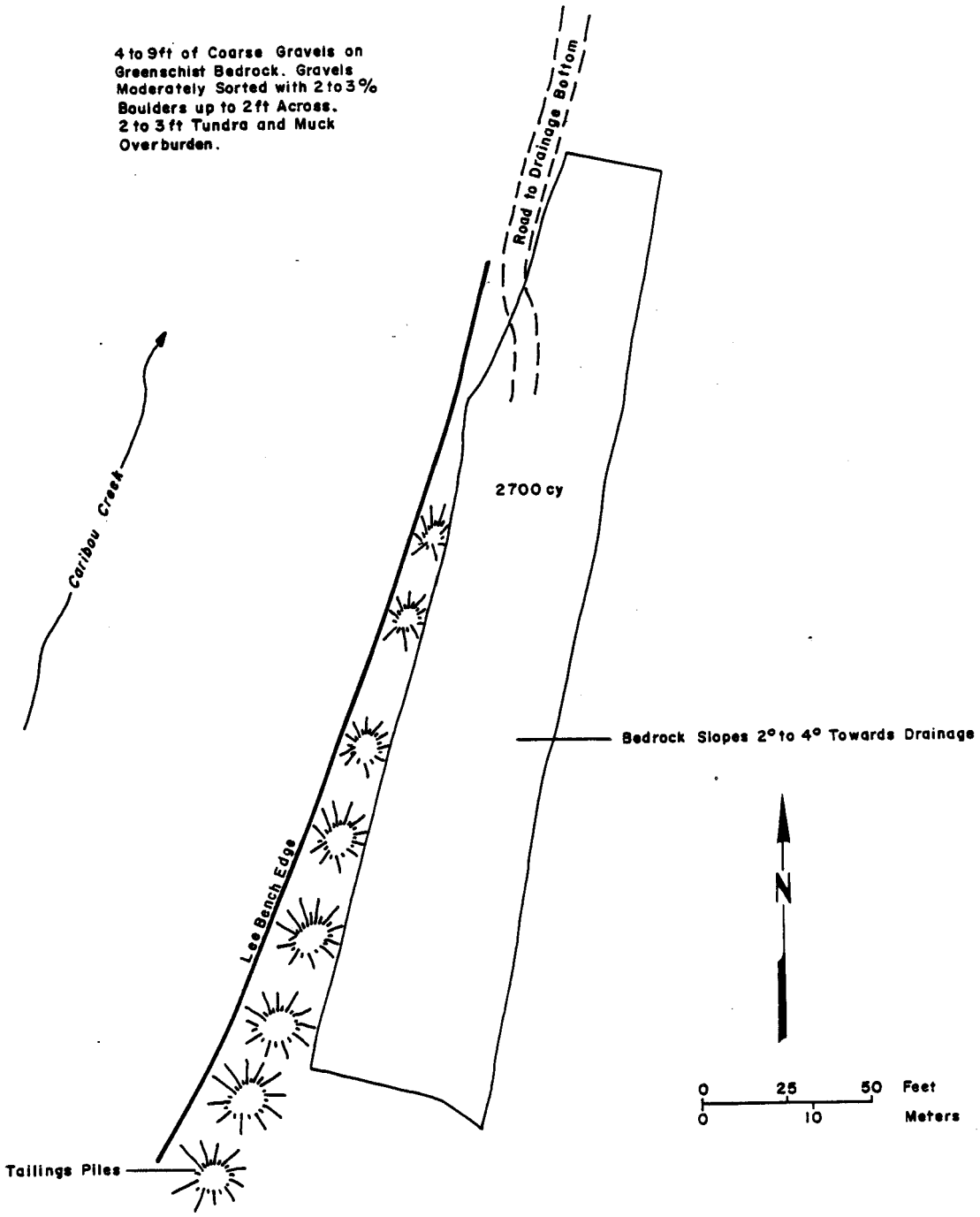
Subsequent mining after this examination produced better gold values as mining progressed away from the drainage sides. Over 1000 oz had been produced by 8/30/83.

The Lee Bench is available to mining in the future and extensions of the bench near the present mine site were tested by panning by the author. Good colors showed up in random pan sampling of recent test cuts. The bench deposits extend from where Caribou Creek emerges from the Kantishna Hills to over 5 miles downstream to the Bearpaw River. A huge amount of gravels could be present on the bench and would represent several years of large scale mining activity. Other operators in the district have also expressed an interest in mining the bench gravels.

The operator anticipates several more seasons of mining the present stream channel gravels and would like to test the present bench gravels in more detail.




Mine Location 6 - Lower Caribou Creek
S.E. Sec.24, T.14 S.,R.18 W.




Mine Location 6 A - Lee Bench, 1975 Mining
S.W.Sec.6, T.15 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 7, Middle Caribou Creek, NW Sec. 7, T15S, R17W

DEPOSIT DESCRIPTION: Coarse, subrounded gravels 2- to 5-ft deep on drainage edge and up to 9-ft deep towards the center. Flat-lying area up to 150 ft across and over 600 ft long, located on a large meander of the creek was stripped and prepared for mining. Gravels lie on a clayey, weathered schist bedrock. The bottom 2 to 3 ft are iron-stained and slightly tight. Gold appears to be fairly well distributed throughout the gravels but concentrated near bedrock. An average of 6 in. of bedrock is also mined.

Gold is very flaky and over 87% of the gold produced from the present cut was under minus 14 mesh size. Very few nuggets are found and most are well worn. All the gold is moderately to heavily tarnished with Mn or Fe oxides.

Thirty- to fifty-foot-high bedrock cliffs rim the stream bottom and are capped by subrounded gravels over 5-ft deep. These bench gravels are correlative with the Lee Bench deposit a mile downstream.

MINING EQUIPMENT: Medium sized trommel and sluice plant (50-100 cy/hr). HD44 Allis Chalmers® dozer, Drott® 1/4 cy bucket excavator, 6-in. pump and several hundred feet of aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two 4x4′ service trucks, welding equipment, school bus, two 3-wheelers, small living trailer, small trailer van for cleanups, large trailer van for parts and supplies, fuel tanks, pickup truck, mini-sluice, 48-in. spiral concentrating wheel.

MINING AND CLEANUP PROCESSING METHOD: Two men mine an average of 10 hr/d. The washing plant is mounted on skids and moved ahead of bucket as mining progresses upstream. Dozer is used to strip thin veneer of overburden and to remove and level tailings. Settling pond is excavated below mine workings.

Cleanups are screened, run over a mini-sluice, demagnetized and run over a spiral concentrating wheel for final separation of the gold.

Approximately 20% of the area mined had been handworked in "earlier" days.

WORK ACCOMPLISHED: The present mine cut was measured by the author and approximately 2,400 cy of material were mined. Fifty-eight hours mining time was spent on the cut. 110.7 oz were recovered from the cleanup. Placer gold grade of the deposit is 0.046 oz/cy. Contained gold grade at 700 fine is 0.032 oz Au/cy.

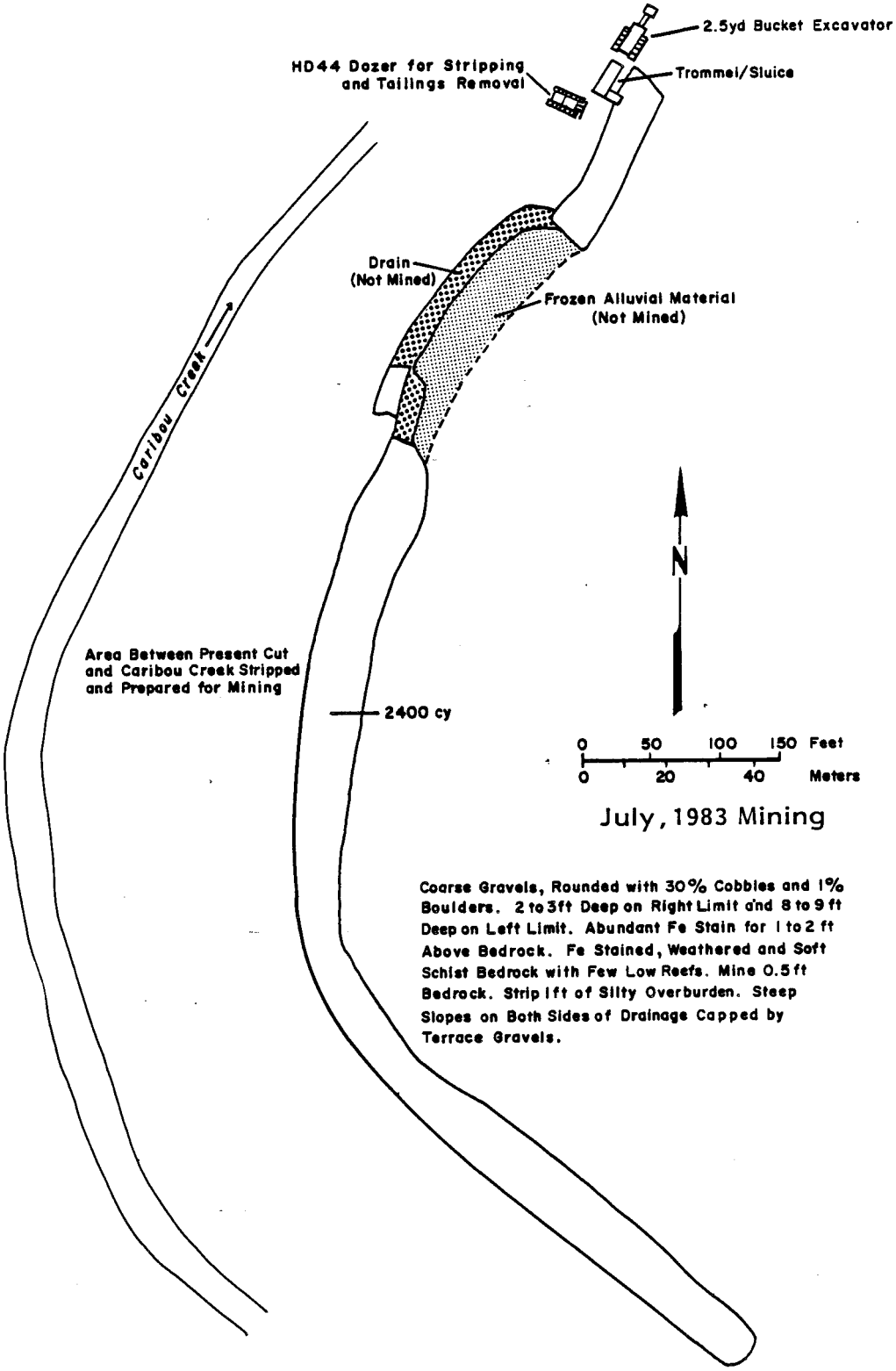
95.65 oz (87%) were below minus 14 mesh size, 7.62 oz were between 14 and 10 in mesh size and 7.0 oz were plus 10 mesh. The 14.62 oz of jewelry grade gold will be considered to be 1000 fine as the proportion of nuggets was not recorded. The 95.65 oz of fine gold is 700 fine according to the operator.

87% @ $280 = 24360
13% @ $400 = 5200
29560/100 = 295.6/400 = 0.74 factor

A factor of 0.74 can be multiplied by the spot price of gold to determine the approximate value of placer gold produced in the area.

The operator's production was approximately 1.9 oz/hr at the time of this examination. As mining progressed across the point bar of the stream the tenor increased considerably and the operator states that he was mining over 2.5 oz/hr.

REMARKS: The first half of the mining season was spent hauling equipment and camp facilities to Caribou Creek, preparing a permanent base camp and preparing the mine site. Similar creek bottom deposits are located up and downstream from the mine site and several mining seasons are anticipated on the middle section of Caribou Creek by the operator.




Mine Location 7 - Middle Caribou Creek
N.W.Sec.7, T.15 S., R.17 W.

## PLACER MINE OPEATIONS REPORT

PROPERTY: Location 8, East Fork Glen Creek, NW Sec. 6, T16S, R16W

DEPOSIT DESCRIPTION: Relatively flat-lying deposit of gravel 100- to 200-ft across and over 1/2-mile long. Gravels are coarse, subangular and average 4- to 5-ft deep. The gravels are mined to a weathered clayey schist bedrock with occasional low reefs of harder rock. Occasionally a thin layer of glacial(?) clay is present on top of bedrock. Shallow troughs below low reefs are commonly overlain by iron stained rich pockets of gravel.

Approximately 40% of the gold recovered is coarse jewelry grade gold plus 14 mesh. The gold is rough showing little sign of wear and often contains quartz and shows crystalline dendritic and wire structures. Most of the gold is slightly to moderately stained with Mn or Fe. Concentrates contained abundant galena, magnetite, pyrite, with stibnite, scheelite, and occasional rhodonite.

MINING EQUIPMENT: 100 cy/hr shaker screen and sluice plant (tire mounted), GM Terex® dozer, Koehring® 2 cy bucket excavator, Deutz® diesel 6-in. pump with collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Six-wheel fuel truck, two 4x4 service trucks, welding equipment, Case® 350B loader/backhoe (test pitting), log cabin, camp generator, 40-ft truck trailer parts van, large Quonset hut. Large wood frame building. Landing strip for fixed wing access.

MINING AND CLEANUP PROCESSING METHOD: Shaker plant is pushed ahead of bucket as mining progresses upstream. Tailings are directed into last cut. Dozer is used to strip thin veneer of overburden and to level tailings. Sump pond excavated upstream for wash water and settling ponds below.

Four men are employed to mine 24 hr/d in two 12 hr shifts. Two men are employed to test pit ahead of mining and to test the rest of Glen Creek holdings. The owner performs support functions for the mining operation.

WORK ACCOMPLISHED The present mine cut was measured by the author and a volume of gravel calculated at 9,400 cy. The concentrate was screened into several splits to minus 20 mesh screen. Each split was run over a Carter shaker table and the concentrate handpicked. The minus 20 material was run over a spiral concentrating wheel.

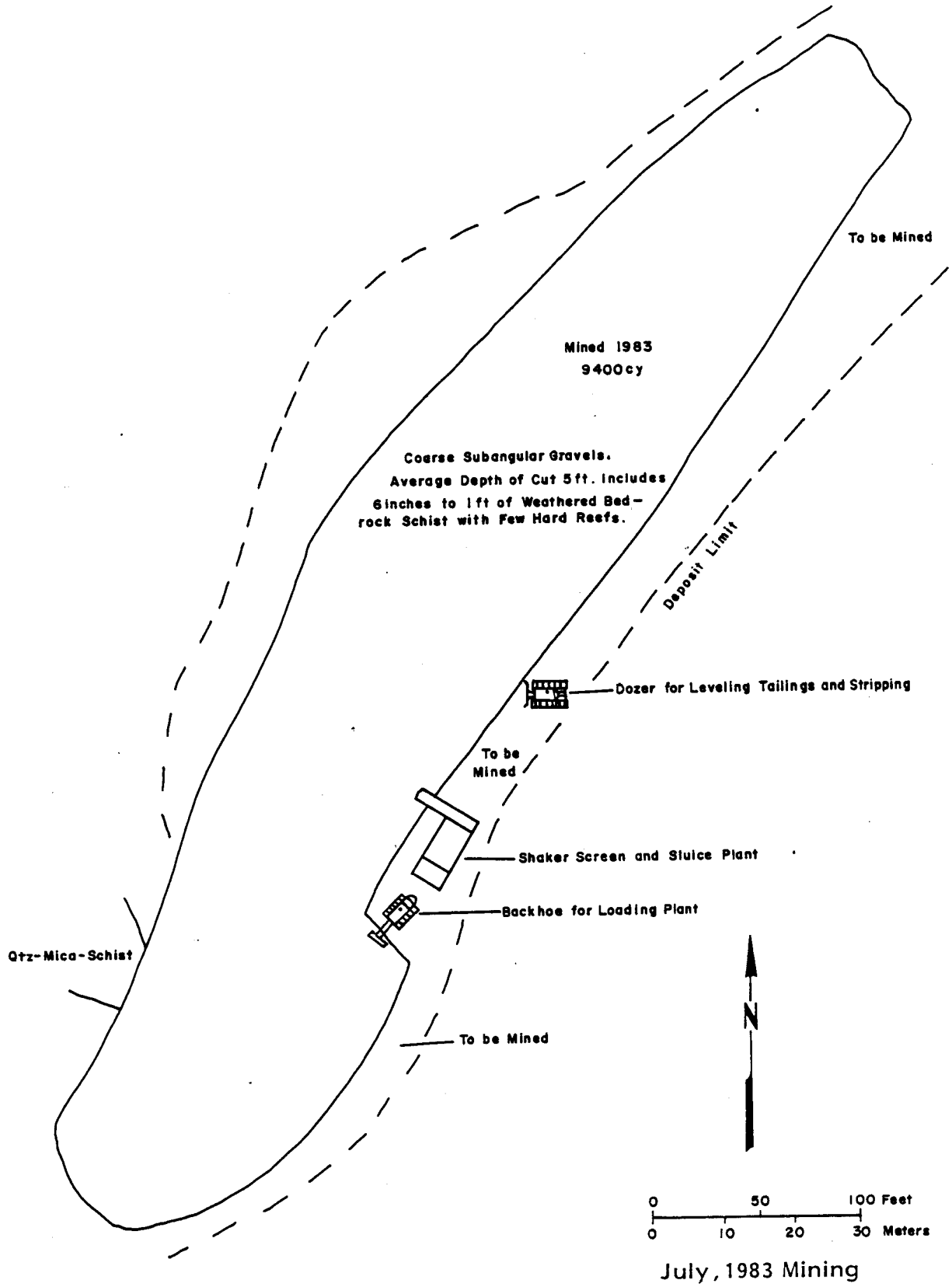
173.6 oz of placer gold were recovered for a placer gold grade of 0.018 oz Au/cy. Contained gold grade at 800 fine is 0.015 oz Au/cy. Approximately 40% of the gold recovered was jewelry grade gold over 14 screen in size. Eleven oz were over 1/4 in. in size and one nugget weighed 0.8 oz.

60% @ $320 = 19200
34% @ $400 = 13600
6% @ $600 = 3600
36400/100 = 364/400 = 0.91 factor

A factor of 0.91 can be multiplied times the spot price of gold to determine the approximate value of placer gold produced in the area.

REMARKS: A consulting geologist was employed to test pit the Glen Creek stream and bench gravels. Initial test results for the area just mined agree very well with production results. All pit results for upper Glen Creek will be forthcoming. Initial pit testing on the bench deposit on West Fork indicates approximately 1.5 million cy may be present with average values of 0.002 oz/cy.

Gold tenor of gravels mined subsequent to the cut studied was reportedly higher. The mining was done over an area of old hand workings and in an area where test pitting had indicated low values could be expected. The low test pit values were probably due to nugget effect. A 1.5 and 0.75 oz nugget have been recovered in subsequent cleanups.




July, 1983 Mining

Mine Location 8 - East Fork Glen Creek Mining
N.W.Sec.6,T.16 S.,R.16 W.

PLACER MINE OPEARTIONS REPORT

PROPERTY: Location 9, Upper Glen Creek at W. and E. Fork Juncture, SW Sec. 6, T16S, R16W

DEPOSIT DESCRIPTION: A deep accumulation of coarse gravels is present at the juncture of west and east forks of Glen Creek. A previous cut exposes 20 to 35 ft of gravel. The immediate area of the "basin" is over 200,000 sq ft. If the gravels average 25-ft deep, approximately 160,000 cy of material is present. Pay gravels being pushed to the plant from one area of the cut were being excavated from over 20 ft down and bedrock had not been exposed.

A glacial(?) clay is occasionally exposed in parts of the old cut and up to 2 ft of iron stained gravel was usually present above that horizon. The gravels are moderately sorted to unsorted and contain up to 1% large boulders. Virgin gravels over 15-ft deep are present up and down stream from the immediate vicinity of the cleared basin deposit.

Bedrock exposed on the sides of the existing cuts dip steeply into the basin. The bedrock is a deeply weathered clayey schist and in many places appears to be badly sheared. The shears are full of a blue clayey gouge and often contain pockets of ground up vein(?) quartz.

Gold is typically very rough, often rudely crystalline and commonly the larger pieces contain attached quartz. Most gold is slightly to heavily stained with Mn and Fe oxides. The gold is apparently distributed throughout the depth of the gravels, as bedrock had not been reached, and each time mining ceased, new nuggets could be picked from the sluice box. Concentrates contain abundant magnetite, galena, and pyrite with stibnite, scheelite, and occasional rhodonite. A few nuggets in the 1/2 oz size range were found and nuggets over 1 oz in size have commonly been recovered in the past.

MINING EQUIPMENT: Stationary shaker screen and sluice plant (150 cy/hr capacity), portable conveyor belt 30 x 3 ft wide, Insley® 3 cy bucket excavator, D-6 Cat® dozer, Cat® 3.5 cy loader, 75 KW generator, 6-in. pump with collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Cat® road grader, two 4x4 vehicles, six-wheel fuel truck, welding equipment, large shop building, two large living trailers, two cabins, cleanup shack and equipment, fuel tanks, large landing strip for fixed wing access.

MINING AND CLEANUP PROCESSING METHOD: Dozer pushes pay gravels over 200 ft to bucket which in turn feeds the conveyor belt. Over 150 cy/hr can be processed. Front end loader removes tailings and distributes downstream. Sump is excavated upstream for mine wash water and settling pond downstream.

Four men operate the mine. The fourth man services and monitors the sluice plant and other equipment.

WORK ACCOMPLISHED: The basin area prepared for mining was mapped and studied by the author. A bucket count was kept as mining progressed and a volume of gravel mined was calculated at approximately 2,300 cy. The sluice was cleaned out and processing of the cleanup yielded 41.87 oz of placer gold, 12.32 oz of which were plus 10 mesh in size. All of the gold was not recovered from the fine fraction and it is estimated that another 2 or 3 oz will be recovered later. Placer gold grade of the deposit is 0.018 oz/cy. Contained gold grade using a fineness of 800 is 0.015 oz Au/cy. When bedrock is reached the tenor of the deposit should increase as the gold should be concentrated there.

The 12.32 oz of jewelry gold is conservatively considered here to be 1000 fine as the average price received from sales will probably be over the spot price for gold.

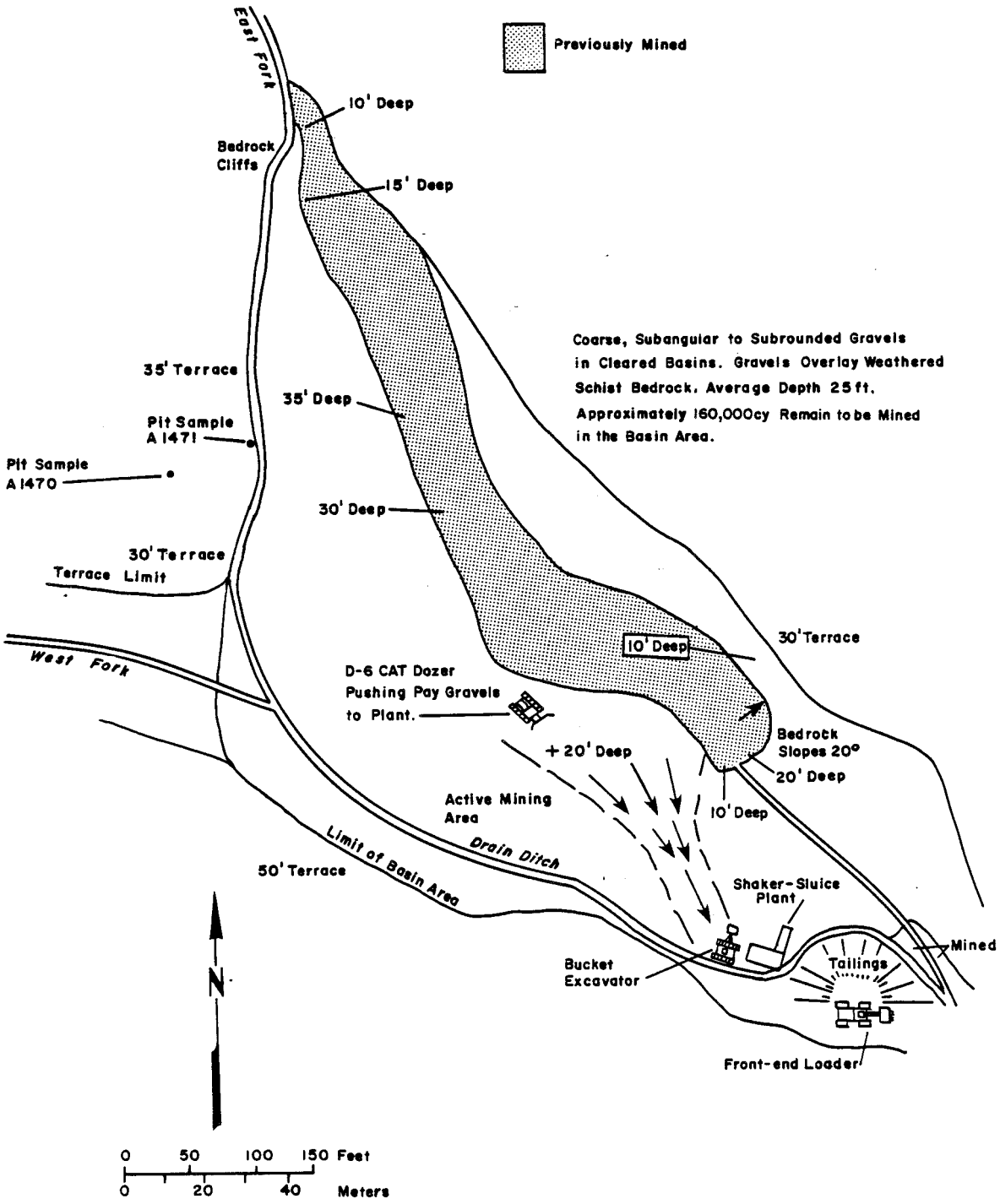
The other 29.55 oz recovered is reportedly 800 fine by the miners. Fineness tests run on gold from the west fork pit testing was over 800 fine.

71% @ $320 = 22720
29% @ $400 = 11600
34320/100 = 343.2/400 = 0.86 factor

A factor of 0.86 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

REMARKS: Several areas of rich shallow gravels remain to be mined on the upper Glen Creek holdings. In the past, smaller scale mining methods of rich pay zones have resulted in very lucrative payoffs and an unusual amount of coarse gold, with nuggets over 1 oz common.

A consulting geologist is test pitting all the Glen Creek stream and bench gravels. The results of which will be made available to this study. A substantial bench deposit is present on the property and tests so far have indicated an average value of 0.002 oz/cy for an estimated 1.5 million cy of material. The bench contains an average of 25 ft of coarse unsorted alluvial and colluvial gravels.




Mine Location 9 - Upper Glen Creek Mining
S.W.Sec.6,T.16 S.,R.16 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 10, Middle Caribou Creek, NW Sec. 7, T15S, R17W

DEPOSIT DESCRIPTION: Two hundred- to three hundred-ft-wide, relatively flat-lying gravel bar being mined. The cut mapped is on the very outside corner of the present stream meander. Gravels in the cut are 2- to 6-ft deep, becoming deeper towards the center of the drainage. Subsequent mining exposed gravels averaging 6- to 8-ft deep. Gravels are subrounded to rounded, loose and coarse except for lower 1 to 2 ft which are usually iron stained and fairly tight. Gravels lie on weathered clayey schist bedrock with occasional layers of harder, less weathered quartz mica schist. An occasional clayey gouge-shear zone with ground up vein quartz was observed in the bedrock. Gravels are virtually frost free although an occasional small patch is present.

The stream gradient is between 1% and 2% and virgin deposits in the vicinity alternate between relatively narrow (20 to 50 ft) canyon deposits to broad flat-lying bars similar to the one being mined. Most of the middle Caribou is lined by bedrock cliffs which are in turn overlain by gravel deposits 5- to 10-ft deep.

An average of 85% of the gold is less than minus 14 mesh in size and very flaky. Approximately 1/2 of the gold plus 14 mesh is also thin and flaky. Three dimensional gold is well rounded and contains very little quartz. Most nuggets are small - being in the 1/4- to 1/2-in. range but subsequent mining recovered 1 1/2 and 3/4 oz well worn nuggets. All gold is moderately to heavily tarnished with Mn and Fe oxides. Gold appears to be distributed throughout the gravel but concentrated on or near bedrock. Concentrates contain abundant garnet and magnetite.

MINING EQUIPMENT: Portable, 100 cy/hr, all hydraulic operated shaker screen and sluice plant - designed and built by the owner, Allis Chalmers® and Fiat Allis® dozers, Drott-Proclain® 2 cy bucket excavator, 6-in. Deutz® centrifugal pump, several hundred feet of aluminum pipe (Deutz® motors in washing plant, excavator and pump with a spare - all interchangeable).

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Large leveled permanent campsite, airstrip for fixed wing traffic, 206 Cessna aircraft, 4x4 truck, articulating rubber tired Nodwell for freighting across tundra, school bus, 40-ft truck-trailer van, 20-ft truck-trailer van, cleanup accessories - 48-in. spiral concentrating wheel - mini-sluice, 4-wheeler vehicle, fuel tanks.

MINING AND CLEANUP PROCESSING METHOD: Two men mine one shift for 10 to 12 hr/d. Dozer strips thin veneer of vegetation and soil. Cut started on left limit and dug well into bedrock for good drainage. Parallel cuts are made to the first cut with all tailings directed into

prior cuts. Washing plant is pushed ahead of excavator as mining progresses upstream. Tailings are leveled with dozer. Mine water pumped out of Caribou Creek and settling ponds are prepared downstream prior to mining. Three to six inches of bedrock are mined depending on the hardness of the rock.

Cleanups are screened, run over mini-sluice, demagnetized, and final gold separation made on the spiral concentrating wheel.

WORK ACCOMPLISHED: The first cut was mapped by the author and a volume of 2,800 cy of excavated material measured. Processing of the cleanup recovered 106.35 oz of mostly fine flaky gold. Fifteen percent of the gold was plus 14 mesh size jewelry gold (15.95 oz). The gold averages 700 fine according to the owner. Placer gold grade of the deposit is 0.038 oz/cy. Contained gold grade is 0.027 oz Au/cy.

The 15.95 oz of jewelry grade gold will be sold on an average over the spot price for gold and is conservatively considered here to be 1000 fine.

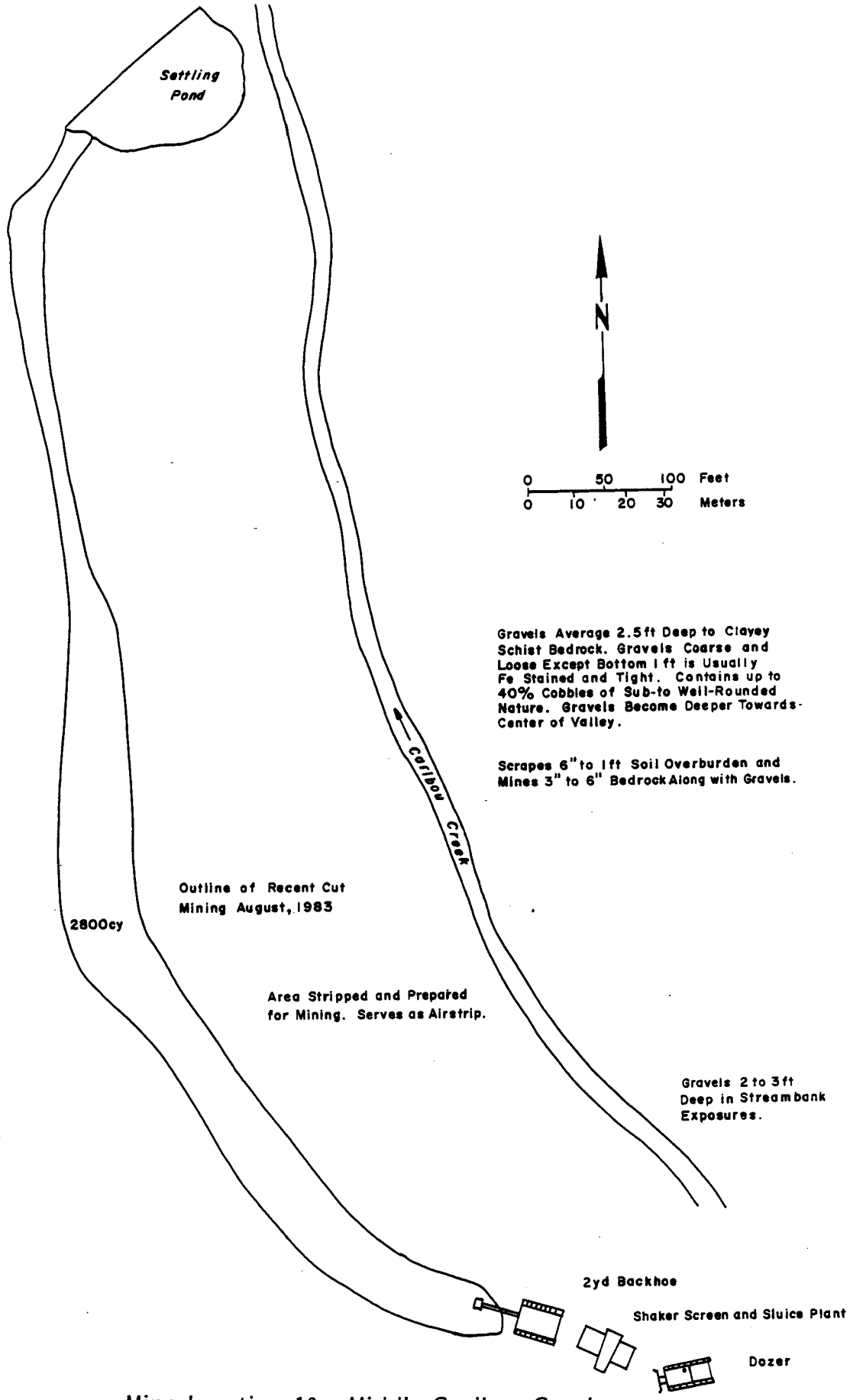
85% @ $280 = 23800
15% @ $400 = 6000
29800/100 = 298/400 = 0.75 factor

A factor of 0.75 can be multiplied by the spot price of gold to determine an approximate value of the placer gold produced in the area.

Approximately 70 hr were spent mining the cut studied and resulted in over 1.5 oz Au/hr of mining. The next cleanup produced over 2.1 oz/hr of operation according to the owner. The last cleanup produced 235 oz Au at over 2.5 oz/hr. The tenor of the deposit increased as mining approached the middle of the point bar deposit.

REMARKS: The owner has established an efficient and comfortable permanent camp and anticipates several more seasons of mining. The mine operation is very efficient and one in which most large-scale mining in the district has been patterned after. The washing plant is virtually problem-free and a model in engineering. This and previous plants built by the owner are in fact models for most of the other mine plants in the district.

It is anticipated that the narrow canyon deposits on the property, which are impractical to mine with the larger scale equipment, will be mined by similar but smaller-scale methods. Bench deposits overlying bedrock cliffs that border the drainage are largely unprospected and present a considerable resource. These benches are correlative with the Lee Bench deposits and probably contain economic concentrations of gold.




Mine Location 10 - Middle Caribou Creek
N.W.Sec.7, T.15 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 11, Eureka Creek, SE Sec. 12, T16S, R18W

DEPOSIT DESCRIPTION: Shallow gravel, 5- to 6-ft deep was being mined in a 30- to 100-ft-wide area on the stream bottom. Gravels are very coarse, subangular to angular with 5% boulders up to 3-ft across. Gravels are underlain by relatively hard quartz mica schist. Evidence of handworkings is common in the area. Unmined alluvium commonly continues underneath steep side slope overburden.

Gold recovered is rough to slightly worn and often rudely crystalline. Dendritic textures are common. Approximately 25% of the gold is slightly stained with Fe and Mn oxides. Concentrates contain abundant garnet and magnetite with galena, scheelite, stibnite and some cassiterite.

MINING EQUIPMENT: Hopper-grizzly-sluice washing plant (stationary) 955K Cat® front end loader, Evans® 6-in. pump with several hundred feet collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: 4x4 pickup, welding equipment. Approximately 1 mile of road built up stream bottom to property.

MINING AND CLEANUP PROCESSING METHOD: Gravels are excavated with loader and transported to a stationary plant. As much bedrock as practical is also mined. Plant is constructed of old truck bed hopper set at a fairly steep angle with spray bars mounted above to wash material over rail grizzly and into the head of a 25 ft x 30 in. sluice box. Oversize and tailings are periodically removed with the loader.

Sluice concentrates are run over a mini-sluice and further concentrated by hand panning. All tailings are put back into sluice box.

Two men (father and son) work the deposit on a daily basis.

WORK ACCOMPLISHED: The cut was mapped by the author and a volume of 220 cy calculated. The sluice was cleaned out and rough processed on site. Concentrates were screened, demagnetized and concentrated on the spiral concentrating wheel in the lab. Tails were amalgamated. Total placer gold recovered weighed 12.79 oz. Thirty-five percent or 4.43 oz of gold was plus 12 mesh size jewelry grade. This portion of the gold is considered conservatively to be 1000 fine. The remaining 8.36 oz of gold will assay approximately 777 fine according to the owner. Placer gold grade of the deposit is 0.058 oz/cy. Contained gold grade is 0.045 oz Au/cy.

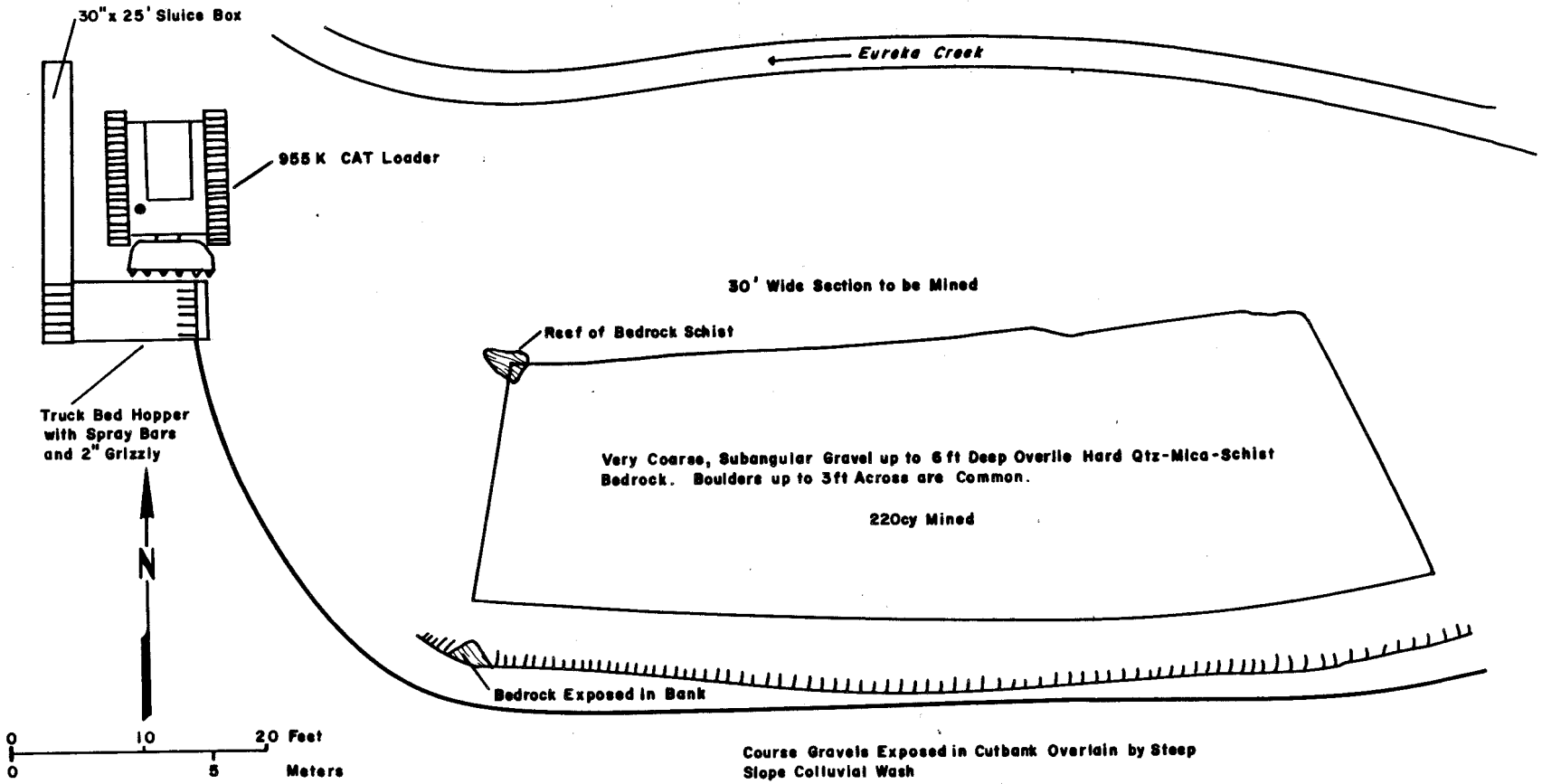
65% @ $311 = 20215
35% @ $400 = 14000
34215/100 = 342.15/400 = 0.86 factor

A factor of 0.86 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

The owner anticipates averaging the world price for gold on all the gold recovered.

REMARKS: Both father and son anticipate several mining seasons on the deposit. They own several patented claims in the district and have a permanent summer home in Kantishna.

Subsequent mining recovered a 3.33 oz nugget. The nugget was fairly well rounded, covered with abundant black oxide stain and contained no visible quartz. This is the largest nugget recovered in the district this season. The next biggest being 3.25 oz recovered from Friday Creek. The nugget was recovered from coarse alluvial and colluvial material excavated from under steep sidehill slope wash. Most of Eureka Creek is lined by similar, buried gravels of this nature.




August, 1983 Mining

Mine Location 11 - Eureka Creek Mining
S.E.Sec.12,T.16 S.,R.18 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 12, Glacier Creek (Lower Canyon), SW Sec. 19, T1S, R17W

DEPOSIT DESCRIPTION: Deposit lies just above mouth of the lower canyon, where the creek emerges on to a broad flat-lying valley. Stream gradient averages 3%. Gravels are coarse, subangular to subrounded and moderately sorted with less than 1% large boulders over 3 ft in size. The gravels overlie a weathered clayey schist. A few shear zones are exposed in the bedrock. These contain clayey gouge and lenses of shattered vein(?) quartz. The bedrock undulates slightly creating low reefs and shallow troughs. Gravels are relatively deep ranging from 4 to 13 ft. Area being mined is 100- to 150-ft across and is bordered by bedrock cliffs. The low cliffs are overlain by bench gravels 4- to 8-ft deep.

Gold recovered was bright to slightly stained, rough and rudely crystalline to slightly worn. Thirty-five percent of the gold is plus 12 mesh and considered jewelry quality. Garnet and magnetite common in the concentrates.

MINING EQUIPMENT: 100 cy/hr shaker screen-sluice plant, Cat® D8H dozer, Cat® D-7 dozer, Cat® front-end loader (5 cy?), Cat® 235 2 cy bucket excavator, Deutz® 8 x 6 in. pump, several hundred feet of aluminum pipe and collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Go-Tract® fuel vehicle 4x4 service truck, welding equipment, motorcycle, 4-wheeler, fuel tanks, truck-trailer van for material and supplies, several wood frame cabins, airstrip, cleanup equipment - spiral concentrating wheel, 12-in. Knelson bowl hydrostatic centrifugal concentrator.

MINING AND CLEANUP PROCESSING METHOD: Ground stripped of thin veneer of overburden. Cut is started on left limit. Mining progresses with parallel cuts. The plant is pushed upstream ahead of excavator and tailings are directed into previous mine cut. and leveled with dozer. Small sump constructed upstream. Settling ponds excavated downstream.

Mining is done in two 12 hr shifts, 24 hr/d.

WORK ACCOMPLISHED: The cut was mapped by the author and a measured volume of 5,500 cy of material calculated. Processing of the cleanup recovered 126.78 oz placer gold. The placer gold grade of the deposit is 0.023 oz/cy. Contained gold grade at 750 fine is 0.017 oz Au/cy. Approximately 35% or 44.37 oz of the gold is coarse jewelry grade gold and is considered here to be at least 1000 fine. Gold fineness averages 750 according to owner.

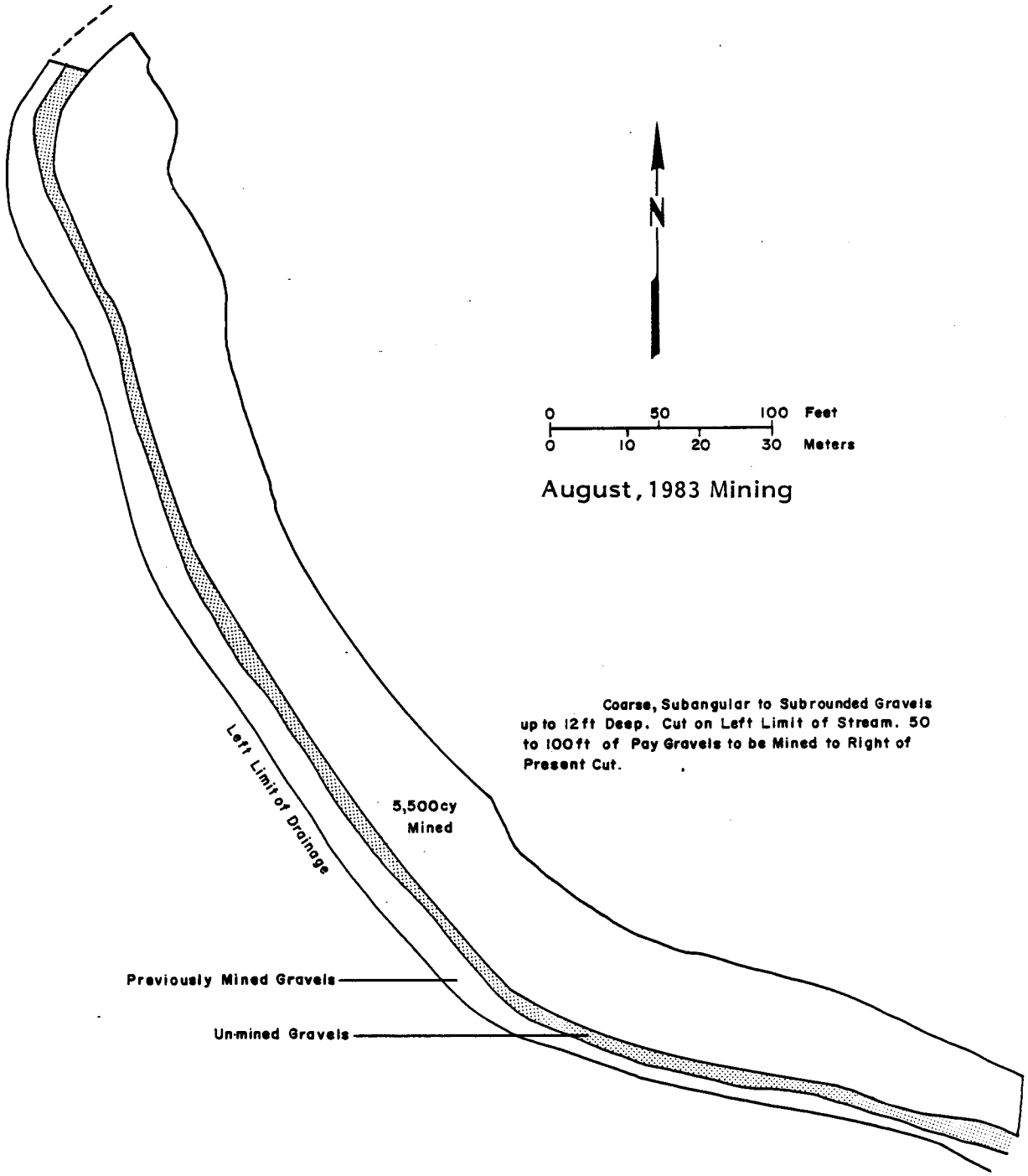
65% @ $300 = 19500
35% @ $400 = 14000
33500/100 = 335/400 = 0.84 factor

A factor of 0.84 can be multiplied by the spot price of gold to determine an approximate value for placer gold produced in the area.

Eighty-four hours were spent mining the cut resulting in 1.5 oz Au/hr operation.

REMARKS: At least eight men were involved with this family oriented, 24 hr/d operation. Wives and other family members are living in camp and perform support functions. Several high bench deposits are present on the claims and mining of the bench adjacent to the previous cut was undertaken after the above deposit was mined. Results were reportedly not as high grade but satisfactory. The stream bottom deposit tenor increased as they mined away from the valley sides.

Mining the stream and bench deposits is planned for next season. The owner of the claims has been mining the higher bench deposits since 1965 using small scale methods with reportedly very rich production of coarse gold. Large nuggets are common.




Mine Location 12 - Glacier Creek
S.W.Sec.19,T.1 S.,R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 13, Glacier Creek (lower), NW Sec. 19, T15S, R17W

DEPOSIT DESCRIPTION: Four- to six-foot deep, subrounded, reddish-brown stained, loose gravels overlie an oxidized, iron-stained, clay-rich Tertiary gravel. Gravels are fairly well sorted and contain few boulders. Mine area is approximately 1/2 mile downstream from the narrow canyon mouth where Glacier Creek emerges onto the present broad, flat-lying valley floor. Stream gradient is less than 2%. The deposit is 200- to 300-ft wide at the present mining area and becomes progressively wider downstream. The valley bottom is bordered by large gravel capped benches up to 50- to 75-ft high.

Mine cuts downstream expose similar gravels up to 10-ft deep. Prospect trenching on the bench gravels expose 4 to 8 ft of gravels very similar to the present stream gravels.

Gold recovered from recent mining is very bright flake gold 85% of which will pass through a 12 mesh. Less than 1% of the gold observed was over 1/2-in. across. Most gold is well worn but a few pieces show remnant crystal, wire or dendritic textures and a few pieces contained attached quartz. Concentrates contained abundant garnet and magnetite.

Gold obtained from panning and churn drilling the bench gravels is more three dimensional and rough.

A dragline operated between the present cut and the canyon mouth in the early 1940's. The huge area mined has been leveled and an airstrip built on top. Virgin gravels 20- to 50-ft wide are present on the side of this old mining area.

MINING EQUIPMENT: Medium capacity shaker screen-sluice plant (tire mounted), H1500 Insley® bucket excavator, D8H Cat® dozer, Deutz® 8 in. x 6 in. pump with collapsible hose.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two 4x4 service trucks, 5,000 gals fuel storage, three 3-wheelers, eight wood frame buidings for personnel and equipment, large truck-trailer van, welding equipment, cleanup equipment-screening-sluice box, spiral concentrating wheel.

2,000 ft airstrip to be lengthened to 3,000 ft next year.

MINING AND CLEANUP PROCESSING METHOD: Nine men perform mining, maintenance and support functions on this 24 hr/day operation. The mine area is stripped of 1 to 2 ft of overburden. The present plant was designed to push ahead of the excavator as mining progressed. A structural problem prohibited this form of operation at the time of this examination. A large cut was excavated and pay

gravels were stockpiled. The windrowed material was then fed into washing plant which was transported behind the excavator. Tailings are directed into previous cut and leveled with dozer. Wash water is pumped out of creek and settling ponds are constructed below the mine cut.

Cleanups are screened and run over a mini-sluice, final separation of gold is made using a spiral concentrating wheel, all tailings will be heap leached.

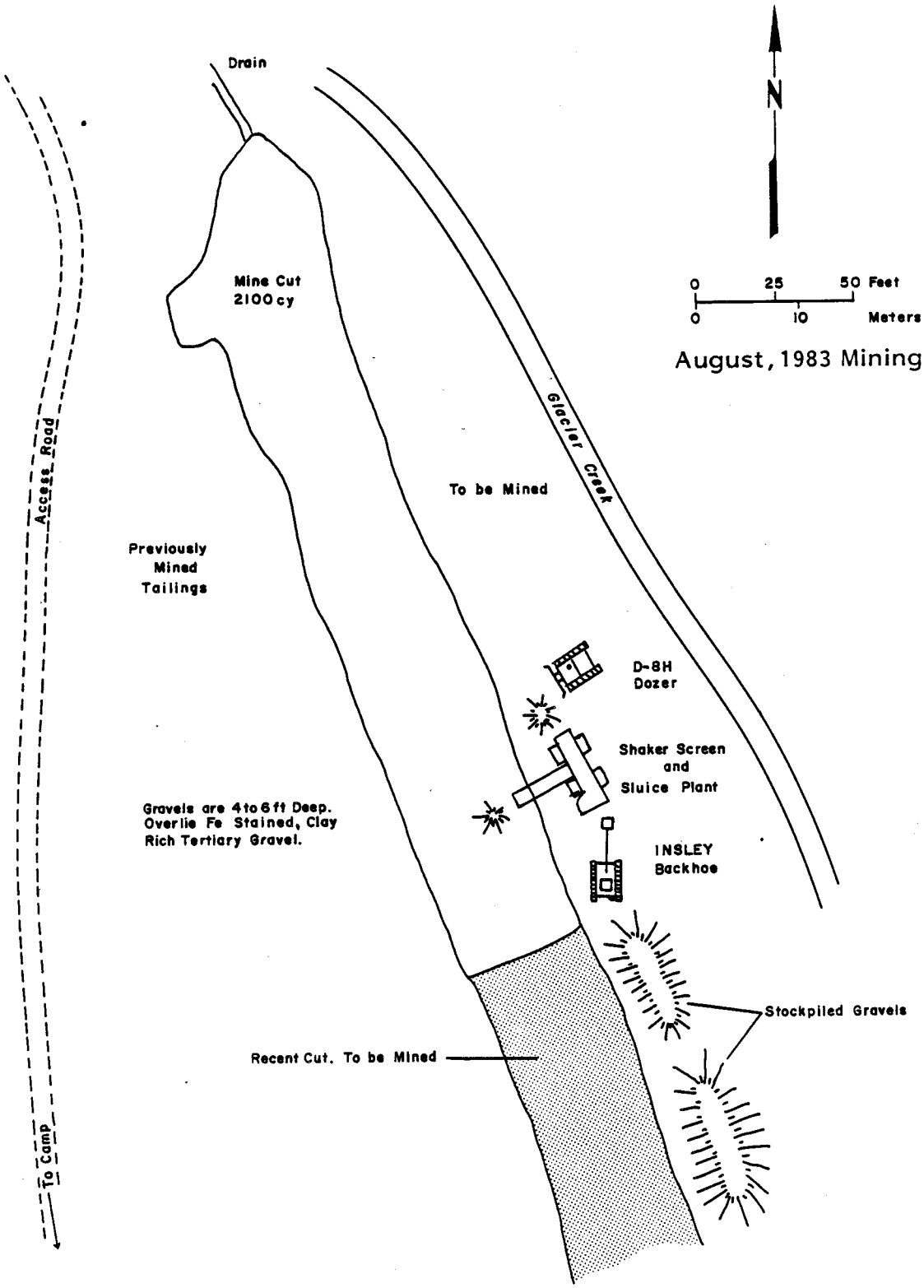
WORK ACCOMPLISHED: The cut was measured by the author and approximately 2,100 cy of material was mined. Processing of the cleanup recovered 47.9 oz of placer gold. Placer gold grade of the deposit is 0.023 oz/cy. Using a fineness of 760 the contained gold is 0.017 oz Au/cy. Fifteen percent or 7.2 oz was coarse jewelry grade gold and is considered to be 1000 fine. Assays of previously mined gold are between 740 and 780 and the other 40.7 oz of fine placer gold calculated at 760 equals 30.9 oz.

85% @ $304 = 25840
15% @ $400 = 6000
31840/100 = 318.4/400 = 0.8 factor

A factor of 0.8 can be multiplied by the spot price of gold to determine an approximate value of the placer gold mined.

REMARKS: Approximately 2 miles of stream bottom gravels of a similar nature have yet to be mined downstream. Tests by the owner are reportedly good. The Glacier Creek bench gravels have been tested by the owner, the results of which are better than the gravels presently being mined. A large area has been stripped of muck in preparaton for mining later this season. Several more seasons are anticipated by the owner to mine the present stream and bench gravels.

One of the men with the help of his son operates a small shaker-screen sluice plant similar to the large plant that can process 20 cy/hr. This plant is mining side-pay areas left behind by previous large scale mining. See Location 14 report for results. This plant is averaging approximately 1/2 oz of gold per hour of operation.




Mine Location 13 - Lower Glacier Creek
N.W.Sec.19, T.15 S., R.17 W.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 14, Lower Glacier Creek, SW Sec. 19, T15S, R17W

DEPOSIT DESCRIPTION: Shallow (3 to 4 ft), coarse gravels on edge of old tailings area. The area was worked with a dragline in the early 1940's and is located below the mouth of the Glacier Creek Canyon where the stream gradient flattens considerably. Twenty- to fifty-ft-wide virgin gravels remain on side of old tailings. Gravels are underlain by a weathered, clayey to brittle schist bedrock. The deposit is over 200-ft wide at the canyon mouth and very flat (1 to 2%) stream gradient.

Gold observed in the sluice box was rough to slightly worn and nuggety. A few pieces of 1/4 in. in size were observed. Garnets and magnetite were also observed.

MINING EQUIPMENT: Small shaker screen-sluice plant (20 cy/hr capacity), small 1/8 cy (?) hydraulic backhoe mounted on track mounted bombardier, 2-in. centrifugal pump with collapsible hose, Cat® diesel generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: The operator utilizes the claimowners tools and service vehicles for the most part.

MINING AND CLEANUP PROCESSING METHOD: The sluice plant is mounted on wheels so maneuverability is very good. It is then moved into position with the bombardier and leveled, and then loaded with the backhoe. Oversize tailings are directed into a prior cut. When observed, the plant was mining mine sidepay left behind by a dragline operation.

The plant is a small shaker screen which screens to 1 1/4 in. Oversize material transported on a conveyor belt and over the cutbank. The plant is set up with a 3/8-in. punch plate on the upper end of the sluice to create an undercurrent effect. Astroturf below expanded metal with a nugget trap is utilized to recover gold.

Three to four hours are spent mining, the rest of the day is spent setting up, on maintenance and cleanup of the mined concentrate. Cleanup is accomplished by screening and running over a mine sluice-demagnetizing and panning or spiral wheel concentrating the final concentrate.

WORK ACCOMPLISHED: The operation was monitored periodically over a weeks time while monitoring two large scale operations on either side of the mine-site. A cleanup was made after a 3 hr mine shift. A little over 1.5 oz of placer gold was recovered for a placer gold grade of 0.025 oz/cy. Using an average of 20 cy/hr and a 760 fine figure, the contained gold grade of the ground was calculated at approximately 0.019 oz Au/cy.

Because the percentage of jewelry gold is not known, a factor of at least 0.76 can be multiplied by the spot price of gold to determine the approximate value of placer gold produced in the area.

REMARKS: The washing plant is uniquely adapted to work small mine side pay areas too small for the larger plants to attempt mining economically. The operator would like to get a small dozer and backhoe to improve maneuverability and mining efficiency. The plant would also prove useful in mining narrow gulch or canyon deposits present in the district.

Before cleanup the operator stated he had been averaging 2 oz per 4 hr mine shift which compared very well with the 1.5 oz recovered from 3 hr of mining.

The man is helped periodically by his son. The plant was engineered and built by the operators and utilizes the same principles as the large scale washing plants in the area.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 15, Upper Glacier Creek, NE Sec. 30, T15S, R17W

DEPOSIT DESCRIPTION: Shallow and generally narrow bedrock walled creek alluvial and colluvial deposits. Gravel is 2 to 6 ft to bedrock and ranges from 25- to 100-ft across. The wider areas usually include shallow stream bottom benches immediately adjacent to stream. Gravels are coarse and angular to subangular and subrounded and usually up to 1% large boulders.

Gold is coarse and rough and often crystalline. Concentrates contain abundant galena and garnets with magnetite. Only 1% of gold recovered is under minus 16 mesh. The gold is usually in the 0.05 to 0.25 oz range and 1/4- to 1/2-oz nuggets are common. A 4.5-oz nugget was recovered last year.

MINING EQUIPMENT: Four-inch floating suction dredge, hydraulic backhoe (1/8 cy?)

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Cushman® trackster, large track vehicle, fuel storage, tool shed, cabin. Cleanup accessories.

MINING AND CLEANUP PROCESSING METHOD: Suction dredge is floated in creek and hose from dredge sucks alluvial material off bedrock. Most stripping or removal of overlying material and large boulders is done by hand or with comalongs.

WORK ACCOMPLISHED: The area being mined was visited when the operator was gone to observe mining method and the deposit geology. The operator ran a test prior to the examination. Approximately 2 cy of material was run through the dredge and just over 0.1 oz of gold recovered. One of the nuggets recovered weighed 0.5 g. Because most of the gold recovered by the operator is very coarse jewelry grade gold he at least averages the world price for gold. The placer gold grade is 0.05 oz/cy. The contained gold grade is 0.038 oz Au/cy. A factor of 1.0 can be multiplied by the spot price of gold to determine an approximate value for placer gold mined in the area, as only 1% of the gold is below jewelry size.

REMARKS: These claims have been worked by the owner in much the same manner with similar results for nearly 20 yr. At the present rate of mining, at least 30 more years are anticipated by the owner. The gold is very coarse and several nuggets above the 1-oz range have been obtained. One nugget recovered weighed over 4 1/2 oz. A small to medium sized operation could probably be supported on the creek.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 16, Juncture of 22 Gulch and Glacier Creek, N 1/2 Sec. 32, T15S, R17W

DEPOSIT DESCRIPTION: Three to six feet of coarse, subangular to subrounded gravel on quartz mica schist bedrock. The present cut is located at the juncture of Glacier Creek and 22 Gulch and both gravels were mined. Glacier Creek is over 80-ft wide at this location and relatively shallow gradient (less than 5 degrees). Part of the cut had been hand mined extensively in the past as evidenced by large piles of hand stacked rocks.

The gold recoverd was variable in appearance and texture. Much of the gold was rudely to coarsely crystalline, dendritic and wire in nature. Some nuggets were very gnarly and most showed little wear or worn edges. After bedrock had been scraped in some localities, the rock could be hand picked for visible nuggets. Bedrock hardness is variable and areas which are harder and more brittle due to quartz content usually tend to concentrate larger amounts of nugget gold. Many of the nuggets recovered are in the 1/4- to 1/2-oz range. Abundant garnets, galena with stibnite and occasional tourmaline in concentrates.

In most areas along the stream, alluvial material continues underneath steep side slope scree and soil cover.

MINING EQUIPMENT: 110B Case® dozer, 350 Case® loader, 40 cy/hr shaker screen sluice plant, 4-in. pump with collapsible hose, generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Renovated school bus, truck camper, welding equipment, two 4x4 trucks. A road was built from Yellow Creek down the Glacier drainage to the mine site (2 miles).

MINING AND CLEANUP PROCESSING METHOD: Most of the upper gravel and large boulders are scraped off and is not mined. Usually the lowermost 1 or 2 ft of alluvium and an average of 1 ft of bedrock is mined.

The dozer pushes pay material up to 50 ft to the plant and is loaded by the loader into the plant. The plant is skidded upstream as mining progresses.

Three men work the deposit 10 to 12 hr/d and move 20 to 40 cy/hr through the plant.

WORK ACCOMPLISHED: As the end of the mining season was drawing to a close, it was decided not to map a specific cut and perform a cleanup of the concentrates as it would consume valuable mining time. The gravels were observed and coarse placer gold (jewelry)

picked from the concentrates to date weighed over 100 oz. It is estimated that at least that amount of finer placer gold remained in the concentrate. The cut was estimated to contain approximately 14,000 cy, 3,400 of which was actually mined. If 200 oz of placer gold are recovered the cut would contain 0.014 oz/cy of placer gold. The material actually mined would have a placer gold grade of 0.059 oz/cy. Using a fineness of 760 the contained gold grade is 0.011 oz Au/cy or 0.045 for material processed.

50% @ $304 = 15200
50% @ $400 = 20000
35200/100 = 352/400 = 0.86 factor

A very conservative factor (much of the gold is sold at over two times the spot price) of 0.88 can be multiplied by the spot price of gold to determine an approximate value for placer gold recovered in the area.

REMARKS: Glacier Creek narrows to 10- or 20-ft wide in a few places but ranges from 50- to 250-ft wide for over 2 miles of the stream length. Several areas show signs of handworking in the past and old reports indicate the "earlier" miners mined rich, coarse-gold pay-streaks. Very good production results were obtained by mining previously hand mined areas at the present mine site. This is probably a good indication that similar results can be expected from future mining on Glacier Creek.

Approximately half of the gravels on 22 Gulch were mined by hand methods in the early days. Extensive piles of hand stacked rocks are evident today. This creek is unclaimed but probably represents a very high grade placer resource. Sidepay areas and low bench deposits would probably support a small to medium sized mining operation.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 17, Friday Creek, SE Sec. 11, T16S, R18W

DEPOSIT DESCRIPTION: Unsorted alluvial and colluvial mixture alluvial fan(?). Mining right limit of stream into hillside. Bedrock schist slopes into hill. Deposit located at the head end of alluvial fan where Friday Creek emerges from narrow canyon. The slope of hill rises rather quickly and the gravels on right limit of cut are over 30-ft deep. Bedrock is exposed uphill 200 ft from edge of cut and gravels could extend into the hill up to 150 ft.

The material above bedrock contained significantly less gold than that mined on and into bedrock but appeared to still be economic. Once bedrock was reached, gold production went up considerably. The gold is typically very rough and often rudely crystalline showing dendritic and wire-like textures and often contains considerable quartz. Several large nuggets were observed including a 2.75, 1.25, and two 1-oz nuggets. Gold found on bedrock is usually iron stained and shows little sign of wear. Abundant galena along with magnetite, pyrite, garnet and some scheelite is found in the concentrate.

Gravels usually covered by 4 to 8 ft of overburden with 25% cobbles subangular to rounded and 1% boulders up to 4-ft across. Bench-fan(?) deposits of a similar nature extend upstream over 700 ft to the narrow canyon mouth.

MINING EQUIPMENT: Two D-8 Cat® dozers, 955 Cat® loader, 60 cy/hr shaker screen-sluice plant (stationary), 10-in. pump and collapsible hose, 45 KW generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Two trailers, one camper, two 4x4 pickups, one pickup, two ton truck, welding equipment, fuel tanks, cleanup accessories.

MINING AND CLEANUP PROCESSING METHOD: The washing plant was set on a steep slope and a ramp built to feed hopper. D-8 used to strip overburden and push pay gravel to loader which in turn feeds plant. Tailings are pushed downstream from plant and contoured. Dam constructed on stream for wash water. Settling pond constructed below.

Cleanups are sieved to minus 4 mesh and hand picked. Remaining concentrate is run over Carter shaking table and most of the coarse gold is hand picked from this new concentrate.

Two to three men worked the deposit 10 to 12 hr/d.

WORK ACCOMPLISHED: Several visits were made to the property as mining progressed and the geology was observed. Two hundred and fifty hr had been spent mining the cut. At 60 cy/hr production approximately 15,000 cy of material had been mined. Over 350 oz were estimated from cleanups to date (a large portion of the concentrates will be processed for gold later in the winter). The placer gold grade is estimated to be 0.023 oz/cy. Using a 780 fine figure the contained gold grade is 0.018 oz Au/cy. Approximately 50% of the gold is considered to be jewelry grade. Many pieces over 1/2 oz in size will obtain a price of 1000 to 1500 dollars/oz for "character" gold. The operators reported that they will probably average the world price for the total amount of gold recovered. Because percentage of size fractions is not known, a factor was not calculated.

REMARKS: A few more seasons of mining are anticipated on this deposit. The deposit would not have been apparent unless mining was undertaken under the slope wash exposing the gravels. Several areas upstream from this cut are probably underlain by similar deposits.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 18, Upper Caribou, SE Sec. 18, T15S, R16W

DEPOSIT DESCRIPTION: Three to five feet of coarse, angular to sub-angular and subrounded material. The deposit is immediately upstream from the last dragline tailings. The drainage at this point is up to 300-ft wide and relatively flat. The gravel was being mined to a 6-in. sandy layer above a clayey weathered mica schist bedrock. The bedrock was cut several times by shears which contained mostly clayey gouge and small pods of crushed quartz containing some pyrite.

Gold observed in the sluice box was rough and one piece showed dendritic texture with attached quartz. Abundant garnets were observed in the concentrate.

MINING EQUIPMENT: Cat® 235 two cy bucket excavator, Cat® D-7 dozer, Cat® D7H dozer, tire mounted 100 cy/hr capacity shaker screen sluice plant, two Deutz® diesel 6-in. pumps, several hundred feet of aluminum pipe.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: 206 Cessna aircraft, welding truck, three large mobile homes, one small trailer, two school buses, three large truck trailer vans.

Cleanup equipment - Sweco 24-in. vibrating screens, 12-in. Knelson bowl hydrostatic centrifugal concentrator, 48-in. spiral concentrating wheel, cement mixer/amalgam tumbler, mercury retort, 6,000 gal capacity fuel tanks.

Approximately 6 miles of road was constructed in July to freight all equipment to mine site. An airstrip was leveled for fixed wing access and a large camp site was prepared near the mine site.

MINING AND CLEANUP PROCESSING METHOD: A sump was excavated for mine wash water. Several acres of relatively flat alluvial deposit was stripped of a thin veneer of soil cover. The plant is pushed ahead of the bucket as mining progresses upstream. Approximately 40-ft-wide cuts are made and tailings are directed into the previous cut. Mine water is directed into previously excavated settling ponds.

Mining is accomplished on a 24-hr basis. Four men mine two 12 hr shifts. Another man is employed to process all cleanups completely on site. One catskinner to prepare ground and level tailings. The owner and one other man perform support functions. Several other family members perform camp logistics.

WORK ACCOMPLISHED: The mining had just begun at the time of the author's visit. The previous two weeks had been spent freighting all equipment and the camp to the mine site and preparing ground for mining. A look at the sluice box showed rough gold was being

recovered. Tenor of the deposit could not be estimated. One piece of coarse (1/2 in. x 1 in.) gold showing rough dendritic texture with attached quartz was observed. Production subsequent to this visit was reportedly satisfactory.

REMARKS: The operator anticipates several seasons of mining on the upper Caribou drainage. Several bench deposits 20- to 50-ft above the creek level have never been tested and represent a substantial gold resource.

PLACER MINE OPERATIONS REPORT

PROPERTY: Location 19, Rainy Creek, SW Sec. 14, T16S, R17W

DEPOSIT DESCRIPTION: Up to 15-ft deep unsorted alluvial and colluvial gravels. Deposit is up to 200-ft wide by 1,000-ft long. Stream gradient is less than 5% and the deposit is located at the mouth of Rainy Creek Canyon where the stream emerges onto a broad, open fan deposit. Gravels being mined are at the head end of the alluvial fan.

MINING EQUIPMENT: 1.25 cy bucket excavator, D-6 Cat® dozer, medium sized shaker screen-sluice plant, 6-in. pump, generator.

ACCESSORY EQUIPMENT OR IMPROVEMENTS ON GROUND: Large tractor truck, 4x4 pickup and camper, four cabins, flatbed truck trailer, large trailer van, welding equipment, camp generator.

MINING AND CLEANUP PROCESSING METHOD: Area was cleared of brush and thin veneer of soil. A drainage ditch was excavated to bedrock schist. A cut will be made moving the washing plant ahead of the bucket excavator. Several men and their families were involved in the operation.

WORK ACCOMPLISHED: The area had been stripped and prepared for mining at the time of the author's visit and no mining had been accomplished at that point.

REMARKS: Upstream from the mine site, the stream becomes fairly narrow and shallow until the head of the drainage where 30- to 50-ft minable widths are present and the gravel is relatively shallow. Some handworking from "earlier" days are evident in the upper canyon. A small area was mined downstream from the present site where the present stream drainage is incised into the huge alluvial fan. Results of that mining are unknown.

Table A-1 - Composition (Fineness) of Placer Gold Collected from Pit and Cable Tool Samples, Kantishna Study Area

| Drainage | Sample # | Composition | |
|---|---|---|---|
| | | Gold | Silver + Base |
| Moose | A1452 | 763 | 237 |
| Moose | A1453 | 779 | 221 |
| Moose | A1454 | 775 | 225 |
| Eureka Fan | A1457 | 746 | 254 |
| Eureka | A1458 | 744 | 256 |
| Moose/Friday Terrace | A1459 | 911 | 89 |
| Friday | A1460 | 769 | 231 |
| Spruce | A1466 | 790 | 210 |
| Upper Glen | A1467 | 808 | 192 |
| Glen Terrace | A1471 | 907 | 93 |
| Lower Glen | A1473 | 786 | 214 |
| Moose Terrace/ Rainy | A1474 | 850 | 150 |
| Eldorado | A1476 | 835 | 165 |
| Moose Terrace | CDH-2 (A1477) | 709 | 291 |
| Moose Terrace | CDH-3 | 889 | 111 |
| Glacier Terrace | CDH-10 (A1478) | 872 | 128 |
| Glacier Terrace | CDH-11-16 | 752 | 248 |
| Moose Terrace | CDH-17 | 915 | 85 |

Table A-1a - Composition and Gold/Silver Ratios of Placer Gold Collected from the Kantishna/Dunkle Mine Study Areas (Compiled by Robert B. Hoekzema, U. S. Bureau of Mines, Anchorage)

| Stream (Kantishna Area) | Sample # | Composition | | | Au/Ag | Au/ Au+Ag |
|---|---|---|---|---|---|---|
| | | Au | Ag | Base | | |
| Banjo Dump | A3032 | 635 | 81 | 284 | 7.8 | 887 |
| Bearpaw River | A0989 | 759 | 111 | 130 | 6.8 | 872 |
| Bearpaw River | A1406 | 623 | 88 | 289 | 7.1 | 876 |
| Caribou Creek (Upper) | A3048 | 654 | 115 | 231 | 5.7 | 850 |
| Caribou Creek (Lower) | A1402 | 660 | 178 | 162 | 3.7 | 788 |
| Crevice Creek | A0978 | 631 | 149 | 220 | 4.2 | 809 |
| Crevice Creek | A0980 | 613 | 30 | 357 | 20.4 | 953 |
| Eldorado Creek | A3022 | 787 | 74 | 139 | 10.6 | 914 |
| Eldorado Creek | A3056 | 829 | 40 | 131 | 20.7 | 954 |
| Eldorado Creek Tributary | A3052 | 952 | 48 | | 19.8 | 952 |
| Little Moose Cr. | A3026 | 579 | 351 | 70 | 1.6 | 623 |
| Little Moose Cr. | A3027 | 537 | 280 | 183 | 1.9 | 657 |
| Moose Creek | A3058 | 713 | 112 | 175 | 6.4 | 864 |
| Moose Creek | A3069 | 738 | 86 | 176 | 8.6 | 896 |
| Moose Creek | A3094 | 717 | 283 | | 2.5 | 717 |
| Moose Creek | A0958 | 760 | 32 | 208 | 23.8 | 960 |
| Moose Creek | A0961 | 630 | 370 | | 1.7 | 630 |
| Moose Creek | A0962 | 724 | 30 | 246 | 24.1 | 960 |
| Myrtle Creek | A3072 | 614 | 50 | 336 | 12.3 | 925 |
| Myrtle Creek | A3077 | 735 | 108 | 157 | 6.8 | 872 |
| Myrtle Creek | A3084 | 827 | 11 | 162 | 75.2 | 987 |
| Myrtle Creek | A3085 | 768 | 232 | | 3.3 | 768 |
| Rainy Creek | A3043 | 743 | 48 | 209 | 15.5 | 939 |
| Rock Creek Trib. | A0995 | 831 | 169 | | 4.9 | 831 |
| Rock Creek | A1400 | 801 | 153 | 46 | 5.2 | 840 |
| Stampede Creek | A3029 | 532 | 322 | 146 | 1.7 | 623 |

Table A-1a - Composition and Gold/Silver Ratios of Placer Gold Collected from the Kantishna/Dunkle Mine Study Areas

| Stream (Dunkle Area) | Sample # | Composition | | | Au/Ag | Au/ Au+Ag |
|---|---|---|---|---|---|---|
| | | Au | Ag | Base | | |
| Bull River | A1418 | 706 | 130 | 164 | 5.4 | 844 |
| Colorado Creek | A2424 | 640 | 166 | 194 | 3.9 | 794 |
| Colorado Creek | A2429 | 626 | 170 | 204 | 3.7 | 786 |
| Costello Creek | A1417 | 670 | 151 | 149 | 4.4 | 816 |
| Costello Creek | A2431 | 496 | 17 | 487 | 29.2 | 967 |

## BACKHOE PITTING AND SAMPLING PROCEDURES

Pits were excavated in 1-ft vertical intervals using a John Deere® 450-D, track mounted backhoe which had a 13-ft reach. As each vertical foot of material was excavated, a representative 4 x 3 ft bucket full of material was sampled. Each bucket was heaped in order to closely approximate an original volume of bank alluvium. Sampling was limited to relatively shallow deposits by the reach capacity of the backhoe. The heavy minerals and gold in the sample were concentrated by a small, portable Denver Gold Saver® trommel/sluice washing plant capable of processing approximately 1 cy of material hourly. The washing plant was run by a 3.5 hp Honda engine. Wash water was supplied to the plant from a 3.5 hp 150 gpm Honda centrifugal pump via 1.5-in. polypipe.

Material from the backhoe was placed onto and washed through a 2-in. screened hopper. Oversize material was discarded manually while undersize (less than 2 in.) material flowed into a 3/16-in. screened trommel and was washed continuously by a spray bar. The undersize (less than 3/16 in.) material flowed through a laterally agitated 2 ft x 1 ft riffle sluice section. Tailings from this primary sluice flowed over an extended 10 ft x 1 ft sluice containing 1-in. transverse riffles overlying a Nomad® indoor-outdoor carpet. The extended sluice was utilized as a safeguard to trap gold not collected in the primary riffles. As the season progressed, only the upper 2 ft of the extended sluice was utilized as the primary riffles effectively trapped the gold.

At 4-ft vertical intervals or at significant changes in the characteristics of the deposit being sampled, the wash plant was shut down and concentrates from the primary riffles were screened. Material larger than 10 mesh was inspected for nuggets. Material smaller than 10 mesh was carefully hand-panned in a large wash tub. Gold colors were counted, described and recorded. The concentrate was saved for further processing. By sampling in set intervals or at definitive breaks, the distribution and concentration of the gold could be recorded. Concentration from the extended sluice section was processed in the same manner at the conclusion of the hole.

Larger excavation equipment, belonging to miners in the area, was used for collecting some samples. In these instances, a large single sample was excavated and piled next to the washing plant. A representative 1 cy sample was taken from the pile and processed through the washing plant.

Free gold was extracted from concentrates from the pit sample in the field laboratory. Coarse gold (greater than 30 mesh) was removed manually. The remaining gold in the concentrate was then amalgamated with mercury in a rock tumbler for a minimum of 2 hr. The amalgam was removed from the concentrate using a spiral wheel concentrator, and digested in a nitric acid solution to dissolve the mercury. The yielded gold was washed with distilled water and then heated to remove any excess mercury. Then both hand-picked and amalgamated gold was weighed to determine the total gold in the sample.

The fineness of selected gold samples from each drainage was determined by Silver Valley Labs in Osburn, Idaho. Approximately half of the sample concentrates were analyzed using an optical emission spectrograph to determine the content of 31 elements. The remaining samples were assayed for selected elements to test the possibility of other potentially economically concentrated metals. Table A-2 summarizes pit sampling results.

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001450 | Lower Moose Creek | 3,481, 590 | 343,340 | SW 13 T16S R18W | *800 | 0.001 | 0 - 4' | Coarse glaciofluvial gravels. Very fine gold in sample. One 24 cu ft sample contained 34.9 mg of gold. | Hit water at 3 ft in hole, sampling stopped at 4 ft due to cave. Bedrock was not reached, inconclusive results. Fair sample location. |
| A001451 | Lower Moose Creek | 3,482, 636 | 341,962 | SW13 T16S R18W | *763 | 0.0002 | 1-10.5' | Poorly-sorted, coarse, glaciofluvial gravel. Very fine gold. One 60 cu ft sample contained 21.2 mg of gold. | Sample taken adjacent to large mine cuts. Stopped at blue clay false bedrock. Fair sample location although pay-streaks are common in this area. |
| A001452 | Lower Moose Creek | 3,482 937 | 341,668 | SE14 T16S R18W | 763 | 0.009 | 0-8' | Poorly sorted coarse glaciofluvial gravel. Hit large tight boulders at 6' which could not be excavated - abandoned hole. Very fine flaky gold increased considerably near bottom of hole. Two samples with a total volume of 54 cu ft contained 82.9 mg of gold. | Boulders at bottom of hole and increasing gold content at bottom of hole at indicate it was abandoned relatively close to bedrock. Inconclusive test. Fair sample location. |
| A001453 | Lower Moose Creek | 3,488 309 | 337,844 | SW11 T16S R18W | 779 | 0.0016 | 0-6' | Loose sandy glaciofluvial gravel. Hit permafrost at 6' and abandoned hole before hitting bedrock. Very fine flaky gold. Two samples with a total volume of 36 cu ft contained 84.5 mg of gold. | Inconclusive test because bedrock not reached. Fair sample location. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001454 | Lower Moose Creek | 3,487 150 | 338,822 | SW11 T16S R18W | 775 | 0.017 (incl. 1/4" nugget) 0.014 (w/o nugget) | 0-6' 6-9.5' | Fine soil overburden (no sample) Sandy glaciofluvial gravel to iron stained quartz sand false bedrock. Gold coarse and rough. Two samples total volume of 36 cu ft, contained 946.1 mg gold. | Deep overburden at sample pit not characteristic of area and was not used to calculate concentration Good sample location. A mining operation nearby is recovering 30% nuggets from a similar deposit and first concentration value is considered representative. |
| A001455 | Eureka Creek | 3,489 032 | 354,844 | SW8 T16S R17W | *744 | 0.0007 | 0-1' 1-5' | Soil (no sample) Disturbed colluvium contained manmade articles and petroleum contamination includes 1' of bedrock. 30 cu ft sample contained 33.4 mg of gold. | Sample probably from old tailings near cabin site and results are inconclusive Poor sample location |
| A001456 | Eureka Creek | 3,489 153 | 354,685 | NW8 T16S R17W | *746 | 0.0088 | 0-1.5' 1.5-2.5' | Coarse, subangular alluvial and colluvial fan gravel. Fine gold. Schist bedrock. One sample with a volume of 12 cu ft contained 161.6 mg of gold. | Sample from nose of alluvial fan above Eureka Creek. Fan heads near Banjo Mine. Fan possibly 30-40' deep. Fair sample location. |
| A001457 | Eureka Creek | 3,489 311 | 354,442 | NW8 T16S R17W | 746 | 0.0048 | 0-3' 3-13.5' | Colluvium (no sample). Coarse, subangular alluvial and colluvial fan gravel. gold. Includes 8mm wire. Three samples total volume of 72 cu ft contained 573.5 mg of gold. | Sample from top of fan, approximately 70' above A001456. Bedrock not reached because of backhoe limitation. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001458 | Eureka Creek | 3,488 530 | 353,068 | NW8 T16S R17W | 744 | 0.0027 | 0-2'<br>2-12.5' | Soil and tundra overburden (no sample)<br>Coarse colluvial and alluvial gravel. Fine to coarse gold. Three samples with a total volume of 66 cu ft contained 277.8 mg of gold. | Sample from low bench adjacent to stream bottom tailings. Bedrock not reached and results are probably low. Fair sample location. |
| A001459 | Friday Creek | 3,487 560 | 340,120 | SE11 T16S R18W | 911 | 0.0117 | 0-2'<br>2-18' | Tundra and soil overburden (no sample)<br>Sandy glaciofluvial gravel Very fine to coarse colors. Four samples with a total volume of 2.6 cu ft contained 37.2 mg of gold. | Sample from buried Moose Creek terrace gravels adjacent to recent mine cut. Hand dug channel sample from vertical bank exposure. Did not reach bedrock. Good sample location. |
| A001460 | Friday Creek | 3,487 880 | 340,350 | SE11 T16S R18W | 769 | 0.0013 | 0-2'<br>3-18' | Tundra and soil overburden<br>Coarse, unsorted, subangular colluvial and alluvial fan gravels. Fine gold. Four samples with a total volume of 2.4 cu ft contained 4.0 mg of gold. | Hand dug channel sample from vertical mine cut in fan gravel. Bedrock was not reached. Poor sample location. |
| A001461 | Lower Moose Creek | 3,484 233 | 340,806 | NE14 T16S R18W | *763 | 0.0012 | 0-8'<br>3-10.5' | Tundra and silty muck overburden (no sample)<br>Loose sandy, unsorted glacio-fluvial gravel. Very fine to fine gold. Two samples with a total volume of 60 cu ft contained 118.1 mg of gold. | Reached limit of backhoe before reaching bedrock inconclusive results. Fair sample location. |
| A001462 | Upper Spruce Creek | 3,489 583 | 391,063 | NW9 T16S R16W | *790 | 0.0001 | 0-3'<br>3-7' | Soil and sandy muck (no sample)<br>Sandy, subrounded gravels water in hole at 3' and ice at 7'. One sample with a volume of 24 cu ft contained 4.7 mg of gold. | Bedrock was not reached and sample is inconclusive as values should be concentrated there. Fair sample location. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001463 | Upper Spruce Creek | 3,489 634 | 391,245 | NW9 T16S R16W | *790 | 0.0005 | 0-1' 1-11.5' | Soil (no sample) Loose, fine, sandy gravel Very few fine colors. 63 cu ft sample contained 4.7 mg of gold. | Reached limit of backhoe before hitting bedrock. Inconclusive sample as values historically on bedrock. Probably close as big boulders occur at bottom of hole. Fair sample location. |
| A001464 | Upper Spruce Creek | 3,488 359 359 | 389,976 | NW9 T16S R16W | *790 | 0.00008 | 0-3' 3-11' | Tundra and muck (no sample) Subangular colluvial and alluvial gravel of local origin with 10% rounded glacial clasts. Very few colors. One sample with a volume of 36 cu ft contained 4.1 mg of gold. | Sample from saddle between Glen and Spruce Creeks proved existence of old channel between the two creeks. Poor fine sample location. |
| A001465 | Upper Spruce Creek | 3,487 998 | 389,787 | SW9 T16S R16W | *790 | 0.0002 | 0-1' 1-13' | Tundra and muck (no sample) Mostly wellrounded clasts of glacial origin on blue clay outwash bedrock. Lower section of gravel contained large amounts of clay. Very few fine to coarse colors. Three samples with a total volume of 72 cu ft contained 17.2 mg of gold. | Sample near A001464. Apparently reworked glacio till/terrace gravels. Poor sample location. |
| A001466 | Lower Spruce Creek | 3,485 662 | 390,289 | SW9 T16S R16W | 790 | 0.0051 | 1-8.5' 8.5-9' | Coarse subangular to subrounded gravel. Fine to coarse gold concentrated near bedrock. Decomposed clayey schist bedrock. Three samples with a total volume of 90 cu ft contained 808.2 mg of gold. | Good sample location. Gold is very bright and flaky. Probably contains reworked glacial gold. |

TABLE A-2- KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001467 | West Fork Glen Creek | 3,493 526 | 377,233 | NE1 T16S | 808 | 0.0127 | 0-1'<br>1-4' | Soil (no sample)<br>Coarse subangular to subrounded gravels. Fine to coarse gold colors. One sample with a volume of 13.2 cu ft contained 238.8 mg of gold. | Good sample location. |
| A001468 | West Fork Glen Creek | 3,493 593 | 377,242 | NE1 T16S R17W | *808 | 0.0043 | 0-1'<br>1-5' | Soil (no sample)<br>Coarse subangular and subrounded gravels to decomposed schist bedrock Large boulders on bedrock. One sample with a volume of 26.4 cu ft contained 163.8 mg of gold. | Good sample location. Taken 200' upstream from recent mining cut. |
| A001469 | West Fork Glen Creek | 3,493 508 | 377,211 | NE1 T16S R17W | *808 | 0.0199 | 0-3'<br>3-4' | Coarse subangular to subrounded gravel with large boulders at bedrock. Fine to coarse gold colors.<br>Bedrock schist with pyrite bearing quartz vein. Fine to coarse gold colors. One sample with a volume of 26.4 cu ft contained 747.9 mg of gold. | Good sample location. Taken 100' from A001468. |
| A001470 | Upper Glen Creek | 3,492 906 | 379,023 | SW6 T16S R16W | *907 | 0.0027 | 0-5' | Coarse, unsorted, subangular colluvial and alluvial gravel. One sample with a volume of 26.4 cu ft contained 93.2 mg of gold. | Sample taken from top five feet of 30' deep bench above main creek. Poor sample location. |
| A001471 | Upper Glen Creek | 3,492 866 | 379,168 | SW6 T16S R16W | 907 | 0.0093 | 20- 27' | Coarse unsorted, subangular alluvial gravels with 10% boulders. Fine to coarse gold colors and one 3/16" nugget. One sample with volume of 26.4 cu ft contained 311.4 mg of gold. | Sapmle from bottom of same bench as sample A001470. Seven feet sample taken above but not on bedrock. Fair sample location. |

TABLE A-2 - KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001472 | Lower Glen Creek | 3,483 178 | 384,520 | NW17 T16S R16W | *786 | 0.0063 | 0-8.5' | Coarse subangular to subrounded gravel. Fine to coarse colors and one 1/4" nugget. | Fair sample location. |
| | | | | | | | 8.5-9.5' | Decomposed schist bedrock fine to coarse colors. Three samples with a total volume of 54 cu ft contained 601.7 mg of gold. | |
| A001473 | Lower Glen Creek | 3,483 462 | 384,617 | NW17 T16S R16W | 786 | 0.0228 | 0-.5' | Soil (no sample) | Fair sample location. 200' upstream from A001472. |
| | | | | | | | .5-5.5' | Coarse sandy, subangular to subrounded gravels fine to coarse gold colors. | |
| | | | | | | | 5.5'-6' | Hard schist bedrock. Two samples with a total volume of 36 cu ft contained 1373.8 mg of gold. | |
| A001474 | Upper Moose Creek | 3,478 301 | 368,748 | NW23 T16S R17W | 850 | 0.0013 | 0-1' | Soil (no sample) | Sample taken at mouth of Rainey Creek from bench adjacent to Moose Creek. Taken 10' from R.P. samples A003045 and A003046. Fair sample location. |
| | | | | | | | 1-23' | Coarse, well sorted, well rounded glaciofluvial gravel. Fine gold colors. | |
| | | | | | | | 23-24' | Schist bedrock. Few fine colors. Three samples with a total volume of 138 cu ft contained 238.6 mg of gold. | |
| A001475 | Rainy Creek | 3,480, 841 | 371,029 | SW14 T16S R17W | *800 | 0.0004 | 0-12' | Subangular to subrounded sandy gravel. Some clasts of glacial till ? origin. Few fine colors. Three samples with a total volume of 72 cu ft contained 27.4 mg of gold. | Appears to be slightly reworked glacial till and local gravels in fan complex. Poor sample location. |

TABLE A-2 - KANTISHNA DISTRICT PLACER GOLD PIT SAMPLING RESULTS

| Sample # | Drainage | Grid Coordinates N | Grid Coordinates E | Location | Gold Fineness | Concentration oz/cubic yard | Sample Interval | Sample Description | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| A001476 | Lower Eldorado | 3,481, 581 | 343,340 | NW23 T16S R18W | 835 | 0.0077 | 0-4.5' | Subangular to subrounded gravel of local origin with FeOx stain. | Good sample location. |
| | | | | | | | 4.5-7.5' | Rounded glaciofluvial gravel fine to coarse colors. | |
| | | | | | | | 7.5-8.0' | Blue clay outwash material False bedrock. Two samples with a total volume of 48 cu ft contained 509.8 mg of gold. | |
| A001476 | Lower Eldorado Creek | 3,481 589 | 343,340 | NW23 T16S R18W | 835 | 0.0116 | 0-2.5' | Subangular to subrounded gravel (no sample) | Good sample location. Taken adjacent to above sample to determine if gold is concentrated at contact of different gravels. |
| | | | | | | | 2.5-5' | Subangular to subrounded gravel with fine to coarse gold. One 1/4" nugget. | |
| | | | | | | | 5-7.5' | Rounded, coarse glaciofluvial gravel. Fine to coarse gold colors. Three samples with a total volume of 24 cu ft contained 363.7 mg of gold. | |

* Fineness value is that of another pit sample from same drainage.

** Sample locations described as to their relative ability to concentrate gold:

Good: Good location for gold to concentrate. Probably paystreak sample and gold concentration is probably above value of gravels in immediate area.

Fair: Fair area for gold to concentrate. Concentration probably representative of value of gravels in immediate area.

Poor: Poor location for gold to accumulate and concentration may understate value of gravels in immediate area.

# FIELD LOG -- PIT SAMPLING

Sample # A001450

Project Kantishna

Line

Claim Ashbrook Homesite - Moose Creek

Hole 1

Bucket Size 6 cubic feet

Elevation 1650

Coordinates N 3481570
E 343375

20' from Moose Cr. @ xing - on RL Moose Cr.

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/20/83 | 1:00 PM | 0 | 4 | 4 | Loose coarse gravel - few small colors from surface |
| | | | | | glaciofluvial material |
| | | | | | Stop @ 4' - hole caving water @ 3' |

Overburden 0 ft.

Gravel 4 ft.

Bedrock 0 ft.

Water Level @ 3 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001451

Project Kantishna

Line

Claim Moose Creek 1

Hole 2

Bucket Size 6 cubic feet

Elevation 1680

Coordinates N 3482610
E 342250

Below Eldorado Creek
approx. 50' south of road on N-5
prospect and drain ditch

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| | | | | | Trench on virgin ground. Scraped by Sonny Kragnes of surfac muck. Never mined however. Area to north 50' has all been mined in last 5 yrs |
| 6/22/83 | Beg. 11:30 AM | 0 | 4 | 4 | Poorly sorted med. to coarse gravel, approx. 12 colors, |
| | | | | | small - 2 mg |
| | 1:00 PM | 4 | 8 | 4 | Poorly sorted med. to coarse gravel, approx. 25 colors - |
| | | | | | 5 mg |
| | 1:40 PM | 8 | 10.5 | 2 | Poorly sorted med. to coarse gravel, approx. 20 colors, |
| | | | | | few boulders |
| | 2:20 PM | Finish | | | Stopped @ blue clay-false bedrock |
| | | | | | *NOTE: All cons. added to one sample |

Overburden 0 ft.

Gravel 10.5 ft.

Bedrock 10.5 ft. blue clay

Water Level @ 8 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001452

Project Kantishna

Line

Claim L-57 Moose Creek

Hole 3

Bucket Size 6 cubic feet

Elevation 1680

Coordinates N 3482950 E 341700

Approx. 80' south of south side line of MC#2

Approx. 2' tundra and soil already scraped off

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/22/83 | Start 4:30 | 0 | 4 | 4 | Coarse sand, gravel, boulder, dark gray clay @ 1 1/2' |
| | | | | | tight, coarse gravel @ 3' - 10 small colors - 1 mg |
| | 5:20 | 4 | 8 | 5 | Gets few big boulders @ 6" and becomes tighter. Some |
| | | | | | sluff from above, water rose 1/2', approx. 75 colors - 35 mg |

Overburden 0 ft. Already scraped

Gravel 8+ ft.

Bedrock ? ft.

Water Level @ 2 1/2 ft.

J. Levell

Probably close to bedrock because large boulders evident near bedrock in trench 200' away

# FIELD LOG -- PIT SAMPLING

Sample # A001453

Project Kantishna

Line

Claim Approx. 200' NE Chinook #4

Hole #4

Bucket Size 6 cubic feet

Elevation 1550

Coordinates N 3488450
E 337800

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/24/83 | 11:50 AM | 0 | 4 | 4 | Loose sandy gravel w/5% of up to 1.5' across boulders |
| | | | | | approx. 100 fine colors - 3 up to 2 mms across |
| | | 4 | 6 | 2 | Loose sandy gravel - boulders the same. Hit water 5' |
| | | | | | hit ice @ 6', approx 50 fine colors - 2 up to 3 mm across |
| | Finish 3:30 | | | | |
| | | 0 | 6 | | Sluice - lots of blacks (magnetite) 5 colors |

Overburden 1 ft. Scraped off

Gravel 6 ft.

Bedrock ? ft.

Water Level @ 5 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001454

Project Kantishna

Line

Claim Chinook 3 or Alder 6

Hole #5

Bucket Size 6 cubic feet

Elevation 1560

Coordinates N 3487360
E 338770

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/24/83 | | 0 | 6 | | No sample, fine sand and clay |
| 6/25/83 | 11:00 AM | 6 | 8.5 | 4 | Stopped at red sand/false bedrock, approx 300, approx. 50 over 3 mm across, one round flat flake 1mm x 6 mm |
| 6/25/83 | 1:00 PM | 8.5 | 9.5 | 2 | Red sand and some sand and gravel from above, 150 colors, 25 approx. above 3 ml, 1 nugget 1/8" across |
| 6/25/83 | | 6 | 9.5 | | Sluice sample, lots of black sand and lots of very fine colors |

Overburden 6 ft. fine soil

Gravel 3.5 ft.

Bedrock 9.5 ft.

Water Level @ - ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001455

Project Kantishna

Line

Claim Eureka Creek 6

Hole #6

Bucket Size 6 cubic feet

Elevation 2350

Coordinates N 3484040
E 354900

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/27/83 | 4:15 PM | 0 | 1 | | No sample |
| | 4:15 PM | 1 | 5 | 5 | 3 ft colluvium, 1 ft bedrock, colluvium disturbed |
| | | | | | heavy diesel contamination approx 10 coarse colors |
| | Sluice | 2 | 5 | 5 | 100 fine colors, one 1/8" flake |

Overburden 1 ft.

Gravel 4 ft.

Bedrock 4 ft.

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001456

Project Kantishna

Line

Claim Eureka Creek 6 (Eureka Creek)

Hole #7

Bucket Size 6 cubic feet

Elevation 2400

Coordinates N 3484120
E 354575

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/28/83 | 12:30 | 0 | 2.5 | 2 | Hit bedrock @ 1.5 ft, dug 1 ft into bedrock |
| | | | | | 70 fine colors |
| | Sluice | 0 | 2.5 | 2 | 70 very fine colors |

Overburden 0 ft.

Gravel 2.5 ft.

Bedrock 2.5 ft.

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001457

Project Kantishna

Line

Claim Eureka Creek 6

Hole #8

Bucket Size 6 cubic feet

Elevation 2430

Coordinates N 3484240
E 354380

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/29/83 | | 0 | 3 | | Overburden, colluvium |
| | 12:30 PM | 3 | 7 | 4 | 30 very fine colors |
| | 2:00 PM | 7 | 10.5 | 4 | 8 mm wire, 30 coarse, 100 fine, 100 very fine |
| | 4:00 PM | 10.5 | 13.5 | 4 | 17 coarse, 200 fine, 300 very fine |
| | Sluice | 3 | 13.5 | 12 | 1 fine, 100 very fine |

Overburden 3 ft.

Gravel 10.5 ft.

Bedrock - ft. never hit

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001458

Project Kantishna

Line

Claim Eureka Creek 5

Hole #9

Bucket Size 6 cubic feet

Elevation 2300

Coordinates N 3483720
E 353460

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 6/30/83 | | 0 | 2 | | Overburden, no sample |
| | 12:00noon | 2 | 6 | 4 | 2 fine, 65 very fine |
| | 1:35 PM | 6 | 9.5 | 4 | 20 fine, 200 very fine |
| | 2:30 PM | 9.5 | 12.5 | 3 | 4 coarse, 25 fine, +100 very fine |
| | | | | | |
| | Sluice | 2 | 12.5 | 11 | 20 very fine colors |

Overburden 2 ft.

Gravel 10.5 ft.

Bedrock - ft. didn't hit

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001459

Project Kantishna

Line

Claim Friday Discovery

~~Hole~~ Bank Channel 10

Bucket Size cubic feet 1 pan/vert. ft

Elevation 1680

Coordinates N 3487560
E 340120

| Date | Time | Sample From | Sample To | No. of ~~Buckets~~ Pans | Remarks |
|---|---|---|---|---|---|
| | | | | | From blue glaciofluvial gravels on left limit terrace |
| ~~7/1/83~~ | ~~12:00~~ | ~~0~~ | ~~2~~ | | ~~No sample - OB~~ |
| | | 2 | 6 | 4 | 20% rounded cobbles, few boulders up to 4' across |
| | | | | | 1 fine, 14 very fine |
| | | 6 | 10 | 4 | Same - no boulders, 1 fine, 6 very fine |
| | | 10 | 14 | 4 | Same - no boulders, 2 coarse, 1 fine, 8 very fine |
| | | 14 | 18 | 4 | Fe stnd, pea gravel in bottom 2 ft, should be near |
| | | | | | false bedrock as active cut across stream channel |
| | | | | | has similar material above false bedrock |
| | Tails sluice | | | | |
| | | ~~2~~ | ~~18~~ | | ~~11 very fine~~ |

Overburden 2 ft.

Gravel 16 ft.

Bedrock ? ft.

Water Level @ 16 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001460

Project Kantishna

Line

Claim Friday Discovery

~~Hole~~ Bank Channel 11

Bucket Size cubic feet 1 pan/vert. ft

Elevation 1710

Coordinates N 3487880
E 340350

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| | | | | | Subangular Friday Creek fan gravels from rt. limit terrace above present, active mine cut, few boulders up to 2 ft across. |
| 7/1/83 | 2:00 | 0 | 3 | 0 | Dirt - no sample |
| | A | 3 | 7 | 4 | Subangular gravels, 14 very fine |
| | B | 7 | 11 | 4 | Subangular, 10 very fine colors |
| | C | 11 | 15 | 4 | Subangular, 14 very fine colors |
| | D | 15 | 18 | 3 | Bedrock present in near vicinity and should have |
| | | | | | been close to or near it in bottom foot of sample |
| | | | | | 1 fine, 16 very fine |

Overburden 3 ft.

Gravel 15 ft.

Bedrock 0 ft.

Water Level @ 0 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001461
Project Kantishna
Claim Liberty Moose Creek
Bucket Size 6 cubic feet
Coordinates N 3484230
E 340810
240' S50E from CP-4

Line
Hole 12
Elevation 1500

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/2/83 | 11:30 | 0 | 3 | 5 | No sample - muck and sandy overburden |
| | 12:30 | 3 | 7 | 5 | Loose sandy gravel with very rounded cobbles of glacio- |
| | | | | | fluvial origin. Rock types vary widely. 10% boulders |
| | | | | | up to 3' across. 1 coarse, 6 fine, 200+ very fine |
| | 2:00 | 7 | 10.5 | 5 | 2 coarse, 40 fine, +200 very fine much black sands |
| | | | | | 50% + 1 1/2", 20% + 3/16, 20% fine sand |
| | Sluice sample | 3 | 10.5 | 15 | 75 very fine colors |

Overburden 3 ft.

Gravel 7.5 ft.

Bedrock ? ft.

Water Level @ - ft.

W. Srock

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001462

Project Kantishna

Line

Claim Spruce

Hole 13

Bucket Size 6 cubic feet

Elevation 2550

Coordinates N 3490100
E 391300

Near rt. limit of valley - 10' west of road

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/6/83 | 10:30 AM | 0 | 3 | - | Soil and sandy muck - no sample |
| | | 3 | 7 | 4 | Loose sandy alluvium - small cobbles. Water @ 3'. Hole |
| | | | | | blocked at 7' on something hard - possibly ice? But also |
| | | | | | ran into big boulders and a 4" clayey gravel layer. 20 very |
| | | | | | fine colors |
| | | | | | 20 very fine colors in tailings sluice |

Overburden 3 ft.

Gravel 4+ ft.

Bedrock ? ft.

Water Level @ 3 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001464

Project Kantishna

Line

Claim Spruce

Hole 14

Bucket Size 6 cubic feet

Elevation 2550

Coordinates N 3490200
E 391500
Approx. 150' east of #13

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/6/83 | 3:00 PM | 0 | 1 | | Soil |
| | | 1 | 5 | 4 | Very loose sandy gravel - 8" silty clay layer @ |
| | | | | | 3.5', 20 very fine colors, lots coarse magnetite |
| | | 5 | 9 | 4 | 10 very fine colors, hit water @ 8 ft, abundant |
| | | | | | coarse magnetite |
| | | 9 | 11.5 | 2.5 | Coarser, 5% boulders up to 2' across. Quit hole because |
| | | | | | bucket can't go deeper. 10 very fine colors, 1 fine |

Overburden 1 ft.

Gravel 10.5+ ft.

Bedrock - ft.

Water Level @ 8 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001464

Project Kantishna

Claim Spruce Creek #5

Bucket Size 6 cubic feet

Coordinates N 3488200
E 390200
Bench above S5

Line

Hole #15

Elevation 2480

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/8/83 | | 0 | 3 | | Overburden - no sample |
| | | 3 | 7 | 4 | 10% 1 1/2"+, 10% 1 1/2"-3/16", high clay content, |
| | | | | | 1, 2 mm color 90% of cobbles are angular schist, 10% |
| | | | | | rounded of various lithologies |
| | | 7 | 11 | 4 | Hit bedrock @ 10', 20% 1.5"+, 25% 1.5"-3/16", |
| | | | | | 1 fine, 6 very fine. Much black sand, 90% of cobbles |
| | | | | | are subangular schist, 10% rounded of varying lithologies |
| | | 11 | 12 | 1 | Bedrock decomposed schist, no colors |
| | | Tailings Sluice Sample | | | |
| | | 3 | 12 | 9 | No colors |

Overburden 3 ft.

Gravel 8 ft.

Bedrock 12 ft.

Water Level @ _____ ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001465

Project Kantishna

Line

Claim Spruce Creek 5

Hole #16

Bucket Size 6 cubic feet

Elevation 2470

Coordinates N 3487600
E 390150
Bench above S5

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/8/83 | | 0 | 1 | | Overburden no sample |
| | | 1 A | 5 | 4 | Well rounded cobbles, 20% 1.5"+, 20% 1.5"-3/16", |
| | | | | | 3 fine colors, 10 very fine |
| | | 5 B | 9 | 4 | Well rounded cobbles of various lithologies, 25% 1.5"+, |
| | | | | | 25% 1.5"=3/16", little clay, 1 coarse, 4 fine, 1+ very fine. |
| | | 9 C | 13 | 4 | Stopped @ blue clay, high clay, 1 fine, 10 very fine |
| | | Tailing Sluice Sample | | | |
| | | 1 | 13 | 12 | |

Overburden 1 ft.

Gravel 12 ft.

Bedrock 13? ft.

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001466

Project Kantishna

Line

Claim Spruce 4

Hole 17

Bucket Size 6 cubic feet

Elevation 2350

Coordinates N 3485450
E 390350

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| | | | | | Near Ashbrook's cut from 1982. Bedrock near surface 100' away |
| 7/9/83 | | 0 A | 4 | 4 | 30% 1.5", 30% 1.5"-3/16", some clay, water @ 2.3' |
| | | | | | approx. 100 fine, +100 very fine, high magnetite |
| | | 4 B | 7 | 6 | 3 coarse, 100 fine, 100+ very fine, much magnetite |
| | | | | | sloughing of hole |
| | | | | 10 | Sluice sample of 7 ft |
| | | | | | |
| 7/10/83 | | | | | Widened hole to go deeper |
| 7/11/83 | | 7 C | 9 | 5 | Hit bedrock @ 8.5' - orange clayey schists, big |
| | | | | | boulders on bed rock, 7 very coarse, 15 coarse, +100 fine, |
| | | | | | +150 very fine. |
| | | 9 D | 9.5 | 4 | Tried to go deeper, but made little headway and started |
| | | | | | pulling out slough, but bedrock and big boulders in |
| | | | | | each bucket, 5 very coarse (one up to 4mms), 25 coarse, |
| | | | | | 100 fine, +150 very fine |
| | | | | 8 | Sluice sample of last 2.5' |
| | | | | | Showed lots of gold, but had a washout accident during |
| | | | | | sample D. Should not include sample D or sluice in calculations. |

Overburden 0 ft. scraped off last year probably close to a ft deep originally

Gravel 8.5 ft.

Bedrock 8.5 ft.

Water Level @ 2 ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001467

Project Kantishna

Line

Claim Gold King 8

Hole #18

Bucket Size 1.2 cubic feet

Elevation 2800

Coordinates N 3493400
E 377500

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/12/83 | | 0 | 1 | | Overburden |
| | | 1 | 4 | 11 | Hit bedrock @ 3 ft. 6 coarse, + 50 fine, 50 very fine |
| | | | | | 25% 1.5", 25% 3/16"-1.5" |

Overburden 1 ft.

Gravel 3 ft.

Bedrock 3 ft.

Water Level @ 3 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001468

Project Kantishna

Line

Claim Gold King 8

Hole 19

Bucket Size 1.2 cubic feet

Elevation 2800

Coordinates N 3493450
E 377500

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/13/83 | | 0 | 1 | | Overburden |
| | | 1 | 5 | 22 | Hit bedrock @ 4', 6 coarse, +25 fine, +100 very fine, |
| | | | | | less black sands than #18. Bedrock is decomposed |
| | | | | | schist (buff colored) 30% +1.5", 30% 3/16=1.5", many |
| | | | | | large boulders @ bedrock |

Overburden 1 ft.

Gravel 3 ft.

Bedrock 4 ft.

Water Level @ ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001469

Project Kantishna

Line

Claim Gold King 8

Hole #20

Bucket Size 1.2 cubic feet

Elevation 2800

Coordinates N 3493400
E 377450

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/13/83 | | 0 | 4 | 22 | Hit bedrock @ 3 ft, sample site situated on a bedrock depression w/pyrite rich vein material showing @ bottom. Much bedrock in sample. Large boulders near bedrock. Much pyrite in sample 10 coarse, +100 fine, +100 very fine |

Overburden 0 ft.

Gravel 3 ft.

Bedrock 4 ft.

Water Level @ ____ ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001470

Project Kantishna

Claim Glen Creek 6

Bucket Size 1.2 cubic feet bank run

Coordinates N 3492400
E 379250

Line

Hole #21

Elevation 2700

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/14/83 | | / | / | 22 | 6 coarse, 75 fine, +100 very fine schist float, angular |
| | | | | | to subangular and subrounded gravel |
| | | Tailings sluice | | | Sample from 30' bench. Top 5' below grass roots 3 1/2 |
| | | | | | yd bucket struck - 1 yd run through gold saver. 10% |
| | | | | | boulders up to 1' across. Rest is fairly fine |
| | | | | | w/another 10% cobbles. Most rocks have hard clay glueing |
| | | | | | pebbles to sides |

Overburden 1 ft.

Gravel 5 ft.

Bedrock None ft.

Water Level @ ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001471

Project Kantishna

Line

Claim Gold King 5

Hole #22

Bucket Size 1.2 cubic feet bank run

Elevation 2660

Coordinates N 3492400
E 379300

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/14/83 | | Random loader bucket from bench | | | ~~One 3/16" nugget, 6 coarse, 50 fine, +75 very fine~~ |
| | | | | | 10% large boulders, 15% +1.5", 25% 3/16-1.5" |
| | | | | | Sample from lower 7' on bottom of 30' bench near |
| | | | | | weathered schist bedrock. 10% cobbles up to 1 ft across, |
| | | | | | 1% boulders up to 4 ft across. Imbricate structure normal |
| | | | | | to East Fork of Glen Creek. 1 yd sample run from |
| | | | | | 3 1/2 yd struck bucket. |

Overburden - ft.

Gravel 7 ft. vertical

Bedrock 2 ft. below sample

Water Level @ - ft.

J. Levell

# FIELD LOG -- PIT SAMPLING

Sample # A001472

Project Kantishna

Line

Claim Glen Creek (lower)

Hole #25

Bucket Size 6 cubic feet

Elevation 2240

Coordinates N 3483300
E 384300 Glen Creek

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/17/83 | | 0 | 3.5 | 3 | 1 coarse (3/8"x1/2"), 1 fine, +100 very fine, hit clay |
| | | | | | and vegetable material @ 3', 40% + 1.5", 30% 3/16"-1.5". |
| | | | | | Possible tailings |
| | | 3.5 | 8.0 | 4 | 4 fine, +200 very fine, stopped 6" above bedrock |
| | | 8.0 | 9.5 | 2 | Decomposed schist bedrock and material just above |
| | | | | | bedrock, 10 coarse, 20 fine, approx. 70 very fine. |
| | | Tailings sluice | | | |
| | | 0 | 9.5 | 9 | No color |

Overburden 0 ft.

Gravel 8.5 ft.

Bedrock 8.5 ft.

Water Level @ 0 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001473

Project Kantishna

Line

Claim Glen Creek

Hole #24

Bucket Size 6 cubic feet

Elevation 2240

Coordinates N 3483500
E 384850 Lower Glen Creek

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/18/83 | | 0 | .5 | | No sample overburden |
| | | 0.5 | 4.5 | 4 | Well washed gravel 20% 1.5"+, 40% 3/16"-1.5", 5 coarse, |
| | | | | | +20 fine, +100 very fine, hit water @ 4.0 ft. |
| | | 4.5 | 6 | 2 | 12 coarse, approx. 100 fine, +100 very fine, hit |
| | | | | | bedrock @ 5.5' hard to dig, semi-decomposed schist |
| | | Sluice sample | | | |
| | | 0.5 | 5 | 5 | |

Overburden 0 ft.

Gravel 5.5 ft.

Bedrock 5.5 ft.

Water Level @ 4 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001474

Project Kantishna

Line

Claim Liberty Moose Creek

Hole #25

Bucket Size 6 cubic feet

Elevation 1890

Coordinates N 3478100
E 368800

Mouth of Rainy Creek on Moose Creek Bench

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/21/83 | | 0 | 1 | | Overburden, no sample |
| | | 1 A | 5 | 4 | 65% +1.5", 15% 3/16"-1.5", well-rounded cobbles of various lithologies, 1 coarse, 5 fine, approx. 20 very fine |
| | | 5 B | 9 | 4 | 35% + 1.5", 40% 3/16"-1.5", approx. 20 very fine, well-rounded cobbles of various lithologies |
| | | 9 C | 13 | 4 | Approx. 20 very fine |
| | | 13 D | 17 | 4 | Well washed 30% +1.5", 30% 3/16-1.5", 10 fine, +75 very fine, many very fine, non-mag black sands |
| | | 17 E | 21 | 4 | Well sorted, well washed 30% +1.5", 30% 3/16"-1.5", 1 coarse, 15 fine, +50 very fine, many very fine non-mag black sands |
| | | 21 F | 24 | 3 | Some clay, hit bedrock @ 23', 10 fine, +50 very fine |
| | | Sluice Sample | | | |
| | | 1 | 24 | 23 | Moose Creek gravels. |

Overburden 1 ft.

Gravel 22 ft.

Bedrock 1 ft.

Water Level @ 0 ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A001475

Project Kantishna

Line

Claim Rainy Creek-Bench adjacent to creek

Hole #26

Bucket Size 6 cubic feet

Elevation 2080

Coordinates N 3480650
E 370850 Rainy Creek

| Date | Time | Sample From | Sample To | No. of Buckets | Remarks |
|---|---|---|---|---|---|
| 7/22/83 | | 0 A | 4 | 4 | Subangular to subrounded, 35% 1.5", 30% 3/16-1.5", some |
| | | | | | clay, schist material, 15 fines, +50 very fine |
| | | 4 B | 8 | 4 | Well washed sandy material 10% +1.5", 30% 3/16-1.5" |
| | | | | | 10 very fine |
| | | 8 C | 12 | 4 | Did not hit bedrock, 5 very fine |
| | | Sluice sample | | | |
| | | 0 | 12 | 12 | No color |

Overburden 0 ft.

Gravel 12 ft.

Bedrock - ft. didn't hit

Water Level @ - ft.

W. Srock

# FIELD LOG -- PIT SAMPLING

Sample # A 001476

Project Kantishna

Claim

Bucket Size 6 cubic feet

Coordinates N 3479850
E 339450 Eldorado

Line

Hole #27 & #28

Elevation 1700

| Date | Time | Sample From | | To | No. of Buckets | Remarks |
|---|---|---|---|---|---|---|
| 7/23/83 | | 0 | A | 4 | 4 | 50% 1.5"+, 25% 3/16-1.5", subangular to subrounded schist a few erratics, very Fe ox stained, little black sand, 3 coarse, 12 fine, 30 very fine |
| | | 4 | B | 8 | 4 | Hit blue gravel @ 4.5', blue gravel has 25% of+1.5", 30% 3/16-1.5", hit bedrock (blue clay @ 7.5') 10 coarse, +100 fine, +100 very fine |
| | | Sluice Sample 0 | | 8 | 8 | 2 very fine |
| TEST #28 Subsequent test taken to determine if values from B interval were concentrated at interface between Fe ox stained gravels and blue clay bearing gravels | | | | | | |
| | | 2.5 | C | 5.5 | 2 | 1-1/4" coarse, 1 coarse, 12 fine, +25 very fine Fe ox stained gravels and 6" blue clay bearing gravels. |
| | | 5.5 | D | 6.5 | 1 | Contact between stained gravels and blue clay gravels dips, so sample contains both. 4 coarse, 12 fine, +50 very fine |
| | | 6.5 | E | 7.5 | 1 | Blue clay rich gravels, glacial origin, granite cobbles, 1 coarse, 1 fine, many sulfides |

Overburden 0 ft.

Gravel 7.5 ft.

Bedrock 7.5 ft.

Water Level @ ft.

W. Srock

A total of 1.9 acres containing 1.7 million cy of gravel have already been mined and are considered to have low resource potential because relatively efficient mining methods were used to mine the deposits and most gold was probably recovered.

Thirty-seven acres containing 1.8 million cy of alluvial fan deposits have an undetermined potential. Some of these fans are deposited from drainages known to contain placer gold and a fan deposit of similar nature was actively mined on Friday Creek (Locations 4 and 17) this season. Approximately 600,000 cy are covered by mining claims.

Glacier Creek

Approximately 148 acres containing 1.6 million cy of stream deposits and 428 acres with 4.9 million cy of terrace deposits in the upper 7 miles of the drainage have high resource potential based on current mine production and the cable tool sampling results. Approximately 1.4 million cy of the stream deposits and 1.3 million cy of the terrace alluvium are overlain by placer claims.

Approximately 435 acres containing 5.6 million cy of stream deposits and 430 acres containing 4.9 million cy of terrace deposits in the lower Glacier drainage have undetermined placer resource potential and sampling is recommended. Although these deposits have not been tested, they are analogous to the deposits with high resource potential upstream and may contain similar placer gold deposits.

Approximately 24 acres with 230,000 cy of placer mining tailings have low resource potential because most of the tailings are the product of relatively sophisticated recovery methods and most gold was probably recovered.

Yellow Creek

Four acres consisting of 35,000 cy of stream deposits are present which have high placer resource potential. Approximately 30,000 cy are covered by mining claims.

Three acres consisting of 24,000 cy of tailings have undetermined resource potential. Although these deposits were not tested, only the lower few feet of gravel were processed and significant amounts of fine gold may still be present.

Glen Creek

Approximately 52 acres containing 730,000 cy of stream deposits in Glen Creek have high placer gold resource potential based on sampling and mine monitoring results. All of these deposits are overlain by mining claims.

Terrace deposits in the upper reaches of the drainage contain approximately 2.6 million cy of gravel which cover an area of 66 acres. The terraces are considered to have moderate placer resource potential based on sampling results. Approximately 75% or 1.9 million yards of the bench gravels are overlain by mining claims. Testing results of the bench gravels showed them to contain grades of below 0.002 to 0.009 oz Au/cy and additional testing may delineate minable reserves. Forty-eight acres containing 590,00 cy of placer mine tailings have undetermined resource potential. The tailings were not tested and similar deposits on other streams in the district have been remined. Testing may delineate minable grades.

Lower Moose

Approximately 310 acres containing 5.0 million cy of recent floodplain deposits occur between the townsite of Kantishna and reconnaissance sample location A961 below the lower canyon. Approximately 629 acres containing 10.1 million cy of terrace deposits occur between Kantishna and reconnaissance sample A962. All of these deposits have high placer resource potential to support placer mining operations based on the sampling results and current and past mining production. Approximately 230 acres and 3.7 million cy of terrace and floodplain deposits are covered by mining claims.

Approximately 655 acres containing 10.6 million cy of recent floodplain deposits and 4600 acres containing 110 million cy of geologically similar terrace and suspected terrace gravel deposits occur between the above deposits and the study area boundary downstream. An estimated average width of 4,500 ft was multiplied by a length of 44,000 ft to arrive at an area figure used in volume calculations for the terrace deposits. The deposits have an undetermined potential. Further reconnaissance is strongly recommended as their favorable location downstream from and similar character to known auriferous gravels suggest that they could contain a substantial gold resource.

Approximately 400 acres of recent floodplain and terrace deposits from Kantishna to the lower canyon area are believed to be underlain by semiconsolidated unsorted glacial outwash deposits. Total depth of these gravels is unknown although a few tests reportedly went to depths of 100 ft without hitting bedrock. Possible preglacial concentrations of placer gold may be concealed beneath the outwash deposits. If this is the case, a deep dredge operation may be feasible. Using an estimated average depth of 50 ft, approximately 32.3 million cy of material with undetermined placer resource potential may be present. Approximately 170 acres containing 13.7 million cy are covered by claims.

Seventy-three acres with 1.2 million cy of recently mined tailings are present near Kantishna. The tailings are considered to have low placer resource potential because the plants used to mine the original deposits contained relatively sophisticated recovery methods and are believed to have recovered most of the gold.

Friday Creek

Four acres with 20,000 cy of stream deposits in the upper drainage have high resource potential for small-scale mining, based on the current and past production. These deposits are under claim and are currently supporting an active mining operation.

Approximately 20 acres containing 1.6 million cy of the fan/terrace are currently under claim and have high resource potential based on present production and sampling results. This deposit should support a large-scale mining operation similar to the one present.

Approximately 30 acres containing 470,000 cy of Moose Creek floodplain gravels are present on the lower section of the stream. These gravels are covered by mining claims and have high resource potential based on present production and sampling results. The recent large-scale mining produced 0.008 oz Au/cy from a similar deposit. Samples obtained from cable tool sampling and pitting contained from 0.003 to 0.017 oz Au/cy.

Approximately 8 acres containing 150,000 cy of tailings have low resource potential because the majority are the product of relatively sophisticated mining methods in which most of the fine gold was probably recovered.

Eureka Creek

Seventeen acres containing 140,000 cy of recent stream gravels have high resource potential based on current production and past production history. The deposits are covered by mining claims. Approximately 30,000 cy of this gravel are located on lower Eureka Creek in the vicinity of the two mines described above and could contain similar values.

Another 110,000 cy in the upper drainage are considered to have high potential. The two pits tested were inconclusive because bedrock was not reached in one and disturbed gravel was tested in the other. However, the unmined gravel is similar to large areas already mined and also similar to deposits presently being mined in the lower canyon indicating a high probability that minable grades also exist on this portion of the drainage.

Twenty-four acres and 315,000 cy of terrace gravels near the mouth of the stream also have high resource potential based on current production and encouraging test results obtained by the current operator. Approximately 250,000 cy of this material are covered by mining claims and will probably be mined in the near future by small and medium scale methods.

The alluvial fan in the upper drainage covers 48 acres and contains approximately 775,000 cy of gravel. This deposit has moderate resource potential based on sampling results and further sampling is recommended. Approximately 195,000 cy of this deposit are overlain by mining claims.

Seventeen acres containing approximately 140,000 cy of recent mine tailings have an undetermined resource potential. Eureka Creek has been mined in places several times over and testing by operators has shown encouraging gold recovery from tailings in some places. Because much of the mining in the past was accomplished by unsophisticated methods, fine gold was probably not recovered.

Eldorado Creek

Approximately 300,000 cy with 46 acres of recent stream alluvium have high resource potential based on recent sampling.

The limited gravels in Slate Creek have low placer resource potential. Gravel deposits on Eldorado Creek above its juncture with Slate Creek have not been tested and have undetermined potential.

One acre with 12,000 cy of recent placer tailings were not tested and have undetermined resource potential.

Spruce Creek

Approximately 78 acres of recent stream alluvium with 1.2 million cy of gravel are present on the drainage. Because of the discontinuous nature of paystreaks in the deposit and sporadic location of past mining only half of the deposits are considered to have high resource potential. The other half has moderate resource potential. Approximately 1 million cy of the recent stream alluvium is presently overlain by mining claims. Another 8 acres containing 100,000 cy of tailings and 61 acres containing 1.2 million cy of bench gravels between Glen and Spruce Creeks have a low resource potential based on sampling results.

All of the tailings are under claim and approximately 7 acres containing 135,000 cy of the bench gravels are covered by claims.

Rainy Creek

Approximately 3 acres containing 15,000 cy of material in the upper drainage have high resource potential based on sample A3043 and evidence of hand worked deposits. This deposit may be able to support a small-scale, mechanized operation. Approximately 5,000 cy of this material are covered by claims.

Another 32 acres with 690,000 cy of recent stream gravels and 25 acres with 320,000 cy of bench gravels are overlain by claims and have undetermined resource potential because very few samples were obtained. Previous and current mining activities indicate minable reserves may be present.

Willow Creek

Forty acres containing 250,000 cy of recent alluvium have low placer gold resource potential based upon sampling results. If Willow Creek had contained gold-bearing deposits they were probably scoured out by glacial ice.

Upper Moose

Approximately 684 acres containing 12.8 million cy of floodplain deposits are present in the Upper Moose Creek drainage. Although sampling results meet one of the criteria for a high resource potential classification, the deposits are considered to have moderate resource potential for the following reason. Sampling results showed encouraging gold values. However, the samples were taken from favorable locations for gold concentrations and may not be representative of the average gold content to be expected in the deposits. This is demonstrated when the disparity between the 1981 mining operation results and the high sample result obtained prior to mining are compared. The samples taken during this study

from the extensive volume of materials indicate that high enough grades may be present to support a large-scale mining operation. However, more comprehensive and sophisticated study would be required to categorize any of the alluvium as reserves. Another 55.6 million cy of deep outwash gravels may exist with an undetermined resource potential. Approximately 10.2 million cy of the floodplain alluvium are covered by mining claims.

Approximately 1476 acres containing 39.5 million cy of terrace gravels have an undetermined resource potential. Approximately 15% or 5.9 million cy of the terrace gravels are covered by mining claims. Although largely unprospected, sampling indicates the deposits are auriferous. One anomalous sample (A1474) showed encouraging amounts of fine gold are present. The gravels are similar to those in the active stream channel. Cable tool sampling is recommended to further explore the terrace deposits. Reserves cannot be determined with the existing information.

A total of 820 acres with 40.3 million cy of fan gravels have undetermined resource potential. They could contain favorable amounts of gold as they were deposited by known auriferous streams such as Glen Creek. These extensive fan gravel deposits were not tested during this study but have been prospected by local miners with reportedly encouraging results (oral communication with Dan Ashbrook, 1983). Approximately 57 acres with 2.3 million cy are covered by claims on Rainy, Glen, Spruce, and Willow Creeks.

**Determination of Mine Life of Deposits Currently Under Mining Claim**

If an annual rate of production can be determined for mining operations in a district, then the mine life (years of operation) for claims with known inferred reserves and resources can be made.

Gold-bearing deposits with high resource potential which are covered by mining claims are shown on table K-4 as Inferred Reserves. Gold-bearing deposits which underlie placer claims and have moderate or undetermined

resource potential are also shown on the table collectively as Resources. Further testing is required to delineate reserves from those deposits with moderate or undetermined potential.

The present yearly, fully-operational production rate was estimated to be 800,000 cy. To determine the potential mine life, this figure was divided into the amount of Inferred Reserves and the sum of Inferred Reserves and Resoures to arrive at a respective minimum and maximum mine life for the placer deposits which are currently covered by mining claims. These figures are shown on table K-4.

An estimate of the volume of deep outwash deposits on Moose Creek is shown separately on table K-5. Because large dredge equipment required to mine a deposit of this type is not present in the district, and they are hypothetical deposits, they are not included in the mine life calculations.

Table A-6 - Kantishna Regional Placer Resource Summary

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Bear Creek<br>Mt. McKinley B2/B3 Quads. T15-16S, R18W | The upper portions of Bear Creek occupy steep narrow colluvial filled valleys with little accumulation of alluvium. Average gradients are about 500 ft/mi. The middle portion of Bear Creek occupies a wider alluvial filled valley having a gradient of about 100 ft/mi. Bedrock appears to be deep along much of the drainage. | No workings were identified on upper Bear Creek. | Five placer samples (A003088-92) were collected from the upper portions of Bear Creek. One contained no detectable gold. The other four contained from a trace to 0.0004 oz gold/cy. Upper Bear Creek has low potential for commercial placer mining. The remainder of Bear Creek has undetermined placer potential. |

Compiled by Robert B. Hoekzema, U. S. Bureau of Mines

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Bearpaw River (above Caribou Creek) Mt. McKinley C2, D2 Quads, T13-14S, R16-17W | The Bearpaw River drains a large drainage basin and occupies steep, narrow tributary valleys and an occasionally wider main valley containing significant alluvial deposits. The average gradient is about 120 ft/mile. | Evidence of minor prospecting is present. No evidence of mining is present. | Nine 0.1 cy placer samples (A000964-968, A00986-987, A001000, A001403) recovered from 0 to 0.0004 oz gold/cy. One sample (A000989) contained 0.0021 oz gold/cy. An extensive gravel resource occurs on the Bearpaw River but little evidence of valuable placer gold mineralization was found. Low placer resource potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Canyon Creek, main fork<br>Mt. McKinley C1-C2 Quads, T14S, R15-16W | Canyon Creek occupies narrow bedrock walled canyons alternating with broader alluvial filled sections. The average gradient is about 75 ft/mile. | Evidence of placer prospecting or mining was not identified. | Eleven 0.1 cy samples (A003037, A000973-977, A000981-985) contained from a trace to 0.0005 oz gold/cy. One sample (A000981) recovered anomalous quantities of coarse (0.4 inch) scheelite. Available data suggest that Canyon Creek has low resource potential for placer mining. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Caribou Creek, Unnamed Northern Tributary<br>Mt. McKinley C2 Quad<br>T15S, R17W | This tributary occupies a steep but relatively wide valley along much of its length prior to entering a very steep narrow bedrock walled canyon just prior to its junction with Caribou Creek. The average gradient is about 300 ft/mile. | A few very small prospect pits occur. No evidence of mining were located. | Two 0.1 cy samples (A001412, 1413) recovered a trace and 0.0003 oz gold/cy respectively. An estimated 700,000 cy of recent alluvial gravels occur in this valley above the lower canyon. However, no evidence of significant gold values exists. Low placer resource potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Canyon Creek, North Fork Mt. McKinley C1-C2 Quads T14S, R15-16W | The North Fork of Canyon Creek occupies steep narrow bedrock canyons with alternating wider sections containing large quantities of alluvial gravels. The average gradient is about 200 ft/mile but is highly variable. The upper portions drain sulfide bearing schist and graphitic phyllite. | Minor prospecting activity is indicated by the presence of several small trenches and pits and cut timbers near the junction of the two main forks of the creek. No recorded production. | Four 0.1 cy samples (A003031, A003034-3036) contained from 0.0001-0.0006 oz gold/cy. One sample (A003030) contained no detectable gold. Low resource potential for supporting a placer mining industry. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Clearwater Fork<br>Mt. McKinley C1-C2, D2 Quads<br>T13-16S, R14-16W | The Clearwater Fork of the Toklat River drains a large area, much of which lies outside the study area. Bedrock is exposed along some sections of the stream but most of it occupies a broad alluvium filled valley with terraces of Tertiary gravels exposed along one or both sides. The average gradient is about 70 ft/mile. | The Clearwater Fork has been prospected in the past. Old prospect pits and trenches still exist but no evidence of significant mining was identified during this study. No reported production. | Three samples (A003041, A003086-87) from small unnamed tributaries to the Clearwater Fork contained from a trace to 0.0005 oz gold/cy. One sample collected from Clearwater Fork (A003040) below Moonlight Creek contained 0.0004 oz gold/cy. Capps, 1919, reports that numerous coarse colors were found on the benches of Clearwater Fork. Additional evaluation is necessary due to the large area drained and extensive gravels associated with the Clearwater Fork. Undetermined placer potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Crevice Creek<br>Mt. McKinley C2 Quad<br>T15S, R16-17W | Crevice Creek occupies a very steep narrow bedrock walled valley with an average gradient of greater than 500 ft/mi. Gold is reported to be relatively coarse. | Evidence of hand mining is present along much of the creek below sample A000979. Estimated production is 500-750 ounces. A production of 660 ounces of gold and 57 ounces of silver was reported in 1946 and 1947 from First Chance Creek. This may be an earlier name for Crevice Creek. | Three 0.1 cy samples (A000978-980) recovered from 0.0018 to 0.1249 oz gold/cy. A 0.011 ounce nugget was recovered in sample A000979. Approximately 100,000 cy of recent alluvial gravels are estimated to occur in Crevice Creek. About 1/3 have been previously mined. High potential for small scale commercial placer mining and suction dredging. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Flat Creek<br>Mt. McKinley C-2/C-3 Quads. T14-15S, R18W | Upper Flat Creek occupies a steep narrow valley with bedrock walls and has a gradient of 300-400 ft/mi. The stream gravels consist in part of alluvial sediments. Alluvial bench (Tertiary in part ?) gravels also occur along much of the drainage. Below the Glacier Creek Road the gradient of Flat Creek decreases to 100-150 ft/mi and the valley widens. | Little evidence of prospecting or mining activity is present. No reported production. | A sample (A003094) of recent alluvial gravels contained 0.0036 oz gold/cy. A sample (A003093) of the bench gravels contained trace amounts of gold though the gold in the sample was not weighed. Because of the anomalous sample results and proximity to known placer producers (Moose Creek, Glacier Creek) Flat Creek has moderate potential for placer gold production. Additional evaluation is highly recommended. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Last Chance Creek Mt. McKinley C2 Quad T15S, R17W | Last Chance Creek occupies a steep narrow bedrock walled colluvial filled valley. The gradient is approximately 500 ft/mile. | Evidence of mining occurs near sample location A001408. Minor prospecting has occurred near the mouth of the creek. Recorded production is 665 ounces. | Three 0.1 cy samples (A001407-1409) recovered from 0.0003 to 0.0006 oz gold/cy. Sample locations were generally poor due to high water and may not reflect values present in the creek. Additional sampling may be warranted since previous mining occurred. Most of the creek is too steep for gravel accumulation. A 1500 ft partially mined section located near sample location A001408 contains about 50,000 cy. An additional 50,000 occurs near the mouth of the creek. Undetermined placer potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Little Moose Creek Mt. McKinley C1, D1 Quads. T13S, R15W | The upper 3 miles of Little Moose Creek mostly occupies a narrow (50-200 ft wide) bedrock walled valley having a gradient of about 200 ft/mile. Bedrock is reported (Capps, 1919) to range from 8-10 ft deep though some portions appear to be shallower. Capps, 1919 also reports that the gold is coarse and of low fineness. Small native silver nuggets were found in cleanups by early miners.<br><br>The lower 1 1/2 miles to the junction with the Clearwater Fork occupies a wider valley containing considerable gravel and has an average gradient of 150 ft/mile. | Sections of Little Moose were worked using booming techniques and by hand mostly between 1906 and 1942. Several cabins and tailings attest to a moderate level of mining activity. Minor prospecting has occurred more recently. Reported production is 1948 ounces gold. | Three placer samples collected from upper Little Moose Creek (A003025-27) contained from 0.0058-0.0597 oz gold/cy. One sample (A003024) contained 0.0002 oz gold/cy and another (A003028) from lower Little Moose Creek contained no detectable gold. Greater than 500,000 cy of gravel are estimated to occupy the upper 3-mile section of the creek. These deposits have high potential for small to medium sized placer operations.<br><br>Significant quantities (>750,000 cy) of gravels are estimated to occur in the lower 1 1/2 mile section of Little Moose Creek. These gravels are unevaluated due to greater depth to bedrock. However, surface indications of a valuable placer resource are lacking. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Beauty Creek<br>Mt. McKinley C2 Quad<br>T14S, R17W | Beauty Creek occupies a relatively wide valley narrowing to a bedrock walled canyon about 1/2 mile above its junction with the Bearpaw River. The average gradient is about 125 ft/mile. | Evidence of prospecting and/or mining was not found. No reported production. | One 0.1 cy placer sample (A000999) recovered a trace of gold. This drainage was not walked as were most of the others. Undetermined placer potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Moonlight Creek Mt. McKinley C1/C2 Quads. T14-15S, R15-16W | Upper Moonlight Creek occupies relatively steep narrow bedrock walled canyons alternating with short, less steep sections containing alluvial deposits. A wider valley containing large volumes of alluvium has developed along its lower portions. The average stream gradient is about 200 ft/mile. | Evidence of significant prospecting or mining was not seen. A few small hand dug pits were tentatively identified. No recorded production. | Two placer samples (A003038, 39) contained trace amounts of gold. One pan concentrate (A003017) from a tributary draining Keevy Peak rocks contained anomalous gold. Moonlight Creek has undetermined potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Myrtle Creek<br>Mt. McKinley C2 Quad<br>T15S, R15-16W | The tributary draining Spruce Peak occupies a broad colluvial filled valley with a gradient of 125 ft/mile. Bedrock is not exposed. The tributary draining Kankone Peak occupies a narrow, bedrock walled valley having a gradient of 200 ft/mile. Sections up to 500 ft wide contain alluvial deposits with bedrock estimated to average less than 5 ft deep. The main valley of Myrtle Creek has well developed terraces 20-30 ft or more high consisting of Tertiary gravels locally overlain by up to 10 ft of coarser Quaternary alluvial deposits. Much of the stream occupies bedrock walled canyons with limited alluvial deposits. The average gradient of the main stream is about 110 ft/mile. | The Spruce Peak tributary has been mined about 1 mile east of Spruce Peak. Evidence of prospecting was found in a few other locations. No recorded production. Estimated production 50-100 oz gold. | Ten 0.1 cy samples (A003073-3076, 3078-3083) contained from a trace to 0.0005 oz gold/cy. Four samples (A003072, 3077, 3084, 3085) contained from 0.0011 to 0.0121 oz gold/cy. An estimated 40,000 cy of gravel occur in the upper portion of the Spruce Peak tributary and an additional 200,000 cy of gravel occur on the tributary draining Kankone Peak. These sections have moderate resource potential for supporting a small to medium placer operation. Bench deposits along Myrtle Creek, especially those exposed between the above mentioned tributaries deserve additional evaluation due to the anomalous gold found in sample A003077 collected at the interface between exposed Tertiary and Quaternary gravels. Additional gravel deposits remain unevaluated. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Rock Creek<br>Mt. McKinley C2 Quad<br>T14-15S, R16-17-W | Rock Creek drains a large basin and occupies steep narrow tributary valleys with intermittent relatively wide alluvial filled sections along the main stream. The average gradient is about 130 ft/mile. | Some evidence of prospecting was identified. No evidence of mining was found. | Seventeen samples (A003061-65, A000969-971, A000991-998, A001400) were collected on Rock Creek. Of these, thirteen contained trace or less amounts of gold. Two contained 0.0001 gold/cy. One sample (A000995) collected from an unnamed eastern tributary contained 0.0012 oz gold/cy and a second (A001400) collected near the mouth of Rock Creek contained 0.0018 oz gold/cy. These two areas may deserve additional evaluation. However, the majority of Rock Creek has low placer resource potential. |

Table A-6 - Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Snowshoe Creek<br>Mt. McKinley C2 Quad<br>T15S, R17W | Snowshoe Creek occupies a narrow colluvial filled bedrock walled valley with an average gradient of over 600 ft/mile. | Evidence of prospecting activity exists near the mouth of the creek. No reported production. | One 0.1 cy sample (A001410) recovered a trace of gold. The placer resource potential remains unevaluated. However, a limited volume of alluvial gravels exists in the drainage. |

Table A-6 -Kantishna Regional Placer Resource Summary - Continued

| Drainage/Location | Summary of Mineralization | Workings and Production | Sample data and resource assessment |
|---|---|---|---|
| Stampede Creek Mt. McKinley, C1/D1 Quads. T13S, R14-15W. | Stampede Creek occupies a narrow valley (50-200 ft wide) for most of its 3 mi length. The gradient averages about 200 ft/mi. Bedrock is shallow (<6 ft) along most of the upper section of the stream but is likely considerably deeper near its junction with the Clearwater Fork of the Toklat River. Gold tends to be relatively rough, fine-grained, and of very low fineness. | Sections of Stampede Creek above the Stampede Mine were worked by hand methods in the 1940's. Lower Stampede Creek has been disturbed by heavy equipment for construction purposes. Portions have been mined. Reported production is 183 ounces. | Two placer samples (A003029, A001414) contained 0.2925 and 0.0418 oz gold/cy. Two samples from tributaries contained 0.0003 and 0.0013 oz gold/cy. An estimated 15,000 cy of gravel occurs on Stampede Creek above the mine. This section may have relatively coarse gold but will be difficult to mine due to boulders and narrow stream width. A larger volume of gravel, 200,000 cy, occurs below the mine where conditions are suitable for mining using heavy equipment. An alluvial fan occurs where Stampede Creek joins the Clearwater Fork of the Toklat River. Additional evaluation of this potential resource is warranted as it is estimated to contain in excess of 500,000 cy of gravel. Stampede Creek has high potential for supporting a small to medium sized placer operation. |

Table A-7

CHEMICAL ANALYSIS OF PAN CON.-PL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) | CS (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001450 | 343340. | 3481590. | 13 | 73 | -.9 | -.80 | -.9 | 10.0 | 300.0 | -.9 | -.9 | .5 | -.9 | -.8 | 100.0 | 1000.0 | -.8 |
| A001451 | 341962. | 3482639. | 13 | 71 | 8.6 | .27 | -.9 | -.9 | 740.0 | -.9 | 1.0 | -.8 | .4 | -.9 | 40.0 | 455.0 | -.9 |
| A001452 | 341668. | 3482937. | 13 | 73 | 10.0 | -.80 | 500.0 | -.9 | 1000.0 | -.9 | -.9 | .1 | -.9 | -.8 | 150.0 | 1500.0 | -.8 |
| A001453 | 337844. | 3488309. | 13 | 73 | 2.0 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .7 | -.9 | -.8 | 50.0 | 10000.0 | -.8 |
| A001454 | 338613. | 3487477. | 13 | 71 | 6.6 | 3.00 | 130.0 | -.9 | 90.0 | -.9 | -.9 | -.8 | -.9 | 260.0 | 15.0 | 140.0 | 25.0 |
| A001455 | 354844. | 3489032. | 13 | 73 | 15.0 | -.80 | 500.0 | -.9 | 100.0 | -.9 | -.9 | .1 | -.9 | -.8 | 500.0 | 20.0 | -.8 |
| A001456 | 354685. | 3489153. | 13 | 73 | 20.0 | -.80 | -.9 | 500.0 | 300.0 | -.9 | -.9 | .7 | -.9 | -.8 | 30.0 | 200.0 | -.8 |
| A001457 | 354442. | 3489311. | 13 | 71 | 65.0 | 2.00 | 310.0 | 10.0 | 200.0 | -.9 | 2.0 | -.8 | 1.0 | 170.0 | 20.0 | 265.0 | 15.0 |
| A001458 | 353068. | 3488530. | 13 | 71 | 11.0 | 1.30 | 455.0 | -.9 | 650.0 | -.9 | 2.0 | -.8 | .8 | 160.0 | 25.0 | 350.0 | 10.0 |
| A001459 | 340120. | 3487560. | 13 | 73 | -.9 | -.80 | -.9 | 50.0 | 1000.0 | -.9 | -.9 | .5 | -.9 | -.8 | 5.0 | 200.0 | -.8 |
| A001460 | 340350. | 3487880. | 13 | 71 | 22.0 | .50 | 75.0 | 15.0 | 190.0 | -.9 | -.9 | -.8 | .4 | 160.0 | 45.0 | 230.0 | 10.0 |
| A001461 | 340806. | 3484233. | 13 | 73 | -.9 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .7 | -.9 | -.8 | 30.0 | 1000.0 | -.8 |
| A001462 | 391063. | 3489583. | 13 | 73 | -.9 | -.80 | -.9 | -.9 | 500.0 | -.9 | -.9 | .2 | -.9 | -.8 | 70.0 | 200.0 | -.8 |
| A001463 | 391245. | 3489634. | 13 | 73 | 3.0 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .2 | -.9 | -.8 | 50.0 | 200.0 | -.8 |
| A001464 | 389976. | 3488359. | 13 | 71 | -.9 | .03 | -.9 | 20.0 | 190.0 | -.9 | -.9 | -.8 | -.9 | 120.0 | 25.0 | 190.0 | 10.0 |
| A001465 | 389787. | 3487998. | 13 | 73 | 2.0 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .5 | -.9 | -.8 | 20.0 | 100.0 | -.8 |
| A001466 | 390289. | 3485662. | 13 | 71 | -.9 | .42 | 15.0 | 10.0 | 90.0 | -.9 | 1.0 | -.8 | -.9 | 120.0 | 35.0 | 90.0 | 20.0 |
| A001467 | 377233. | 3493526. | 13 | 73 | 50.0 | -.80 | 500.0 | -.9 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 200.0 | 300.0 | -.8 |
| A001468 | 377242. | 3493593. | 13 | 71 | 16.0 | 1.20 | 900.0 | 80.0 | 710.0 | -.9 | -.9 | -.8 | -.9 | 280.0 | 50.0 | 195.0 | 20.0 |
| A001469 | 377211. | 3493508. | 13 | 73 | 7.0 | -.80 | 10000.0 | 1500.0 | 50.0 | -.9 | -.9 | .1 | 200.0 | -.8 | 70.0 | 10.0 | -.8 |
| A001470 | 379023. | 3492906. | 13 | 73 | 1.0 | -.80 | 1500.0 | 500.0 | 500.0 | -.9 | -.9 | .2 | -.9 | -.8 | 50.0 | 300.0 | -.8 |
| A001471 | 379168. | 3492866. | 13 | 71 | 10.0 | .18 | 160.0 | 95.0 | 270.0 | -.9 | -.9 | -.8 | 1.0 | 100.0 | 35.0 | 245.0 | 10.0 |
| A001472 | 384520. | 3483178. | 13 | 73 | -.9 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .2 | -.9 | -.8 | 70.0 | 200.0 | -.8 |
| A001473 | 384617. | 3483462. | 13 | 71 | .4 | 2.70 | 55.0 | 35.0 | 130.0 | -.9 | -.9 | -.8 | -.9 | 100.0 | 45.0 | 145.0 | 20.0 |
| A001474 | 368748. | 3478301. | 13 | 71 | .4 | 1.70 | 30.0 | 30.0 | 180.0 | -.9 | -.9 | -.8 | -.9 | 320.0 | 25.0 | 245.0 | 20.0 |
| A001475 | 371029. | 3480841. | 13 | 71 | -.9 | .22 | 120.0 | 25.0 | 130.0 | -.9 | -.9 | -.8 | .6 | 80.0 | 35.0 | 115.0 | 20.0 |
| A001476 | 343340. | 3481589. | 13 | 71 | 32.0 | 1.10 | 1150.0 | 25.0 | 640.0 | 10.0 | 5.0 | -.8 | .8 | 120.0 | 70.0 | 210.0 | 10.0 |
| A001477 | 338181. | 3488467. | 13 | 71 | 4.4 | .02 | 990.0 | 25.0 | 350.0 | -.9 | -.9 | -.8 | 3.0 | 40.0 | 35.0 | 115.0 | -.9 |
| A001478 | 347527. | 3510424. | 13 | 71 | -.9 | .24 | 70.0 | 20.0 | 120.0 | -.9 | -.9 | -.8 | -.9 | 50.0 | 10.0 | 125.0 | -.9 |

Table A-7 CHEMICAL ANALYSIS OF PAN CON.-PL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | HG (%) | LA (PPM) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001450 | 150.0 | 20.0 | 20.0 | -.9 | -.8 | 20.0 | 3.00 | 1500.0 | 10.0 | 20.0 | 150.0 | 70.0 | -.8 | -.8 | -.9 | 70.0 | 100.0 |
| A001451 | 55.0 | 39.3 | -.9 | -.8 | 80.0 | -.9 | -.80 | 4650.0 | -.9 | -.9 | 75.0 | 260.0 | -.9 | -.9 | 110.0 | -.9 | -.9 |
| A001452 | 100.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 1000.0 | 20.0 | 30.0 | 150.0 | 300.0 | -.8 | -.8 | 500.0 | 30.0 | 500.0 |
| A001453 | 200.0 | 20.0 | 50.0 | -.9 | -.8 | 20.0 | 2.00 | 2000.0 | 20.0 | 30.0 | 100.0 | 150.0 | -.8 | -.8 | -.9 | 50.0 | 100.0 |
| A001454 | 15.0 | 40.0 | 7.0 | -.8 | 45.0 | 80.0 | -.80 | 5450.0 | -.9 | 230.0 | 25.0 | 280.0 | .1 | .1 | 12.0 | 45.0 | 910.0 |
| A001455 | 150.0 | 20.0 | 15.0 | -.9 | -.8 | -.9 | 0.15 | 500.0 | 10.0 | -.9 | 500.0 | 2000.0 | -.8 | -.8 | 300.0 | -.9 | -.9 |
| A001456 | 100.0 | 15.0 | 20.0 | -.9 | -.8 | 20.0 | 1.00 | 5000.0 | 5.0 | 30.0 | 150.0 | 1000.0 | -.8 | -.8 | -.9 | 70.0 | 20.0 |
| A001457 | 45.0 | 27.3 | 7.0 | -.8 | 25.0 | 45.0 | -.80 | 5850.0 | -.9 | 130.0 | 45.0 | 920.0 | -.9 | -.9 | 34.0 | 50.0 | 6.0 |
| A001458 | 25.0 | 24.4 | 8.0 | -.8 | 30.0 | 35.0 | -.80 | 5550.0 | -.9 | 120.0 | 50.0 | 2900.0 | -.9 | -.9 | 44.0 | 50.0 | -.9 |
| A001459 | 30.0 | 10.0 | 15.0 | -.9 | -.8 | 30.0 | 1.50 | 2000.0 | 2.0 | 20.0 | 50.0 | 100.0 | -.8 | -.8 | -.9 | 20.0 | 10.0 |
| A001460 | 55.0 | 24.9 | 9.0 | -.8 | 20.0 | 60.0 | -.80 | 5650.0 | -.9 | 100.0 | 70.0 | 1600.0 | -.9 | -.9 | 24.0 | 60.0 | -.9 |
| A001461 | 70.0 | 20.0 | 20.0 | -.9 | -.8 | 20.0 | 2.00 | 3000.0 | 15.0 | 30.0 | 100.0 | 15.0 | -.8 | -.8 | -.9 | 70.0 | 100.0 |
| A001462 | 30.0 | 20.0 | 100.0 | -.9 | -.8 | -.9 | 0.30 | 500.0 | 30.0 | 20.0 | 200.0 | 10.0 | -.8 | -.8 | -.9 | 15.0 | 700.0 |
| A001463 | 50.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 1000.0 | 20.0 | 20.0 | 100.0 | 310.0 | -.8 | -.8 | -.9 | 30.0 | 500.0 |
| A001464 | 40.0 | 30.2 | 10.0 | -.8 | 18.0 | 50.0 | -.80 | 6650.0 | -.9 | 140.0 | 145.0 | 20.0 | -.9 | -.9 | -.9 | 30.0 | 18.0 |
| A001465 | 50.0 | 20.0 | 50.0 | -.9 | -.8 | -.9 | 0.20 | 3000.0 | 20.0 | 50.0 | 50.0 | 500.0 | -.8 | -.8 | -.9 | 30.0 | 70.0 |
| A001466 | 15.0 | 59.1 | 14.0 | -.8 | 40.0 | 20.0 | -.80 | 2450.0 | -.9 | 90.0 | 65.0 | 15.0 | -.9 | -.9 | 4.0 | 10.0 | 1100.0 |
| A001467 | 100.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 1.00 | 2000.0 | 30.0 | 20.0 | 150.0 | 1000.0 | -.8 | -.8 | 100.0 | 15.0 | 2000.0 |
| A001468 | 55.0 | 43.9 | 10.0 | -.8 | -.9 | 100.0 | -.80 | 2500.0 | -.9 | 90.0 | 170.0 | 3400.0 | -.9 | -.9 | 105.0 | 25.0 | 15000.0 |
| A001469 | 200.0 | 20.0 | 30.0 | -.9 | -.8 | -.9 | 0.20 | 200.0 | 20.0 | 20.0 | 20.0 | 10000.0 | -.8 | -.8 | 5000.0 | -.9 | 10000.0 |
| A001470 | 50.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 2000.0 | 30.0 | 20.0 | 100.0 | 500.0 | -.8 | -.8 | 500.0 | 20.0 | 10000.0 |
| A001471 | 55.0 | 37.7 | 11.0 | -.8 | 18.0 | 35.0 | -.80 | 2050.0 | -.9 | 40.0 | 120.0 | 510.0 | -.9 | -.9 | 90.0 | 15.0 | 17500.0 |
| A001472 | 200.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 1500.0 | 30.0 | 20.0 | 150.0 | 70.0 | -.8 | -.8 | -.9 | 20.0 | 500.0 |
| A001473 | 40.0 | 47.8 | 15.0 | -.8 | 25.0 | 30.0 | -.80 | 2300.0 | -.9 | 20.0 | 115.0 | 25.0 | -.9 | -.9 | 18.0 | 15.0 | 4650.0 |
| A001474 | 30.0 | 35.9 | 12.0 | -.8 | 4.7 | 140.0 | -.80 | 4950.0 | -.9 | 120.0 | 60.0 | 20.0 | -.9 | -.9 | 12.0 | 35.0 | 1100.0 |
| A001475 | 45.0 | 44.7 | 13.0 | -.8 | 1.5 | 25.0 | -.80 | 3650.0 | -.9 | 60.0 | 85.0 | 145.0 | -.9 | -.9 | 48.0 | 25.0 | 1450.0 |
| A001476 | 65.0 | 24.5 | 10.0 | -.8 | 1.9 | 20.0 | -.80 | 2750.0 | -.9 | 40.0 | 65.0 | 7650.0 | -.9 | -.9 | 430.0 | 25.0 | 1850.0 |
| A001477 | 170.0 | 15.8 | 8.0 | -.8 | 4.8 | 30.0 | -.80 | 2300.0 | -.9 | 85.0 | 115.0 | 445.0 | -.9 | -.9 | 40.0 | -.9 | 8.0 |
| A001478 | 35.0 | 8.4 | 4.0 | -.8 | 5.7 | 25.0 | -.80 | 4050.0 | 12.0 | 25.0 | 20.0 | 140.0 | -.9 | -.9 | 75.0 | 35.0 | 22.0 |

Table A-7

CHEMICAL ANALYSIS OF PAN CON.-PL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A001450 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | -.9 | 200.0 | -.9 | 700.0 |
| A001451 | -.8 | -.9 | -.900 | -.9 | -.9 | 630.0 | 2650.0 | -.9 | 150.0 | -.9 |
| A001452 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | 300.0 | 30.0 | -.9 | 700.0 |
| A001453 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | -.9 | 50.0 | -.9 | 700.0 |
| A001454 | -.8 | 40.0 | -.900 | -.9 | .2 | 980.0 | 95.0 | 40.0 | 50.0 | 800.0 |
| A001455 | -.9 | -.8 | -.800 | -.8 | -.9 | 20.0 | 50.0 | -.9 | 300.0 | 500.0 |
| A001456 | -.9 | -.8 | -.800 | -.8 | -.9 | 200.0 | 150.0 | 70.0 | -.9 | 1000.0 |
| A001457 | -.8 | 10.0 | -.900 | -.9 | .2 | 455.0 | 550.0 | 70.0 | 120.0 | 760.0 |
| A001458 | -.8 | -.9 | -.900 | -.9 | .1 | 280.0 | 3600.0 | 100.0 | 145.0 | 680.0 |
| A001459 | 100.0 | -.8 | -.800 | -.8 | -.9 | 100.0 | -.9 | 20.0 | -.9 | 300.0 |
| A001460 | -.8 | -.9 | -.900 | -.9 | .1 | 245.0 | 75.0 | 95.0 | 110.0 | 350.0 |
| A001461 | -.9 | -.8 | -.800 | -.8 | -.9 | 500.0 | 100.0 | 50.0 | -.9 | 1000.0 |
| A001462 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | -.9 | 50.0 | -.9 | 700.0 |
| A001463 | -.9 | -.8 | -.800 | -.8 | -.9 | 200.0 | -.9 | 70.0 | -.9 | 700.0 |
| A001464 | -.8 | 10.0 | -.900 | -.9 | .1 | 320.0 | 6.0 | 60.0 | 60.0 | 920.0 |
| A001465 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | -.9 | 50.0 | -.9 | 500.0 |
| A001466 | -.8 | 60.0 | -.900 | -.9 | .5 | 460.0 | 28.0 | 15.0 | 35.0 | 400.0 |
| A001467 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 300.0 | -.9 | 150.0 | -.9 | 100.0 |
| A001468 | -.8 | 60.0 | .190 | -.9 | -.9 | 255.0 | 120.0 | 110.0 | 115.0 | 450.0 |
| A001469 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 20.0 | -.9 | 10.0 | 10000.0 | 200.0 |
| A001470 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 200.0 | -.9 | 30.0 | 2000.0 | 300.0 |
| A001471 | -.8 | 20.0 | .085 | -.9 | 15000.0 | 285.0 | 275.0 | 40.0 | 170.0 | 400.0 |
| A001472 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 300.0 | -.9 | 20.0 | 500.0 | 500.0 |
| A001473 | -.8 | 80.0 | .060 | -.9 | 13000.0 | 340.0 | 15.0 | 30.0 | 65.0 | 440.0 |
| A001474 | -.8 | 60.0 | .040 | -.9 | 68000.0 | 540.0 | 150.0 | 55.0 | 90.0 | 600.0 |
| A001475 | -.8 | 60.0 | .065 | -.9 | 24000.0 | 285.0 | 17.0 | 50.0 | 155.0 | 730.0 |
| A001476 | -.8 | 40.0 | 1.600 | -.9 | 19000.0 | 165.0 | 810.0 | 35.0 | 165.0 | 400.0 |
| A001477 | -.8 | 185.0 | .080 | -.9 | 11000.0 | 80.0 | 4.0 | -.9 | 465.0 | 180.0 |
| A001478 | -.8 | -.9 | .025 | -.9 | 11000.0 | 105.0 | 4.0 | 50.0 | 75.0 | 145.0 |

Table A-7a CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000958 | 332200. | 3496500. | 14 | 71 | .4 | .18 | .008 | 110.0 | -.9 | 1250.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 10.0 | 125.0 |
| A000959 | 331950. | 3496150. | 14 | 73 | 1.0 | -.80 | .015 | 300.0 | 20.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 70.0 | 700.0 |
| A000960 | 330750. | 3502750. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 700.0 | 2.0 | -.9 | 2.0 | -.9 | -.8 | 15.0 | 500.0 |
| A000961 | 330600. | 3502750. | 14 | 71 | 1.5 | .04 | .009 | 150.0 | -.9 | 480.0 | -.9 | -.9 | -.9 | .2 | 160.0 | 25.0 | 620.0 |
| A000962 | 331950. | 3497050. | 14 | 71 | -.9 | -.90 | .017 | -.9 | -.9 | 270.0 | -.9 | -.9 | -.9 | -.9 | 140.0 | 15.0 | 425.0 |
| A000963 | 342800. | 3482250. | 14 | 73 | -.9 | -.80 | .074 | -.9 | 300.0 | 700.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 20.0 | 500.0 |
| A000964 | 398700. | 3554800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 500.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000965 | 397400. | 3556900. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 300.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000966 | 396100. | 3554900. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000967 | 392000. | 3555800. | 14 | 71 | -.9 | -.90 | -.900 | 10.0 | -.9 | 180.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 10.0 | 85.0 |
| A000968 | 389300. | 3554700. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000969 | 383600. | 3537000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 500.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 10.0 | 70.0 |
| A000970 | 372900. | 3536200. | 14 | 71 | 30.0 | 25.00 | -.900 | 55.0 | -.9 | 190.0 | -.9 | -.9 | -.9 | -.9 | 80.0 | 10.0 | 75.0 |
| A000971 | 372200. | 3535200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 1000.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 15.0 | 100.0 |
| A000973 | 402100. | 3523800. | 14 | 73 | 5.0 | -.80 | -.900 | -.9 | 200.0 | 2000.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 100.0 | 150.0 |
| A000974 | 404100. | 3528200. | 14 | 73 | 1.0 | -.80 | -.900 | -.9 | 200.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 30.0 | 100.0 |
| A000975 | 403700. | 3529200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 5.0 | 100.0 |
| A000976 | 407300. | 3533350. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000977 | 413300. | 3538000. | 14 | 71 | .8 | .99 | -.900 | 25.0 | -.9 | 230.0 | -.9 | -.9 | -.9 | .4 | 20.0 | 15.0 | 70.0 |
| A000978 | 380000. | 3507800. | 14 | 73 | 5.0 | -.80 | .002 | -.9 | 200.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 15.0 | 300.0 |
| A000979 | 380550. | 3508000. | 14 | 73 | 30.0 | -.80 | .022 | 200.0 | 100.0 | 500.0 | -.9 | -.9 | .7 | -.9 | -.8 | 20.0 | 70.0 |
| A000980 | 374100. | 3510300. | 14 | 71 | 1.7 | 5.70 | .002 | 90.0 | -.9 | 380.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 20.0 | 75.0 |
| A000981 | 408700. | 3538400. | 14 | 73 | 5.0 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 50.0 | 70.0 |
| A000982 | 411100. | 3540500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000983 | 403850. | 3535300. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 150.0 | 500.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000984 | 412900. | 3538700. | 14 | 71 | 7.6 | .08 | -.900 | 150.0 | 25.0 | 190.0 | -.9 | -.9 | -.9 | .6 | 160.0 | 15.0 | 80.0 |
| A000985 | 419200. | 3539000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000986 | 372200. | 3559200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 70.0 | 300.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A000987 | 365200. | 3557100. | 14 | 71 | -.9 | -.90 | -.900 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | 10.0 | 70.0 |
| A000989 | 358500. | 3554600. | 14 | 73 | -.9 | -.80 | .002 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A000990 | 343600. | 3480100. | 14 | 73 | 5.0 | -.80 | -.900 | 700.0 | 700.0 | 1000.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000991 | 366500. | 3525050. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 1000.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 5.0 | 100.0 |
| A000992 | 359800. | 3527350. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000993 | 359400. | 3527100. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 100.0 |
| A000994 | 358500. | 3534800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 150.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 70.0 |
| A000995 | 359050. | 3535200. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 50.0 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 15.0 | 150.0 |
| A000996 | 358000. | 3536200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 70.0 |
| A000997 | 356700. | 3540000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 70.0 |
| A000998 | 356750. | 3539650. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000999 | 355800. | 3550750. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 300.0 | -.9 | -.9 | 10.0 | -.9 | -.8 | 20.0 | 100.0 |
| A001000 | 353600. | 3551200. | 14 | 73 | -.9 | .14 | -.900 | -.9 | -.9 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 100.0 |
| A001400 | 350450. | 3550250. | 14 | 73 | -.9 | .28 | .002 | -.9 | -.9 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 100.0 |
| A001401 | 345550. | 3550300. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 70.0 | 100.0 |
| A001402 | 344700. | 3550000. | 14 | 73 | .6 | 13.50 | .026 | -.9 | -.9 | 100.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 150.0 |
| A001403 | 345000. | 3550450. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A001404 | 346200. | 3541500. | 14 | 73 | -.9 | -.80 | .305 | -.9 | 100.0 | 150.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A001405 | 344650. | 3547400. | 14 | 73 | -.9 | -.80 | .006 | -.9 | 50.0 | 100.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A001406 | 344500. | 3550500. | 14 | 73 | -.9 | -.80 | .003 | -.9 | 50.0 | 50.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 20.0 | 100.0 |
| A001407 | 374150. | 3503150. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 100.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 300.0 |
| A001408 | 371800. | 3506200. | 14 | 73 | 2.0 | -.80 | -.900 | -.9 | 150.0 | 500.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 30.0 | 300.0 |
| A001409 | 368100. | 3510800. | 14 | 73 | 1.4 | 3.80 | -.900 | -.9 | -.9 | 300.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 200.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CS (PPM) | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | LA (%) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000958 | -.9 | 30.0 | 6.9 | 12.0 | -.8 | 20.0 | -.80 | 1500.0 | -.9 | 25.0 | 35.0 | 10.0 | -.9 | -.9 | 10.0 | 20.0 | 7.0 |
| A000959 | -.8 | 70.0 | 20.0 | 30.0 | -.9 | 30.0 | 2.00 | 5000.0 | 10.0 | 20.0 | 70.0 | 50.0 | -.8 | -.8 | 100.0 | 50.0 | 70.0 |
| A000960 | -.8 | 50.0 | 10.0 | 20.0 | -.9 | 100.0 | 2.00 | 5000.0 | 5.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | 100.0 | 30.0 | -.9 |
| A000961 | 10.0 | 20.0 | 33.3 | 8.0 | -.8 | 70.0 | -.80 | 7150.0 | -.9 | 95.0 | 45.0 | 25.0 | -.9 | -.9 | 13.0 | 60.0 | 245.0 |
| A000962 | 10.0 | 15.0 | 23.0 | 10.0 | -.8 | 50.0 | -.80 | 5400.0 | -.9 | 70.0 | 30.0 | 10.0 | -.9 | -.9 | 15.0 | 44.0 | 135.0 |
| A000963 | -.8 | 30.0 | 20.0 | 20.0 | -.9 | 100.0 | 3.00 | 5000.0 | 10.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | 30.0 |
| A000964 | -.8 | 15.0 | 15.0 | 20.0 | -.9 | -.9 | 1.00 | 5000.0 | 7.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000965 | -.8 | 15.0 | 20.0 | 30.0 | -.9 | 30.0 | 1.50 | 7000.0 | 10.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000966 | -.8 | 15.0 | 20.0 | 20.0 | -.9 | 30.0 | 1.50 | 10000.0 | 5.0 | 20.0 | 20.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 200.0 |
| A000967 | -.9 | 15.0 | 18.9 | 8.0 | -.8 | 35.0 | -.80 | 7900.0 | -.9 | 35.0 | 10.0 | -.9 | -.9 | -.9 | 2.0 | 90.0 | 95.0 |
| A000968 | -.8 | 15.0 | 20.0 | 30.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 7.0 | 20.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 200.0 |
| A000969 | -.8 | 20.0 | 15.0 | 20.0 | 20.0 | 20.0 | 1.00 | 10000.0 | 7.0 | 30.0 | 20.0 | 30.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A000970 | -.9 | 15.0 | 18.1 | 8.0 | -.8 | 40.0 | -.80 | 14000.0 | -.9 | 40.0 | 15.0 | 90.0 | -.9 | -.9 | 9.0 | 120.0 | 20.0 |
| A000971 | -.8 | 30.0 | 15.0 | 20.0 | -.9 | 20.0 | 1.00 | 10000.0 | 5.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000973 | -.8 | 70.0 | 15.0 | 20.0 | -.9 | 30.0 | 1.00 | 5000.0 | 5.0 | 20.0 | 100.0 | 200.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A000974 | -.8 | 100.0 | 20.0 | 30.0 | -.9 | 30.0 | 1.50 | 7000.0 | 7.0 | 20.0 | 70.0 | 100.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000975 | -.8 | 20.0 | 15.0 | 10.0 | 20.0 | 30.0 | 1.00 | 10000.0 | 7.0 | 20.0 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000976 | -.8 | 20.0 | 15.0 | 10.0 | -.9 | 30.0 | .70 | 10000.0 | 7.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 10.0 |
| A000977 | -.9 | 35.0 | 14.0 | 8.0 | -.8 | 25.0 | -.80 | 8150.0 | -.9 | 15.0 | 25.0 | 15.0 | -.9 | -.9 | 18.0 | 90.0 | 30.0 |
| A000978 | -.8 | 30.0 | 15.0 | 20.0 | -.9 | 30.0 | 1.50 | 5000.0 | 5.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | 100.0 | 20.0 | -.9 |
| A000979 | -.8 | 50.0 | 10.0 | 20.0 | -.9 | 20.0 | 1.00 | 700.0 | 2.0 | 30.0 | 50.0 | 2000.0 | -.8 | -.8 | -.9 | 10.0 | -.9 |
| A000980 | -.9 | 35.0 | 13.0 | 12.0 | -.8 | 25.0 | -.80 | 4100.0 | -.9 | 35.0 | 50.0 | 50.0 | -.9 | -.9 | 24.0 | 45.0 | -.9 |
| A000981 | -.8 | 20.0 | 20.0 | 20.0 | -.9 | 30.0 | 1.50 | 10000.0 | 10.0 | 30.0 | 50.0 | 150.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000982 | -.8 | 15.0 | 20.0 | 20.0 | -.9 | 30.0 | 1.50 | 10000.0 | 7.0 | 20.0 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000983 | -.8 | 15.0 | 15.0 | 10.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 10.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000984 | -.9 | 25.0 | 19.0 | 8.0 | -.8 | 40.0 | -.80 | 8950.0 | -.9 | 25.0 | 25.0 | 470.0 | -.9 | -.9 | 24.0 | 100.0 | 16.0 |
| A000985 | -.8 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 15.0 | 20.0 | 20.0 | 20.0 | -.8 | -.8 | -.9 | 70.0 | 150.0 |
| A000986 | -.8 | 7.0 | 20.0 | 20.0 | 20.0 | 20.0 | 3.00 | 10000.0 | 15.0 | 30.0 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000987 | -.9 | 10.0 | 20.0 | 8.0 | -.8 | 40.0 | -.80 | 9150.0 | -.9 | 20.0 | 10.0 | 5.0 | -.9 | -.9 | -.9 | 110.0 | 85.0 |
| A000989 | -.8 | 10.0 | 20.0 | 20.0 | 20.0 | 20.0 | 3.00 | 10000.0 | 20.0 | 30.0 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A000990 | -.8 | 30.0 | 10.0 | 30.0 | -.9 | 30.0 | 1.50 | 3000.0 | 5.0 | 30.0 | 70.0 | 300.0 | -.8 | -.8 | 300.0 | 30.0 | -.9 |
| A000991 | -.8 | 30.0 | 10.0 | 20.0 | -.9 | 20.0 | 3.00 | 10000.0 | 5.0 | 20.0 | 30.0 | 50.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000992 | -.8 | 20.0 | 20.0 | 15.0 | 20.0 | 20.0 | 1.00 | 10000.0 | 10.0 | 30.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000993 | -.8 | 10.0 | 20.0 | 15.0 | -.9 | 20.0 | 2.00 | 7000.0 | 10.0 | 20.0 | 5.0 | 15.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000994 | -.8 | 15.0 | 20.0 | 15.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 10.0 | 20.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 10.0 |
| A000995 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 15.0 | 30.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 100.0 | 50.0 |
| A000996 | -.8 | 7.0 | 15.0 | 20.0 | -.9 | 20.0 | 1.00 | 7000.0 | 10.0 | 20.0 | 15.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000997 | -.8 | 7.0 | 20.0 | 20.0 | -.9 | 20.0 | 1.50 | 7000.0 | 10.0 | 20.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 50.0 |
| A000998 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 20.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000999 | -.8 | 15.0 | 20.0 | 30.0 | 20.0 | 20.0 | 3.00 | 10000.0 | 20.0 | 30.0 | 20.0 | -.9 | -.8 | -.8 | -.9 | 100.0 | -.9 |
| A001000 | -.8 | 7.0 | 20.0 | 30.0 | -.9 | 20.0 | 2.00 | 10000.0 | 15.0 | 50.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 100.0 |
| A001400 | -.8 | 10.0 | 20.0 | 30.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 30.0 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A001401 | -.8 | 20.0 | 15.0 | 15.0 | -.9 | 20.0 | 1.00 | 10000.0 | 10.0 | 30.0 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A001402 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 30.0 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A001403 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 20.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A001404 | -.8 | 20.0 | 20.0 | 30.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 20.0 | 30.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 100.0 | -.9 |
| A001405 | -.8 | 20.0 | 15.0 | 20.0 | -.9 | -.9 | 1.00 | 10000.0 | 10.0 | 20.0 | 20.0 | -.9 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A001406 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.00 | 10000.0 | 15.0 | 50.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 20.0 |
| A001407 | -.8 | 50.0 | 10.0 | 20.0 | -.9 | 50.0 | 1.00 | 3000.0 | 3.0 | 30.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A001408 | -.8 | 70.0 | 20.0 | 20.0 | -.9 | 50.0 | 2.00 | 7000.0 | 10.0 | 30.0 | 50.0 | 50.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A001409 | -.8 | 50.0 | 20.0 | 50.0 | -.9 | 20.0 | 3.00 | 10000.0 | 15.0 | 30.0 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A000958 | -.8 | -.9 | -.900 | -.9 | 10000.0 | 160.0 | 5.0 | 25.0 | 70.0 | 220.0 |
| A000959 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | 50.0 | 70.0 | -.9 | 500.0 |
| A000960 | 200.0 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | 50.0 | 200.0 | 300.0 |
| A000961 | -.8 | -.9 | .080 | -.9 | 69000.0 | 610.0 | 44.0 | 60.0 | 85.0 | 580.0 |
| A000962 | -.8 | -.9 | -.900 | -.9 | -.9 | 465.0 | 50.0 | 50.0 | 70.0 | 450.0 |
| A000963 | 200.0 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | 70.0 | 50.0 | 300.0 | 200.0 |
| A000964 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | 100.0 | -.9 | 500.0 |
| A000965 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 150.0 | -.9 | 500.0 |
| A000966 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 150.0 | -.9 | 200.0 |
| A000967 | -.8 | -.9 | .020 | -.9 | 12000.0 | 45.0 | 6.0 | 150.0 | 30.0 | 240.0 |
| A000968 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 50.0 | 200.0 | 200.0 | 300.0 |
| A000969 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 50.0 | 150.0 | -.9 | 500.0 |
| A000970 | -.8 | -.9 | .070 | -.9 | 15000.0 | 55.0 | 55.0 | 190.0 | 35.0 | 340.0 |
| A000971 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 200.0 |
| A000973 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | -.9 | 500.0 |
| A000974 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | 200.0 | 150.0 |
| A000975 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 200.0 | -.9 | 700.0 |
| A000976 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 100.0 | 200.0 | 200.0 | 200.0 |
| A000977 | -.8 | -.9 | .130 | -.9 | 9300.0 | 55.0 | 185.0 | 150.0 | 35.0 | 220.0 |
| A000978 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | 200.0 | 300.0 |
| A000979 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | 50.0 | 50.0 | 200.0 | 150.0 |
| A000980 | -.8 | -.9 | .085 | -.9 | 11000.0 | 120.0 | 65.0 | 90.0 | 60.0 | 190.0 |
| A000981 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | 1000.0 | 200.0 | 300.0 | 300.0 |
| A000982 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | 50.0 | 150.0 | 300.0 | 500.0 |
| A000983 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 50.0 | 200.0 | 200.0 | 700.0 |
| A000984 | -.8 | -.9 | .075 | -.9 | 11000.0 | 40.0 | 17850.0 | 170.0 | 50.0 | 220.0 |
| A000985 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 200.0 | 200.0 | 200.0 | 300.0 |
| A000986 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 200.0 | 200.0 | 300.0 |
| A000987 | -.8 | -.9 | .014 | -.9 | 7800.0 | 50.0 | 7.0 | 180.0 | 20.0 | 260.0 |
| A000989 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 200.0 | 200.0 | 300.0 |
| A000990 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | 150.0 | 70.0 | 500.0 | 700.0 |
| A000991 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 700.0 |
| A000992 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 200.0 | -.9 | 300.0 |
| A000993 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | 50.0 | 150.0 | -.9 | 200.0 |
| A000994 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 150.0 | -.9 | 1000.0 |
| A000995 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 50.0 | 200.0 | -.9 | 700.0 |
| A000996 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 150.0 | -.9 | 200.0 |
| A000997 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 150.0 | -.9 | 500.0 |
| A000998 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 150.0 | -.9 | 500.0 |
| A000999 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | 200.0 | -.9 | 100.0 |
| A001000 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 500.0 |
| A001400 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 50.0 | -.9 | 150.0 | -.9 | 300.0 |
| A001401 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 300.0 |
| A001402 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 200.0 | -.9 | 300.0 |
| A001403 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 200.0 |
| A001404 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 150.0 | -.9 | 300.0 |
| A001405 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 200.0 |
| A001406 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 200.0 | -.9 | 500.0 |
| A001407 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | -.9 | 700.0 |
| A001408 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | 100.0 | -.9 | 150.0 |
| A001409 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 100.0 | -.9 | 150.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001410 | 365500. | 3511400. | 14 | 73 | .6 | 9.90 | -.900 | -.9 | -.9 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A001411 | 364450. | 3512000. | 14 | 73 | 8.2 | 7.40 | .019 | 1000.0 | -.9 | 300.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 50.0 | 200.0 |
| A001412 | 370500. | 3517600. | 14 | 73 | -.9 | .99 | -.900 | -.9 | 200.0 | 2000.0 | -.9 | -.9 | .5 | -.9 | -.8 | 10.0 | 100.0 |
| A001413 | 364700. | 3512700. | 14 | 73 | -.9 | 7.20 | -.900 | -.9 | 100.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 5.0 | 100.0 |
| A001414 | 437500. | 3559950. | 14 | 73 | 6.2 | 5.50 | .042 | -.9 | 100.0 | 700.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 10.0 | 50.0 |
| A001415 | 437600. | 3559800. | 14 | 73 | 1.3 | 8.40 | -.900 | -.9 | 100.0 | 1500.0 | -.9 | -.9 | .5 | -.9 | -.8 | 30.0 | 70.0 |
| A001416 | 441100. | 3558800. | 14 | 73 | 5.2 | 17.90 | .001 | 500.0 | -.9 | 10000.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 300.0 | 10.0 |
| A003020 | 342600. | 3481750. | 14 | 73 | 1.0 | -.80 | .001 | -.9 | 10.0 | 70.0 | -.9 | -.9 | .1 | -.9 | -.8 | 5.0 | 150.0 |
| A003021 | 345700. | 3489000. | 14 | 71 | 3680.0 | .06 | .009 | 8500.0 | -.9 | 140.0 | -.9 | 6.0 | -.9 | 520.0 | -.9 | 5.0 | 10.0 |
| A003022 | 340900. | 3480300. | 14 | 71 | -.9 | -.90 | .016 | 4650.0 | -.9 | 530.0 | -.9 | 140.0 | -.9 | 10.0 | -.9 | 150.0 | 150.0 |
| A003023 | 354800. | 3490700. | 14 | 71 | 320.0 | 128.00 | .006 | 870.0 | 25.0 | 390.0 | -.9 | -.9 | -.9 | 1.0 | 20.0 | 10.0 | 80.0 |
| A003024 | 425300. | 3560150. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 20.0 |
| A003025 | 425500. | 3559800. | 14 | 73 | -.9 | -.80 | .006 | -.9 | -.9 | 100.0 | -.9 | -.9 | .1 | -.9 | -.8 | 5.0 | 10.0 |
| A003026 | 429200. | 3563000. | 14 | 71 | 1.7 | 1.40 | .060 | 80.0 | -.9 | 300.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | 80.0 | 30.0 |
| A003027 | 431300. | 3568950. | 14 | 73 | -.9 | -.80 | .007 | -.9 | 15.0 | 50.0 | -.9 | -.9 | .5 | -.9 | -.8 | 20.0 | 50.0 |
| A003028 | 435400. | 3572000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 100.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 50.0 |
| A003029 | 446000. | 3564600. | 14 | 71 | 13.0 | 250.00 | .293 | 510.0 | 35.0 | 2150.0 | -.9 | 2.0 | -.9 | 1.0 | 380.0 | 55.0 | 30.0 |
| A003030 | 403700. | 3544100. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 15.0 | 100.0 | -.9 | -.9 | .2 | -.9 | -.8 | 5.0 | 30.0 |
| A003031 | 412500. | 3546700. | 14 | 71 | .2 | .66 | .001 | 20.0 | -.9 | 280.0 | -.9 | 2.0 | -.9 | -.9 | 80.0 | 20.0 | 30.0 |
| A003032 | 354650. | 3491650. | 14 | 73 | 1500.0 | -.80 | .164 | 3000.0 | 30.0 | 100.0 | -.9 | -.9 | .1 | -.9 | -.8 | 10.0 | 50.0 |
| A003033 | 335800. | 3494400. | 14 | 73 | 50.0 | -.80 | .001 | -.9 | 20.0 | 70.0 | -.9 | -.9 | .2 | -.9 | -.8 | 20.0 | 300.0 |
| A003034 | 416950. | 3551700. | 14 | 73 | -.9 | -.80 | -.900 | 500.0 | 20.0 | 70.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 50.0 |
| A003035 | 417250. | 3547950. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 10.0 | 20.0 | -.9 | -.9 | .5 | -.9 | -.8 | 15.0 | 15.0 |
| A003036 | 420300. | 3548350. | 14 | 71 | 1.3 | 2.00 | -.900 | 110.0 | -.9 | 340.0 | -.9 | -.9 | -.9 | -.9 | 40.0 | 20.0 | 25.0 |
| A003037 | 424900. | 3542250. | 14 | 71 | .4 | .55 | -.900 | 105.0 | -.9 | 130.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | 30.0 | 30.0 |
| A003038 | 418400. | 3527800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 10.0 | -.9 | -.9 | -.9 | -.9 | -.8 | -.9 | -.9 |
| A003039 | 433600. | 3533500. | 14 | 71 | 1.7 | .11 | -.900 | 180.0 | -.9 | 430.0 | -.9 | 3.0 | -.9 | -.9 | -.9 | 110.0 | 20.0 |
| A003040 | 438300. | 3536350. | 14 | 73 | .6 | 1.30 | -.900 | 50.0 | 60.0 | 340.0 | -.9 | -.9 | -.9 | -.9 | 170.0 | 50.0 | 135.0 |
| A003041 | 438400. | 3545250. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 10.0 | 1500.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 20.0 |
| A003042 | 367850. | 3488000. | 14 | 71 | 5.0 | -.80 | -.900 | -.9 | 200.0 | 700.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 150.0 |
| A003043 | 370250. | 3483200. | 14 | 71 | 9.6 | 3.60 | .010 | 80.0 | 90.0 | 440.0 | -.9 | -.9 | -.9 | .6 | 60.0 | 20.0 | 40.0 |
| A003044 | 373000. | 3480500. | 14 | 71 | .4 | 1.20 | -.900 | 10.0 | -.9 | 340.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.0 | 20.0 |
| A003045 | 371150. | 3478250. | 14 | 71 | 1.1 | .82 | .007 | 25.0 | 55.0 | 480.0 | -.9 | 2.0 | -.9 | .2 | 60.0 | 20.0 | 105.0 |
| A003046 | 371150. | 3478250. | 14 | 73 | -.9 | -.80 | .003 | -.9 | 10.0 | 50.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 300.0 |
| A003047 | 395150. | 3517550. | 14 | 73 | 15.0 | -.80 | .001 | -.9 | 50.0 | 150.0 | -.9 | -.9 | .2 | -.9 | -.8 | 20.0 | 200.0 |
| A003048 | 393200. | 3515500. | 14 | 73 | -.9 | -.80 | .008 | -.9 | 70.0 | 150.0 | -.9 | -.9 | .3 | -.9 | -.8 | 50.0 | 200.0 |
| A003049 | 389300. | 3513600. | 14 | 71 | 32.0 | .74 | .001 | 670.0 | -.9 | 840.0 | -.9 | -.9 | -.9 | -.9 | 120.0 | 30.0 | 75.0 |
| A003050 | 389400. | 3512950. | 14 | 73 | 10.0 | -.80 | -.900 | -.9 | 20.0 | 700.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 150.0 |
| A003051 | 333700. | 3469000. | 14 | 71 | 3.4 | 3.50 | -.900 | 12500.0 | 80.0 | 450.0 | -.9 | 3.0 | -.9 | .8 | 120.0 | 60.0 | 95.0 |
| A003052 | 334450. | 3472100. | 14 | 73 | -.9 | -.80 | .002 | -.9 | 70.0 | 500.0 | -.9 | -.9 | .1 | -.9 | -.8 | -.9 | 30.0 |
| A003053 | 334550. | 3474350. | 14 | 73 | 1.0 | -.80 | .018 | 200.0 | 50.0 | 150.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 300.0 |
| A003054 | 334300. | 3472350. | 14 | 73 | 10.0 | -.80 | .001 | 500.0 | 50.0 | 1500.0 | -.9 | -.9 | .1 | -.9 | -.8 | 5.0 | 100.0 |
| A003055 | 334400. | 3474000. | 14 | 73 | 50.0 | -.80 | -.900 | -.9 | 30.0 | 200.0 | -.9 | -.9 | .2 | -.9 | -.8 | 20.0 | 200.0 |
| A003056 | 334575. | 3474200. | 14 | 73 | 70.0 | -.80 | .018 | 2000.0 | 200.0 | 700.0 | -.9 | -.9 | .7 | -.9 | -.8 | 30.0 | 150.0 |
| A003057 | 335350. | 3475200. | 14 | 71 | -.9 | 20.00 | .071 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | .6 | -.9 | 30.0 | 940.0 |
| A003058 | 331500. | 3496100. | 14 | 71 | 3.9 | .43 | -.900 | 2200.0 | -.9 | 520.0 | -.9 | 2.0 | -.9 | -.9 | 120.0 | 25.0 | 380.0 |
| A003059 | 394750. | 3493300. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 150.0 | -.9 | -.9 | .3 | -.9 | -.8 | 7.0 | 70.0 |
| A003060 | 392800. | 3486250. | 14 | 71 | -.9 | .08 | -.900 | 10.0 | -.9 | 290.0 | -.9 | -.9 | -.9 | -.9 | 80.0 | 15.0 | 65.0 |
| A003061 | 389800. | 3526000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 10.0 | -.9 | -.9 | .2 | -.9 | -.8 | -.9 | 10.0 |
| A003062 | 384850. | 3524850. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 10.0 | 50.0 | -.9 | -.9 | .7 | -.9 | -.8 | 5.0 | 30.0 |
| A003063 | 384500. | 3524450. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | .5 | -.9 | -.8 | 5.0 | 20.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CS (PPM) | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | LA (%) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001410 | -.8 | 50.0 | 20.0 | 20.0 | -.9 | 20.0 | 2.00 | 10000.0 | 10.0 | 30.0 | 10.0 | 70.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A001411 | -.8 | 70.0 | 20.0 | 30.0 | -.9 | 20.0 | 1.50 | 10000.0 | 15.0 | 20.0 | 50.0 | 70.0 | -.8 | -.8 | 700.0 | 70.0 | -.9 |
| A001412 | -.8 | 70.0 | 7.0 | 50.0 | -.9 | 100.0 | 3.00 | 2000.0 | 2.0 | 30.0 | 50.0 | 50.0 | -.8 | -.8 | -.9 | 20.0 | -.9 |
| A001413 | -.8 | 20.0 | 10.0 | 20.0 | -.9 | 20.0 | 2.00 | 7000.0 | 2.0 | 30.0 | 30.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A001414 | -.8 | 30.0 | 7.0 | 10.0 | -.9 | 50.0 | 2.00 | 5000.0 | -.9 | 30.0 | 30.0 | 20.0 | -.8 | -.8 | 100.0 | 20.0 | -.9 |
| A001415 | -.8 | 50.0 | 5.0 | 30.0 | -.9 | 50.0 | 1.00 | 1500.0 | -.9 | 20.0 | 50.0 | 200.0 | -.8 | -.8 | 7000.0 | 10.0 | -.9 |
| A001416 | -.8 | 1000.0 | 20.0 | 50.0 | -.9 | 100.0 | 1.00 | 700.0 | 30.0 | 30.0 | 500.0 | 2000.0 | -.8 | -.8 | 300.0 | -.9 | -.9 |
| A003020 | -.8 | 20.0 | 7.0 | -.9 | -.9 | -.9 | 0.20 | 500.0 | -.9 | -.9 | 20.0 | 200.0 | -.8 | -.8 | -.9 | 10.0 | 10.0 |
| A003021 | -.9 | 3500.0 | 6.1 | 4.0 | -.8 | -.9 | -.80 | 260.0 | -.9 | -.9 | 15.0 | 473000.0 | -.9 | -.9 | 4700.0 | -.9 | 16.0 |
| A003022 | 10.0 | 380.0 | 27.3 | -.9 | -.8 | -.9 | -.80 | 2650.0 | -.9 | -.9 | 170.0 | -.9 | -.9 | -.9 | 1750.0 | -.9 | 510.0 |
| A003023 | -.9 | 35.0 | 9.6 | 8.0 | -.8 | 10.0 | -.80 | 4150.0 | -.9 | 10.0 | 30.0 | 530.0 | -.9 | -.9 | 55.0 | 35.0 | 6.0 |
| A003024 | -.8 | 50.0 | 10.0 | -.9 | -.9 | -.9 | .10 | 5000.0 | -.9 | -.9 | 30.0 | 70.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003025 | -.8 | 7.0 | 5.0 | -.9 | -.9 | -.9 | .15 | 1000.0 | -.9 | -.9 | 20.0 | -.9 | -.8 | -.8 | -.9 | 10.0 | -.9 |
| A003026 | 10.0 | 30.0 | 16.8 | 6.0 | -.8 | 35.0 | -.80 | 12000.0 | -.9 | -.9 | 65.0 | 30.0 | -.9 | -.9 | 14.0 | 90.0 | -.9 |
| A003027 | -.8 | 10.0 | 10.0 | -.9 | -.9 | -.9 | .20 | 5000.0 | -.9 | -.9 | 30.0 | 20.0 | -.8 | -.8 | -.9 | 30.0 | 10.0 |
| A003028 | -.8 | 15.0 | 10.0 | -.9 | -.9 | -.9 | .50 | 5000.0 | -.9 | -.9 | 30.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003029 | 10.0 | 155.0 | 16.2 | 7.0 | -.8 | 110.0 | -.80 | 5800.0 | -.9 | 50.0 | 115.0 | 110.0 | -.9 | -.9 | 2900.0 | 30.0 | 660.0 |
| A003030 | -.8 | 5.0 | 7.0 | -.9 | -.9 | -.9 | .20 | 1500.0 | -.9 | -.9 | 5.0 | 20.0 | -.8 | -.8 | -.9 | 20.0 | -.9 |
| A003031 | -.9 | 20.0 | 17.4 | 5.0 | -.8 | 40.0 | -.80 | 10000.0 | -.9 | 10.0 | 40.0 | 25.0 | -.9 | -.9 | 6.0 | 100.0 | 22.0 |
| A003032 | -.8 | 700.0 | 10.0 | -.9 | -.9 | 20.0 | .20 | 500.0 | -.9 | 30.0 | 15.0 | 2000.0 | -.8 | -.8 | 500.0 | 15.0 | 20.0 |
| A003033 | -.8 | 100.0 | 15.0 | -.9 | -.9 | -.9 | .10 | 2000.0 | 2.0 | 30.0 | 20.0 | 1500.0 | -.8 | -.8 | -.9 | 20.0 | 70.0 |
| A003034 | -.8 | 10.0 | 15.0 | -.9 | -.9 | -.9 | .50 | 5000.0 | -.9 | 20.0 | 15.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A003035 | -.8 | 5.0 | 7.0 | -.9 | -.9 | -.9 | .20 | 2000.0 | -.9 | -.9 | 20.0 | -.9 | -.8 | -.8 | -.9 | 20.0 | -.9 |
| A003036 | -.9 | 40.0 | 13.2 | 8.0 | -.8 | 20.0 | -.80 | 11500.0 | -.9 | -.9 | 45.0 | 50.0 | -.9 | -.9 | 32.0 | 60.0 | 7.0 |
| A003037 | -.9 | 40.0 | 17.6 | 4.0 | -.8 | 40.0 | -.80 | 9800.0 | -.9 | 10.0 | 50.0 | 35.0 | -.9 | -.9 | 20.0 | 95.0 | 16.0 |
| A003038 | -.8 | 2.0 | 2.0 | -.9 | -.9 | -.9 | 0.03 | 300.0 | -.9 | -.9 | -.9 | -.9 | -.8 | -.8 | -.9 | -.9 | -.9 |
| A003039 | 10.0 | 145.0 | 29.5 | 6.0 | -.8 | 10.0 | -.80 | 8250.0 | -.9 | -.9 | 200.0 | 145.0 | -.9 | -.9 | 9.0 | 45.0 | -.9 |
| A003040 | 10.0 | 60.0 | 28.6 | 5.0 | -.8 | 70.0 | -.80 | 12000.0 | -.9 | 60.0 | 130.0 | 75.0 | -.9 | -.9 | 5.0 | 70.0 | 13.0 |
| A003041 | -.8 | 70.0 | 10.0 | -.9 | -.9 | 50.0 | .50 | 3000.0 | -.9 | -.9 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 15.0 | -.9 |
| A003042 | -.8 | 30.0 | 15.0 | 10.0 | -.9 | 100.0 | 1.50 | 2000.0 | 2.0 | 20.0 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 20.0 | 300.0 |
| A003043 | -.9 | 40.0 | 8.2 | 11.0 | -.8 | 40.0 | -.80 | 2100.0 | -.9 | -.9 | 55.0 | 330.0 | -.9 | -.9 | 34.0 | 25.0 | 175.0 |
| A003044 | -.9 | 20.0 | 5.9 | 10.0 | -.8 | 20.0 | -.80 | 3850.0 | -.9 | -.9 | 35.0 | 35.0 | -.9 | -.9 | 6.0 | 30.0 | 3.0 |
| A003045 | -.9 | 30.0 | 15.4 | 11.0 | -.8 | 30.0 | -.80 | 4700.0 | -.9 | 40.0 | 60.0 | 170.0 | -.9 | -.9 | 22.0 | 25.0 | 46.0 |
| A003046 | -.8 | 10.0 | 15.0 | -.9 | -.9 | -.9 | .50 | 500.0 | -.9 | 20.0 | 30.0 | 20.0 | -.8 | -.8 | -.9 | 10.0 | 300.0 |
| A003047 | -.8 | 30.0 | 20.0 | 15.0 | -.9 | -.9 | .30 | 1000.0 | -.9 | 20.0 | 50.0 | 500.0 | -.8 | -.8 | -.9 | 15.0 | -.9 |
| A003048 | -.8 | 20.0 | 15.0 | 10.0 | -.9 | -.9 | .30 | 1000.0 | -.9 | -.9 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 30.0 | 30.0 |
| A003049 | 10.0 | 45.0 | 21.0 | 9.0 | -.8 | 30.0 | -.80 | 5150.0 | -.9 | 20.0 | 60.0 | 1300.0 | -.9 | -.9 | 36.0 | 60.0 | 100.0 |
| A003050 | -.8 | 30.0 | 5.0 | 15.0 | -.9 | 20.0 | .50 | 500.0 | -.9 | -.9 | 50.0 | 300.0 | -.8 | -.8 | -.9 | 10.0 | -.9 |
| A003051 | 10.0 | 110.0 | 22.8 | 8.0 | -.8 | 30.0 | -.80 | 2400.0 | -.9 | 40.0 | 115.0 | 370.0 | -.9 | -.9 | 3800.0 | 20.0 | 195.0 |
| A003052 | -.8 | 10.0 | 2.0 | -.9 | -.9 | 20.0 | .05 | 300.0 | -.9 | -.9 | 20.0 | -.9 | -.8 | -.8 | -.9 | -.9 | -.9 |
| A003053 | -.8 | 50.0 | 7.0 | -.9 | -.9 | -.9 | .20 | 500.0 | -.9 | -.9 | 50.0 | 100.0 | -.8 | -.8 | 200.0 | -.9 | 300.0 |
| A003054 | -.8 | 20.0 | 5.0 | -.9 | -.9 | -.9 | .30 | 1000.0 | -.9 | -.9 | 20.0 | 100.0 | -.8 | -.8 | 200.0 | -.9 | 500.0 |
| A003055 | -.8 | 30.0 | 10.0 | 10.0 | -.9 | 20.0 | .50 | 1500.0 | -.9 | -.9 | 30.0 | 10000.0 | -.8 | -.8 | 1000.0 | 20.0 | 10.0 |
| A003056 | -.8 | 100.0 | 15.0 | 15.0 | -.9 | 20.0 | .50 | 1500.0 | 2.0 | 20.0 | 100.0 | 10000.0 | -.8 | -.8 | 2000.0 | 20.0 | 150.0 |
| A003057 | -.9 | 50.0 | -.9 | -.9 | -.8 | -.9 | -.80 | -.9 | -.9 | -.9 | 85.0 | 200.0 | -.9 | -.9 | 370.0 | -.9 | -.9 |
| A003058 | 20.0 | 50.0 | 32.9 | 7.0 | -.8 | 65.0 | -.80 | 5500.0 | -.9 | 120.0 | 60.0 | 200.0 | -.9 | -.9 | 60.0 | 55.0 | 640.0 |
| A003059 | -.8 | 10.0 | 10.0 | 10.0 | -.9 | -.9 | .50 | 5000.0 | -.9 | -.9 | 30.0 | 70.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003060 | -.9 | 20.0 | 13.7 | 12.0 | -.8 | 25.0 | -.90 | 7500.0 | -.9 | 20.0 | 40.0 | 5.0 | -.9 | -.9 | -.9 | 45.0 | 6.0 |
| A003061 | -.8 | 7.0 | 5.0 | -.9 | -.9 | -.9 | .07 | 2000.0 | -.9 | -.9 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003062 | -.8 | 10.0 | 10.0 | -.9 | -.9 | -.9 | .30 | 5000.0 | -.9 | -.9 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003063 | -.8 | 15.0 | 7.0 | -.9 | -.9 | -.9 | .50 | 5000.0 | -.9 | -.9 | 15.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | 20.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A001410 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 150.0 | -.9 | 100.0 |
| A001411 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | 50.0 | 200.0 | -.9 | 300.0 |
| A001412 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | -.9 | 500.0 |
| A001413 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 500.0 | 100.0 | -.9 | 700.0 |
| A001414 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 2000.0 | 50.0 | -.9 | 200.0 |
| A001415 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 200.0 | 20.0 | -.9 | 150.0 |
| A001416 | 100.0 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | 3000.0 | 100.0 | -.9 | 150.0 |
| A003020 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 30.0 | 50.0 | -.9 | -.9 | 150.0 |
| A003021 | -.8 | -.9 | -.900 | -.9 | 1600.0 | 15.0 | 60.0 | 10.0 | 57000.0 | 50.0 |
| A003022 | -.8 | -.9 | -.900 | -.9 | -.9 | 145.0 | -.9 | -.9 | -.9 | -.9 |
| A003023 | -.8 | -.9 | .055 | -.9 | 30000.0 | 180.0 | 1950.0 | 55.0 | 170.0 | 240.0 |
| A003024 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | -.9 | 50.0 | -.9 | 500.0 |
| A003025 | -.9 | -.8 | -.800 | -.8 | 3000.0 | 10.0 | -.9 | -.9 | -.9 | 200.0 |
| A003026 | -.8 | 40.0 | .045 | -.9 | 11000.0 | 50.0 | 240.0 | 140.0 | 75.0 | 150.0 |
| A003027 | -.9 | -.8 | -.800 | -.8 | 3000.0 | 15.0 | -.9 | 50.0 | -.9 | 30.0 |
| A003028 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 20.0 | -.9 | 50.0 | -.9 | 100.0 |
| A003029 | -.8 | 40.0 | .065 | -.9 | 26000.0 | 90.0 | 17500.0 | 120.0 | 155.0 | 440.0 |
| A003030 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 15.0 | 50.0 | 30.0 | -.9 | 50.0 |
| A003031 | -.8 | 60.0 | .050 | -.9 | 17000.0 | 50.0 | 375.0 | 170.0 | 95.0 | 340.0 |
| A003032 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 2000.0 | 20.0 | 300.0 | 500.0 |
| A003033 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | -.9 | 10.0 | 200.0 | 500.0 |
| A003034 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 30.0 | -.9 | 100.0 | -.9 | 150.0 |
| A003035 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 20.0 | 50.0 | 50.0 | -.9 | 200.0 |
| A003036 | -.8 | 20.0 | .075 | -.9 | 8900.0 | 65.0 | 265.0 | 100.0 | 75.0 | 180.0 |
| A003037 | -.8 | -.9 | .095 | 20.0 | 12000.0 | 45.0 | 420.0 | 180.0 | 65.0 | 270.0 |
| A003038 | -.9 | -.8 | -.800 | -.8 | 700.0 | 10.0 | -.9 | -.9 | -.9 | -.9 |
| A003039 | -.8 | 60.0 | .200 | -.9 | 9700.0 | 85.0 | 90.0 | 75.0 | 85.0 | 170.0 |
| A003040 | -.8 | 80.0 | .110 | -.9 | 29000.0 | 240.0 | 50.0 | 110.0 | 95.0 | 600.0 |
| A003041 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | -.9 | 30.0 | -.9 | 100.0 |
| A003042 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 100.0 | 30.0 | -.9 | 200.0 |
| A003043 | -.8 | -.9 | .080 | -.9 | 9300.0 | 90.0 | 19.0 | 45.0 | 100.0 | 230.0 |
| A003044 | -.8 | -.9 | .020 | -.9 | 7500.0 | 95.0 | 8.0 | 35.0 | 75.0 | 210.0 |
| A003045 | -.8 | 20.0 | .170 | -.9 | 20000.0 | 230.0 | 7.0 | 35.0 | 90.0 | 240.0 |
| A003046 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | -.9 | -.9 | 300.0 |
| A003047 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 20.0 | -.9 | 100.0 |
| A003048 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 100.0 | -.9 | 70.0 | -.9 | 100.0 |
| A003049 | -.8 | 20.0 | .095 | 20.0 | 13000.0 | 180.0 | 85.0 | 110.0 | 115.0 | 380.0 |
| A003050 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 50.0 | -.9 | 20.0 | -.9 | 200.0 |
| A003051 | -.8 | 20.0 | .400 | -.9 | 16000.0 | 195.0 | 3100.0 | 35.0 | 280.0 | 880.0 |
| A003052 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 15.0 | 70.0 | -.9 | -.9 | 30.0 |
| A003053 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | 100.0 | 10.0 | -.9 | 100.0 |
| A003054 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 10.0 | 70.0 | -.9 | -.9 | 70.0 |
| A003055 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 30.0 | 200.0 | 200.0 |
| A003056 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | 300.0 | 20.0 | 200.0 | 500.0 |
| A003057 | -.8 | -.9 | .045 | -.9 | -.9 | -.9 | -.9 | -.9 | 250.0 | -.9 |
| A003058 | -.8 | 120.0 | .190 | -.9 | 96000.0 | 790.0 | 165.0 | 40.0 | 130.0 | 480.0 |
| A003059 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | -.9 | 30.0 | -.9 | 100.0 |
| A003060 | -.8 | 40.0 | .019 | -.9 | 12000.0 | 160.0 | 6.0 | 65.0 | 70.0 | 320.0 |
| A003061 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 10.0 | -.9 | 50.0 | -.9 | 100.0 |
| A003062 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 20.0 | -.9 | 70.0 | -.9 | 300.0 |
| A003063 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | -.9 | 50.0 | -.9 | 300.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A003064 | 382750. | 3526400. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 10.0 | 30.0 |
| A003065 | 373800. | 3524750. | 14 | 71 | .2 | -.90 | -.900 | 100.0 | -.9 | 300.0 | -.9 | -.9 | -.9 | -.9 | 80.0 | 15.0 | 20.0 |
| A003066 | 379400. | 3492600. | 14 | 71 | 2.4 | -.90 | -.900 | 130.0 | 55.0 | 490.0 | -.9 | -.9 | -.9 | -.9 | 20.0 | 20.0 | 60.0 |
| A003067 | 328800. | 3467200. | 14 | 73 | -.9 | -.80 | -.900 | 2000.0 | 100.0 | 150.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 20.0 |
| A003068 | 333800. | 3474300. | 14 | 73 | 1.0 | -.80 | -.900 | 200.0 | 50.0 | 300.0 | -.9 | -.9 | .2 | -.9 | -.8 | 10.0 | 200.0 |
| A003069 | 374750. | 3477700. | 14 | 73 | -.9 | -.80 | .003 | -.9 | -.9 | 20.0 | -.9 | -.9 | .1 | -.9 | -.8 | 30.0 | 500.0 |
| A003070 | 371600. | 3477450. | 14 | 73 | -.9 | -.80 | .006 | -.9 | -.9 | 200.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 300.0 |
| A003071 | 370650. | 3477600. | 14 | 71 | -.9 | -.90 | .005 | 75.0 | -.9 | 240.0 | -.9 | -.9 | -.9 | -.9 | 200.0 | 15.0 | 205.0 |
| A003072 | 392250. | 3501450. | 14 | 73 | 1.0 | -.80 | .002 | -.9 | 150.0 | 500.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 150.0 |
| A003073 | 395350. | 3502800. | 14 | 73 | 5.0 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 20.0 | 100.0 |
| A003074 | 397000. | 3500850. | 14 | 71 | .8 | .22 | -.900 | 110.0 | 30.0 | 380.0 | 2.0 | -.9 | -.9 | .4 | 120.0 | 20.0 | 95.0 |
| A003075 | 399750. | 3499750. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 700.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 20.0 | 300.0 |
| A003076 | 404600. | 3502500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 500.0 | 300.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 30.0 | 200.0 |
| A003077 | 404600. | 3502500. | 14 | 71 | .8 | .25 | .005 | 35.0 | -.9 | 170.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 25.0 | 270.0 |
| A003078 | 404600. | 3502500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 500.0 | 300.0 | -.9 | -.9 | .5 | -.9 | -.8 | 20.0 | 150.0 |
| A003079 | 404600. | 3502500. | 14 | 71 | .4 | .42 | -.900 | 60.0 | 25.0 | 270.0 | -.9 | -.9 | -.9 | .2 | 40.0 | 15.0 | 75.0 |
| A003080 | 405400. | 3502700. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 100.0 |
| A003081 | 408450. | 3504250. | 14 | 73 | 2.0 | -.80 | -.900 | -.9 | 200.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 15.0 | 200.0 |
| A003082 | 402500. | 3509200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 700.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 10.0 | 100.0 |
| A003083 | 402800. | 3509800. | 14 | 71 | .6 | -.90 | .001 | 75.0 | 75.0 | 330.0 | -.9 | -.9 | -.9 | .2 | 80.0 | 45.0 | 385.0 |
| A003084 | 405800. | 3506350. | 14 | 73 | -.9 | -.80 | .012 | -.9 | 200.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 30.0 | 1000.0 |
| A003085 | 411000. | 3504800. | 14 | 71 | -.9 | -.90 | .001 | 25.0 | -.9 | 240.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | 220.0 |
| A003086 | 419200. | 3510700. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 50.0 | 150.0 |
| A003087 | 422650. | 3515500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 30.0 | 100.0 |
| A003088 | 317400. | 3474850. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 10.0 | 500.0 |
| A003089 | 316900. | 3475800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 500.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 20.0 | 200.0 |
| A003090 | 317000. | 3481000. | 14 | 71 | .2 | 5.50 | -.900 | 180.0 | -.9 | 150.0 | -.9 | -.9 | -.9 | .6 | -.9 | 10.0 | 75.0 |
| A003091 | 322200. | 3483200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 70.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 10.0 | 100.0 |
| A003092 | 327000. | 3481100. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 200.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 10.0 | 150.0 |
| A003093 | 337500. | 3488300. | 14 | 73 | 7.0 | -.80 | .019 | -.9 | 70.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 70.0 | 1000.0 |
| A003094 | 336900. | 3489800. | 14 | 71 | 1.2 | .05 | .001 | 500.0 | -.9 | 470.0 | -.9 | -.9 | -.9 | -.9 | 120.0 | 15.0 | 100.0 |
| A003095 | 335250. | 3476150. | 14 | 73 | 10.0 | -.80 | -.900 | -.9 | 70.0 | 700.0 | -.9 | -.9 | .2 | -.9 | -.8 | 15.0 | 200.0 |
| A003096 | 335250. | 3476150. | 14 | 71 | 8.3 | 8.00 | -.900 | 190.0 | 35.0 | 430.0 | -.9 | 1.0 | -.9 | 2.0 | 80.0 | 15.0 | 55.0 |
| A003097 | 340350. | 3496800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 200.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 5.0 | 70.0 |
| A003098 | 342900. | 3503000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 10.0 | 100.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 100.0 |
| A003099 | 342850. | 3503850. | 14 | 71 | 1.0 | 113.00 | .004 | 20.0 | -.9 | 140.0 | -.9 | -.9 | -.9 | 1.0 | 20.0 | 10.0 | 65.0 |
| A003100 | 332200. | 3496500. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 200.0 | 700.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 15.0 | 200.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CS (PPM) | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | LA (%) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A003064 | -.8 | 20.0 | 10.0 | 10.0 | -.9 | -.9 | .70 | 5000.0 | -.9 | -.9 | 15.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003065 | -.9 | 25.0 | 14.6 | 7.0 | -.8 | 40.0 | -.80 | 12000.0 | -.9 | 40.0 | 30.0 | 50.0 | -.9 | -.9 | 4.0 | 100.0 | 5.0 |
| A003066 | -.9 | 45.0 | 13.0 | 14.0 | -.8 | 25.0 | -.80 | 1400.0 | -.9 | 10.0 | 65.0 | 35.0 | -.9 | -.9 | 18.0 | 15.0 | 460.0 |
| A003067 | -.8 | 70.0 | 5.0 | -.9 | -.9 | 20.0 | .10 | 500.0 | -.9 | 20.0 | 70.0 | 30.0 | -.8 | -.8 | 1500.0 | -.9 | -.9 |
| A003068 | -.8 | 20.0 | 5.0 | 10.0 | -.9 | 20.0 | .50 | 700.0 | -.9 | -.9 | 50.0 | 100.0 | -.8 | -.8 | 100.0 | 10.0 | -.9 |
| A003069 | -.8 | 20.0 | 20.0 | 15.0 | -.9 | -.9 | 1.00 | 500.0 | 2.0 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 10.0 | 200.0 |
| A003070 | -.8 | 15.0 | 10.0 | 15.0 | -.9 | -.9 | 1.50 | 700.0 | -.9 | -.9 | 30.0 | 150.0 | -.8 | -.8 | -.9 | 10.0 | 10.0 |
| A003071 | 20.0 | 25.0 | 21.1 | 8.0 | -.8 | 95.0 | -.80 | 4950.0 | -.9 | 160.0 | 35.0 | 25.0 | -.9 | -.9 | 290.0 | 55.0 | 400.0 |
| A003072 | -.8 | 30.0 | 7.0 | 15.0 | -.9 | 200.0 | 1.00 | 1000.0 | 2.0 | 20.0 | 70.0 | 150.0 | -.8 | -.8 | -.9 | 15.0 | 2000.0 |
| A003073 | -.8 | 15.0 | 10.0 | 15.0 | -.9 | 50.0 | 1.50 | 7000.0 | 5.0 | 20.0 | 50.0 | 300.0 | -.8 | -.8 | -.9 | 50.0 | 150.0 |
| A003074 | -.9 | 40.0 | 9.9 | 10.0 | -.8 | 25.0 | -.80 | 4050.0 | -.9 | 25.0 | 40.0 | 30.0 | -.9 | -.9 | 24.0 | 45.0 | 165.0 |
| A003075 | -.8 | 30.0 | 15.0 | 20.0 | -.9 | 20.0 | 1.50 | 5000.0 | 10.0 | 20.0 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 50.0 | 150.0 |
| A003076 | -.8 | 15.0 | 20.0 | 20.0 | -.9 | -.9 | .50 | 5000.0 | 15.0 | -.9 | 70.0 | 50.0 | -.8 | -.8 | -.9 | 30.0 | 500.0 |
| A003077 | 10.0 | 30.0 | 38.2 | 14.0 | -.8 | 25.0 | -.80 | 5000.0 | -.9 | 10.0 | 50.0 | 15.0 | -.9 | -.9 | 18.0 | 30.0 | 275.0 |
| A003078 | -.8 | 30.0 | 15.0 | 10.0 | -.9 | -.9 | .50 | 5000.0 | 10.0 | 20.0 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 30.0 | 30.0 |
| A003079 | -.9 | 45.0 | 15.9 | 10.0 | -.8 | 30.0 | -.80 | 6450.0 | -.9 | 35.0 | 40.0 | 20.0 | -.9 | -.9 | 16.0 | 50.0 | 80.0 |
| A003080 | -.8 | 30.0 | 15.0 | 10.0 | -.9 | -.9 | 1.00 | 5000.0 | 5.0 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | 20.0 |
| A003081 | -.8 | 20.0 | 10.0 | 15.0 | -.9 | -.9 | 1.50 | 5000.0 | 2.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003082 | -.8 | 30.0 | 7.0 | 10.0 | -.9 | 20.0 | 1.50 | 7000.0 | -.9 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003083 | -.9 | 50.0 | 14.5 | 12.0 | -.8 | 30.0 | -.80 | 4650.0 | -.9 | 30.0 | 70.0 | 55.0 | -.9 | -.9 | 17.0 | 40.0 | 415.0 |
| A003084 | -.8 | 50.0 | 20.0 | 20.0 | -.9 | -.9 | 1.00 | 5000.0 | 10.0 | 20.0 | 70.0 | 100.0 | -.8 | -.8 | -.9 | 30.0 | 500.0 |
| A003085 | 10.0 | 40.0 | 22.8 | 12.0 | -.8 | 25.0 | -.80 | 6100.0 | -.9 | -.9 | 45.0 | 15.0 | -.9 | -.9 | 6.0 | 45.0 | 14.0 |
| A003086 | -.8 | 70.0 | 20.0 | 30.0 | -.9 | -.9 | 1.00 | 5000.0 | 15.0 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | 20.0 |
| A003087 | -.8 | 50.0 | 20.0 | 20.0 | -.9 | -.9 | .70 | 7000.0 | 10.0 | 20.0 | 50.0 | 100.0 | -.8 | -.8 | -.9 | 50.0 | 20.0 |
| A003088 | -.8 | 10.0 | 7.0 | 15.0 | -.9 | 20.0 | 1.50 | 3000.0 | 2.0 | 20.0 | 30.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003089 | -.8 | 20.0 | 10.0 | 20.0 | -.9 | 20.0 | 3.00 | 7000.0 | 2.0 | 20.0 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003090 | -.9 | 15.0 | 16.9 | 12.0 | -.8 | 15.0 | -.80 | 10500.0 | -.9 | 35.0 | 15.0 | 5.0 | -.9 | -.9 | 11.0 | 100.0 | 13.0 |
| A003091 | -.8 | 7.0 | 7.0 | 15.0 | -.9 | -.9 | 1.50 | 5000.0 | 2.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003092 | -.8 | 10.0 | 10.0 | 20.0 | -.9 | -.9 | 1.00 | 5000.0 | 2.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | 70.0 |
| A003093 | -.8 | 50.0 | 20.0 | 50.0 | -.9 | 20.0 | 2.00 | 2000.0 | 15.0 | 30.0 | 50.0 | 200.0 | -.8 | -.8 | -.9 | 30.0 | 200.0 |
| A003094 | 10.0 | 40.0 | 17.3 | 12.0 | -.8 | 50.0 | -.80 | 4500.0 | -.9 | 60.0 | 30.0 | 130.0 | -.9 | -.9 | 85.0 | 40.0 | 55.0 |
| A003095 | -.8 | 30.0 | 10.0 | 20.0 | -.9 | 20.0 | 1.00 | 1500.0 | 5.0 | -.9 | 50.0 | 3000.0 | -.8 | -.8 | -.9 | 20.0 | 700.0 |
| A003096 | -.9 | 70.0 | 7.9 | 16.0 | -.8 | 30.0 | -.80 | 1750.0 | -.9 | 15.0 | 45.0 | 1100.0 | -.9 | -.9 | 115.0 | 25.0 | 225.0 |
| A003097 | -.8 | 10.0 | 7.0 | 20.0 | -.9 | 20.0 | 1.50 | 7000.0 | 2.0 | 20.0 | 20.0 | 15.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003098 | -.8 | 20.0 | 15.0 | 30.0 | -.9 | 20.0 | 1.00 | 7000.0 | 10.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A003099 | -.9 | 20.0 | 13.4 | 10.0 | -.8 | 25.0 | -.80 | 10000.0 | -.9 | 30.0 | 15.0 | 10.0 | -.9 | -.9 | 8.0 | 100.0 | -.9 |
| A003100 | -.8 | 50.0 | 15.0 | 20.0 | -.9 | 50.0 | 3.00 | 3000.0 | 5.0 | 30.0 | 30.0 | 30.0 | -.8 | -.8 | -.9 | 50.0 | 30.0 |

Table A-7a

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A003064 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 30.0 | -.9 | 50.0 | -.9 | 500.0 |
| A003065 | -.8 | 20.0 | .040 | -.9 | 14000.0 | 50.0 | 11.0 | 200.0 | 55.0 | 360.0 |
| A003066 | -.8 | 40.0 | .075 | -.9 | 6900.0 | 140.0 | 4.0 | 30.0 | 170.0 | 240.0 |
| A003067 | -.9 | -.8 | -.800 | -.8 | 3000.0 | 30.0 | 200.0 | -.9 | -.9 | 300.0 |
| A003068 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | -.9 | 10.0 | 200.0 | 200.0 |
| A003069 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | -.9 | -.9 | 100.0 |
| A003070 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | -.9 | -.9 | 50.0 |
| A003071 | -.8 | 100.0 | .130 | 20.0 | 110000.0 | 820.0 | 13.0 | 35.0 | 90.0 | 480.0 |
| A003072 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 50.0 | -.9 | 150.0 |
| A003073 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | 100.0 | 70.0 | -.9 | 300.0 |
| A003074 | -.9 | -.9 | .270 | -.9 | 8900.0 | -.9 | 9.0 | 65.0 | 110.0 | 180.0 |
| A003075 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 100.0 | 200.0 | 150.0 |
| A003076 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 150.0 | -.9 | 70.0 | 300.0 | 100.0 |
| A003077 | -.8 | 60.0 | .070 | -.9 | 11000.0 | -.9 | 19.0 | 50.0 | 60.0 | 260.0 |
| A003078 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 70.0 | 200.0 | 200.0 |
| A003079 | -.8 | -.9 | .080 | -.9 | 14000.0 | -.9 | 12.0 | 75.0 | 80.0 | 310.0 |
| A003080 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 70.0 | 200.0 | 200.0 |
| A003081 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 50.0 | -.9 | 200.0 |
| A003082 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 300.0 |
| A003083 | -.8 | -.9 | .240 | -.9 | 14000.0 | -.9 | 65.0 | 50.0 | 90.0 | 150.0 |
| A003084 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 100.0 | 200.0 | 50.0 |
| A003085 | -.8 | -.9 | .045 | -.9 | 11000.0 | -.9 | 4.0 | 60.0 | 65.0 | 280.0 |
| A003086 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 100.0 | -.9 | 100.0 | 200.0 | 200.0 |
| A003087 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 150.0 | -.9 | 100.0 | -.9 | 150.0 |
| A003088 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 70.0 | -.9 | 150.0 |
| A003089 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 70.0 | -.9 | 200.0 |
| A003090 | -.8 | -.9 | .050 | -.9 | 16000.0 | -.9 | 60.0 | 150.0 | 50.0 | 170.0 |
| A003091 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | 70.0 | -.9 | 150.0 |
| A003092 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 200.0 |
| A003093 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | 50.0 | 30.0 | -.9 | 300.0 |
| A003094 | -.8 | -.9 | .045 | -.9 | 42000.0 | -.9 | 12.0 | 60.0 | 110.0 | 210.0 |
| A003095 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 100.0 | 50.0 | 20.0 | 300.0 | 100.0 |
| A003096 | -.8 | -.9 | .040 | -.9 | 11000.0 | -.9 | 65.0 | 30.0 | 220.0 | 160.0 |
| A003097 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 300.0 |
| A003098 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | 150.0 | -.9 | 150.0 |
| A003099 | -.8 | -.9 | .040 | -.9 | 14000.0 | -.9 | 210.0 | 160.0 | 45.0 | 180.0 |
| A003100 | 200.0 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | -.9 | 50.0 | 200.0 | 300.0 |

Table A-7b

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) | CS (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002424 | 593600. | 3383200. | 14 | 73 | 7.0 | -.80 | .0078 | 10000.0 | 50.0 | 1500.0 | -.9 | 70.0 | 1.5 | -.9 | -.8 | 500.0 | 7000.0 | -.8 |
| A002427 | 575600. | 3369800. | 14 | 73 | -.9 | -.80 | .0006 | -.9 | 30.0 | 1000.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 20.0 | 7000.0 | -.8 |
| A002428 | 573400. | 3375900. | 14 | 71 | -.9 | .12 | -.8000 | 70.0 | -.8 | -.8 | -.8 | -.9 | -.8 | -.8 | -.8 | -.8 | -.8 | -.8 |
| A002429 | 573400. | 3375850. | 14 | 71 | 5.9 | 3.40 | .0047 | 420.0 | 50.0 | 1100.0 | -.9 | 30.0 | -.8 | -.9 | 20.0 | 20.0 | 2500.0 | -.9 |
| A002430 | 573250. | 3374750. | 14 | 73 | -.9 | -.80 | .0007 | -.9 | 100.0 | 2000.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 5000.0 | -.8 |
| A002431 | 582850. | 3374600. | 14 | 71 | .8 | 1.30 | .0029 | 1300.0 | 60.0 | 1500.0 | 3.0 | 4.0 | -.8 | .2 | 40.0 | 30.0 | 4250.0 | -.9 |
| A002489 | 598600. | 3374000. | 14 | 71 | .6 | .44 | .0010 | 230.0 | -.9 | 540.0 | -.9 | 3.0 | -.8 | .4 | 20.0 | 65.0 | 24000.0 | -.9 |

Table A-7b

CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CU (PPM) | FE (%) | GA (PPM) | LA (PPM) | MG (%) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) | SR (PPM) | TA (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002424 | 200.0 | 10.0 | 30.0 | 20.0 | 1.00 | 1000.0 | 5.0 | -.9 | 200.0 | 500.0 | -.8 | -.8 | 300.0 | 20.0 | -.9 | 100.0 | -.8 |
| A002427 | 30.0 | 5.0 | 15.0 | -.9 | 1.50 | 1000.0 | -.9 | -.9 | 100.0 | 50.0 | -.8 | -.8 | -.9 | 10.0 | -.9 | 200.0 | -.8 |
| A002428 | 55.0 | -.8 | -.8 | -.8 | -.80 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.8 | -.8 |
| A002429 | 70.0 | 6.1 | 14.0 | 10.0 | -.80 | 1450.0 | -.9 | -.9 | 65.0 | 20.0 | -.9 | -.9 | 4.0 | 25.0 | 12.0 | -.8 | -.9 |
| A002430 | 50.0 | 7.0 | 20.0 | 20.0 | 2.00 | 1000.0 | 2.0 | -.9 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 20.0 | -.9 | 300.0 | -.8 |
| A002431 | 70.0 | 9.2 | 14.0 | 10.0 | -.80 | 3050.0 | -.9 | 10.0 | 75.0 | 80.0 | -.9 | -.9 | 18.0 | 30.0 | 26.0 | -.8 | -.9 |
| A002489 | 65.0 | 13.5 | 10.0 | -.9 | -.80 | -.9 | -.9 | 10.0 | 230.0 | 50.0 | -.9 | -.9 | 9.0 | 30.0 | 265.0 | -.8 | 180.0 |

Table A-7b

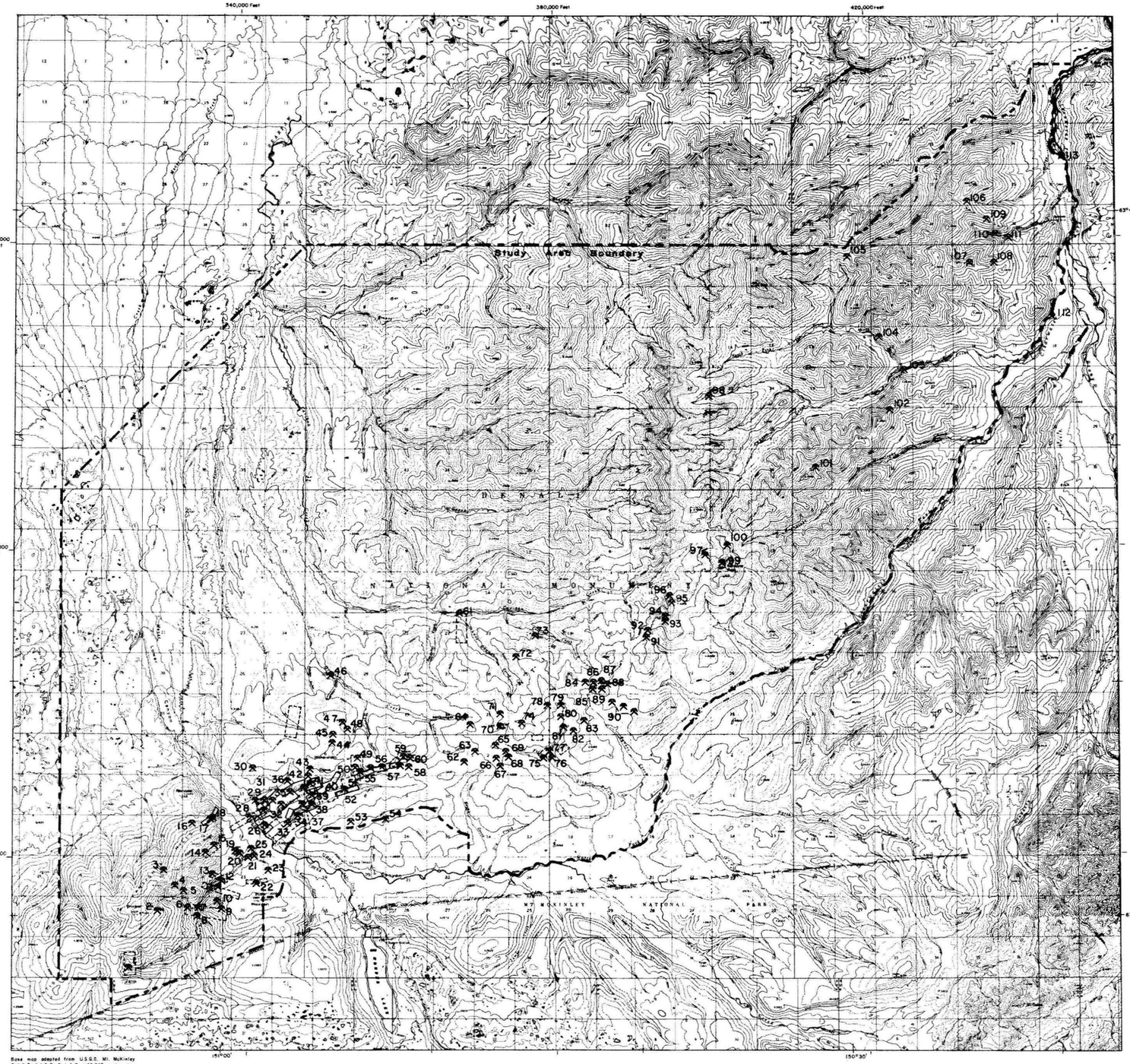
CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | WT (GRAMS) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| A002424 | -.800 | -.8 | 5000.0 | 100.0 | 150.0 | 96.14 | 30.0 | 500.0 | 200.0 |
| A002427 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 106.54 | -.9 | 200.0 | 50.0 |
| A002428 | -.800 | -.8 | -.8 | -.8 | 3.0 | -.80 | -.8 | 130.0 | -.8 |
| A002429 | 6.400 | -.9 | 6000.0 | -.9 | 100.0 | 118.61 | 15.0 | 135.0 | 190.0 |
| A002430 | -.800 | -.8 | 7000.0 | 150.0 | -.9 | 87.60 | 20.0 | 200.0 | 100.0 |
| A002431 | .190 | -.9 | 10000.0 | -.9 | 6.0 | 105.09 | 20.0 | 285.0 | 280.0 |
| A002489 | 1.000 | -.9 | 18000.0 | -.9 | 9.0 | 95.25 | 30.0 | 280.0 | 280.0 |

# APPENDIX B

# OCCURRENCE REPORT FORMS




Base map adapted from U.S.G.S. Mt. McKinley B-1,2,3; C-1,2,3; D-1,2,3 1:63,360 quadrangles.
Work performed for the U.S. Bureau of Mines under contract number S0134031
Prime contractor: Salisbury & Dietz, Inc.
Technical subcontractors: C.C. Hawley and Associates, Inc. and WGM Inc.

0 1 2 3 4 Miles
0 1 2 3 4 5 6 Kilometers
Scale

Contour Interval 100 feet

LEGEND

- Patented lode claims
- Unpatented lode claims
- Mines, prospects, and occurrences

LIST OF MINES, PROSPECTS, AND OCCURRENCES

| Map Number | Name | Development* | Geol. Type** |
|---|---|---|---|
| 1 | Slate Creek Mine | M | AQ |
| 2 | Brooker Mountain Prospect | P | AQ |
| 3 | Unnamed Prospect | P | SV-AQ |
| 4 | Unnamed Prospect | P | AQ |
| 5 | Unnamed Prospect | P | SV |
| 6 | Unnamed Prospect | P | SV |
| 7 | Bunnell (Neversweat) Prospect | P+ | SV |
| 8 | Upper Bunnell Prospect | P | SV |
| 9 | Unnamed Occurrence | O | OT |
| 10 | Arizona Claims | P | OT |
| 11 | Eagles Den Prospect | P | AQ |
| 12 | Unnamed Occurrence | O | OT |
| 13 | Eldorado No. 3 Claim | P | AQ |
| 14 | Alpha Prospect | P+ | SV |
| 15 | Alpha Ridge Prospect | P | SV |
| 16 | Unnamed Prospect | P | SV |
| 17 | Whistler Prospect | P | SV |
| 18 | Bright Light | P | SV |
| 19 | Iron Dome Skarn | O | OT |
| 20 | Unnamed Occurrence | O | SV |
| 21 | Unnamed Occurrence | O | SS |
| 22 | Lucky Tuesday Prospect | P | AQ |
| 23 | Unnamed Occurrence | O | OT |
| 24 | Unnamed Occurrence | O | SV |
| 25 | Unnamed Occurrence | O | SV |
| 26 | Lucky Strike | P | SV |
| 27 | Galena Mine | M | SV |
| 28 | Red Top Mine (with Silver King extension) | M | SV |
| 29 | Dalton Group, includes: | | |
| | Star Prospect | P | SV |
| | Friday Prospect | P | SV |
| | Martha Q Prospect | P | SV |
| | Polly Wonder Prospect | P | SV |
| 30 | Friday Rim Prospect | P | SV |
| 31 | Francis Prospect and Little Maud Prospect | P | SV |
| 32 | Silver Pick Prospect (with Darling extension) | P | SV |
| 33 | Eureka Stibnite (Pick Claims) | P+ | AQ |
| 34 | White Hawk Prospect | P | SV |
| 35 | Little Annie (and Little Annie 2) | M | SV |
| 36 | Gold Eagle Prospect and Gold Dollar Mine | M | SV |
| 37 | Water Level Claim | P | SV |
| 38 | Sulphide Claim | P | CV |
| 39 | Pennsylvania-Keystone Claims | P | CV |
| 40 | Gold King | P | SV |
| 41 | East Gold King-Pittsburg Claims | P | SV |
| 42 | Unnamed Occurrence | P | SV |
| 43 | Unnamed Prospect | P | SV |
| 44 | Florence Lode | P | SV |
| 45 | Unnamed Prospect | P | SV |
| 46 | Unnamed Occurrence | O | SV |
| 47 | Upper Bogart Prospect | P | SV |
| 48 | Bogart Prospect | P | SV |
| 49 | Unnamed Prospect | P | SV |
| 50 | Banjo Mine | M | CV |
| 51 | Jupiter-Mars Claims | P+ | CV |
| 52 | Silver King-Merry Widow Claims | P | SV |
| 53 | Unnamed Occurrence | O | SV |
| 54 | Unnamed Occurrence | O | SV |
| 55 | Chloride Prospect | P | SV |
| 56 | Waterloo Prospect | P | SV |
| 57 | Saddle Prospect | P | SV |
| 58 | Wieler or Parky Prospect | P+ | SV |
| 59 | Unnamed Occurrence | O | SV |
| 60 | Grizzly No. 2 Claim | P | SV |
| 61 | Last Chance Mine (Caribou Lode) | M | AQ |
| 62 | Unnamed Prospect | P | SV |
| 63 | Unnamed Prospect | P | SV |
| 64 | McGonnigill | P+ | CV |
| 65 | Pension Claim | P | SV |
| 66 | Unnamed Prospect | P | AQ |
| 67 | Unnamed Prospect | P | SV |
| 68 | Unnamed Prospect | P | AQ |
| 69 | Arkansas Claim | P | SV |
| 70 | Glenn Prospect | P | SV |
| 71 | Unnamed Occurrence | O | SV |
| 72 | Unnamed Occurrence | P | SV |
| 73 | Home Lode Prospect | P | AQ |
| 74 | Glenn Ridge I or Skoona Prospect | P | CV |
| 75 | Wieler Antimony Prospect | P | AQ |
| 76 | Unnamed Occurrence | O | OT |
| 77 | Lloyd Prospect | P | SS |
| 78 | Humbolt Prospect | P | SV |
| 79 | Unnamed Prospect | P | SS |
| 80 | Unnamed Occurrence | P | SS |
| 81 | Unnamed Prospect | P | SV |
| 82 | Unnamed Occurrence | O | SS |
| 83 | Rainy Creek Ridge I and Rainy Creek Ridge II | O | SV |
| 84 | Ridgetop or Spruce Creek I Prospect | P | SV |
| 85 | Lena and Silver Wire Prospects | P | SV |
| 86 | Unnamed Prospect | P | SS |
| 87 | Mammoth Claim or Lucky Jim Prospect | P | CV |
| 88 | Unnamed Occurrence | O | CV |
| 89 | Unnamed Prospect | P | CV |
| 90 | Unnamed Occurrence | O | SV |
| 91 | Unnamed Occurrence | O | SS |
| 92 | Unnamed Occurrence | O | SV |
| 93 | Unnamed Occurrence | O | SV |
| 94 | Unnamed Occurrence | O | AQ |
| 95 | Unnamed Prospect | P | SV |
| 96 | Unnamed Occurrence | O | SS |
| 97 | Unnamed Occurrence | O | SV |
| 98 | Canyon Creek Occurrence | O | SS |
| 99 | Unnamed Occurrence | O | SS |
| 100 | Unnamed Occurrence | O | SV |
| 101 | Unnamed Occurrence | O | SV |
| 102 | Moonlight Stibnite Occurrence | O | AQ |
| 103 | Bloom Prospect | P | SS |
| 104 | Unnamed Occurrence | O | OT |
| 105 | Red Dirt Occurrence | O | SS |
| 106 | Nessie Deposit | M | AQ |
| 107 | Unnamed Occurrence | O | AQ |
| 108 | Unnamed Occurrence | O | SV |
| 109 | Upper-Ridge Claims | P | AQ |
| 110 | Unnamed Prospect | P | AQ |
| 111 | Stampede Mine (includes Glory Hole, Surface, Emil Winze, Mooney, and Kobuk ore bodies) | M | AQ |
| 112 | Unnamed Occurrence | O | SV |
| 113 | Clearwater Barite | O | OT |

*Explanation of Development Symbols

- M Mine with sustained production
- P+ Prospect with minor production
- P Prospect with pits, trenches, or underground workings
- O Occurrence with no development

*Explanation of Geologic Type Symbols

- SV Silver-bearing quartz-sulfide vein, commonly with gold values or metal-bearing vein with unknown precious-metal values
- CV Gold-bearing quartz-sulfide vein, commonly with silver values
- AQ Antimony-quartz vein
- SS Stratabound sulfide deposit
- OT Other deposit types

## KANTISHNA HILLS STUDY AREA

## MINES, PROSPECTS, OCCURRENCES, AND LODE MINING CLAIMS

Figure B-1

# OCCURRENCE REPORT FORM

NAME Slate Creek Mine

Study Area Kantishna Hills

Occurrence No. 1

Location: Head of Slate Creek (345600N, 324830E)

Occurrence Type Massive stibnite quartz

Examining Geologist TKH

Ownership: 4 unpatented lode claims belonging to John Millhouse

Date(s) of Examination June 30, 1983

General Geology: Birch Creek quartzite (pGsq), pyritic near vein.

Mineralization: Massive stibnite-quartz with minor pyrite, boulangerite, cerrantite, and arsenopyrite. Millhouse says the vein averaged 8-10 in. in width.

Structure: Vein not seen in place in this examination, Bundtzen says mineralization trends N50°E, dips 82° SE. Millhouse says open pit was following vein when it turned to SE. USBM drilling (Ebbley and Wright) indicated at least some stibnite persisted to a depth of 70 ft. Millhouse indicates about half of this has been mined.

Development and Production: Bundtzen (1981) estimates at least 657 tons of ore mined in four periods 1916, 1942-49, 1970-71, and 1979. These shipments averaged 45% Sb for a production of about 800,000 lbs. Sb. Millhouse shipped approximately 20 tons of ore from tailings piles in 1983.

Remarks: First two periods of production were underground; last two were from open pits.

Analyses: See attached table.

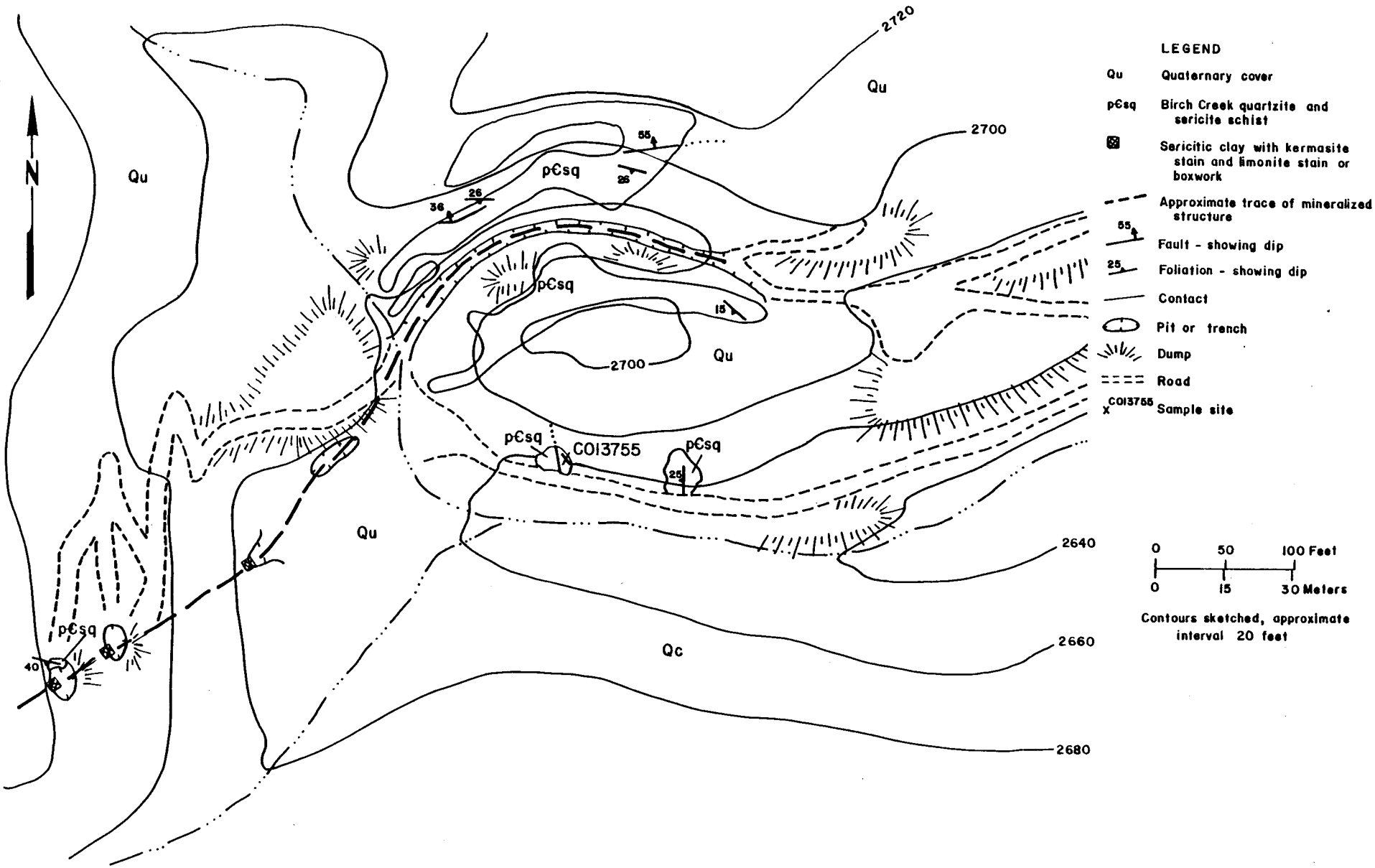
References: Ebbley and Wright, 1948, p. 20-28.
Bundtzen, 1981, p. 128-130, 141, 198-211, 229.

Slate Creek Mine

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 ppm | 15 ppm | 40 ppm | 0.8 ppm | ND | ND | 5 ppm | 6 ppm | ND | ND | 3 ppm | ND | Sample C013701. Wall rock sample. |
| | ND | ND | ND | ND | ND | ND | 59.5% | 4 ppm | ND | ND | ND | ND | Sample C013704. Wall rock sample. |
| | 0.016% | ND | 0.006% | ND | .005 oz/tn | ND | 38.5% | 4 ppm | .028% | ND | ND | ND | SampleC013706. Wall rock sample. |
| | 30 ppm | ND | 105 ppm | ND | 0.07 ppm | ND | 0.14 ppm | 3 ppm | 23.2% | ND | -- | -- | Sample C013738. Grab from creek above mine. |
| | 0.006% | ND | 0.006% | 0.4 ppm | ND | ND | 60.6% | 3 ppm | 55 ppm | ND | -- | -- | Sample C013739. |
| | 0.012% | ND | 0.014% | 1.0 ppm | ND | ND | 61% | ND | 0.18% | ND | -- | -- | Sample C013740. Sample from former jig con. |
| * | 0.008% | 0.16% | 0.019% | 0.16 oz/tn | tr | ND | 17.14% | 75 ppm | 0.001% | 0.007% | 0.2 ppm | 0.3 ppm | Average chip sample, are in open cut. |
| * | 0.005% | 0.07% | 0.019% | 0.06 oz/tn | tr | 28 ppm | 23.0% | 75 ppm | 2.80% | 0.008% | 1.4 ppm | 4.0 ppm | Grab sample from open pit. |
| * | 0.006% | 0.045% | 0.024% | 0.04 oz/tn | 0.01 oz/tn | ND | 19.0% | 75 ppm | 3.19% | 0.005% | 0.6 ppm | 3.3 ppm | Average chip sample of schist on dump. |
| * | 0.029% | 0.36% | 0.036% | 0.14 oz.tn | tr | -- | 25.9% | 75 ppm | 0.3% | 0.007% | 0.2 ppm | 0.7 ppm | Chip sample from exposed stibnite vein. |
| * | 0.005% | 0.07% | 0.002% | 0.04 oz/tn | tr | 41 ppm | 40.8% | 75 ppm | 0.15% | 0.004% | 0.2 ppm | 0.3 ppm | Grab sample from open cut. |
| * | 0.002% | 0.006% | 0.001% | tr | tr | 6 ppm | 12.0% | -- | -- | -- | -- | -- | Chip sample from exposed sulfide vein in open cut. |
| * | 0.008% | 0.006% | 0.035% | 0.09 oz/tn | tr | 306 ppm | 32.6% | 75 ppm | 1.46% | 0.005% | 0.6 ppm | 1.3 ppm | Grab sample from dump. |

* Bundtzen, 1981.




Occurrence No. 1 - Slate Creek Mine

# OCCURRENCE REPORT FORM

NAME Brooker Mountain Prospect

Study Area Kantishna Hills

Occurrence No. 2

Location: Brooker Mountain (3473250N, 328430E)

Occurrence Type Quartz-stibnite vein

Examining Geologist TKH

Ownership: No current claims.

Date(s) of Examination July 6, 1983

General Geology: Float in area is Birch Creek quartzite (p€sq). Some pieces are pyritic.

Mineralization: Trench float: limonite gossan and stibiconite stained quartz, rare quartz pieces have several percent stibnite.

Structure: No outcrop in area, both trench and streak of stibiconite stained quartz in bottom are oriented N62°E.

Development and Production: Development consists of a shallow, 65 ft. long bulldozer trench; there is no recorded production.

Remarks: Enough logs for a small cabin (now rotted) and a small box stove were found on the site. Logs must have been brought in from a considerable distance as there is no timber anywhere near the site.

Analyses: See attached table.

References: Bundtzen, 1981, p. 198, 211.

Brooker Mountain Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .079% | 3.0% | 0.28% | 4900 ppm | 1.6 ppm | 2 ppm | 1.55% | ND | 1.3% | ND | -- | -- | Sample C013746. Grab of limonite and stibiconite stained quartz with a few percent stibnite. |
| * | .019% | 1.18% | 0.16% | tr | 12.1 oz/tn | 51% | 0.63% | -- | 0.4% | 0.236% | 2.2 ppm | 11.3% | Grab sample of weathered gossan. |

* Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 3

Location: Ridge between Brooker Mountain and Alpha Ridge (3477450N, 329900E)

Occurrence Type Quartz-antimony-silver(?) vein

Examining Geologist TKH

Ownership: No current claims.

Date(s) of Examination July 6, 1983

General Geology: Birch Creek schist, felsite and quartzite (pЄsq, pЄf).

Mineralization: Stibnite, tourmaline and possible traces of pyrargerite in quartz-ankerite gangue.

Structure: Mineralization not seen in place, trenches trend N39°E.

Development and Production: Two sloughed trenches 40 and 90 ft. long, both shallow; no known production.

Remarks: In approximate location of Bundtzen's (1981) Occurrence No. 8, but does not tally with his description.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag ppm | Au ppm | Sb % | As % |
|---|---|---|---|---|---|---|---|
| C013743 | .03 | 10.5 | .905 | 275 | 1.1 | 9.15 | .245 |
| C013744 | .02 | .041 | .016 | 1.20 | 0.03 | .030 | .0081 |

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 4

Location: Ridge near Reinhart Creek (347690N, 330700E)

Occurrence Type Quartz, stibnite, base metal vein

Examining Geologist TKH

Ownership: No current claims.

Date(s) of Examination July 6, 1983

General Geology: Feldspar-quartz-mica schist of the Birch Creek schist.

Mineralization: Quartz vein with stibnite, sphalerite and traces of galena and pyrite. Maximum 50% stibnite.

Structure: Vein not seen in place. Float pattern suggests that it strikes roughly east-west and dips south.

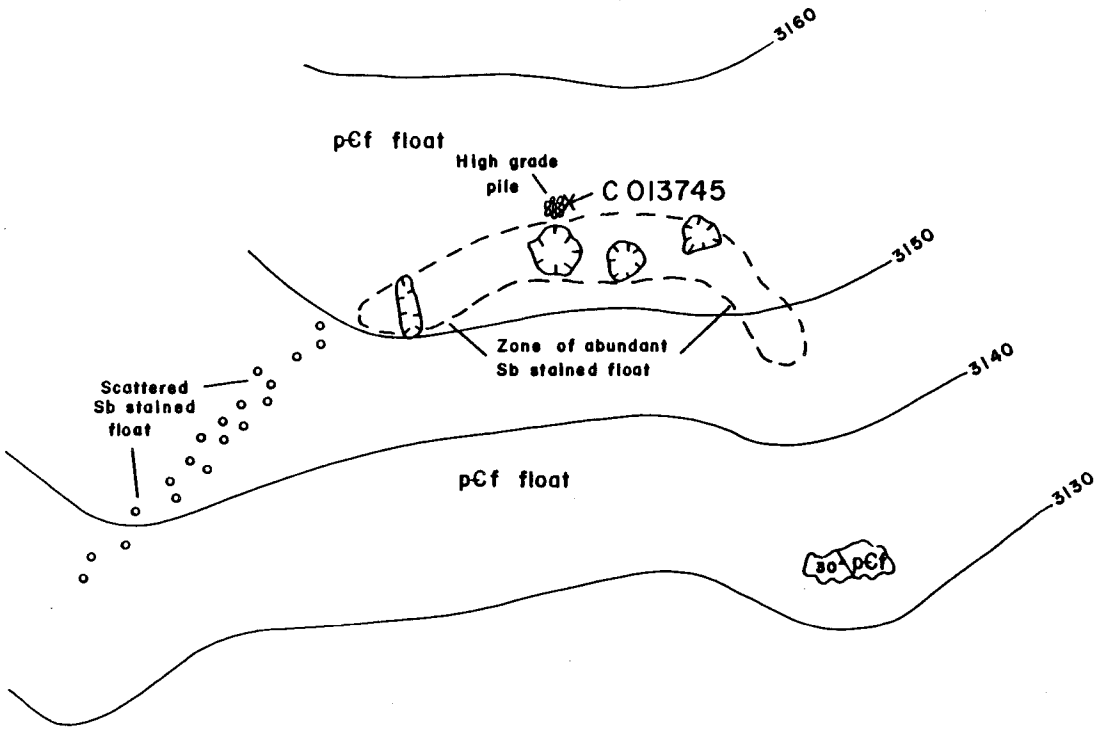
Development and Production: Four small, shallow pits. No known production.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C013745 | .365 | 8.40 | 3.75 | 144 | .05 | ND | 45 | 3 | 18 | high grade for sulfides from pit near trench |

References:




LEGEND

pCf Birch Creek Schist

30 Foliation attitude

Pit or trench

CO 13745 X Sample site

N

0 10 20 Feet

0 2 4 6 Meters

Contours sketched, approximate interval 10 feet

Occurrence No. 4 -Unnamed

# OCCURRENCE REPORT FORM

NAME Unreported Prospect

Study Area Kantishna Hills

Occurrence No. 5

Location: Ridge north of Reinhart Creek (3466000N, 332850E)

Occurrence Type Silver-bearing vein

Ownership: No current claims.

Examining Geologist TKH

Date(s) of Examination July 8, 1983

General Geology: Quartz-mica schist and feldspar-quartz-mica schist units of the Birch Creek Schist.

Mineralization: Gossan and iron stain with traces of malachite; west trench had a few pieces of gray sulfide (tetrahedrite).

Structure: Located near major northeast-striking thrust fault in the Birch Creek schist sequence; dip unknown but apparently to the northwest.

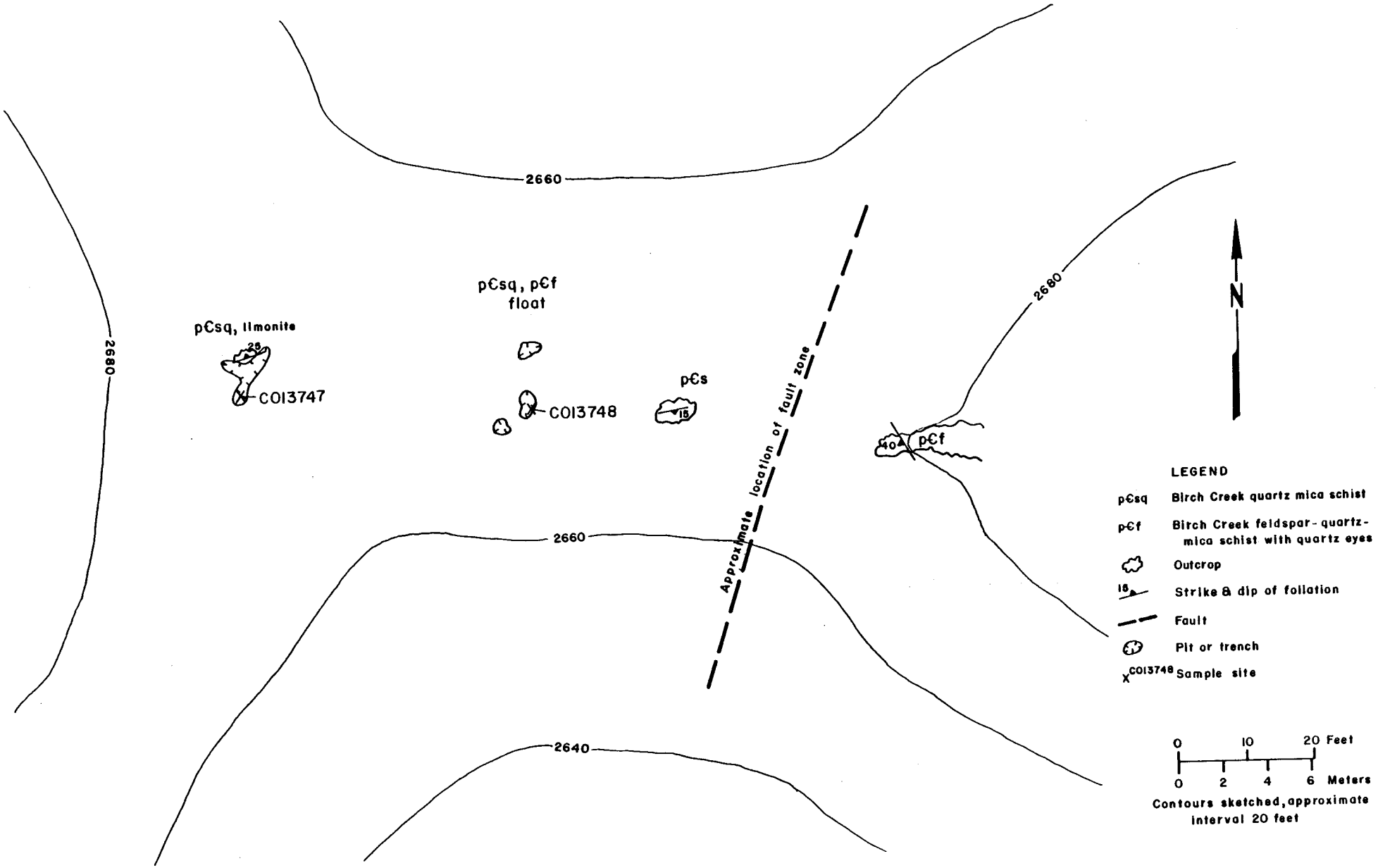
Development and Production: Trench and shallow pits; no known production.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| CO13747 | 1.25 | 4.450 | 33.00 | 5.16 | ND | ND | 2.450 | ND | .009 | high grade form sulfides from west trench |
| CO13748 | 0.01 | 0.004 | 2.95 | 7.20 | ND | ND | 0.094 | ND | .010 | limonite & gossan from eastern pit |

References:




Occurrence No. 5 - Unnamed Prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 6

Location: South side of Reinhart Creek 900 ft. SW of its junction with Eldorado Creek (3473080N, 332760E)

Occurrence Type Quartz-sulfide vein

Ownership: No current claims.

Examining Geologist JMK

Date(s) of Examination July 21, 1983

General Geology: Bedrock in vicinity consists of interbedded chloritic phyllites and calcareous schist cut by a quartz feldspar porphyry dike. The contact between phyllites and a porphyry body is 50 ft. to the southeast. Porphyry rubble is found on the prospect dump.

Mineralization: Gossaneous quartz float contains up to 20% sulfides and includes stibnite, jamesonite, galena, pyrite, and sphalerite.

Structure: No mineralization found in place.

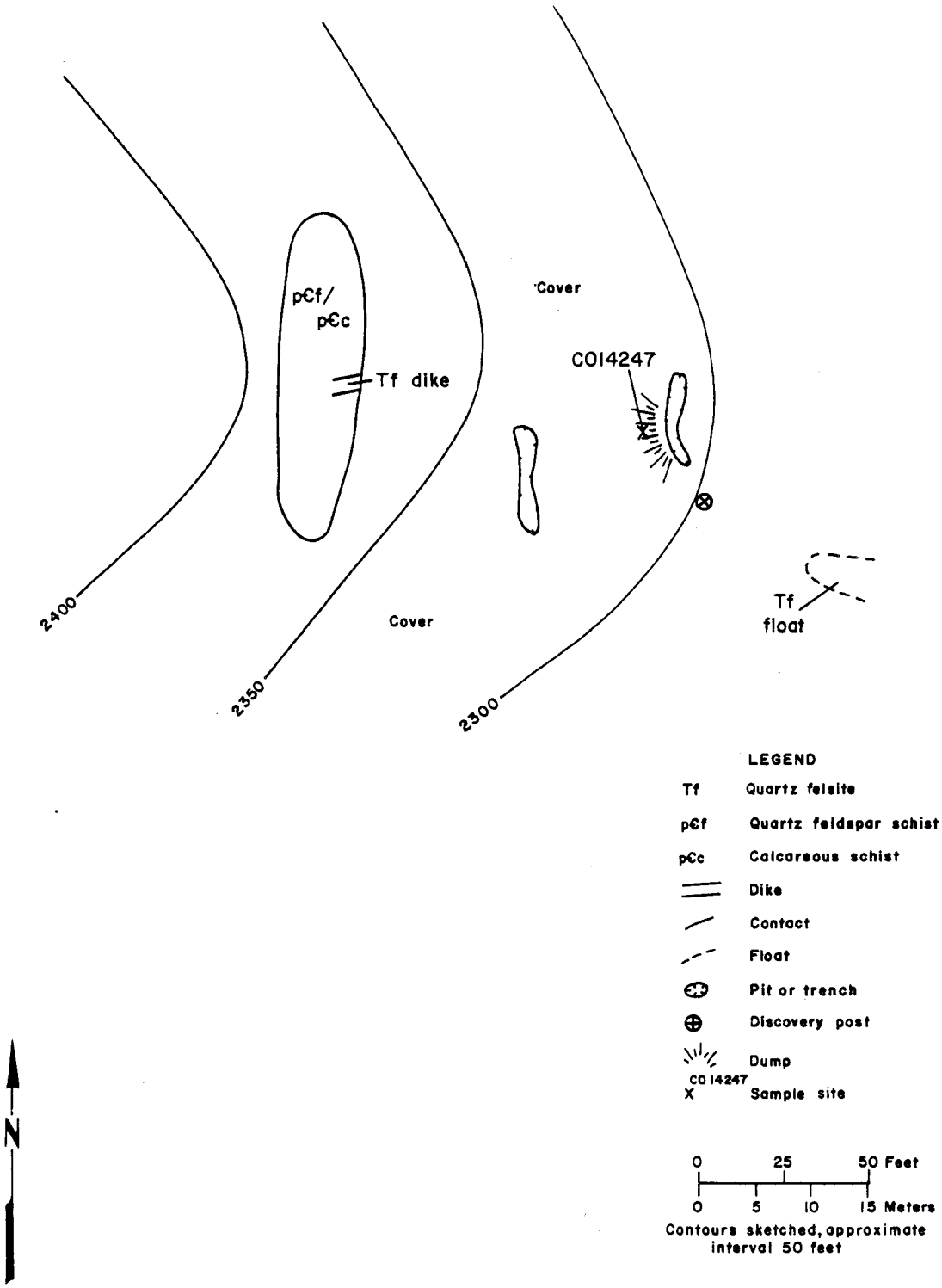
Development and Production: Development: two 10 ft. long sloughed open cuts. No production.

Remarks: Mineralization cannot be traced due to lack of exposure in area.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014247 | 50 | 75 | 195 | 1.8 | ND | ND | 55 | 3 | 25 |

References:




Occurrence No. 6 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Bunnell Mine (Neversweat) (Bonnell)

Study Area Kantishna Hills

Occurrence No. 7

Location: Eldorado Creek (3473420N, 334310E)

Occurrence Type Polymetallic precious-metal-bearing quartz, calcite vein

Examining Geologist TKH, JMK

Ownership: Covered by Comstock 1-8 unpatented lode claims controlled by Jim Fuksa.

Date(s) of Examination July 8, 1983

General Geology: Granitic intrusive and porphyry and inclusions of quartz muscovite schist.

Mineralization: Galena, tetrahedrite, stibnite, sphalerite, and minor chalcopyrite, boulangerite, jamesonite and scheelite in quartz, feldspar, carbonate veins.

Structure: Complexly faulted vein(s) trends E-W to N70$^{\circ}$E, dips 50-75$^{\circ}$ SE; vein is up to five feet thick, but not exposed on surface so horizontal and vertical extent can not be determined.

Development and Production: Five adits with 200 ft. of vertical relief; three were completely caved, one partially caved, and one was accessible in 1983. A shipment of lead-silver ore was believed to have been made from this deposit in 1955.

Remarks: Unusual for its igneous association, not found in the other deposits of the Kantishna District.

Analyses: See attached table.

References: Wells (1933), Saunders (1964), Morrison (1964), Seraphim (1960), Bundtzen and others (1976), Bundtzen (1981), Hawley (1976).

Bunnell Mine (Neversweat) (Bonnell)

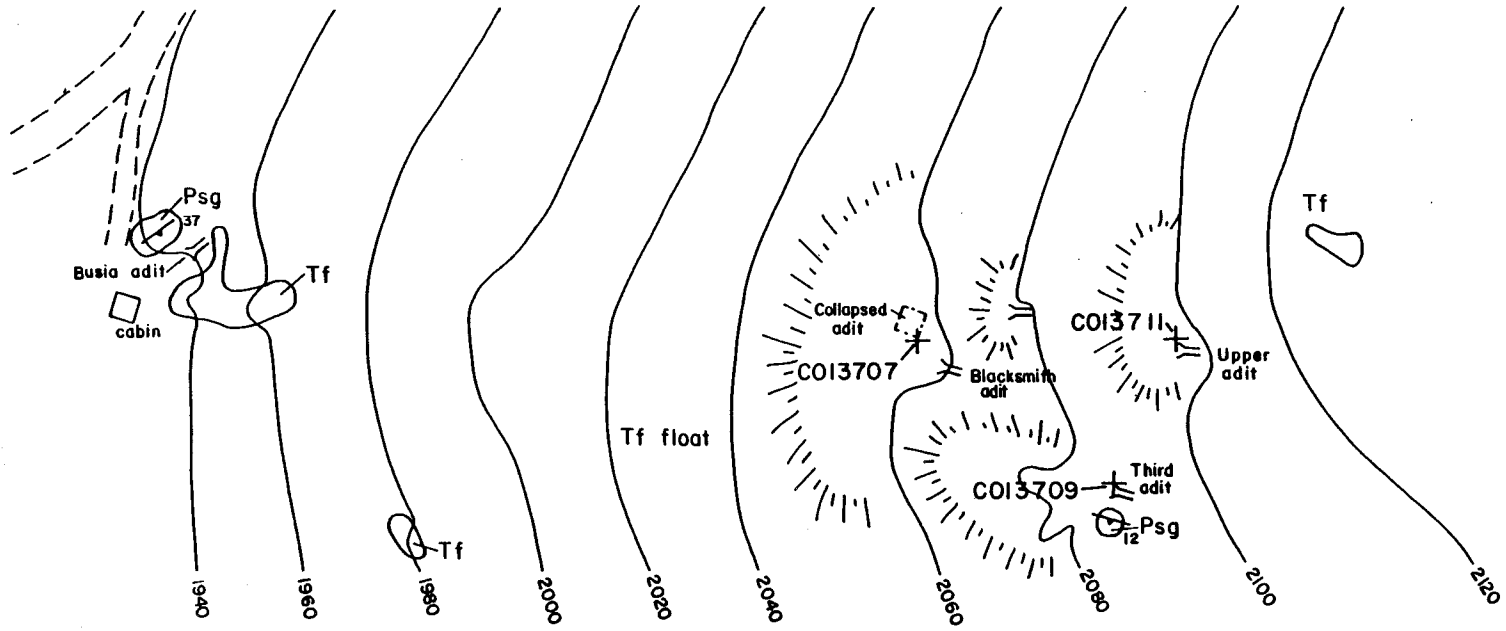
Salisbury & Dietz, Inc. study results:

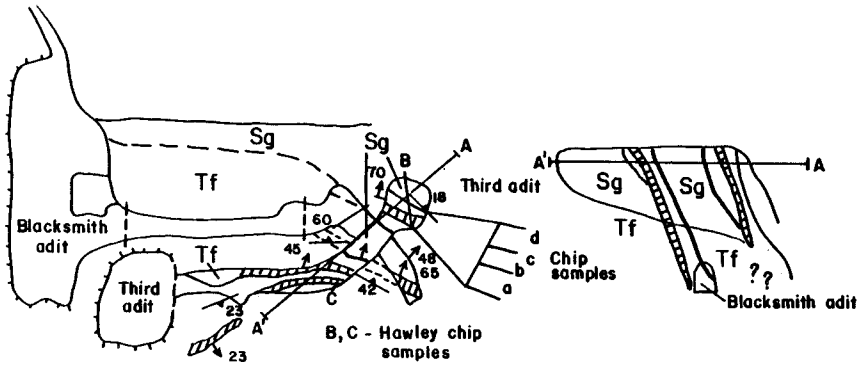
| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .145% | 13% | 17% | 18.6 oz/tn | .059 oz/tn | -- | .64% | 5 ppm | .295% | .0001% | ND | ND | Sample C013707. Multi-element and mineral character sample. |
| | .105% | 17% | 13.5% | 23.8 oz/tn | .029 oz/tn | ND | 2% | 3 ppm | .225% | .00021% | ND | ND | Sample C013709. Multi-element and mineral character sample. |
| | .0005% | .115% | .048% | 2 ppm | .78 ppm | ND | .0475% | ND | 2.05% | ND | ND | ND | Sample C013711. Multi-element and mineral character sample. |
| * | .918% | 10.3% | 4.8% | 19.2 oz/tn | tr | 65 ppm | .60% | <75 ppm | .086% | .0002% | 2.3 ppm | 0.5 ppm | Channel samples across 26 in. |
| * | .030% | 20.3% | 15.2% | 37.9 oz/tn | tr | 34 ppm | 1.23% | <75 ppm | .058% | .0002% | 2.4 ppm | 0.5 ppm | of sulfide vein in third |
| * | .050% | 10.0% | 5.1% | 22.7 oz/tn | tr | 86 ppm | 1.57% | <75 ppm | .085% | .0001% | 3.5 ppm | 1.3 ppm | adit. (See map) |
| * | .060% | 0.84% | 34.0% | 8.2 oz/tn | tr | 26 ppm | 0.60% | <75 ppm | .109% | .0003% | 3.5 ppm | 0.3 ppm | |
| ** | -- | -- | -- | 11.9 oz/tn | tr | -- | -- | -- | -- | -- | -- | -- | Grab samples. |
| *** | -- | -- | -- | 11.1 oz/tn | 0.04 oz/tn | -- | -- | -- | -- | -- | -- | -- | Grab samples. |
| *** | -- | -- | -- | 44.96oz/tn | 0.04 oz/tn | -- | -- | -- | -- | -- | -- | -- | Grab samples. |
| **** | -- | -- | -- | 17.2 oz/tn | tr | -- | -- | -- | -- | -- | -- | -- | Grab sample, eight in. vein, Neversweat, 30% sulfide. |
| **** | -- | -- | -- | 32.72oz/tn | 0.02 oz/tn | -- | -- | -- | -- | -- | -- | -- | Sulfide, (third adit) 50% sulfide in porphyry. |
| **** | -- | -- | -- | tr | tr | -- | -- | -- | -- | -- | -- | -- | 3 ft. channel, footwall of vein, 6 ft. channel. |
| **** | -- | -- | -- | 0.64 oz/tn | 0.04 oz/tn | -- | -- | -- | -- | -- | -- | -- | Neversweat tunnel, (third adit) 25% sulfide grab from caved cut |
| **** | -- | -- | -- | 14.04oz/tn | tr | -- | -- | -- | -- | -- | -- | -- | Across Eldorado Creek from Neversweat. |
| ***** | -- | 55.0% | -- | 74.0 oz/tn | 0.48 oz/tn | -- | -- | -- | -- | -- | -- | -- | "Sample of ore" (Wells, 1933, p. 376). |
| ****** | 3.5% | 27.2% | -- | 35.05oz/tn | 0.04 oz/tn | -- | 5.45% | -- | 0.02% | -- | -- | -- | Grab sample from float. |
| ****** | 0.06% | 16.0% | 7.04% | 15.39oz/tn | 0.02 oz/tn | -- | 0.51% | -- | 0.11% | -- | -- | -- | Grab sample from float. |
| ****** | 0.10% | 8.3% | 9.10% | 22.43oz/tn | 0.02 oz/tn | -- | 11.51% | -- | 0.02% | -- | -- | -- | Grab sample, shipping ore. |
| ****** | 0.05% | 4.3% | 24.20% | 2.47oz/tn | 0.02 oz/tn | -- | 0.94% | -- | 0.16% | -- | -- | -- | Grab sample, zinc-ore pile. |
| ****** | 0.03% | 2.2% | 1.45% | 0.76oz/tn | 0.24 oz/tn | -- | 1.01% | -- | 3.91% | -- | -- | -- | Grab sample, jamesonite-stibnite pile. |
| ****** | 0.21% | 32.9% | 5.15% | 14.48oz/tn | 0.01 oz/tn | -- | 3.97% | -- | 0.11% | -- | -- | -- | Sample from face of pit. |

Bunnell Mine (Neversweat) (Bonnell) Continued

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ******* | 0.054% | 2.00% | 18.5% | 13.5 oz/tn | -- | -- | 0.265% | -- | -- | -- | -- | -- | 2 foot chip (A on Bundtzen map) |
| ******* | 0.007% | 2.85% | 10.0% | 3.24oz/tn | tr | -- | 0.067% | -- | -- | -- | -- | -- | 3 foot chip (B on Bundtzen map) |

* Bundtzen and others, 1976, with additional data from Bundtzen, 1981.
** Saunders, 1964.
*** Morrison, 1964.
**** Seraphim, 1960.
***** Wells, 1933.
****** U. S. Bureau Mines, 1959, unpub.
******* Hawley, 1976.







Assays of chip samples

| | oz/ton | | % | | | |
|---|---|---|---|---|---|---|
| | Au | Ag | Cu | Pb | Zn | Sb |
| a | tr | 19.2 | .02 | 10.3 | 4.8 | .60 |
| b | tr | 37.9 | .05 | 20.3 | 15.2 | 1.23 |
| c | tr | 22.7 | .05 | 10.0 | 5.1 | 1.57 |
| d | tr | 8.2 | .06 | 0.8 | 34.0 | .40 |

Occurrence No. 7 - Bunnell Mine

LEGEND

| | |
|---|---|
| Tf | Granitic intrusive |
| Psg | Graphitic phyllite and chloritic phyllite |
| | Massive sulfide-sulfosalt vein fault and sulfide breccia, showing dip |
| | Fault, showing dip |
| 45 | Foliation, showing dip |
| | Adit |
| | Partially blocked adit |
| | Caved adit |
| | Edge of adit ramp |
| | Dump |

0 25 50 Feet

0 5 10 15 Meters

# OCCURRENCE REPORT FORM

NAME Upper Bunnell (Comstock No. 7 claim)

Study Area Kantishna Hills

Occurrence No. 8

Location: Eldorado Creek 1300 ft. south of Reinhart Creek (3473450N, 333800E)

Occurrence Type Fissure vein

Ownership: Jim Fuksa

Examining Geologist JMK

Date(s) of Examination July 12, 1983

General Geology: Quartz porphyry, limonite stained with disseminated pyrite.

Mineralization: Fractured, limonite stained zone two feet wide exposed on south side of creek. Massive and stringer stibnite. Disseminated pyrite. Minor boulangerite and sphalerite.

Structure: Fractured zone trends N65$^{o}$W and dips steeply.

Development and Production: None.

Remarks: Poorly exposed, strike and dip difficult to determine.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Bi ppm | Ag ppm | Au ppm | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014259 | .010 | 0.46 | 2 | 0.11 | ND | ND | .305 | ND | .034 | Select grab |

References: Bundtzen, 1981, p. 198.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 9

Location: Just east of Bunnell Mine (3474250N, 336550E)

Occurrence Type Quartz vein

Examining Geologist CJM

Ownership: No claims.

Date(s) of Examination July 7, 1983

General Geology: Ultramafic or basalt dike(?) and Birch Creek Schist.

Mineralization: Pyrite and arsenopyrite in vein outcrop and in float, chalcopyrite, tetrahedrite(?), azurite, and malachite. Gangue minerals are quartz, calcite, and siderite.

Structure: Exposure is poor however, the vein is apparently at the contact of the dike with the schist and strikes N35°E with a vertical dip. The length is unknown but two feet are exposed.

Development and Production: None.

Remarks: Weak mineralization in outcrop but float discovery is encouraging.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012603 | .830 | .077 | .110 | 40.1 | .005 | 6 | .910 | 3 | .065 | outcrop |
| C012604 | ND | .002 | .006 | .023 | .020 | ND | .042 | ND | .485 | float |

References:

# OCCURRENCE REPORT FORM

NAME Arizona Claims

Study Area Kantishna Hills

Occurrence No. 10

Location: Eldorado Creek near junction of Reinhart Creek. (3475700N, 337250E)

Occurrence Type

Examining Geologist Bundtzen

Ownership: Likely included within Bunnell claim group owned by Jim Fuksa.

Date(s) of Examination

General Geology: Host rock consists of a quartzose muscovite-chlorite schist.

Mineralization: Limonitic gossan zone trends N20-50°E. Poorly defined.

Structure:

Development and Production: None reported.

Remarks:

Analyses:

| Sample | Cu | Pb | Zn | Ag oz/tn | Au | Mo | Sb | W | As |
|---|---|---|---|---|---|---|---|---|---|
| Bundtzen | tr | tr | tr | 0.3 | tr | tr | -- | -- | -- |
| Bundtzen | tr | tr | tr | 0.3 | tr | tr | -- | -- | -- |

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Eagle's Den (Possibly Eldorado)

Study Area Kantishna Hills

Occurrence No. 11

Location: SE slope Eldorado Creek
(3475800N, 335750E main (upper) show)
(3476100N, 336600E lower extension)

Occurrence Type Quartz vein, stibnite

Examining Geologist CDH

Ownership: Jim Fuksa owns unpatented claims. There is confusion as to names and locations.

Date(s) of Examination July 7-8, 1983

General Geology: Birch Creek quartz-feldspar-mica schist. The gangue quartz is both massive and brecciated with open-space euhedral quartz filling.

Mineralization: Stibnite in quartz. Massive, coarse-grained.

Structure: Apparently a major normal fault with at least 20 ft. thickness of quartz at the upper show. Stibnite occurs near the footwall over a width of 3-5 ft. in a series of lenses and fracture planes which often overlap and pinch and swell from 1-12 in. The vein has an approximate attitude of N60°W, 55°NE.

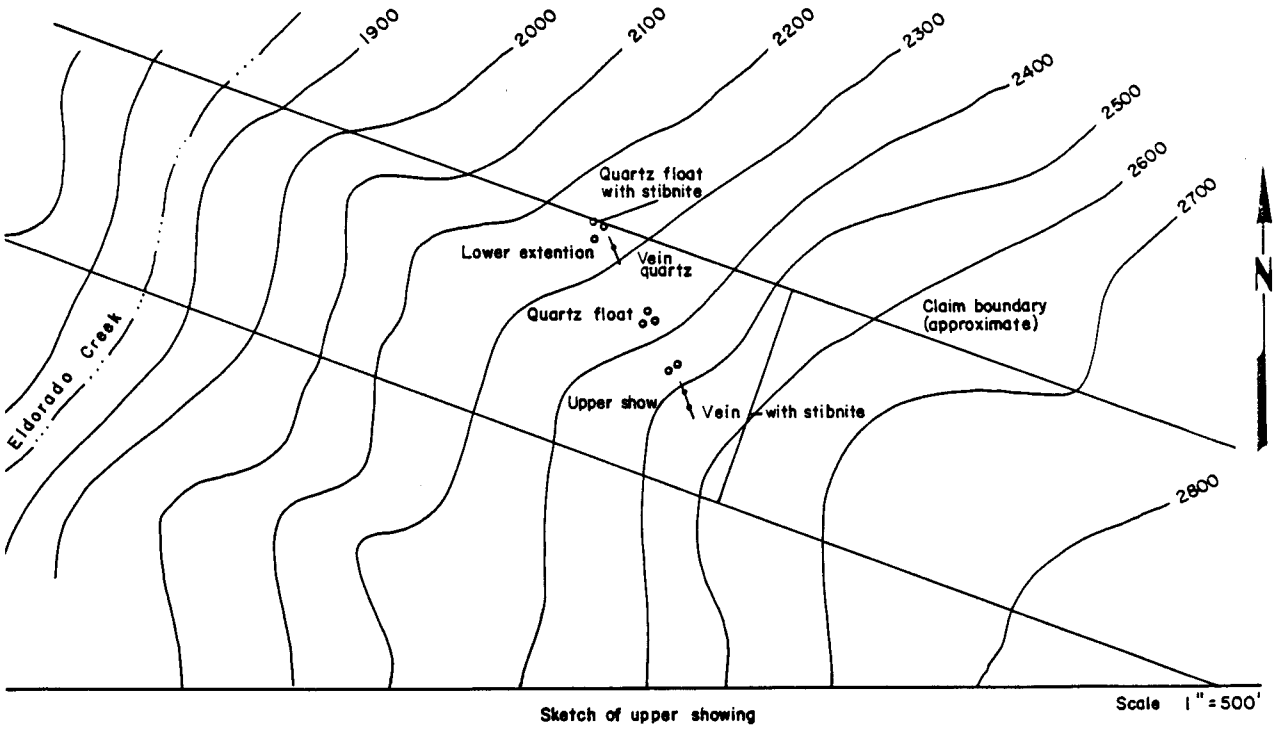
Development and Production: Upper show was possibly blasted; vein not completely exposed. No further exploration has been done along strike and there was no production.

Remarks: An outcrop of similar vein quartz and breccia about 400 ft. NW along strike with stibnite in float and the presence of a major fault structure suggests that this could be significant antimony deposit. Mineralization appears to coincide with late movement on an older fault.

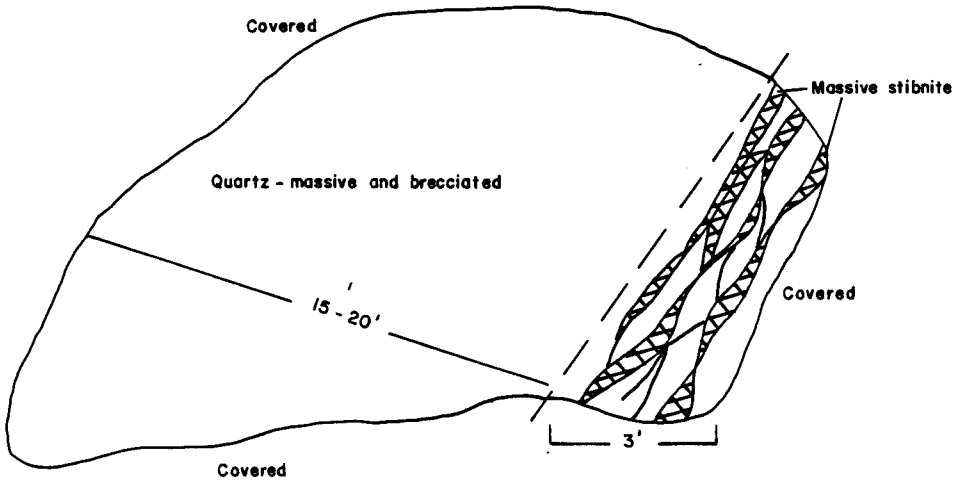
Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012601 | 0.014 | ND | ND | 2.76 | ND | ND | 44.3 | ND | 0.015 | |
| C012602 | ND | ND | ND | 0.2 | 0.011 | ND | 11.4 | ND | 0.066 | Sb float |
| Bundtzen | -- | -- | -- | 1.74 | -- | -- | 28.5 | 150 | -- | |

References: Bundtzen, 1981.
Hawley, 1976.




Sketch of upper showing
Cross section looking SE




Bundtzen sample

Occurrence No. 11 - Eagles Den

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 12

Location: Eldorado Creek (3476900N, 336830E)

Occurrence Type Disseminated

Examining Geologist CDH

Ownership: No claims.

Date(s) of Examination July 9, 1983

General Geology: Quartz porphyry intrusive. Slightly altered with disseminated pyrite and arsenopyrite also with occasional veinlets of massive pyrite. Very similar to Bunnell type intrusion.

Mineralization: Disseminated pyrite and arsenopyrite.

Structure: Fractured. This is a lone outcrop with no other rock types exposed nearby.

Development and Production: None.

Remarks: Has good potential for Bunnell-type ore bodies associated with this exposure. A geochemical soil sampling grid is recommended.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb % | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012606 | 15 | 230 | 570 | 3.6 | .02 | ND | .017 | ND | 95 | grab of host rock |

References:

# OCCURRENCE REPORT FORM

NAME Eldorado #3 Claim

Study Area Kantishna Hills

Occurrence No. 13

Location: Eldorado Creek (3477400N, 336200E)

Occurrence Type Quartz-stibnite vein

Examining Geologist CDH

Ownership: Unpatented claims held by Jim Fuksa.

Date(s) of Examination July 8, 1983

General Geology: Micaceous marble in Spruce Creek Sequence.

Mineralization: Stibnite, kermesite, and pyrite in quartz, and in silicified brecciated marble.

Structure: Appears to be small fault; there is much slumping over exposure so true attitude, width, and extent could not be determined.

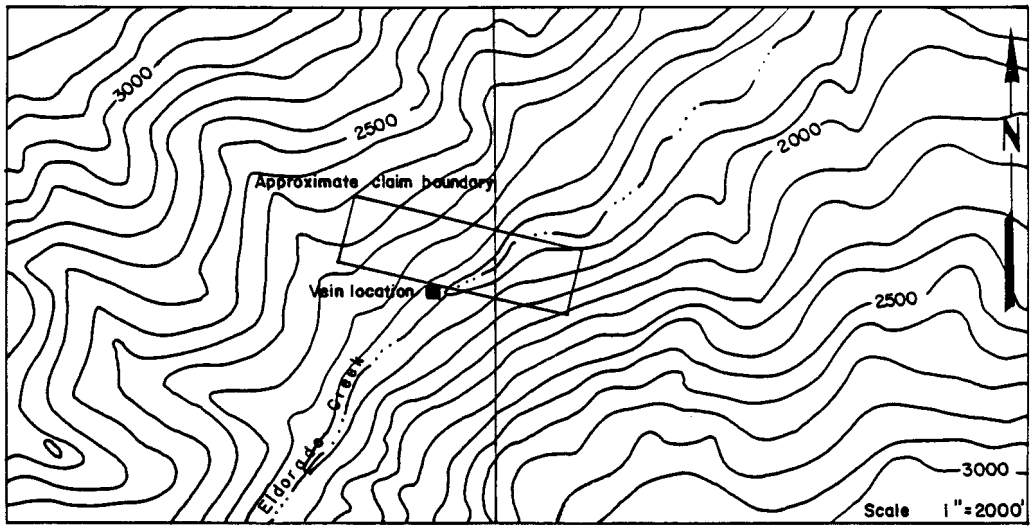
Development and Production: None.

Remarks: Appears to have limited potential for a significant mineral deposit; however, a little trenching could be revealing. Some confusion exists as to whether the show is on Eldorado claims or Eagle's Den claims.

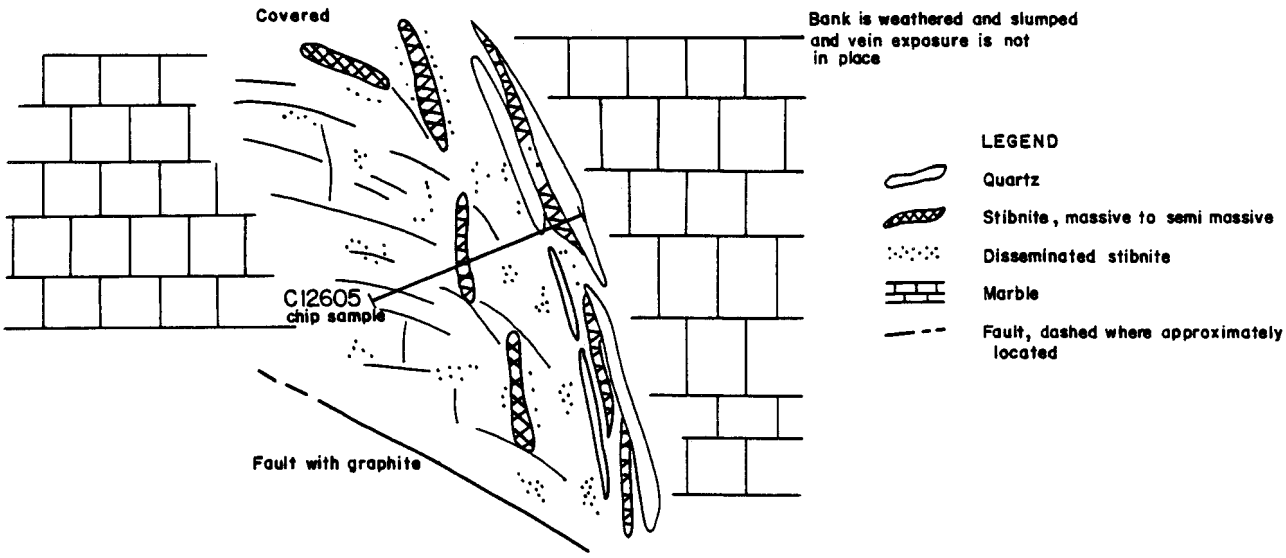
Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo | Sb % | W | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012605 | ND | ND | .004 | .30 | .005 | ND | 3.2 | ND | .015 | 2' chip of vein |
| Bundtzen | .002 | .003 | .001 | .81 | ND | -- | 14.1 | -- | -- | |

References: Bundtzen, 1981.




Topography from U.S.G.S.




Sketch of prospect looking northwest

Occurrence No. 13 - Eldorado no. 3

# OCCURRENCE REPORT FORM

NAME Alpha Prospect

Study Area Kantishna Hills

Occurrence No. 14

Location: Alpha Ridge (348075N, 334800E)

Occurrence Type Quartz, siderite, galena vein

Examining Geologist JMK

Ownership: Virginia City 1 and 2 unpatented claims owned by Jim Fuksa.

Date(s) of Examination July 5-6, 1983

General Geology: NW striking, SW dipping Birch Creek quartz-feldspar schists with minor interbedded quartzites.

Mineralization: A total of three veins 1.6-9.8 ft. thick exposed for 327 ft. along strike. Mineralogy: galena, jamesonite, stibnite, sphalerite, pyrite, and arsenopyrite. Minor tetrahedrite and boulangerite. High siderite content. (Bundtzen, 1981)

Structure: N70°E vein orientation (Bundtzen, 1981). The Alpha Ridge claim, 1700 ft. to the NE may be an extension of this mineralized zone.

Development and Production: A caved adit, 20 x 150 ft. open cut, bunk house and tool shop. An overgrown bulldozer trail leads up to the property from Eldorado Creek. Production: 25 tons. In 1921, 10 tons of ore assayed 200 oz/ton Ag (Bundtzen, 1981, p. 199 and Plate 3).

Remarks: The open cut is sloughed and no mineralization was found in place.

Analyses: See attached table.

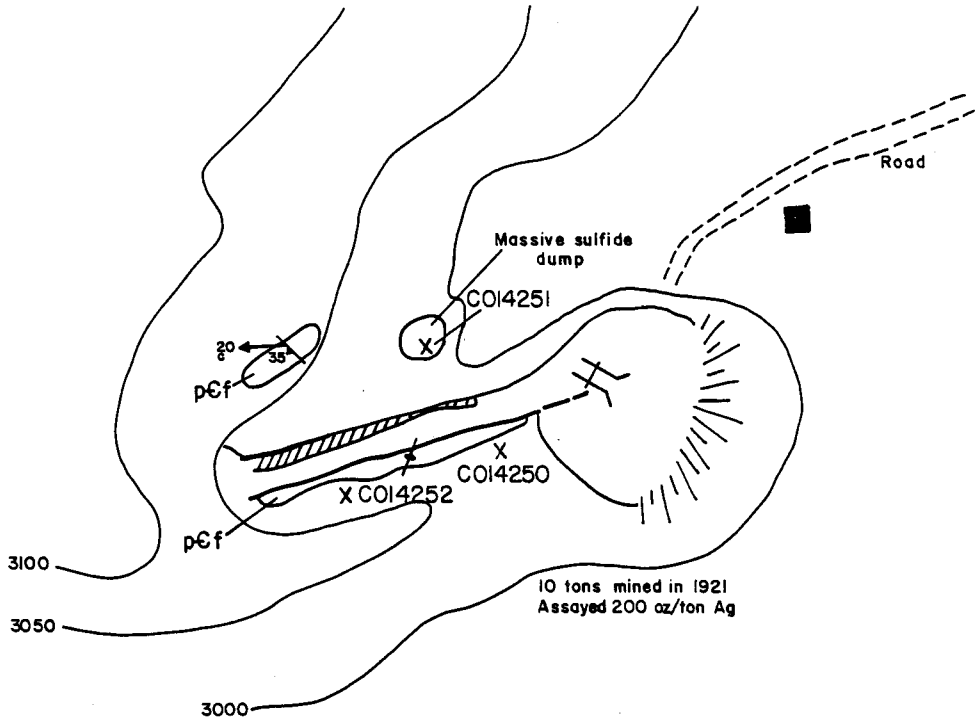
References:
Wells, 1933, p. 375.
Davis, 1922, p. 131.
Bundtzen, 1976, 1981.
Hawley, 1977.
Seraphim, 1960.

Alpha Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.65% | 7.85% | 6.95% | 1640 ppm | 0.13 ppm | ND | 4.35% | 6 ppm | 0.44% | .0156% | -- | -- | Sample CO14250. Select dump sample. |
| | 1.80% | 6.20% | 2.00% | 163.9 ppm | 0.025ppm | ND | 5.50% | ND | 0.88% | .009% | -- | -- | Sample CO14251. Select dump sample. |
| | .002% | .008% | .015% | .05 ppm | 4.400ppm | 4 ppm | .011% | 4 ppm | 0.004% | ND | -- | -- | Sample CO14252. Select dump sample. |
| * | .10% | 2.02% | 5.88% | 17.50 oz/tn tr | | 18 ppm | 1.22% | 75 ppm | 0.90% | .004% | 2.8 ppm | 0.5 ppm | Grab samples from caved trenching. |
| * | .40% | 15.40% | 1.05% | 20.20 oz/tn tr | | 5 ppm | 9.30% | 75 ppm | 2.65% | .001% | 3.2 ppm | 0.6 ppm | |
| * | .54% | 18.70% | 2.89% | 83.82 oz/tn tr | | 4 ppm | 8.52% | 75 ppm | 0.54% | .006% | 11.0 ppm | 1.5 ppm | |
| * | .57% | 8.65% | 2.75% | 62.70 oz/tn tr | | ND | 4.36% | ND | ND | .003% | 20.0 ppm | 3.0 ppm | |

* Bundtzen, 1976, 1981.




LEGEND

| | |
|---|---|
| pЄf | Birch Creek quartz-feldspar schist |
| | Fault and/or shear zone |
| 35 | Foliation - showing dip |
| 20 | Crenulation - showing plunge |
| | Pit or trench |
| | Dump |
| | Building |
| X C014251 | Sample site |

0 45 90 Feet

0 5 15 25 Meters

Contours sketched, approximate interval 50 feet

Geology by Bundtzen (1981) with additions

Occurrence No. 14- Alpha Mine

# OCCURRENCE REPORT FORM

**NAME** Alpha Ridge Prospect

**Study Area** Kantishna Hills

**Occurrence No.** 15

**Location:** Alpha Ridge, 3000 ft. NE of Alpha Mine (3481650N, 336500E)

**Occurrence Type** Fault zone with quartz

**Examining Geologist** CDH

**Ownership:** No claims.

**Date(s) of Examination** July 5-6, 1983

**General Geology:** Birch Creek quartz-feldspar-mica schist with minor quartzite and graphitic schist interbeds.

**Mineralization:** Pyrite in quartz and wall rock.

**Structure:** Possible fault zone in saddle about 25 ft. wide with quartz on NW side. Very poor exposure; no mineralization other than pyrite and iron oxides was seen and no definite structures were defined. Possible N60°E strike.

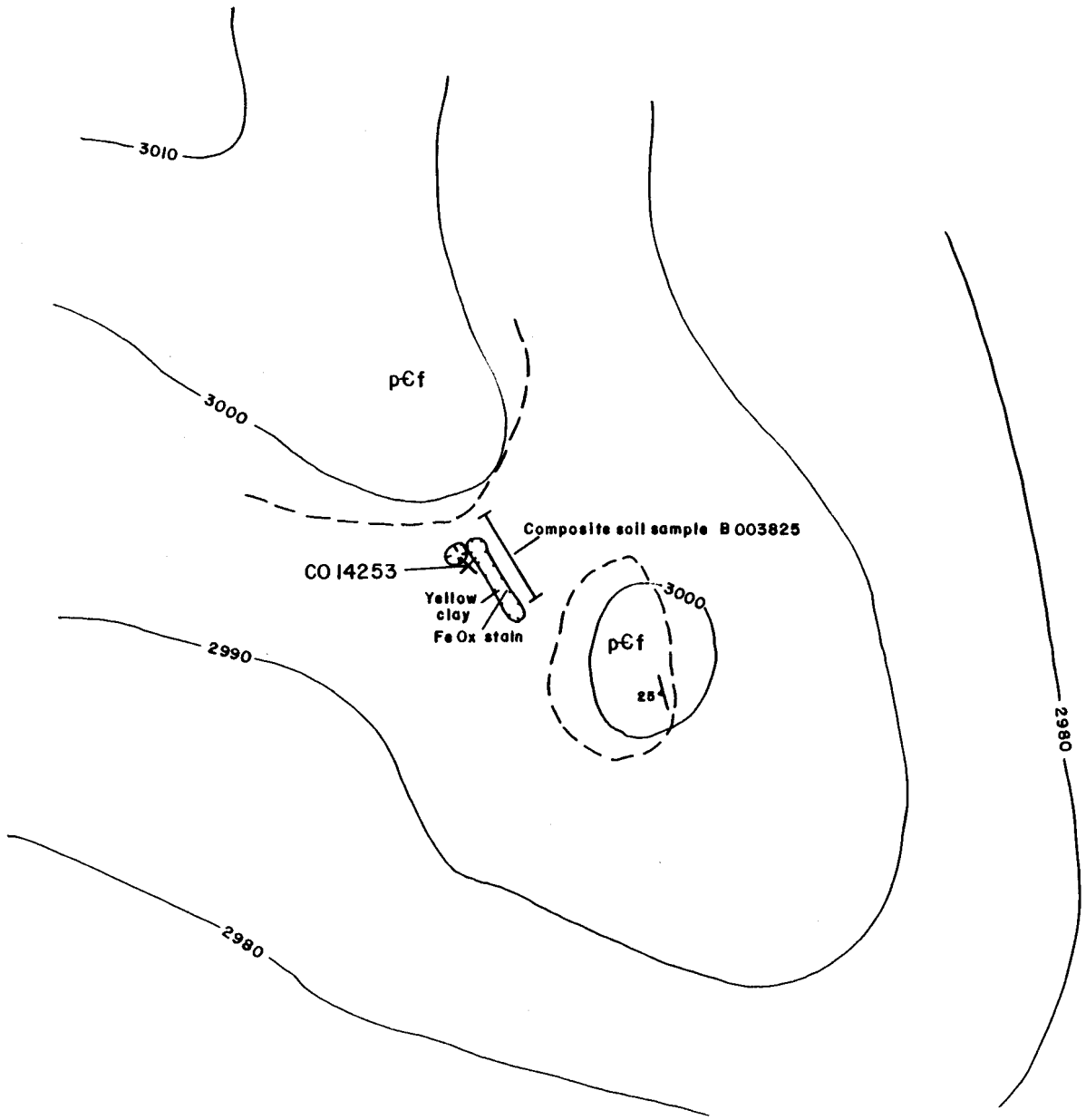
**Development and Production:** Several small shallow slumped trenches. No production.

**Remarks:** Possible extension of Alpha prospect structure; needs exploration, especially to SE towards Alpha prospect.

**Analyses:** Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014253 | 10 | 15 | 20 | .6 | .24 | ND | 18 | ND | 480 | rock sample |
| B003825 | 100 | 20 | 400 | 1.2 | .09 | ND | 130 | 3 | 2700 | soil sample |
| Bundtzen | .004% | .001% | .033% | tr | tr | 41 | -- | -- | -- | |
| Hawley | -- | -- | -- | 8.4 | 1.2 | -- | -- | -- | -- | rock sample |

**References:**
Bundtzen, 1981.
Hawley, 1976.




LEGEND

p€f Quartz-feldspar-mica schist

25 Foliation attitude

CO14253 X Sample site

N

0 10 20 Feet

0 2 4 6 Meters

Contours sketched, approximate interval 10 feet

Occurrence No. 15 - Alpha Ridge

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 16

Location: Northwest Flank Alpha Ridge (33250E, 3484750N)

Occurrence Type Disseminated sulfide

Examining Geologist RH, SF

Ownership: No current claims.

Date(s) of Examination July 29, 1983

**General Geology:** Northeast pits are hosted in a heavily hematite stained metafelsite ($p\epsilon fq$). Southeast pits occur in interbedded garnet-chlorite-quartz graphitic schists and quartzite. A ferricrete unit is exposed in a nearby ravine. Mineralization is best developed in the quartzite unit.

**Mineralization:** Disseminated pyrite with minor galena and possible tetrahedrite. Small amounts of malachite. Disseminated graphite in southwest pits. Mineraliation not identified in northeast pits.

**Structure:** Foliation varies from N10°W to N35°E in general area of the prospect. Dips are to the west at 40-50°. Mineralization appears to be associated with shear zone which caused significant brecciation of the host rocks.

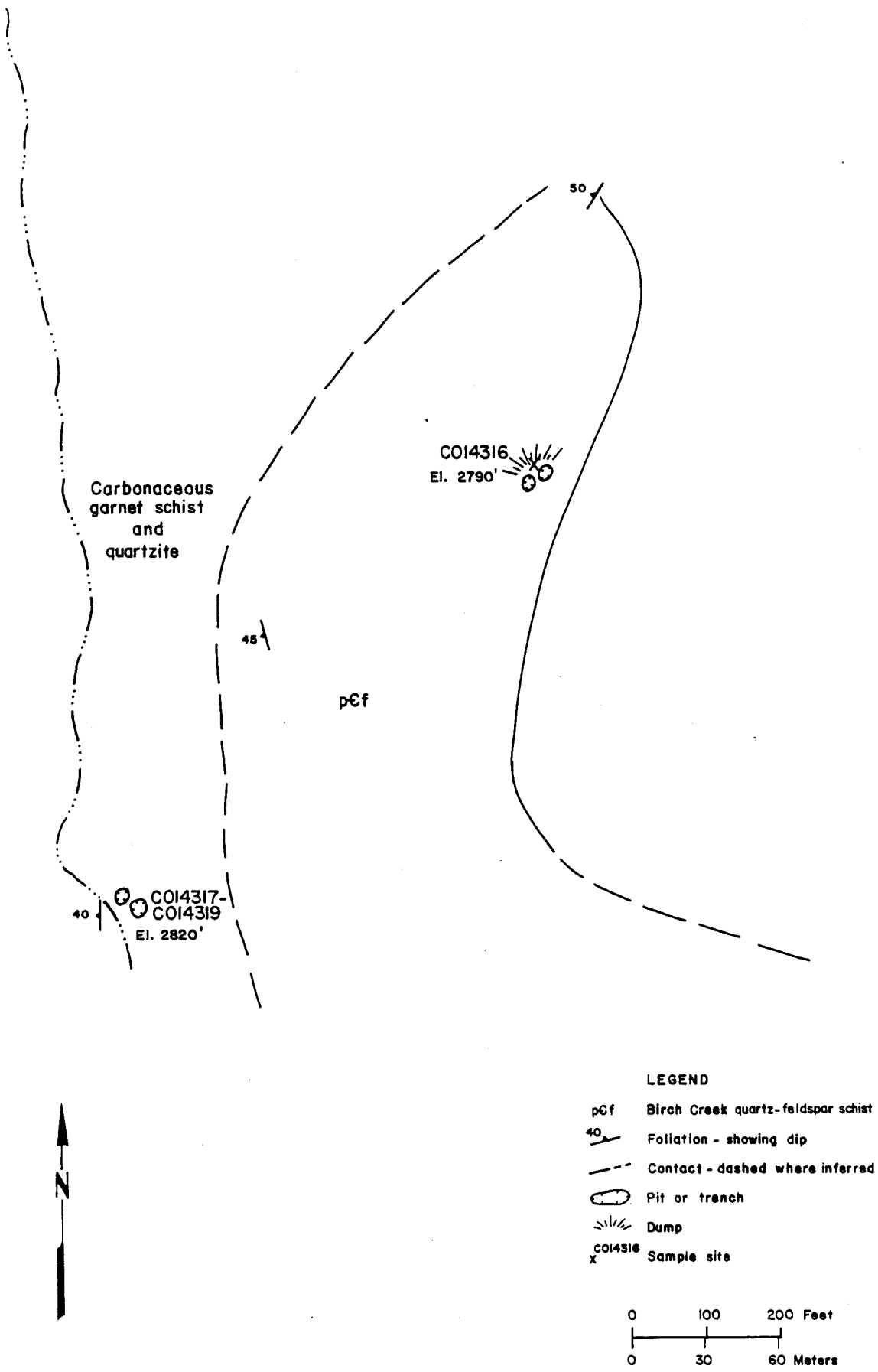
**Development and Production:** No production. Two prospect pits located in a small ravine near a small pile of logs at an elevation of approximately 2,820 ft. (See attached figure.) Two additional prospect pits occur 800 ft. northeast of the first.

**Remarks:** A kill zone is located approximately 1200 ft. north of the southwest prospect pits 150 ft. lower in elevation.

**Analyses:** Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb ppm | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014317 | .048 | ND | ND | ND | ND | 105 | ND | 8 | ND |
| C014318 | .175 | .002 | .039 | ND | ND | 16 | ND | 6 | .004 |

**References:**




Occurrence No. 16 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Whistler Claim (patented M.S. 1704)

Study Area Kantishna Hills

Occurrence No. 17

Location: East end Alpha Ridge (3489200N, 335800E)

Occurrence Type Quartz-silver vein

Examining Geologist JMK

Ownership: Patented claims: Mineral Survey No. 1704; owner Kantishna Mines Ltd. (Leo Mark Anthony, President)

Date(s) of Examination July 2, 1983

General Geology: Birch Creek micaceous schistose quartzite wallrocks.

Mineralization: No significant mineralization found on this claim.

Structure:

Development and Production: One small trench in rubble near east end of claim.

Remarks: Lies adjacent to Bright Light claim. See Occurrence No. 18 for description.

Analyses:

References: Hawley, 1977.
Moffitt, 1933.

# OCCURRENCE REPORT FORM

NAME Bright Light Claim (patented MS1704)

Study Area Kantishna Hills

Occurrence No. 18

Location: East end Alpha Ridge (3489200N, 335800E)

Occurrence Type ~~Quartz-silver vein~~

Examining Geologist JMK

Ownership: Patented claims: Mineral Survey No. 1704. Owner: Kantishna Mines Ltd. Leo Mark Anthony, President.

Date(s) of Examination July 8, 1983

General Geology: Birch Creek micaceous-schistose quartzite wall rocks.

Mineralization: Trench and dump float: limonite-stained quartz vein float with 1-2% finely disseminated pyrite cubes. Minor arsenopyrite and trace sphalerite. Tan-colored carbonate vein gangue float.

Structure: No outcrop of mineralization located but trend of open cuts indicate a N45$^{o}$E trend of mineralized zone.

Development and Production: Development consists of a 6 x 15 ft. trench four feet deep, one 20 ft. long trench, and a short collapsed adit. No known production.

Remarks: The upper trench (see attached map) contains no exposed mineralization. The lower trench and adit are sloughed in. The small size of the adit dump indicates the adit is quite short.

Analyses: See attached table.

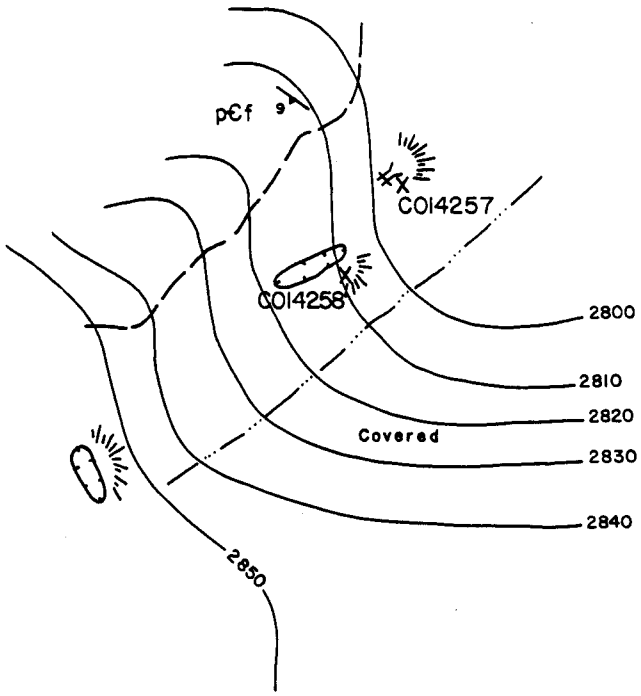
References: Hawley, 1977.
Moffitt, 1933.

Bright Light Claim (patented M.S. 1704)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .055% | .480% | .140% | 85 ppm | 1.1 ppm | ND | .505% | ND | .520% | 1 ppm | -- | -- | Sample C014257 |
| | .052% | .260% | .145% | 255 ppm | 2.6 ppm | ND | .092% | ND | 1.90% | 2ppm | -- | -- | Sample C014258 |
| * | -- | 12.0% | .195% | 14 ppm | 0.04ppm | -- | -- | -- | -- | -- | -- | -- | Grab samples. |
| * | -- | 0.38% | .265% | 3.21 ppm | 0.07ppm | -- | -- | -- | -- | -- | -- | -- | Grab samples. |
| * | -- | 0.5% | .355% | 2.19 ppm | 0.05ppm | -- | .130% | -- | -- | -- | -- | -- | Grab samples. |

* Hawley, 1977.




LEGEND

p€f Birch Creek Schist quartz-feldspar schist

9 Foliation - showing dip

Contact - dashed where approximate

Pit or trench

Caved adit

C014257 Sample site

N

0 25 50 Feet

0 5 10 15 Meters

Contours sketched, approximate interval 10 feet

Occurrence No. 18 - Whistler and Bright Light claims area

# OCCURRENCE REPORT FORM

NAME Iron Dome Skarn

Study Area Kantishna Hills

Occurrence No. 19

Location: Iron Dome, Eldorado Creek (3481400N, 339100E)

Occurrence Type Disseminated sulfides in skarn.

Examining Geologist CDH

Ownership: No claims.

Date(s) of Examination July 5-6, 1983

General Geology: Host rocks are banded marbles with minor phyllite and quartzite. The marble shows varying degrees of skarn development possibly related to original $SiO_2$ content in the sediments. Banding (1-8 in. thick) seems to be caused by color, grain size, and quartz content differences. Numerous quartz-calcite-feldspar veinlets crosscut host rocks.

Mineralization: Spotty, disseminated pyrite, chalcopyrite, and pyrrhotite. Skarn gangue minerals consist of garnet, clinozoisite, idocrase, microcline and locally serpentine.

Structure: Skarn development apparently overprints regional metamorphism. A small basic intrusive located near the lower contact of the skarn section does not seem to affect skarn development. The skarn seems to be strata-bound as non-tactized marbles have been located both above and below the Iron Dome skarn. Sulfides occur in spotty concentrations and in disseminations in siliceous beds and phyllitic units.

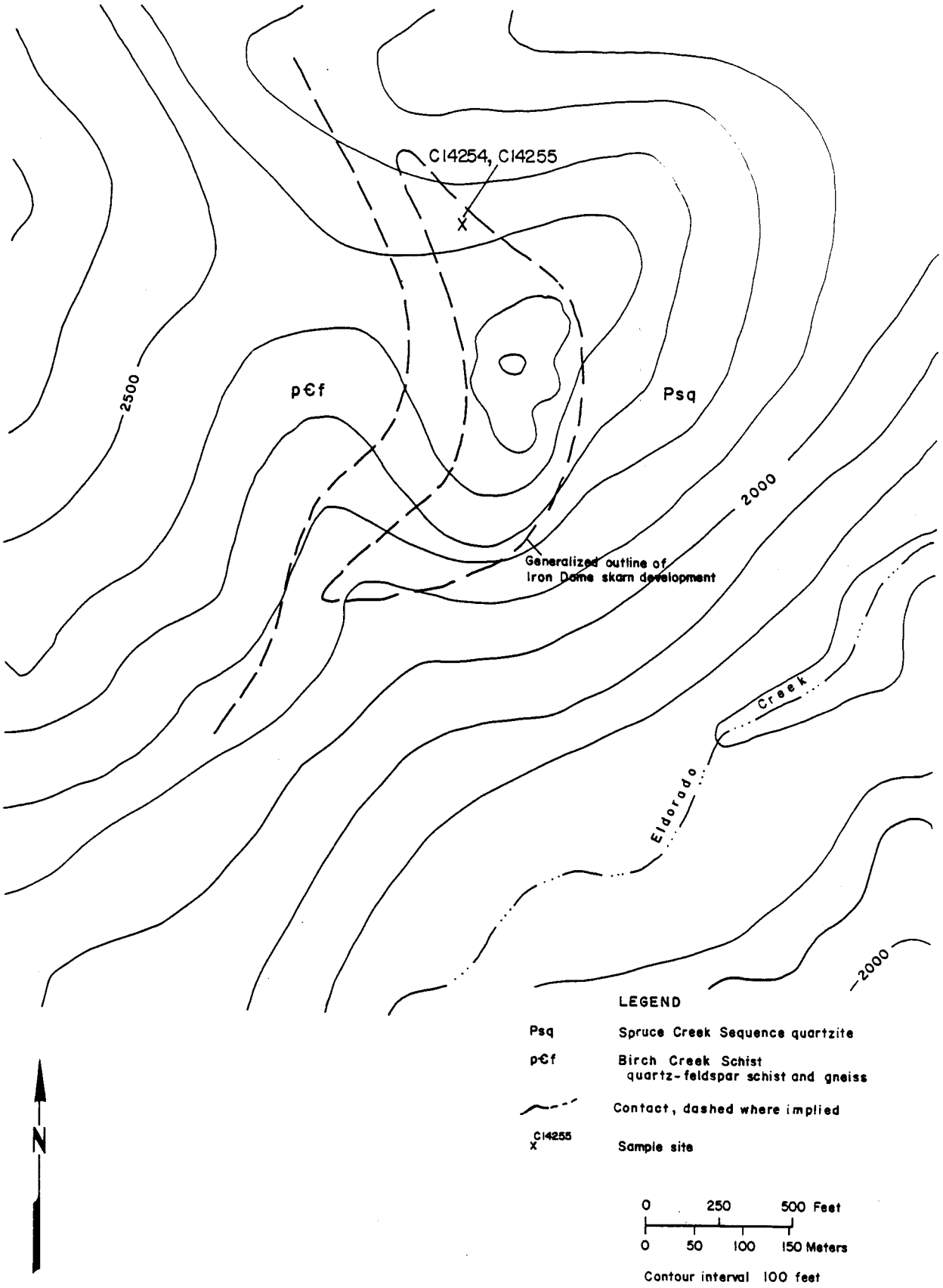
Development and Production: None.

Remarks: Outcrop exposure is good. Economic potential for the Iron Dome skarn is limited. Mineral concentrations are far below ore grade and size and the skarn itself is discontinuous and unpredictable.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014254 | 270 | 25 | 245 | 0.2 | ND | ND | 8 | ND | 30 |
| C014255 | 200 | ND | 20 | ND | ND | ND | 4 | ND | ND |
| Bundtzen | .044% | .004% | .008% | .01 | ND | -- | -- | <75 | -- |

References: Bundtzen, 1981.




Occurrence No. 19 - Iron Dome Skarn

# OCCURRENCE REPORT FORM

**NAME** Unnamed Occurrence

**Study Area** Kantishna Hills

**Occurrence No.** 20

**Location:** Exposed on S. Canyon wall in Eldorado Creek narrow 3/4 mi. above its junction with Moose Creek. (3480000N, 340500E)

**Occurrence Type** Quartz vein

**Examining Geologist** JMK

**Ownership:** None. No claims.

**Date(s) of Examination** June 29, 1983

**General Geology:** Gently-dipping Spruce Creek gray quartzites.

**Mineralization:** Average 3-ft.-wide quartz vein with a 3/4-in.-wide vuggy calcite vein on its east margin. Mineralogy: pyrite, arsenopyrite, siderite, galena, sphalerite. Contains wall rock breccia fragments. Small parallel quartz veinlets cut quartzite wall rocks.

**Structure:** Vein trends N17°E, dips 75°E.

**Development and Production:** None.

**Remarks:** Approximately 20 ft. vertical height and 10 ft. exposed strike length.

**Analyses:** Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014246 | .002 | .027 | .09 | 7.2ppm | .34ppm | 2 | .002 | 6 | .25 | chip 3' wide qz. vn |
| C014305 | .002 | .028 | .945 | .04 | .042 | ND | .060 | ND | .69 | rock chip |
| C014306 | ND | .018 | .260 | .04 | .028 | ND | .060 | ND | .32 | rock chip |

**References:** Bundtzen, 1981, p. 200 and 214.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 21

Location: Eldorado Creek (3480500N, 340400E)

Occurrence Type Strata-bound sulfides

Examining Geologist CDH

Ownership: No lode claims.

Date(s) of Examination July 19, 1983

General Geology: Spruce Creek calcareous quartz-muscovite schists.

Mineralization: Massive to semi-massive pyrite.

Structure: Several strata-bound lenses of semi-massive to massive pyrite from 1-18 in. thick and up to possibly 50 ft. long.

Development and Production: None.

Remarks: Very small occurrence of massive sulfides but has interesting connotations.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb ppm | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C012610 | .004 | .004 | ND | ND | .005 | ND | ND | 3 | .027 |

References:

# OCCURRENCE REPORT FORM

NAME Lucky Tuesday Prospect

Study Area Kantishna Hills

Occurrence No. 22

Location: Busia Mountain (3461260N, 336720E)

Occurrence Type Stibnite quartz vein

Examining Geologist TKH

Ownership: Two unpatented claims (Lucky Tuesday 1 and 2) held by Jim Fuksa.

Date(s) of Examination July 11, 1983

General Geology: Slightly reddish weathering quartz sericite schist of the Birch Creek schist.

Mineralization: Massive stibnite and quartz-stibnite seen in float.

Structure: Trench is slumped; vein not seen in place.

Development and Production: Slumped shallow trenches; no known production.

Remarks:

Analyses: See attached table.

References: Bundtzen, 1981.
Bundtzen and others, 1976.

Lucky Tuesday Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .004% | ND | .09% | .18 oz/tn | .006 oz/tn | ND | 54.2% | ND | .018% | ND | -- | -- | Sample C013752. Consists of high grade. Collected from pile near pit. |
| * | .006% | .31% | .01% | .21 oz/tn | .07 oz/tn | 39 ppm | 46.5% | -- | .23% | .001% | -- | 3.3 ppm | Grab of high grade from pit. |

* Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 23

Location: (3477700N, 342380E)

Occurrence Type Shear zone with quartz vein

Examining Geologist CDH

Ownership: No claims.

Date(s) of Examination July 13, 1983

General Geology: Birch Creek Schist.

Mineralization: Pyritic wall rocks and quartz-pyrite vein.

Structure: Possible thrust zone.

Development and Production: None.

Remarks: Red and white precipitate heavily stains the creek beneath this area down to Moose Creek.
Await sample results.

Analyses:

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 24

Location: Mouth of Eldorado Creek (3481100N, 340750E)

Occurrence Type Quartz-breccia vein

Examining Geologist CDH

Ownership: No lode claims.

Date(s) of Examination July 14, 1983

General Geology: Spruce Creek quartzite. General attitude: N49°W, 20°SW.

Mineralization: Pyrite and galena in quartz and brecciated quartzite.

Structure: Vein occurs at or near crest of Kantishna anticline which trends N40°E in this area. The vein trends N25°E and no dip was obtainable but appears steep. The vein is at least three feet wide but is covered by overburden. Strike extensions not traceable due to overburden.

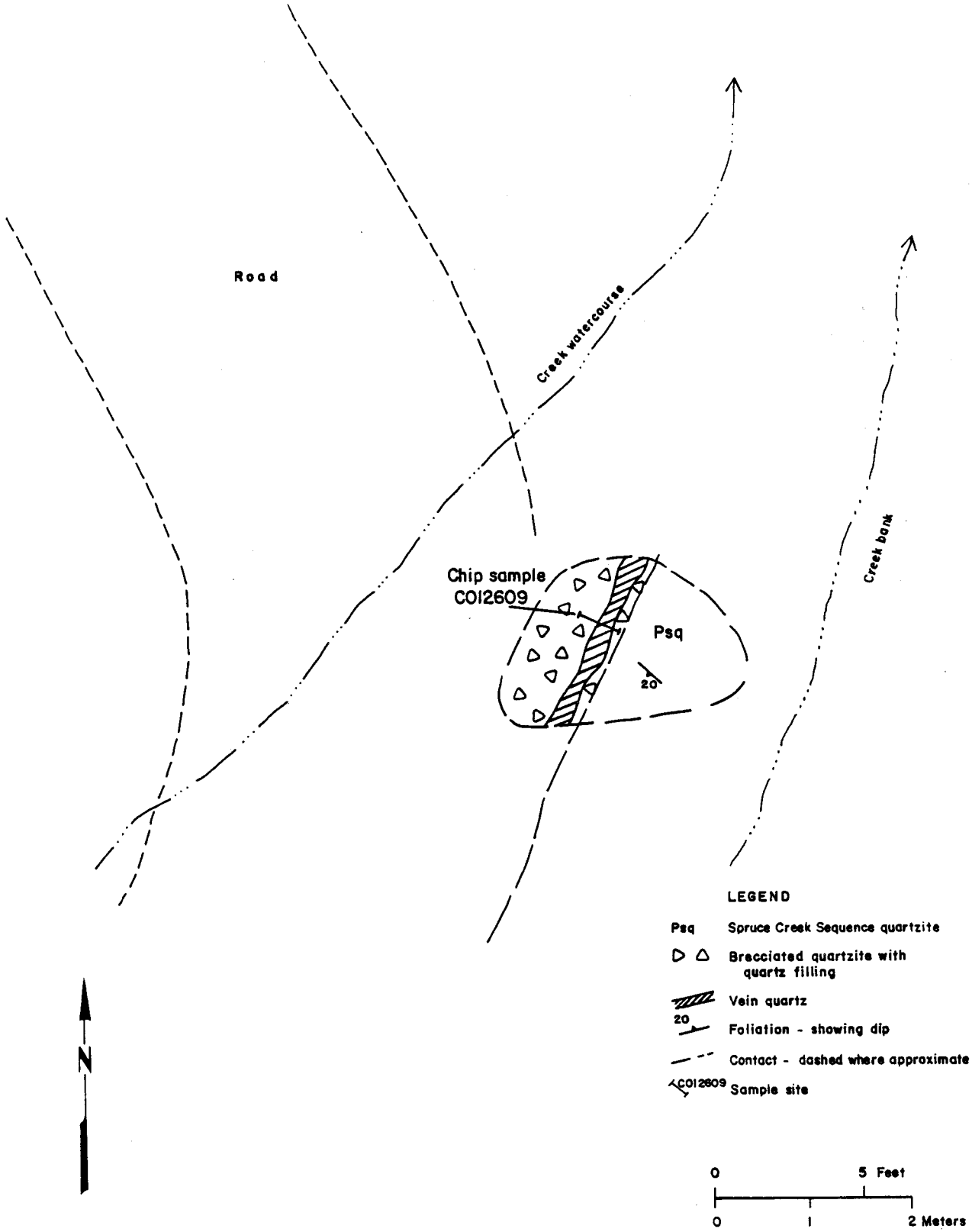
Development and Production: None. New occurrence. Vein outcrops in the road in creek bottom.

Remarks: Low grade mineralization at exposure.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012609 | .002 | .235 | .11 | .16 | .01 | ND | .028 | ND | .465 | 1.5 ft. chip on SE wall of vein |

References:




Occurrence No. 24 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 25

Location: Eldorado Creek near Iron Dome (3482100N, 340850E)

Occurrence Type Quartz vein

Examining Geologist Bundtzen

Ownership:

Date(s) of Examination

General Geology: Marble host rock of the Spruce Creek Sequence.

Mineralization: Quartz gangue contains pyrite, sphalerite and minor marcasite. Disseminated arsenopyrite present in wall rock.

Structure: Mineralization strikes N70°E and dips 10°SE.

Development and Production: None recorded.

Remarks: Unexplored occurrence.

Analyses: Bundtzen (1981) reports three samples with 0.02-0.1 oz/ton Ag, minor amounts of Cu, Pb, Mo and Sb, and up to 0.32% Zn.

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Lucky Strike

Study Area Kantishna Hills

Occurrence No. 26

Location: NW¼ Sec. 13, T16S, R18W
Western end of Quigley Ridge
(3485250N, 343025E

Occurrence Type Quartz vein with sulfides and Ag/A

Examining Geologist CJM

Ownership: Patented claim held by
Kantishna Mines Ltd.
(Leo Mark Anthony, President)

Date(s) of Examination June 1983

General Geology: Spruce Creek Sequence metafelsite.

Mineralization: Quartz veins with sulfides

Structure: Two veins trending NE, dipping steeply south.

Development and Production: Short adit and several open cuts now all collapsed. Two veins reportedly exposed about 100 ft. apart. Veins are apparently about six and eight feet wide.

Remarks:

Analyses: Davis reports the following assays:

| | |
|---|---|
| Vein exposed by adit: | 0.04 oz/tn Au and 6.4 oz/tn Ag |
| | 0.05 oz/tn Au and 10 oz/tn Ag |
| Vein exposed in trenches: | 0.04 oz/tn Au and 1.4 oz/tn Ag |

References:
Davis, 1922.
Bundtzen, 1981.
Wells, 1933.

# OCCURRENCE REPORT FORM

NAME Galena Mine

Study Area Kantishna Hills

Occurrence No. 27

Location: West end of Quigley Ridge
SE¼, Sec. 11, T16S, R18W
(3485930N, 342020E)

Ownership: Estate of Charles McGonagal

Occurrence Type Silver bearing, sulfide-quartz vein

Examining Geologist CJM

Date(s) of Examination July 1983

General Geology: Vein cuts Spruce Creek metafelsite.

Mineralization: Quartz-siderite vein with galena, arsenopyrite, pyrite, sphalerite, tetrahedrite.

Structure: Vein approximately six feet thick trends N45°E, dips 65°SE. Fault gouge occurs with vein.

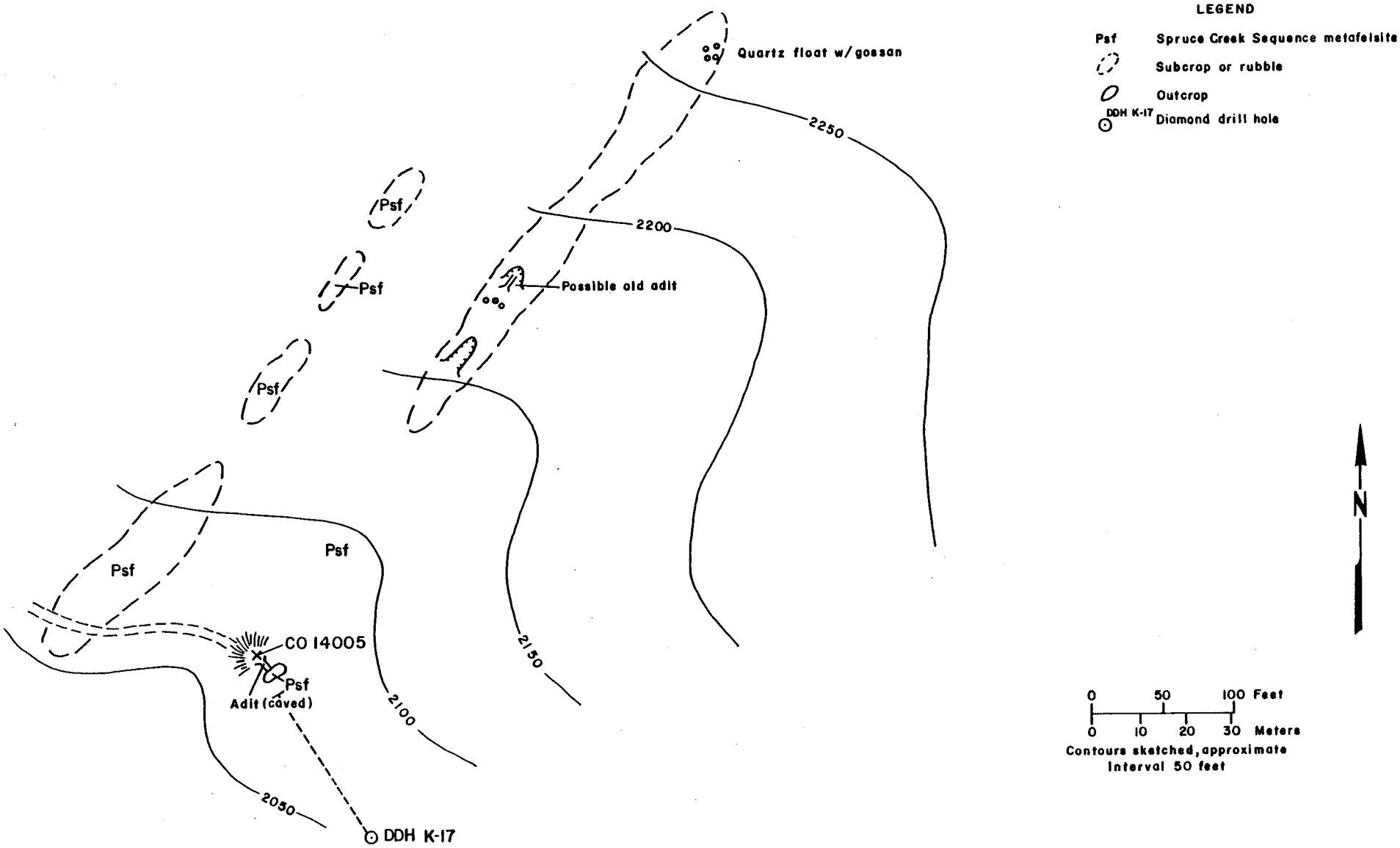
Development and Production: Approximately 100 tons of high-grade silver ore shipped prior to 1922. Underground workings, now caved, consisted of 30 ft. crosscut and 30 ft. drift. Open cuts exposed quartz vein about 300 ft. northeast of adit.

Remarks: This vein may be an extension of the Silver Pick/Little Maud veins. Diamond core drilling completed on this property for this study.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014005 | .370 | 3.3 | 5.5 | 45.4 | .07 | ND | .19 | 3 | .835 | |
| Capps | -- | -- | -- | 131 | -- | -- | -- | -- | -- | Galena sample |

References:
Bundtzen, 1981.
Wells, 1933.
Davis, 1922.
Capps, 1919.




Occurrence No. 27-Galena prospect

# OCCURRENCE REPORT FORM

NAME Red Top Mine

Study Area Kantishna Hills

Occurrence No. 28

Location: West End of Quigley Ridge, Sec. 11, T16S, R18W. (3487244N, 341170E)

Occurrence Type Silver/gold quartz-sulfide vein

Ownership: Kantishna Mines, Ltd. (Leo Mark Anthony)

Examining Geologist FGK, CJM

Date(s) of Examination July 1983

General Geology: Vein cuts metafelsite, graphitic phyllite, and calcareous rocks of the Spruce Creek Sequence.

Mineralization: Galena, sphalerite, arsenopyrite, tetrahedrite, polybasite, pyrargyrite, pyrite in a quartz and siderite gangue.

Structure: Vein is 3-20 ft. thick, trends N70-80$^{o}$E and dips steeply. Crosscutting fracture systems reportedly localized high grade ore.

Development and Production: Developed by approximately 300 ft. of adit (now caved) with several stopes and several surface trenches. Produced 182 tons averaging 237 oz/ton Ag and 1.1 oz/ton Au.

Remarks: Geophysical surveys and diamond core drilling done for this study.

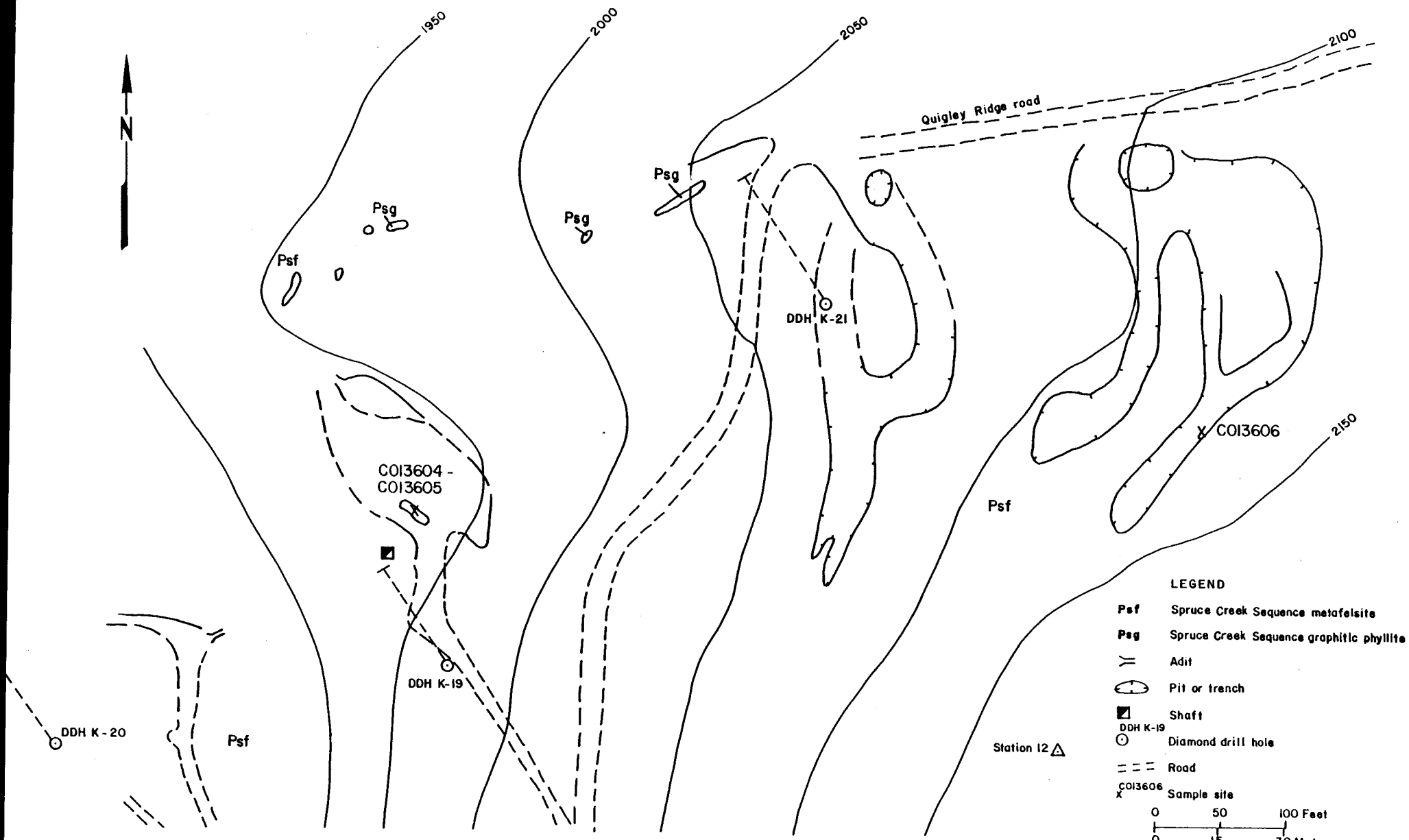
Analyses: See attached table.
Davis reports values from 45 underground samples ranging from trace to approximately 2 oz/ton Au and tr to 1000 oz/ton Ag.

References: Davis, 1922.
Bundtzen, 1981.
Wells, 1933.
Seraphim, 1962.

Red Top Mine

Salisbury & Dietz, Inc. study results:

| Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| .004% | .006% | .120% | .08 oz/tn | .026 oz/tn | ND | .0432% | ND | .600% | ND | -- | -- | Sample C013604. |
| .004% | ND | .110% | ND | .013 oz/tn | ND | 3.20% | 7 ppm | .560% | ND | -- | -- | Sample C013605. |
| ND | .001% | .006% | ND | 16 ppm | ND | .017% | 8 ppm | .285% | ND | -- | -- | Sample C013606. |




Occurrence No. 28 - Red Top Mine

# OCCURRENCE REPORT FORM

NAME Star/Friday/Martha Q./Polly Wonder Prospects

Study Area Kantishna Hills

Occurrence No. 29

Location: SW¼, Sec. 12, T16S, R18W
NW side of Quigley Ridge
(3487040N, 342390E)

Occurrence Type Quartz sulfide vein with Ag

Examining Geologist CJM

Date(s) of Examination July 1983

Ownership: Star/Friday - Maurice Butler; Polly Wonder - Kantishna Mines 2/3 and Maurice Butler 1/3; Martha Q. - Kantishna Mines Ltd.

General Geology: Spruce Creek Sequence metafelsite.

Mineralization: Quartz with sulfides.

Structure: Quartz veins trend NE and NW.

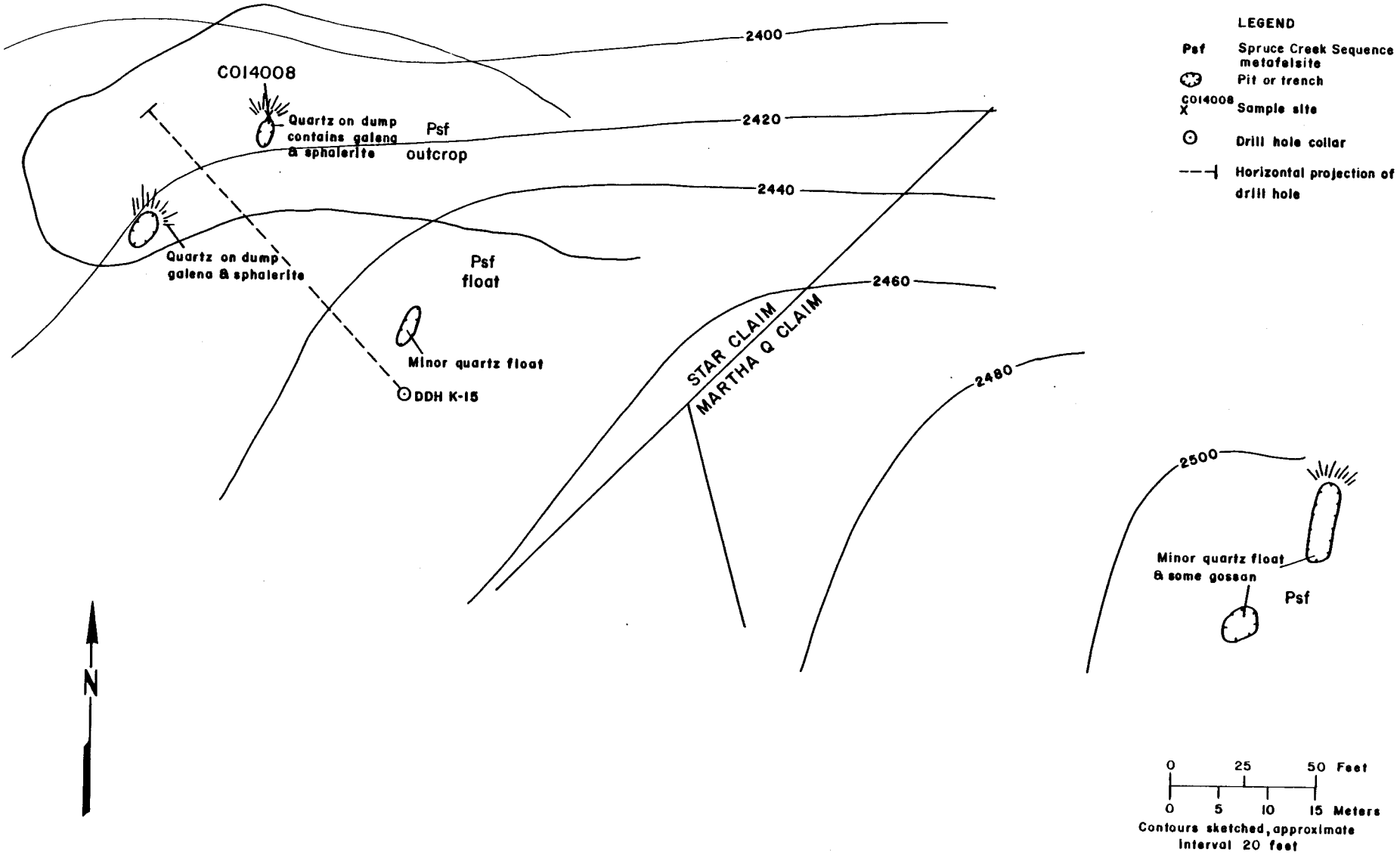
Development and Production: Polly Wonder - open cut, now caved, exposed quartz vein seven feet wide. Friday - open cuts exposed mineralized quartz float, no vein found in place. Star - open cut in SW corner of claim exposed 6 in. quartz vein with galena, sphalerite. Martha Q. - open cut exposed 6 in. quartz/galena vein, several tons shipped.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014008 | 15 | 14.8 | 9.35 | 10.36 | .004 | ND | .071 | 4 | 540 | Star |
| | -- | -- | -- | 60 | -- | -- | -- | -- | -- | Star literature |
| | -- | -- | -- | 284 | .08 | -- | -- | -- | -- | Martha Q literature |

References:
Davis, 1922.
Wells, 1933.
Bundtzen, 1981.




Occurrence No. 29 - Star prospect/Martha Q. prospect

# OCCURRENCE REPORT FORM

NAME Friday Rim Prospect

Study Area Kantishna Hills

Occurrence No. 30

Location: North side of Friday Creek (3492150N, 340800E)

Occurrence Type Quartz-siderite vein

Examining Geologist CM, CH

Ownership:

Date(s) of Examination August 1983

General Geology: Birch Creek quartzite host rock.

Mineralization: Quartz-siderite containing minor pyrite.

Structure:

Development and Production: Small prospect pit, caved.

Remarks:

Analyses: Bundtzen and others (1976) report one sample containing 0.05 oz/ton Ag and small amounts of Pb and Zn.

References: Bundtzen and others, 1976.

# OCCURRENCE REPORT FORM

NAME Little Maud/Francis Prospect

Study Area Kantishna Hills

Occurrence No. 31

Location: SW¼, Sec. 12, T16S, R18W, Quigley Ridge (3487250N, 343840E)

Occurrence Type Quartz vein with gold

Examining Geologist CJM

Ownership: Patented claim held by Kantishna Mines Ltd. (Leo Mark Anthony, President)

Date(s) of Examination June 1983

General Geology: Veins cut metafelsite schist of the Spruce Creek Sequence with some interlayered graphitic phyllite.

Mineralization: Quartz vein with gold and silver. Probably the same vein on both claims (Little Maud and Francis).

Structure: The vein strikes about N55°E and dips steeply southeast.

Development and Production: No recorded production. Large dozer cuts expose the vein at several locations. A reported 70 ft. adit on the Francis claim was not found. A 190 ft. adit on the Little Maud claim is inaccessible but reportedly cuts three veins on the Little Maud and adjacent Silver Pick properties.

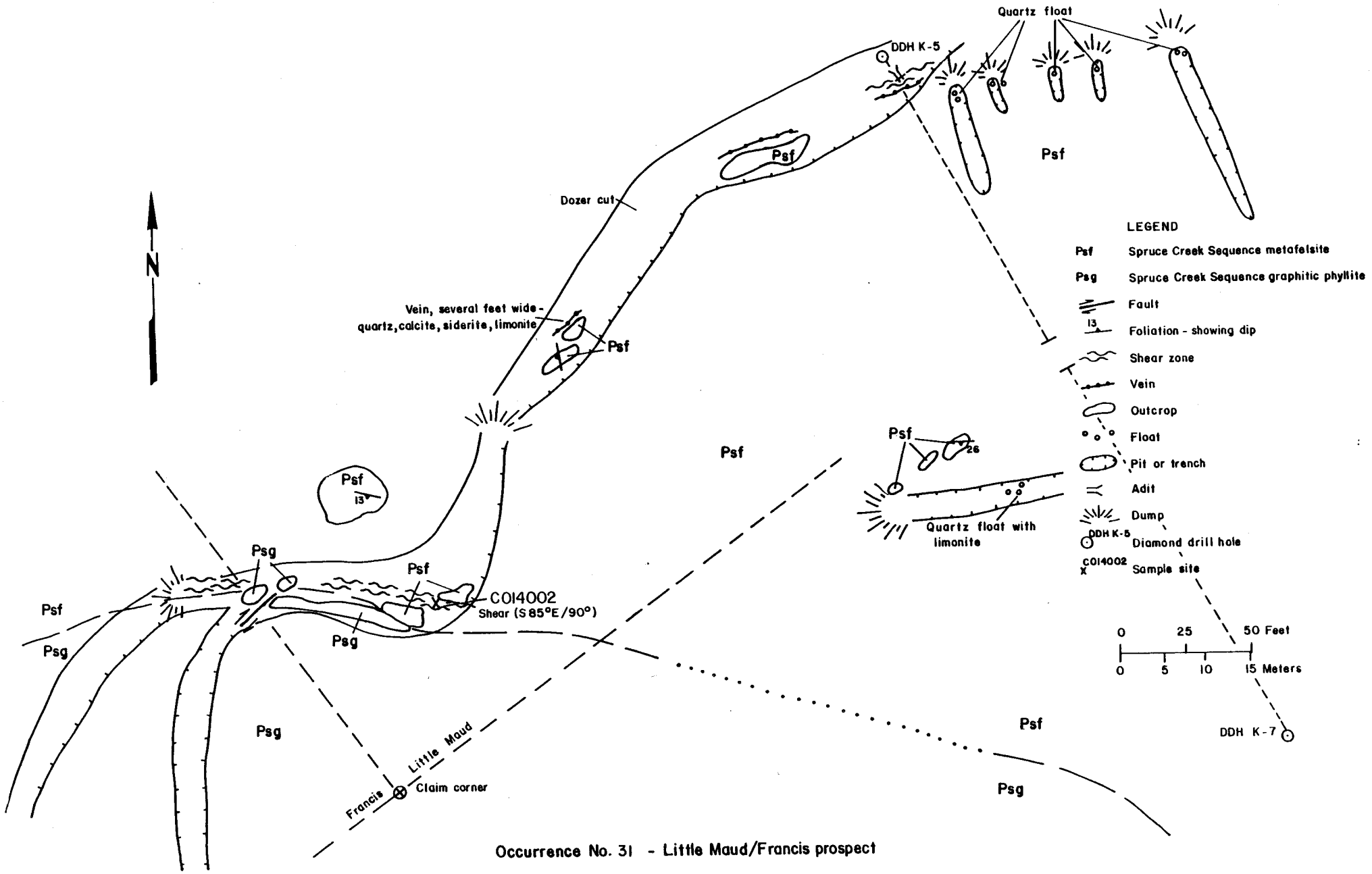
Remarks: Seraphim (1962) did extensive sampling on these claims. Diamond drilling performed for this study: holes K-5 and K-6.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014002 | 25 | 35 | 3950 | 2.4 | .12 | 2 | 96 | 7 | .125 |

Also see analyses of drill core and soil samples from Quigley Ridge grid. Seraphim (1962) did extensive sampling of veins.

References:
Bundtzen, 1981.
Davis, 1922.
Wells, 1933.
Seraphim, 1962.




Occurrence No. 31 - Little Maud/Francis prospect

# OCCURRENCE REPORT FORM

NAME Silver Pick Prospect

Study Area Kantishna Hills

Occurrence No. 32

Location: West end of Quigley Ridge
SW¼ Sec. 12, T16S, R18W
(3487260N, 344210E)

Ownership: Kantishna Mines Ltd.
(Leo Mark Anthony, President)

Occurrence Type Quartz-calcite veins with Au and Ag

Examining Geologist CJM

Date(s) of Examination June 1983

**General Geology:** Veins cut metafelsite of the Spruce Creek Sequence with some interlayered graphitic phyllite.

**Mineralization:** Two veins, one possibly extends for 1500 ft. along strike. Galena-sphalerite-arsenopyrite-tetrahedrite in siderite-quartz gangue (Bundtzen, 1981). Veins locally contain large calcite lenses.

**Structure:** The veins are subparallel to the axis of the Quigley Ridge Anticline. They are poorly exposed now but reportedly strike N35°E, and N65°E, and dip 61° NW and 67°SE, respectively (Bundtzen, 1981). Fault gouge occurs in several places in the trenches.

**Development and Production:** No recorded production. Developed by extensive trenching and a 188 ft. cross cut adit which was driven from the Little Maud claim (now caved).

**Remarks:** Diamond drill holes K-5 and K-6 were drilled from Little Maud claim under the Silver Pick claim. Soil samples were collected along several lines in this area. DDH K-7 was drilled on the Silver Pick claim.

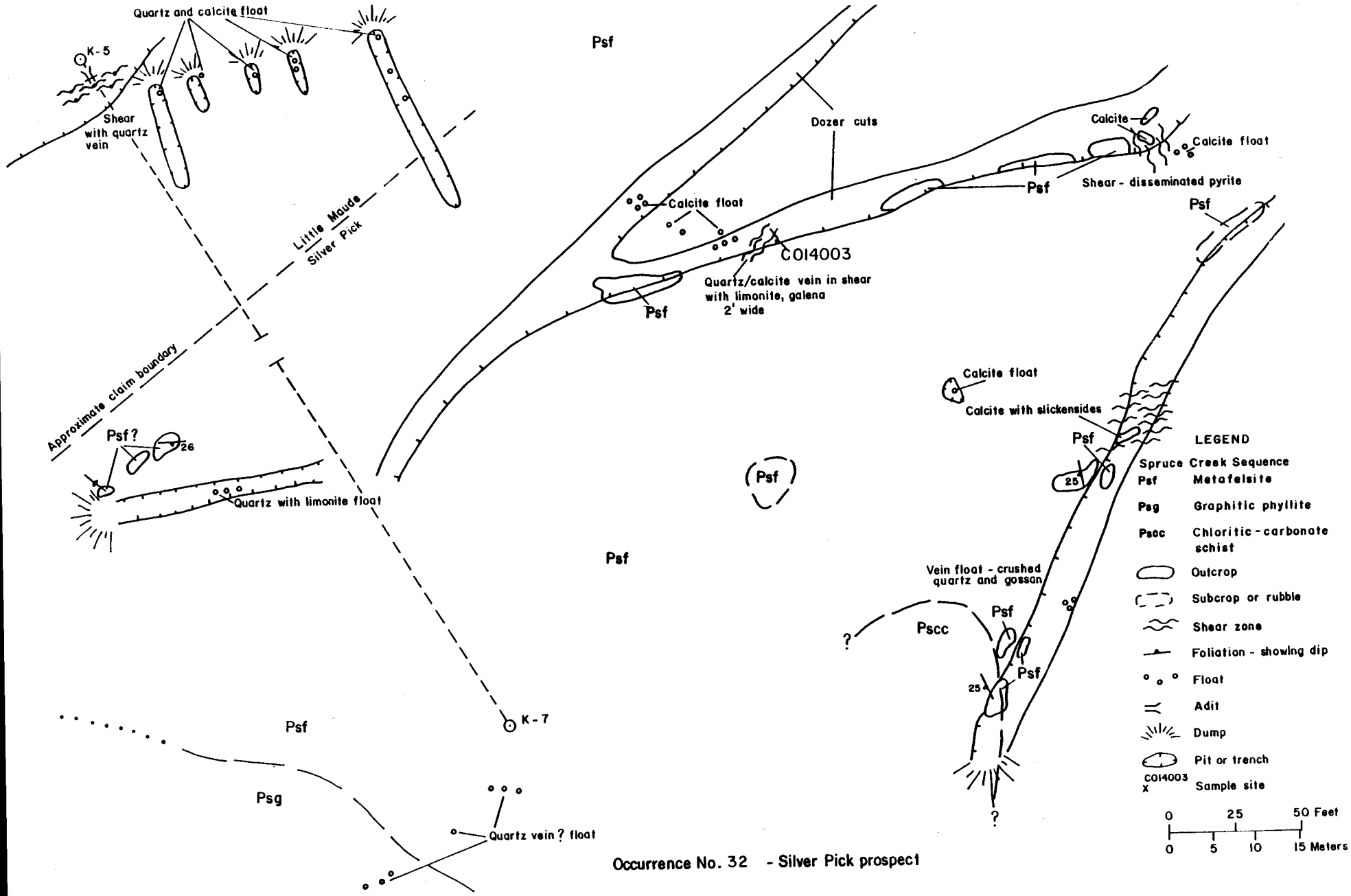
**Analyses:** Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014003 | 0.14 | 3.05 | 7.65 | 25.1 | .015 | ND | 0.1 | 6 | .690 | rock sample |

Also see analyses of core from above holes and soil sampling. Assays reported in below reports indicate that mineralization was rather erratic. Gold values range from trace to one ounce, and silver from trace to 100 ounces per ton.

**References:**

Bundtzen, 1981.
Seraphim, 1962.
Capps, 1919.
Wells, 1933.
Davis, 1922.
Moffitt, 1933.




Occurrence No. 32 - Silver Pick prospect

# OCCURRENCE REPORT FORM

NAME Eureka Stibnite (Pick Claims)

Study Area Kantishna Hills

Occurrence No. 33

Location: Eureka Creek

Occurrence Type Quartz-stibnite vein

Ownership: George Baily

Examining Geologist CDH, JMK

Date(s) of Examination July 30, 1983

General Geology: Birch Creek schist composed of quartzite with ankeritic interbeds, quartz chlorite muscovite schist and graphitic interbeds.

Mineralization: Stibnite in quartz. Minor pyrite, arsenopyrite, and stibiconite.

Structure: Quartz vein in fault or shear zone. Small high-grade stringer veins were found in wall rocks up to 50 ft. away from main vein. Vein strikes approximately N40°W.

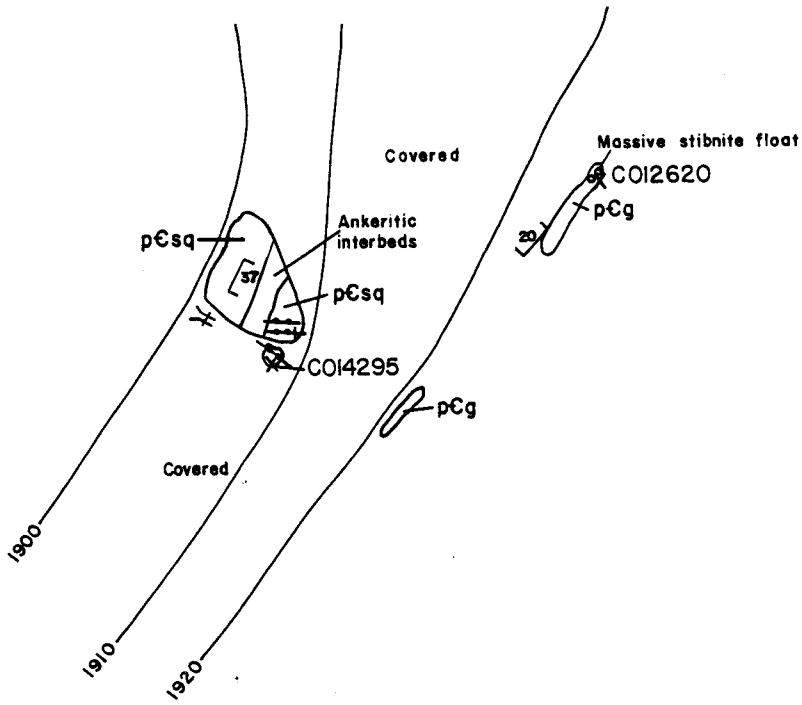
Development and Production: Adit (caved) with unknown amount of workings. Production of 50 tons in 1915; 12 tons 62% Sb in 1970; later approximately 50 tons (personal conversation with Dan Ashbrook).

Remarks: Deserves exploration. Good potential for small high-grade antimony producer.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Bi ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C014295 | .004 | .210 | .004 | .160 | .120 | ND | .150 | ND | .400 | ND | 3" wide qz.vn. |
| C012620 | ND | ND | ND | .56 | .027 | ND | 51.0 | 9 | .039 | 4 | Massive Sb float |
| Bundtzen | .009 | .0274 | .012 | .91 | .047 | -- | 51.5 | -- | -- | -- | |
| Hawley | .003 | 1.05 | 2.95 | .25 | -- | -- | 0.17 | -- | -- | -- | |

References:
Bundtzen, 1976, 1981.
Hawley, 1977.
Ashbrook, 1983.




LEGEND

| | |
|---|---|
| p€sq | Birch Creek quartzite |
| p€g | Birch Creek quartz chlorite muscovite schist |
| 20 | Quartz vein - showing dip, locally contains stibnite, pyrite, arsenopyrite, scorodite |
| | Vertical quartz vein |
| 20 | Cleavage - showing dip |
| | Adit |
| | Contact |
| C012620 x | Sample site |

N

0 10 20 Feet

0 3 6 Meters

Contours sketched, approximate interval 10 feet

Occurrence No. 33 - Eureka stibnite prospect

# OCCURRENCE REPORT FORM

NAME White Hawk Prospect

Study Area Kantishna Hills

Occurrence No. 34

Location: Eureka Creek (3485900N, 345600E)

Occurrence Type Pb, Au, Ag vein

Examining Geologist CDH

Ownership: Patented claim controlled by Kantishna Mines.

Date(s) of Examination August 1, 1983

General Geology: Float on dumps is Spruce Creek felsite. No outcrop exists in pits or surrounding area. Vegetation and overburden cover land surface.

Mineralization: Seen on dumps of pits only: massive sphalerite, galena, and pyrite, with tetrahedrite, and stibnite. Malachite, azurite, hematite, goethite staining.

Structure: Previous reports quote several northeast trending veins to 3-ft.-thick with 500 ft. of traced strike length. Bundtzen (1981) calls it one of the larger vein systems in the region.

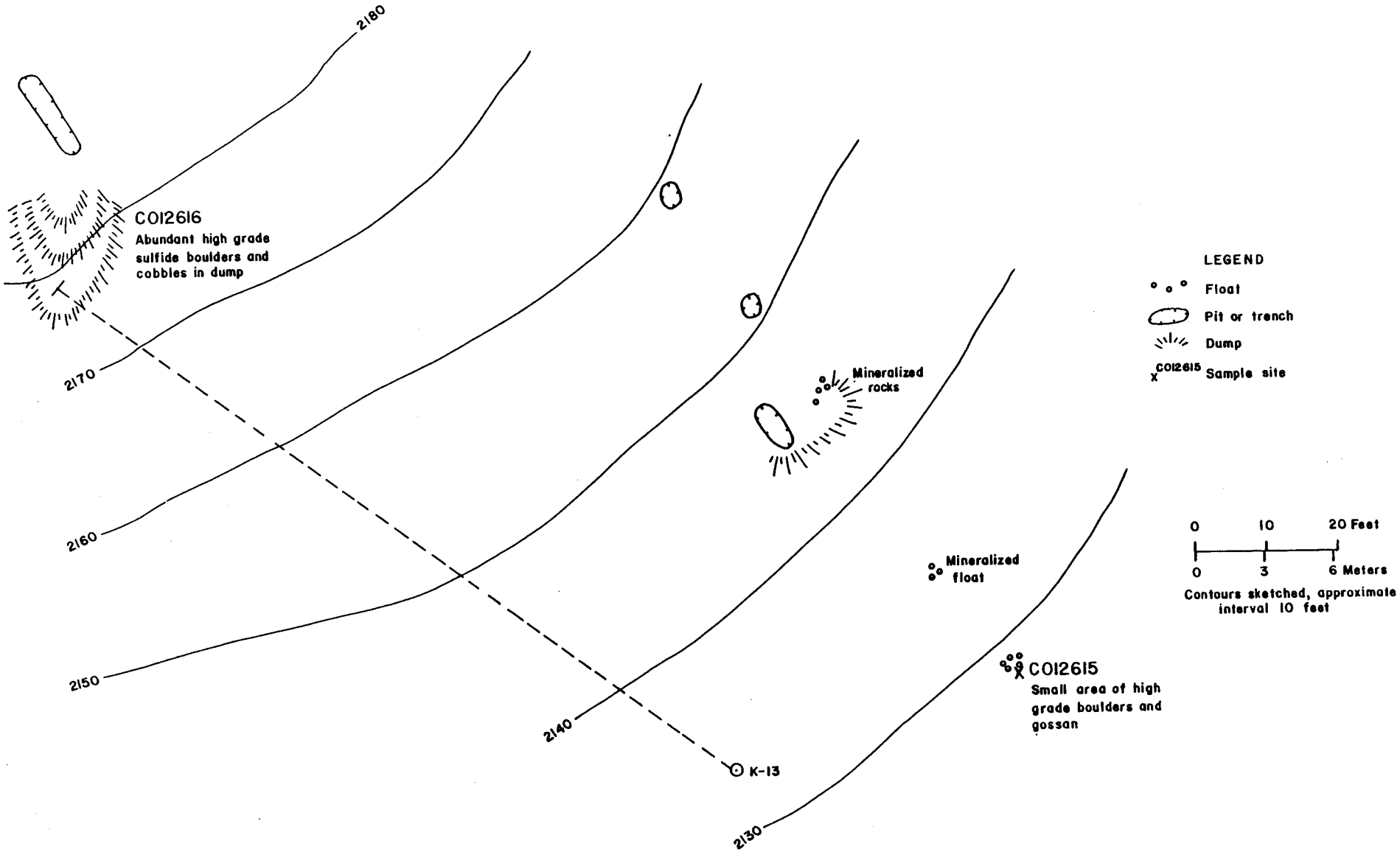
Development and Production: Several caved pits and workings. No recorded production.

Remarks: In Spruce Creek felsite sequence near contact with Birch Creek schist. Good strike length and vein thickness reported. Deserves exploration. Could be good property for small operator.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C012615 | .054 | 11.00 | 32.5 | 4.30 | .009 | -- | 5.45 | -- | .530 |
| C012616 | .340 | 24.50 | 12.0 | 11.60 | .015 | -- | 11.00 | 3 | .930 |
| Seraphim | .080 | 16.97 | -- | 4.88 | .02 | -- | -- | -- | -- |

References:
Bundtzen, 1981.
Seraphim, 1960.
Davis, 1922.




Occurrence No.34 - White Hawk claim

# OCCURRENCE REPORT FORM

NAME Little Annie/Little Annie #2

Study Area Kantishna Hills

Occurrence No. 35

Location: North slope of Quigley Ridge, NE¼ Sec. 12, T16S, R18W (3480850N, 345850E)

Occurrence Type Quartz vein/sulfide vein

Examining Geologist CJM

Ownership: Kantishna Mines Ltd. (Leo Mark Anthony, President)

Date(s) of Examination June 16-17, 1983

General Geology: The two veins cut metafelsite and graphitic phyllite of the Spruce Creek Sequence.

Mineralization: Two veins have been worked: (1) quartz vein up to 32 ft. wide, carries gold and silver, (2) sulfide vein, primarily galena with sphalerite and tetrahedrite. Gangue minerals, where present, are siderite or calcite. Good silver values and some gold.

Structure: The veins are described by Wells (1933) as fissure veins. They crosscut the foliation of the metamorphic rocks. The quartz vein strikes N59°E and dips about 65°S. The sulfide vein strikes N10°E and dips about 65-70°S.

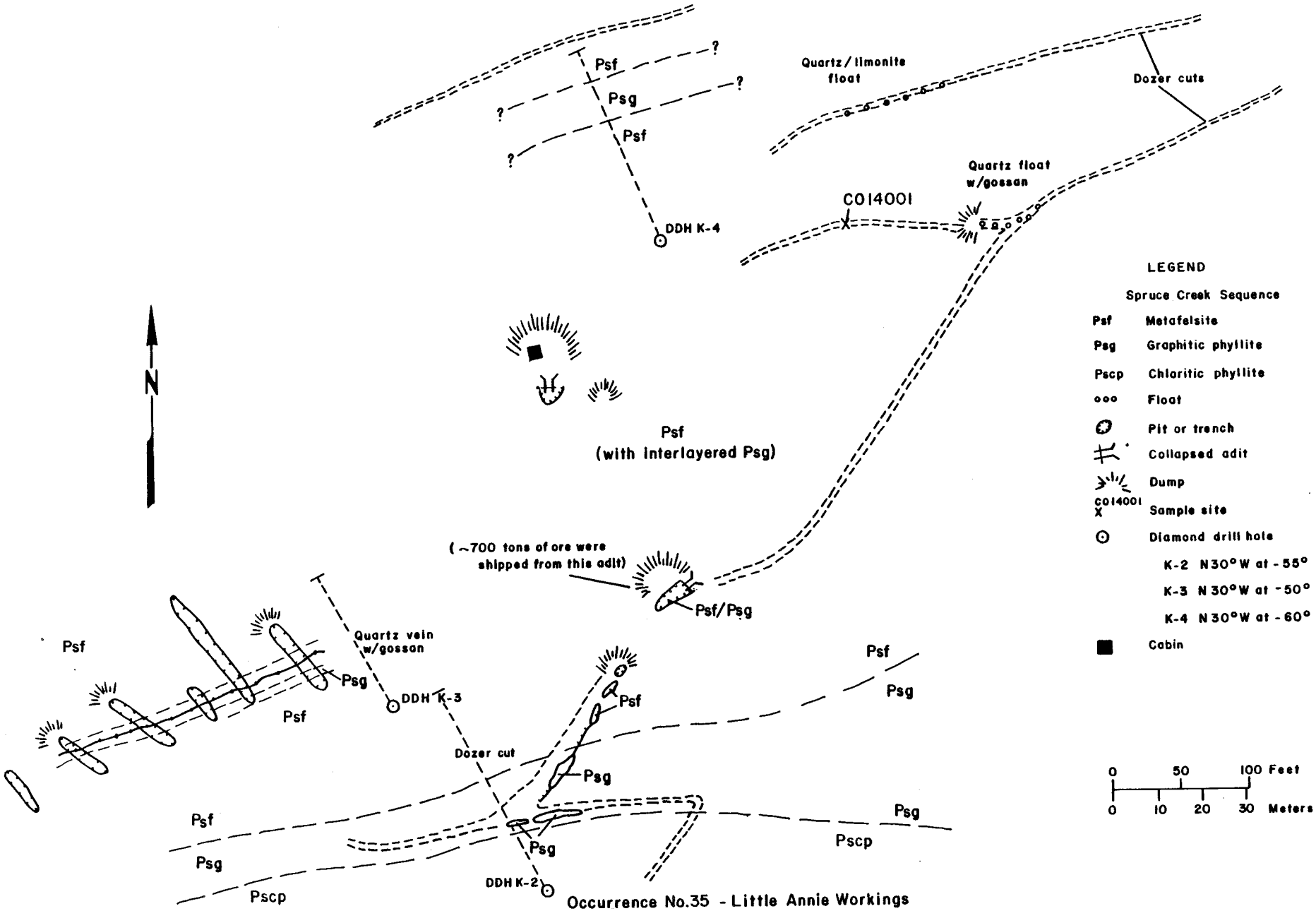
Development and Production: Approximately 700 tons of lead-silver ore were shipped from the sulfide vein. The ore averaged 25% Pb, with 0.16 oz/ton Au, and 150 oz/ton Ag. The quartz vein was developed by five surface trenches and a drift 510 ft. long with 11 crosscuts. Numerous dozer cuts on Little Annie #2 claim.

Remarks: One of the few mines in the district with recorded production. Detailed description of property in below references. Three diamond drill holes were drilled on this area for this study (K-2, K-3 and K-4).

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag ppm | Au ppm | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014001 | .008 | ND | 1.100 | .4 | .21 | ND | .0018 | 3 | 1.05 |

References: Wells, F. G., 1933.
Moffitt, F. H., 1933.
Davis, J. A., 1922.
Bundtzen, T. K., 1981.
Seraphim, R. H., 1962.
Capps, 1919.




Occurrence No.35 - Little Annie Workings

# OCCURRENCE REPORT FORM

NAME Gold Dollar Mine and Gold Eagle

Study Area Kantishna Hills

Occurrence No. 36

Location: NE¼ Sec. 12, T16S, R18W
North side of Quigley Ridge
(3475100N, 336600E)

Occurrence Type Sulfide vein with Au and Ag

Ownership: Kantishna Mines, Ltd.
(Leo Mark Anthony, President)

Examining Geologist FGK

Date(s) of Examination June 1983

General Geology: Spruce Creek Sequence metafelsite and graphitic phyllite.

Mineralization: Quartz vein containing galena, sphalerite, tetrahedrite, and pyrite with gold and silver.

Structure: Vein occurs in a major shear zone trending N65-70°E, dipping steeply. Vein reported as 3-4 ft. wide at surface, narrowing with depth.

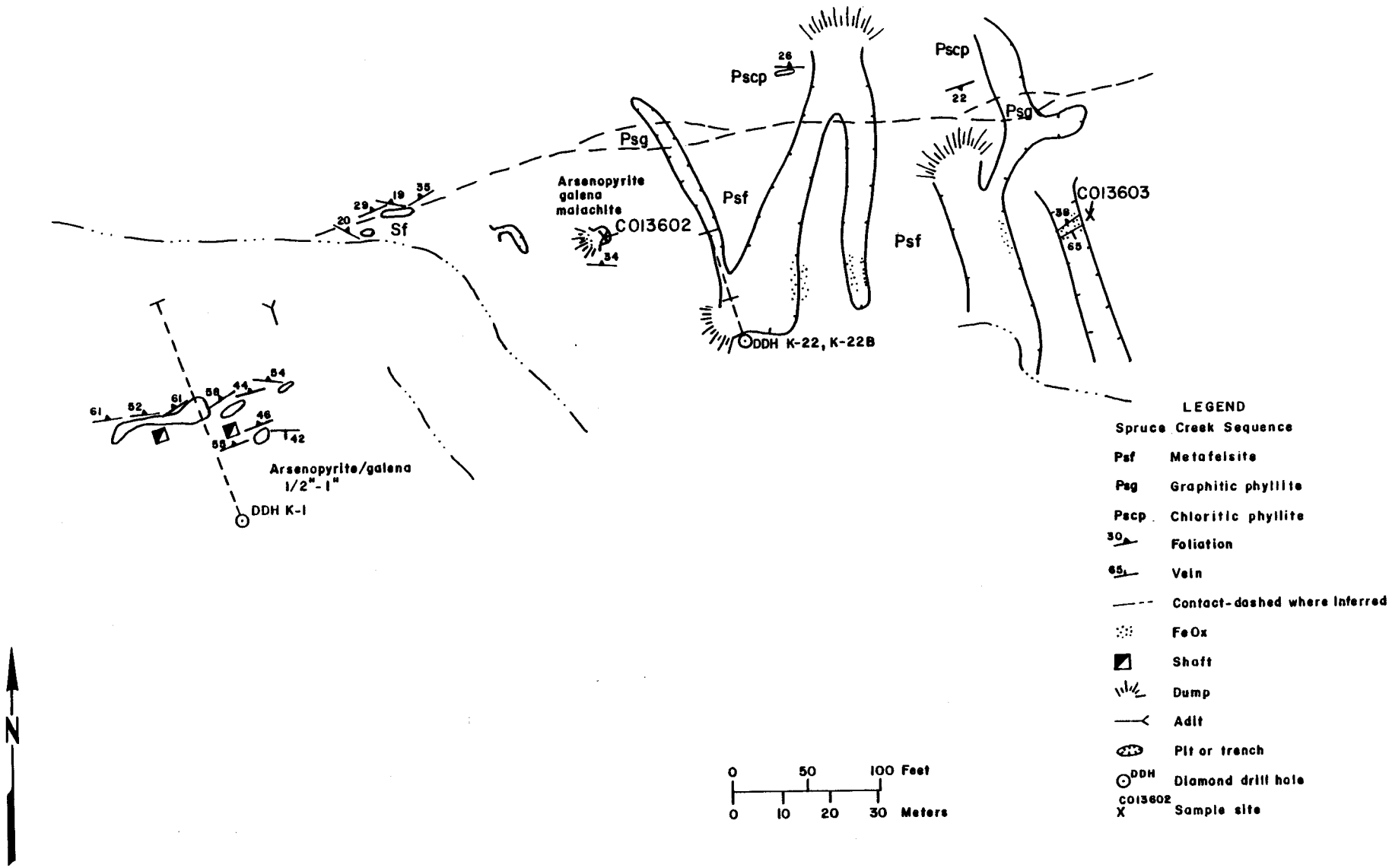
Development and Production: Numerous trenches, an adit, and two shafts. Approximately 600 tons shipped, reportedly carrying up to 152 oz/ton Ag and 0.18 oz/ton Au.

Remarks: Diamond drill holes (K-1, K-22 and K-22B) drilled for this study did not intersect vein.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C013602 | 0.11 | 5. | .225 | 30.9 | .110 | ND | .13 | ND | 2.05 |
| C013603 | ND | .0115 | .006 | .003 | ND | ND | .0008 | 5 | .026 |

References: Capps, 1919.
Moffitt, 1933.
Davis, 1922.
Bundtzen, 1981.
Wells, 1933.




Occurrence No.36 - Gold Dollar/Gold Eagle prospects

# OCCURRENCE REPORT FORM

NAME Water Level Claim

Study Area Kantishna Hills

Occurrence No. 37

Location: Eureka Creek, SE¼ Sec. 12, T16S, R18W (3486300N, 346850E)

Occurrence Type Vein

Ownership: Patented claim held by Kantishna Mines Ltd. (Leo Mark Anthony, President)

Examining Geologist CDH

Date(s) of Examination August 2-3, 1983

General Geology: Birch Creek schist by geologic projection.

Mineralization: Galena float found on claim shows boulangerite.

Structure: No workings were located due to extensive slope movement and abundant vegetation. Davis (1922) describes the deposit as "a vein three feet in width carrying galena". Seraphim (1961) failed to find the showing.

Development and Production: A cut at the eastern end of the claim.

Remarks: Proper evaluation of this prospect would require a geochemical soil grid, trenching, detailed prospecting and possible geophysics. High assay values in silver are interesting.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012619 | 0.01 | 0.815 | 0.008 | 49.2 | .008 | ND | .720 | 3 | .130 | float |
| Davis | -- | -- | -- | 30-40 | -- | -- | -- | -- | -- | |
| Seraphim | 0.24 | 1.24 | -- | 76.68 | .02 | -- | -- | -- | -- | float |

References: Davis, 1922.
Seraphim, 1961.

# OCCURRENCE REPORT FORM

NAME Sulphide Claim

Study Area Kantishna Hills

Occurrence No. 38

Location: Eureka Creek (3488450N, 346900E)

Occurrence Type Quartz vein

Examining Geologist CDH

Ownership: Patented claim held by Kantishna Mining Company

Date(s) of Examination August 3, 1983

General Geology: No outcrop in trench or nearby. However geologic projection places this prospect in the Birch Creek schist.

Mineralization: Pyrite and arsenopyrite in quartz. Free gold in crushed quartz reported by Davis (1922).

Structure: Eight inch quartz vein with unknown structure or attitude. Trench is completely slumped and overgrown.

Development and Production: One trench. No known production.

Remarks: Lack of exposure prevented proper evaluation.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012618 | ND | .071 | .039 | ND | .0002 | ND | .038 | 9 | .054 | |
| Seraphim | -- | -- | -- | .22 | .06 | -- | -- | -- | -- | float |
| Hawley | -- | -- | -- | .08 | .10 | -- | -- | -- | -- | float |

References:

Davis, 1922.
Seraphim, 1961.
Hawley, 1977.

# OCCURRENCE REPORT FORM

NAME Keystone-Pennsylvania Claims (patented M.S. No. 1702)

Study Area Kantishna Hills

Occurrence No. 39

Location: Iron Gulch 1.5 mi. above Eureka Creek (3488400N, 348900E)

Occurrence Type Quartz galena vein

Ownership: Morris Butler

Examining Geologist JMK

Date(s) of Examination June 22, 1983 ~~August 4-7, 1983~~

General Geology: Quartz eye-bearing metafelsite and chloritic phyllite. Cleavage: N80°E, 30°S.

Mineralization: Quartz vein(s) and breccia zones 4-10 ft. thick traced intermittently for 550 ft. along strike. Mineralogy: quartz, calcite, dolomite, pyrite, galena, arsenopyrite, sphalerite, chalcopyrite, scorodite, jamesonite(?). Massive galena occurs locally. The majority of sulfides were found on the dump of a caved adit on the west side of Iron Gulch. (See attached map)

Structure: The vein(s) trend N45°E and dip approximately 85°S.

Development and Production: Development: Several trenches along the surface trend and a caved adit near the bottom of Iron Gulch. (See attached map)

Remarks: Three core holes (K-8, K-9, and K-10) were drilled on the property. All intercepted vein quartz. Hole K-9 intercepted a four foot thick quartz vein containing 0.294 oz/ton Au and 0.276 oz/ton Ag. (See appendix D). Surface samples contained traces of gold and up to 0.20 oz/ton Ag.

Analyses: See attached table.

References:

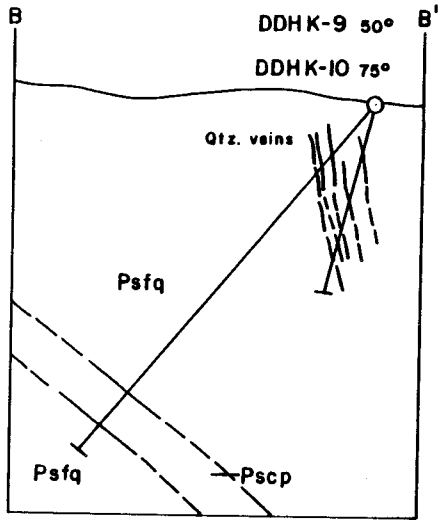
Davis, 1922, p. 53-55.
Capps, 1919, p. 102.
Wells, 1933, p. 370.
Bundtzen, 1981, p. 202.
Hawley, 1977.

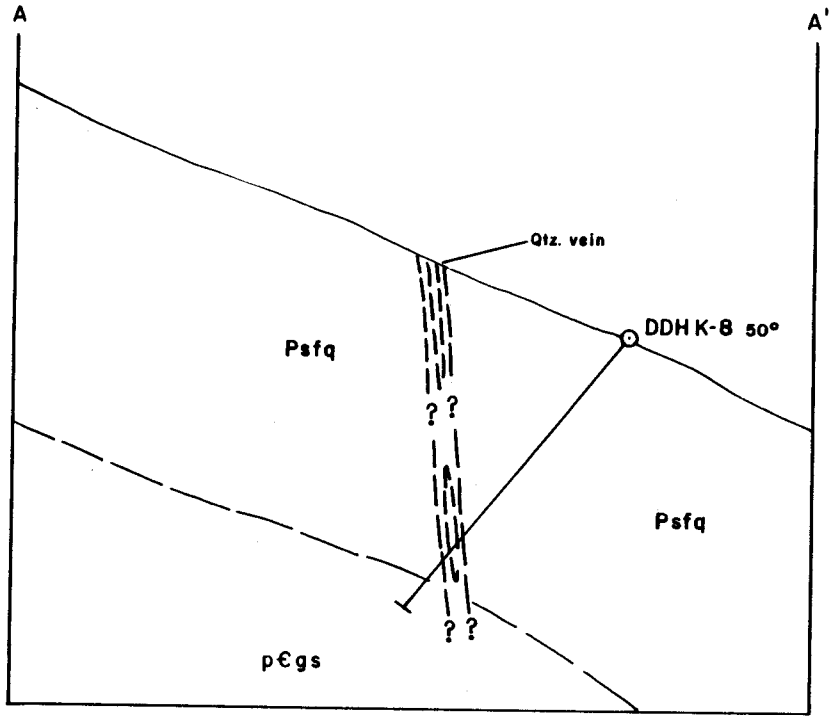
Keystone-Pennsylvania Claims (patented M.S. No. 1702)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .001% | .001% | .001% | .2 ppm | .16 ppm | ND | 4 ppm | 4 ppm | .0395% | ND | -- | -- | Sample CO14242 |
| | .001% | .010% | .002% | 1.1 ppm | .04 ppm | ND | 6 ppm | 4 ppm | .2150% | ND | -- | -- | Sample CO14243 |
| | .255% | 8.55% | .230% | 58.5 oz/tn | .028 oz/tn | ND | .25ppm | ND | .5350% | 3 ppm | -- | -- | Sample CO14244 |
| * | .100% | .030% | .110% | .11 oz/tn | tr | -- | .01% | 400 ppm | .0400% | -- | -- | -- | 1.4 ft. channel sample; iron-stained quartz. |
| * | .520% | 2.22% | 6.00% | 43.14 oz/tn | .02 oz/tn | -- | .18% | 100 ppm | .420% | -- | -- | -- | Sulfide-rich grab sample. |
| * | .26% | 3.60% | 4.89% | 3.60 oz/tn | tr | -- | .01% | 100 ppm | .140% | -- | -- | -- | Steel galena, pyrite, arsenopyrite(?) and tetrahedrite |
| * | -- | -- | -- | 1.60 oz/tn | -- | -- | -- | -- | -- | -- | -- | -- | Channel across 18 in. of |
| * | -- | -- | -- | 0.20 oz/tn | 0.86 oz/tn | -- | -- | -- | -- | -- | -- | -- | vein near old shaft. |
| * | .008% | .027% | .040% | 0.35 oz/tn | 0.12 pz/tn | -- | -- | -- | -- | -- | -- | -- | Soil of gossan on Pennsylvania claim. |

* Bundtzen, 1981.



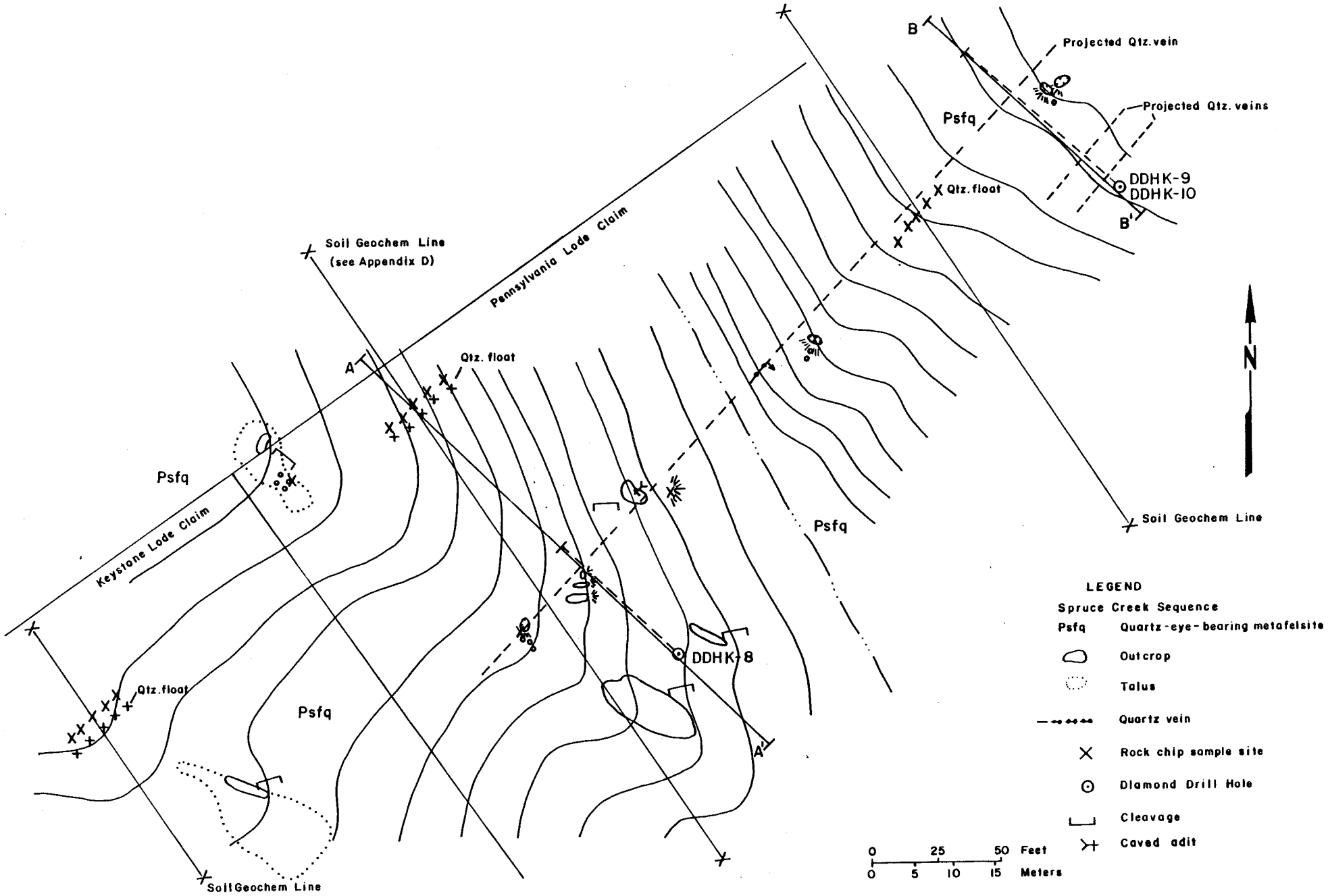

LEGEND

Psfq Spruce Creek Sequence metafelsite
Pscp Spruce Creek Sequence chloritic phyllite
p€gs Birch Creek Sequence graphitic schist

Contact
Quartz veins
Diamond Drill Hole

0 25 50 Feet
0 5 10 15 Meters

Occurrence No. 39- Cross Section of Drill Holes - Pennsylvania - Keystone Patented Lode Claims




Occurrence No. 39 - Pennsylvania - Keystone Patented Lode Claims

# OCCURRENCE REPORT FORM

NAME Gold King (East Gold King and Blue Bell)

Study Area Kantishna Hills

Occurrence No. 40

Location: NW¼, Sec. 7, T16S, R17W, east end of Quigley Ridge.

Occurrence Type Quartz vein

Ownership: Patented claims held by Guy Erwin.

Examining Geologist CJM

Date(s) of Examination July 1983

General Geology: Vein cuts metafelsite of Spruce Creek Sequence.

Mineralization: Quartz vein (4-6 ft. wide) contains arsenopyrite, sphalerite and galena.

Structure: Vein strikes N80°E and dips steeply to vertically.

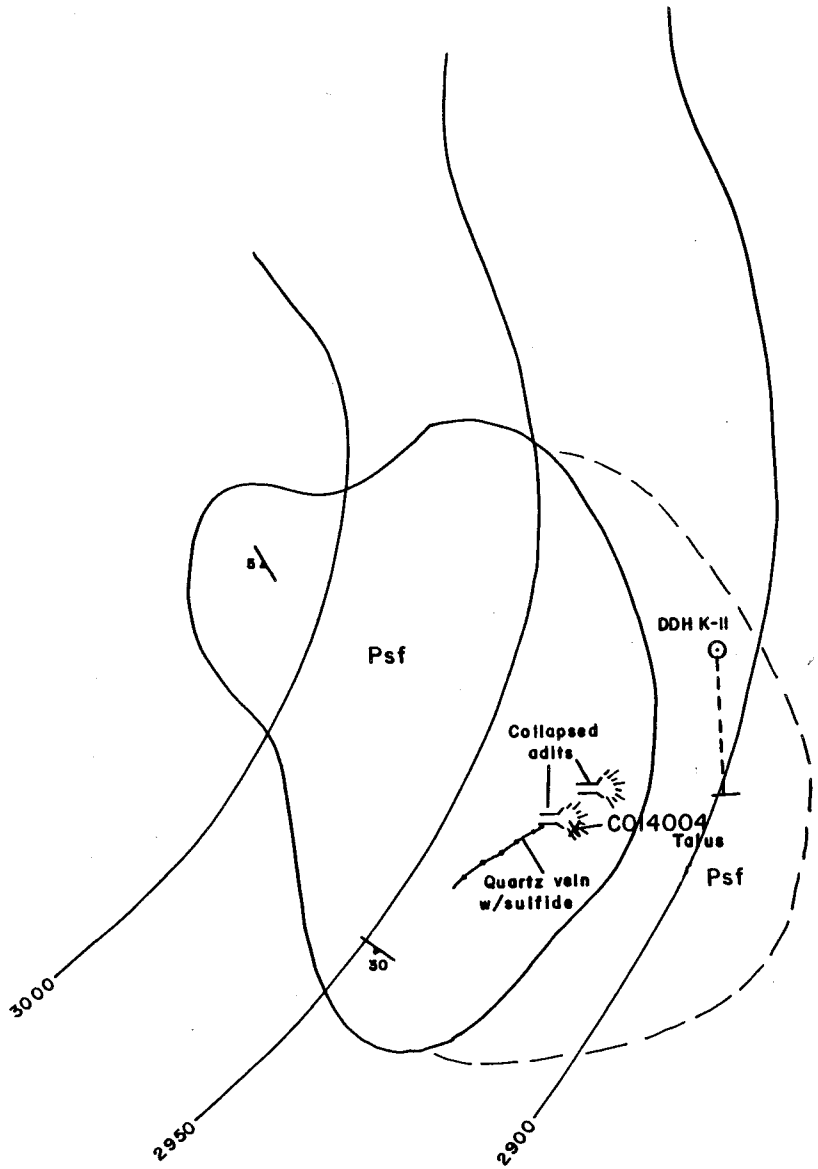
Development and Production: Two short adits on Gold King claim. Series of trenches, now overgrown, reportedly traced vein through Gold King East claim. Several trenches (now caved) apparently exposed a parallel vein on the Bluebell claim, north of the East Gold King.

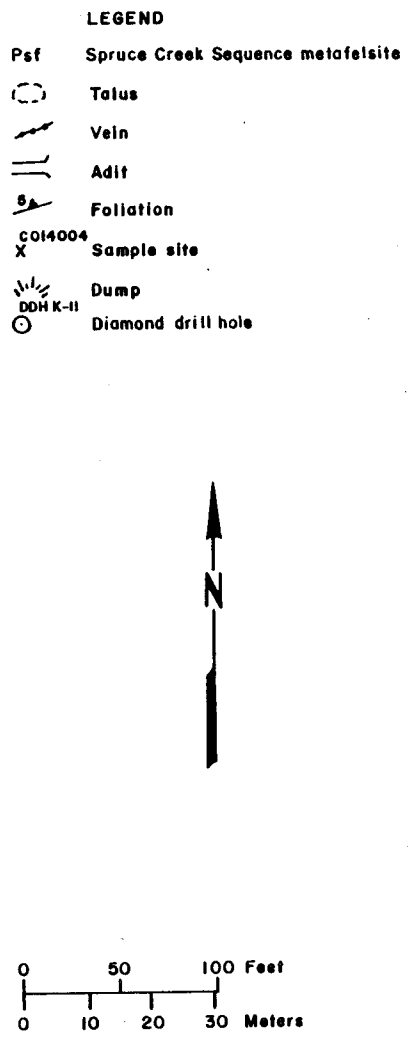
Remarks: DDH K-11 drilled to intersect vein on Gold King claim.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014004 | 350 | 90 | .120 | 7.88 | .19 | 8 | 305 | 9 | 810 |

References: Davis, 1922.
Bundtzen, 1981.
Capps, 1919.




Occurrence No. 40 - Gold King prospect

# OCCURRENCE REPORT FORM

NAME Pittsburg/East Gold King

Study Area Kantishna Hills

Occurrence No. 41

Location: Sec.7, T165, R17W

Occurrence Type Qtz Vein with Au

Ownership: Guy Erwin

Examining Geologist CJM/JK

Date(s) of Examination July, 1983

**General Geology:**

Quartz vein intruding metafelsite of Spruce Creek Sequence

**Mineralization:**

Reported free gold in quartz

**Structure:**

Pittsburg vein reportedly trends N75° E.

**Development and Production:**

Davis (1922) reports a quartz vein 6 or 7 ft. wide containing some sulfides and calcite on the Pittsburg claim. Only quartz float was found during this study. Several collapsed prospect pits.

**Remarks:**

Pittsburg vein is probably extension of Pennsylvania vein. East Gold King claim is located on probable extension of Gold King vein (see Occ. Rpt. #40)

**Analyses:**

**References:**


Wells (1933) p. 370
Davis (1922) p. 53

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 42

Location: Southwest side of Wickersham Dome (3491550N, 348350E)

Occurrence Type Quartz vein

Ownership: Unknown

Examining Geologist JMK

Date(s) of Examination July 20, 1983

General Geology: Quartz veins and veinlets cut quartz feldspar schist and lie adjacent to altered and fresh diabasic dikes or sills. Greenstone outcrops 170 ft. to the north.

Mineralization: Limonite stained quartz veining within silicified quartz-feldspar wall rocks. Sulfides: finely disseminated pyrite and arsenopyrite, minor siderite. Fresh and altered diabasic dikes or sills up to 2 ft. thick occur in the vicinity and contain disseminated pyrite (see attached figure).

Structure: Surface workings follow a N20$^{o}$E quartz vein intermittently exposed for 70 ft. along strike.

Development and Production: Development: four open cuts, the largest is 30 ft. long.

Remarks: Bundtzen (1981) remarks that this prospect lies near the Blue Bell Prospect. Mineralization is low grade and has a short strike length. May be a NE extension of Occurrence No. 43 which is located 480 ft. to the SW.

Analyses: See attached table.

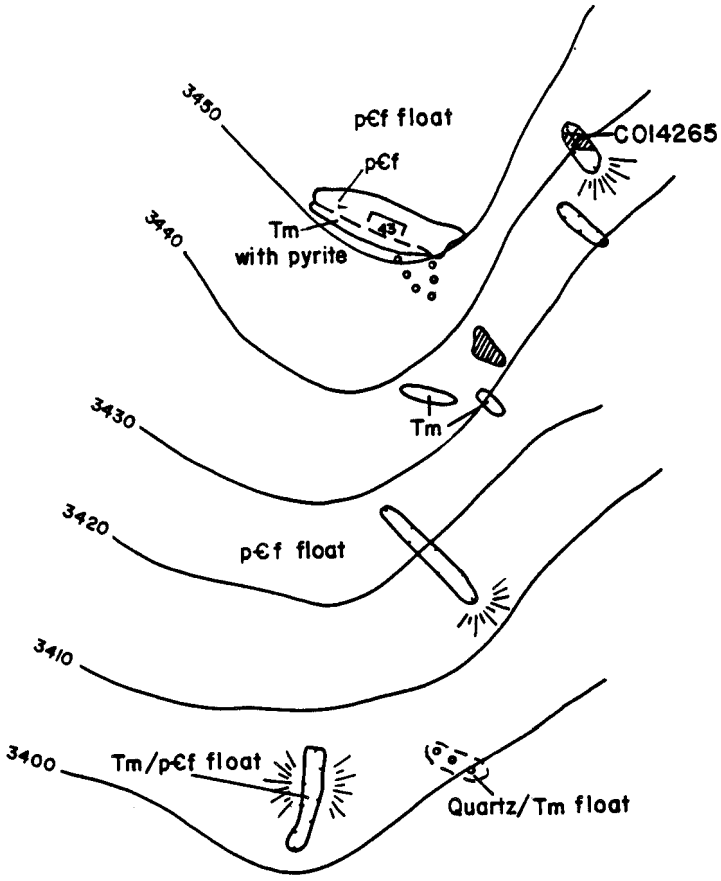
References: Bundtzen, 1981, p. 203, 219.

Unnamed Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ND | 10 ppm | 10 ppm | 0.4 ppm | ND | ND | 4 ppm | 3 ppm | .010% | ND | -- | -- | Sample CO14265. Quartz vein select grab. |
| * | .005% | .17% | .005% | .14 oz/tn | ND | 9 ppm | .01% | 75 ppm | .035% | .009% | 1.3 ppm | 3.5 ppm | Grab sample from pit, low-grade mineralization. |
| * | tr | .03% | .020% | .22 oz/tn | tr | ND | ND | 75 ppm | .028% | .046% | 0.8 ppm | 2.0 ppm | |
| * | .006% | .01% | .016% | .04 oz/tn | ND | 35 ppm | .002% | 75 ppm | .029% | .051% | 1.1 ppm | 2.9 ppm | |

* Bundtzen, 1981, p. 219.




LEGEND

Tm — Diabase dikes, locally altered, containing disseminated pyrite

p€f — Birch Creek Sequence quartz feldspar schist

Vein quartz - limonite, minor pyrite and arsenopyrite

Vein quartz float

43 — Cleavage - showing dip

Contact - dashed where approximate

Pit or trench

Dump

x C014265 — Sample site

N

0 25 50 Feet

0 5 10 15 Meters

Contours sketched, approximate interval 10 feet

Occurrence No. 42 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 43

Location: South side Wickersham Dome (3490400N, 348000E)

Occurrence Type Quartz vein

Ownership: Unknown.

Examining Geologist JMK

Date(s) of Examination July 20, 1983

General Geology: Quartz feldspar schist.

Mineralization: Limonite-stained vein quartz float. Sulfides: minor finely disseminated pyrite and arsenopyrite.

Structure: Prospect pits lie along a N20°E trend.

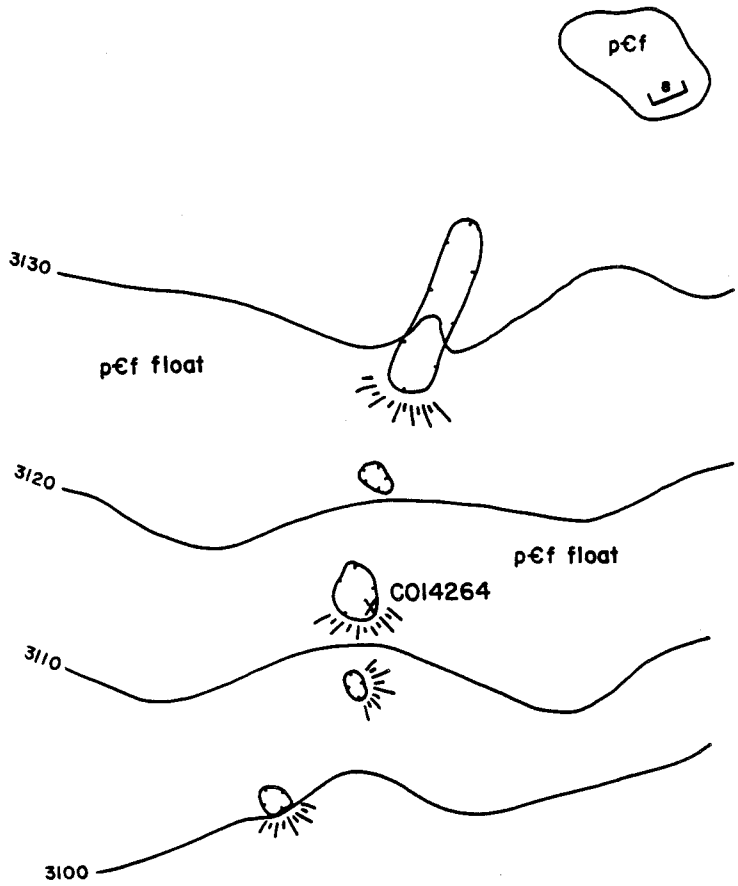
Development and Production: Development: A 5 x 25 ft. trench and three small pits.

Remarks: Very little mineralization; may be a southern extension of occurrence No. 38 which is 480 ft. to the northeast.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014264 | 40 | 45 | 70 | 1.6 | .04 | ND | 6 | 3 | 670 | select grab dump |

References:




LEGEND

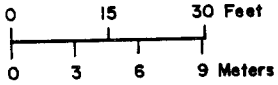
p€f Birch Creek Schist quartz feldspar schist with minor disseminated pyrite and limonite stain

Cleavage - showing dip

Pit or trench

Dump

x C014264 Sample site




Contours sketched, approximate interval 10 feet

Occurrence No. 43- Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Florence Lode

Study Area Kantishna Hills

Occurrence No. 44

Location: 2500 feet northeast of Wickersham Dome (3494530N, 351350E)

Occurrence Type Quartz galena vein

Ownership: No current claims.

Examining Geologist JMK

Date(s) of Examination July 28, 1983

General Geology: Birch Creek micaceous quartzite. Greenstone float in the area.

Mineralization: Limonite-stained-vein-quartz float exposed intermittently for 170 ft. along strike. Mineralogy: massive and stringer galena, cerrusite(?), stibnite, tetrahedrite(?), malachite, and siderite.

Structure: Float traces indicate an approximate N45°E trend for the mineralization.

Development and Production: A caved shaft, numerous bulldozer cuts, and trenches. No production.

Remarks: No mineralization observed in place.

Analyses: See attached table.

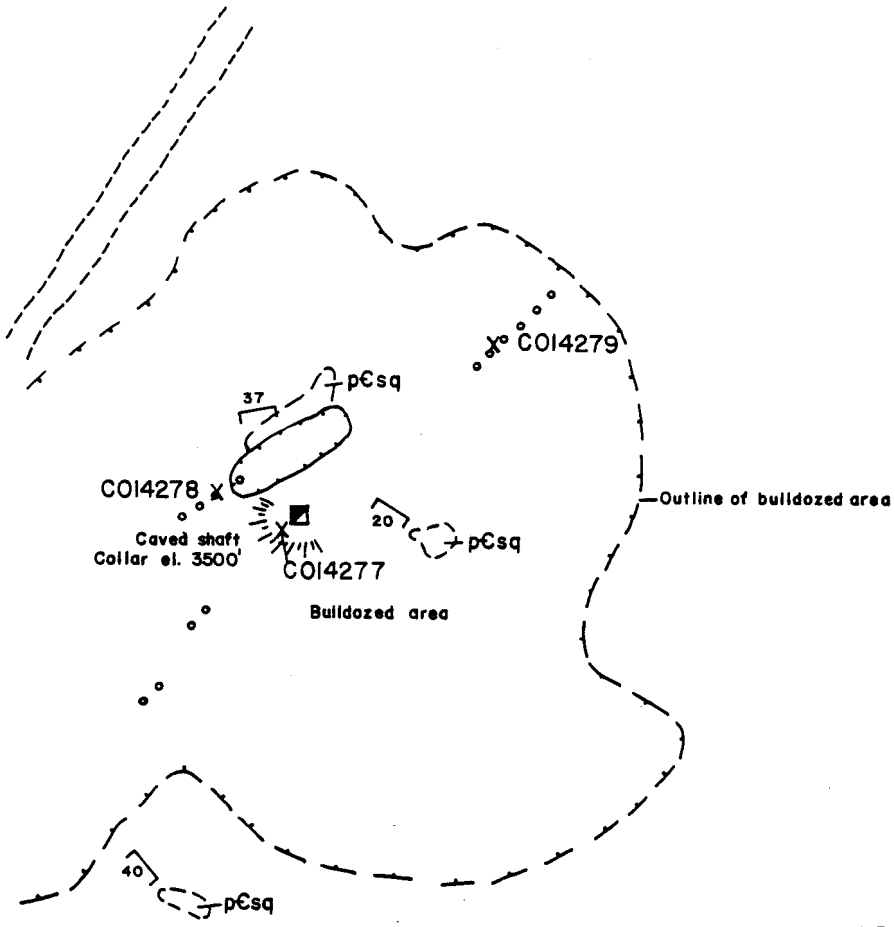
References: Bundtzen, 1981, p. 203, 219.
U. S. Bureau of Mines, 1959.
Wells, 1933, Plate 28, p. 371.

Florence Lode

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.15% | 49.5% | 4.0% | 35.8 oz/tn | ND | ND | 2.4% | 4 ppm | .035% | 5 ppm | -- | -- | Sample CO14277. Select grab dump. |
| | .059% | 5.5 % | ND | 2.3 oz/tn | ND | ND | .625% | 3 ppm | .030% | 3 ppm | -- | -- | Sample CO14278. Select grab dump. |
| | .033% | 2.95% | .295% | 0.89 oz/tn | ND | ND | .595% | 3 ppm | .026% | 1 ppm | -- | -- | Sample CO14279. Select grab dump. |
| * | 1.50% | 4.55% | 1.25% | 39.4 oz/tn | ND | ND | 2.35% | 75 ppm | .076% | .003 % | 2.7 ppm | 1.8 ppm | Grab sample of copper-rich galena ore. |
| * | 1.40% | 46.3% | 1.10% | 29.1 oz/tn | tr | 15 ppm | 2.87% | -- | -- | -- | -- | -- | Grab sample, galena ore. |
| * | 1.58% | 70.0% | 1.49% | 54.42oz/tn | tr | ND | 3.10% | -- | -- | -- | -- | -- | |

* Bundtzen, p. 219.




LEGEND

Birch Creek Schist

p€sq Birch Creek micaceous quartzite

Vein quartz float with galena, cerrusite, stibnite, tetrahedrite?, malachite

20 Cleavage - showing dip

Contact - dashed where inferred

Pit or trench

Road

C014277 Sample site

Dump

Shaft

N

0 25 50 Feet

0 5 10 15 Meters

Occurrence No. 44 - Flourence Lode

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 45

Location: 3300 ft. northeast of Wickersham Dome (3495150N, 351800E)

Occurrence Type Quartz galena vein

Examining Geologist JMK

Ownership: ?

Date(s) of Examination July 28, 1983

General Geology: Birch Creek quartz feldspar schist and quartzite.

Mineralization: A 10 x 80 ft. limonite-stained vein quartz float zone. Mineralogy: minor pyrite, stibnite, stibiconite, galena.

Structure: Trend of quartz float N75$^{o}$E.

Development and Production: Several trenches in colluvium. No production.

Remarks: No mineralization seen in outcrop. Could be Bundtzen's No. 40 (1981, p. 203).

Analyses: See attached table.

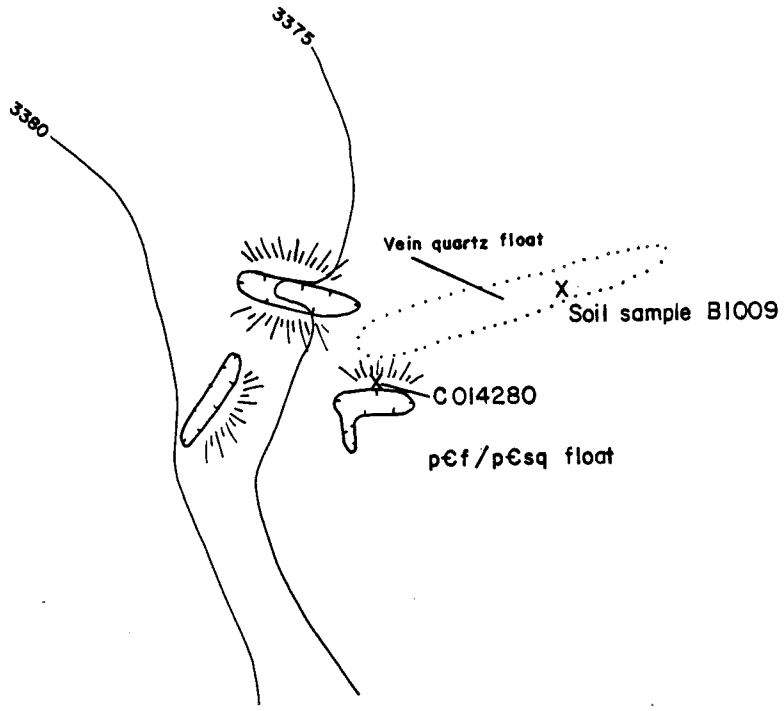
References: Bundtzen and others, 1976.
Bundtzen, 1981, p. 203.

Unnamed Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .033% | .078% | .130% | ND | ND | ND | .007% | 3 ppm | .125% | ND | -- | -- | Sample CO14280. Dump select grab. |
| | .004% | .190% | .100% | 2.7 ppm | .12 ppm | ND | .011% | ND | .350% | ND | -- | -- | Sample B1009. Soil sample stained zone. |
| * | .003% | .020% | .040% | tr | tr | 75 ppm | .049% | 74 ppm | .370% | .002% | ND | 0.8 ppm | Arsenopyrite vein poorly exposed. |

* Bundtzen, 1976.




LEGEND

| | |
|---|---|
| p€f | Birch Creek Schist quartz feldspar schist |
| p€sq | Birch Creek Schist micaceous quartzite |
| — — | Contact - dashed where inferred |
| | Pit or trench |
| | Dump |
| C014280 X | Sample site |

N

0 25 50 Feet

0 5 10 15 Meters

Contours sketched, approximate interval 5 feet

Occurrence No. 45 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 46

Location: (3504100N, 350750E)

Occurrence Type Ag-sulfide-quartz vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 23, 1983

General Geology: Blastoporphyritic metafelsite (Psf) of the Spruce Creek Sequence.

Mineralization: Poorly exposed trend. Sheared, altered, and mineralized zone. Sheared and altered metafelsite locally contains abundant pyrite. Metafelsite as well as minor vein quartz extensively stained orange-red due to the weathering and leaching of the sulfides. Goethite, limonite, and jarosite impart a red color to the soil as well.

Structure: Poor exposure; the trend can only be approximated to be northwesterly.

Development and Production: None recorded.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014408 | 20 | 35 | 35 | 0.8 | ND | ND | 6 | 5 | 285 |

References:

# OCCURRENCE REPORT FORM

NAME Upper Bosart Vein

Study Area Kantishna Hills

Occurrence No. 47

Location: 1.1 mi NE of Wickersham Dome (349740N, 352720E)

Occurrence Type Quartz galena vein

Examining Geologist JMK

Ownership: ?

Date(s) of Examination July 29, 1983

General Geology: Birch Creek quartz feldspar schist and micaceous quartzite.

Mineralization: Vein quartz dump float containing massive and stringer galena, tetrahedrite, malachite, and cerrusite(?).

Structure: No strike or dip could be determined for the mineralized zone.

Development and Production: Four trenches in colluvium. No production.

Remarks: Sulfides found only on dump of one trench. No mineralization found in outcrop.

Analyses: See attached table.

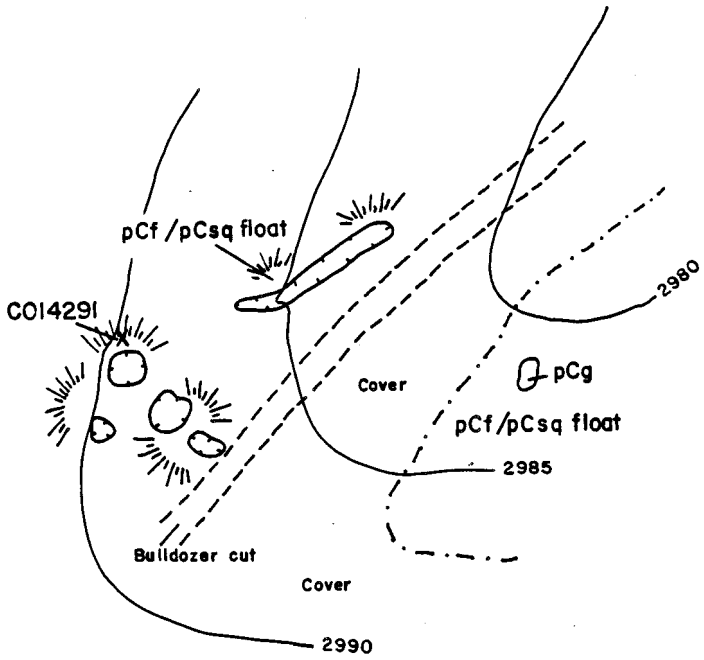
References: Bundtzen, 1981, p. 203, 220.
Hawley, 1977.

Upper Bosart Vein

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .365% | 32.0% | 18.0% | 23.6 oz/tn | ND | ND | .830% | 4 ppm | .020% | ND | -- | -- | Sample CO14291. Select high grade dump. |
| * | .880% | 32.8% | 20.4% | 26.4 oz/tn | tr | 1 ppm | 1.36% | 75 ppm | .027% | .009% | 1.3 ppm | 1.8 ppm | Grab sample, high-grade galena |
| ** | .046% | 2.75% | 1.15% | 1.47 oz/tn | ND | ND | 0.35% | -- | -- | -- | -- | -- | Sulfide grab sample. |

* Bundtzen, 1981.
** Hawley, 1977.




LEGEND

Birch Creek Schist

pCf — Birch Creek quartz feldspar schist

pCsq — Birch Creek micaceous quartzite

pCg — Birch Creek greenstone/greenschist

Contact - dashed where approximate

Pit or trench

C014291 x — Sample site

Dump

N

0 25 50 Feet

0 5 10 15 Meters

Contours sketched, approximate interval 5 feet

Occurrence No. 47 - Upper Bosart prospect

# OCCURRENCE REPORT FORM

NAME Bosart Prospect

Study Area Kantishna Hills

Occurrence No. 48

Location: 1.2 mi. northeast of Wickersham Dome (3497240N, 353700E)

Occurrence Type Quartz, galena vein

Ownership: Arley Taylor

Examining Geologist JMK

Date(s) of Examination July 29, 1983

General Geology: Interbedded Birch Creek quartz feldspar schist and micaceous quartzite. Greenstone locally observed within the sequence.

Mineralization: A 0.5 ft. wide quartz vein(s) are intermittently exposed over a 50 ft. strike length. Mineralogy: massive and stringer galena, tetrahedrite(?), cerrusite(?), arsenopyrite, pyrite, chalcopyrite, sphalerite.

Structure: The vein(s) trend N50$^{o}$E, dip 70-80$^{o}$ NW and may be offset by cross faults.

Development and Production: Development consists of a 190 ft. long open cut. Production: 30 tons hand sorted ore shipped in 1980, 0.328 oz/ton Au, 78.22 oz/ton Ag. Estimation 75 tons milling ore on dump at that time (Mark Anthony, 1983).

Remarks: A Hartz-type jig was set up on the property in 1980 and an unknown amount of concentrates produced.

Analyses: See attached table.

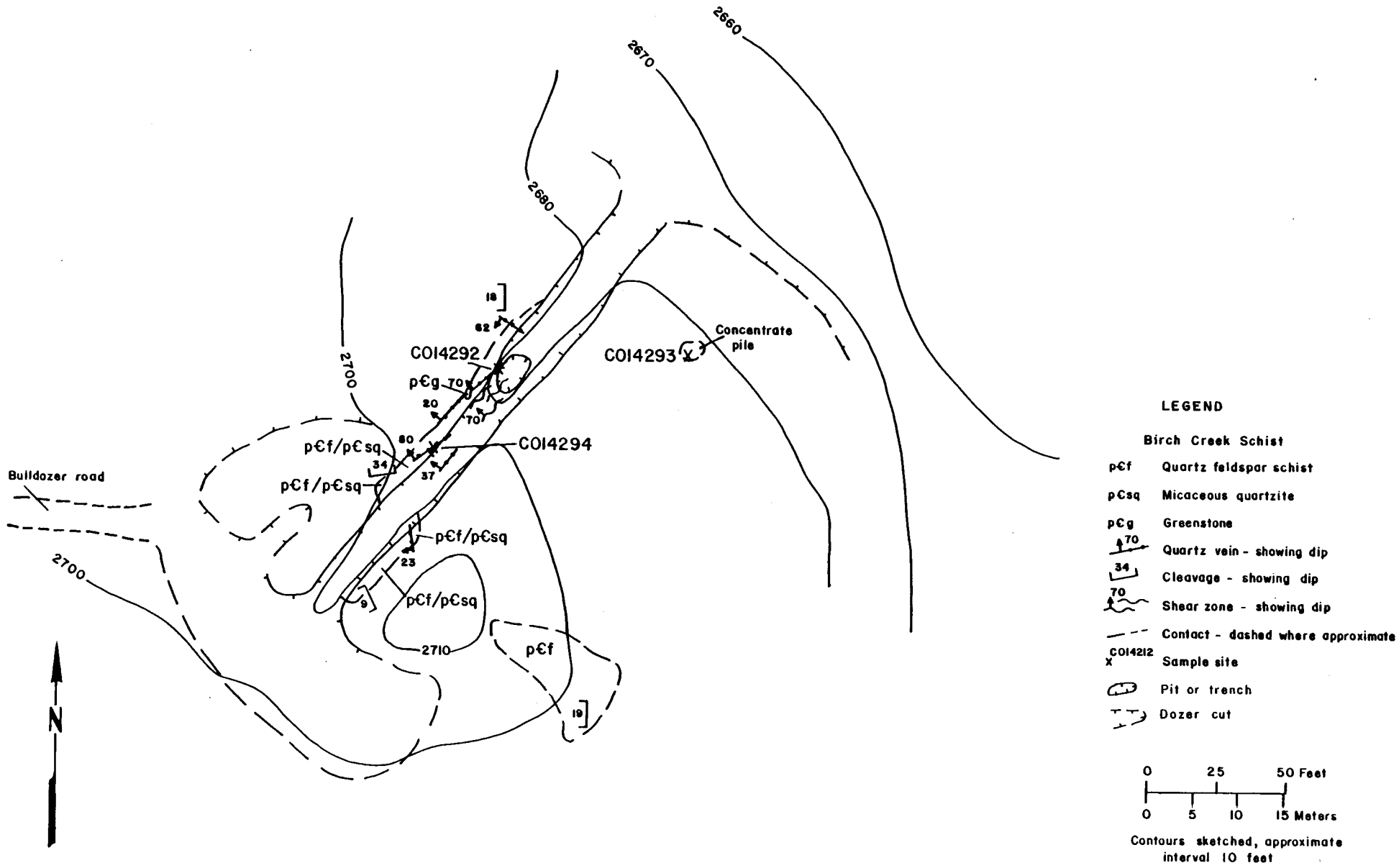
References:
Wells, 1933, p. 371-372.
Bundtzen, 1981, p. 203, 220.
Hawley, 1977.
Mark Anthony, L., personal comm., July 1983.

Bosart Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3.10 ppm | 23.5 ppm | 6.90 ppm | 95.0 ppm | .012 ppm | ND | 7.25 ppm | 3 ppm | .310 ppm | 9 ppm | -- | -- | Sample CO14292. Bosart prospect. |
| | .145 ppm | 3.95 ppm | 5.45 ppm | 12.6 ppm | ND | ND | .425 ppm | 22 ppm | .145 ppm | ND | -- | -- | Sample CO14293. Conc. pile. |
| | .585 ppm | 11.5 ppm | .795 ppm | 55.3 ppm | .016 ppm | ND | 4.05 ppm | ND | .640 ppm | 8 ppm | -- | -- | Sample CO14294. High grade. |
| * | .340% | 76.0% | 1.56% | 71.7 oz/tn | tr | ND | 0.94% | 75 ppm | .023% | .001% | 0.5 ppm | 1.3 ppm | Massive galena. |
| * | 6.66% | 24.5% | 0.38% | 223.3oz/tn | .02 oz/tn | 40 ppm | 1.54% | 75 ppm | .510% | .008% | 1.0 ppm | 1.0 ppm | Massive galena ore. |
| ** | .100% | 5.0% | 8.63% | 44.1 oz/tn | tr | -- | 0.54% | -- | -- | -- | -- | -- | Galena ore contains 32 ppm Hg. |

* Bundtzen, 1981.
** Hawley, 1977.




Occurrence No. 48 - Bosart prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect (Tugboat Annie Claim)

Study Area Kantishna Hills

Occurrence No. 49

Location: Wickersham Dome, 500 ft. north of the Banjo Mine (3493450N, 354180E)

Occurrence Type Quartz vein

Examining Geologist JMK

Ownership: Kantishna Mines and Red Top Mining Company

Date(s) of Examination July 28, 1983

General Geology: Birch Creek quartz feldspar schist and greenstone.

Mineralization: A 25 x 160 ft. zone of vein quartz float. Mineralogy: limonite, pyrite, stibnite, chalcopyrite, tetrahedrite, malachite. Sulfides total 1-2%.

Structure: No vein quartz was found in outcrop. The long direction of the float zone trends N85°W.

Development and Production: Four small trenches in colluvium. No production.

Remarks: Bundtzen (1981) has a prospect shown in this area but gives it no number. Rock samples of the quartz float were collected and soil samples taken along its strike length.

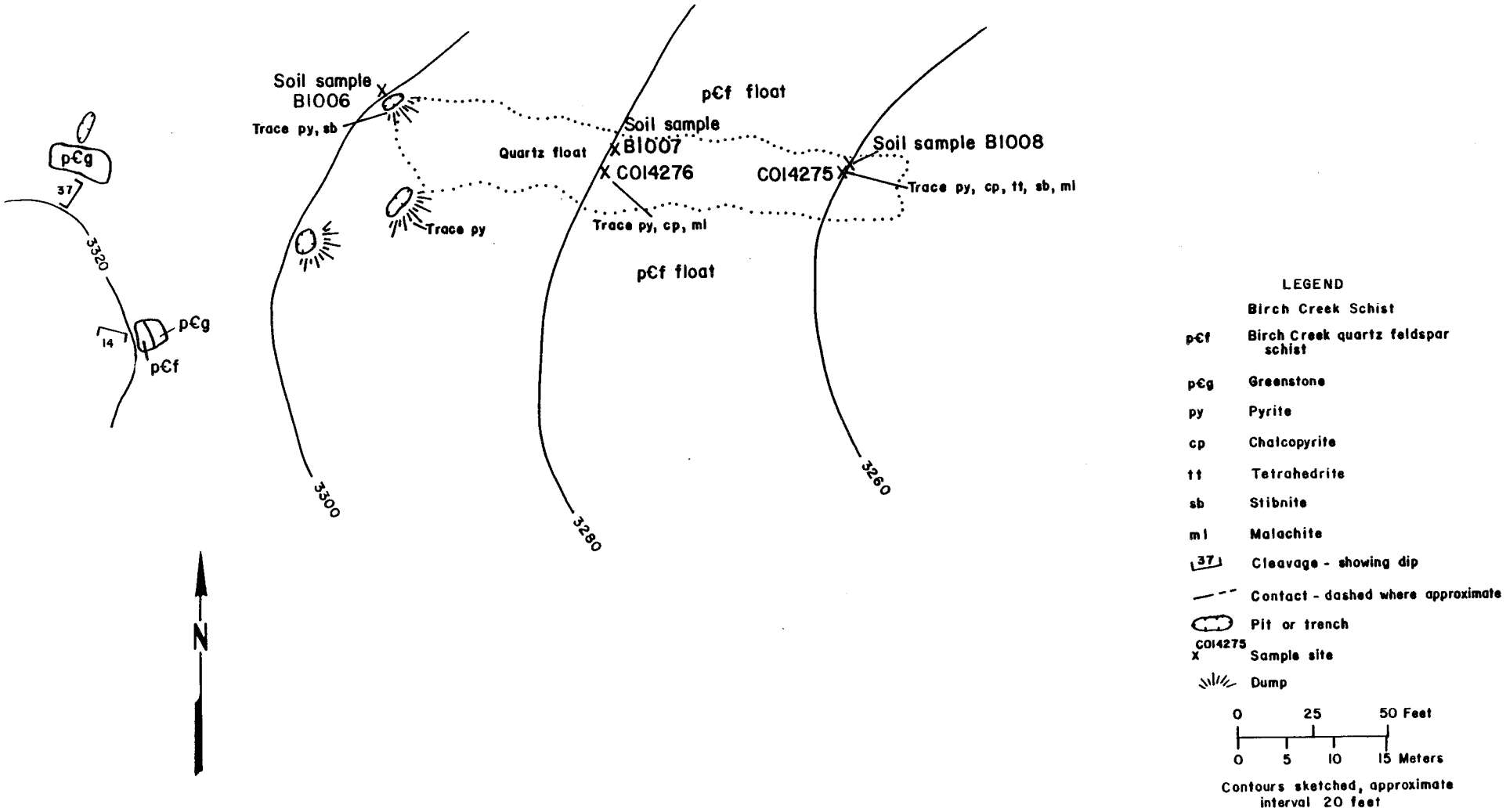
Analyses: See attached table.

References: Bundtzen, 1981.

Unreported Occurrence (Tugboat Annie Claim)

Salisbury & Dietz, Inc. study results:

| Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| .019% | .067% | .055% | <.001 oz/tn | <.001 oz/tn | ND | .024% | -- | .004% | -- | -- | -- | Sample C014275. Select grab quartz float. |
| .021% | .040% | .048% | <.001 oz/tn | <.001 oz/tn | ND | .003% | -- | ND | -- | -- | -- | Sample C014276. Select grab quartz float. |
| 45 ppm | 45 ppm | 100 ppm | 0.5 ppm | 0.5 ppm | -- | 9 ppm | -- | ND | -- | -- | -- | Sample B1006. Soil. |
| 185 ppm | 405 ppm | 185 ppm | 0.8 ppm | ND | -- | 75 ppm | -- | 25 ppm | -- | -- | -- | Sample B1007. Soil. |
| 175 ppm | 215 ppm | 340 ppm | 0.4 ppm | ND | -- | 38 ppm | -- | 70 ppm | -- | -- | -- | Sample B1008. Soil. |




Occurrence No. 49 – Unnamed prospect

# OCCURRENCE REPORT FORM

NAME ~~Banjo Mine, Hardrock and Tugboat Annie~~ Claims

Study Area Kantishna Hills

Occurrence No. 50

Location: Head of Lucky Gulch 1.5 mi. above mouth of Eureka Creek (3491980N, 354880E)

Occurrence Type Quartz gold veins

Ownership: Kantishna Mines and Red Top Mining Company

Examining Geologist JMK

Date(s) of Examination June 16 and 23, 1983

General Geology: Quartz-eye bearing metafelsite and graphitic schist.

Mineralization: Limonite stained quartz vein(s) of undetermined thickness containing arsenopyrite, pyrite, galena, malachite, scheelite.

Structure: Northeast trending quartz vein system 1-3.3 ft. wide (Bundtzen, p. 202, plate 3).

Development and Production: Development: 1700 ft. of inaccessible underground workings on three levels, aerial tramway and a 24 ton/day mill. Milling consisted of concentrating tables and flotation cells.

Remarks: The underground workings are presently caved, but a vein exposed intermittently on the surface was sampled along with some dumps and mill tailings.

Analyses: See attached table.

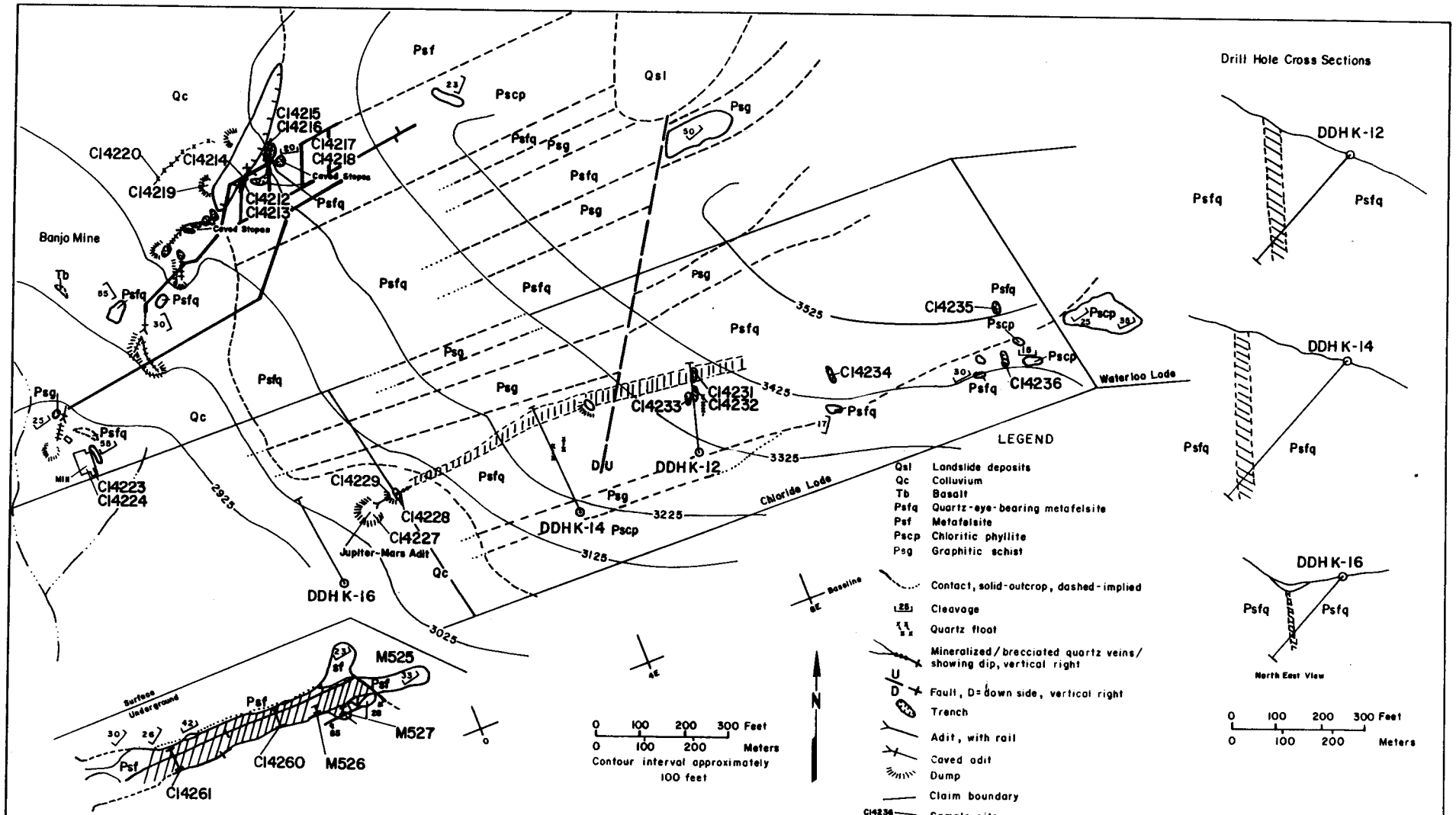
References: Wells, 1933, p. 371.
Bundtzen, 1976, p. 157, 1981, p. 202, 219.
Hawley, 1977.

Banjo Mine, Hardrock and Tugboat Annie Claims

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .004% | .030% | .004% | .21 oz/tn | .72 oz/tn | 2 ppm | 32 ppm | 4 ppm | .785% | 2 ppm | -- | -- | Sample CO14212. Quartz vein breccia. |
| | .006% | .078% | .011% | .40 oz/tn | .37 oz/tn | ND | 34 ppm | 3 ppm | .345% | ND | -- | -- | Sample CO14213. Quartz vein. |
| | 40 ppm | 65 ppm | .0145% | 1.1 ppm | .8 ppm | ND | 14 ppm | 5 ppm | .480% | ND | -- | -- | Sample CO14214. Metafelsite wall rock. |
| | .018% | .500% | .025% | 3.04 oz/tn | .061 oz/tn | ND | 220 ppm | 660 ppm | .180% | ND | -- | -- | Sample CO14215. Quartz vein. |
| | .008% | 1.30% | .765% | 2.09 oz/tn | .210 oz/tn | ND | 55 ppm | 140 ppm | .080% | ND | -- | -- | Sample CO14216. Quartz vein. |
| | 75 ppm | 25 ppm | .100% | 0.22 oz/tn | .032 oz/tn | ND | 22 ppm | 7 ppm | .125% | ND | -- | -- | Sample CO14217. Graphitic schist wall rock. |
| | 10 ppm | 15 ppm | 40 ppm | .2 ppm | .11 ppm | ND | -- | 7 ppm | .072% | ND | -- | -- | Sample CO14218. Metafelsite. |
| | .002% | .092% | .028% | .410 oz/tn | .480 oz/tn | ND | 15 ppm | 105 ppm | .215% | ND | -- | -- | Sample CO14219. Quartz vein. |
| | .004% | 1.10% | .275% | 1.15 oz/tn | .013 oz/tn | ND | 42 ppm | 95 ppm | .022% | ND | -- | -- | Sample CO14220. Quartz float with GN. |
| | 65 ppm | .077% | .017% | 2.64 oz/tn | .076 oz/tn | ND | 85 ppm | 9 ppm | .195% | ND | -- | -- | Sample CO14223. Mill tailings Banjo. |
| | 80 ppm | .330% | .063% | 4.82 oz/tn | 6.13 oz/tn | ND | 60 ppm | 315 ppm | .320% | 3 ppm | -- | -- | Sample CO14224. Shaker table cons. |
| * | .015% | .013% | .002% | 0.03 oz/tn | 0.044oz/tn | 6 ppm | 12 ppm | -- | 14.2% | ND | 2.1 ppm | 1.0 ppm | Grab sample from dump. |
| ** | -- | -- | -- | 0.52 oz/tn | 0.46 oz/tn | -- | -- | -- | -- | -- | -- | -- | Average grade of 13,656 tons of ore. |
| *** | ND | .245% | .075% | 2.94 oz/tn | 0.058oz/tn | -- | ND | -- | -- | -- | -- | -- | Grab sample; tailings. |

* Bundtzen, 1981.
** Bundtzen and others, 1976.
*** Hawley, 1977.




Underground Workings
Jupiter - Mars Claim

Geology after Hawley, 1977 with additions in 1983 by T.K.Hinderman and J.M.Kurtak

**Occurrence No. 50 Banjo Mine, Jupiter-Mars, Chloride Lode, and Waterloo Claims Area-Kantishna Hills Study Area**

Topography after Hawley, 1977
Geology by T.K. Hinderman, and J.M. Kurtak

# OCCURRENCE REPORT FORM

NAME Jupiter-Mars (Damon & Pythias) (Patented claim MS 361)

Study Area Kantishna Hills

Occurrence No. 51

Location: East side Lucky Gulch 2.5 mi. above mouth of Eureka Creek (3491310N, 355210E)

Ownership: Ivan P. Lloyd

Occurrence Type Quartz sulfide vein

Examining Geologist JMK, TKH

Date(s) of Examination June 16 and 23, 1983

General Geology: Spruce Creek metafelsite with minor quartz eyes.

Mineralization: A near vertical brecciated, limonite stained quartz vein-gouge zone averaging 8 ft. wide is exposed for 80 ft. along strike underground.
Mineralogy: quartz, fault gouge, minor calcite, arsenopyrite, pyrite, galena, sphalerite, scorodite, stibiconite, boulangerite, jamesonite(?). See attached figure.

Structure: The vein trends N65$^{o}$E and is cut off by a low angle NW trending fault 20 ft. short of the adit face. Clayey gouge zone within and running parallel to the vein indicate post emplacement movement.

Development and Production: Development: A 120 ft. adit and several pits on the surface above it.
Production: A small unknown tonnage of ore was added to the Banjo production (Bundtzen, 1981, p. 203).
Indicated reserves in adit: 2339 tons at 0.11 oz/ton Au and 2.8 oz/ton Ag.

Remarks: The continuation of the vein on the footwall side of the crosscutting fault was not located underground. One 237 ft. core drill hole (K-16), 150 ft. southwest of the adit, intersected 9.4 ft. averaging .052 oz/ton Au and 7.30 oz/ton Ag. A brecciated metafelsite and gossaneous quartz zone 9.5 ft. thick was intersected 110 ft. vertically below the surface along the southwest projection of the mineralized zone followed by the adit. The mineralized zone extends northeast on to the Chloride Claim.

Analyses: See attached table.
Drill core samples (see hole K-16, Appendix D)

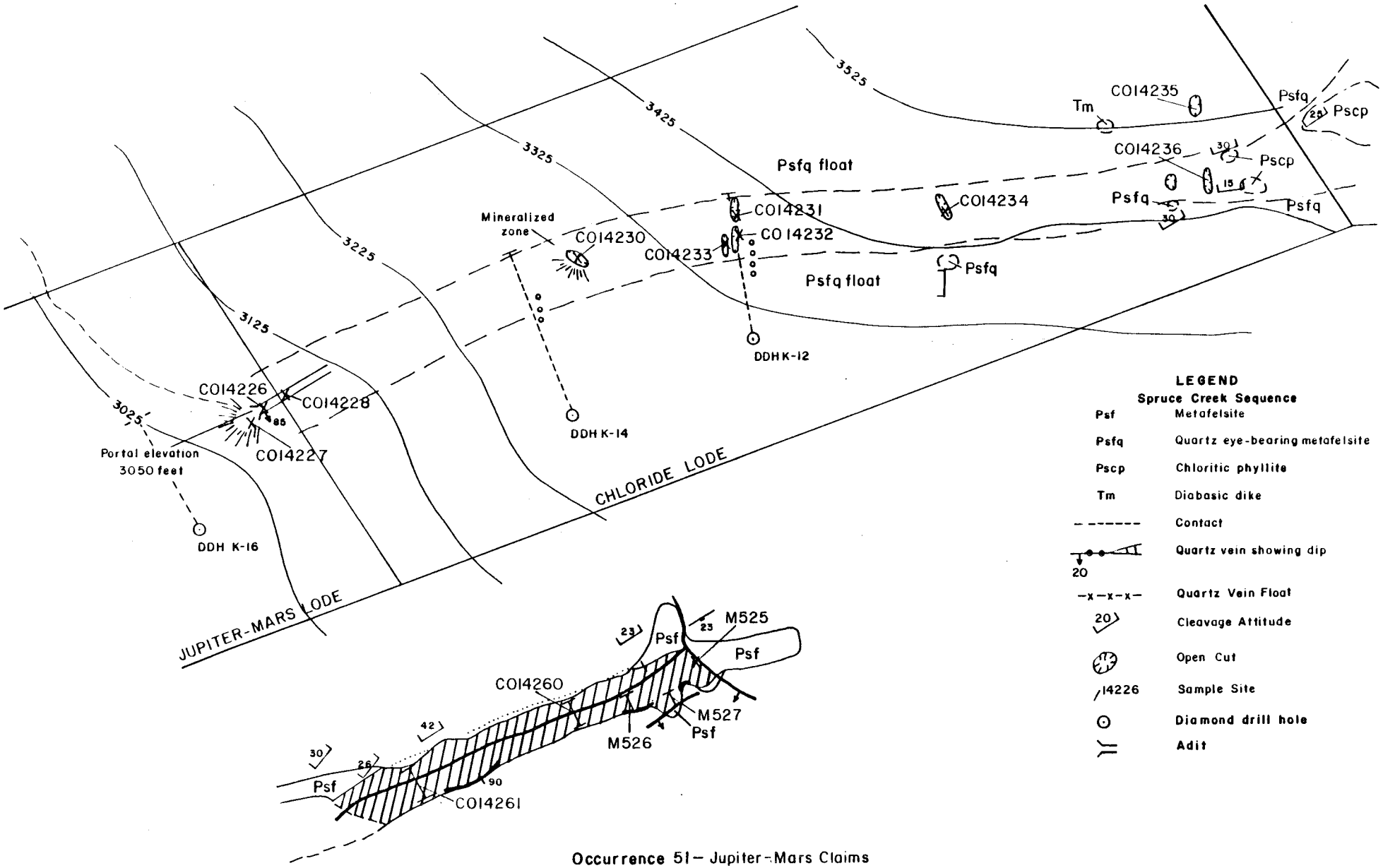
References: Wells, 1933, p. 371.
Hawley, 1977.
Bundtzen, 1981, p. 203, 219.

Jupiter-Mars (Damon & Pythias) (Patented Claim M.S. 361)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .195% | .790% | .575% | 6.30 oz/tn | .20 oz/tn | 2 ppm | .020% | 2 ppm | 11.7% | 3 ppm | -- | -- | Sample CO14227. Jupiter-Mars dump. |
| | .032% | 1.20% | .041% | 9.81 oz/tn | .11 oz/tn | 2 ppm | .042% | 2 ppm | .675% | 1 ppm | -- | -- | Sample CO14228. Surface quartz vein. |
| | .004% | .032% | .012% | 1.6 ppm | .08 ppm | 2 ppm | .002% | 4 ppm | .110% | 1 ppm | -- | -- | Sample CO14229. Dump sample. |
| | .048% | 2.05% | .150% | 3.53 oz/tn | .11 oz/tn | ND | .052% | ND | 7.30% | 1 ppm | -- | -- | Sample CO14260. 4 ft. chip across vein. |
| | .048% | 2.90% | .115% | 3.78 oz/tn | .15 oz/tn | ND | .036% | ND | 3.4% | 2 ppm | -- | -- | Sample CO14261. 6 ft. chip across vein. |
| * | .180% | .270% | .050% | 3.76 oz/tn | .20 oz/tn | ND | .023% | -- | 14.2% | .012 ppm | -- | .9 ppm | Grab samples, high grade. |
| * | .060% | .630% | .120% | 14.6 oz.tn | .20 oz/tn | ND | .025% | -- | -- | .018 ppm | 7.2 ppm | 22.5ppm | |
| ** | .250% | 2.25% | .460¢ | 8.40 oz/tn | .18 oz/tn | -- | -- | -- | -- | -- | -- | -- | Channel sample underground. |
| ** | .090% | 1.60% | .180% | 3.30 oz/tn | .04 oz/tn | -- | .034% | -- | -- | -- | -- | -- | Channel sample underground. |
| ** | .030% | .020% | .180% | tr | tr | -- | tr | -- | -- | -- | -- | -- | Channel sample underground. |

* Bundtzen, p. 219.
** Hawley, 1977.




Occurrence 51 – Jupiter-Mars Claims

# OCCURRENCE REPORT FORM

NAME Silver King - Merry Widow Claims

Study Area Kantishna Hills

Occurrence No. 52

Location: North side Eureka Creek
NW¼ Sec. 8, T16S, R17W
(3489100N, 352950E)

Occurrence Type Silver-bearing sulfide vein

Examining Geologist TKH

Ownership: Two patented claims controlled by Ivan P. Lloyd.

Date(s) of Examination June 25, 1983

General Geology: Felsite of the Spruce Creek Sequence (Psf).

Mineralization: Galena, pyrite, sphalerite, tetrahedrite and minor chalcopyrite with limonite and malachite in quartz-ankerite gangue. The vein is 4-6 ft. thick. 45 ft. of the vein were exposed by trenching in the 1970's.

Structure: According to Bundtzen (1981) the vein strikes N70°E, dips 65°NW, and is highly sheared and oxidized.

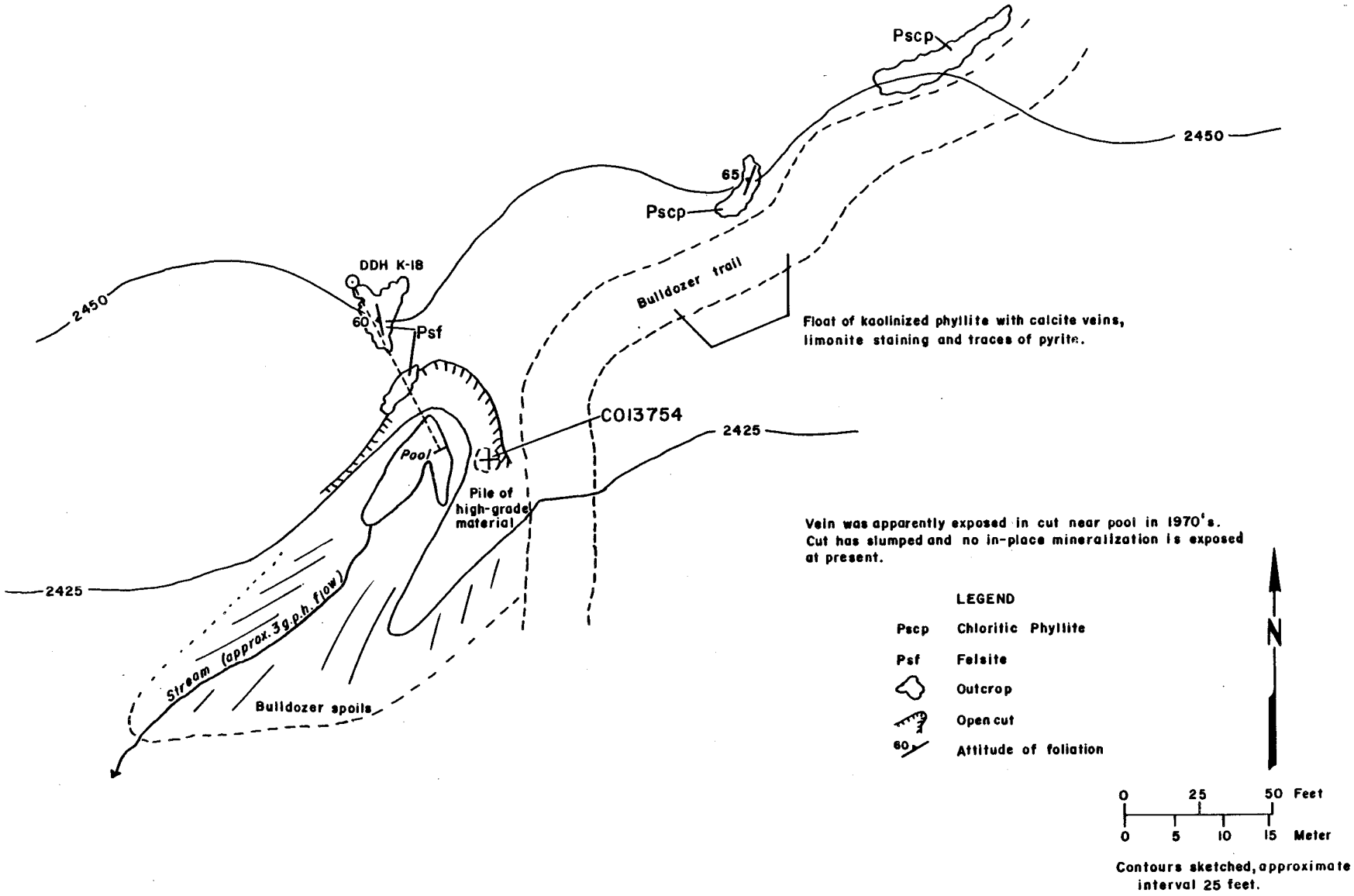
Development and Production: Exposed by dozer trenching. No production.

Remarks: Trenches have slumped or filled with water. Vein is not exposed at this time.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C013754 | .905 | 58.5 | 13.5 | 188.7 | .047 | ND | 1.0 | ND | .27 | Grab from high grade pile near trench. |

References:
Bundtzen, 1981.
Bundtzen and others, 1976.
Hawley, 1977.
Chadwick, 1976.
Wells, 1933.




Occurrence No. 52 - Silver King - Merry Widow Claims

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 53

Location: Ridge southeast of Eureka Creek (3484000N, 354200E)

Occurrence Type Quartz vein

Examining Geologist CDH

Ownership: No current claims.

Date(s) of Examination July 29, 1983

General Geology: Birch Creek schist.

Mineralization: Pyrite and arsenopyrite, sparse.

Structure: Very poorly exposed N30°W striking vertical vein. Possible 35 ft. of strike length indicated by float.

Development and Production: One small slumped prospect pit.

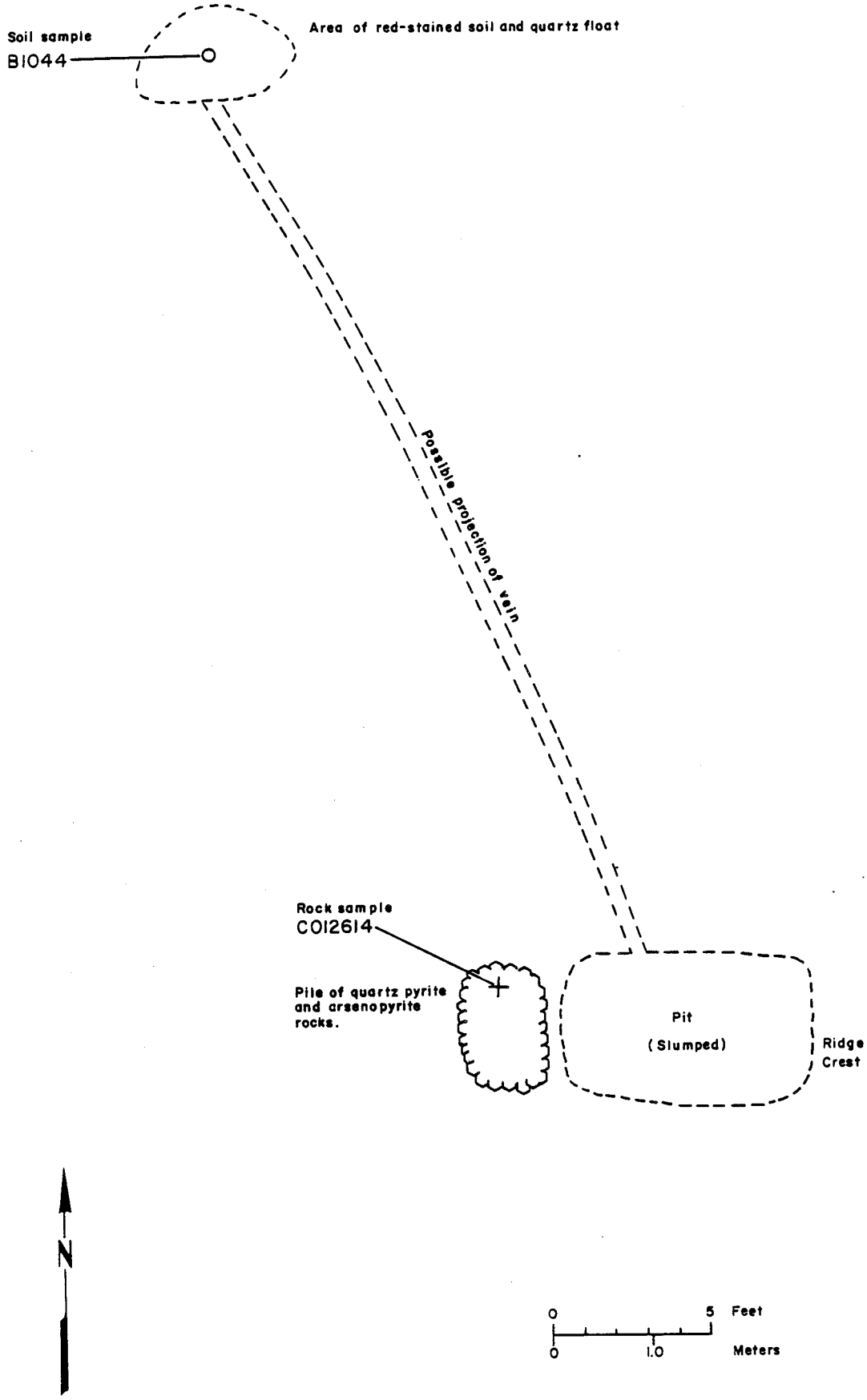
Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C012614 | ND | 10 | 20 | 1.7 | 1.2 | ND | 48 | 2 | .99 | quartz from pit |
| B1044 | 90 | 115 | 330 | 4.7 | 1.9 | ND | 165 | 6 | .86 | soil sample |

Bundtzen barren (no significant mineralization) quartz from pit

References: Bundtzen, 1981.




Occurrence No. 53- Unnamed Occurrence

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 54

Location: Ridge south of Eureka Creek (348360N, 357850E)

Occurrence Type Shear controlled and/or stratabound sulfides

Examining Geologist CDH

Ownership: No current claims.

Date(s) of Examination July 29, 1983

General Geology: Birch Creek schists. No mineralized outcrops seen. Exposure is nonexistent in the area of mineralized float.

Mineralization: Sphalerite, pyrite, galena, chalcopyrite, hematite. Gangue is garnet, tremolite-actinolite, quartz.

Structure: The true structure and rock relationships are unknown. A possible northwest shear zone passes through area and may be a mineralizing structure. Selective replacement in the quartz-garnet schist resulted in a semi-stratabound deposit from which sample C012613 was derived. Abundant quartz float (mostly barren) is also found in the area.

Development and Production: None.

Remarks: Lack of exposure prevents proper evaluation of this showing. Soil sample prospecting and trenching would be helpful.

Analyses: See attached table.

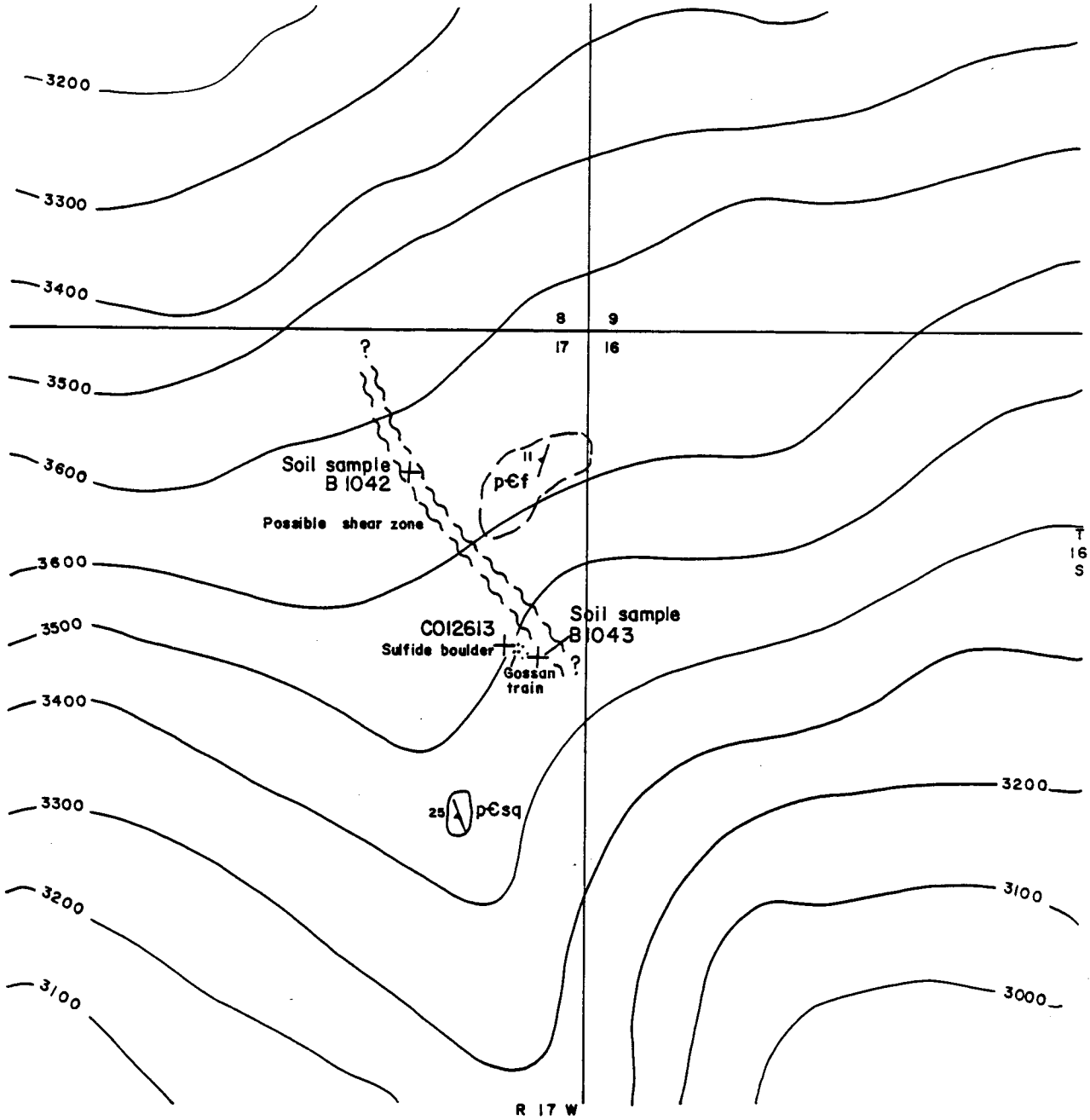
References: Bundtzen, 1981.

Unnamed Occurrence

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .110% | 1.05% | 11.0% | ND | .007 oz/tn | ND | .067% | ND | .050% | 2 ppm | -- | -- | Sample C012613. Float. |
| | .006% | .016% | .016% | .4 ppm | ND | ND | .010% | 5 ppm | .092% | ND | -- | -- | Sample B1042. Soil. |
| | .004% | .087% | .315% | .5 ppm | .02 ppm | ND | .018% | 3 ppm | .028% | ND | -- | -- | Sample B1043. Soil. |
| * | .006% | .015% | .240% | .010 oz/tn | tr | -- | .810% | -- | -- | -- | -- | -- | Quartz float. |

* Bundtzen, 1981.




LEGEND

| | |
|---|---|
| p€sq | Birch Creek Schist |
| p€f | Birch Creek Schist quartz feldspar schist and quartzite |
| 25 | Foliation - showing dip |
| | Shear zone |
| | Contact - dashed where inferred |
| C012613 | Sample site |

0 250 500 Feet

0 50 100 150 Meters

Contours sketched, approximate interval 100 feet

N

Occurrence No. 54 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Chloride Lode Claim (patented M.S. No. 361)

Study Area Kantishna Hills

Occurrence No. 55

Location: East side Lucky Gulch, 2.6 mi. above mouth of Eureka Creek. (3491570N, 355890E)

Occurrence Type Quartz sulfide vein

Examining Geologist JMK, TKH

Ownership: Ivan P. Lloyd

Date(s) of Examination June 16 and 23, 1983

General Geology: Quartz eye-bearing metafelsite and graphitic schist. The metafelsite alters to a tan-colored, limonite-stained fissile, calcareous wall rock, adjacent to the mineralized zone.

Mineralization: Limonite-stained vuggy massive and brecciated quartz float zone trending roughly N80°E for 1400 ft. along strike. Mineralogy: quartz, limonite, arsenopyrite, scorodite, pyrite, jamesonite(?), galena (see figure for Occurrence No. 51).

Structure: The mineralized zone may be two branching vein structures, one trends N 85°E and the other N65°E. The latter is a continuation of the vein cut underground on the Jupiter-Mars claim.

Development and Production: Development: a series of trenches along the strike length of the mineralized zone. No production.
Indicated reserves along entire mineralized trend including Jupiter-Mars claims: 103,760 tons at 0.062 oz/ton Au and 5.97 oz/ton Ag.

Remarks: Two holes, K-12 and K-14, drilled along trend of mineralization. (See Appendix D) The deepest intersected mineralization 340 ft. vertically below the surface. A 1.8 ft. interval averaged .063 oz/ton Au and 7.31 oz/ton Ag.

Analyses: See attached table.
Drill core samples (See holes K-12 and K-14, Appendix D.)

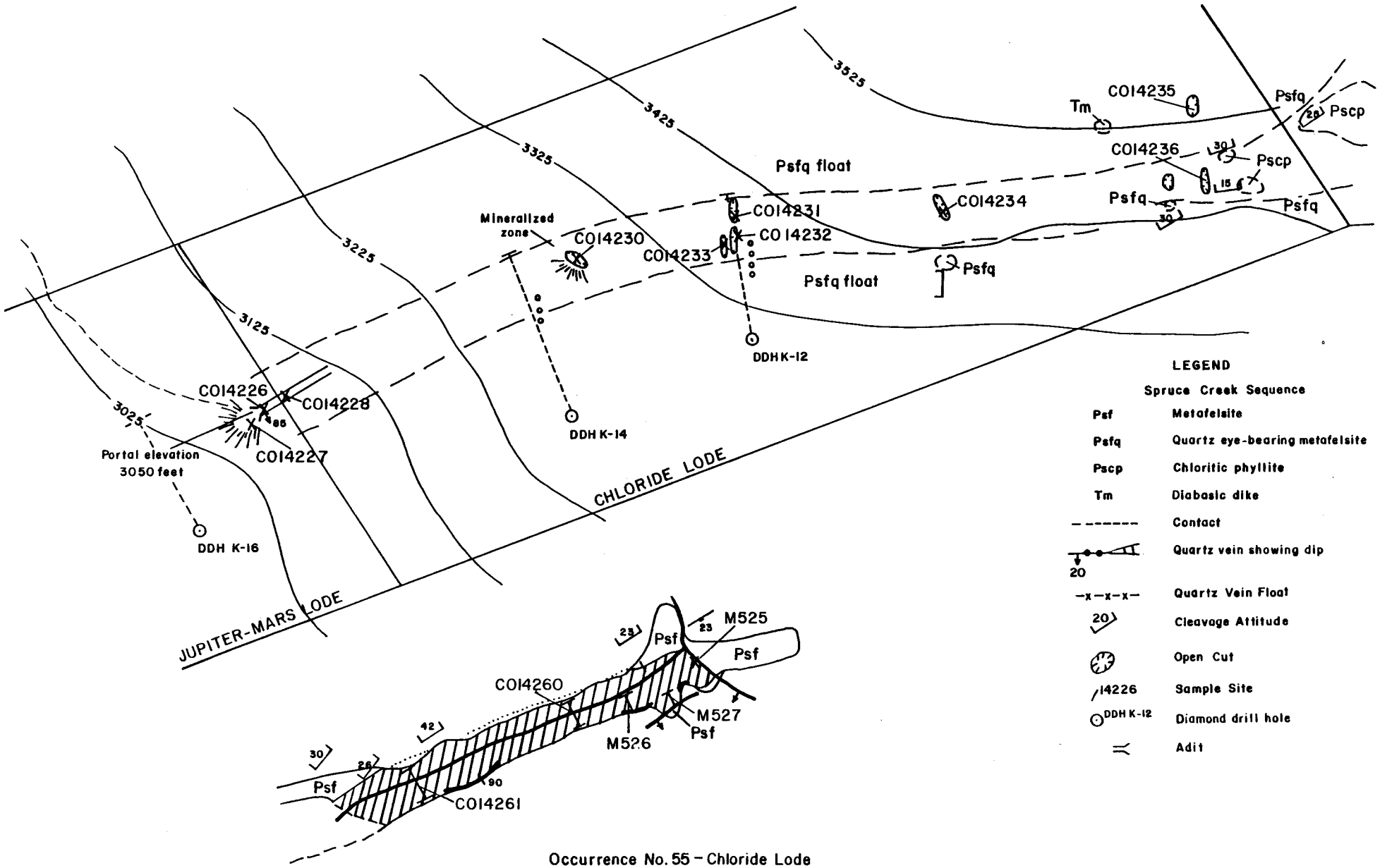
References: Bundtzen, 1981, p. 203, 219.
Hawley, 1977.

Chloride Lode Claim (patented M.S. No. 361)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .016% | .195% | .004% | 4.82 oz/tn | .035 oz/tn | ND | .003% | ND | 1.00% | ND | -- | -- | Sample CO14231. Dump sample. |
| | .200% | 14.0% | .440% | 43.8 oz/tn | .467 oz/tn | ND | .290% | ND | 5.05% | ND | | | Sample CO14232. Dump sample. |
| | .135% | 4.80% | .220% | 10.5 oz/tn | .093 oz/tn | ND | .070% | ND | 3.60% | ND | -- | -- | Sample CO14233. Dump sample. |
| | .030% | .315% | .020% | 2.92 oz/tn | .105 oz/tn | 2 ppm | .034% | 5 ppm | 2.80% | 4 ppm | -- | -- | Sample CO14234. Dump sample. |
| | .007% | .450% | .010% | 1.75 oz/tn | .079 oz/tn | ND | .010% | ND | 1.20% | 18 ppm | -- | -- | Sample CO14235. Dump sample. |
| | .110% | 20.0% | .125% | 52.5 oz/tn | .137 oz/tn | 4 ppm | .002% | 4 ppm | .245% | 3 ppm | -- | -- | Sample CO14236. Dump sample. |
| * | .007% | .011% | .037% | 0.03 oz/tn | tr | -- | ND | -- | -- | -- | -- | -- | Soil samples across mineralized zone. |
| * | .002% | .013% | .026% | 0.26 oz/tn | tr | -- | ND | -- | -- | -- | -- | -- | |
| * | .007% | .110% | .060% | 0.47 oz/tn | .01 oz/tn | -- | ND | -- | -- | -- | -- | -- | |
| * | .010% | .390% | .080% | 0.64 oz/tn | .01 oz/tn | -- | ND | -- | -- | -- | -- | -- | |

* Hawley, 1977.




Occurrence No. 55 – Chloride Lode

# OCCURRENCE REPORT FORM

NAME Waterloo Claim

Study Area Kantishna Hills

Occurrence No. 56

Location: 1.4 mi. east of Wickersham Dome (491850N, 357525E)

Occurrence Type Quartz vein

Ownership: A. Q. Peterson, Fairbanks, AK

Examining Geologist JMK

Date(s) of Examination June 29, 1983

General Geology: Lies within quartz eye-bearing metafelsite approximately 50 ft. west of a graphitic schist bed.

Mineralization: Float in trenches consists of limonite-stained quartz, locally somewhat gossaneous and brecciated, silicified metafelsite with less than 5% pyrite and arsenopyrite.

Structure: One trench trends N10°E and lies along a northeast fault projected through the area (Bundtzen, 1981, Plate 1).

Development and Production: Development: Three small sloughed-in trenches.

Remarks: This description does not match that given by Bundtzen (1981, p. 203) of the mineralization.

Analyses: See attached table.

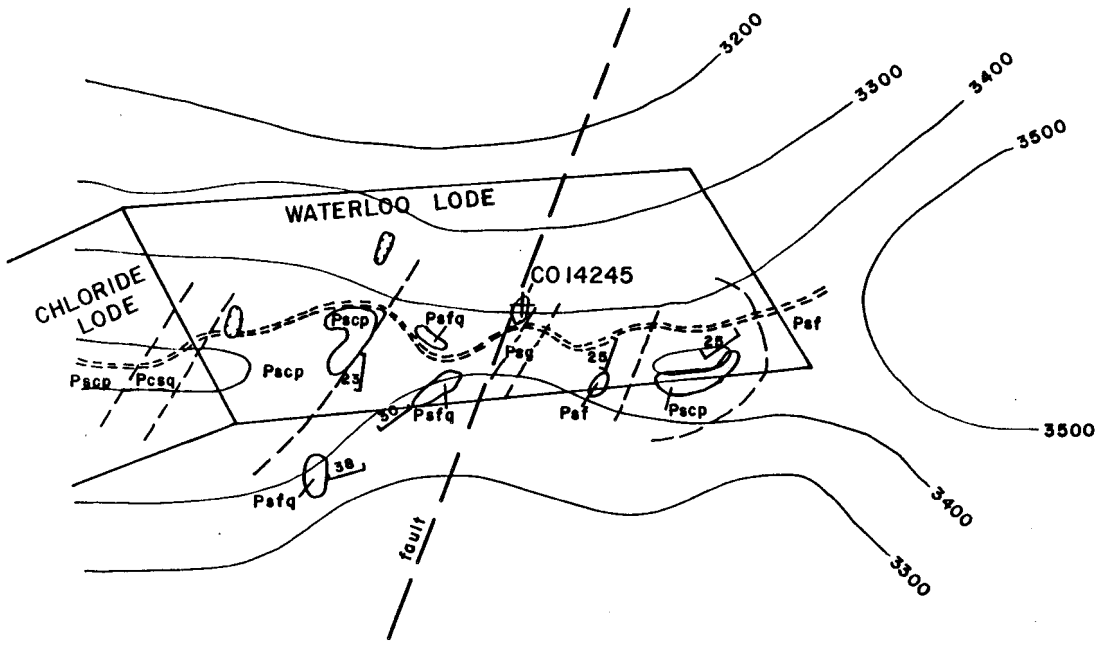
References: Bundtzen, 1981, p. 203, 220, and Plate 1.

Waterloo Claim

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .018% | .026% | .165% | .27 oz/tn | .03 ppm | ND | .016% | ND | 0.25% | ND | -- | -- | Sample CO14245. |
| * | .050% | 48.3% | .072% | 5.0 oz/tn | .02 oz/tn | 6 ppm | .100% | -- | -- | -- | -- | -- | Massive galena. |
| * | .077% | 52.0% | .133% | 79.1oz/tn | .04 oz/tn | 50 ppm | .380% | 75 ppm | 4.97% | .001% | 5.2 ppm | 1.5 ppm | Massive galena. |

* Bundtzen, 1981.




LEGEND

Spruce Creek Sequence

| | |
|---|---|
| Psf | Metafelsite |
| Psfq | Quartz eye-bearing metafelsite |
| Pscp | Chloritic phyllite |
| Psg | Graphitic schist |
| 38 | Cleavage attitude |
| — — — | Contact - dashed where approx. |
| | Trench |
| CO 14245 X | Sample site |

0 250 500 Feet

0 50 100 150 Meters

Contour Interval 100'

N

Occurrence No. 56 - Waterloo claim

# OCCURRENCE REPORT FORM

NAME Saddle Prospect

Study Area Kantishna Hills

Occurrence No. 57

Location: 700 ft. southwest of peak 3835 (3492800N, 360500E)

Occurrence Type Silicified zone

Examining Geologist JMK

Ownership: Jim Fuksa, Grizzly No. 1 Claim

Date(s) of Examination June 25, 1983

General Geology: Quartz eye-bearing metafelsite.

Mineralization: Quartz and silicified quartz eye-bearing metafelsite float, occurring within a N70°E trending 8 ft. by 100 ft. long zone. Mineralogy: limonite-stained quartz, pyrite, arsenopyrite.

Structure: A dip for the zone could not be determined.

Development and Production: Development: Five trenches in colluvium.

Remarks: Appears to fit Bundtzen's No. 47.

Analyses: See attached table.

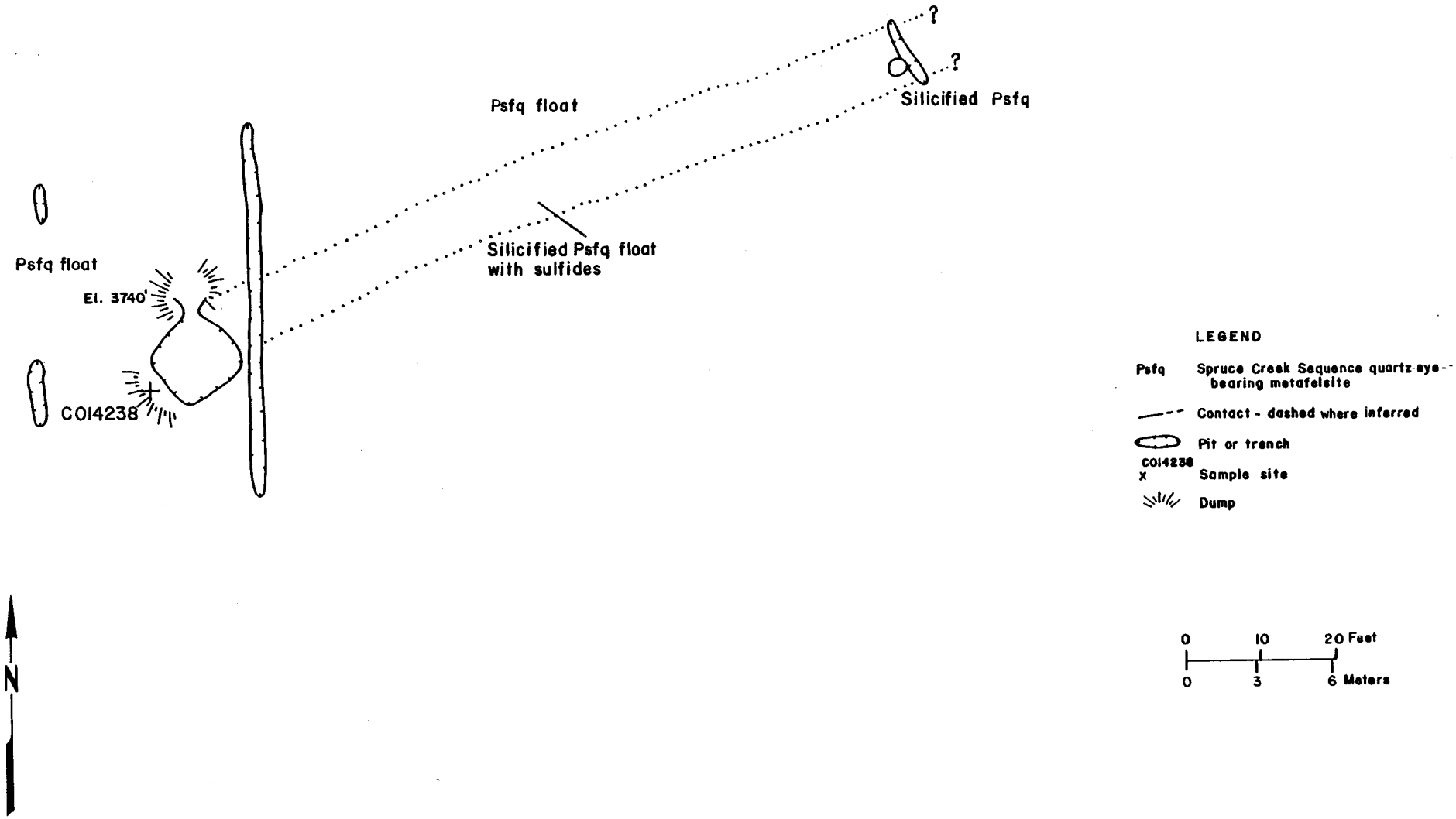
References: Bundtzen, 1981, p. 214, 221.
Hawley, 1977.

Saddle Prospect

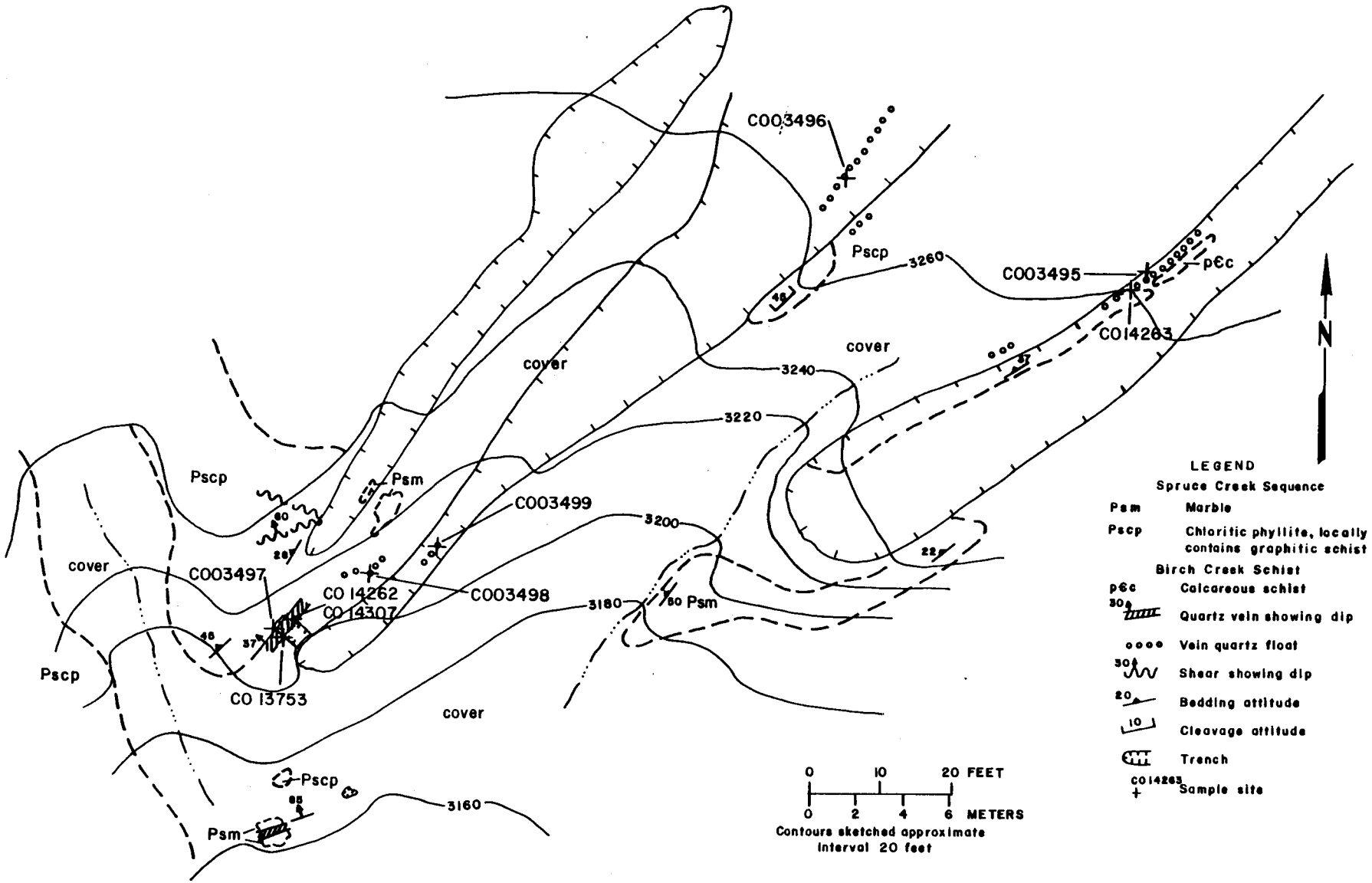
Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 ppm | .014% | .004% | 1.5 ppm | .17 ppm | ND | .005% | 3 ppm | .145% | ND | -- | -- | Sample CO14238 |
| * | .005% | .018% | .008% | .09 oz/tn | .01 oz/tn | 20 ppm | .001% | 75 ppm | .572% | .007% | 1.0 ppm | 4.3 ppm | Grab samples; pyrite ore. |
| ** | .001% | .003% | .013% | ND | ND | -- | ND | -- | -- | -- | -- | -- | Gossan chip. |

* Bundtzen, 1981.
** Hawley, 1977.




Occurrence No. 57 - Saddle prospect




Occurrence No. 58 - Weiler or Parky Prospect (Griess) (Silver King No. 18 Claim)

# OCCURRENCE REPORT FORM

**NAME** Wieler, (Griess) Prospect (Silver King No. 18 claim)

**Study Area** Kantishna Hills

**Occurrence No.** 58

**Location:** 2.0 miles east of Wichersham Dome (3473450N, 333800E)

**Occurrence Type** Quartz, galena vein

**Examining Geologist** JMK, TKH, LWH, RJH

**Ownership:** Gold King Mines

**Date(s) of Examination** July 14-15, 1983

**General Geology:** Interbedded marble and chloritic phyllite of the Spruce Creek sequence. The phyllite locally contains graphitic interbeds.

**Mineralization:** A four foot wide exposure of limonitic, sheared quartz-vein material exposed for 22 feet along strike. Quartz vein float found in nearby bulldozer cuts. Mineralogy: galena, malachite, azurite, arsenopyrite, pyrite, chalcopyrite, sphalerite.

**Structure:** The only mineralized bedrock quartz vein exposure trends N40$^{o}$E and dips 37$^{o}$N which is roughly parallel to bedding and cleavage. Several shears were noted cutting the nearby host rocks. A barren quartz vein to the south strikes N70$^{o}$E, dips 89$^{o}$W and may correlate with chalcopyrite quartz and sphalerite-bearing float in the southern-most trench.

**Development and Production:** Ore produced from a 5 x 5 x 30 foot trench and an 8 foot adit after examination. Capps (1919, p. 101) reports a 23 foot adit in the area. Production: 156 tons at average 2.8 oz/ton gold, 65.3 oz/ton silver mined during August and September 1983 (Nick Begich, personal comm.).

**Remarks:** Mineralization is spotty and has a very short continuous strike length.

**Analyses:** See attached table.

**References:**

Capps, 1919, p. 101.
Bundtzen, 1981, p. 204.
Hawley, 1977.
Nick Begich, personal comm. 1983.

Wieler, (Griess) Prospect (Silver King No. 18 claim)

Salisbury & Dietz, Inc. study results:

| | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | B % | U ppm | Th ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.05 | 14. | 4.1 | 247.9 | 0.15 | | 1.25 | | | | | | Sample C013755, quartz vein |
| | 60 ppm | 70 ppm | 105 ppm | 1.02 | .01 | | | | | | | | Sample C003495 |
| | 350 ppm | 1300 ppm | 2750 ppm | 2.16 | .037 | | | | | | | | Sample C003496 |
| | 1750 ppm | 220 ppm | 1400 ppm | 3.84 | .1 | | | | | | | | Sample C003497 |
| | 900 ppm | 560 ppm | 5700 ppm | 0.21 | .005 | | | | | | | | Sample C003498 |
| | 17000 ppm | 28200 ppm | 37000 ppm | 377.00 | .21 | | | | | | | | Sample C003499 |
| * | ND | .023 | .051 | tr | tr | | .001 | | | | | | Hawley (1977) |

* Hawley, 1977

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .45 | 4.85 | .505 | 95.40 | .12 | | .32 | | 1.0 | | | Sample C014262 |
| | .955 | 12.5 | 8.95 | 174.0 | .14 | | 9250 ppm | | 3150 ppm | | | Sample C014307 |

# OCCURRENCE REPORT FORM

NAME Ridgetop No. 1 Claim (Unnamed Occurrence)

Study Area Kantishna Hills

Occurrence No. 59

Location: 1300 ft. southwest of Peak 3835 (34933500N, 359900E)

Occurrence Type Silicified zone

Examining Geologist JMK

Ownership: Jim Fuksa
Ridgetop No. 1 Claim

Date(s) of Examination June 25, 1983

General Geology: Quartz eye-bearing metafelsite.

Mineralization: Limonite-stained silicified zone exposed in a trench. The zone is 12 ft. wide and contains wall rock inclusions. Mineralogy: quartz, pyrite, arsenopyrite. Up to 10% total sulfide.

Structure: A trend could not be determined for the zone due to poor exposure.

Development and Production: Development: three trenches in colluvium, two of which are sloughed.

Remarks: Two nearby trenches contain no significant mineralization. This occurrence appears to fit Bundtzen's No. 46. Overlaps the Chloride patented lode claim. (See attached.)

Analyses: See attached table.

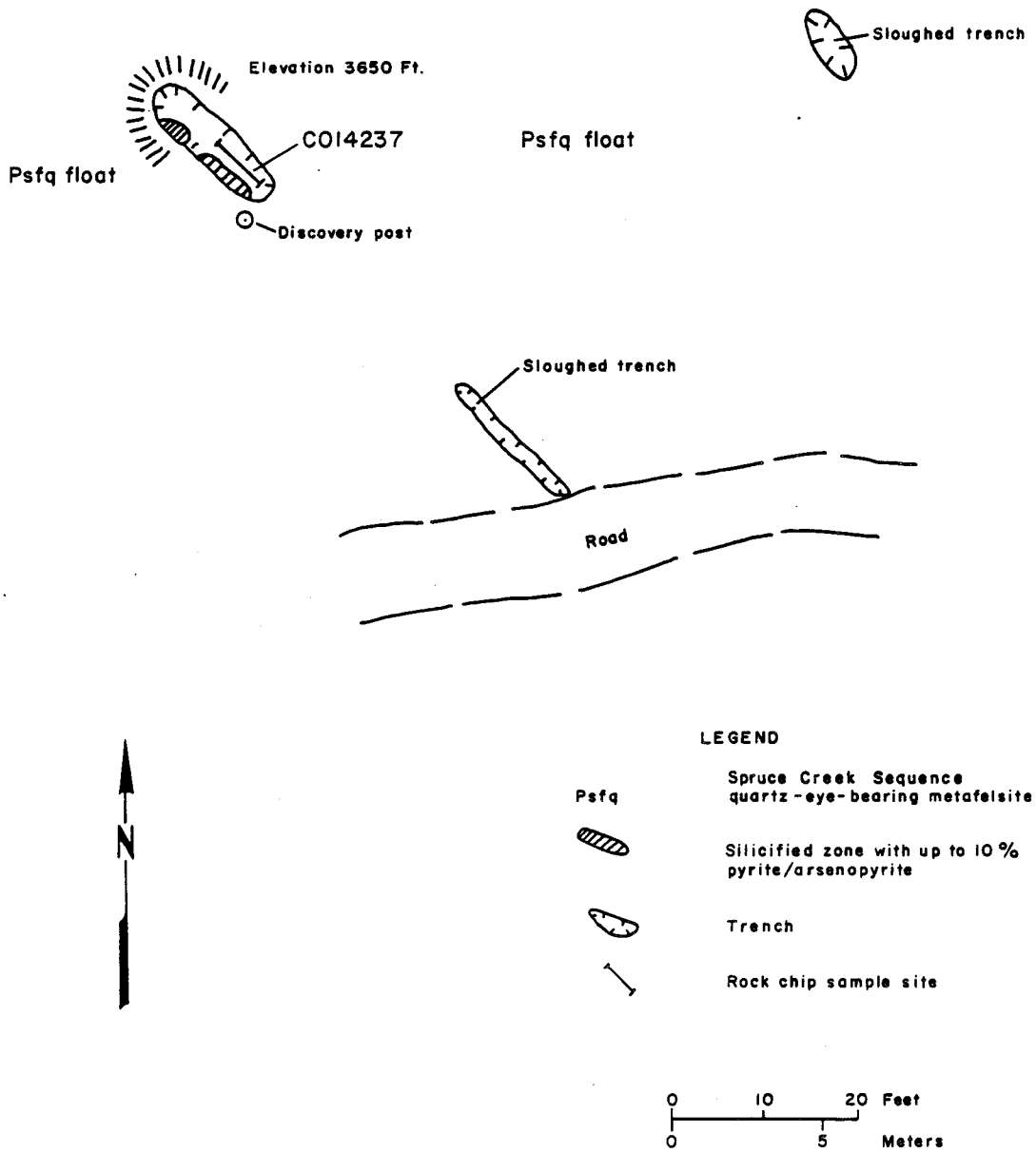
References: Bundtzen, 1981, p. 204, 221.
Hawley, 1977.

Ridgetop No. 1 Claim (Unnamed Occurrence)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 35 ppm | 80 ppm | 130 ppm | 2.7 ppm | 2.9 ppm | <2 ppm | 30 ppm | 3 ppm | 12000 ppm | 2 ppm | -- | -- | Quartz on dump. |
| * | .004% | .005% | .003% | .10 oz/tn | .11 oz/tn | 8 ppm | .004% | 75 ppm | 1.37 % | .001% | 0.1 ppm | 1.8 ppm | Arsenopyrite-quartz grab sample. |
| ** | ND | .022% | .012% | .09 oz/tn | .01 oz/tn | -- | ND | 75 ppm | -- | -- | -- | -- | Pit samples. |
| ** | -- | .012% | .010% | .05 oz/tn | .01 oz/tn | -- | ND | -- | -- | -- | -- | -- | Pit samples. |

* Bundtzen, 1981.
** Hawley, 1977.




Occurrence No. 59-Ridgetop No. 1 Claim

# OCCURRENCE REPORT FORM

NAME Grizzly No. 2 Claim

Study Area Kantishna Hills

Occurrence No. 60

Location: 1300 ft. southeast of Peak 3835 (3493200N, 361300E)

Occurrence Type Quartz vein

Ownership: Grizzly No. 2 unpatented lode claim belonging to Jim Fuksa

Examining Geologist JMK

Date(s) of Examination August 1, 1983

General Geology: Spruce Creek metafelsite and quartz eye-bearing metafelsite.

Mineralization: A series of northeast- and northwest-trending quartz veins 0.5-1.0 ft. wide; the longest set exposed over a 40 ft. strike length. Mineralogy: 1-2% pyrite and arsenopyrite, limonite stain.

Structure: Some veins are offset by a northwest-trending fault.

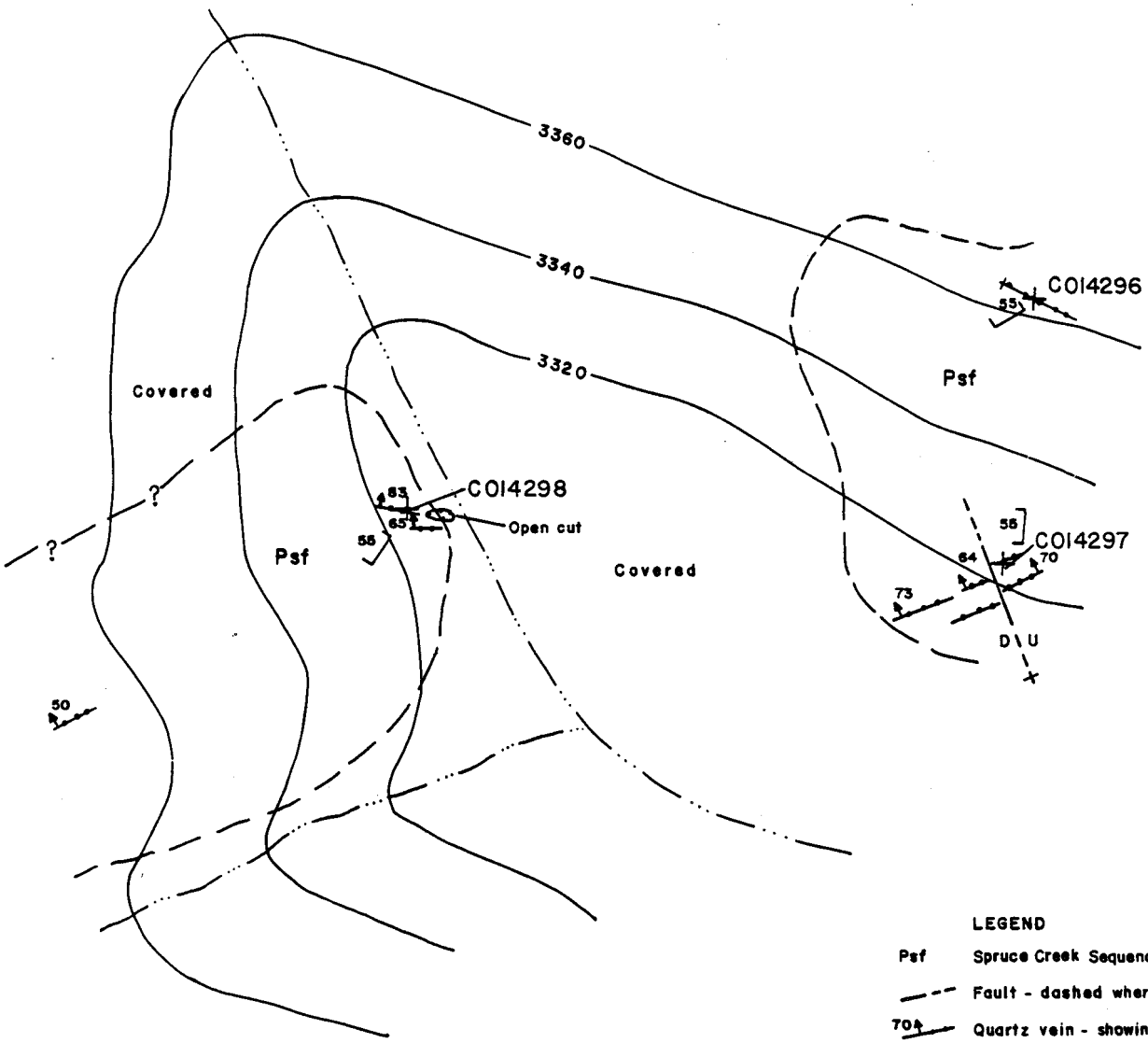
Development and Production: Development: one small open cut. No production.

Remarks: The vein dips do not fit Bundtzen's description of his Occurrence No. 48 which is located in the area.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag oz/tn | Au oz/tn | Mo ppm | Sb ppm | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014296 | ND | 10 | 20 | ND | ND | ND | ND | 4 | 240 | 1'wide quartz vein |
| C014297 | 10 | ND | 10 | 0.2 | ND | ND | ND | 4 | 55 | .5' wide quartz vein |
| C014298 | ND | 15 | ND | ND | ND | ND | ND | ND | 45 | .2-.6'wide quartz vein |

References: Bundtzen, 1981, p. 204.




LEGEND

| | |
|---|---|
| Psf | Spruce Creek Sequence metafelsite |
| | Fault - dashed where approximate |
| 70 | Quartz vein - showing dip |
| | Vertical quartz vein |
| 55 | Cleavage - showing dip |
| | Contact - dashed where inferred |
| C014296 | Sample site |

N

0 25 50 Feet

0 5 10 15 Meters

Contours sketched, approximate interval 20 feet

Occurrence No. 60 - Grizzly No. 2 claim

# OCCURRENCE REPORT FORM

**NAME** Last Chance Mine (Caribou Lode)

**Study Area** ~~Kantishna Hills~~

**Occurrence No.** 61

**Location:** Intersection of Last Chance and Caribou Creeks. (3511350N, 367480E)

**Occurrence Type** Quartz stibnite vein

**Examining Geologist** JMK

**Ownership:** Arley Taylor
Last Chance Creek Lode No. 1-6

**Date(s) of Examination** July 27, 1983

**General Geology:** Birch Creek biotite amphibolite schist.

**Mineralization:** A vein 3-6 ft. wide that strikes N30°E and dips 50-70°NW has been exposed by an open cut for 150 ft. along strike. Mineralogy: stibnite, pyrrhotite, jamesonite, pyrite, stibiconite. Intermittent vein exposures occur along this trend for 560 ft.

**Structure:** The vein is crosscut by numerous northwest trending faults. Intense folding within vein wall rocks.

**Development and Production:** Development consists of a 150 ft. long open cut, an eight foot deep shaft, a caved shaft and adit and a 32 ft. long open adit. Production: approximately 70 tons of select high grade ores and concentrates mined up through 1975; 15-30 tons ore at mine site. A concentrating plant was set up and used at the property at one time.

**Remarks:** Potential exists for small-scale future mineral production (Bundtzen, 1981, p. 206).

**Analyses:** See attached table.

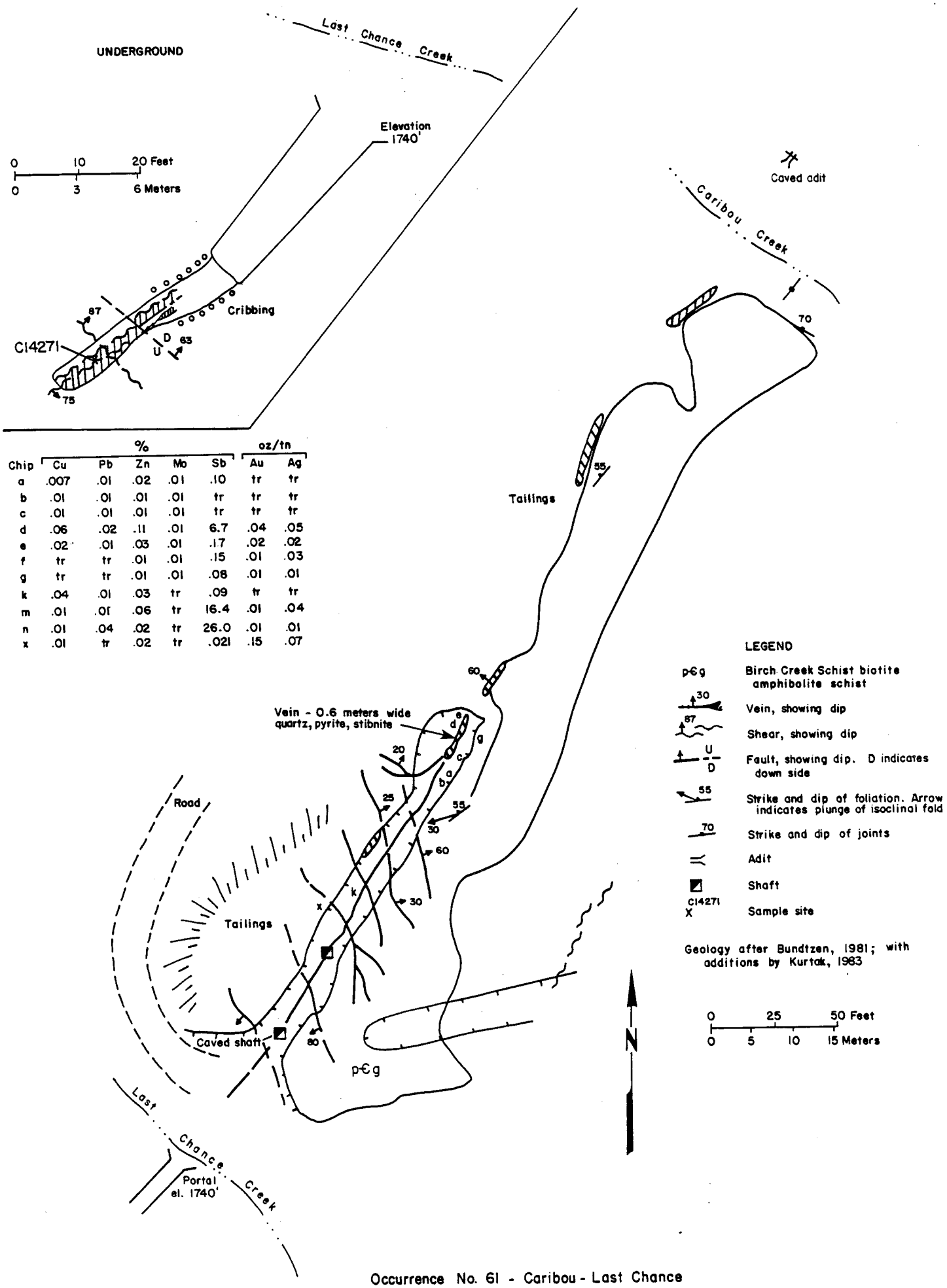
**References:**
Capps, 1919, p. 107-108.
Wells, 1933, p. 377-378.
Hawley, 1977.
Bundtzen, 1981, p. 206, 223.

Last Chance Mine (Caribou Lode)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .002% | .006% | .006% | ND | .08 oz/tn | ND | .250% | ND | 1.00% | -- | -- | -- | Sample CO14271. |
| * | tr | .003% | .016% | 0.01 oz/tn | 0.01 oz/tn | -- | .180% | -- | -- | -- | -- | -- | |
| * | .065% | .001% | .013% | 3.23 oz/tn | 0.08 oz/tn | -- | .034% | -- | -- | -- | -- | -- | |
| * | .001% | .002% | .008% | 0.01 oz/tn | 0.11 oz/tn | -- | .056% | -- | -- | -- | -- | -- | |
| * | .001% | .001% | .001% | 0.01 oz/tn | 0.02 oz/tn | -- | .026 | -- | -- | -- | -- | -- | |

* Hawley, 1977.




| Chip | % Cu | Pb | Zn | Mo | Sb | oz/tn Au | Ag |
|---|---|---|---|---|---|---|---|
| a | .007 | .01 | .02 | .01 | .10 | tr | tr |
| b | .01 | .01 | .01 | .01 | tr | tr | tr |
| c | .01 | .01 | .01 | .01 | tr | tr | tr |
| d | .06 | .02 | .11 | .01 | 6.7 | .04 | .05 |
| e | .02 | .01 | .03 | .01 | .17 | .02 | .02 |
| f | tr | tr | .01 | .01 | .15 | .01 | .03 |
| g | tr | tr | .01 | .01 | .08 | .01 | .01 |
| k | .04 | .01 | .03 | tr | .09 | tr | tr |
| m | .01 | .01 | .06 | tr | 16.4 | .01 | .04 |
| n | .01 | .04 | .02 | tr | 26.0 | .01 | .01 |
| x | .01 | tr | .02 | tr | .021 | .15 | .07 |

Occurrence No. 61 - Caribou - Last Chance

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 62

Location: (3491900N, 368100E)

Occurrence Type Quartz-arsenopyrite vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination July 9, 1983

General Geology: Blastoporphyritic metafelsite (Psfq) unit. Unit lies in an area of imbricate thrusting.

Mineralization: No mineralization observed this study. Previous studies indicate arsenopyrite and pyrite in a quartz vein with minor calcite. Vein 6 ft. thick.

Structure: Previous reports indicate a N20-40$^{o}$W trending vertical vein 6 ft. thick.

Development and Production: None recorded.

Remarks: Previous literature reports a small prospect with only weak mineralization. Occurrence has been covered by bulldozer road fill.

Analyses: No significant results from gossanized chips (Bundtzen, 1981).

References: Bundtzen, 1981, p. 214, 221.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 63

Location: (3494250N, 369750E)

Occurrence Type Quartz-sulfide vein

Examining Geologist MGS

Ownership: None.

Date(s) of Examination July 9, 1983

General Geology: Interlayered chloritic phyllite and chlorite carbonate schist, mapped as chlorite phyllite (Pscp).

Mineralization: Minor float on road cut: iron oxide stained quartz. Previous work describes pyrite and minor galena in quartz vein.

Structure: Previous work describes northeast trending vein. Vein not seen during this examination.

Development and Production: None recorded.

Remarks: No significant mineralization observed other than minor iron-stained quartz float. Bulldozed road probably has covered the prospect.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb % | Zn ppm | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014423 | 20 | .010 | 55 | .041 | ND | ND | .010 | ND | .008 |
| Bundtzen | -- | .042 | -- | .114 | .01 | -- | -- | -- | .016 |

References: Bundtzen, 1981, p. 214, 221.

# OCCURRENCE REPORT FORM

NAME McGonnigill

Study Area Kantishna Hills

Occurrence No. 64

Location: (3496700N, 369200E)

Occurrence Type Polymetallic quartz-carbonate vein

Examining Geologist JRB, MGS

Ownership:

Date(s) of Examination July 21, 1983

General Geology: Micaceous quartzite of the Birch Creek Schist strikes N25°W, dips 25-35°W.

Mineralization: Arsenopyrite, boulangerite, pyrite, minor galena, sphalerite. This study noted pyrite, arsenopyrite, stibnite and sphalerite.

Structure: Prospect located on quartz vein strikes N58-70°E, dips 50°SE (Capps) or 34°NW (Bundtzen, 1981). Vein attains eight foot thickness. At least one other quartz vein present on prospect site.

Development and Production: One ton shipped to testing plant circa 1920. Assays reportedly yielded 1.45 oz/ton Au (Davis, 1922). A partially open 12 ft. adit was driven to explore the quartz vein.

Remarks: Very small amount of development work, not enough to fully evaluate the potential of prospect. (Tonnage potential from outcropping quartz vein estimated 880 tons.)

Analyses: See attached table.

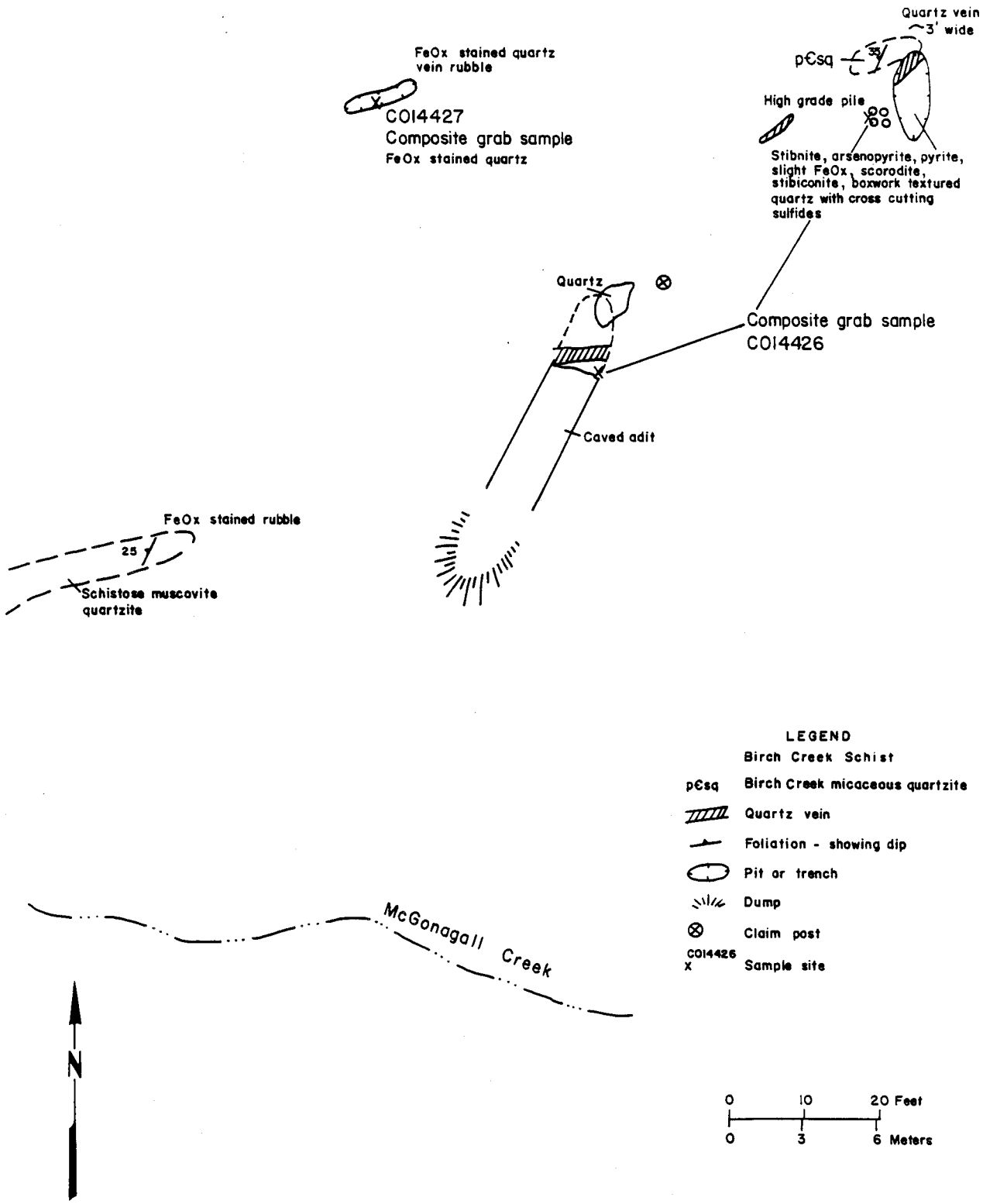
References:
Bundtzen, 1981.
Capps, 1919.
Davis, 1922.

McGonnigill

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .010% | .765% | .220% | 2.33 oz/tn | .95 ppm | ND | .340% | 3 ppm | .455% | ND | -- | -- | Sample CO14426. Composite grab of high graded dump material. Primarily white, locally FeOx stained vein quartz with disseminated grain and stringers of pyrite, arsenopyrite, stibnite and trace sphalerite. Pronounced FeOx, jarosite, scorodite, and stibiconite stain. |
| | .0015% | .155% | .125% | 0.32 oz/tn | .13 ppm | ND | .096% | ND | .215% | ND | -- | -- | Sample CO14427. Composite grab sample of trench spoils. Similar to No. CO14426 except trace sulfides noted. |
| * | .007% | 2.20% | .450% | 1.35 oz/tn | .14 oz/tn | 54 ppm | 1.13% | 75 ppm | 6.28% | .038% | 0.8 ppm | 4.8 ppm | Arsenopyrite, galena, and |
| * | .005% | 0.68% | .520% | 0.87 oz/tn | .03 oz/tn | 39 ppm | .580% | 75 ppm | 8.51% | .008% | 0.4 ppm | 1.5 ppm | boulangerite in quartz. |
| * | -- | -- | -- | 0.25 oz/tn | .17 oz/tn | -- | -- | -- | -- | -- | -- | -- | Grab sample. |
| * | -- | -- | -- | 2.24 oz/tn | .24 oz/tn | -- | -- | -- | -- | -- | -- | -- | One ft. channel area. |
| ** | -- | -- | -- | 52.0 oz/tn | -- | -- | -- | -- | -- | -- | -- | -- | |
| ** | -- | -- | -- | 63.0 oz/tn | .60 oz/tn | -- | -- | -- | -- | -- | -- | -- | |

* Bundtzen, 1981.
** Davis, 1922.




Occurrence No. 64 - McGonagall Prospect

# OCCURRENCE REPORT FORM

NAME Pension Claim

Study Area Kantishna Hills

Occurrence No. 65

Location: 3494225N, 372325E)

Occurrence Type Quartz-arsenopyrite-galena vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination July 8, 1983

General Geology: Blastoporphyritic metafelsite (Psfq).

Mineralization: Float: only iron oxide stained quartz. Previous work describes arsenopyrite, boulangerite, and scorodite present in quartz vein.

Structure: Previous work describes northwest trending vein. Early work describes 2.5 ft. galena vein. Vein not seen during this examination.

Development and Production: None recorded.

Remarks: A road cut into the stream bank leads up to an area where loose colluvial material has slumped off burying the shaft and adit that are reported to be present.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo | Sb % | W | As % |
|---|---|---|---|---|---|---|---|---|---|
| CO14422 | 45 | .084 | .100 | .292 | .40 | ND | 0.03 | ND | .515 |
| Bundtzen | -- | 2.76 | .400 | 1.27 | .16 | -- | 1.15 | -- | .340 |
| Davis | -- | -- | -- | 150 | -- | -- | -- | -- | -- |

References: Bundtzen, 1981, p. 205, 222.

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 66

Location: (3492925N, 371950E)

Occurrence Type Stibnite-quartz vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination July 7, 1983

General Geology: Blastoporphyritic metafelsite (Psfq) of Spruce Creek Sequence.

Mineralization: Broken rock in prospect pits. Stibnite and pyrite with quartz-tourmaline-calcite.

Structure: Poorly exposed. Mineralized rocks in prospect pits indicate an easterly trend. Rock is broken and sheared with mineralization along numerous, small, anastomosing veinlets. Zone several feet wide.

Development and Production: Several prospect pits and a short adit have been dug. All are caved and/or sloughed in. No recorded production.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014418 | 0.46 | 4.55 | .285 | 97.2 | .064 | ND | 1.80 | 3 | 0.51 |

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 67

Location: (3491725N, 372775E)

Occurrence Type Sb-Ag-Sulfide-Quartz vein

Examining Geologist MGS

Ownership: No current claims.

Date(s) of Examination July 7, 1983

General Geology: Blastoporphyritic metafelsite of the Spruce Creek Sequence.

Mineralization: Partially exposed shear zone along which hydrothermal alteration and sulfide and quartz mineralization have taken place. Pyrite only hypogene mineral observed. Weathering and leaching has produced supergene goethite, limonite, and jarosite.

Structure: Five hundred foot wide shear zone in brittle metafelsite unit adjacent to the major, high angle fault of the Birch Creek/Spruce Creek contact. Vertically dipping zones and discrete shears trend N40°E range in width from 5-13 ft. Limited exposure precludes mapping trend along strike.

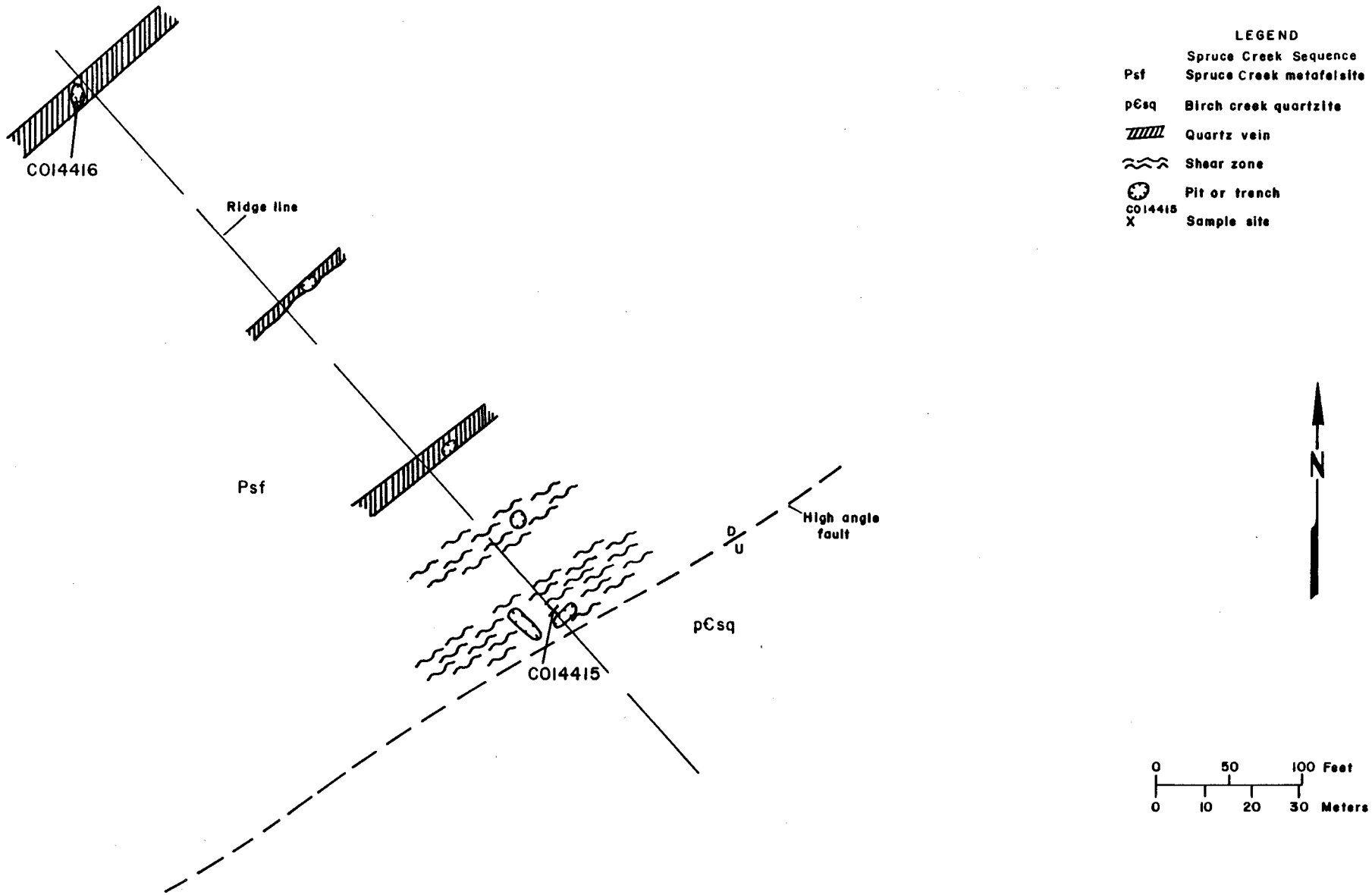
Development and Production: No production recorded. Several of the shears and/or quartz veins have been prospected by pits and trenches.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014415 | 15 | 830 | 20 | 6.4 | ND | ND | 480 | ND | 1650 |
| C014416 | 35 | 15 | 35 | 0.2 | ND | ND | 6 | 3 | 20 |

References:




Occurrence No.67- Unnamed Prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 68

Location: (3493125N, 373850E)

Occurrence Type Stibnite-quartz vein

Examining Geologist MGS

Ownership: None.

Date(s) of Examination July 17, 1983

General Geology: Blastoporphyritic metafelsite of the Spruce Creek Sequence.

Mineralization: Outcrop and float have stibnite, pyrite, possible arsenopyrite in vein quartz.

Structure: Mineralized shear trending N0-10°E at a high to vertical angle. Vein 1-2 ft. across.

Development and Production: Small pits. No recorded production.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014419 | 0.006 | 1.45 | 0.008 | 1.60 | .019 | ND | 1.2 | ND | 2.25 |

References:

# OCCURRENCE REPORT FORM

NAME Arkansas Claim

Study Area Kantishna Hills

Occurrence No. 69

Location: (3493250N, 373950E)

Occurrence Type Quartz-stibnite vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination July 7, 1983

General Geology: Blastoporphyritic metafelsite (Psfq).

Mineralization: Trench float: non oxide-stained quartz locally with stringers of pyrite, stibnite, boulangerite, and arsenopyrite.

Structure: Quartz vein trends N70°E at a vertical angle, with a width of 1-4 ft. Structure traceable for about 100 ft. on the surface.

Development and Production: No recorded production.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au ppm | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| CO14421 | .012 | 3.55 | .495 | 2.33 | .12 | ND | 1.9 | ND | 5.65 |
| Bundtzen | -- | .71 | .150 | 1.36 | .08 | -- | .74 | -- | 5.97 |

References: Bundtzen, 1981, p. 205, 222.

# OCCURRENCE REPORT FORM

NAME Glenn Prospect

Study Area Kantishna Hills

Occurrence No. 70

Location: (3496475N, 372575E)

Occurrence Type Quartz-sulfide vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination July 20, 1983

**General Geology:** Quartzite: weakly to moderately micaceous. Unit included in Birch Creek Schist. Bedding attitude generally strikes to the north and dips 20-40$^{o}$ to the west.

**Mineralization:** From tailings pile. White quartz vein with disseminated to semi-massive accumulations of stibnite, with lesser pyrite, sphalerite, and minor arsenopyrite. Previous reports (Bundtzen, 1981; Wells, 1933) describe galena. Weathered material contains jarosite, goethite, scorodite, and stibiconite.

**Structure:** Quartz-sulfide vein trends N80$^{o}$W and dips 90$^{o}$. Vein averages four feet in width and has a strike length of 500-700 ft.

**Development and Production:** No recorded production. Two adits were developed on the trend between 1906-1909. The lower adit is 200 ft. vertically below the upper adit, and extends 300 ft. into the hillside. Both adits now caved. Upper adit 40 ft. long with a winze at the end.

**Remarks:** A stone shelter was constructed on the property against a cliffy outcrop.

**Analyses:** See attached table.

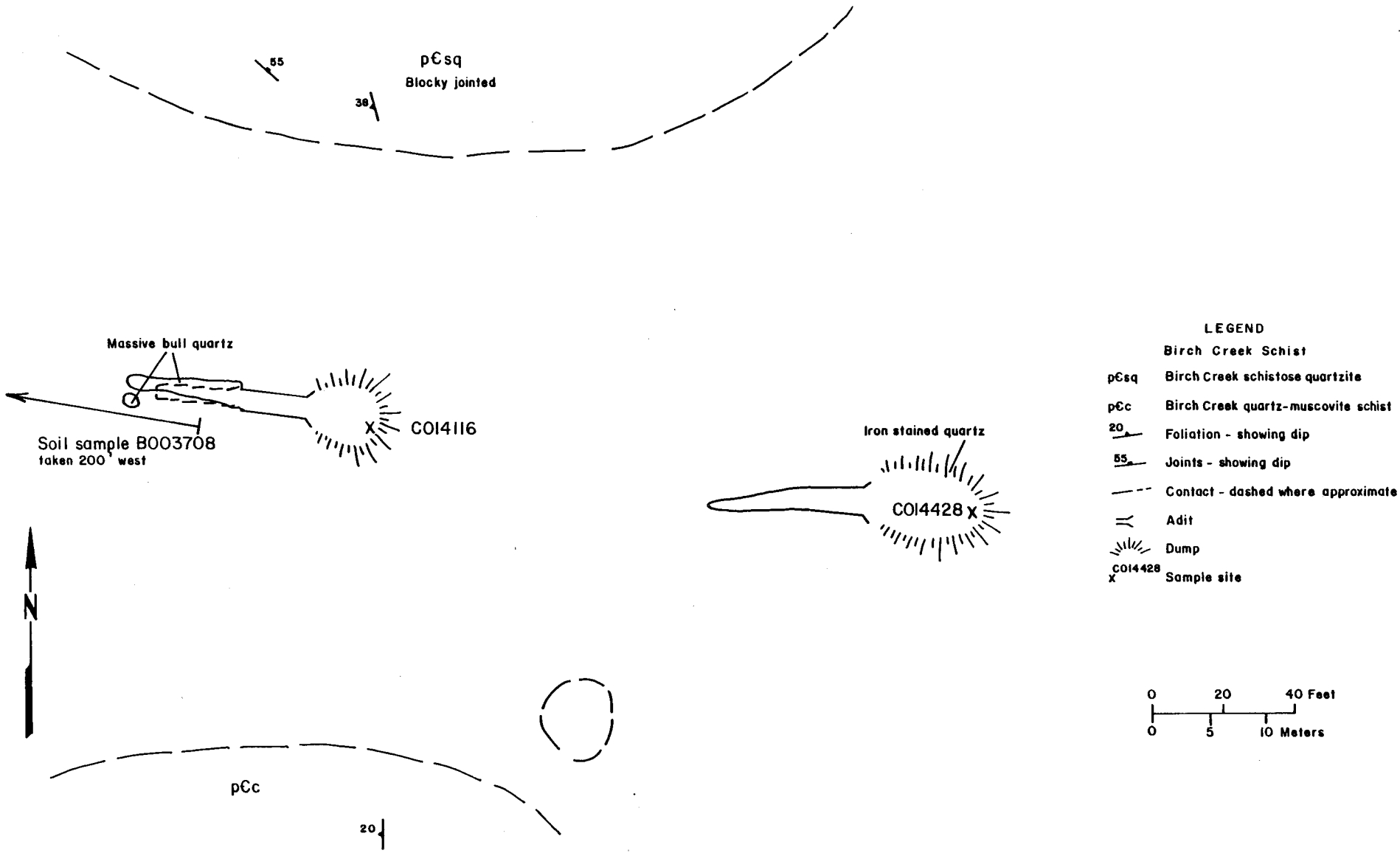
**References:**
Bundtzen, 1981. p. 205, 221.
Wells, 1933, p. 373.

Glenn Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .086% | 3.40% | .480% | 8.54 oz/tn | .03 oz/tn | 2 ppm | 2.05% | 4 ppm | 2.05% | ND | -- | -- | Sample C014116. Sample from tailings dump below the upper adit and consists of a composite grab of mineralized material. Ore consists of iron oxide stained vein quartz with disseminated to semi-massive accumulation of stibnite, with lesser pyrite, arsenopyrite, sphalerite, and tetrahedrite(?). Weathered surfaces stained by jarosite, goethite, scorodite, stibiconite. |
| | .093% | 6.55% | 1.00% | 23.8 oz/tn | .05 oz/tn | ND | .870% | ND | .870% | 1 ppm | -- | -- | Sample C014428. Sample from the tailings dump below the lower adit and consists of a composite grab of mineralized material. Ore consists of vein quartz with disseminated to semi-massive accumulations of stibnite, with lesser sphalerite, arsenopyrite and pyrite. Weathered surfaces contain jarosite, goethite, scorodite, and stibiconite. |
| | .004% | .006% | .018% | 2.7 ppm | .12 ppm | ND | 28 ppm | 8 ppm | .058% | ND | -- | -- | Sample B003708. Soil sample taken along quartz vein trend 200 ft. west of upper adit. Sample from 3-5 in. deep and consists of brown to reddish soil with numerous chips of vein quartz and lesser schist. |
| * | .008% | 1.38% | .045% | 2.32 oz/tn | .02 oz/tn | 16 ppm | .940% | -- | -- | -- | -- | -- | Grab samples, weathered sulfides. |
| * | .050% | 7.20% | .020% | 3.40 oz/tn | .01 oz/tn | 100ppm | 3.36% | 75 ppm | .532% | .006% | 0.1 ppm | 1.0 ppm | Same. |
| * | -- | -- | -- | 0.76 oz/tn | .04 oz/tn | -- | -- | -- | -- | -- | -- | -- | Grab sample, dumps. |

* Bundtzen, 1981.




Occurrence No. 70 - Glen Prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 71

Location: 1/3 mi. north of Glacier Peak (3500050N, 372450E)

Occurrence Type Quartz vein

Examining Geologist Bundtzen

Ownership:

Date(s) of Examination

General Geology:

Mineralization: Small six foot wide quartz-siderite vein containing boulangerite and pyrite.

Structure: Mineralization strikes N25-45°E.

Development and Production: None reported.

Remarks:

Analyses:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Sb % | As % |
|---|---|---|---|---|---|---|---|
| Bundtzen and others | .054 | 3.5 | 2.6 | 9.37 | tr | 1.19 | 0.04 |

References: Bundtzen and others, 1976.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 72

Location: Northeast side of Last Chance Creek, 1.8 mi. above its mouth (3509700N, 375100E)

Occurrence Type Quartz vein

Ownership: No current claims.

Examining Geologist JMK

Date(s) of Examination August 1, 1983

General Geology: Float in area consists of quartz-feldspar schist.

Mineralization: Limonite-stained-quartz-vein float and light colored soil in a 200 ft. zone that averages 30 ft. wide. Minor boxworks and pyrite in the quartz.

Structure: Stained zone trends N50°E across a saddle.

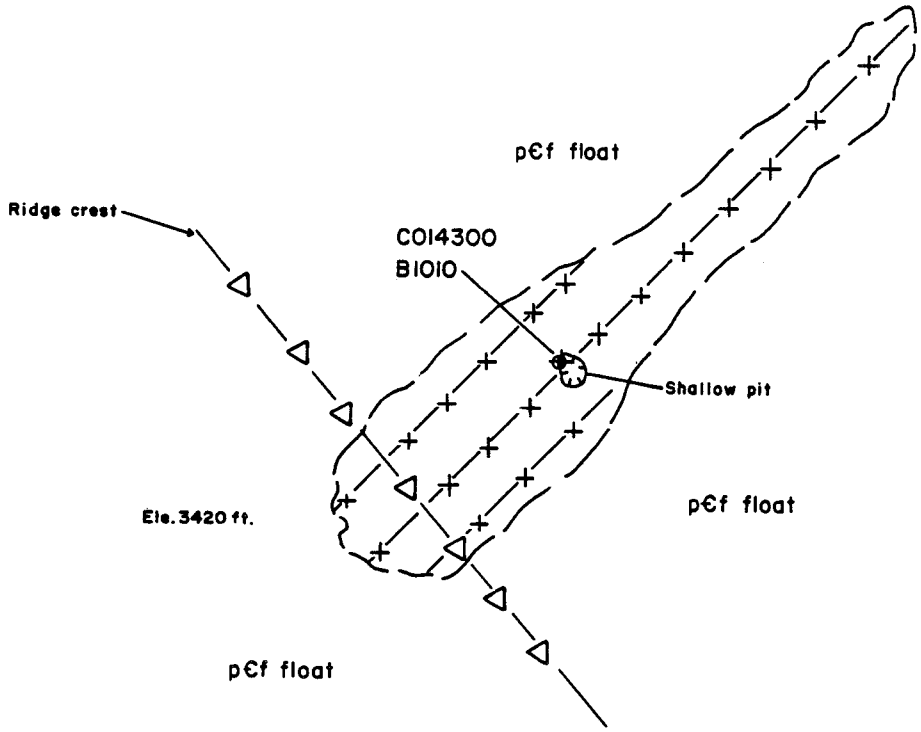
Development and Production: Development: shallow pit. No production.

Remarks: Minor mineralization.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014300 | 5 ppm | .001 | .001 | ND | ND | 2 | ND | 4 | ND | quartz vein float |
| Bundtzen | .040 | .002 | .003 | ND | ND | 30 | .001 | <75 | .002 | quartz vn w/limonite |
| Bundtzen | .002 | .001 | .008 | ND | ND | 1 | ND | -- | -- | grab sample |
| Bundtzen | .006 | .006 | .003 | .010 | .01 | 11 | ND | -- | -- | |

References: Bundtzen, 1981, p. 206, 224.



LEGEND

| | |
|---|---|
| p€f | Birch Creek Quartz Feldspar Schist |
| X X X | Zone of red brown-yellow colored soil contains vein quartz fragment with minor sulfide boxworks and pyrite |
| C014300 B1010 | Rock and soil sample site |

Occurrence No. 72-Unnamed Prospect

# OCCURRENCE REPORT FORM

NAME Home Lode Prospect

Study Area Kantishna Hills

Occurrence No. 73

Location: Crevice Creek
(3510150N, 377200E)

Occurrence Type Antimony-bearing quartz vein

Examining Geologist Wells

Ownership:

Date(s) of Examination

General Geology:

Mineralization: Quartz vein containing stibnite.

Structure:

Development and Production: None reported.

Remarks:

Analyses: No assay information available.

References: Wells, 1931.

# OCCURRENCE REPORT FORM

**NAME** Glenn Ridge I or Skoona Prospect

**Study Area** Kantishna Hills

**Occurrence No.** 74

**Location:** (3498800N, 376000)

**Occurrence Type** Silver bearing quartz vein

**Examining Geologist** MGS, JRB

**Ownership:**

**Date(s) of Examination** July 22, 1983

**General Geology:** Blastoporphyritic quartz-feldspar metafelsite (Psfq) of the Spruce Creek Sequence.

**Mineralization:** Arsenopyrite, pyrite, scheelite(?), and scorodite reported by Bundtzen (1981), Wells (1911) and Capps (1916). This study noted galena, arsenopyrite, scorodite, sphalerite, trace azurite with quartz and local tourmaline gangue.

**Structure:** The prospect area encompasses two distinct vein types: (1) Discontinuous bulbous quartz-galena shear veins up to 40 ft. wide and 150 ft. long; trending N38°W, subvertical, and (2) N45°E trending quartz-tourmaline-arsenopyrite-pyrite-galena-sphalerite filled shear zone approximately 1-3 ft. wide by 300 ft. long. The Type 1 quartz veins occur in a major fault zone of the same orientation.

**Development and Production:** At least 13 prospect pits and trenches were dug in the prospect area. Of which eight trenches were dug on the northeast trending quartz-galena-arsenopyrite shear system.
No recorded production.

**Remarks:** The northwest trending quartz and galena veins are discontinuous, possibly en echelon structures emplaced in a large fault zone. Mineralization appears to be erratic. However, the northeast trending vein, with a more uniform sulfide content indirectly evidenced by scorodite stained gossan has good potential for a low tonnage precious metal lode source.

**Analyses:** See attached table.

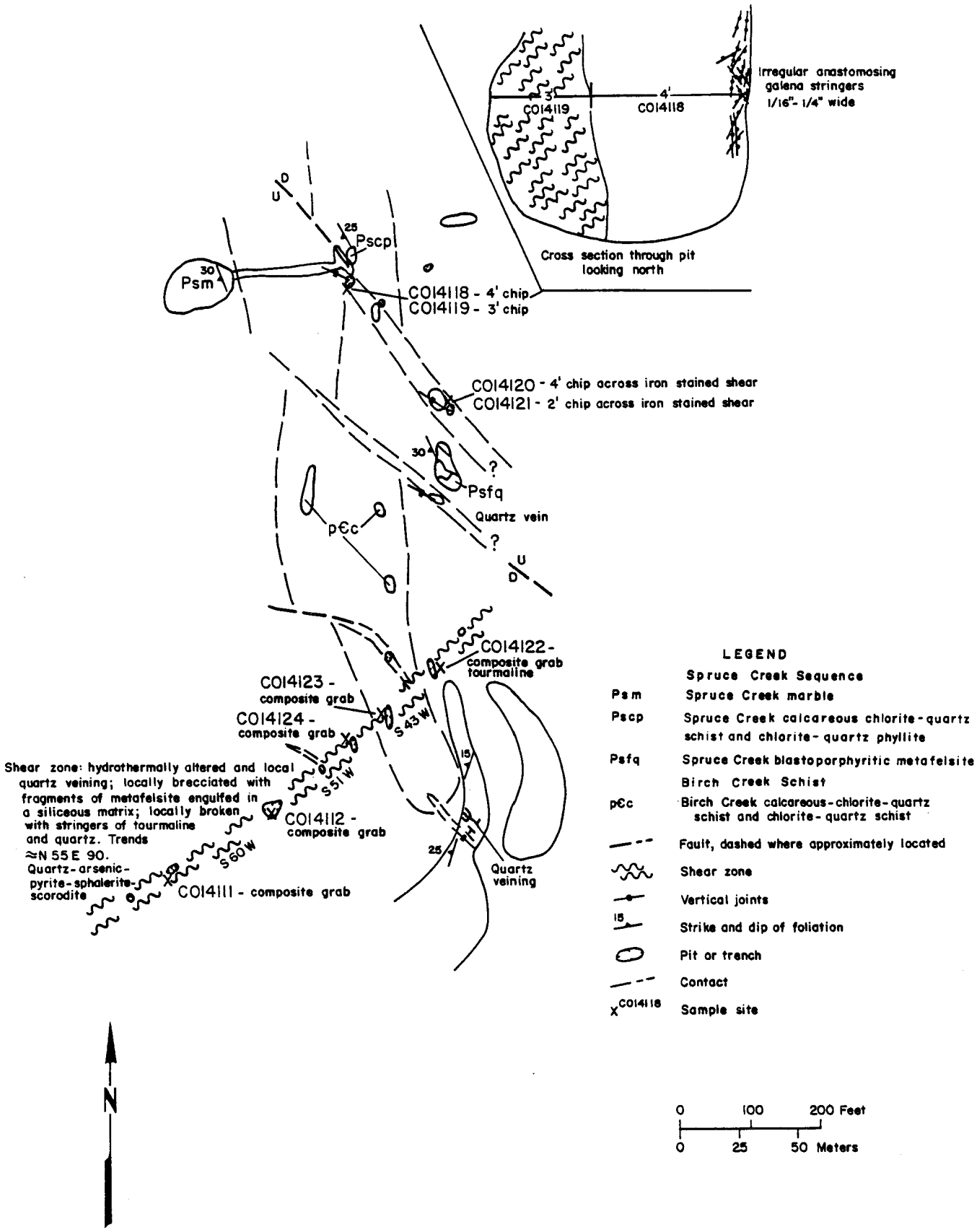
**References:**
Bundtzen, 1981.
Hawley, 1977.
Seraphim, 1961.

Glenn Ridge I or Skoona Prospect

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * | .009% | .20% | .360% | 0.04 oz/tn | .04 oz/tn | 45 ppm | .007% | -- | -- | -- | -- | -- | Chip samples from mineralized |
| * | .014% | .70% | .072% | 16.40 oz/tn | .28 oz/tn | 11 ppm | .100% | 150 ppm | 8.32% | .004% | 2.0 ppm | 2.5 ppm | pods in large quartz shear. |
| * | .004% | .73% | .017% | 3.30 oz/tn | .03 oz/tn | 71 ppm | .022% | -- | -- | -- | -- | -- | |
| * | .004% | .240% | .240% | 6.14 oz/tn | .02 oz/tn | 51 ppm | .405% | 75 ppm | 1.54% | .018% | 3.2 ppm | 0.3 ppm | |
| * | .004% | .350% | .310% | 6.17 oz/tn | .03 oz/tn | 25 ppm | .089% | -- | -- | -- | -- | -- | |
| * | -- | -- | .720% | 25.50 oz/tn | .08 oz/tn | 8 ppm | .240% | -- | -- | -- | -- | -- | |
| * | -- | -- | .360% | 1.00 oz/tn | .03 oz/tn | 38 ppm | .020% | -- | -- | -- | -- | -- | Grab sample. |
| * | .010% | -- | .079% | 7.10 oz/tn | .01 oz/tn | 62 ppm | .140% | -- | -- | -- | -- | -- | |
| ** | tr | .150% | .100% | 0.76 oz/tn | .04 oz/tn | -- | -- | -- | -- | -- | -- | -- | Massive quartz vein. |
| *** | -- | -- | -- | 2.14 oz/tn | .08 oz/tn | -- | -- | -- | -- | -- | -- | -- | |
| | 150 ppm | 11500 ppm | 1650 ppm | -.8<br>65 ppm | .8<br>3.60 ppm | -.9 | 530 ppm | 7 ppm | 116000 ppm | -.9 | -- | -- | Sample C014111. |
| | -.9 | 7.900% | .180% | 11.70 oz/tn<br>-.8 | .053 oz/tn<br>-.8 | -.9 | 400 ppm | 2 ppm | 31000 ppm | 2.0 ppm | -- | -- | Sample C014112. |
| | .018% | 1.10% | .140% | 5.28 oz/tn<br>-.8 ppm | -.5<br>-.8 | -.9 | .024% | -.9 | .054% | 85 ppm | -- | -- | Sample C014118. |
| | -.9 | .110% | .002% | .07 oz/tn<br>-.8 ppm | -.9<br>-.8 | -.9 | -.900 ppm | -.9 | .019% | 6 ppm | -- | -- | Sample C014119. |
| | -.9 | 30 ppm | 15 ppm | -.8<br>1.7 ppm | -.8<br>-.9 | -.9 | 4.000 ppm | 3 ppm | 40 ppm | -.9 | -- | -- | Sample C014120. |
| | 5 ppm | 5 ppm | 10 ppm | -.8<br>.2 ppm | -.8<br>-.9 | -.9 | 6.000 ppm | -.9 ppm | 20 ppm | -.9 | -- | -- | Sample C014121. |
| | .004% | 1.700% | .016% | 3.69 oz/tn<br>-.8 ppm | .008 oz/tn<br>-.8 | -.9 | .021% | -.9 ppm | 1.100% | -.9 | -- | -- | Sample C014122. |
| | .016% | 1.200% | .067% | 8.07 oz/tn<br>-.8 ppm | .150 oz/tn<br>-.8 | -.9 | .065% | -.9 ppm | 7.450% | -.9 | -- | -- | Sample C014123 |
| | .014% | .845% | .098% | 13.00 oz/tn<br>-.8 ppm | .230 oz/tn<br>-.8 | -.9 | .079% | -.9 ppm | 5.050% | 2 ppm | -- | -- | Sample C014124. |

* Bundtzen, 1981.
** Hawley- 1977.
*** Seraphim, 1961.

-.9 Represents lower than detection limit
-.8 Represents element not analyzed




Occurrence No. 74 - Skookona Prospect (Glen Ridge I)

# OCCURRENCE REPORT FORM

NAME Wieler Antimony Prospect

Study Area Kantishna Hills

Occurrence No. 75

Location: West Fork Glen Creek (3493000N, 393250E)

Occurrence Type Antimony Quartz vein

Examining Geologist RH, SF

Ownership: Located on unpatented placer claim owned by the Weiler Brothers.

Date(s) of Examination June 20, 1983

General Geology: Host rock consists of graphitic and chloritic schists.

Mineralization: Quartz gangue containing massive pods and disseminated grains of stibnite, pyrite, galena and sphalerite exposed for a length of 50 ft.

Structure: Mineralization is oriented transverse to shearing developed in the stream valley and appears to be cut off.

Development and Production: Dozer trench exposed mineralization in 1983.

Remarks: Evidence of several mineralized veins associated with an extensive shear zone paralleling the West Fork of Glen Creek. Additional evaluation is warranted.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014302 | .023 | 8.55 | 3.1 | .12 | ND | ND | 7.35 | ND | .003 |
| C014303 | .081 | 10.5 | 10.5 | ND | ND | ND | 9.05 | ND | .002 |

References:

# OCCURRENCE REPORT FORM

NAME Glen Creek Rhodochrisite

Study Area Kantishna Hills

Occurrence No. 76

Location: East Fork of Glen Creek (3492500N, 342500E)

Occurrence Type Rhodochrosite/Carbonate vein

Examining Geologist RH, SF

Ownership: Spacially associated with unpatented placer claims owned by the Weiler Brothers.

Date(s) of Examination June 20, 1983

General Geology:

Mineralization: Float consists of pyrolusite stained boulders consisting of fractured rhodochrosite and calcite.

Structure:

Development and Production: None.

Remarks: Mineralization has not been found in place. Boulders are reported to be more numerous about ½ mi. above the junction of the East and West Forks of Glen Creek.

Analyses:

References:

# OCCURRENCE REPORT FORM

NAME Lloyd Prospect

Study Area Kantishna Hills

Occurrence No. 77

Location: East Fork Glen Creek near junction with the West Fork of Glen Creek. (3493600N, 379375E)

Occurrence Type Stratiform sphalerite-chalcopyrite

Examining Geologist MGS

Ownership: No valid lode claims.

Date(s) of Examination July 21-25, 1983

General Geology: Metamorphosed recrystallized chert with lesser interbeds of garnetiferous muscovite-quartz schist. The interval is part of the Birch Creek Schist. The sulfide bands parallel the compositional banding of the host lithology.

Mineralization: Observed in outcrop and in adit. Stratiform laminae and layers, 1-10 mm thick, contain disseminated to massive sphalerite and minor chalcopyrite with a trace of galena. Weathered surfaces display malachite, azurite, and smithsonite. The mineralization can be traced for about 100 ft. The greatest thickness observed was 2-3 ft.

Structure: The mineralization does not appear to be structurally controlled. However, small to moderate scale recumbent, isoclinal folds which plunge to the southwest at a shallow angle contort the mineralized horizon.

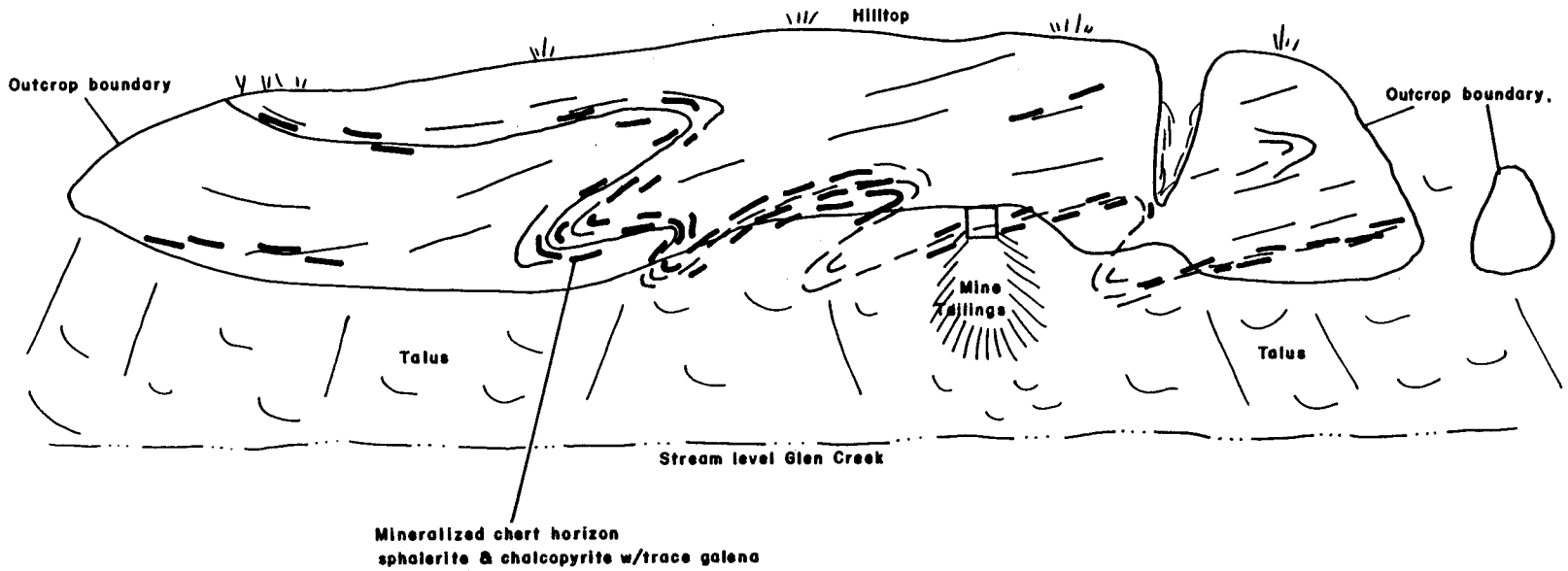
Development and Production: No recorded production. A 30 ft. long adit (10 ft. collapsed) has been driven into the mineralized horizon. The adit is four feet wide and 5-6 ft. high.

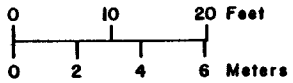
Remarks: Similar mineralization in chert has been observed a mile or two to the east. Similar chert is exposed in West Fork of Glen Creek but with no obvious mineralization.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb ppm | W ppm | As % | Bi ppm |
|---|---|---|---|---|---|---|---|---|---|---|
| C014433 | 1.100 | .215 | 5.600 | .850 | ND | ND | ND | ND | .002 | 55 |
| C014434 | 0.105 | .028 | 0.735 | .070 | ND | ND | ND | ND | .002 | 7 |
| C014435 | 0.355 | .070 | 2.200 | .151 | ND | ND | ND | ND | ND | 14 |
| Bundtzen | 2.160 | .090 | 3.980 | .970 | .01 | -- | -- | -- | -- | -- |

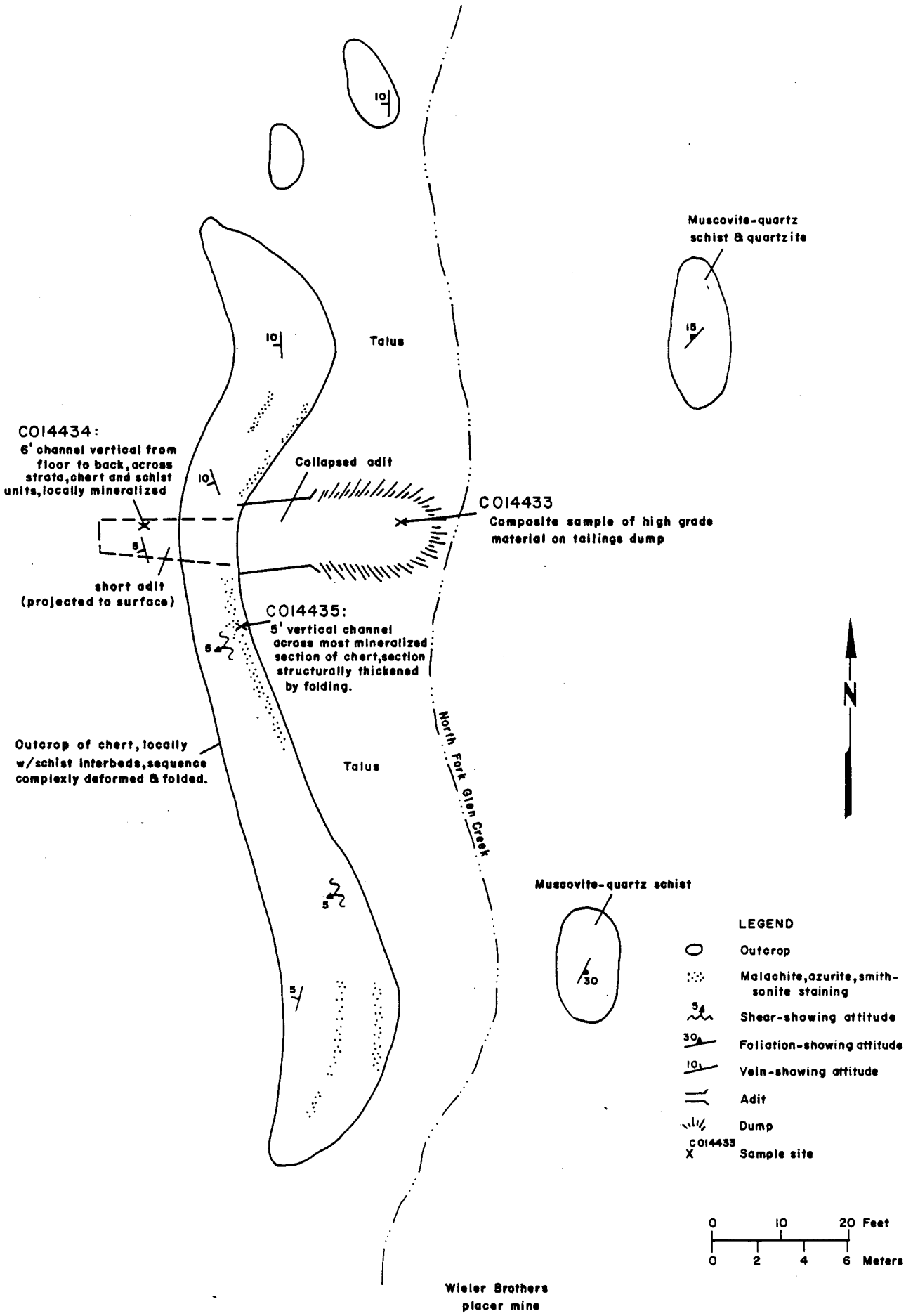
References: Bundtzen, 1981, p. 205.




Sketch cross section-Looking West

Occurrence No.77 - Lloyd prospect




Occurrence No. 77 - Lloyd prospect

# OCCURRENCE REPORT FORM

NAME Humbolt Prospect

Study Area Kantishna Hills

Occurrence No. 78

Location: (3499000N, 378500E)

Occurrence Type Gold and silver-bearing quartz vein

Examining Geologist JRB, MGS

Ownership:

Date(s) of Examination July 21, 1983

**General Geology:** Birch Creek quartz-chlorite with biotite schist and interbedded micaceous quartzite and quartz-chlorite-muscovite with garnet schist. Strikes N35°W, dips 15-25°SW.

**Mineralization:** Reported pyrite, pyrrhotite, galena, sphalerite, arsenopyrite in massive quartz gangue. This study noted sparse pyrite and abundant FeOx stain associated with the quartz. Minor malachite stain on chloritic interlayers in wall rocks. Pervasive sideritic alteration halos to veined zone.

**Structure:** Irregular quartz veinlet zone trending roughly N55°W, subvertical. The veined zone consists of several anastomosing white quartz veins to four feet thick, aggregate zone is approximately 22 feet wide.

**Development and Production:** Adit 48 ft. long, now caved. Several hundred pounds of vein material reportedly shipped to Fairbanks for testing yielded returns of free gold.

**Remarks:** Impressive quartz vein system associated with fault zone cuts Birch Creek schist wall rocks. The apparent lack of sulfide mineralogies in place or in the dump material indicates lesser base and precious metal potential.

**Analyses:** See attached table.

**References:**

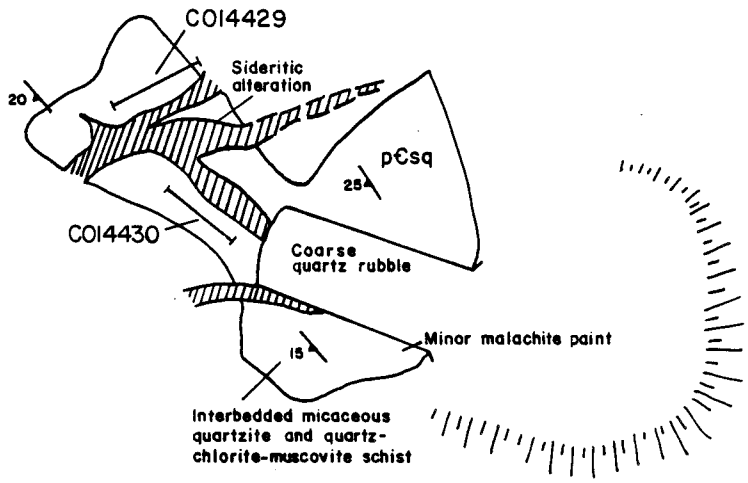
Capps, 1916.
Wells, 1933.
Bundtzen, 1981.

Humbolt Prospect

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .004% | .006% | .003% | 0.27 oz/tn | 1.02 oz/tn | ND | .002% | 3 ppm | .046% | ND | -- | -- | Sample C014429. Composite along 15 ft. of northeast-trending quartz vein. Trace pyrite and possible stibinite. Abundant sideritic alteration in adjacent wall rocks. |
| | .001% | .010% | .004% | 0.06 oz/tn | 0.07 oz/tn | ND | .003% | 5 ppm | .090% | ND | -- | -- | Sample C014430. Composite along 15 ft. of northwest-trending quartz vein. No visible sulfides. |
| * | .067% | 1.45% | 2.10% | 3.52 oz/tn | 0.01 oz/tn | -- | -- | -- | -- | -- | -- | -- | Soil gossan sample. |

*



LEGEND

p€sq Birch Creek Schist quartz chlorite schist

Quartz vein

20 Foliation - showing dip

Dump

C014430 x Sample site

0 10 20 Feet

0 3 6 Meters

Occurrence No.78-Humbolt Prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 79

Location: (3499900N, 380400E)

Occurrence Type Stratiform pyrite in Psfq

Examining Geologist JRB

Ownership:

Date(s) of Examination June 21, 1983

General Geology: Blastoporphyritic quartz-feldspar metafelsite.

Mineralization: Semi-massive stratiform pods of parallel layered pyrite up to six inches thick with 20% pyrite.

Structure: Well foliated metafelsite.

Development and Production: Small caved pit. No production.

Remarks: Same host unit as Occurrence No. 80 and Occurrence No. 86.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014108 | 25 | 10 | 10 | .6 | ND | ND | 14 | 7 | 270 | selected grab sample |

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 80

Location: (3498475N, 379875E)

Occurrence Type Disseminated to massive sulfide

Examining Geologist JMK

Ownership: None

Date(s) of Examination

General Geology: Iron stained, sheared and brecciated, dacite dike or plug that intrudes the Spruce Creek blastoporphyritic metafelsite unit.

Mineralization: Observed in outcrop and in tailings pile. Consists of disseminated to semi-massive (1-35%) pyrite and trace arsenopyrite. Mineralization occurs along shears, replaces crystals and in siliceous breccia matrix.

Structure: The mineralization is associated with the dacite dike that is sheared along a northeasterly trend. Brecciation on material is healed by siliceous sulfide matrix.

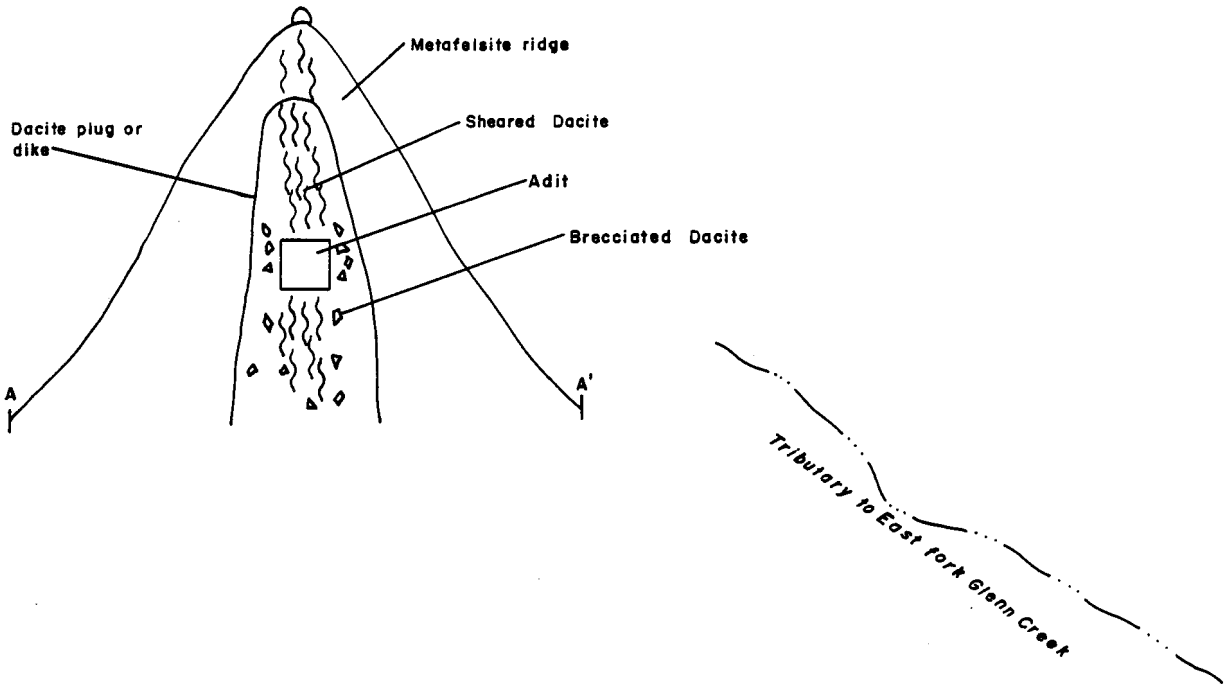
Development and Production: No recorded production. Developed by a short 10 ft. long adit.

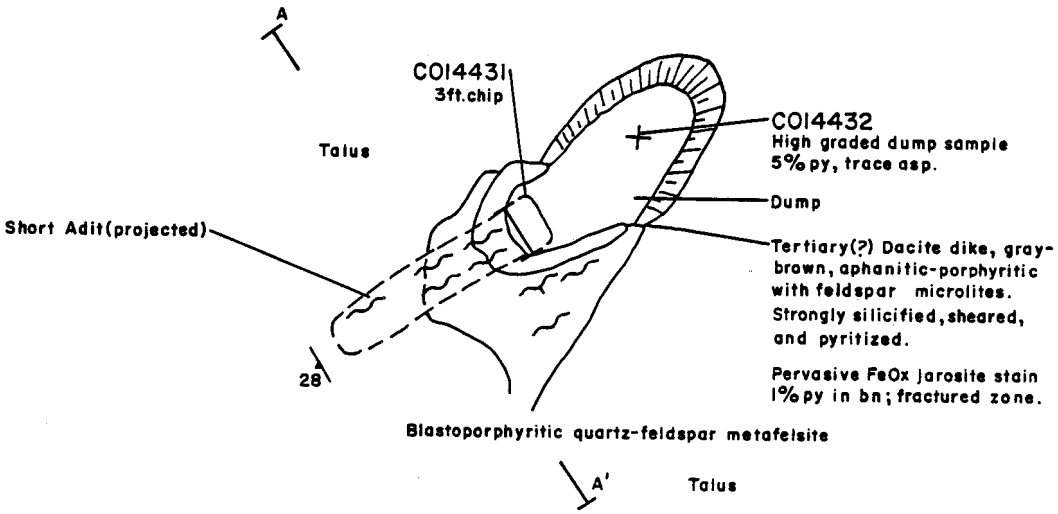
Remarks: Dike apparently is a Tertiary dike that is altered and mineralized.

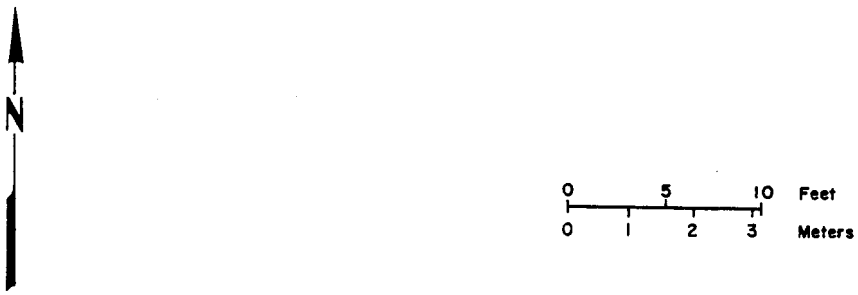
Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag ppm | Au ppm | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014431 | .0045 | .0075 | .0035 | 1.6 | 0.1 | ND | .0032 | 3 | .695 |
| C014432 | .0010 | .0305 | .0040 | 5.1 | 4.2 | ND | .0024 | ND | .840 |

References:




Occurrence No.80-Unnamed Occurrence(Nickel Prospect?)

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 81

Location: East Fork Glen Creek (3498100N, 381150E)

Occurrence Type Quartz vein

Examining Geologist Bundtzen

Ownership: May lie on placer claims currently owned by the Weiler Brothers.

Date(s) of Examination

General Geology:

Mineralization: Quartz vein containing arsenopyrite and galena.

Structure:

Development and Production: Caved adit. Reportedly driven in 1912.

Remarks:

Analyses: No assay information available.

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 82

Location: (3496100N, 382800E)

Occurrence Type Lloyd-type stratiform base metal

Examining Geologist JRB

Ownership:

Date(s) of Examination June 20, 1983

General Geology: Vitreous, tar colored quartzite of the Birch Creek schist unit.

Mineralization: Pyrite, galena, sphalerite, chalcopyrite occurred in parallel layered bands.

Structure:

Development and Production: No development. No production.

Remarks: Occurrence marked by FeOx-stained talus in rubble slope. Mineralization consists of parallel layered aggregates of pyrite, galena, sphalerite, and sparse chalcopyrite in tan vitreous quartzite. Largest piece of mineralized quartzite is 6 in. across and contains up to 20% sulfide. This occurrence is remarkably similar to the stratiform base metal mineralization exposed at the Lloyd Prospect.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014103 | .049 | .375 | 1.30 | 0.47 | ND | ND | .0023 | ND | 1.25 |

References:

# OCCURRENCE REPORT FORM

NAME Rainy Creek Ridge I and II

Study Area Kantishna Hills

Occurrence No. 83

Location: West side of Spruce Creek. (3499250N, 383300E)

Occurrence Type

Examining Geologist Bundtzen

Ownership: None.

Date(s) of Examination

General Geology:

Mineralization: Rainy Creek Ridge I consists of a silicified zone 6-30 ft. wide, 2600 ft. long which contains pyrite, stibnite and minor galena.
Rainy Creek Ridge II consists of a 30 ft. wide silicified zone with massive arsenopyrite and minor pyrite.

Structure: Rainy Creek Ridge I strikes N75-85°E.
Rainy Creek Ridge II strikes N60-75°E and dips near vertically.

Development and Production: None reported.

Remarks:

Analyses: Bundtzen (1981) reports six samples containing 0-1.29 oz/ton Ag, 0-0.01 oz/ton Au, up to 0.38% Pb, 0.43% Sb and 11% As.

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Ridgetop or Spruce Creek I

Study Area Kantishna Hills

Occurrence No. 84

Location: (3502200N, 384200E)

Occurrence Type Quartz vein

Examining Geologist JRB

Ownership:

Date(s) of Examination

General Geology: Spruce Creek Sequence metafelsite.

Mineralization: Quartz, trace pyrite.

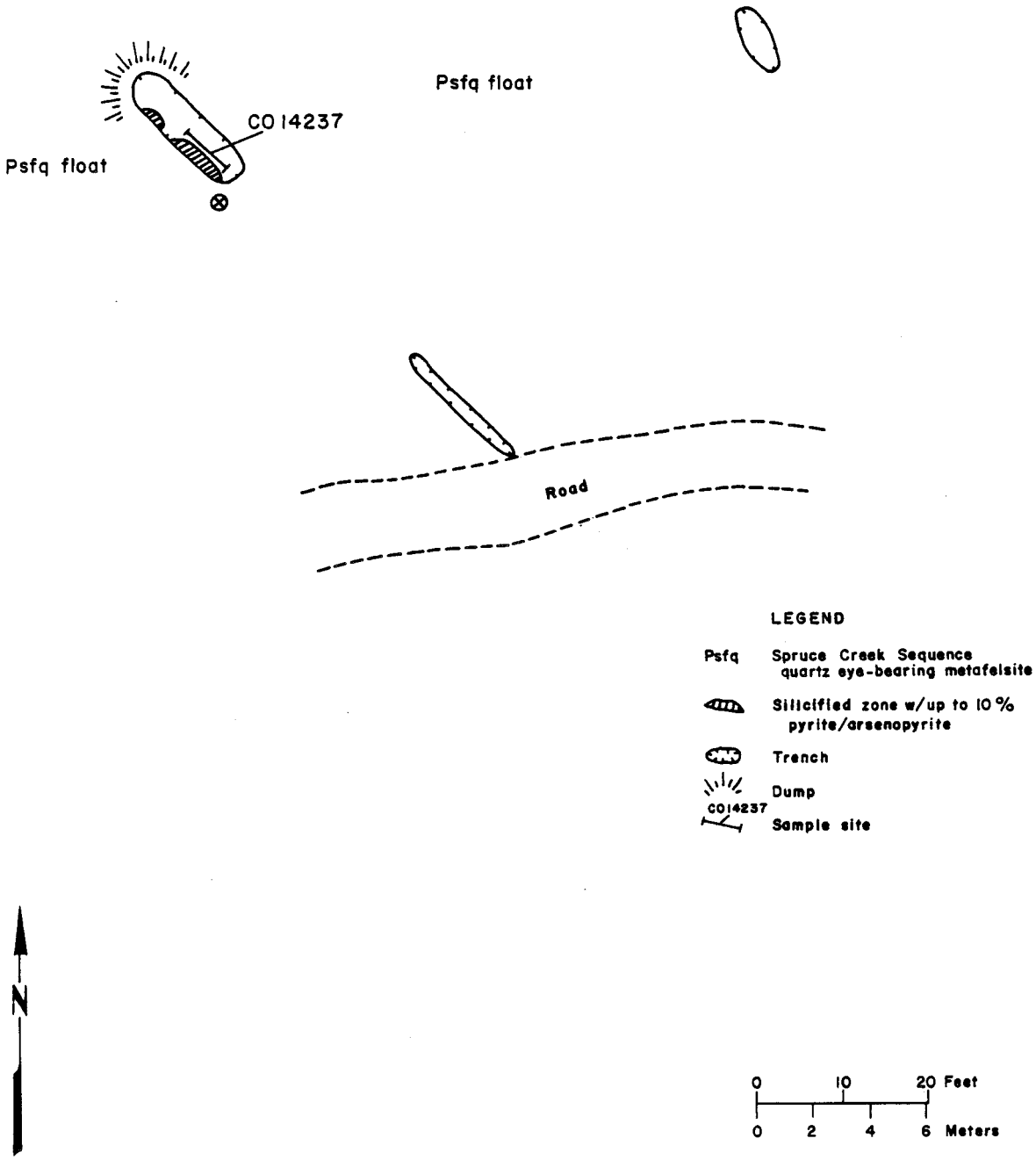
Structure: Major fault zone trends N25°E. Pronounced quartz shear vein up to 20 ft. wide. Well developed breccia texture, with silicified felsite and graphitic phyllite fragments; vuggy quartz matrix. Abundant FeOx, trace pyrite.

Development and Production: No recorded production. Two sloughed prospect pits along trend of veined zone.

Remarks: Impressive vein/breccia zone but little sulfide content.

Analyses: No sample taken.

References: Davis, 1922.




Occurrence No. 84 - Ridgetop No. 1 claim

# OCCURRENCE REPORT FORM

NAME Lema and Silver Wire Prospects

Study Area Kantishna Hills

Occurrence No. 85

Location: Southwest side of Spruce Peak SW¼ Sec. 29, T15S, R16W. (3501470N, 384800E)

Occurrence Type Silver-bearing sulfide vein

Ownership: No current claims.

Examining Geologist TKH

Date(s) of Examination August 29, 1981

General Geology: Felsite of the Spruce Creek Sequence.

Mineralization: Galena, tetrahedrite and pyrite in quartz gangue with common malachite staining.

Structure: Bundtzen (1981) states the vein is about five feet thick, strikes N60-70°E and dips 80°S. He apparently got this information from Wells (1933).

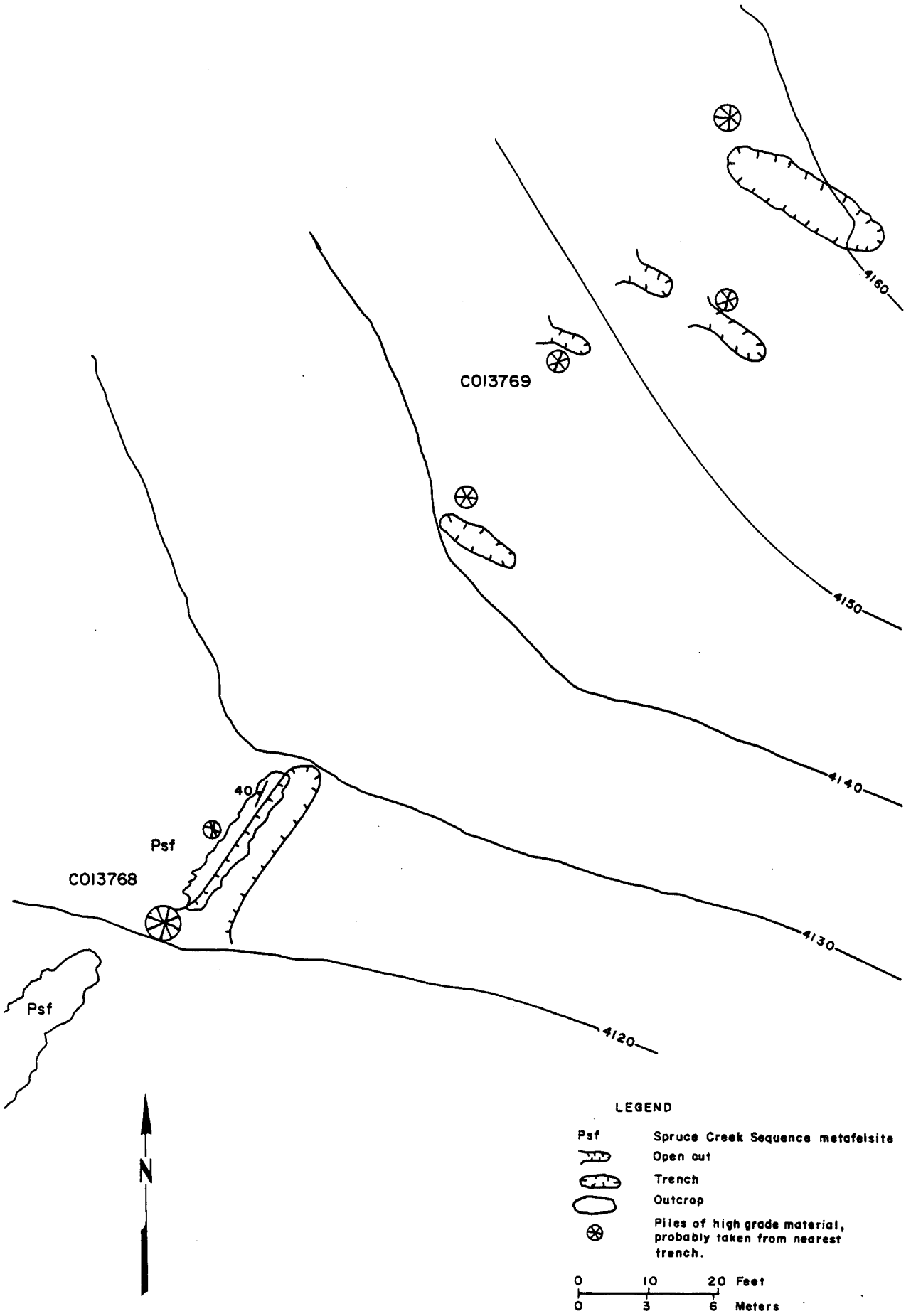
Development and Production: Five trenches expose 100 ft. of strike length, no production. Exploration was done in the late 1920's or early 1930's and the area was staked again in 1965. Claims have since lapsed.

Remarks: Trenches are slumped, vein is not exposed in place, mineralization seen only on high-grade piles near the trenches. Wells (1933) states sulfide content drops off to the east. The material near the trenches appears to bear this out.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo % | Sb ppm | W % | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C013768 | .655 | 36.0 | 1.45 | 180.3 | 0.27 | .002 | ND | .006 | ND | high grade dumps |
| C013769 | .145 | 52.5 | 8.20 | 129.6 | 0.46 | .008 | ND | .008 | ND | near trenches |
| Wells | -- | -- | -- | 75.0 | 0.50 | -- | -- | -- | -- | |

References: Wells, 1933.
Bundtzen, 1981.




Occurrence No. 85-Lena and Silver Wire Prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 86

Location: (3502300N, 384400E)

Occurrence Type Quartz-pyrite zone

Examining Geologist JRB

Ownership:

Date(s) of Examination June 25, 1983

General Geology: Blocky jointed massive variety (Psf) of the blastoporphyritic quartz-feldspar metafelsite unit (Psfq).

Mineralization: Disseminated pyrite and semi-massive concordant aggregates in bleached and FeOx-stained Psfq. Trace sphalerite and arsenopyrite.

Structure:

Development and Production: No production. Shallow prospect pit at elevation 4350 ft. on Spruce Peak Ridge.

Remarks: Prospect located in Psb sub-unit of the Psfq metafelsite unit. Style of mineralization suggests a syngenetic, or at least premetamorphic origin.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb % | Zn % | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014115 | 15 | .185 | .150 | 12 | 8.2 | ND | 13 | 26 | .260 |

References:

# OCCURRENCE REPORT FORM

NAME Mammoth Claim or Lucky Jim Prospect

Study Area Kantishna Hills

Occurrence No. 87

Location: (3502250N, 385350E)

Occurrence Type Quartz-sulfide-gold vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 22, 1983

General Geology: Blastoporphyritic metafelsite (Psfq).

Mineralization: Outcrop and float: iron oxide stained quartz. Previous work describes pyrite, minor galena and chalcopyrite. Early work describes free gold.

Structure: Shear with quartz vein and minor sulfide mineralization trends N85°W with a 90° dip. The vein is several feet wide. Float quartz washes from both sides of the saddle.

Development and Production: None recorded.

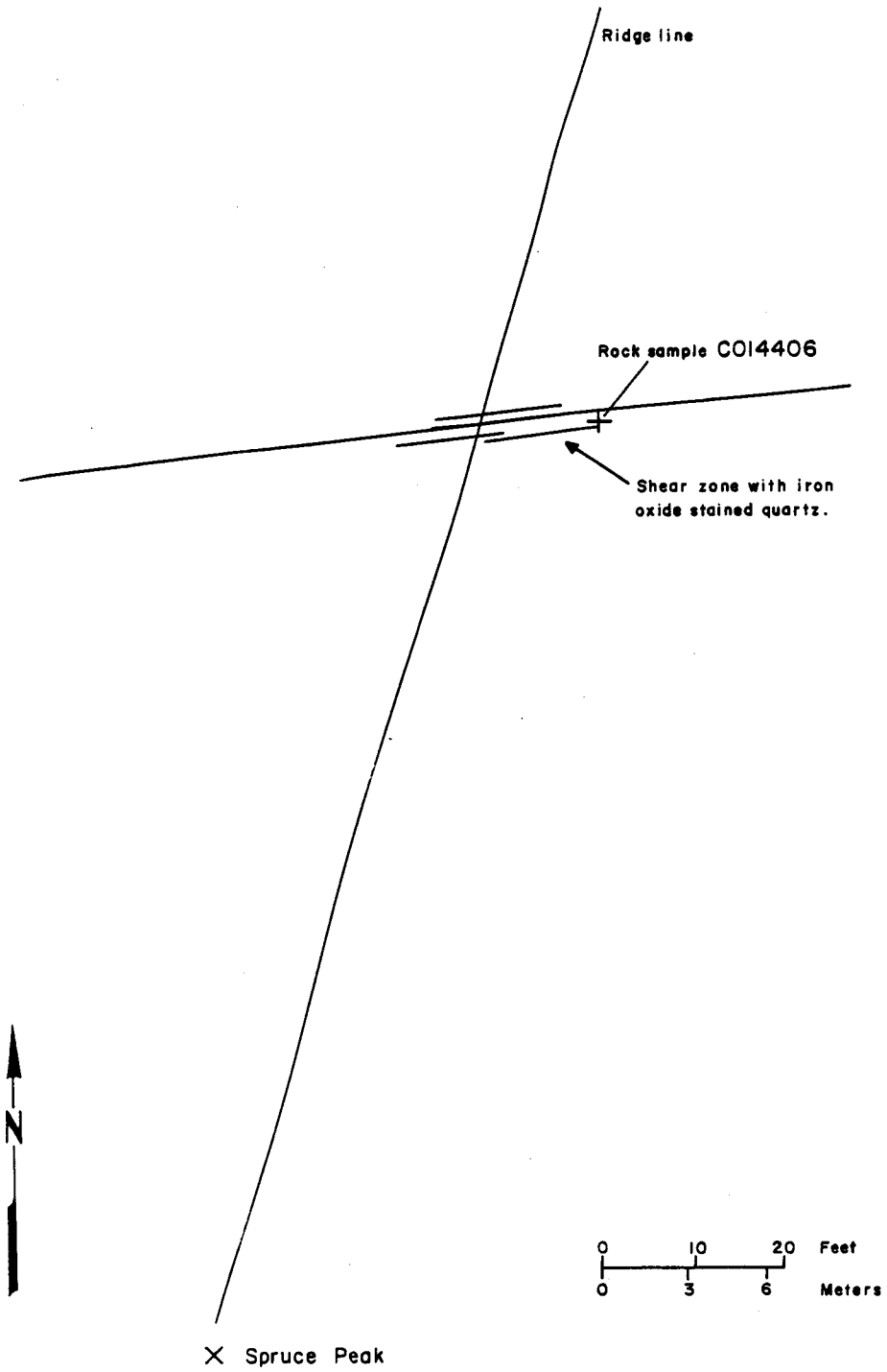
Remarks: The vein is not well exposed at this time.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| CO14406 | 20 | 35 | 15 | 1.1 | 0.13 | ND | 6 | 9 | 350 |

Bundtzen, 1981, and Hawley, 1977, showed no significant values.

References: Bundtzen, 1981, p. 207.




Occurrence No.87 - Mammoth Claim

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 88

Location: (3502850N, 386175E)

Occurrence Type Au-quartz-sulfide vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 22, 1983

General Geology: Blastoporphyritic metafelsite (Psf) and graphitic schist (Psg) of the Spruce Creek Sequence.

Mineralization: Moderately exposed. Weathered and leached shear zone and quartz vein/breccia. Supergene weathering products include goethite, limonite, and jarosite that stain the host rock, as well as the quartz veining and associated soil. Quartz is the dominant gangue mineral with lesser calcite. Anomalous Au and As values.

Structure: Sulfide and quartz mineralization occurs along the structural contact (high angle reverse fault) that places metafelsite juxtaposition to highly deformed graphitic schist. Locally quartz vein is brecciated. Fault through exposured area trends N55°E, 65-75°. The zone is 10-15 ft. wide and in excess of several tens of feet in length (limited exposure precludes mapping).

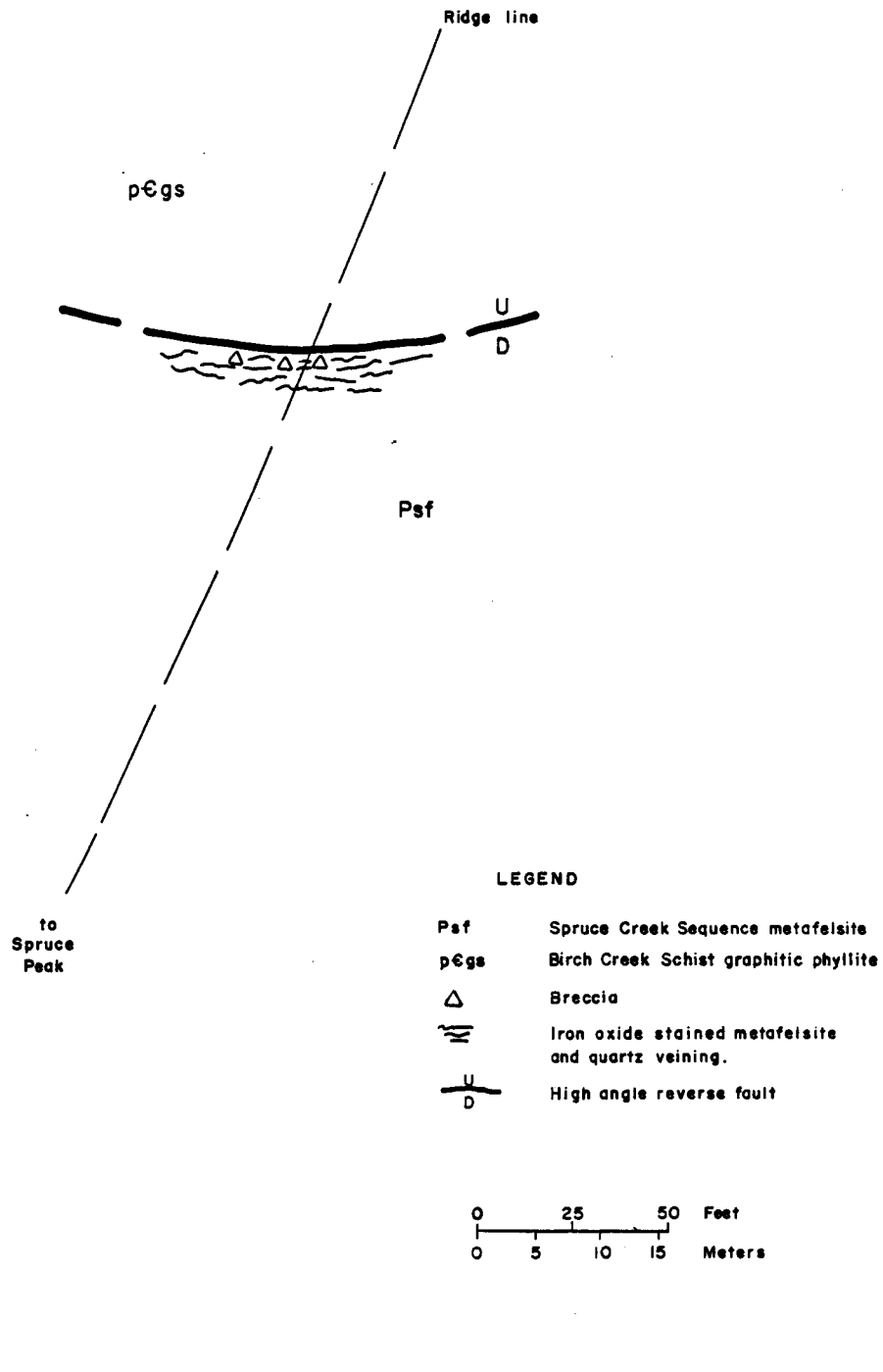
Development and Production: No recorded production. No development.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014407 | 10 | 40 | 20 | 0.7 | 0.35 | ND | 10 | 4 | 1400 |

References:




Occurrence No.88–Unnamed Occurrence

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 89

Location: (3502250N, 285350E)

Occurrence Type Au quartz-sulfide vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 22, 1983

General Geology: Blastoporphyritic metafelsite of the Spruce Creek Sequence.

Mineralization: Saddle in ridge line is marked by abundant, orange-red, iron-oxide stained soil and iron-oxide stained vein quartz. No fresh sulfides observed directly, but the weathered and leached supergene minerals goethite, limonite, and jarosite indicate their original presence. Grab sample anomalous in silver, gold, and arsenic.

Structure: Sheared-altered-mineralized zone trends approximately N45$^{o}$E and dips 55$^{o}$NW. Iron oxide stained zone 20-30 ft. wide.

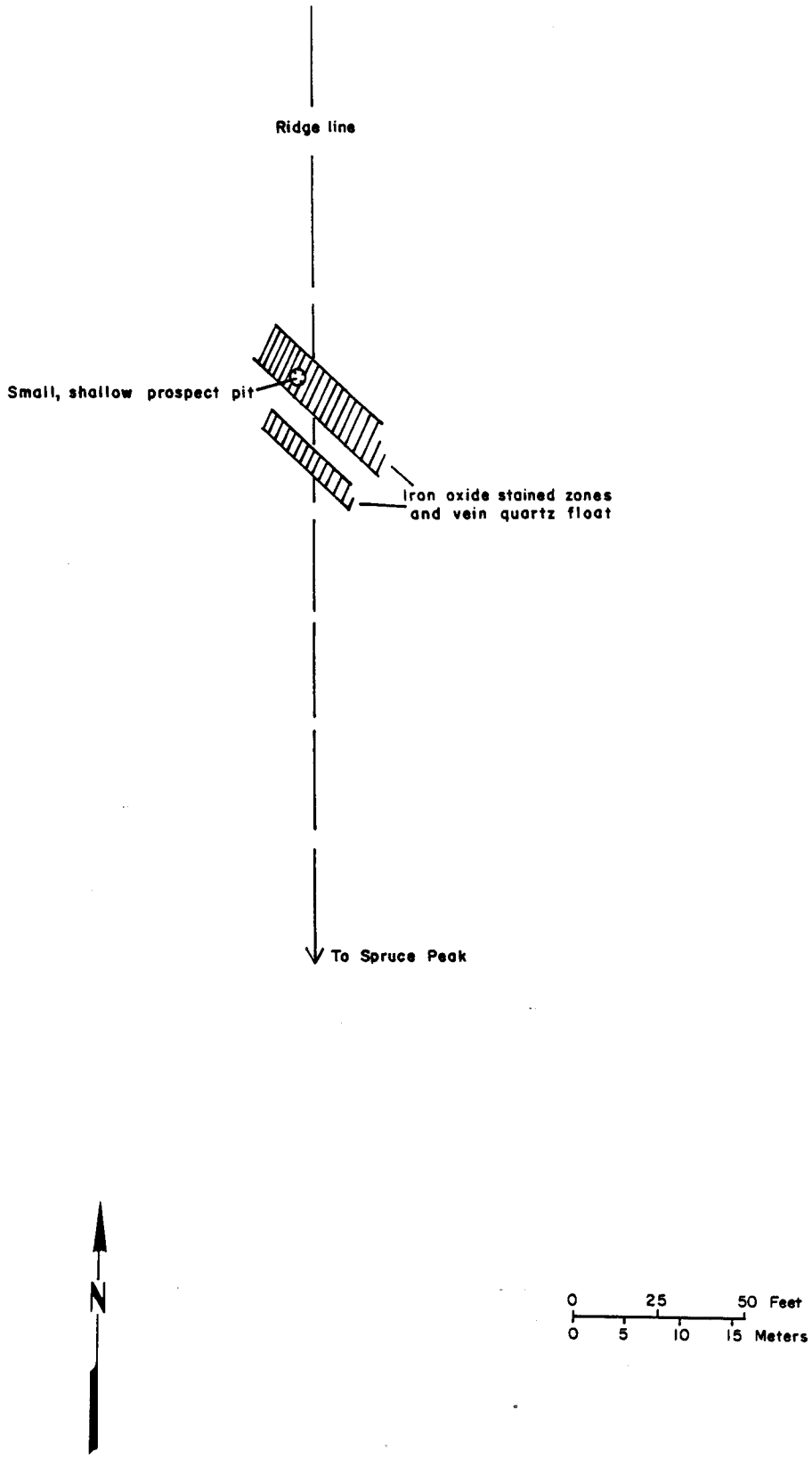
Development and Production: No production recorded. Minor development in the form of shallow prospect pit.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014406 | 20 | 35 | 15 | 1.1 | 0.13 | ppm | 6 | 9 | 350 |

References:




Occurrence No. 89 - Unnamed Prospect

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 90

Location: Ridge trending southeast from Spruce Peak (3500000N, 387000E) to (3498350W, 390250E)

Occurrence Type Vein

Examining Geologist MGS

Ownership: No current claims.

Date(s) of Examination June 20, 1983

General Geology: Spruce Creek metafelsite and Birch Creek quartzite.

Mineralization: Numerous saddles along ridge line are marked by significant orange-red iron oxide and iron oxide stained vein quartz. No fresh sulfides observed directly, but the weathered and leached supergene minerals goethite, limonite, and jarosite indicate their original presence. Grab rock samples anomalous in Pb, Ag, As, Au, Sb.

Structure: Numerous saddles along the ridge are cut by shear zones and fractures along which quartz-sulfide veins have been emplaced. Deep weathering and soil cover preclude direct observation. Most veins trend northeasterly. Veins and shear zones range from less than one foot to several tens of feet in width. Length of veins/shears not determinable due to limited exposure.

Development and Production: No development or production recorded.

Remarks: Four spatially distinct occurrences sampled and grouped under this occurrence number. All are of similar mineralogy and morphology.

See 1 in.=1mi. geochem map.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm | Bi ppm |
|---|---|---|---|---|---|---|---|---|---|---|
| C014401 | 25 | 710 | 55 | 9.7 | .12 | ND | 20 | ND | 465 | ND |
| C014402 | 25 | 435 | 35 | 7.4 | .04 | ND | 18 | 3 | 155 | ND |
| C014403 | 35 | 110 | 30 | 2.2 | ND | ND | 15 | 7 | 180 | ND |
| C014404 | 60 | 50 | 100 | 1.0 | ND | ND | 305 | 3 | 40 | ND |

References:

# OCCURRENCE REPORT FORM

**NAME** Unnamed Occurrence

**Study Area** Kantishna Hills

**Occurrence No.** 91

**Location:** Ridge between Spruce and Kankone Peaks N½ Sec. 21, T15S, R16W. (3508900N, 391820E)

**Ownership:** No claims.

**Occurrence Type** Strata-bound sulfide horizon.

**Examining Geologist** TKH

**Date(s) of Examination** July 24, 1983

**General Geology:** Quartz-eye felsite and fine-grained felsite of the Spruce Creek Sequence which form lenses in graphitic and chloritic schist.

**Mineralization:** Pyrite occurs as disseminated grains in 0.5 in. wide bands that contain up to 50% pyrite. Abundant limonite staining.

**Structure:** Several pyrite-bearing metamorphosed felsic volcanic units define a horizon of undetermined thickness which can be traced for at least 1300 ft. along strike.

**Development and Production:** None.

**Remarks:** Bundtzen describes pyrite in graphitic phyllite nearby. Pyritic black phyllite was located but not with the amount of sulfides seen in the felsite.

**Analyses:** Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C013770 | 10 | 10 | 10 | ND | 0.1 | ND | ND | 3 | 50 | grabs from exposed limonite stained outcrops |
| C013771 | 5 | 15 | 20 | 0.4 | ND | 12 | ND | 4 | 90 | |

**References:** Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 92

Location: (3509275N, 392400E)

Occurrence Type Galena-quartz vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 25, 1983

**General Geology:** Blastoporphyritic metafelsite (Psfq); hydrothermally altered around the shear vein.

**Mineralization:** Vein observed in float and outcrops consisted of galena, sphalerite, and pyrite in quartz gangue. Oxidation products of the above sulfides were also present.

**Structure:** Mineralized shear zone cuts through Psfq strikes N15°W dips 75°SW and is a maximum of 1 ft. wide.

**Development and Production:** None.

**Remarks:** Vein is only moderately exposed.

**Analyses:** Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014409 | .006 | 2.8 | 8.15 | 2.94 | 0.12 | ND | .0145 | ND | 3.95 |

**References:**

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 93

Location: (351040450N, 394025E)

Occurrence Type Galena-quartz vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 25, 1983

General Geology: Blastoporphyritic metafelsite (Psfq) of Spruce Creek Sequence.

Mineralization: Observed only in float which overlays outcrop. Galena with minor pyrite in quartz vein.

Structure: Northeast-trending mineralized shear. Poorly exposed. Amount of mineralized float indicates structure not very wide.

Development and Production: None.

Remarks: Mineralized float is very close to in place.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014413 | 0.12 | 33 | 0.265 | 112.4 | 0.93 | 6 | 0.435 | 3 | 2.65 |

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 94

Location: (3513350N, 394825E)

Occurrence Type Stibnite-quartz vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 27, 1983

General Geology: Graphite-muscovite-quartz schist (Psq).

Mineralization: Mineralization not observed directly. Reported to consist of stibnite, galena, sphalerite in a quartz vein.

Structure: Two foot thick vein cutting schist unit. Poor exposure.

Development and Production: None recorded.

Remarks: New prospect identified by Bundtzen, 1981. Surface showing small. Not located for this study.

Analyses:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Sb % |
|---|---|---|---|---|---|---|
| Bundtzen 1981 | 0.30 | 1.43 | 0.20 | 0.14 | 0.22 | 0.02 |

References: Bundtzen, 1981, p. 207, 224.

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hills

Occurrence No. 95

Location: (3512850N, 395175E)

Occurrence Type Galena-quartz vein

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 21, 1983

General Geology: Blastoporphyritic metafelsite (Psfq) of Spruce Creek Sequence.

Mineralization: In outcrop and float. Galena with lesser sphalerite and minor pyrite in a quartz vein.

Structure: Mineralized shear trending N75°W at a high angle. Vein is 2-3 ft. thick.

Development and Production: None.

Remarks: Several shallow pits have been located on the mineralized trend.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % |
|---|---|---|---|---|---|---|---|---|---|
| C014412 | .325 | 21.5 | 14.0 | 51.3 | 0.23 | ND | 0.385 | 3 | 2.85 |

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 96

Location: (3510570N, 394500E)

Occurrence Type Stratiform

Examining Geologist Bundtzen

Ownership: None.

Date(s) of Examination

General Geology: Host rock consists of greenstone schists.

Mineralization: Bundtzen (1981) reports disseminated sulfide bands 4-6 ft. thick parallel to foliation containing pyrite, chalcopyrite, malachite and azurite.

Structure:

Development and Production: None recorded.

Remarks:

Analyses: Bundtzen (1981) reports three samples containing trace amounts Au, trace-0.96 oz/tn Ag, 0.012-0.035% Cu, trace-0.69% Pb, 0.003-0.6% Zn, and trace amounts of Sb and As.

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 97

Location: (3518825N, 399775E)

Occurrence Type Sulfide shear zone

Examining Geologist MGS

Ownership: None

Date(s) of Examination June 28, 1983

General Geology: Quartzite and muscovite-quartz schist of the Birch Creek Sequence (pЄsq).

Mineralization: Moderately exposed, orange-red iron oxide stained shear zone. Sheared and hydrothermally altered quartzite containing disseminated pyrite. Much of surface exposure is oxidized to goethite, limonite, and jarosite. Associated soils also pervasively iron oxide stained. Shear zone anomalous in Pb and Ag. Little if any quartz veining.

Structure: Shear zone cuts across quartzite units and trends N55°E at a high angle (vertical?). Shear traceable for 1200 ft. is 5-10 ft. wide.

Development and Production: None recorded.

Remarks: Conspicious color anomaly from the air.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014414 | 15 | 650 | 125 | 9.6 | ND | 2 | 16 | 2 | 65 |
| B003705 | 40 | ND | 30 | 0.4 | ND | ND | 4 | 2 | 10 |

References:

# OCCURRENCE REPORT FORM

NAME Canyon Creek Occurrence

Study Area Kantishna Hills

Occurrence No. 98

Location: Sec. 23, T14S, R16W

Occurrence Type Potential Massive Sulfide

Examining Geologist JRB

Ownership: Unclaimed

Date(s) of Examination

General Geology:

Mineralization:

Structure:

Development and Production:

Remarks:

The occurrence is discussed in the text in the Stratabound Massive Sulfide section

Analyses:

References:

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 99

Location: (3519450N, 401700E)

Occurrence Type Sulfide bearing quartz veins

Examining Geologist Bundtzen

Ownership: None

Date(s) of Examination

General Geology:

Mineralization: Low grade mineralization consisting of pyrite with minor galena in quartz gangue.

Structure: Northeast trending vein swarms 15-35 ft. thick and with 360 ft. of strike length.

Development and Production: None recorded.

Remarks:

Analyses: Bundtzen (1981) reports three samples containing trace amounts of Au, 0.05-0.25 oz/tn Ag, 0.004-0.03% Cu, 0.105-0.47% Pb, 0.024-0.14% Zn, and minor As and Sb.

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 100

Location: (3521900N, 402400E)

Occurrence Type Quartz vein

Examining Geologist Bundtzen

Ownership: None

Date(s) of Examination

General Geology: Calcareous schist spatially associated with a dike swarm.

Mineralization: Bundtzen (1981) reports a small quartz filled fracture in schist containing limonite and galena.

Structure: Fracture reported to strike N10°E and to dip 20°SE.

Development and Production: None.

Remarks:

Analyses:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Sb % | As % |
|---|---|---|---|---|---|---|
| Bundtzen | .007 | 1.15 | .001 | .62 | tr | tr |

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 101

Location: Canyon Creek (3528000N, 414900E)

Occurrence Type Mineralized Dike

Examining Geologist Bundtzen

Ownership: None.

Date(s) of Examination

General Geology: Northeast trending gabbro(?) dike reported by Bundtzen (1981).

Mineralization: Reported to consist of pyrite and a trace of stibnite.

Structure:

Development and Production: None.

Remarks:

Analyses:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Sb % |
|---|---|---|---|---|---|---|
| Bundtzen | tr | tr | tr | 0.1 | 0.01 | 0.016 |

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Moonlight Stibnite Occurrence

Study Area Kantishna Hills

Occurrence No. 102

Location: Divide between Moonlight and Canyon Creek. (3475800N, 337500E)

Occurrence Type Antimony-quartz vein

Ownership: None

Examining Geologist RBH, JRB

Date(s) of Examination June 16, 1983

General Geology: Host rock consists of Birch Creek schist near contact with the Keevy Peak Formation.

Mineralization: Massive stibnite pods in a quartz vein up to 10 in. wide exposed for a strike length of 6 ft.

Structure: Vein strikes N30°E and dips 20°NW.

Development and Production: None.

Remarks: Area should be explored for vein extension.

Analyses: Bundtzen reports three samples with traces of Au, up to 0.33 oz/tn Ag, minor Cu, Pb, Zn, and up to 65.5% Sb.

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Bloom Prospect

Study Area Kantishna Hills

Occurrence No. 103

Location: (3542500N, 425400E)

Occurrence Type Possible stratiform sulfides

Examining Geologist JRB

Ownership: Unknown.

Date(s) of Examination July 25, 1983

General Geology: Tan and black quartzite units of the Birch Creek schist. Rocks are essentially horizontal.

Mineralization: Abundant white and yellow sulfate effloresence on north-facing cliff face.

Structure: Prospect located along two or three shear zones grossly concordant with foliation. Principal shearing localized the contact between black finely-laminated locally graphitic quartzite and tan finely-laminated vitreous quartzite. Strata between shears are plicated and locally brecciated.

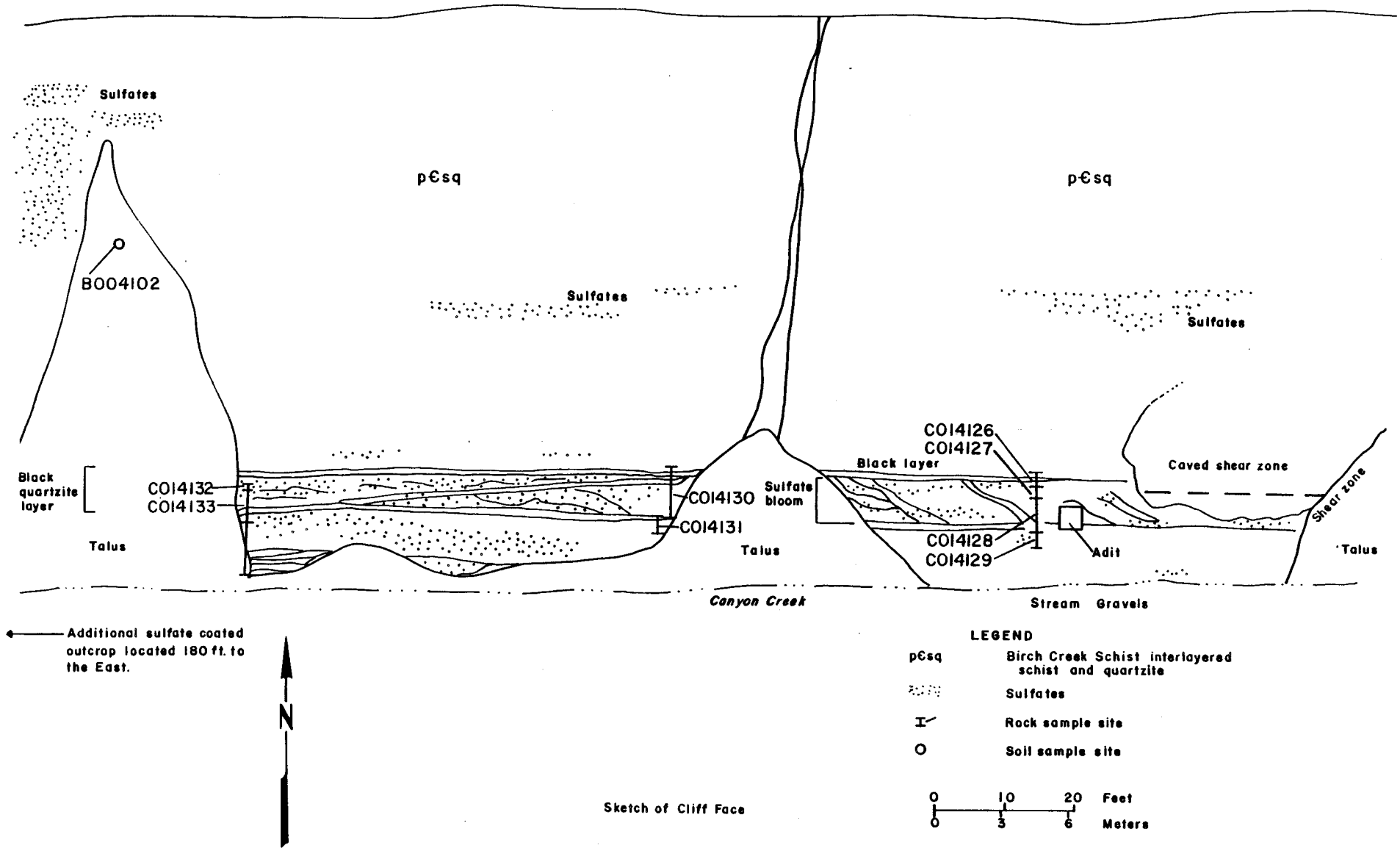
Development and Production: A four foot long 3 x 3 ft. adit was driven. No production.

Remarks: Luxuriant blooms of white and yellow sulfate cover the black quartzite units, especially along the sheared zones. No evidence of relict sulfides. No positive Zn Zap reaction. Geometry of the sulfate blooms suggest possible stratiform sulfide accumulations in the black, locally carbonaceous layers.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag ppm | Au ppm | Mo ppm | Sb % | W % | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014126 | .002 | .001 | .005 | ND | ND | ND | .0006 | .0002 | .002 | chip sample |
| C014310 | .004 | ND | .004 | ND | ND | ND | .0019 | .0003 | .003 | |
| C014311 | .002 | ND | .004 | ND | ND | 2 | .0012 | ND | .001 | |
| B004102 | .008 | .002 | .010 | ND | ND | ND | .0030 | .0004 | .004 | soil sample |

References:




Sketch of Cliff Face

Occurrence No. 103-Bloom Prospect

# OCCURRENCE REPORT FORM

NAME Red Dirt Occurrence

Study Area Kantishna Hills

Occurrence No. 105

Location: Sec. 5, T14S, R15W

Occurrence Type Potential Massive Sulfide

Examining Geologist JRB

Ownership: Unclaimed

Date(s) of Examination

General Geology:

Mineralization:

Structure:

Development and Production:

Remarks:

The occurrence is discussed in the text in the Stratabound Massive Sulfide section.

Analyses:

References:

# OCCURRENCE REPORT FORM

NAME Nessie Deposit (Ridge No. 1 Claim) (Patented Claim M.S. No. 2196)

Study Area Kantishna Hills

Occurrence No. 106

Location: 0.5 mi. northwest of Stampede Mine (3561500N, 437310E)

Occurrence Type Quartz, stibnite vein

Examining Geologist JMK

Ownership: Patented Claim (M.S. No. 2196) Mineral rights belonging to University of Alaska.

Date(s) of Examination August 12-13, 1983

General Geology: Micaceous quartzite.

Mineralization: A 10 ft. wide shear contains a 2.5 ft. wide quartz-stibnite-bearing zone (up to 5% stibnite). Other minerals include kermesite, stibiconite, boulangerite(?).

Structure: The mineralized zone is vertical, trends N85$^{o}$E and is intermittently exposed for 80 ft. along strike.

Development and Production: Development: Three bulldozer trenches and some small pits. No production.

Remarks: Bundtzen (1981), p. 208) reports reserve of 1400 lbs. of high grade stibnite ore.

Analyses: See attached table.

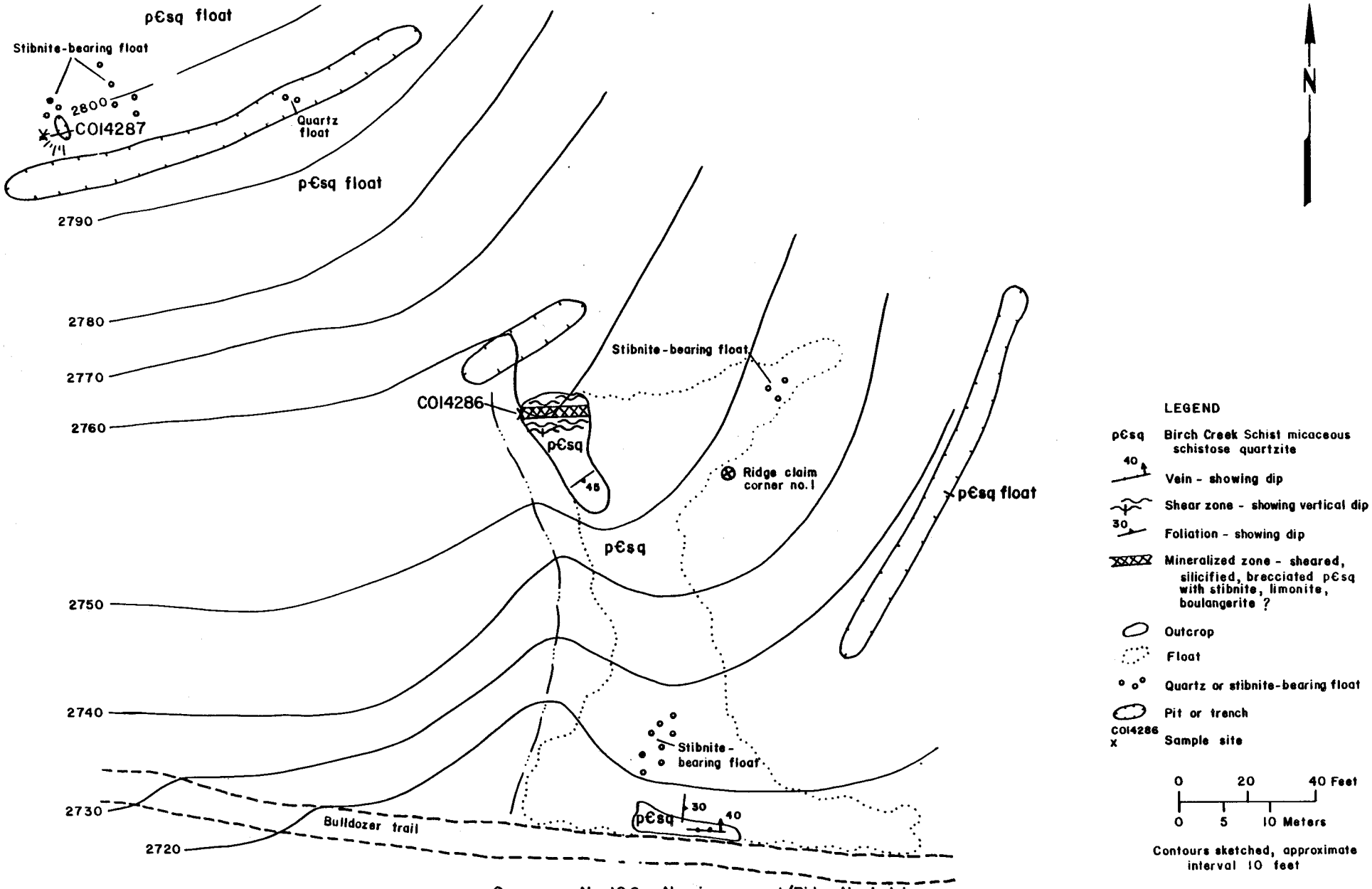
References: Bundtzen, 1981, p. 208, 226.

Nessie Deposit (Ridge No. 1 Claim) (Patented Claim M.S. No. 2196)

Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | .001% | .0005% | .002% | 0.05 oz/tn | .016 oz/tn | 14 ppm | .795% | 6 ppm | .06% | 2 % | -- | -- | Sample C014286. 4 ft. chip across shear. |
| | .021% | <.001% | .002% | 2.76 oz/tn | .4-6 oz/tn | -- | 6.05% | <.0002 ppm | .57% | .0001 | -- | -- | Sample C014287. Dump grab. |
| * | .003% | .001% | .001% | .308 oz/tn | .01 oz/tn | 33 ppm | .800% | -- | -- | -- | -- | -- | Disseminated sulfide gashes |
| * | .001% | .001% | tr | 0.01 oz/tn | tr | 50 ppm | .016% | -- | -- | -- | -- | -- | (stibnite) in quartzite. |

* Bundtzen, 1981.




Occurrence No. 106 - Nessie prospect/Ridge No. I claim

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 107

Location: (3558690N, 433500E)

Occurrence Type Antimony bearing quartz

Examining Geologist Bundtzen

Ownership: None.

Date(s) of Examination

General Geology: Quartzite host rock.

Mineralization: Quartz gangue containing pyrite and minor stibnite exposed for 330 ft.

Structure: Mineralized zone strikes N35°E and dips 45°SE.

Development and Production: None.

Remarks:

Analyses:

| Sample | Cu % | Pb % | Zn % | Au oz/tn | Mo ppm | Sb % | Remarks |
|---|---|---|---|---|---|---|---|
| Bundtzen | tr | tr | tr | tr | 51 | .052 | gossan sample |

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 108

Location: Southwest of Stampede Mine (3558700N, 436550E)

Occurrence Type Quartz vein

Examining Geologist Bundtzen

Ownership: None.

Date(s) of Examination

General Geology: Graphitic schist host rock.

Mineralization: Disseminated chalcopyrite and pyrite in a 12 in. wide discontinuous quartz vein. Minor malachite staining present.

Structure: Vein is subparallel to schistosity.

Development and Production: None recorded.

Remarks:

Analyses:

References: Bundtzen, 1981.

# OCCURRENCE REPORT FORM

NAME Upper Ridge Claims No.'s 344 (patented M.S. No. 2261)

Study Area Kantishna Hills

Occurrence No. 109

Location: 1.3 mi. northwest of the Stampede Mine (356409N, 433950E)

Occurrence Type Quartz stibnite vein

Ownership: University of Alaska

Examining Geologist JMK

Date(s) of Examination August 11, 1983

General Geology: Birch Creek quartzite, quartzite feldspar schist and calcareous schist.

Mineralization: Limonite-stained vein quartz exposed in trenched area. Mineralogy: massive and stringer stibnite. Minor stibiconite and kermesite.

Structure: No mineralization found on outcrop.

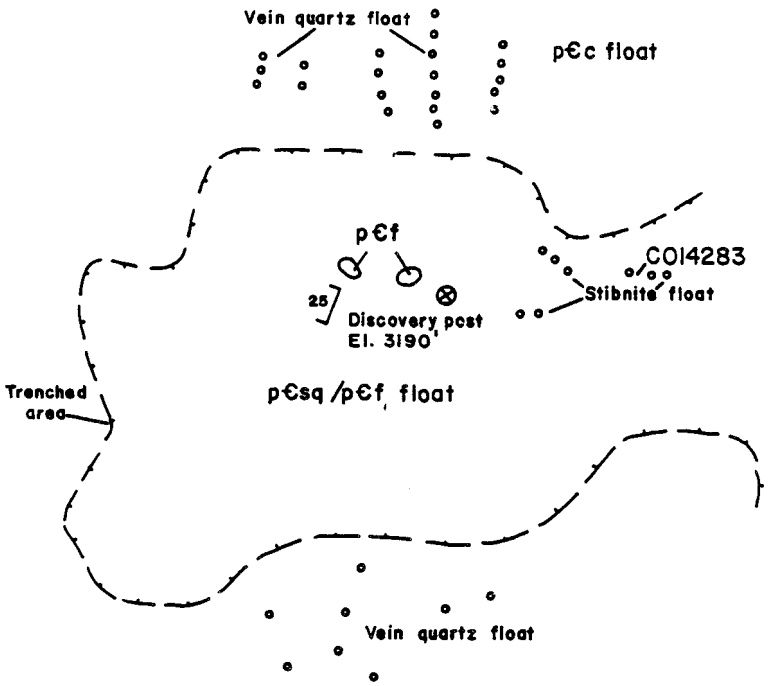
Development and Production: Development: considerable bulldozer trenching. No production.

Remarks:

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu % | Pb % | Zn % | Ag oz/tn | Au oz/tn | Mo ppm | Sb % | W ppm | As % | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014283 | 0.009 | <.001 | .005 | <.01 | .026 | <2 | 38.5 | -- | 0.45 | float grab |
| Bundtzen | 0.026 | .03 | 1.20 | .01 | tr | 19 | 0.031 | -- | -- | sulfide schist near vein |
| Bundtzen | 0.010 | 0.03 | 0.03 | 0.20 | 0.06 | 22 | 14.5 | -- | -- | stibnite gash vein |

References: Bundtzen, 1981, p. 208, 226.




LEGEND

Birch Creek Schist

| | |
|---|---|
| p€c | Calcareous schist |
| p€sq | Quartzite |
| p€f | Quartz feldspar schist |
| 25 | Cleavage - showing dip |
| ° ° ° | Float |
| ⊗ | Discovery post |
| C014283 x | Sample site |

N

0 25 50 Feet

0 5 10 15 Meters

Occurrence No. 109 - Upper Ridge claim

# OCCURRENCE REPORT FORM

NAME Unnamed Prospect

Study Area Kantishna Hill

Occurrence No. 110

Location: South bank of Stampede Creek 0.35 mi. west of the Stampede Mine (35660080N, 437300E)

Occurrence Type Quartz, stibnite vein

Ownership:

Examining Geologist JMK

Date(s) of Examination August 13, 1983

General Geology: Birch Creek calcareous schist and schistose quartzite.

Mineralization: Veinlets and lenses of limonite-stained quartz and quartz breccia, the largest is 1 x 2.5 ft. in size. Mineralogy: stibnite, stibiconite, pyrite. Locally massive stibnite.

Structure: Quartz veinlets and breccia crosscut schistosity. A trend for the mineralized zone could not be determined because of poor exposure.

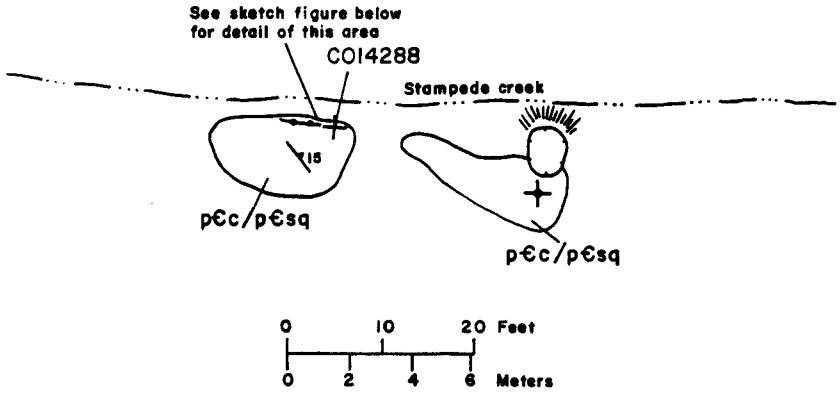
Development and Production: Development: one small open cut. No production.

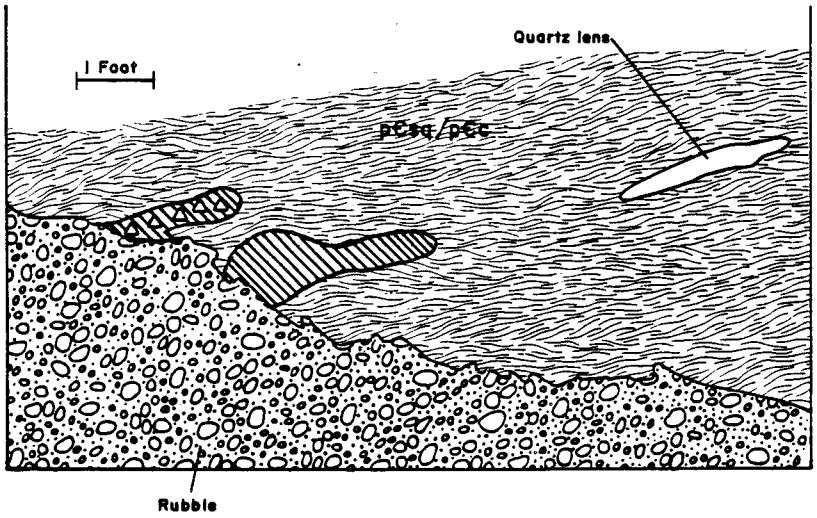
Remarks: Poorly exposed.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm |
|---|---|---|---|---|---|---|---|---|---|
| C014288 | 5 | ND | ND | ND | .007 | ND | 19% | ND | 570 |

References: Wells, 1941, Plate 49.




Sketch view at south side of Stampede Creek- looking south

LEGEND

Birch Creek Schist

p€c Calcareous schist

p€sq Schistose quartzite

Quartz breccia

Quartz vein

Stibnite-bearing zone

15 Foliation-showing attitude

Horizontal foliation

Pit or trench

Dump

C014288 Sample site

Occurrence No. 110 - Unnamed prospect

# OCCURRENCE REPORT FORM

NAME Stampede Mine

Study Area Kantishna Hills

Occurrence No. 111

Location: Stampede Creek
SW¼ Sec. 36, T13S, R15W
(3558420N, 439680E)

Occurrence Type Antimony-quartz veins

Examining Geologist TKH

Ownership: Patented claims: Mineral rights are owned by University of Alaska surface is controlled by National Park Service.

Date(s) of Examination August 11-12, 1983

General Geology: Quartzite and schist of the Birch Creek formation.

Mineralization: Massive stibnite and stibnite-bearing quartz veins with minor pyrite, pyrrhotite and sphalerite.

Structure: The minerals occur in a set of NE trending veins and fractures associated with the Stampede fault.

Development and Production: Development: Small glory hole and more than 3000 ft. of underground workings in complex array of drifts, crosscuts, shafts and inclined workings; small mill.
Production: Total of 3,894.5 tons of ore and concentrates containing 3,695,429 lbs. antimony (see attached table).

Remarks: Includes surface, Nesse winze, Emil winze, West and East Mooney, and Kobuk ore bodies. Many buildings and some equipment on site; most of the buildings and some of the equipment are usuable. Hawley (1977) estimates up to 1000 tons of high grade (50% Sb) material may remain in the workings. White (1942) estimated 6000 tons of mill grade (10-15% Sb) ore remained at that time; most of which has not been mined.

Analyses: See attached table.

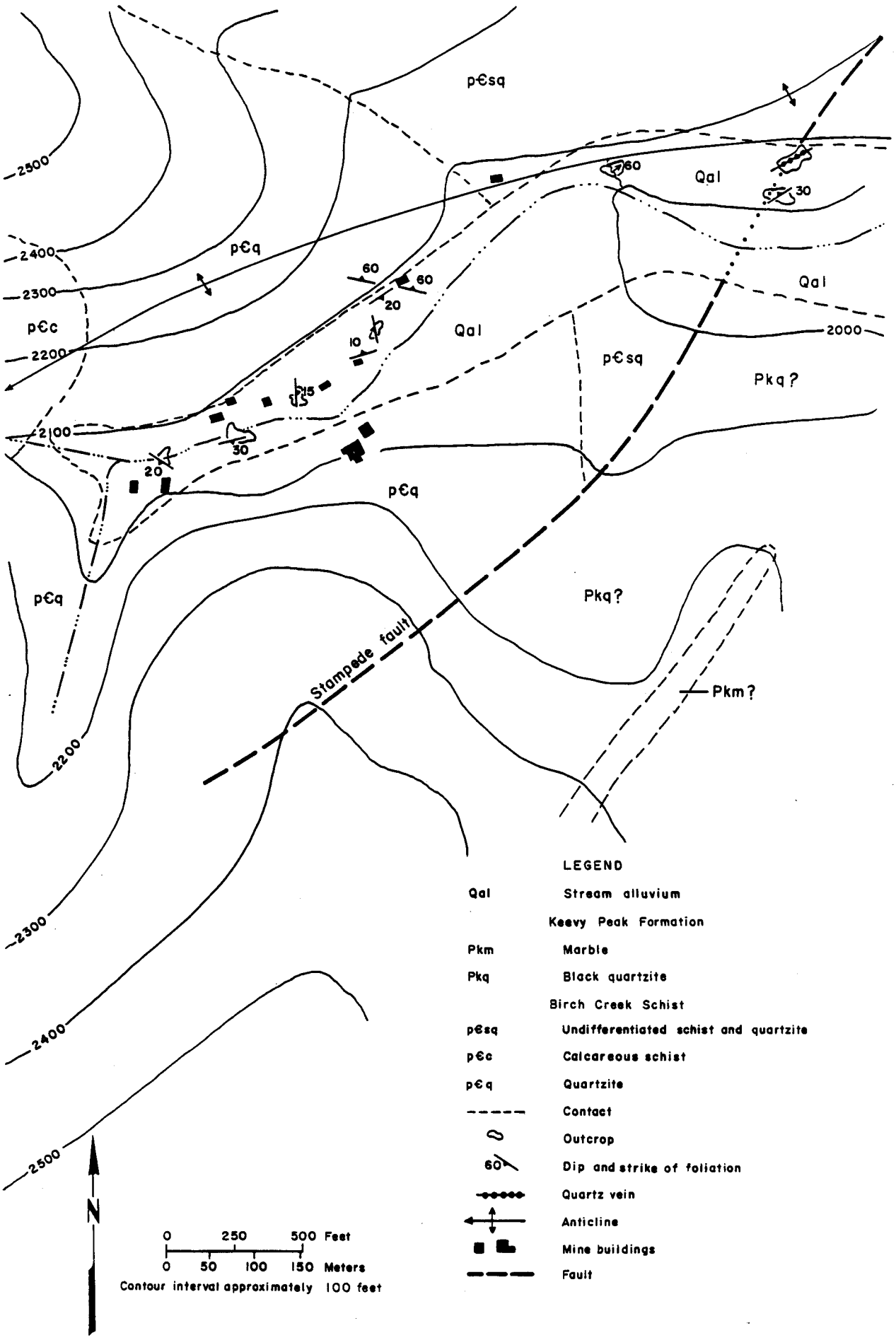
References:
Bundtzen, 1981, p. 128-141 and tables.
Hawley, 1977, p. 4-32-4-45.
Barker, 1963, p. 10-17.
Ebbley and Wright, 1940, p. 3-30.
White, 1942.

Stampede Mine

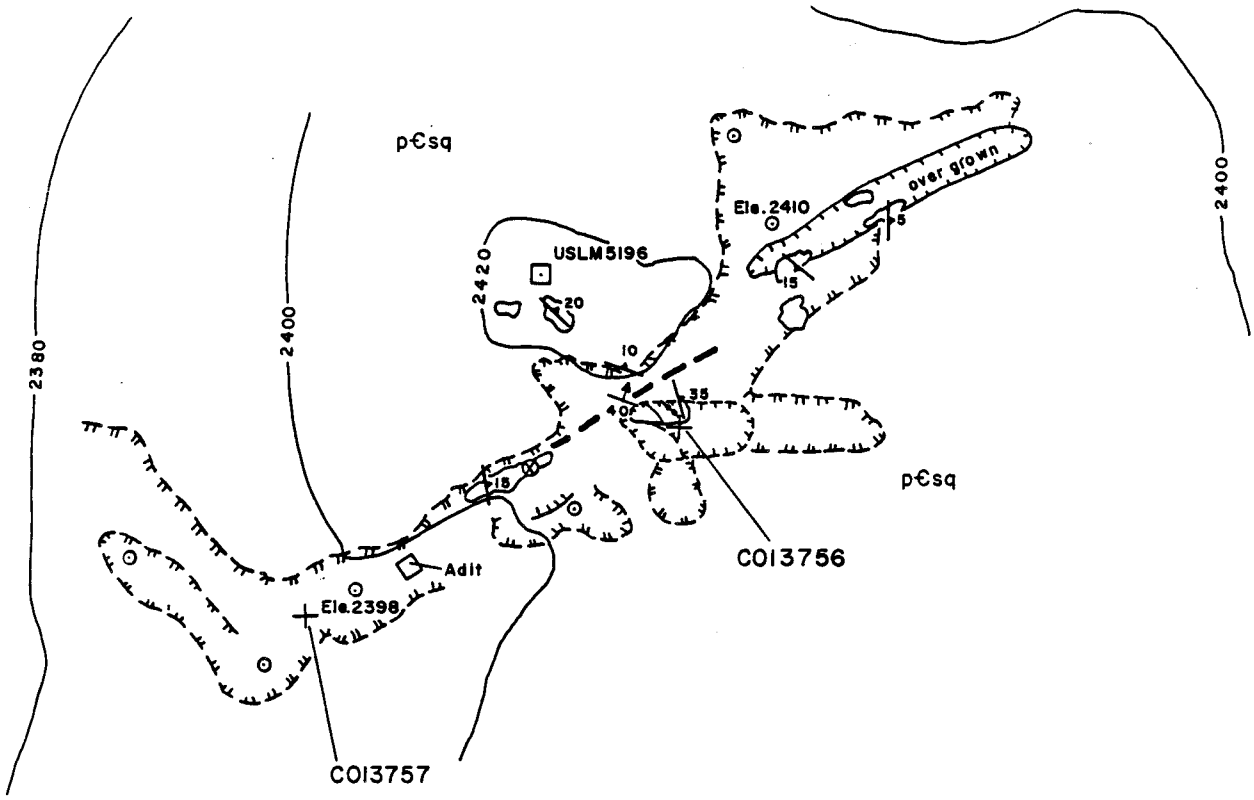
Salisbury & Dietz, Inc. study results:

| | Cu | Pb | Zn | Ag | Au | Mo | Sb | W | As | Bi | U | Th | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ND | ND | ND | .03 oz/tn | .053 oz/tn | ND | 65% | 6 ppm | .088% | -- | -- | -- | Sample C013756. |
| | ND | ND | ND | .12 oz/tn | .070 oz/tn | ND | 68% | 4 ppm | .100% | -- | -- | -- | Sample C013757. |
| * | tr | .01% | tr | .05 oz/tn | .020 oz/tn | tr | 26.2% | -- | -- | -- | -- | -- | Grab samples along road cut. |
| * | tr | tr | tr | .17 oz/tn | .230 oz/tn | tr | 30.8% | -- | -- | -- | -- | -- | |
| ** | -- | -- | ND | tr | tr | -- | .082% | -- | -- | -- | -- | -- | Channel sample across |
| ** | -- | -- | ND | tr | tr | -- | .042% | -- | -- | -- | -- | -- | approximately 20 m of vein |
| ** | -- | -- | ND | tr | tr | -- | .005% | -- | -- | -- | -- | -- | and gossans. |
| ** | -- | -- | ND | tr | tr | -- | .021% | -- | -- | -- | -- | -- | |
| ** | -- | -- | ND | .105oz/tn | .010 oz/tn | -- | 2.75% | -- | -- | -- | -- | -- | |
| ** | -- | -- | ND | .04 oz/tn | .020 oz/tn | -- | 1.20% | -- | -- | -- | -- | -- | |
| ** | -- | -- | ND | .02 oz/tn | .010 oz/tn | -- | 0.06% | -- | -- | -- | -- | -- | |
| ** | -- | -- | ND | .01 oz/tn | tr | -- | 1.70% | -- | -- | -- | -- | -- | |
| ** | -- | -- | ND | ND | ND | -- | 0.035% | -- | -- | -- | -- | -- | |

* Bundtzen and others, 1976.
** Hawley, 1977.




Occurrence No. III – Geology of the Stampede Mine Area




LEGEND

| | |
|---|---|
| p€sq | Birch Creek Schist undifferentiated schist and quartzite |
| — — — | Fault |
| —•—•— | Quartz/Antimony vein |
| + | Rock sample site |
| | Cut boundary |
| ⊙ | Survey point |
| 20 | Dip and strike of foliation |
| — | Outcrop |

N

0 50 100 Feet

0 10 20 30 Meters

Contour interval approximately 20 feet

Occurrence No.111-Stampede Mine/Glory Hole Ore Body

PRODUCTION OF ANTIMONY ORES, CONCENTRATES, STAMPEDE MINE

| Year | Ore + Concentrates (ton) | Antimony (%) | Antimony (lb.) |
|---|---|---|---|
| Pre-1937 | 150.00 | ---- | ---- |
| 1937 | 873.67 | 55.01 | 962,000 |
| 1938 | 426.73 | 52.00 | 444,000 |
| 1939 | 211.52 | 49.68 | 210,000 |
| 1940 | 293.83 | 52.16 | 306,000 |
| 1941 | 582.90 | 53.47 | 624,000 |
| 1942 | 60.00 | 52.00 | 83,200 |
| 1943 | 120.00 | 52.00 | 124,400 |
| 1944 | 78.50 | 50.00 | 78,500 |
| 1945 | 40.00 | 56.00 | 46,600 |
| 1946 | 40.00 | 56.00 | 44,800 |
| 1947 | 26.00 | 56.00 | 29,120 |
| 1948 | 68.50 | 56.00 | 69,720 |
| 1949 | 74.00 | 56.00 | 82,880 |
| 1951 | 121.00 | 56.00 | 135,520 |
| 1956 | 120.00 | 56.00 | 134,400 |
| 1957 | 63.50 | 56.00 | 71,120 |
| 1964 | 40.00 | 56.00 | 46,600 |
| 1965 | 40.00 | 56.00 | 46,600 |
| 1969 | 23.00 | 56.00 | 29,760 |
| 1970 | 121.35 | 56.00 | 126,209 |
| Total | 3,594.50 | | 3,695,429 |

From White, 1942, and estimates by E. R. Pilgrim

Sources: White, 1942.
E. R. Pilgrim, pers. commun.

# OCCURRENCE REPORT FORM

NAME Unnamed Occurrence

Study Area Kantishna Hills

Occurrence No. 112

Location: On Clearwater River
SW¼ Sec. 7, T14S, R14W
(3549220N, 444750E)

Ownership: Not claimed.

Occurrence Type Sulfide-bearing quartz vein

Examining Geologist CJM

Date(s) of Examination August 12, 1983

General Geology: Birch Creek quartzite.

Mineralization: Quartz vein with pyrite and galena.

Structure: Quartz veins approximately one foot wide crosscut quartzite schist.

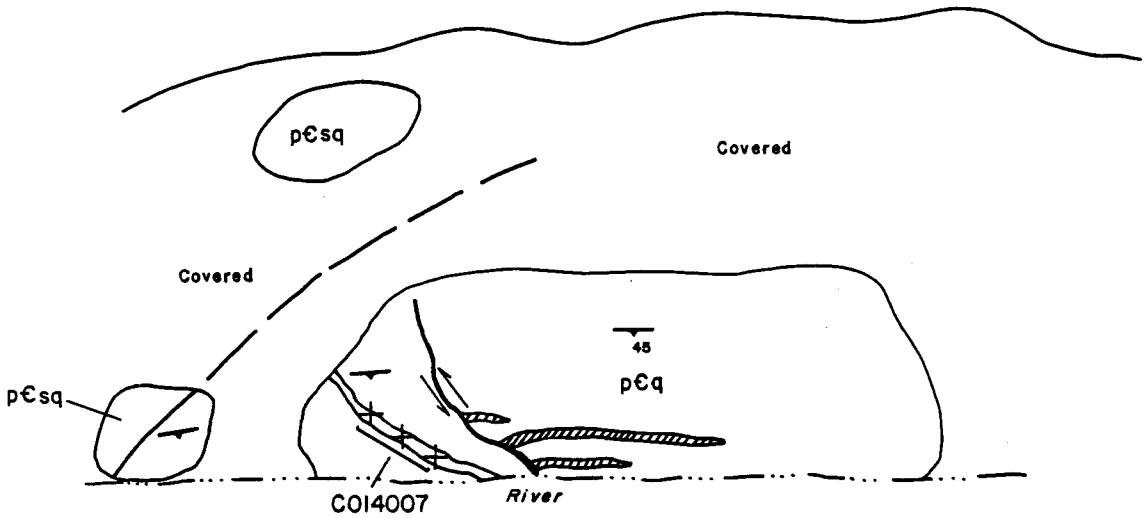
Development and Production: None.

Remarks: Quartz veins contain sparse sulfides.

Analyses: Salisbury & Dietz, Inc. study results:

| Sample | Cu ppm | Pb % | Zn ppm | Ag ppm | Au ppm | Mo ppm | Sb ppm | W ppm | As ppm | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| C014007 | 30 | .505 | 5 | 11 | ND | ND | 2 | 2 | 10 | selected sample, high-graded from sulfide bearing area of vein |

References:




Sketch section N60W - View to north from river level

LEGEND

p€q Birch Creek Schist quartzite

p€sq Birch Creek Schist

Fault - dashed where approximate

Slickensides

45 Foliation - showing dip

Quartz vein

C14007 Sample site

N

0 25 50 Feet

0 5 10 15 Meters

Occurrence No. 112-Unnamed Prospect

# OCCURRENCE REPORT FORM

NAME Clearwater Barite

Study Area Kantishna Hills

Occurrence No. 113

Location: Clearwater Fork 1 mile north of Stampede Creek

Occurrence Type

Examining Geologist Bundtzen

Ownership: None

Date(s) of Examination

General Geology:

Mineralization: Poorly exposed quartz vein six feet wide contains barite, pyrite, and pyrrhotite.

Structure: Vein strikes N50°W and dips 40°SW.

Development and Production: None reported.

Remarks:

Analyses: Bundtzen (1981) reports one sample containing approximately 25% barite and 0.017% Zn.

References: Bundtzen, 1981.

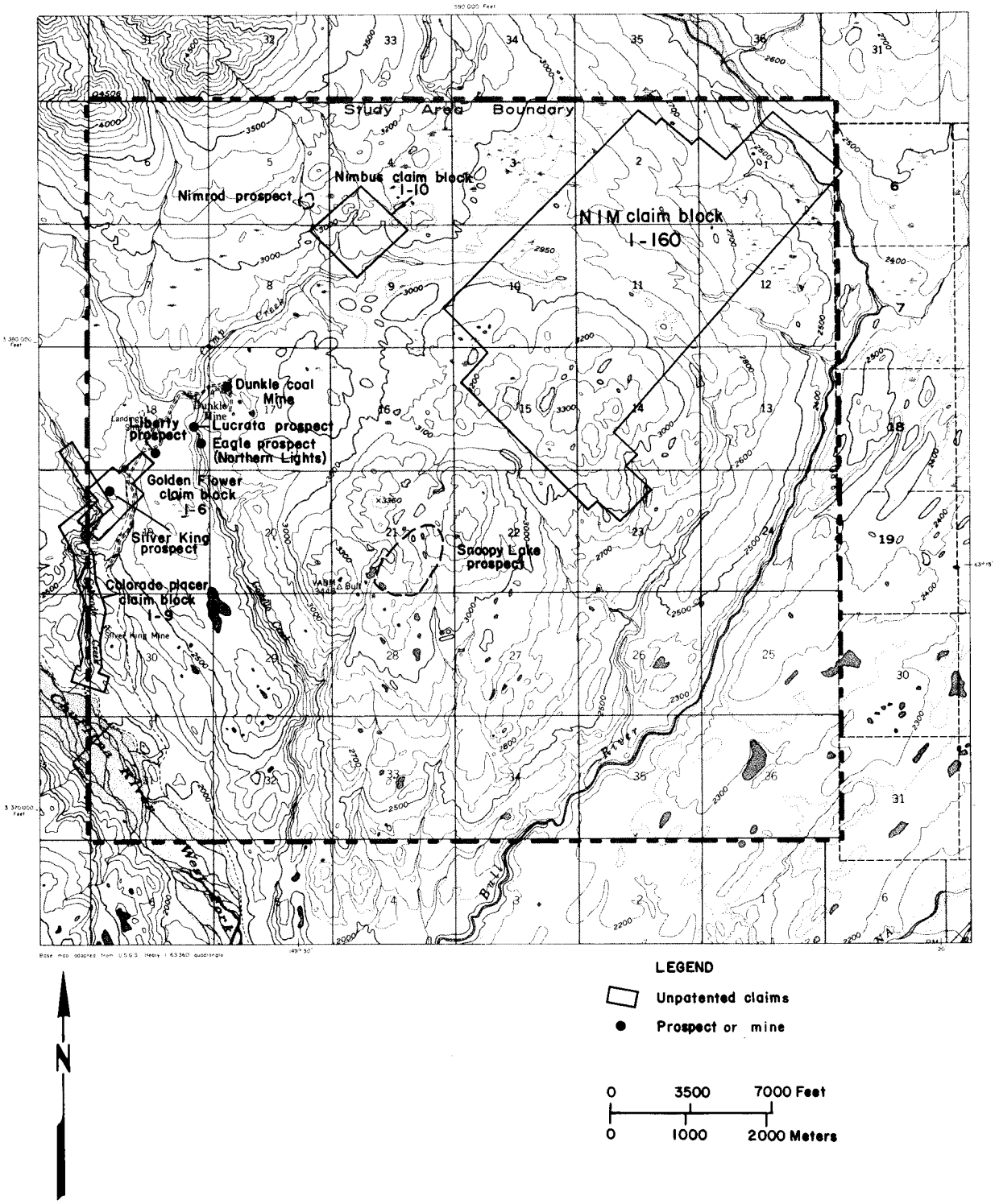



Figure B-2 Claims, Mines, and Prospects - Dunkle Mine Study Area

# OCCURRENCE REPORT FORM

NAME Snoopy Lake Prospect

Study Area Dunkle

Occurrence No.

Location: Section 21, T19S, R10W

Occurrence Type Disseminated/Breccia

Examining Geologist CJM, JD, JG

Ownership: Unclaimed.

Date(s) of Examination August 23, 24, 1983

General Geology: Hornfelsed metasediments and/or metavolcanics intruded by felsic to intermediate dikes and plugs.

Mineralization: Arsenopyrite, chalcopyrite, pyrite occurs as disseminations and stringers in and surrounding breccias. Locally sulfides make up part of breccia matrix.

Structure: Hornfels is brecciated by andesitic intrusions.

Development and Production: Several small hand-diggings. No production.

Remarks: At one time covered by part of the NIM claim block. These claims have been allowed to lapse.
See geologic map, plate D-1.

Analyses: See attached table.

References: Resource Associates of Alaska, and Resource Exploration Consultants; In-house reports and maps, 1971-1981.
Bundtzen, 1983.

Snoopy Lake Prospect

Salisbury and Dietz, Inc. study results:

| Sample | Cu ppm | Ag ppm | Au ppm | As ppm |
|---|---|---|---|---|
| C014170 | 260 | 3.8 | .25 | 3,200 |
| C014171 | 20 | 0.2 | -- | 30 |
| C014172 | 105 | 0.2 | -- | 90 |
| C014173 | 160 | -- | -- | -- |
| C014174 | 1700 | 990 | .44 | 109,000 |
| C012715 | 120 | -- | -- | -- |
| C012743 | 280 | -- | -- | -- |
| C012746 | 260 | 9.2 | .50 | -- |
| C012747 | 220 | 2.4 | -- | -- |
| C012748 | 480 | -- | -- | -- |
| C012749 | 120 | -- | -- | -- |
| C012750 | 430 | -- | .40 | -- |
| C012751 | 40 | -- | .20 | -- |
| C013767 | 360 | 0.6 | -- | 40 |

# OCCURRENCE REPORT FORM

NAME NIM Property

Study Area Dunkle

Occurrence No.

Location: Section 10, 11, 14, 15 T19S, R10W

Occurrence Type Disseminated/breccia/vein?

Examining Geologist CHM, TKH, JB, VVT

Ownership: Richard Swainbank

Date(s) of Examination August 22-25, 1983

General Geology: Metasedimentary and metavolcanic rocks intruded by felsic to mafic igneous complex.

Mineralization: Disseminated arsenopyrite, chalcopyrite, molybdenite, pyrrhotite, float from massive arsenopyrite vein. Breccias with chalcopyrite, pyrrhotite.

Structure: Numerous breccias.

Development and Production: No development or production. Considerable exploration work performed on property including soil geochemistry, Induced Polarization survey, ground and airborne magnetics, geologic mapping, and limited rotary drilling.

Remarks: Promising area of widespread mineralization.

Analyses: Numerous rock and soil samples taken for this study. See sample location map, plate D-2 , this report. Resource Associates of Alaska and Resource Exploration Consultants. In-house reports and maps, 1971-1981.

References: Resource Associates of Alaska, and Resource Exploration Consultants; in-house maps and reports, 1971-1981.
Bundtzen, 1983.

# OCCURRENCE REPORT FORM

NAME Nimrod

Study Area Dunkle

Occurrence No.

Location: On one of the northern tributaries to Camp Creek, SE ¼ Section 5, T19S, R10W.

Ownership: Swainbank?

Occurrence Type Disseminated sulfides in intrusive

Examining Geologist TKH, GJG

Date(s) of Examination August 22, 1983

General Geology: Diorite porphyry.

Mineralization: Disseminated pyrite up to 7 percent in argillized and limonite stained intrusive. Altered zone is exposed for about 125 feet along the creek.

Structure: Altered zone is cut by scattered small shears.

Development and Production: None.

Remarks: Hawley (1977) mentions a brecciated sedimentary rock with sulfides in the matrix from this area that was not seen.

Analyses: See attached table.

References: Hawley and Clark, 1974.
Hawley, 1977.

Nimrod

Salisbury and Dietz, Inc. study results:

| Sample | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Au ppm | Sb ppm | Remarks |
|---|---|---|---|---|---|---|---|
| C013764 | -- | -- | -- | 0.6 | -- | -- | Chips of mineralized material from outcrop. |
| C014154 | -- | -- | -- | 1.0 | .04 | -- | Chips of mineralized material from outcrop. |
| C014155 | -- | -- | -- | 1.5 | .07 | -- | Chips of mineralized material from outcrop. |
| Hawley, 1977 | 460 | 25 | 160 | 110 | <02 | -- | Breccia. |
| Hawley, 1977 | 10 | 100 | <200 | tr | .02 | -- | |
| Hawley, 1977 | 100 | 150 | 700 | tr | -- | -- | |
| Hawley, 1977 | 10 | 50 | 500 | .5 | -- | -- | |
| Hawley, 1977 | 500 | 50 | 1000 | .7 | .6 | 150 | |

# OCCURRENCE REPORT FORM

NAME Nimbus

Study Area Dunkle

Occurrence No.

Location: On eastern tributary to Camp Creek, NW ¼ Section 9, T19S, R10W.

Occurrence Type Gold-bearing quartz sulfide vein

Ownership: Swainbank?

Examining Geologist TKH, GJG

Date(s) of Examination August 22, 1983

General Geology: Andesite porphyry and hornfelsed argillite.

Mineralization: Arsenopyrite, pyrite and sphalerite in quartz gangue. Vein is six inches to two feet wide.

Structure: The andesite appears to be of intrusive origin. The sulfides occur at the contact.

Development and Production: Explored by shallow trenches. No production.

Remarks: About ten feet of strike length is exposed. It may be open to east as it appears to trend to south of present trenches.

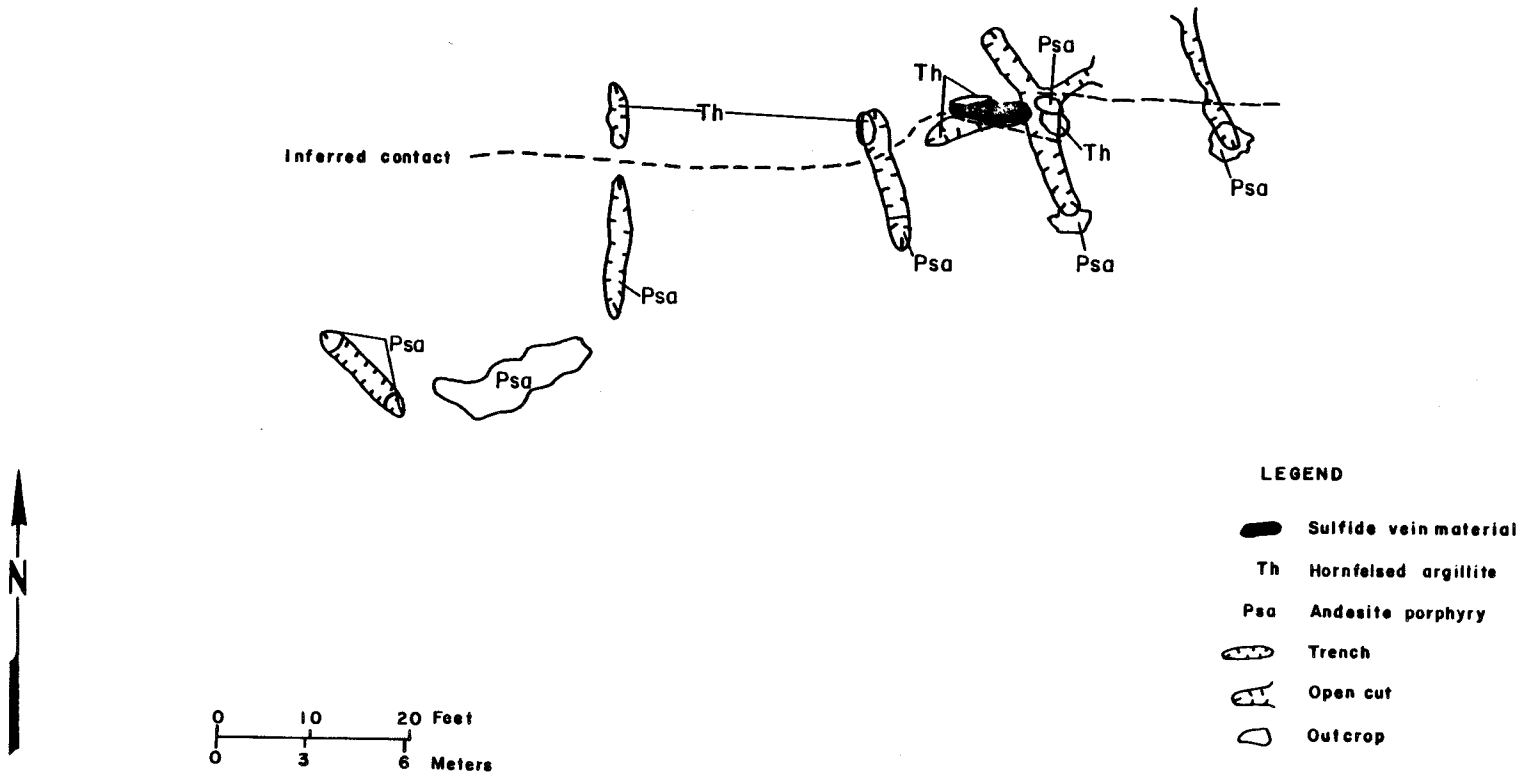
Analyses: See attached table.

References: Hawley, 1977.

Nimbus

Salisbury and Dietz, Inc. study results:

| Sample | Pb ppm | Zn ppm | Ag ppm | Au oz/tn | As ppm | Remarks |
|---|---|---|---|---|---|---|
| C014157 | -- | -- | -- | .47 | -- | Grab sample from vein in outcrop. |
| C014158 | -- | -- | -- | .42 | -- | Grab sample from vein in outcrop. |
| C014159 | -- | -- | -- | .92 | -- | Grab sample from vein in outcrop. |
| Hawley, 1977 | 20 | 45 | 1.2 | 9.30ppm | 22% | Chip sample. |
| Hawley, 1977 | -- | -- | 0.6 | <.02ppm | 1200 | Chip sample |
| Hawley, 1977 | -- | -- | 1.0 | 1.40ppm | 2.2% | Chip sample. |
| Hawley, 1977 | -- | -- | 6.0 | 2.00ppm | 1.9% | Chip sample. |
| Hawley, 1977 | -- | -- | 22.0 | .50ppm | 3.0% | Chip sample. |
| Hawley, 1977 | -- | -- | <.2 | .11ppm | 550 | Grab sample. |
| Hawley, 1977 | -- | -- | 0.8 | <.02ppm | 180 | Grab sample |
| Hawley, 1977 | -- | -- | <.2 | <.02ppm | 60 | Trench not into bedrock. Grab sample. |




Occurrence No. 2 – Nimbus Prospect – Dunkle Mine Study Area

# OCCURRENCE REPORT FORM

NAME Dunkle Coal Mine

Study Area Dunkle

Occurrence No.

Location: Near confluence of Camp and Costello Creeks, NW ½ Section 17, T19S, R10W.

Ownership: No current leases.

Occurrence Type Coal

Examining Geologist TKH, GJG

Date(s) of Examination August 22, 1983

General Geology: Lenses and discontinuous beds of rock in poorly consolidated conglomerates, sandstones, siltstones, and shales of Tertiary age.

Mineralization: Development work and U.S. Bureau of Mines trenching and drilling (Rutledge, 1948) revealed three beds considered mineable at the time: The Dunkle, Upper Billie, and Lower Billie beds. The coal is subbituminous and reportedly makes good steam coal.

Structure: The coal-bearing sediments lie in a small fault-bounded basin. They are gently folded but dips in the U.S.B.M. drill core were all less than 20°. The coal beds are broken by high angle reverse faults with displacement of up to ten feet.

Development and Production: The coal beds were developed by about 1500 feet of underground workings (see attached map). In 1941 and 1942 about 5000 tons of coal were mined from the Dunkle bed. Operations were suspended in March of 1943. During 1952-1954 about tons were produced from a strip-mining operation.

Remarks: Attached tables and figures show reserves in the mine area. See further discussion in main text.

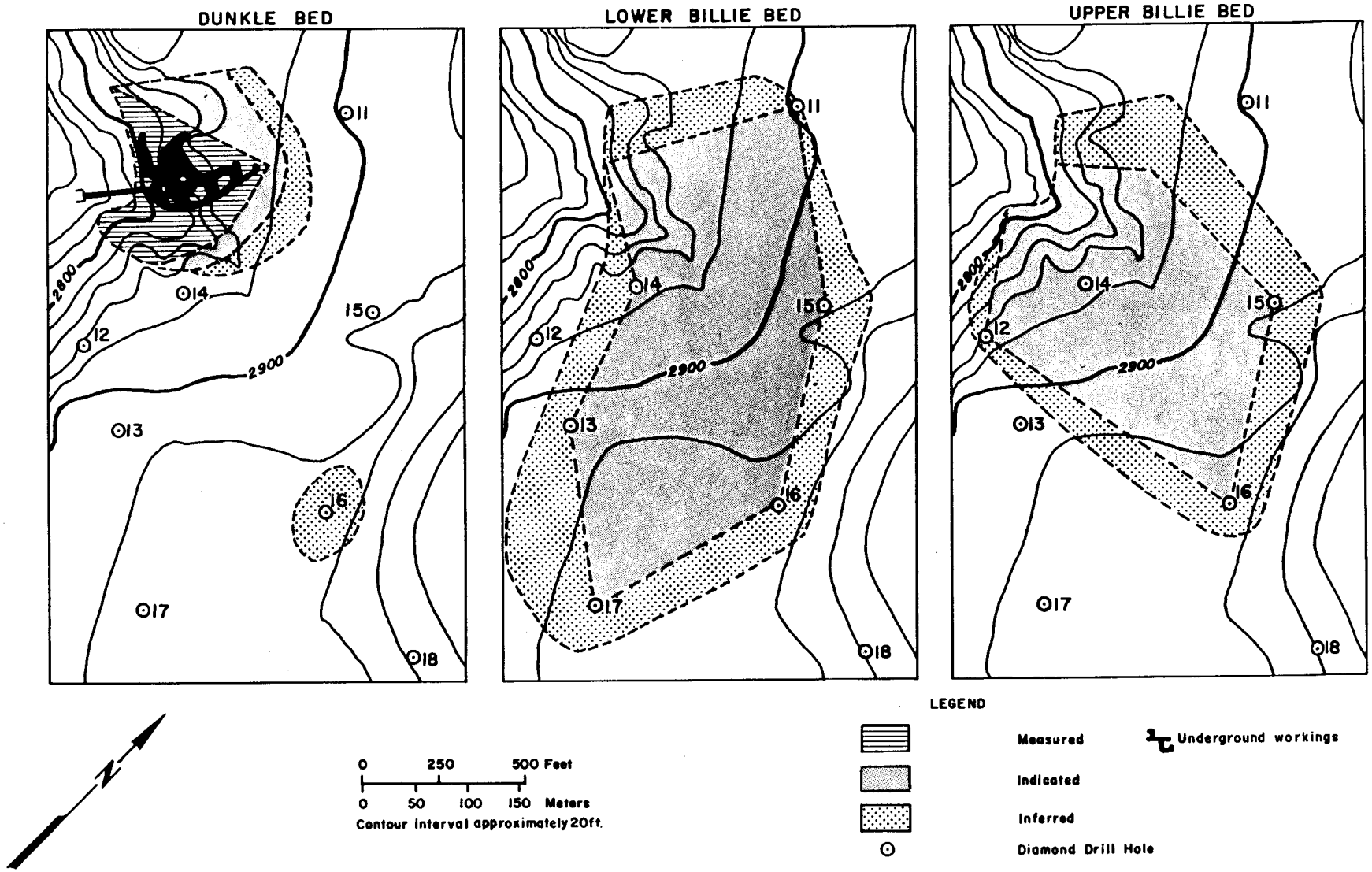
Analyses: See attached tables.

References: Rutledge, 1948.

CALCULATION OF COAL RESERVES
(Rutledge, 1948)

| Bed | Class | Area, square feet | Thickness, feet | Volume, cubic feet | Short tons1/ | Mineable tonnage2/ |
|---|---|---|---|---|---|---|
| Dunkle | Measured | 138,000 | 6.1 | 841,800 | 3/33,670 | 8,400 |
| | Indicated | 93,625 | 6.1 | 571,100 | 22,840 | 11,400 |
| | Inferred | 56,525 | 6.1 | 344,800 | 13,790 | 6,900 |
| | | | | | | 26,700 |
| Lower Billie | Indicated | 776,000 | 3.7 | 2,871,200 | 114,850 | 57,400 |
| | Inferred | 471,000 | 3.7 | 1,742,700 | 69,710 | 34,900 |
| | | | | | | 92,300 |
| Upper Billie | Indicated | 549,000 | 4.3 | 2,360,700 | 94,430 | 47,200 |
| | Inferred | 308,000 | 4.3 | 1,324,400 | 52,980 | 26,500 |
| | | | | | | 73,700 |
| | | | | | | 192,700 |
| | Total: | | | | | |
| | Measured | | | | | 8,400 |
| | Indicated | | | | | 116,000 |
| | Inferred | | | | | 68,300 |
| | | | | | | 192,700 |

1/ 25 cubic feet of coal equals 1 short ton.
2/ A mining extraction factor of 50 percent has been assumed.
3/ 50 percent of this amount has either been extracted or left as pillars.




Occurrence No. 4 – Coal Reserves, W.E. Dunkle Mine – Dunkle Mine Study Area (from Rutledge, 1948)

# OCCURRENCE REPORT FORM

NAME Lucrata (Lucrative Prospect)

Study Area Dunkle

Occurrence No.

Location: West side Costello Creek, 0.3 miles southwest of the Dunkle Mine (3366080N, 578100E)

Ownership:

Occurrence Type Quartz sulfide veins

Examining Geologist JMK, MS

Date(s) of Examination August 22, 1983

General Geology: Hornfels zone surrounded by dacites?

Mineralization: Sheared hornfels zones approximately 40 feet wide containing irregular quartz-rich lenses and veinlets. Largest is 3 x 10 feet. Mineralogy: quartz, arsenopyrite, pyrite, pyrrhotite, scorodite. Sulfides mostly stringer but locally massive.

Structure: The shear zone trends slightly east of north and individual shears indicate a steep dip to the west. It appears to be part of the major Chulitna Fault zone running through the area (Hawley, 1974, p. B11).

Development and Production: Development: a caved 15 foot adit (Ross, p. 224) and two open cuts. No production.

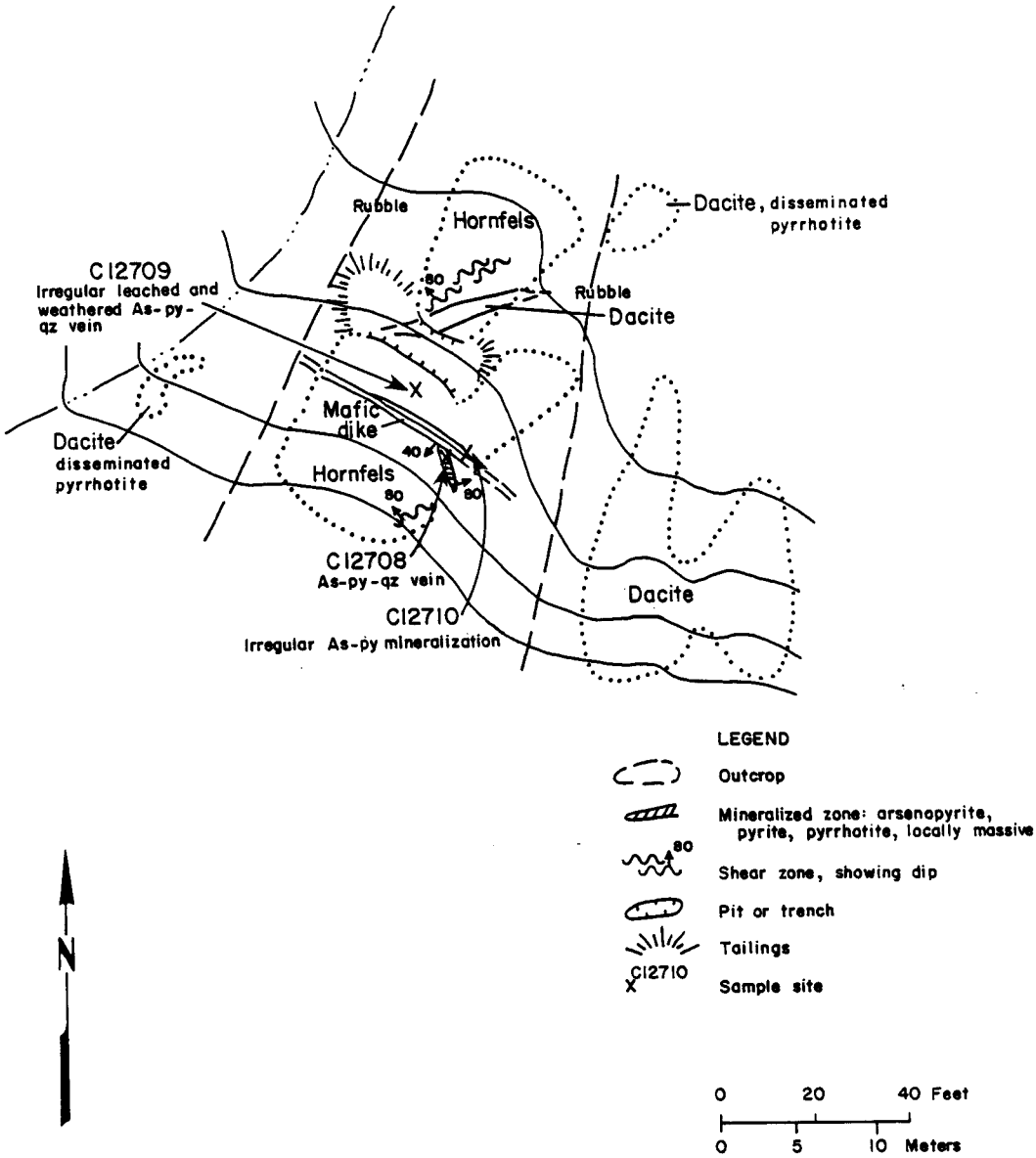
Remarks: No evidence of adit was found.

Analyses: See Hawley, p. B32. Salisbury and Dietz, Inc. study results:

| Sample | Ag oz/tn | Au oz/tn | Remarks |
|---|---|---|---|
| C012708 | 2.82 | 0.86 | |
| C012709 | 2.80 | 0.17 | |
| C012710 | 2.24 | 0.17 | |
| Ross | 3.80 | 1.26 | Page 225 |

References:

Capps, 1919, p. 224.
Ross, 1933, p. 224-225.
Hawley, 1974, p. B30-31.




Occurrence No. 5 - Lurata Prospect - Dunkle Mine Study Area

# OCCURRENCE REPORT FORM

NAME Eagle Prospect (Northern Lights)

Study Area Dunkle

Occurrence No.

Location: East side Costello Creek 0.3 miles southwest of the Dunkle Mine (3366050N, 578250E)

Ownership:

Occurrence Type Quartz sulfide vein

Examining Geologist JMK, MS

Date(s) of Examination August 20-23, 1983

General Geology: Wallrocks consist of dacites overlain by hornfels.

Mineralization: Branching shear zones up to 10 feet wide contain intermittent quartz veins averaging one foot wide and irregularly exposed for 200 feet along strike. Veins contain stringer, disseminated and locally massive arsenopyrite and pyrite. Chalcopyrite, sphalerite, galena, malachite, azurite, scorodite, and galena occur to a lesser extent.

Structure: In the vicinity of the Eagle Prospect the majority of the veins trend north to slightly northeast. The extension beyond swings slightly to the west of north. The western limit of shearing is the contact between dacite and hornfels and that contact appears to structurally control the shearing. Shearing occurs along this contact north of the main prospect but only minor quartz veining occurs. The mineralization is reported to occur in subparallel faults in the wall of the Lucrata segment of the Chulitna Fault (Hawley, 1974, p. B11).

Development and Production: Development: A caved adit reported to follow a vein for 62 feet (Ross, p. 329) and an open cut. No production.

Remarks: Reserves: 12,000 tons inferred reserves (Ross, p. 329). Ross (p. 329) indicates an extent of mineralization along strike of over 300 feet north of the prospect and Hawley (p. B28) infers veining for over 1600 feet to the north.

Analyses: See attached table.

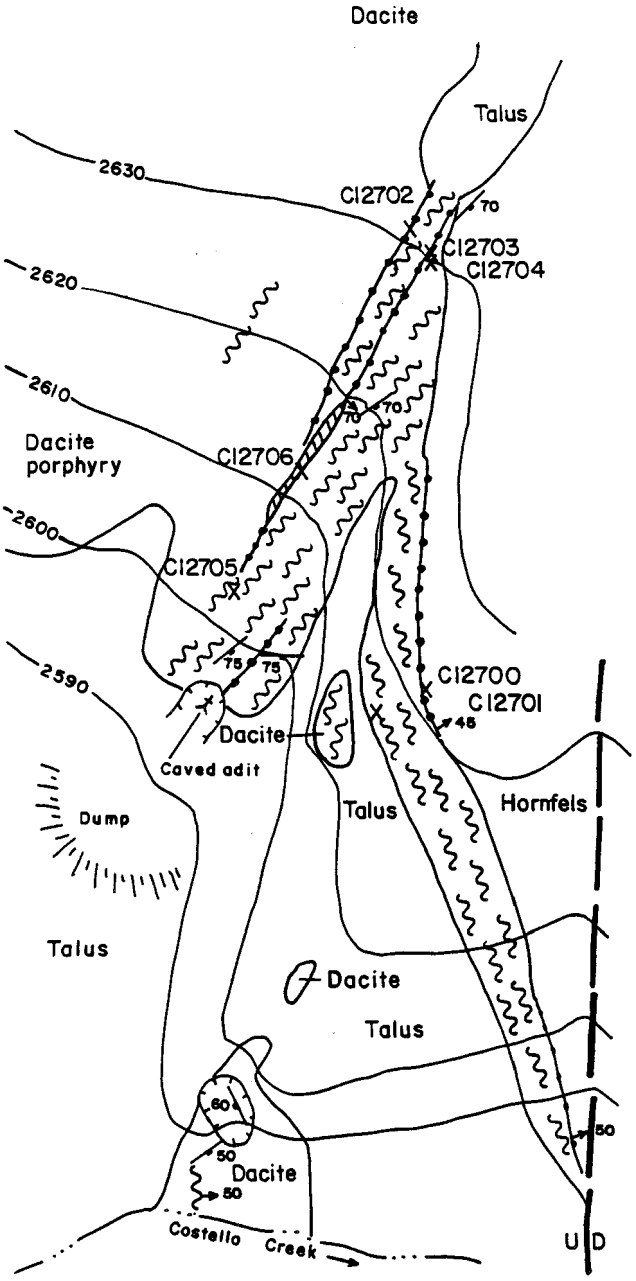
References:

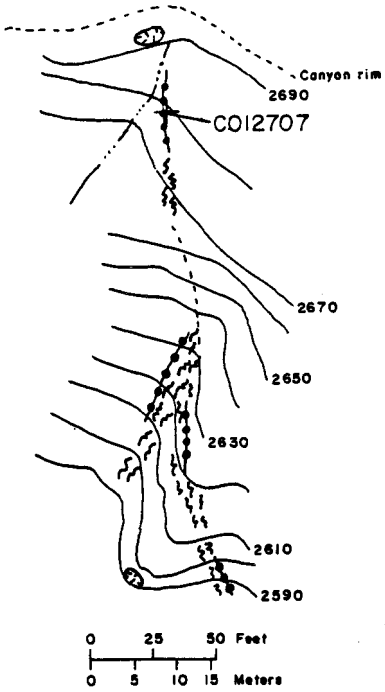
Capps, 1919, p. 224.
Ross, 1933, p. 329.
Hawley, 1974, p. B31.

Eagle Prospect (Northern Lights)

Salisbury and Dietz, Inc. study results:

| Sample | Ag oz/tn | Au oz/tn | Remarks |
|---|---|---|---|
| C012701 | 0.10 | 0.034 | From a shear zone 15 feet wide. |
| C012702 | 8.67 | 0.610 | |
| C012703 | 4.14 | 0.240 | |
| C012704 | 5.88 | 2.270 | From a vein 2 feet wide. |
| C012705 | 4.03 | 0.210 | |
| C012706 | 72.20 | 0.250 | |




LEGEND

20 / 70 — Quartz vein showing dip, locally massive arsenopyrite/pyrite, minor trace of galena.

Shear zone showing dip

20 — Joint attitude

Open cut

CO12706 — Rock chip sample

Occurrence No. 6 - Eagle Prospect - Dunkle Mine Study Area

# OCCURRENCE REPORT FORM

NAME Liberty Prospect

Study Area Dunkle

Occurrence No.

Location: 0.7 miles southwest of the Dunkle Mine (3363250N, 576200E)

Occurrence Type Sheared hornfels

Examining Geologist JMK

Ownership:

Date(s) of Examination August 23, 1983

General Geology: Hornfels.

Mineralization: Sheared hornfels containing locally massive and disseminated pyrrhotite, pyrite, and arsenopyrite. Sulfide boxworks containing scorodite present and trace sphalerite(?). Only disseminated sulfides found in outcrop. Massive on dump.

Structure: Mineralization appears to be trending along a N35°E trend. Bedding/fracture(?) attitudes indicate a steep dip to the east.

Development and Production: A series of bulldozer trenches. No production.

Remarks: Poor exposure of mineralization. Ross (p. 328) mentions a pit exposing a N50°W trending shear zone.

Analyses: Salisbury and Dietz, Inc. study results:

| Sample | Ag oz/tn | Au oz/tn | Remarks |
|---|---|---|---|
| C012713 | 4.56 | 0.046 | |
| Ross | 1.20 | 0.060 | 2.5' wide sample across shear zone. |
| Ross | 8.60 | 0.140 | 2.5' wide sample across shear zone. |

References:


Hawley, p. B32.
Ross, 1933, p. 328.
Capps, 1919, p. 224.
Hawley, 1974.

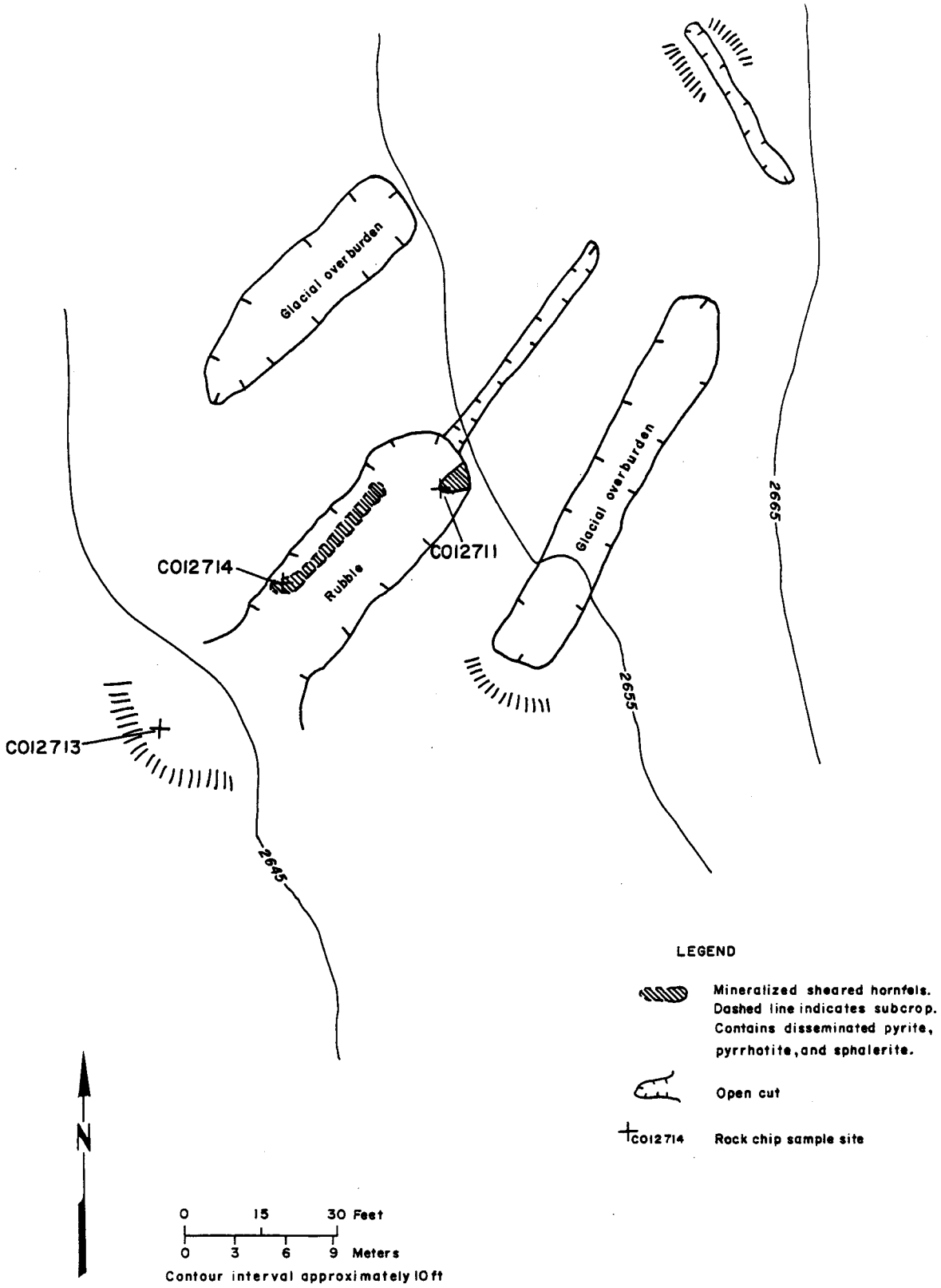
Liberty Prospect

Salisbury & Dietz, Inc. study results:

| Sample | Ag oz/tn | Ag ppm | Co | Cu | Mo | Ni | Remarks |
|---|---|---|---|---|---|---|---|
| C012711 | -.9 | -.9 | .002% | .053% | .002% | .004% | |
| C012713 | 4.56 | -.8 | .018% | .043% | .002% | -.9 | |
| C012714 | -.9 | -.9 | -.9 | .031% | .001% | -.9 | |

| | Ag oz/tn | Au oz/tn | |
|---|---|---|---|
| Ross, 1933 | 1.20 | 0.060 | 2.5' wide sample across shear zone |
| Ross, 1933 | 8.60 | 0.140 | 2.5' wide sample across shear zone |

-.9 Represents lower than detection limit
-.8 Represents element not analyzed




Occurrence No. 7 – Liberty Prospect – Dunkle Mine Study Area

# OCCURRENCE REPORT FORM

NAME Silver King Prospect

Study Area Dunkle

Occurrence No.

Occurrence Type Sulfide-bearing skarn and vein system.

Examining Geologist TKH

Date(s) of Examination August, 21, 1983

**Location:** East of Colorado Creek, NW ¼ Section 19, T19S, R10W (3383300N, 577100E)

**Ownership:** 3/4th's of the six claim Golden Flower group, owned by Eric Zinc of Anchorage, Alaska, are in the study area.

**General Geology:** Triassic argillite and limestone that have been intruded by diorite porphyry dikes and bosses and metasomatized into aphanitic very siliceous, light gray-green, banded hornfels and coarse- to medium-grained clinozoisite-idocrase-calcite skarn.

**Mineralization:** Three types: (1) pyrrhotite and chalcopyrite in veins and skarn; (2) arsenopyrite veins and pods; and (3) a stibnite-quartz vein.

**Structure:** Mineralization is disseminated and in irregular pods, also in northeast-trending steeply dipping veins.

**Development and Production:** There is no recorded production. The prospect is developed by several shallow pits and trenches.

**Remarks:**

**Analyses:** See attached table.

**References:** Hawley and Clark, 1974.

Silver King Prospect

Salisbury and Dietz, Inc. study results:

| Sample | Cu % | Ag oz/tn | Au oz/tn | Remarks |
|---|---|---|---|---|
| C013761 | -- | .85 | .87 | 4"-8" arsenopyrite quartz vein. |
| C013762 | -- | ND | ND | Disseminated pyrrhotite and chalcopyrite. |
| C013763 | -- | .12 | .29 | Stibnite quartz vein material from dump of pit. |
| C012744 | .3 | .15 | .01 | Chips across 3 foot width of pyrite-chalcopyrite-arsenopyrite bearing vein in green, siliceous matrix. |

Analyses of Rock Samples From the Silver King Prospect (Hawley & Clark, 1973)

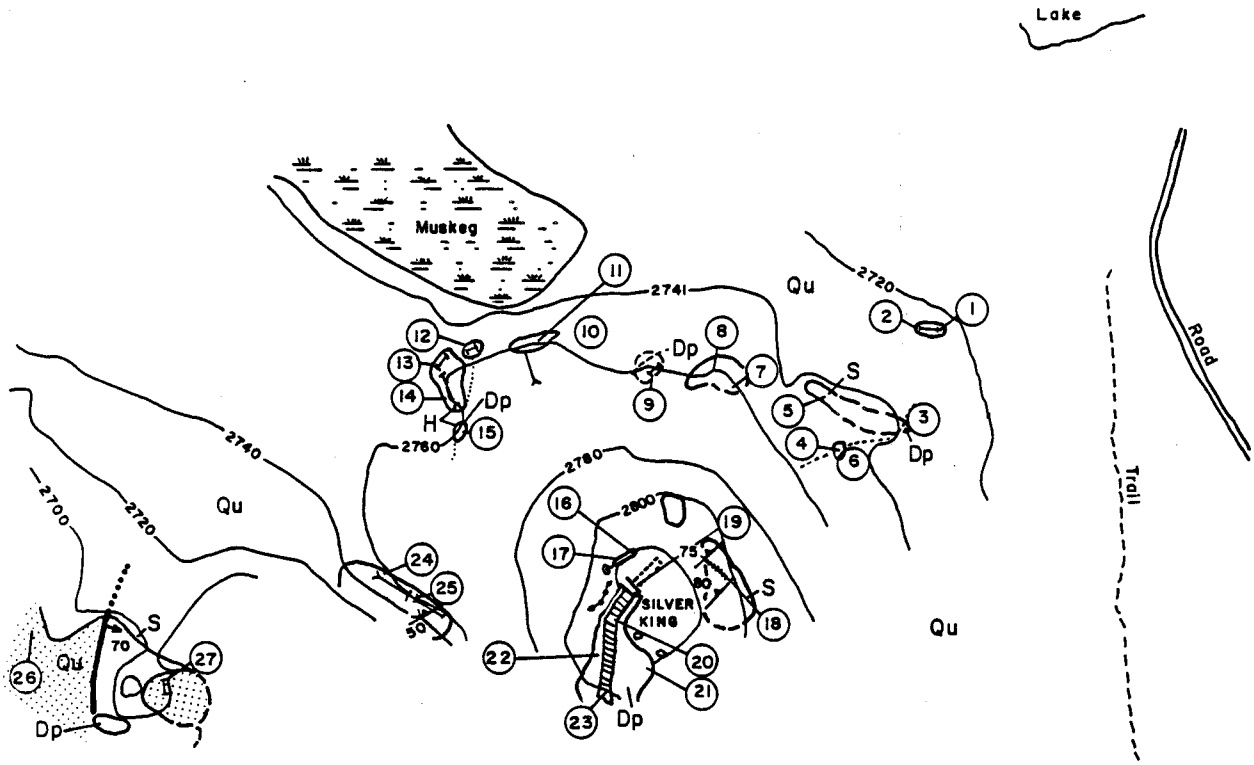
Analyses, unless noted, are semiquantitative spectrographic and are reported in the series 0.1, 0.15, 0.2, 0.3, 0.5, 0.7, 1.0, 1.5, and so on. N = not detected; L = detected but below limit of determination; > = greater than. H = interference with spectral line. Results are given in parts per million except for Fe, which is given in percent.

| Sample No. | Ag | As | Au[1] | Bi | Co | Cu | Mo | Ni | Pb | Sb | Sn | Zn | Fe | Host Rock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | N | 0.08 | L | 15 | 15 | L | 70 | L | N | N | 300 | 10 | Contact Metamorphosed argillite. |
| 2 | N | N | N | L | 15 | 200 | N | 50 | L | N | N | L | 10 | Tactite. |
| 3 | N | N | 1.3 | N | 15 | 150 | L | 50 | L | N | N | 500 | 20 | Do. |
| 4 | L | L | .3 | 10 | 15 | 150 | L | 50 | 15 | N | N | N | 5 | Contact Metamorphosed argillite. |
| 5 | 0.7 | N | .06 | N | 20 | 2,000 | N | 70 | 15 | N | L | N | 15 | Diorite dike. |
| 6 | N | L | N | N | 15 | 300 | N | 70 | L | N | N | N | 10 | Argillite. |
| 7 | N | L | N | 10 | 10 | L | L | 70 | L | N | 30 | L | 20 | Tactite. |
| 8 | N | N | .3 | 10 | 10 | 10 | N | 50 | L | L | 30 | L | 15 | Limestone. |
| 9 | 1.5 | 10,000 | .04 | N | 20 | 1,500 | N | 30 | L | N | L | L | 15 | Tactite. |
| 10 | N | N | N | 100 | 10 | 300 | N | 150 | 15 | N | 50 | N | 7 | Diorite dike. |
| 11A | 7 | >10,000 | 1.9 | 50 | 70 | 1,500 | N | 20 | 30 | L | N | N | 20 | Tactite. |
| B | L | >10,000 | .4 | L | 20 | 500 | N | 30 | 10 | N | 15 | N | 15 | Diorite dike. |
| C | L | N | .04 | 100 | 7 | 1,500 | N | 70 | L | N | N | N | 20 | Tactite. |
| D | 7 | >10,000 | 2.2 | L | 1,500 | 2,000 | 30 | 200 | 15 | 150 | N | L | >20 | Do. |
| E | N | 300 | N | L | 15 | 300 | L | 70 | 10 | N | N | L | 15 | Diorite dike. |
| F | .7 | 1,500 | N | L | 10 | 1,500 | N | 70 | 10 | N | L | N | 20 | Tactite. |
| 12 | N | N | N | L | 15 | 10 | N | 70 | 15 | N | N | L | 10 | Limestone. |
| 13 | N | N | N | N | 15 | 500 | N | 100 | N | N | 15 | L | 20 | Tactite. |
| 14 | N | N | N | N | 15 | 500 | N | 100 | N | N | 30 | L | 20 | Do. |
| 15 | N | N | N | L | 15 | 50 | N | 70 | L | N | N | L | 15 | Diorite dike. |
| 16 | N | N | 1.1 | N | 15 | 200 | N | 70 | 20 | N | N | N | 10 | Silicious argillite. |
| 17 | N | N | N | 70 | 15 | 1,000 | N | 70 | L | N | N | 200 | 20 | Tactite. |
| 18 | N | N | .2 | N | 7 | 300 | N | 100 | 20 | N | N | L | 15 | Do. |
| 19A | N | 700 | N | L | 15 | 500 | L | 100 | L | N | N | L | 20 | Diorite dike. |
| B | N | 10,000 | N | L | 20 | 1,000 | N | 100 | L | N | N | L | 720 | Tactite. |
| C | 1.5 | >10,000 | .1 | 30 | 30 | 1,800 | 5 | 50 | 15 | L | 20 | L | 10 | Diorite dike. |
| 20 | 7 | >10,000 | 1.0 | 50 | 150 | 1,500 | L | 70 | 70 | 500 | 15 | 200 | 20 | Tactite. |
| 21A | .7 | 500 | N | L | 10 | 500 | N | 30 | 15 | N | N | N | 10 | Contact metamorphosed argillite. |
| B | 8 | 500 | N | 15 | 10 | 100 | N | 30 | 10 | 100 | 15 | N | 15 | Diorite dike. |
| C | N | L | N | N | 15 | 150 | L | 50 | L | N | N | N | 5 | Do. |

| Sample No. | Ag | As | Au[1] | Bi | Co | Cu | Mo | Ni | Pb | Sb | Sn | Zn | Fe | Host Rock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21D | 15 | 1,500 | 1.8 | L | 7 | 1,000 | N | 50 | L | 2,000 | N | N | 20 | Tactite. |
| E | >5(H) | 700 | 2.0 | N | L | 1,000 | L | L | 1,500 | >10,000 | N | N | .2 | Stibnite. |
| 22A | N | 500 | N | L | 15 | 1,000 | L | 50 | 10 | 1,000 | 20 | L | 15 | Diorite dike. |
| B | 0.7 | 200 | N | 10 | 10 | 1,000 | L | 30 | 10 | 150 | 10 | N | 15 | Tactite. |
| C | .5 | 200 | .02 | 10 | 7 | 1,000 | 5 | 30 | 10 | L | 10 | N | 15 | Diorite dike. |
| 23 | 20 | >10,000 | .5 | 70 | 70 | 2,000 | N | 30 | 10 | 200 | 30 | N | >20 | Do. |
| 24 | N | N | N | N | 15 | 70 | L | 70 | N | N | 30 | 200 | >20 | Contact Metamorphosed argillite. |
| 25 | N | N | .06 | L | 15 | 200 | L | 100 | L | N | 50 | 200 | >20 | Do. |
| 26 | 70 | H | .08 | N | 150 | 10,000 | N | 500(H) | 20(H) | N | N | 500(H) | 15 | Conglomerate. |
| 27A | 50 | 10,000 | [2]282 | >1,000 | 150 | 300 | N | 5 | 200 | 200 | 70 | N | 15 | Altered diorite dike. |
| B | L | N | N | N | N | 100 | 5 | 20 | 20 | N | 20 | N | 10 | Contact Metamorphosed argillite. |
| C | L | 200 | N | N | N | 200 | 5 | 5 | 10 | N | 100 | 200 | 15 | Do. |
| D | N | N | .02 | N | 5 | 20 | N | 30 | 10 | N | N | N | 2 | |
| E | L | 200 | N | N | 10 | 50 | 5 | 50 | 10 | N | N | N | 5 | Contact metamorphosed greywacke. |
| F | 3 | >10,000 | [2]7.3 | 300 | 700 | 500 | N | 30 | 20 | 200 | N | N | 15 | Arsenopyrite vein. |
| Limits of determination... | 0.5 | 200 | 0.02 | 10 | 5 | 5 | 5 | 2 | 10 | 100 | 10 | 200 | 0.05 | |

[1]Atomic absorption.

[2]Fire assay.



0 160 320 Feet

0 50 100 Meters

Contour interval approximately 20 ft

LEGEND

| | |
|---|---|
| Qu | Undifferentiated deposits |
| Dp | Quartz diorite porphyry |
| S | Skarn |
| H | Hornfelsed argillite |
| | Pyritic shear zone |
| 75 | Strike and dip of bedding |
| | Vein |
| | Sulfidized rock |
| | Tactite |
| | Trench |
| (10) | Sample location, 1968 |
| | Fault |
| | Contact |

Occurrence No. 8 – Silver King Prospect – Dunkle Mine Study Area (after Clark, Hawley, & Hendrick, 1968)

# APPENDIX C

# CORE DRILLING

By V. V. Thornsberry

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## CORE DRILLING

DISCUSSION OF RESULTS

Twenty-three diamond drill holes totalling 4,909 ft were completed during the Kantishna Hills/Dunkle Mine study. All hole locations were surveyed using an EDM-Theodolite. The location of diamond drill holes is shown on plate 5 and figure C-1. Core was geologically logged, split, and sampled at the Kantishna field camp. Samples were analyzed by Skyline Labs, Wheat Ridge, Colorado. All core has been transferred to the Bureau of Mines, Anchorage. Table C-1 summarizes drill hole survey information.

The core drilling program commenced June 14, and was completed on September 10, 1983. Initially one Salisbury & Dietz, Inc. HG-1500 "hydraulic converted Winkie" diamond drill was employed, operating 2 shifts per day. A second drill was mobilized to the project on August 13, and also operated 2 shifts per day. The majority of the holes were collared to retrieve BW44 (NQ equivalent) size core and were usually reduced to IAX (BQ equivalent). Extremely difficult drilling conditions were encountered due to faulting, folding, incompetent formations, and numerous fracture and clay zones. These conditions resulted in slow penetration rates averaging 22.8 ft/shift. Blocking of core in the core barrel and caving hole conditions resulted in short core-runs in several holes. K-7 for example required 135 runs to complete 282 ft of hole. Average core recovery was 73% and is considered very good for the material being cored.

The drilling program was confined to the Quigley Ridge/Jupiter-Mars areas because core drilling was restricted to patented claims. Objectives of the core drilling program were as follows:

1) Test favorable mineralized structures on the patented lode claims by correlating geology, geochemistry, and geophysical results with drilling.

TABLE C-1 - DRILL HOLE SURVEY DATA

SALISBURY & DIETZ,INC.
KANTISHNA DISTRICT

| HOLE # | COLLAR COORD. NORTH | EAST | COLLAR ELEV. | HOLE BEARING | HOLE AZIMUTH | HOLE ANGLE | TOTAL LENGTH | HORIZ. LENGTH | E.O.H. COORD. NORTH | EAST | ELEV. E.O.H |
|---|---|---|---|---|---|---|---|---|---|---|---|
| K-1 | 3489339.7 | 345820.76 | 2541.9 | N21W | 339 | -60 | 158.8 | 79.40 | 3489413.83 | 345792.31 | 2404.38 |
| K-2 | 3488420.65 | 345546.68 | 2872.8 | N30W | 330 | -55 | 280.3 | 160.77 | 3488559.88 | 345466.29 | 2643.19 |
| K-3 | 3488556.97 | 345435.05 | 2798.4 | N30W | 330 | -50 | 166.5 | 107.02 | 3488649.66 | 345381.54 | 2670.85 |
| K-4 | 3488892.88 | 345639.34 | 2652.6 | N25W | 335 | -60 | 300.7 | 150.35 | 3489029.14 | 345575.80 | 2392.19 |
| K-5 | 3487263.87 | 344073.46 | 2786.8 | S30E | 150 | -50 | 195.7 | 125.79 | 3487154.93 | 344136.36 | 2636.89 |
| K-6 | 3487331.23 | 344042.58 | 2736.4 | S30E | 150 | -50 | 186 | 119.56 | 3487227.69 | 344102.36 | 2593.92 |
| K-7 | 3486978.96 | 344227.96 | 2909 | N30W | 330 | -55 | 281.9 | 161.69 | 3487118.99 | 344147.11 | 2678.08 |
| K-8 | 3488364.41 | 348963.49 | 2464.6 | N45W | 315 | -50 | 182.7 | 117.44 | 3488447.45 | 348880.45 | 2324.64 |
| K-9 | 3488739.69 | 349331.71 | 2567.6 | N45W | 315 | -50 | 244 | 156.84 | 3488850.59 | 349220.81 | 2380.69 |
| K-10 | 3488739.69 | 349331.71 | 2567.6 | N45W | 315 | -75 | 103 | 26.66 | 3488758.54 | 349312.86 | 2468.11 |
| K-11A | 3489167.62 | 348035.49 | 2900.7 | N5W | 355 | -60 | 33.6 | 16.80 | 3489184.36 | 348034.03 | 2871.60 |
| K-11 | 3489167.62 | 348035.49 | 2900.7 | S5E | 175 | -60 | 146.8 | 73.40 | 3489094.50 | 348041.89 | 2773.57 |
| K-12 | 3491390.19 | 355923.59 | 3299.2 | N10W | 350 | -50 | 304.8 | 195.92 | 3491583.14 | 355889.57 | 3065.71 |
| K-13 | 3485886.91 | 345560.02 | 2212.5 | N55W | 305 | -50 | 183 | 117.63 | 3485954.38 | 345463.66 | 2072.31 |
| K-14 | 3491259.12 | 355633.98 | 3204.3 | N25W | 335 | -50 | 399.1 | 256.54 | 3491491.62 | 355525.56 | 2898.57 |
| K-15 | 3487126.01 | 342389.34 | 2473.4 | N45W | 315 | -50 | 201.7 | 129.65 | 3487217.69 | 342297.66 | 2318.89 |
| K-16 | 3491086.21 | 355097.45 | 2990.8 | N30W | 330 | -40 | 237.3 | 181.78 | 3491243.64 | 355006.56 | 2838.27 |
| K-17 | 3485802.11 | 342101.13 | 2158.9 | N35W | 325 | -70 | 262.5 | 89.78 | 3485875.65 | 342049.63 | 1912.23 |
| K-18 | 3489174.02 | 353010.3 | 2432.9 | S30E | 150 | -70 | 188 | 64.30 | 3489118.33 | 353042.45 | 2256.24 |
| K-19 | 3487247.33 | 341198.97 | 1954.3 | N35W | 325 | -65 | 203.5 | 86.00 | 3487317.78 | 341149.64 | 1769.87 |
| K-20 | 3487183.27 | 340924.36 | 1837.5 | N35W | 325 | -50 | 186.6 | 119.94 | 3487281.52 | 340855.56 | 1694.56 |
| K-21 | 3487521.19 | 341481.98 | 2063.9 | N35W | 325 | -50 | 175 | 112.49 | 3487613.33 | 341417.46 | 1929.84 |
| K-22 | 3489398.79 | 345992.37 | 2555.4 | N20W | 340 | -60 | 61 | 30.50 | 3489427.45 | 345981.94 | 2502.57 |
| K-22B | 3489398.79 | 345992.37 | 2555.4 | N20W | 340 | -70 | 226.3 | 77.40 | 3489471.52 | 345965.90 | 2342.75 |

TOTAL FOOTAGE 4908.8

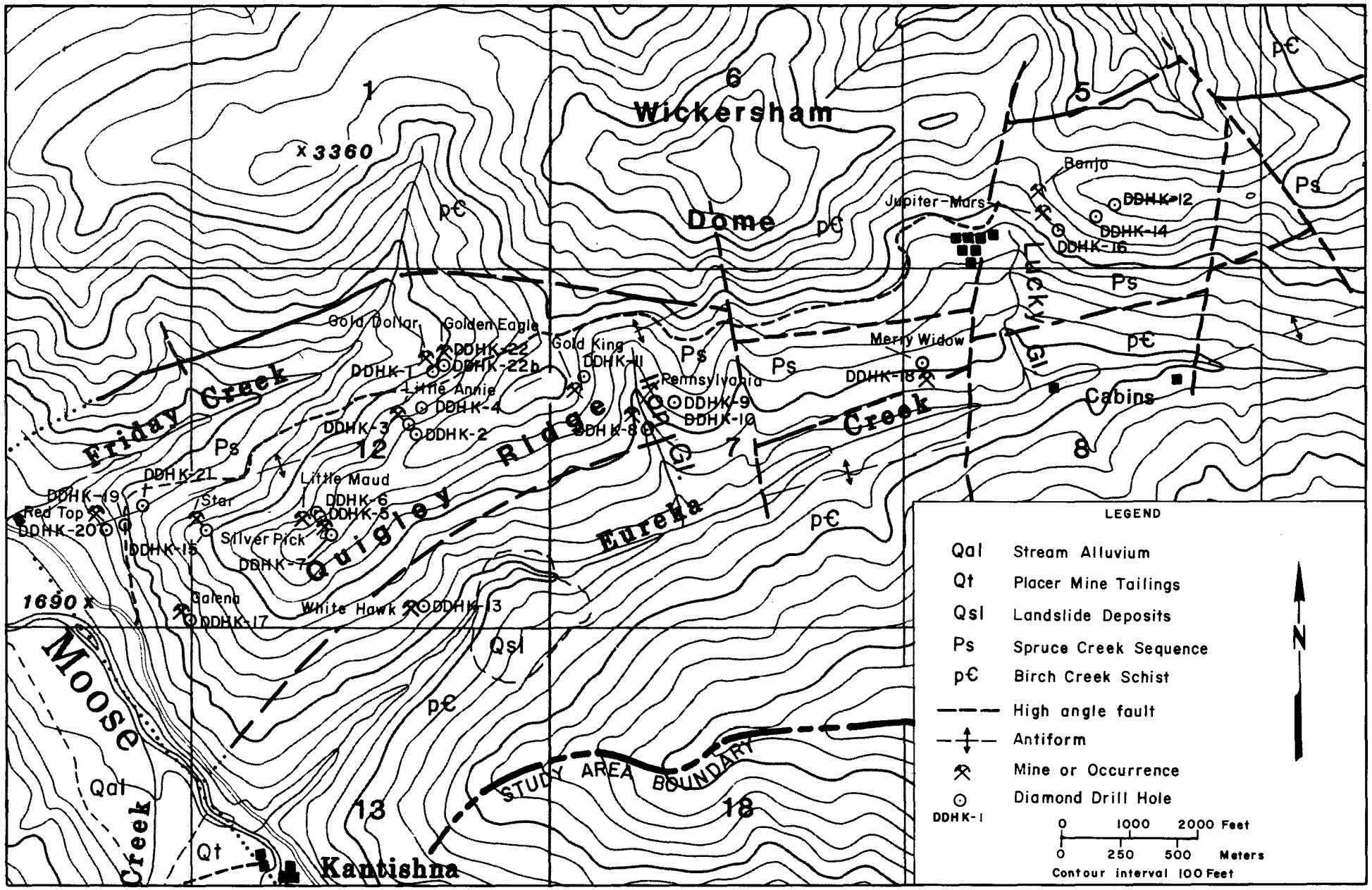


Figure C-1 Drill Hole Index and Geology Map — Kantishna Hills Study Area

2) Verify the existence and continuation of mineralized structures downdip and along strike on patented claims.

3) Project drilling results from patented claims into areas of similar geologic environments where drilling was not allowed.

4) Provide analytical data where possible on subsurface lode mineralization.

No attempt was made to establish reserve estimates or develop ore reserves of individual mines and prospects drilled during the study. Emphasis was placed on establishing continuity of mineralization and structures rather than ore grade and reserves.

The type of structures tested were precious-metal sulfide bearing veins. These structures contain mineralized horizons and ore shoots localized as discrete bodies both laterally and vertically along structure. Rock type controlled to some extent the deposition of gangue and ore minerals. As a general rule, structures within graphitic schist units contained fault clay with minor quartz and sulfides. Structures hosted by the meta-felsite unit contained vein quartz with precious and base metal sulfides. Table C-2 summarizes the mineralized intercepts cored during the program. Individual drill logs are presented in this Appendix following table C-2. Analytical results are shown on the drill logs and in table D-17, Appendix D. Drilling results are discussed in the PRECIOUS METAL VEIN section of the text under the respective occurrence.

# TABLE C-2 - DRILL HOLE SUMMARY
## KANTISHNA HILLS STUDY AREA

| Hole No. | Area | Intercept | | | oz/ton | | Assays | | % or ppm | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Projected | Actual | Length | Au | Ag | Cu | Pb | Zn | As | Sb | |
| K-1 | Gold Dollar | 100' | 100.5-106.7 | 6.2' | ND | ND | 0.002% | 0.002% | 0.905% | 0.110% | 36 | Mylonitic crush breccia, structure present, weakly mineralized. Psf with qz and cal veinlets, breccia and clay. |
| K-2 | Little Annie | 210' | Not reached, 224.2-224.9 | 0.7' | 0.047 | 1.79 | 0.006% | 0.785% | 0.037% | 1.95% | 65 | Hole problems, abandoned at 280.3' due to caving conditions. Badly fractured interbedded Psf, Psfg, and Psg with several small clay and crush zones containing qz and minor sulfides. Anomalous Zn in country rock. |
| K-3 | Little Annie | 75' | 103.0-141.0 | 38.0' | 0.023 | 0.44 | 0.01 | 0.04 | 0.08% | | | Crushed clay and qz heavily lim staining with py and ap within an extremely fractured and broken Psf/Psfq host rock, poor recovery core runs of less than one foot. |
| | | | 112.1-122.3 | 10.2' | 0.69 | 1.89 | 0.03 | 0.02 | 0.14% | | | |
| K-4 | Little Annie | 100-200' | None | - | | * | | | * | | | Hole drilled on geophysical target several small clay and crush zones encountered. Interbedded Psf and Psg. Anomaly explained by graphitic schist and pyrite. Slightly anomalous Ag and An entire hole. |
| K-5 | Little Maud - Silver Pick | 50' | 33.0-64.5 | 31.5' | 0.022 | 1.16 | 0.019 | 0.062 | 0.174% | 2.981% | 54ppm | Qz/calcite breccia vein with strong lim, ap and py 33-64.5. Second strucutre with less qz in highly fractured Psf. |
| | | | 46.0-49.8 | 3.8' | 0.082 | 8.67 | 0.039 | 0.288 | 0.340% | 1.05% | 240ppm | |
| | | | 79.5-88.5 | 9.0' | 0.025 | 0.046 | 29ppm | 157ppm | 827ppm | 0.267% | 14ppm | |
| K-6 | Little Maud - Silver Pick | 150' | 149.5-168.2 | 18.7' | - | - | - | - | - | - | - | Structure indicated by Psfq w/unit cataclastic deformation bounded by qz/lim cemented breccia. |
| | | | 68-76 | 8.0' | - | - | - | - | - | - | - | Weak to tr mineralization. Barren qz vein at 68-76' Structure is probably cut off by the 1st vein intersected in K-5. |

Table C-2 - Drill Hole Summary

| Hole No. | Area | Intercept | | | oz/ton | | Assays | | % or ppm | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Projected | Actual | Length | Au | Ag | Cu | Pb | Zn | As | Sb | |
| K-7 | Silver Pick | 170' | 128-169 | 41.0' | - | - | - | - | - | - | - | Qz/cal breccia with fault clay and Psfq clasts, structure weakly mineralizled. Recovery very poor approx. 10% through structure. |
| | | | 167-169 | 2.0' | 0.028 | ND | ND | 0.004% | 0.008 | 0.435% | 10 | |
| K-8 | Iron Gulch | 140' | 132.5-154.8 | 22.3 | 0.052 | 0.066 | Tr | Tr | Tr | 0.130% | 9 | Brecciated Psfq with qz, lim and banded vuggy dolo/qz vein. |
| | | | 147-150 | 3.0' | 0.294 | 0.276 | 10 | ND | 5 | 20 | 6 | |
| K-9 | Iron Gulch | 120' | 33.5-57 | 23.5' | | | | | | | | Brecciated qz vein w/calcite cement and Psfq clasts lim and fault clay. Void 43.5-52.0, poor recovery through entire section. |
| | | | 34.5-43.5 | 10.0' | 0.12 | ND | Tr | Tr | 0.003% | 535 | 4 | |
| K-10 | Iron Gulch | 30' | 24.5-69 | 44.5' | | | | | | | | Brecciated dolo, qz, calcite vein material with Psfq clasts and clay several zones weakly mineralized with detectable Au. |
| | | | 49.3-52 | 2.7' | 0.023 | ND | ND | ND | ND | 390 | 2 | |
| | | | 59-60 | 1.0' | 0.029 | ND | ND | ND | 0.002% | 270 | 4 | |
| K-11 | East Gold King | 190' | 103-108 | 5' | ND | ND | ND | ND | 0.007% | ND | ND | Structure present as fault clay and crush, not mineralized. |
| K-12 | Jupiter-Mars | 180' | 215-267-8 | 51.9' | | | | | | | | Brecciated qz vein w/lim py gn sph within Psfq country rock. Hole anomalous in zinc. |
| | | | 224.7 | | 0.017 | 0.656 | 0.111% | 0.862% | 0.756% | 1.20% | | |
| | | | 226.5 | 1.8' | 0.063 | 7.31 | 0.665% | 4.15% | 0.965% | 1.65 | 445 | |
| K-13 | White Hawk | Float | None | | | | | | | | | No mineralized structure, host rock is Birch Creek Schist. |
| K-14 | Jupiter-Mars | 235' | 309.2-363.2 | 54' | 0.014 | ND | 441 | 144 | 215% | 1.21% | 23 | Brecciated Psfq and qz vein material w/qz cement vuggy, lim w/py, ap. Highly anomalous in zinc entire hole. |
| | | | 323-331.3 | 8.1' | 0.025 | ND | 0.079% | 0.269% | 1.05% | 1.92% | 34 | |
| K-15 | Star-Friday | 150' | None | - | - | - | - | - | - | - | - | Structure not found, minor fracture zone w/clay at30-34'. |
| | | | 30-37.8 | 7.8' | 0.019 | ND | Tr | Tr | 22 | 412 | ND | |

Table C-2 - Drill Hole Summary

| Hole No. | Area | Intercept | | | oz/ton | | Assays | | % or ppm | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Projected | Actual | Length | Au | Ag | Cu | Pb | Zn | As | Sb | |
| K-16 | Jupiter-Mars | 125' | 162-174.4 | 9.9 | 0.052 | 6.95 | 160ppm | 8.42% | 1.21% | 1.85% | 280ppm | Brecciated, lim qz vein with fragments of Psfq, visible py, ap, gn, and tet. |
| | | | 165-174.4 | 6.9 | 0.71 | 9.97 | 210ppm | 12.05% | 1.75% | 2.50% | 401ppm | |
| | | | 0-162 | 162.0 | | | | | 0.38% | | | |
| | | | 174.4-185.9 | 11.5 | | | | | 1.98% | | | |
| | | | 174.4-237.3 | 62.9 | | | | | 1.01% | | | |
| | | | 185.9-237.3 | 51.4 | | | | | 0.54% | | | |
| K-17 | Galena | 130' | 235.8-237.3 | 1.5 | 0.23 | 18.8 | 0.37% | 0.20% | 0.24% | 9.35% | 0.38% | Qz vein material black fault clay and sulfides of as, py, gn and (?)tet w/red and yellow oxides. |
| | | | 234.1-242.9 | 8.8 | 0.165 | 5.79 | 0.112% | 0.173% | 0.117% | 4.33% | 0.11 | |
| K-18 | Merry Widow | 150' | None | - | - | - | - | - | - | - | - | Very Poor recovery zone 168-188 Psf and Psg cuttings recovered only. |
| K-19 | Red Top | 150' | 148-176.4 | 28.4 | 0.137 | 3.36 | 304 | 146 | 0.48% | 2.89% | 237 | Vein qz breccia w/fragments of Psf and Psg with py, ag, tet vuggy lim and qz. |
| | | | 148-156.4 | 8.8 | 0.179 | 1.38 | 183 | 200 | 0.90% | 5.38% | 73 | |
| | | | 167.7-172 | 10.3 | 0.201 | 8.09 | 656 | 212 | 0.39% | 2.18% | 552 | |
| K-20 | Red Top | 100' | 105-111 | 6 | - | - | - | - | - | - | - | Zone of no recovery lim & qz frags and clay 1/2' below zone. Qz breccia vein. Several intercepts in hole carried anomalous Au of +0.005 oz/ton. Geophysical targets projection of vein. |
| | | | 130.6-132.7 | 2.1 | 0.009 | ND | ND | 30 | 120 | 0.150% | 2 | |
| K-21 | Red Top | 100' | None | - | - | - | - | - | - | - | - | Hole was a geophysical test for faulted extension of vein. May have missed vein by drilling in footwall. Hole contained units of conductive Psg and py. |
| K-22 | Gold Dollar | 185' | - | - | - | - | - | - | - | - | - | Hole lost at 50'. |
| K-22B | Gold Dollar | 185' | None | - | - | - | - | - | - | - | - | Drainage east of hole 22 appears to be a fault offsetting the vein. |

# DIAMOND DRILL HOLE LOGS

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

| | |
|---|---|
| Property: GOLD DOLLAR | Hole No.: K-1 |
| Location: KANTISHNA DISTRICT | Bearing at Collar: N. 21° W. |
| | Inclination at Collar: -60° |
| Coord. - Collar N: 3489340 | |
| E: 345821 | Length: 158.8' |
| Elev. - Collar: 2541.9 | Core Size: 1AX |
| Date started: 6/14/83 | |
| Completed: 6/17/83 | Logged by: F.G.K. |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | oz/ton Au | Ag | percent Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ND - BELOW DETECTION LIMITS<br>Ag & Au - FIRE OZ/TON<br>OTHER ELEMENTS - PPM & 10 % | | | | | | | | | | | | |
| 18.0 CORE RECOVERY @ 18' | 10 | | | | | | | | | | | | | | |
| LT GREY/LT. GREEN FN. GR. FELDSPATHIC QUARTZ MICA SCHIST (Sb). ~10% BIOTITE. FOLIATION AT OR NEAR VERTICAL. WEAK CARBONATE ON SOME FCTS.<br>24.0-27.4: YELLOW GOUGE & SLKS ON SOME FOLIATION FCTS. | 20 | | No. VIS. SUL.<br>20.8': 2" FN IRR FeOx VLTS W/ MINOR TRM. Py. | 18.0<br>21.0<br>24.0<br>27.4 | 3.0<br>3.0<br>3.4<br>3.6 | 0.9<br>1.6<br>1.6<br>1.4 | 30<br>53<br>47<br>39 | | | | | | | | |
| 31.0 CNT. LOST | 30 | | | 31.0 | | | | | | | | | | | |
| LT. GREY CLAY CRUSH BRECCIA | | | No VIS. SUL. | 34.6<br>36.7<br>38.5 | 3.6<br>2.1<br>1.8<br>2.5 | 0.4<br>0.1<br>0.2<br>0 | 11<br>5<br>11<br>0 | | | | | | | | |
| 41.0 CNT. BRK | 40 | | | 41.0 | | | | | | | | | | | |
| CARBONATE BRECCIA W/ FeOx STN. 70° SHR. CNT. | | | | 42.3 | 1.3 | 1.8 | 15 | C-013,801 | 41.0/44.3 | ND | ND | .007% | .03% | .009% | |
| 44.3 | | | | | | | | | | | | | | | 44.3 |
| CRUSH BRECCIA.<br>CLAY DECREASING APPROACHING 51.8' | | | No VIS. SUL | 45.7<br>47.9<br>49.4<br>50.8<br>52.8<br>52.2 | 3.4<br>2.2<br>1.5<br>1.4<br>1.0<br>0.4 | 1.8<br>0.1<br>0.4<br>1.4<br>1.0<br>0.2 | 53<br>5<br>27<br>100<br>100<br>100 | | | | | | | | |
| 51.8 GRAD. CNT. | 50 | | | | | | | | | | | | | | |
| LT. GREY, FN. GR. CRUSHED FELDSPATHIC QUARTZ MICA SCHIST (Sb) ~5% BIOTITE | | | | | | | | | | | | | | | |

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K-1; 2/3

| LITHOLOGY, ALTERATION, MISC. | MINERALIZATION |
|---|---|
| LT. GREY, FN. GR., CRUSHED FELDSPATHIC QUARTZ MICA SCHIST (Sb) 5-10% BIOTITE. FOLIATION AT 70°-80° TO THE CORE | NO VIS. SUL |
| 59.0'-61.8': WK. FeOx STN ON FCTS. | 60.8': 1/4" QTZ. w/ LIM STN & MINOR EUH. TRN Py |
| 63.0'-65.9': 1/2" QTZ VLTS BIO → CHLOR, CHLOR ON FCTS. | NO VIS. SUL. |
| 65.9 IRR CNT | |
| CRUSH BRECCIA BIO → CHLOR | |
| 80.5 GRAD. CNT | |
| Sb, AS AT 51.8'-65.9' | |
| 84.0 IRR CNT | 84.0': 2" CRUSHED QTZ. |
| 84.8 CRUSH BRECCIA GRAD. CNT | |
| Sb, AS @ 51.8'-65.9' | |
| 92.0': QTZ & CARBONATE VLTS OFFSET BY FOLIATION. QTZ & CARBONATE FLOODING ON FOLIATION, INCREASING TOWARDS 100.5 | 90.4' FeOx STN. CLAY w/ MINOR 92.0' Py ON ∥ FCTS. |
| | TR. Py ON FOLIATION ESP. WHERE BIO. → CHLOR. |
| 100.5 GRAD. CNT | 98.1': 1/4" CARBONATE/Py. VLT. 99.5-100.5': IRR QTZ/Py FLOODING, 1-2% Py |
| MYLONITIC CRUSH BRECCIA | TR (<<1%) EUH. Py., V. FN. |
| 106.7 SHR CNT | 106.7 |
| Sb AS @ 51.8-65.9. LT. GREEN, BIO → CHLOR. SLKS ON FOLIATION | NO. VIS. SUL. |
| BIO. ALT. TO CHLOR. DECREASING | 111.9: 1/4" QTZ, CARBONATE, Py. |
| | 113.0-114.0: CARBONATE, Py ON FCTS. |
| | 118.0-118.5: ~5% V. FN EUH Py & APY(?) |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 52.2 | | | | | | | | | | | |
| | 3.8 | 0.9 | 24 | | | | | | | | 2 |
| 56.0 | | | | | | | | | | | |
| 56.7 | 0.7 | 0.6 | 86 | | | | | | | | |
| | 1.8 | 1.1 | 61 | | | | | | | | |
| 58.5 | | | | | | | | | | | 58.7 |
| 58.7 | | | | | | | | | | | |
| | 1.4 | 1.4 | 100 | | | | | | | | |
| 60.1 | | | | | | | | | | | |
| 61.8 | 1.7 | 1.7 | 100 | | | | | | | | |
| | 3.6 | 3.6 | 100 | | | | | | | | 3 |
| 65.4 | | | | | | | | | | | |
| | 2.0 | 2.0 | 100 | C-013,802 | 63.5/65.9 | N.D. | N.D. | ND | .008% | .009% | 66.2 |
| 67.4 | | | | | | | | | | | |
| | 1.5 | 1.3 | 87 | | | | | | | | |
| 68.9 | | | | | | | | | | | |
| | 1.7 | 1.4 | 82 | | | | | | | | |
| 70.6 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | |
| 71.9 | | | | | | | | | | | |
| | 1.1 | 0.7 | 64 | | | | | | | | |
| 73.0 | | | | | | | | | | | |
| | 1.4 | 0.8 | 57 | | | | | | | | 4 |
| 74.4 | | | | | | | | | | | |
| | | | | | | | | | | | 75.9 |
| | 3.1 | 3.1 | 100 | | | | | | | | |
| 77.5 | | | | | | | | | | | |
| | 1.1 | 1.1 | 100 | | | | | | | | |
| 78.6 | | | | | | | | | | | |
| | 2.8 | 2.6 | 93 | | | | | | | | 5 |
| 81.4 | | | | | | | | | | | |
| | 1.1 | 1.1 | 100 | | | | | | | | |
| 82.5 | | | | | | | | | | | 83.6 |
| | 2.8 | 2.8 | 100 | | | | | | | | |
| 85.3 | | | | | | | | | | | |
| | 3.1 | 2.3 | 74 | | | | | | | | |
| 88.4 | | | | | | | | | | | 6 |
| | 1.6 | 1.4 | 88 | | | | | | | | |
| 90.0 | | | | | | | | | | | |
| | 4.0 | 4.0 | 100 | | | | | | | | |
| 94.0 | | | | | | | | | | | 94.5 |
| | 3.0 | 3.0 | 100 | C-013,803 | 94.0/100.5 | N.D. | N.D. | .002% | .009% | .079% | |
| 97.0 | | | | | | | | | | | 7 |
| | 4.0 | 3.9 | 98 | | | | | | | | |
| 101.0 | | | | | | | | | | | |
| | 2.0 | 1.2 | 60 | | | | | | | | |
| 103.0 | | | | | | | | | | | |
| | 1.5 | 1.5 | 100 | C-013,804 | 100.5/106.5 | N.D. | N.D. | .002% | .002% | .905% | |
| 104.5 | | | | | | | | | | | 104.5 |
| | 2.2 | 1.7 | 77 | | | | | | | | |
| 106.7 | | | | | | | | | | | |
| 107.8 | 1.1 | 1.4 | 127 | | | | | | | | |
| | 1.1 | 1.1 | 100 | | | | | | | | 8 |
| 108.9 | | | | | | | | | | | |
| | 1.6 | 1.6 | 100 | | | | | | | | |
| 110.5 | | | | | | | | | | | |
| | 2.9 | 2.9 | 100 | | | | | | | | 113.4 |
| 113.4 | | | | | | | | | | | |
| | 1.2 | 1.2 | 100 | | | | | | | | |
| 114.6 | | | | | | | | | | | |
| | 0.8 | 0.6 | 75 | | | | | | | | |
| 115.4 | | | | | | | | | | | |
| | 0.7 | 0.7 | 100 | | | | | | | | |
| 116.1 | | | | | | | | | | | 9 |
| | 5.6 | 5.6 | 100 | C-013,805 | 117.5-121.7 | N.D. | N.D. | .002% | .002% | .007% | |

FT. 60 70 80 90 100 110 120

GRAPHIC LOG

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| LT. GREY, FN. GR FELDSPATHIC QUARTZ MICA SCHIST (Sb) 5-10% FN. BIO', BIO → CHLOR ON FCTS. | 130.0 | | CARBONATE, ±QTZ, ±PY, TR. AP? |
| 135.3 CNT. BRK | | | 135.3 |
| CRUSH BRECCIA | 140.0 | | NO VIS. SUL |
| 143.3 SHR CNT. | | | 143.3 |
| Sb, AS @ 120.0 - 135.3 | 150.0 | | ±CARBONATE, ±QTZ, MINOR PY ON FCTS. |
| 154.0: 6" BRECCIA, BIO → CHLOR. | | | 153.5-157.0: FN PY ON FOLIATION, ±1% 155.0: 1/4" QTZ, CARBONATE ON FOLIATION |
| 158.8 END OF HOLE @ 158.8 | | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 121.7 | | | | C-013,805 | 117.5/121.7 | N.D. | N.D. | .002% | .002% | .007% | 121.7 |
| | 4.7 | 4.7 | 100 | | | | | | | | |
| 126.4 | 1.5 | 1.5 | 100 | | | | | | | | 10 |
| 127.9 | 0.5 | 0.5 | 100 | | | | | | | | |
| 128.4 | 2.7 | 2.7 | 100 | | | | | | | | 130.0 |
| 131.1 | 3.3 | 3.3 | 100 | | | | | | | | |
| 134.9 | 2.6 | 2.6 | 100 | | | | | | | | 11 |
| 137.0 | 1.8 | 1.5 | 83 | | | | | | | | |
| 138.8 | 2.2 | 1.6 | 73 | C-013,806 | 137.0/143.0 | N.D. | N.D. | N.D. | N.D. | .008% | 140.0 |
| 141.0 | 0.5 | 0.5 | 100 | | | | | | | | |
| 141.5 | 1.5 | 1.2 | 80 | | | | | | | | |
| 143.0 | 1.5 | 1.5 | 100 | | | | | | | | |
| 144.5 | 0.7 | 0.7 | 100 | | | | | | | | 12 |
| 145.2 | 2.0 | 2.0 | 100 | | | | | | | | |
| 147.2 | 4.4 | 4.4 | 100 | | | | | | | | 149.2 |
| 151.6 | 1.6 | 1.6 | 100 | | | | | | | | |
| 153.2 | 1.6 | 1.6 | 100 | | | | | | | | 13 |
| 154.8 | 2.4 | 2.2 | 92 | C-013,807 | 153.2/158.8 | N.D. | N.D. | N.D. | N.D. | .008% | |
| 157.2 | 1.6 | 1.0 | 63 | | | | | | | | |
| 158.8 | | | | | | | | | | | 158.8 |

# DIAMOND DRILL HOLE LOG

Company: B O M

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| | | | |
|---|---|---|---|
| Property | LITTLE ANNIE | Hole No. | K-2 |
| Location | KANTISHNA DISTRICT | Bearing at Collar | N. 30° W |
| | | Inclination at Collar | -55 |
| Coord. - Collar N | 3 488 420.65 | | |
| E | 345 546.68 | Length | 280.3 |
| Elev. - Collar | 1877.8 | Core Size | NQX |
| Date started | 6/18/83 | | |
| Completed | 7/6/83 | Logged by | F.G.K. |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| | 10 | | |
| 14.0 — DRK. GREY/BLACK GRAPHITIC QUARTZ PHYLLITE (Sg) | | | 14.0 — No. vis. sulfides |
| LT. GREEN, FN-MED GR. QUARTZ MUSCOVITE CHLORITE CARBONATE SCHIST (Scp) @ 15.4': 1" Sg | 20 | | Limonite & Tr. v. Py (<1%) on foliation @ 18.3": carbonate vein w/ Tr Cp? |
| 23.0 — DRK. GREY/BLACK MICACEOUS GRAPHITIC QUARTZ PHYLLITE (Sg) | | | 23.0: No vis. sulfides |
| WELL DEVELOPED THIN FOLIATION OF GRAPHITE & MUSCOVITE LAYERS w/ DISCONTINUOUS, ELONGATE, FN. GR. QTZ. MINOR CARBONATE ON SOME FOLIATIONS. LIMONITE ASS. w/ QTZ LAYERS & IRR. VERTICAL FRACTURES. 30.5-33.4: GRAPHITE ↑, QTZ ↓ | 30 | | Spotty Py. Casts<br>~25.0-29.0: strong limonite on irr. near vertical fractures |
| 35.6 — Sg. as @ 23.0-35.6, interlayered w/ ½"-7" concordant Lt. grey micaceous carbonate rich phyllite | | | Mn Ox on foliation & vert. fr. |
| 40.2 — Sg, as @ 23.0-35.6 | 40 | | Py. Casts Common<br>~42.0': 2" Qtz + carbonate<br>~43.5: 2" Qtz + Limonite |
| | 50 | | 49.0: 1" Qtz<br>49.7: 6" Qtz<br>Py casts ↓↓ |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au (oz/ton) | Ag (oz/ton) | Cu (percent) | Pb (percent) | Zn (percent) | |
| 14.0 | | | | | | | | | | | |
| | 5 | 5 | 100 | C-013808 | 14.4/19.0 | N.D. | N.D. | .008% | N.D. | .01% | 1 |
| 19.0 | | | | | | | | | | | |
| | 8.3 | 8.3 | 100 | | | | | | | | 23.9 |
| 23.3 | | | | C-013809 | 25.0/29.0 | N.D. | N.D. | .004% | .002% | .01% | |
| | 3.2 | 2.3 | 72 | | | | | | | | 2 |
| 30.5 | | | | | | | | | | | |
| | 2.9 | 2.9 | 100 | | | | | | | | |
| 33.4 | | | | | | | | | | | 35.0 |
| | 3.1 | 2.7 | 87 | | | | | | | | |
| 36.5 | | | | | | | | | | | |
| | 1.5 | 1.4 | 93 | | | | | | | | 3 |
| 38.0 | | | | | | | | | | | |
| | 2.0 | 1.8 | 90 | | | | | | | | |
| 40.0 | | | | | | | | | | | |
| | 2.0 | 1.7 | 85 | | | | | | | | 43.4 |
| 42.0 | | | | | | | | | | | |
| | | | | C-013810 | 42.0/45.9? | .016 | N.D. | .004% | ND | .008% | |
| | 7.7 | 4.5 | 58 | | | | | | | | |
| | | | | C-013811 | 45.9/49.7 | N.D. | N.D. | .004% | ND | | |
| 49.7 | | | | C-013812 | 49.7/50.2 | N.D | N.D. | .004% | ND | .016% | |
| | 3.8 | 1.1 | 29 | C-013813 | 50.2/54.7 | N.D. | N.D. | .003% | ND | .002% | |
| 53.5 | | | | | | | | | | | |
| | 1.2 | 0.2 | 1.7 | | | | | | | | |
| 54.7 | | | | | | | | | | | |

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K-2, 2/5

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| DRK GREY - BLACK MICACEOUS GRAPHITIC QUARTZ PHYLLITE (Sq) | | | NO VIS. SUL. |
| WELL DEVELOPED THIN FOLIATION OF GRAPHITE & MUSCOVITE W/ DISCONTINUOUS, ELONGATE FN. GR. QTZ. MINOR CARBONATE ON SOME FOLIATIONS | | | PY CASTS ON FOL. |
| | 60 | | WK-MOD. LIM. ASS. W/ QTZ LAYERS. |
| 65.8 CNT. BRK | | | 65.8 |
| LT. GREY, APH- U. FN. GR. METAFELSITE (Sf). MUSCOVITE, WK. CARBONATE, LIMONITE STN ON FOLIATION. LIMONITE ↑ @ 65.8'-70.8' | | | TR. PY, MnO ON FOLIATION. << 1% PY. |
| @ 69.0': ORANGE CLAY ON FOLIATION | 70 | | |
| 73.0 | | | 73.0 |
| 74.0 VOID, NO CORE RECOVERY | | | 74.0 |
| LT. GREEN, U. FN. GR. QUARTZ CHLORITE PHYLLITE (Scp). SIMILIAR TO Scp @ 14.4'-23.0', BUT LACKING ELONGATE CARBONATE & CONTAINING ~2% BIOTITE. WK. CARBONATE ON SOME FOLIATIONS | | | TR. U. FN. EUH PY ON FOLIATION, << 1% |
| | 80 | | |
| 82.0 | | | 82.0 |
| CRUSH BRECCIA, YELLOW GOUGE | | | NO VIS. SUL. |
| 85.0 | | | |
| GREY, FN. GR. FELDSPATHIC QUARTZ MICA SCHIST (Sfq). ~5% Bio., ~5% MED. GR. QTZ "EYES" | | | |
| 88.0': 6" CRUSH | | | |
| | 90 | | |
| 91.3': 10" CRUSH | | | |
| 92.8 | | | |
| CRUSH BRECCIA | | | |
| 94.7 | | | 94.7' |
| Sfq, AS @ 85.0-92.8, W/ ~15% QTZ EYES. GENERALLY MASSIVE W/ WELL DEVELOPED FOLIATION. | | | TR. PY → LIMONITE ON FOLIATION |
| | 100 | | TR. U. FN. DISS. PY, << 1% |
| | | | 102.5 |
| | | | 1/4"-1 1/2" QTZ VLT W/ LIMONITE PY CASTS & RARE FN PY XLS. PY → LIM NEAR QTZ VLTS. PY IN Sfq INCREASING NEAR QTZ VLTS. |
| 107.4: 1 1/2" QTZ VN. | | | |
| 109.0 | | | 109.0 |
| 110.0 VOID, NO CORE RECOVERY | 110 | | 110.0 |
| Sfq, AS ABOVE | | | AS @102.5-109.0 |
| | | | 114.5: 1/2" QTZ, CARBONATE, LIM. |
| 1" METAMORPHIC QTZ<br>1" METAMORPHIC QTZ | 120 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| | 3.8 | 1.1 | 29 | | | | | | | | |
| 53.5 | | | | | | | | | | | |
| 54.7 | 1.2 | 0.2 | 17 | | | | | | | | |
| | 3.0 | 0.5 | 17 | | | | | | | | |
| 57.7 | | | | | | | | | | | |
| | 2.6 | 0.8 | 31 | | | | | | | | 4 |
| 60.3 | | | | | | | | | | | |
| 63.3 | 3.0 | 1.4 | 47 | | | | | | | | |
| | 2.8 | 0.2 | 7 | | | | | | | | |
| 66.1 | 0.4 | 0.4 | 100 | | | | | | | | |
| 67.0 | 0.4 | 0.4 | 100 | | | | | | | | |
| 67.5 | 1.4 | 0.9 | 64 | | | | | | | | 68.0 |
| 68.9 | | | | | | | | | | | |
| 70.0 | 1.1 | 1.5 | 136 | | | | | | | | |
| | 1.7 | 0.8 | 47 | | | | | | | | |
| 71.7 | | | | | | | | | | | |
| | 2.3 | 1.3 | 57 | | | | | | | | |
| 74.0 | | | | | | | | | | | 5 |
| | 2.6 | 1.2 | 46 | | | | | | | | |
| 76.6 | | | | | | | | | | | |
| | 2.4 | 2.1 | 88 | | | | | | | | 78.6 |
| 79.0 | | | | | | | | | | | |
| | 1.1 | 1.0 | 91 | | | | | | | | |
| 80.1 | | | | | | | | | | | |
| | 1.9 | 1.0 | 53 | | | | | | | | |
| 82.0 | | | | | | | | | | | |
| 83.1 | 1.1 | 0.9 | 82 | | | | | | | | |
| 83.5 | 0.4 | 0.4 | 100 | | | | | | | | |
| | 1.5 | 0.8 | 53 | | | | | | | | |
| 85.0 | 0.5 | 0.1 | 20 | | | | | | | | |
| 85.5 | | | | | | | | | | | |
| 86.5 | 1.0 | 0.1 | 10 | | | | | | | | 6 |
| | 1.3 | 0.5 | 38 | | | | | | | | |
| 87.8 | 0.3 | 0.3 | 100 | | | | | | | | |
| 88.0 | 0.2 | 0.2 | 100 | | | | | | | | |
| 88.5 | | | | | | | | | | | |
| | 2.1 | 0.5 | 24 | | | | | | | | |
| 90.6 | 0.7 | 0.7 | 100 | | | | | | | | |
| 91.3 | 0.9 | 0.6 | 67 | | | | | | | | 92.2 |
| 92.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| 93.1 | | | | | | | | | | | |
| | 1.6 | 0.6 | 38 | | | | | | | | |
| 94.7 | | | | | | | | | | | |
| 95.7 | 1.0 | 0.9 | 90 | | | | | | | | |
| | 2.8 | 2.8 | 100 | | | | | | | | 7 |
| 98.5 | | | | | | | | | | | |
| 99.7 | 1.2 | 1.2 | 100 | | | | | | | | |
| | 3.1 | 3.1 | 100 | | | | | | | | |
| 102.8 | | | | | | | | | | | 102.8 |
| 104.0 | 1.2 | 1.2 | 100 | | | | | | | | |
| | 1.8 | 1.8 | 100 | C013814 | 104.0/108.0 | N.D. | N.D. | N.D. | .01% | .007% | |
| 105.8 | | | | | | | | | | | |
| | 1.6 | 1.6 | 100 | | | | | | | | |
| 107.4 | | | | | | | | | | | |
| | 2.9 | 1.4 | 48 | | | | | | | | |
| 110.3 | | | | | | | | | | | |
| 111.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| 112.4 | 1.2 | 1.2 | 100 | | | | | | | | |
| | 1.6 | 1.3 | 81 | | | | | | | | |
| 114.0 | | | | | | | | | | | |
| | 5.2 | 5.2 | 100 | | | | | | | | |
| 119.2 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| LT. GREY, U. FN. GR. FELDSPATHIC QUARTZ MICA SCHIST, ~5% MED. GR. QUARTZ EYES (Sfq) | | | 120.0-125.5: Lim, Py→Lim. Ass. w/ QTZ ULTS. Py & LIM. INCREASING IN Sfq NEAR QTZ ULTS. @123.5: 2" QTZ |
| 126.8 | | | 126.8: 4" QTZ, NO ATTITUDE |
| 128.4 CRUSH BRECCIA | | | |
| Sfq, AS @ 120.0-126.8 MINOR YELLOW CLAY ON FOLIATION | 130 | | TR. DISS. Py <<1% |
| 132.8 - 137.2: BOX DROPPED, CORE MIXED | | | |
| | | | @ 137.0-140.0: SAME NOTE AS @ 120.0-125.5 |
| 139.7-140.3: CLAY ON FOLIATION | 140 | | 139.0: 8" CRUSHED QTZ |
| | | | 145.4: SAME NOTE AS @ 120.0-125.5 |
| 147.3-155.3: BADLY FRACTURED & GROUND CORE | 150 | | |
| Sfq AS ABOVE, SLIGHTLY COARSER GR. | | | |
| | | | 155.4: Py → LIM IN QTZ ULT. |
| 159.1: 2½" METAMORPHIC QTZ // TO FOLIATION | 160 | | 158.5-161.0. SAME NOTE AS @ 120.0-125.5 |
| 161.0-164.0: ORANGE/YELLOW CLAY ON NEAR VERTICAL FRACTURES | | | |
| | 170 | | 171.0-174.0. CARBONATE & BROWNISH RED FeOx ON 40° FLTS. |
| 180.0: 6" CRUSH | 180 | | TR. U. FN DISS. Py (<<1%) THRU OUT. |
| Sfq AS ABOVE | 190 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 123.2 | 4.0 | 3.6 | 90 | | | | | | | | 122.8 |
| 123.5 | | | | | | | | | | | |
| 124.8 | 3.3 | 2.2 | 6.7 | | | | | | | | |
| 125.9 | 1.1 | 0.9 | 82 | | | | | | | | 10 |
| 128.3 | 1.4 | 1.4 | 100 | | | | | | | | |
| 130.3 | 1.6 | 1.4 | 88 | | | | | | | | |
| 131.6 | 0.6 | 0.6 | 100 | | | | | | | | |
| 132.0 | 0.5 | 0.3 | 60 | | | | | | | | |
| 132.8 | 0.8 | 0.8 | 100 | | | | | | | | 132.8 |
| | BOX DROPPED MIXED CORE | | | | | | | | | | |
| 137.2 | 0.5 | 0.5 | 100 | | | | | | | | 11 |
| 137.7 | 1.2 | 1.2 | 100 | | | | | | | | |
| 138.9 | 1.4 | 1.4 | 100 | C 013 815 | 138.5/140.3 | .06 | N.D. | N.D. | N.D. | .02% | |
| 140.3 | 1.6 | 0.9 | 56 | | | | | | | | 142.7 |
| 141.9 | 2.4 | 2.1 | 88 | | | | | | | | |
| 143.3 | 1.1 | 0.8 | 73 | | | | | | | | |
| 145.4 | 1.6 | 1.6 | 100 | | | | | | | | |
| 147.0 | 1.7 | 1.7 | 100 | | | | | | | | 12 |
| 148.7 | 1.2 | 0.2 | 17 | | | | | | | | |
| 149.9 | | | | | | | | | | | |
| 150.1 | | | | | | | | | | | |
| 150.3 | 2.3 | 1.7 | 74 | | | | | | | | |
| 152.6 | 2.7 | 1.7 | 63 | | | | | | | | 153.1 |
| 155.3 | 2.7 | 2.4 | 89 | | | | | | | | |
| 158.0 | 2.9 | 2.9 | 100 | | | | | | | | 13 |
| 160.9 | 3.6 | 3.6 | 100 | | | | | | | | 163.8 |
| 164.5 | | | | | | | | | | | |
| 164.9 | 1.2 | 1.0 | 83 | | | | | | | | |
| 166.1 | 3.3 | 3.1 | 94 | | | | | | | | 14 |
| 169.9 | 1.7 | 1.6 | | | | | | | | | |
| 171.1 | 1.0 | 1.0 | 100 | | | | | | | | |
| 172.1 | 1.1 | 1.1 | 100 | C 013 816 | 171.1/174.0 | N.D. | N.D. | .004% | .007% | .003% | 173.9 |
| 173.2 | 1.7 | 1.7 | 100 | | | | | | | | |
| 174.5 | 2.3 | 1.9 | 83 | | | | | | | | |
| 177.2 | 1.8 | 1.8 | 100 | | | | | | | | 15 |
| 179.0 | 1.5 | 1.5 | 100 | | | | | | | | |
| 180.5 | 1.5 | 1.5 | 100 | | | | | | | | |
| 182.0 | 1.8 | 1.1 | 61 | | | | | | | | |
| 183.8 | 1.3 | 1.3 | 100 | | | | | | | | 184.5 |
| 185.1 | 3.4 | 3.3 | 97 | | | | | | | | |
| 188.5 | | | | | | | | | | | |

K-2, 4/4

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| CRUSH BRECCIA, | | | NO. VIS. SUL. MINOR LIM. STN. |
| 194.0 CNT. BRK. | | | 194.0 |
| LT. GREY, FN. GR. FELDSPATHIC QUARTZ MICA SCHIST, w/ ZONES w/ QTZ EYES (Sf/Sfq). 194.0-197.4: Feld → CLAY, Bio → FeOx | | | TR. Py ON FOLIATION LIM. ON FCTS & FOLIATION |
| | 200.0 | | |
| 202.1 GRAD CNT | | | 202.1-203.0: MOD LIM STN IN CRUSH |
| 203.6 CRUSH BRECCIA GRAD. CNT | | | |
| SHEARED & ALTERED Sf. Feld → CLAY, Bio → FeOx. CRUSH & GOUGE @ 204.2-204.9. | | | |
| 206.5 GRAD CNT | | | |
| 207.5 CRUSH BRECCIA CNT | | | |
| SHEARED & ALTERED Sf, AS @ 203.6-206.5 | | | |
| 210.0 IRR. CNT. | 210.0 | | |
| Sf, AS @ 194.0-202.1. RARE QTZ EYES. @ 210.0: SLKS ON FOLIATION | | | TR. Py ON FOLIATION |
| META. QTZ @ 214.6-215.4 | | | |
| ~217.0-221.0 THIN (<1mm) Sg INTERLAYERED w/ Sf. | | | 218.3-219.0: LIM STN ON FOL |
| | 220.0 | | |
| | | | 221.0: 1/4" QTZ w/ Py, RED/BROWNISH CLAY. |
| | | | 224.2-224.5: DRK. RED/BROWN CLAY, MINOR Py. w/ QTZ ~1" QTZ @ 40° |
| | 230.0 | | 228.4-228.8: MOD RED/BROWN CLAY ON FCTS |
| 230.2-231.3: CRUSH ~231.0-234: WK-MOD. ALT Bio → CHLOR. | | | |
| 235.0-237.0: Bio ↓↓ | | | |
| 237.3: 4" CRUSH 239.0 50° CNT. | | | 236.0-236.5: MOD FeOx ON FCTS |
| | 240.0 | | |
| CRUSH BRECCIA 240.3-242.5: LIM. STN, GOUGE. 239.0-242.5 LIM. STN COMMON IN CRUSH BRECCIA. | | | 242.0(?): 2" CRUSHED QTZ w/ LIM., MINOR Py. |
| 248.5 CNT. BRK | | | |
| LT. GREY, FN. GR., FELDSPATHIC QTZ MICA SCHIST (Sf), FELD → CLAY, Bio → FeOx | 250.0 | | |
| 252.0 @ 250: 10" CRUSH GRAD | | | 251.5: LIM, Py ON 1/4" QTZ VEIN |
| SHEARED Sf, GOUGE ON FCTS. 255.0 LIM. STN, Bio → FeOx, FELD → CLAY GRAD | | | TR. Py ON FOLIATION |
| CRUSH BRECCIA | | | |
| 259.5 Sf | 260.0 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 194.0 | 2.5 | 1.8 | 72 | | | | | | | | |
| | 1.5 | 1.5 | 100 | | | | | | | | 16 |
| 192.5 | 0.5 | 0.5 | 100 | | | | | | | | |
| 193.0 | 0.5 | 0.5 | 100 | | | | | | | | |
| 193.5 | 0.5 | 0.5 | 100 | | | | | | | | |
| 193.9 | 0.4 | 0.4 | 100 | | | | | | | | |
| 194.4 | 1.1 | 1.0 | 91 | | | | | | | | 194.8 |
| 195.1 | 0.7 | 0.6 | 86 | | | | | | | | |
| 196.2 | 1.2 | 1.2 | 100 | | | | | | | | |
| 197.4 | 1.0 | 0.9 | 90 | | | | | | | | |
| 198.4 | 2.4 | 2.4 | 100 | | | | | | | | 17 |
| 200.8 | 0.3 | 0.2 | 67 | | | | | | | | |
| 201.1 | 2.5 | 2.2 | 88 | | | | | | | | |
| 203.6 | 1.3 | 1.3 | 100 | | | | | | | | 204.6 |
| 204.9 | 1.3 | 0.7 | 54 | | | | | | | | |
| 206.2 | 1.8 | 1.8 | 100 | | | | | | | | |
| 208.0 | 1.3 | 1.0 | 77 | | | | | | | | |
| 209.3 | 1.5 | 1.5 | 100 | | | | | | | | 18 |
| 210.8 | 0.4 | 0.3 | 75 | | | | | | | | |
| 211.2 | 1.9 | 1.3 | 68 | | | | | | | | |
| 213.1 | 1.5 | 1.5 | 100 | | | | | | | | |
| 214.6 | 1.8 | 1.8 | 100 | | | | | | | | 215.1 |
| 216.4 | | | | | | | | | | | |
| | 3.9 | 3.9 | 100 | | | | | | | | 19 |
| 220.3 | | | | | | | | | | | |
| | 4.4 | 4.4 | 100 | | | | | | | | |
| 224.9 | | | | C013817 | 224.2/224.9 | .047 | 1.79 | .006% | .785% | .04% | 224.9 |
| 225.8 | 0.9 | 0.9 | 100 | | | | | | | | |
| 227.0 | 1.2 | 1.0 | 83 | | | | | | | | |
| 228.6 | 1.6 | 1.0 | 63 | | | | | | | | 20 |
| | 3.0 | 2.7 | 90 | | | | | | | | |
| 231.6 | | | | | | | | | | | |
| | 3.4 | 3.4 | 100 | | | | | | | | |
| 235.0 | | | | | | | | | | | 235.0 |
| | 3.1 | 3.1 | 100 | | | | | | | | |
| 238.1 | | | | | | | | | | | |
| 239.7 | 1.6 | 1.6 | 100 | | | | | | | | 21 |
| | 3.9 | 2.8 | 100 | C013818 | 240.3/243.6 | N.D. | N.D. | .002% | .004% | .02% | |
| 243.6 | | | | | | | | | | | |
| 244.7 | 1.1 | 1.1 | 100 | | | | | | | | 245.0 |
| | 2.0 | 2.0 | 100 | | | | | | | | |
| 246.7 | | | | | | | | | | | |
| | 2.3 | 2.1 | 91 | | | | | | | | 22 |
| 249.0 | | | | | | | | | | | |
| | 3.8 | 3.8 | 100 | C013819 | 249.0/252.0 | .005 | N.D. | N.D. | N.D. | .01% | |
| 252.8 | | | | | | | | | | | 253.6 |
| | 2.8 | 2.8 | 100 | | | | | | | | |
| 255.6 | | | | | | | | | | | |
| | 2.1 | 1.9 | 90 | | | | | | | | 23 |
| 257.7 | | | | | | | | | | | |
| 258.5 | 0.8 | 0.8 | 100 | | | | | | | | |
| 260.1 | 1.6 | 1.4 | 88 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| LT. GREY, V. FN. GR. FELDSPATHIC QUARTZ MICA SCHIST (Sf). RARE QTZ EYES, ~5% BIO., ± FeOx ± CLAY ± CARBONATE (V. WK). ON FLTS. | 270 | | TR. Py. ON FOLIATION |
| 274.0 GRAD. CNT. | | | |
| INTERLAYERED Sf & Sg | | | |
| Sg/Sf RATIO INCREASING → 280.3 | | | 276.6: TR. Py IN 1/4" QTZ VLTS. |
| Sg UNITS UP TO 1/2" | | | LIMONITIC Py. CASTS IN Sg |
| 280.3 | 280 | | 280.3 |
| END OF HOLE @ 280.3, 7/6/83 | | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 260.1 | | | | | | | | | | | |
| | 3.4 | 3.4 | 100 | No SAMPLE | 260.1/263.5 | | | | | | 262.3 |
| 263.5 | | | | | | | | | | | |
| | 2.3 | 2.3 | 100 | | | | | | | | |
| 265.8 | | | | | | | | | | | |
| | 1.5 | 1.5 | 100 | | | | | | | | |
| 267.3 | | | | | | | | | | | |
| | 4.7 | 4.7 | 100 | | | | | | | | |
| 272.0 | | | | | | | | | | | 271.7 |
| | 1.2 | 0.8 | 67 | | | | | | | | |
| 273.2 | | | | | | | | | | | |
| | 0.8 | 0.7 | 88 | | | | | | | | |
| 274.0 | | | | | | | | | | | |
| | 0.6 | 0.6 | 100 | | | | | | | | |
| 274.6 | | | | | | | | | | | |
| | 0.6 | 0.2 | 33 | | | | | | | | |
| 275.2 | | | | | | | | | | | |
| | 0.8 | 0.4 | 50 | | | | | | | | |
| 276.0 | | | | | | | | | | | |
| | 0.6 | 0.6 | 100 | | | | | | | | |
| 276.6 | | | | | | | | | | | |
| | 0.8 | 0.6 | 75 | | | | | | | | |
| 277.4 | | | | | | | | | | | |
| | 2.0 | 0.6 | 30 | C-013820 | 276.0/280.3 | N.D. | N.D. | N.D. | N.D. | .012% | |
| 279.4 | | | | | | | | | | | |
| | 0.9 | 0.9 | 100 | | | | | | | | |
| 280.3 | | | | | | | | | | | 280.3 |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: LITTLE ANNIE
Hole No.: K-3
Location: KANTISHNA DISTRICT
Bearing at Collar: N. 30° W.
Inclination at Collar: -50°
Coord. - Collar N: 3 488 556.97
E: 345 435.05
Length: 166.5
Elev. - Collar: 2798.4
Core Size: BW 44 (0.0-63.7), 1 AX (63.7-123.9), 1 EX (123.9-166.5)
Date started: 7/6/83
Completed: 7/10/83
Logged by: F. G. KRUGER

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag (oz/ton) | Cu (% or PPM) | Pb (% or PPM) | Zn (% or PPM) | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 13.0 | 1.6 | 12 | | | | | | | | |
| | | | | 13.0 | | | | | | | | | | | |
| | | | | | 6.0 | 1.8 | 30 | | | | | | | | 1 |
| | | | | 19.0 | | | | | | | | | | | |
| | | | | | 4.2 | 1.4 | 33 | | | | | | | | |
| | | | | 23.2 | | | | | | | | | | | |
| | | | | | 4.8 | 1.6 | 33 | | | | | | | | |
| | | | | 28.0 | | | | | | | | | | | |
| | | | | | 2.4 | 2.1 | 88 | | | | | | | | 30.6 |
| | | | | 30.4 | | | | | | | | | | | |
| | | | | | 2.6 | 2.0 | 77 | | | | | | | | |
| | | | | 33.0 | | | | | | | | | | | |
| | | | | | 2.0 | 1.6 | 80 | | | | | | | | |
| | | | | 35.0 | | | | | | | | | | | |
| | | | | | 2.9 | 1.5 | 52 | | | | | | | | 2 |
| | | | | 37.9 | | | | | | | | | | | |
| | | | | | 1.5 | 0.9 | 60 | | | | | | | | |
| | | | | 39.4 | | | | | | | | | | | |
| | | | | | 2.0 | 0.9 | 45 | | | | | | | | |
| | | | | 41.4 | | | | | | | | | | | |
| 43.0 (?) | | | 43.0 | | 1.6 | 0.8 | 50 | | | | | | | | |
| | | | | 43.0 | 0.7 | 0.5 | 71 | | | | | | | | |
| | | | | 43.7 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 44.7 | 0.3 | 0.3 | 100 | | | | | | | | 44.7 |
| LT. GREY, FN. GR. FELDSPATHIC QUARTZ MICA SCHIST, W/ MED. GR. QUARTZ "EYES". (Sfq). | | | TR. PY, MINOR LIMONITE ON FOLIATION. MINOR LIM AS IRR. VLTS. | 45.0 | 2.3 | 1.6 | 70 | C 013 821 | 45.0/47.3 | .015 | ND | ND. | N.D. | .15% | |
| @ 45.0-47.3: STRONGLY FRACTURED ON FOLIATION. | | | @ 45.0-47.3: NO VIS SUL., STRONG LIM. | 47.3 | | | | | | | | | | | |
| QTZ. EYES ✓ | | | | | 5.7 | 1.5 | 26 | | | | | | | | |
| | | | 1/2" QTZ, LIM @ MARGIN. | 53.0 | | | | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | MINERALIZATION |
|---|---|---|
| LT. GREY, FN. GR. FELDSPATHIC QUARTZ MICA SCHIST (Sf) GRADING TO SM. ZONES Sfq | | TR. U. FN. Py ON FOLIATION WK. LIM. STN. ON FCTS. & FOL. |
| 56.0' CNT. BRK | | 56.0 |
| Sf AS ABOVE, w/ ALT. FELD. → CLAY | 60 | NO. VIS. SUL., MOD. LIM. ON FCTS, FOL., & AS IRR VLTS. MnO ON FOL. |
| 63.7 CNT. BRK. | | |
| CRUSH BRECCIA. SHATTERED Sf IN HEAVY GOUGE | | |
| 67.0 | | |
| SHATTERED & CRUSHED Sf MINOR GOUGE | 70 | |
| 74.5 CNT. BRK | | 74.5 |
| ALT. Sf/Sfq AS @ 56.0-63.7 | | TR. U. FN. Py ON FOLIATION Py → LIM. |
| 77.7: 1' CRUSHED, ALT. Sf w/ SLKS. | | 77.7: STRONG LIM. |
| | | 79.0 |
| | 80 | NO VIS. SUL LIM/MnO ✓✓ |
| 81.0-85.0: SHATTERED Sf. | | 83.0 |
| 84.5 CNT. BRK | | TR. Py ON FOLIATION 83.4-84.5: STRNG LIM., QTZ |
| Sf/Sfq AS @ 50.0-56.0. | | |
| | 90 | |
| 92.0-94.0: SHATTERED Sf | | 92.0-94.0: LIM. STN, QTZ. 92.3: 3-4" QTZ w/TR. AS, MOD LIM |
| 94.8-95.7 SHATTERED Sf | | 94.8-95.7: LIM. STN |
| | | 97. -98.5: RECOVERED 1½" QTZ & LIM. |
| LIMONITE STRONGEST ON FCT ⊥ TO FOL | 100 | 101.3-102.1: ~2-4"(?) QTZ & LIM. |
| 103.0 CNT. BRK | | 103.0 |
| 104.3 SHATTERED QUARTZ & LIMONITE CNT. BRK | | V. STRONG LIM, TR. AS.? |
| 105.3 3½" ALT. Sf RECOVERED CNT. BRK | | 105.3 NO VIS. SUL., MOD. LIM. |
| CRUSHED LIM. STN. QTZ & ALT. Sf. | | NO VIS. SUL., MOD.-STRONG LIM. |
| 107.2 | | 107.2 |
| NO CORE RECOVERED | | |
| 110.5 | 110 | 110.5 |
| CRUSHED QTZ | | NO VIS. SUL. MINOR. LIM. |
| 112.1 | | 112.1 |
| 113.3 NO CORE RECOVERED | | 113.3 |
| REDDISH YELLOW CLAY GOUGE CNT. BRK | | NO VIS. WK-MOD LIM., WK MnO |
| 115.5 | | 115.5 |
| CRUSHED QTZ, ALT. Sf, MOD. CLAY GOUGE | | FN AS, Py IN QTZ, AS > Py Py → LIM. |
| 117.7 | | 117.7 |
| 118.5 NO CORE RECOVERED | | 118.5 |
| 119.1 BROWNISH FINELY CRUSHED QTZ | | 119.1 MOD. LIM. STN. |
| CRUSHED QUARTZ | 120 | MOD LIM. IRR DIST. FN AS, Py |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run # | Run length | Core | % | Sample | Interval | Au oz/ton | Ag oz/ton | Cu % | Pb % | Zn ppm | |
| 53.0 | 3.0 | 1.9 | 63 | | | | | | | | |
| 56.0 | 7.0 | 0.5 | 7 | | | | | | | | 3 |
| 63.0 | 0.7 | 0.4 | 57 | | | | | | | | |
| 63.7 | 3.3 | 0.7 | 21 | C013822 | 63.7/67.0 | N.D. | N.D. | N.D. | N.D. | .1% | |
| 67.0 | 1.0 | 0.8 | 80 | | | | | | | | |
| 68.0 | 1.6 | 0.6 | 38 | | | | | | | | |
| 69.6 | 1.8 | 0.9 | 50 | | | | | | | | 69.6 |
| 71.4 | 1.1 | 0.8 | 73 | | | | | | | | |
| 72.5 | 3.5 | 2.3 | 66 | | | | | | | | |
| 76.0 | 1.5 | 0.6 | 40 | | | | | | | | 4 |
| 77.5 | 2.3 | 2.3 | 100 | | | | | | | | |
| 79.8 | 1.2 | 1.2 | 100 | | | | | | | | |
| 81.0 | 2.4 | 1.6 | 67 | | | | | | | | |
| 83.4 | 1.6 | 1.6 | 100 | C013823 | 83.4/85.0 | .012 | N.D. | N.D. | N.D. | .4% | 83.4 |
| 85.0 | 1.5 | 1.1 | 73 | | | | | | | | |
| 86.5 | 3.0 | 1.9 | 63 | | | | | | | | 5 |
| 89.5 | 1.5 | 0.8 | 53 | | | | | | | | |
| 91.0 | 0.9 | 0.6 | 67 | | | | | | | | |
| 91.9 | 2.1 | 1.4 | 67 | C013824 | 91.9/94.0 | .005 | 1.43 | .01% | .002% | .14% | |
| 94.0 | 1.7 | 1.3 | 76 | | | | | | | | 95.7 |
| 95.7 | 1.2 | 1.1 | 92 | | | | | | | | |
| 96.9 | 0.4 | 0.3 | 75 | | | | | | | | |
| 97.3 | 1.2 | 0.1 | 8 | | | | | | | | |
| 98.5 | 1.7 | 1.3 | 76 | | | | | | | | |
| 100.2 | 0.6 | 0.4 | 67 | | | | | | | | |
| 100.8 | 0.7 | 0.4 | 57 | | | | | | | | |
| 101.3 | 0.8 | 0.4 | 50 | | | | | | | | |
| 102.1 | 1.9 | 1.6 | 84 | C013825 | 100.6/103.0 | N.D. | N.D. | .002% | .002% | .165% | |
| 104.0 | 0.5 | 0.3 | 60 | C013826 | 103.0/104.3 | .011 | N.D. | .004% | .002% | .45% | 6 |
| 104.3 | 1.0 | 0.3 | 30 | C-013827 | 104.3/105.3 | N.D. | N.D. | .002% | .004% | | |
| 105.3 | 1.9 | 1.8 | 95 | C013828 | 105.3/107.2 | .012 | N.D. | .008% | .002% | .115% | |
| 107.2 | 1.9 | 0.0 | 0 | | No SAMPLE | | | | | | |
| 109.1 | 1.4 | 0.0 | 0 | | | | | | | | |
| 110.5 | 0.7 | 0.7 | 100 | | | | | | | | 111.2 |
| 111.2 | 0.9 | 0.7 | 78 | C013829 | 110.5/112.1 | .009 | N.D. | .004% | .002% | .18% | |
| 112.1 | 1.2 | 0.0 | 0 | | No SAMPLE | | | | | | |
| 113.3 | 2.2 | 1.6 | 73 | C013830 | 113.3/115.5 | .094 | 5.86 | .077% | .415% | .81% | |
| 115.5 | 1.2 | 0.3 | 25 | | | | | | | | |
| 116.7 | 1.0 | 0.8 | 80 | C013831 | 115.5/117.7 | .039 | .21 | .014% | .053% | .346% | 7 |
| 117.7 | 0.8 | 0.0 | 0 | | No SAMPLE | | | | | | |
| 118.5 | 0.6 | 0.6 | 100 | C013832 | 118.5/119.1 | .024 | .11 | .04% | .140% | .054% | |
| 119.1 | 0.9 | 0.9 | 100 | C013833 | 119.1/121.3 | .086 | N.D. | .006% | .016% | .015% | |
| 120.0 | | | | | | | | | | | |

## LITHOLOGY, ALTERATION, MISC.

- 121.3 CRUSHED QUARTZ
- 122.3 NO CORE RECOVERY
- CRUSHED QUARTZ.
- 132.0
- 132.9 NO CORE RECOVERY
- CRUSHED QUARTZ
- 135.2 CNT. BRX
- 136.3 (?) ALT. SF. w/ QTZ VLT. CNT. BRX.
- 137.5 CRUSHED QTZ & ALT. SF.
- 138.2 NO CORE RECOVERY
- 138.7 CRUSHED QUARTZ
- 139.5 NO CORE RECOVERY
- 141.0 ALT. SF/GOUGE. CRUSH BRECCIA CNT. BRX.
- LT. GREY, FN. GR. ALT. FELDSPATHIC QUARTZ MICA SCHIST. (SF/SFQ.) FELD → CLAY, BIO → FeOx.
- @ 141.0-146.5 (EON): STRONGLY FRACTURED & CRUSHED
- 149.2-149.6: YELLOW CLAY GOUGE & CRUSH
- 149.6-150.3: IRR. NEAR. VERT. FCT w/ WHITE GOUGE
- 150.3
- 151.3 NO CORE RECOVERY
- CARBONATE ON FOLIATION SURFACES WITH LITTLE OR NO LIM. STN.
- 159.2-160.0: ALT ↑
- END OF HOLE @ 166.5, 7/10/83

FT.: 130, 140, 150, 160, 166.5

GRAPHIC LOG

## MINERALIZATION

- MOD. LIM. STN. IRR. DIST. AS, PY
- 121.3 AS > PY, PY → LIM., <1% T.S.
- 122.3
- MOD LIM. STN, IRR. DIST. AS, Py. AS > Py, <1% T.S.
- 132.0
- 132.9
- MOD. LIM. STN. NO VIS. SUL.
- 135.2
- 136.3 MOD-STRONG LIM. TR. AS. NO VIS. PY.
- 137.5
- 138.2 MOD-STRONG LIM. TR. AS.
- 138.7 WK. LIM. STN. NO VIS. SUL.
- 139.5
- 141.0 NO VIS. SUL., MOD-STRONG LIM.
- NO VIS. SUL. MOD - STRONG LIM ON MOST FCT. & FOLIATION
- MANY FN, IRR. LIM & QTZ VLTS @ 143.3-144.4: V. STRONG LIM.
- 149.5: 2" STRONG LIM & GOUGE
- TR. Py → LIM ON SOME LIM. FILLED FCTS.
- 165.8: IRR. LIM, QTZ. Py, GL. VLT.

## RECOVERY

| Run | Run length | Core | % |
|---|---|---|---|
| 121.3 | 1.3 | 0.6 | 46 |
| 122.3 | 1.0 | 0 | 0 |
| 123.0 | 0.7 | 0.9 | 129 |
| 123.9 | 0.9 | 0.3 | 33 |
| 125.6 | 1.7 | 1.3 | 76 |
| 126.2 | 0.6 | 0.3 | 50 |
| 127.3 | 1.1 | 0.9 | 82 |
| 128.5 | 1.2 | 0.6 | 50 |
| 129.1 | 0.6 | 0.4 | 67 |
| 129.9 | 0.8 | 0.7 | 88 |
| 130.4 | 0.5 | 0.3 | 60 |
| 132.0 | 1.6 | 1.0 | 63 |
| 132.9 | 0.9 | 0.0 | 0 |
| 133.4 | 0.5 | 0.5 | 100 |
| 134.0 | 0.6 | 0.6 | 100 |
| 134.8 | 0.8 | 0.1 | 13 |
| 135.5 | 0.7 | 0.6 | 86 |
| 137.5 | 2.0 | 1.5 | 75 |
| 138.2 | 0.7 | 0.0 | 0 |
| 138.7 | 0.5 | 0.5 | 100 |
| 139.5 | 0.8 | 0.0 | 0 |
| 141.0 | 1.5 | 1.1 | 73 |
| 142.0 | 1.0 | 0.7 | 70 |
| 143.0 | 1.0 | 0.5 | 50 |
| 144.8 | 1.8 | 1.7 | 94 |
| 145.8 | 1.0 | 0.7 | 70 |
| 146.3 | 0.5 | 0.3 | 60 |
| 147.7 | 1.4 | 1.2 | 86 |
| 149.5 | 1.8 | 1.8 | 100 |
| 150.3 | 0.8 | 0.8 | 100 |
| 151.0 | 0.7 | 0.0 | 0 |
| 151.9 | 0.9 | 0.9 | 100 |
| 153.4 | 1.5 | 1.5 | 100 |
| 154.3 | 0.9 | 0.9 | 100 |
| 155.0 | 0.7 | 0.7 | 100 |
| 156.0 | 1.0 | 0.9 | 90 |
| 156.7 | 0.3 | 0.3 | 100 |
| 157.4 | 0.7 | 0.7 | 100 |
| 158.2 | 0.8 | 0.8 | 100 |
| 159.2 | 1.0 | 0.7 | 70 |
| 160.0 | 0.8 | 0.8 | 100 |
| 160.5 | 0.5 | 0.4 | 80 |
| 161.1 | 0.6 | 0.5 | 83 |
| 161.5 | 0.4 | 0.4 | 100 |
| 162.3 | 0.8 | 0.6 | 75 |
| 163.5 | 1.2 | 1.2 | 100 |
| 164.3 | 0.8 | 0.8 | 100 |
| 166.0 | 1.7 | 1.3 | 76 |
| 166.5 | 0.5 | 0.5 | 100 |

## ANALYTICAL

oz/ton; % or PPM

| Sample | Interval | Au | Ag | Cu | Pb | Zn |
|---|---|---|---|---|---|---|
| C 013 833 | 119.1 / 121.3 | .086 | N.D. | .006% | .016% | .015% |
| | No SAMPLE | | | | | |
| C 013 834 | 122.3 / 123.9 | .010 | N.D. | .004% | .008% | .011% |
| C 013 835 | 123.9 / 127.3 | .007 | N.D. | .002% | .006% | .007% |
| C 013 836 | 127.3 / 129.9 | .009 | N.D. | .002% | .002% | .006% |
| C 013 837 | 129.9 / 132.0 | .011 | N.D. | .002% | N.D. | .004% |
| | No SAMPLE | | | | | |
| C-013 838 | 132.9 / 135.2 | .005 | N.D. | N.D. | .002% | .006% |
| C 013 839 | 135.2 / 137.5 | .014 | N.D. | .002% | .005% | .017% |
| | No SAMPLE | | | | | |
| C 013 840 | 138.2 / 138.7 | .009 | N.D. | N.D. | N.D. | .008% |
| | No SAMPLE | | | | | |
| C-013 841 | 139.5 / 141.0 | .023 | N.D. | .002% | .008% | .034% |
| C 013 842 | 141.0 / 144.8 | .015 | N.D. | .004% | .004% | .041% |
| C 013 843 | 149.2 / 150.3 | N.D. | N.D. | .002% | .002% | .004% |

## BOX

7, 8, 9, 10, 11

125.6, 138.7, 150.0, 158.2, 166.5

# DIAMOND DRILL HOLE LOG

Company: U. S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Little Annie
Location: Kantishna
Coord. - Collar N: 3 488 892.88
E: 345 639.34
Elev. - Collar: 2652.6
Date started: 7/11/83
Completed: 7/19/83

Hole No.: K-4
Bearing at Collar: N25°W
Inclination at Collar: -60°
Length: 300.7'
Core Size: BW44 - IAX
Logged by: FGK-CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag | Cu (ppm) | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12' core recovery at 12' | 10 | | | | | | | | | | | | | | |
| Metafelsite (SF) quartz-rich Sg, and 3" lim stn qz | | | | 12.0 | 4.5 | 1.5 | 33 | | | | | | | | |
| fine grained, no alteration | 20 | | << 1% v. fine dissem py | 16.5 | 3.2 | 1.6 | 50 | | | | | | | | 1 |
| Metafelsite (SF) blocky (up to 4"), minor Sg frags, minor qz / lim vein material in light brown sandy matrix | | | | 19.7 | 4.3 | 3.9 | 91 | | | | | | | | |
| | | | | 24.0 | 3.7 | 2.8 | 76 | | | | | | | | |
| | 30 | | | 27.7 | 3.8 | 3.7 | 97 | | | | | | | | |
| | | | | 31.5 | 2.4 | 2.2 | 92 | | | | | | | | 2 |
| | | | | 33.9 | 2.1 | 1.8 | 86 | | | | | | | | |
| | 40 | | | 36.0 | 3.8 | 0.4 | 11 | | | | | | | | |
| | | | | 39.8 | 2.2 | 2.2 | 100 | | | | | | | | |
| | | | | 42.0 | 2.1 | 2.1 | 100 | | | | | | | | 3 |
| | | | | 44.1 | 2.0 | 1.3 | 65 | | | | | | | | |
| | | | | 46.1 | 1.4 | 1.4 | 100 | | | | | | | | |
| | 50 | | | 48.5 / 49.0 | 0.5 | 0.2 | 40 | | | | | | | | |

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overburden

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF) blocky with minor SG, lim stn qz in light brn sandy matrix | | | |
| | 60 | | |
| 2" of lim stn qz with xenoliths of SG | | | |
| weakly chloritized SF with fsp → clay | | | no visible sulfides |
| | 70 | | |
| badly fractured SG with spotty strong lim stn | | | |
| | 80 | | |
| Graphitic Phyllite (SG) dk gry, blk, little qz, badly fractured on foliation, irr. lim stn, vertical fcts, lim on foliation | | | no vis. sulfides; py casts up to 1/8", some with associated limonite |
| many zones of crushed SG probably due to drilling | 90 | | |
| interlayered with SF (up to 2") | | | |
| | 100 | | |
| 2" black gouge | | | |
| | 110 | | |
| 112.3-113.8: crushed SF with minor gouge and frags of 1/4" qz parallel to foliation | | | |
| 116.3-118.0: crush | | | |
| SG as above with qz on foliation | 120 | | py xtals → lim in qz layers |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 51.0 | 2.0 | 0.9 | 45 | | | | | | | | 4 |
| 51.8 | 0.8 | 0.8 | 100 | | | | | | | | |
| 54.2 | 2.4 | 1.3 | 54 | | | | | | | | |
| 56.7 | 2.5 | 1.7 | 68 | | | | | | | | |
| 58.5 | 2.8 | 1.7 | 61 | | | | | | | | |
| | 3.4 | 1.6 | 47 | | | | | | | | |
| 61.9 | 1.1 | 0.7 | 64 | | | | | | | | |
| 63.0 | | | | | | | | | | | |
| 65.2 | 2.2 | 1.4 | 64 | | | | | | | | 5 |
| 67.0 | 1.8 | 1.5 | 83 | | | | | | | | |
| 67.9 | 0.4 | 0 | 0 | | | | | | | | |
| | 4.6 | 0.8 | 17 | | | | | | | | |
| 72.0 | 3.0 | 0.3 | 10 | | | | | | | | |
| 75.0 | 2.0 | 0.9 | 45 | | | | | | | | |
| 77.0 | 1.8 | 1.8 | 100 | | | | | | | | |
| 78.8 | 1.7 | 1.0 | 59 | | | | | | | | |
| 80.5 | 1.3 | 0 | 0 | | | | | | | | |
| 81.8 | 1.4 | 0.6 | 43 | | | | | | | | 6 |
| 83.2 | 2.2 | 0.6 | 27 | | | | | | | | |
| 85.4 | 0.6 | 0.6 | 100 | | | | | | | | |
| 86.0 | 2.0 | 0.6 | 30 | | | | | | | | |
| 88.0 | 2.0 | 1.6 | 80 | | | | | | | | |
| 90.0 | 2.0 | 1.2 | 60 | | | | | | | | |
| 92.0 | 1.6 | 0.8 | 50 | | | | | | | | |
| 93.6 | 1.4 | 0.9 | 64 | | | | | | | | |
| 95.0 | 2.0 | 1.7 | 85 | | | | | | | | |
| 98.0 | 2.0 | 0.7 | 35 | | | | | | | | |
| 100.0 | 1.3 | 1.3 | 100 | | | | | | | | |
| 101.3 | 1.5 | 0.7 | 47 | | | | | | | | |
| 102.8 | 0.9 | 0.7 | | | | | | | | | 7 |
| 103.7 | 0.6 | 0.6 | 100 | | | | | | | | |
| 104.3 | 2.7 | 0.7 | 26 | | | | | | | | |
| 107.0 | 2.5 | 2.2 | 88 | | | | | | | | |
| 109.5 | 1.5 | 1.4 | 93 | | | | | | | | |
| 111.0 | 1.3 | 1.3 | 100 | | | | | | | | |
| 112.3 | 1.5 | 0.7 | 47 | | | | | | | | |
| 113.8 | 0.7 | 0.7 | 100 | | | | | | | | 8 |
| 114.5 | 1.8 | 1.8 | 100 | | | | | | | | |
| 116.3 | 1.7 | 0.8 | 47 | | | | | | | | |
| 118.0 | 1.1 | 0.3 | 27 | | | | | | | | |
| 119.1 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Graphitic Phyllite (SG) dk gry/blk | | | py → lim ass. w/ qz layers |
| 2" qz on foliation | | | |
| 3" qz on foliation | | | 126: minor py assoc with SF inc in qz |
| | 130 | | no vis py, weak spotty lim |
| 135-136: crush | | | spotty euhedral py up to 1/8" on foliation, 1/2-1% py |
| Metafelsite (SF) lt gry, fine grained, altered fsp qz mica schist, fsp → clay, fn white mica (sericite?) on foliation | 140 | | |
| 143.5-146.0: foliation subparallel to core | | | 1/2-1% py, fine euhedral, irreg dist in fol. as single xtals and aggregates, v. weak lim stn on some fcts and fol. |
| 145.2: 2" crush and gouge | | | |
| irreg dist meta qz on foliation | | | |
| 1" gouge on foliation | 150 | | |
| 2" gouge on foliation, 1' zone meta qz up to 1/2" | | | |
| chlor/ser on foliation | | | py on fol 156.0-156.9 |
| strongly fct for 1.3', ~5° fcts, minor gouge | 160 | | |
| minor carbonate on some crosscutting fcts | | | py ↓ tr-1/2% |
| gouge on foliation | | | |
| 2-3" crush/gouge, 8" crush/gouge, 16" shear zone, ~30" shear zone } on foliation | 170 | | |
| fsp alt grad decreasing | | | 176.8': py on 50° fct |
| | 180 | | tr py euhedral |
| Metafelsite (SFQ) m gry, fine grained, qz eyes, 1 mm qz veins 2-3 cm apart, some fct. surfaces are chloritized | | | |
| fsp → clay at 188-189' | 190 | | tr py in qz veinlet |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 120.8 | 1.7 | 1.7 | 100 | | | | | | | | |
| | 1.5 | 1.4 | 93 | 13882 | 119.1-123.1 | ND | .012 | 65 | 15 | 115 | |
| 122.3 | | | | | | | | | | | |
| | 2.1 | 2.1 | 100 | | | | | | | | |
| 124.4 | | | | | | | | | | | 9 |
| | 1.8 | 1.6 | 89 | | | | | | | | |
| 126.2 | | | | | | | | | | | |
| | 1.1 | 0.9 | 82 | | | | | | | | |
| 127.3 | | | | | | | | | | | |
| | 0.7 | 0.7 | 100 | | | | | | | | |
| 128.0 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | |
| 129.3 | | | | | | | | | | | |
| | 2.2 | 1.3 | 59 | | | | | | | | |
| 131.5 | | | | | | | | | | | |
| | 0.8 | 0.8 | 100 | | | | | | | | |
| 132.3 | | | | | | | | | | | |
| | 1.2 | 0.8 | 67 | | | | | | | | |
| 133.5 | | | | | | | | | | | |
| | | | | | | | | | | | 10 |
| | 2.6 | 1.8 | 69 | | | | | | | | |
| 136.1 | | | | | | | | | | | |
| | 1.9 | 1.3 | 68 | | | | | | | | |
| 138.0 | | | | | | | | | | | |
| | 0.5 | 0.5 | 100 | | | | | | | | |
| 138.5 | | | | | | | | | | | |
| | 0.7 | 0.7 | 100 | 13883 | 136.1-140.1 | ND | .012 | 70 | 20 | 170 | |
| 139.2 | | | | | | | | | | | |
| | 0.9 | 0.9 | 100 | | | | | | | | |
| 140.9 | | | | | | | | | | | |
| | 1.6 | 1.0 | 68 | 13884 | 140.1-143.0 | ND | .012 | 45 | 10 | 155 | |
| 141.7 | | | | | | | | | | | |
| | 2.2 | 1.5 | 68 | | | | | | | | |
| 143.9 | | | | | | | | | | | |
| | 2.1 | 3.0 | 143 | 13885 | 143.0-146.0 | .001 | .006 | 15 | 10 | 170 | 11 |
| 146.0 | | | | | | | | | | | |
| | 0.9 | 0.9 | 100 | | | | | | | | |
| 146.9 | | | | | | | | | | | |
| | 1.5 | 1.5 | 100 | | | | | | | | |
| 148.4 | | | | | | | | | | | |
| | 2.2 | 2.2 | 100 | | | | | | | | |
| 150.6 | | | | | | | | | | | |
| | 1.6 | 1.6 | 100 | | | | | | | | |
| 152.2 | | | | | | | | | | | |
| | 3.1 | 3.1 | 100 | | | | | | | | 12 |
| 155.3 | | | | | | | | | | | |
| | 2.1 | 2.1 | 100 | 13881 | 155.3-157.4 | ND | ND | 5 | 15 | 35 | |
| 157.4 | | | | | | | | | | | |
| | 2.0 | 2.0 | 100 | | | | | | | | |
| 159.4 | | | | | | | | | | | |
| | 0.8 | 0.8 | 100 | | | | | | | | |
| 160.2 | | | | | | | | | | | |
| | 1.9 | 1.9 | 100 | | | | | | | | |
| 162.1 | | | | | | | | | | | 13 |
| | 2.1 | 1.9 | 90 | | | | | | | | |
| 164.2 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | |
| 165.5 | | | | | | | | | | | |
| | 0.3 | 0.3 | 100 | | | | | | | | |
| 165.8 | | | | | | | | | | | |
| | 2.2 | 2.2 | 100 | | | | | | | | |
| 168.0 | | | | | | | | | | | |
| | 1.6 | 1.6 | 100 | | | | | | | | |
| 169.6 | | | | | | | | | | | |
| | 2.1 | 1.9 | 90 | | | | | | | | |
| 171.7 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | 14 |
| 173.0 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | |
| 174.3 | | | | | | | | | | | |
| | 0.5 | 0.5 | 100 | | | | | | | | |
| 174.9 | | | | | | | | | | | |
| | 1.7 | 1.7 | 100 | | | | | | | | |
| 176.6 | | | | | | | | | | | |
| | 2.3 | 2.3 | 100 | | | | | | | | |
| 178.9 | | | | | | | | | | | |
| | 1.0 | 1.0 | 100 | | | | | | | | 15 |
| 179.9 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | 4.6 | 4.6 | 100 | | | | | | | | |
| 184.5 | | | | | | | | | | | |
| | 3.0 | 2.8 | 93 | | | | | | | | 16 |
| 187.5 | | | | | | | | | | | |
| | 0.5 | 0.3 | 60 | | | | | | | | |
| 188.0 | | | | | | | | | | | |
| | 0.4 | 0.4 | 100 | | | | | | | | |
| 188.4 | | | | | | | | | | | |
| | 1.3 | 0.8 | 62 | | | | | | | | |
| 189.7 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SFQ)<br>m gry feldspathic schist, milky qz stringers, foliated, calcite and chlor on some fracture surfaces | | 10<br>10<br>35 | sl tr py |
| up to 2% qz eyes | | | minor lim stn |
| | 200 | | |
| < 1% qz eyes | | | |
| thin (< 1 mm) discontinuous qz stringers parallel to foliation | | 28 | sl tr v. fine py subhedral to euhedral |
| | 210 | | |
| | | | sl tr v. fine shiny py |
| clayey calcitic gouge 216-217' | | | |
| | 220 | | |
| Metafelsite (SFQ)<br>m to lt. gry, schistose, 1% qz eyes, minor qz veining parallel to foliation and on fractures, chlor/serp on some fracture surfaces, tip → cal at 125' and 127' | | 30 | no py noted |
| | | | sl tr py |
| | 230 | | |
| Metafelsite (SF)<br>as above but contains fewer qz eyes, lt. gry | | | |
| | | | tr py<br>some discontinuous stringers parallel to foliation, some euhedral py |
| Graphitic Schist (SG)<br>dk gry to black, carbonaceous, increasing graphite with depth, minor qz veinlets, most veinlets are parallel to foliation | 240 | 75 | |
| py is in the schist, not the qz veinlets | | | up to 1% py in some places, good euhedral xtals to 1 mm, py is in schist not in qz veinlets |
| soft, poorly lithified zone 251-255', gouge zone | 250 | | tr + py |
| as above | | | tr py |
| | 260 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 190.9 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | |
| 192.2 | | | | | | | | | | | |
| | 2.4 | 2.3 | 96 | ~~13886~~ | ~~193.5-194.0~~ | ~~ND~~ | ~~ND~~ | ~~ND~~ | ~~ND~~ | ~~30~~ | |
| 194.6 | | | | | | | | | | | |
| | 2.9 | 2.8 | 97 | | | | | | | | 18a |
| 197.5 | | | | | | | | | | | |
| | 2.5 | 2.5 | 100 | | | | | | | | |
| 200.0 | | | | | | | | | | | |
| | 1.0 | 0.9 | 90 | | | | | | | | |
| 201.0 | | | | | | | | | | | |
| 202.0 | 1.0 | 1.0 | 100 | | | | | | | | |
| | 2.0 | 2.0 | 100 | | | | | | | | |
| 204.0 | | | | | | | | | | | |
| | 1.2 | 0.8 | 67 | | | | | | | | |
| 205.2 | | | | | | | | | | | 18b |
| | 2.2 | 2.1 | 95 | | | | | | | | |
| 207.4 | | | | | | | | | | | |
| 208.3 | 0.9 | 0.3 | 33 | | | | | | | | |
| | 1.2 | 1.2 | 100 | | | | | | | | |
| 209.5 | | | | | | | | | | | |
| 210.5 | 1.0 | 1.0 | 100 | | | | | | | | |
| | 2.7 | 2.6 | 96 | | | | | | | | |
| 213.2 | | | | | | | | | | | |
| | 2.9 | 2.9 | 100 | | | | | | | | |
| 216.1 | | | | | | | | | | | |
| | 1.5 | 1.2 | 80 | | | | | | | | 19 |
| 217.6 | | | | | | | | | | | |
| | 1.4 | 1.4 | 100 | | | | | | | | |
| 219.0 | | | | | | | | | | | |
| 219.4 | 0.4 | 0.4 | 100 | | | | | | | | |
| | 2.3 | 2.2 | 96 | | | | | | | | |
| 221.7 | | | | | | | | | | | |
| | 1.5 | 1.5 | 100 | | | | | | | | |
| 223.2 | | | | | | | | | | | |
| 223.8 | 0.6 | 0.3 | 50 | | | | | | | | |
| | 2.4 | 1.7 | 71 | | | | | | | | |
| 226.2 | | | | | | | | | | | |
| | 2.0 | 1.9 | 95 | | | | | | | | 21a |
| 228.2 | | | | | | | | | | | |
| | 1.8 | 1.1 | 61 | | | | | | | | |
| 230.0 | | | | | | | | | | | |
| | 2.8 | 1.4 | 50 | | | | | | | | |
| 232.8 | | | | | | | | | | | |
| | 3.1 | 2.2 | 71 | | | | | | | | |
| 235.9 | | | | | | | | | | | |
| | 3.2 | 2.8 | 87 | | | | | | | | 21b |
| 239.1 | | | | | | | | | | | |
| | 1.1 | 0.7 | 64 | | | | | | | | |
| 240.2 | | | | | | | | | | | |
| | 3.4 | 1.8 | 53 | 13887 | 240.0-243.6 | ND | .012 | 55 | 20 | 220 | |
| 243.6 | | | | | | | | | | | |
| | 1.3 | 1.1 | 85 | | | | | | | | |
| 244.9 | | | | | | | | | | | |
| 245.7 | 0.8 | 0.8 | 100 | | | | | | | | |
| | 2.1 | 1.6 | 76 | | | | | | | | |
| 247.8 | | | | | | | | | | | |
| | 0.8 | 0.7 | 88 | | | | | | | | |
| 248.6 | | | | | | | | | | | |
| 249.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| | 1.8 | 0.3 | 17 | | | | | | | | |
| 251.1 | | | | | | | | | | | 22 |
| | 4.2 | 1.0 | 24 | | | | | | | | |
| 255.3 | | | | | | | | | | | |
| | 0.9 | 0.8 | 89 | | | | | | | | |
| 256.2 | | | | | | | | | | | |
| | 0.9 | 0.9 | 100 | | | | | | | | |
| 257.1 | | | | | | | | | | | |
| | 1.3 | 1.3 | 100 | | | | | | | | |
| 258.4 | | | | | | | | | | | |
| | 0.9 | 0.6 | 67 | | | | | | | | |
| 259.3 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Graphitic Schist (SG) dk gry to blk, fissile, thin foliations of qz + fsp | | | |
| | | | tr + py |
| no qz veinlets in this interval | | | |
| clay (gouge?) zone 261-271' poor recovery mostly unlithified chips | 270 | | tr py euhedral xtals |
| | | | some py up to 2 mm |
| Graphitic as above | | | |
| | | 55 | |
| | 280 | 18 | |
| | | 66 | |
| | 290 | 68 | sl tr py generally follows foliation |
| minor qz veinlet | | | |
| | | 35 | sl tr py |
| | 300 | 40 | |
| Graphitic Schist (SG) kink banding, fsp → clay (+cal?) at 295' | | EOH | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 261.3 | 2.0 | .9 | 45 | 13888 | 259.3-261.3 | ND | ND | 45 | 35 | 130 | 23 |
| 264.7 | 3.4 | 0 | 0 | | | | | | | | |
| 266.7 | 2.0 | 0 | 0 | | | | | | | | |
| 267.3 | 0.6 | 0.6 | 100 | | | | | | | | |
| 271.4 | 4.1 | 0 | 0 | | | | | | | | |
| 273.0 | 1.6 | 1.6 | 63 | | | | | | | | |
| 273.8 | 0.8 | 0 | 0 | | | | | | | | |
| 274.8 | 1.0 | 1.0 | 100 | | | | | | | | |
| 275.1 | 0.3 | 0.3 | 100 | | | | | | | | |
| 275.5 | 0.4 | 0.4 | 100 | | | | | | | | |
| 276.2 | 0.7 | 0.6 | 86 | | | | | | | | |
| 277.0 | 0.8 | 0.7 | 87 | | | | | | | | |
| 278.0 | 1.0 | 1.0 | 100 | | | | | | | | |
| 280.2 | 2.2 | 1.2 | 55 | 13889 | 278.0-281.5 | ND | .006 | 60 | 10 | 160 | 24 |
| 281.5 | 1.3 | 1.3 | 100 | | | | | | | | |
| 283.0 | 1.5 | 1.1 | 73 | | | | | | | | |
| 286.1 | 3.1 | 1.0 | 32 | | | | | | | | |
| 288.8 | 2.7 | 1.4 | 52 | | | | | | | | |
| 289.2 | 0.4 | 0.4 | 100 | | | | | | | | |
| 289.9 | 0.7 | 0.4 | 57 | | | | | | | | |
| 292.1 | 2.2 | 0.7 | 32 | | | | | | | | |
| 295.1 | 3.0 | 1.2 | 40 | 13890 | 292.1-295.1 | ND | .012 | 35 | 10 | 100 | 25 |
| 296.3 | 1.2 | 1.2 | 100 | | | | | | | | |
| 298.1 | 1.8 | 1.8 | 100 | | | | | | | | |
| 299.6 | 1.5 | 1.5 | 100 | | | | | | | | |
| 300.7 | 1.1 | 1.1 | 100 | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| | | | |
|---|---|---|---|
| Property | Silver Pick / Little Maud | Hole No. | K-5 |
| Location | Kantishna | Bearing at Collar | S 30°E |
| | | Inclination at Collar | -50° |
| Coord. - Collar N | 3 487 263.87 | | |
| E | 344 073.46 | Length | 195.7' |
| Elev. - Collar | 2786.75 | Core Size | BW44 - IAX |
| Date started | 7/19/83 | | |
| Completed | 7/23/83 | Logged by | VVT |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag | Cu (ppm) | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Overburden | | | | | | | | | | | | | | | |
| | | | | 7.2 | | | | | | | | | | | |
| Metafelsite (SF) lt. gry, f. grained, thin bedded, foliated, weak slicks, cut by qz and cal veinlets | 10 | | ¼" qz vlts w/ tr py, minor FeOx on fct | 9.3 | 2.1 | 1.1 | 52 | 13848 | 8.3-12.0 | .001 | ND | ND | ND | 65 | |
| 12-28': fault zone orange FeOx stained clay & crush @ 40° to core frags of SF with 60-70° foliation | | 70 | | 13.0 | 3.7 | 3.6 | 97 | 13849 | 12.0-15.2 | .006 | .032 | 10 | 60 | 120 | |
| | | | FeOx on fct, tr py | 15.2 | 2.2 | 2.2 | 100 | | | | | | | | |
| 17-20': SF fragments and crush | 20 | | 12-38': mod FeOx, yel-orng 1% py | 18.5 | 3.3 | 3.3 | 100 | 13850 | 15.2-21.4 | .003 | ND | 5 | 5 | 90 | |
| 20-28': clay and crush grey → orng → tan, talc & kaolin slicks on slt and bleached SF | | 60 | | 21.4 | 2.9 | 2.4 | 83 | | | | | | | | |
| | | | | 24.0 | 2.6 | 2.0 | 77 | 13851 | 21.4-28.0 | ND | ND | 95 | ND | 780 | |
| | | | | | 4.0 | 4.0 | 100 | | | | | | | | |
| 28-33': gry-tan bleached and altered SF foliation @ 50° | 30 | 50 | | 28.0 | 4.1 | 3.8 | 93 | 13852 | 28.0-33.0 | ND | ND | 95 | 5 | 520 | |
| fault clay @ 45° | | | 33-38': hvy brn-orng FeOx w/ 1-3% py and tr gn & sph, FeOx masks most of sulfides | 32.1 | 1.9 | 1.8 | 95 | | | | | | | | |
| 35-38': recemented fault breccia, qz and carbonate veinlets, random orientation, SF frags, chlor-cal-clay alteration | | | | 34.0 | 3.0 | 2.7 | 90 | 13853 | 33.0-37.0 | .010 | .035 | 185 | 45 | 730 | |
| 38-40.5': clay and crush, SF frags, qz vein | 40 | | 38-40.5': 1-5% py, gn, sph(?) weak zinc zap | 37.0 | 3.0 | 1.9 | 63 | 13854 | 37.0-40.0 | .004 | .012 | 140 | 10 | 610 | |
| 40.5-42.5': yel fault clay | | | | 40.0 | | | | | | | | | | | |
| 42.5-46': grey-grn heavy FeOx stn SF w/ occ qz eyes, chlor and white kaolin on fractures, recemented with 2 or more stages of qz, calcite, kaolin veining, brecciated | | | 42.5-46.0': brn-brk red & yel FeOx w/ py clasts, tr gn, tr py | | 4.0 | 3.4 | 85 | 13855 | 40.0-44.0 | .013 | .029 | 120 | 10 | .09% | |
| 46': fault clay @ 40°, qz sulfide at 20° | | | | 44.0 | | | | 13856 | 44.0-46.5 | .009 | 1.23 | 180 | 365 | .17% | |
| 47-54.6': recemented fault breccia with 50% qz vein material and 50% frags of chlor alt SF, qz-kao-chl bxd filling, heavy brn FeOx | 50 | | 46-47': yel fault clay w/ FeOx and py | 46.5 | 2.5 | 2.5 | 100 | | | | | | | | |
| | | | | 48.0 | 1.5 | 1.5 | 100 | 13857 | 46.0-49.8 | .082 | 8.67 | 495 | .42% | .43% | |
| | | | 47-54': hvy velvet brn → red FeOx, 1-3% py, minor gn(?) and sph, oxidation masks most sulfides, sulfide clasts on fcts. | 49.8 | 1.8 | 1.6 | 89 | 13858 | 49.8-54.6 | .029 | .085 | 380 | 45 | .39% | |
| 54.6': sharp 30° contact | | | | 54.0 | 4.2 | 4.2 | 100 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2' alt and brd SF; oxidized, 10% vein matl w/ micro → 1/4" qz veinlets | | | gyp, str FeOx on fct | | | | | | | | | | | | |
| 57-64.5': recemented fault breccia as at 47', bx and alt SF w/ 50% qz vein material | | | 57-64.5': py, aspy, gn (?), sp T.S. 1-4% much of the sulfides are oxidized and masked by brn-orng hvy FeOx | 59.1 | 5.1 | 5.1 | 100 | 13859 | 54.6-59.1 | .007 | .018 | 40 | 95 | 475 | |
| | | | | | 4.4 | 3.3 | 75 | 13860 | 59.1-64.5 | .014 | .062 | 45 | 380 | .11% | |
| sharp 70° contact | | | | 63.5 | | | | | | | | | | | |
| | 65 | | py & gn 6" 10% T.S. @ 63.7' | | 3.5 | 3.5 | 100 | | | | | | | | |
| Metafelsite (SF) m gry silicified and altered, cut by qz vlts, FeOx stn, micro to 1/4", chlor-gyp-FeOx on fcts, also clotty metamorphic qz | | 50 40 | 64.5-79.5': diss and remobilized py, aspy 1-2% T.S., tr gn and py along qz vlts | 67.0 | 3.0 | 3.0 | 100 | | | | | | | | |
| 2' brn SF with ~25% qz vein material, completely resilicified w/ chl SF → SCC | | | | 70.0 | 3.3 | 2.4 | 73 | | | | | | | | |
| | 75 | | | 73.3 | | | | | | | | | | | |
| 75-79.5': SF as above | | | | | 4.4 | 4.4 | 100 | | | | | | | | |
| | | | | 77.7 | 2.8 | 2.8 | 100 | | | | | | | | |
| 79.5-81.5': 2' milky white qz vein @ 40-55° shp cnt | | | 79.5-81.5': 1% py, weak FeOx, weak MnO, tr free Au (?), tr gn | 80.5 | | | | 13861 | 79.5-81.5 | .002 | .062 | 15 | 205 | .09% | |
| 81.5-85.9': fault zone @ 45-55° 90% FeOx oxidized | 85 | | 81.5-85.9': intense brick red to brn FeOx w/ sulfide casts and wk MnO | | 5.4 | 5.4 | 100 | 13862 | 81.5-85.9 | .013 | .029 | 25 | 180 | .11% | |
| 85.9-88.5': fault bx recemented & silicified SF and qz vein material | | | | 85.9 | | | | | | | | | | | |
| | | | 85.9-88.5': dissem and remob. py (?) and gn, hvy FeOx as above, 1-5% py, T.S. weak MnO | | 4.9 | 4.9 | 100 | 13863 | 85.9-88.5 | .062 | .062 | 45 | 60 | 310 | |
| SCC interbedded with SF ↳ dk grn, contorted bedding w/ metamorphic beddins and qz veinlets, FeOx stn qz, contorted foliation 30-60° | | 30 60 30 | | 90.8 | | | | | | | | | | | |
| | | | minor $CaCO_3$ on fcts gypsum on fcts | | 4.8 | 4.8 | 100 | | | | | | | | |
| | 95 | | | | | | | | | | | | | | |
| 96': reduced to IAX core | | 50 30 | tr py - 1% | 96.0 | | | | | | | | | | | |
| SCC gradational contact with SF chl → qz | | | | | 5.0 | 4.6 | 92 | | | | | | | | |
| | | | 101': heavy FeOx and gyp on fct. | 101.0 | | | | | | | | | | | |
| Metafelsite (SF) dk gry, siliceous w/ qz boudins, fractured and recemented with qz micro veinlets at random orientation, gypsum and kaolin on flw fcts | | | | | 4.9 | 4.5 | 92 | | | | | | | | |
| | 105 | | tr py - 1% + fine dissem shiny metallic | 105.9 | | | | | | | | | | | |
| grad increase of graphitic material and chlor | | | | | 4.5 | 4.5 | 100 | | | | | | | | |
| Mixture of SCC and SG dk gry to blk | | | 110.2-120.6': | 110.4 | | | | | | | | | | | |
| tight isoclinal folding (micro) | 115 | | mod-wk orng FeOx stn qz w/ 1-2% finely dissem py | | 10.2 | 8.7 | 85 | 13864 | 110.4-120.6 | ND | ND | 35 | ND | .32% | |
| slicks on fcts, mod FeOx, characteristic FeOx stn qz | | | | | | | | | | | | | | | |
| 120.6 grd cnt w/ 4" qz vein at 40° | | | | 120.6 | | | | | | | | | | | |
| Graphitic Phyllite (SG) dk gry to blk, minor 1/4-1" qz veinlets, FeOx stn along foliation | 125 | | tr - 1% py | 125.6 | 5.0 | 1.5 | 30 | 13865 | 120.6-125.6 | ND | .012 | 100 | 75 | .15% | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Graphitic Phyllite (SG) dk gry - blk, contorted foliation w/ qz vlts and metamorphic qz | | 45 | |
| banded red, tan, and blk zones 3-6" @ 133 and 138 w/ sulfides and FeOx | | 50 | 6" banded sulfides and FeOx py (?) sph 10% T.S. |
| core bkn, highly fct, faulted throughout section | 135 | | |
| abrupt cnt w/ fault clay, ∠ lost | | | 4" banded py & FeOx ± 5% T.S. |
| Metafelsite (SF) chlor +, m gry - grn banded, qz eye | | 50 | 140-168': 1% dissem py w/ local zones 1-6" of 1-5% py occ py along qz vlts |
| dist bedding - foliation all qz, chl, & G.M. | 145 | 60 | |
| broken frac core w/ chl, talc, and orange FeOx on frac | | 55 | |
| minor recementation of fracs by qz vlts across and along foliation | | | |
| | 155 | 60 | |
| minor bx & FeOx, qz cement | | 55 | |
| 6" fault gouge | 165 | | |
| grad cnt - chlor ↓, qz ↑, banding ↓ 168 - EOH | | 60 | |
| Metafelsite (SF) | | | tr - <1% dissem and euhedral py |
| med gry, thin bedded, siliceous, blotchy, numerous qz eyes and biotite | 175 | | |
| v. hard comp core | | 60 | |
| v. little fracturing, minor chlorite and orange FeOx along schistosity | | | |
| | 185 | | |
| 182-186': zone of 30% metamorphic qz | | 60 | |
| 183.6': 1" qz vlt @ 20° with crystalline qz | | | tr py and (?) gn |
| 191 - EOH slight inc in mafics and increase in chlor along fct | | 50 | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 125.6 | | | | | | | | | | | |
| | 1.2 | 1.2 | 100 | | | | | | | | |
| 126.8 | | | | | | | | | | | |
| | 1.1 | 0.5 | 45 | 13866 | 125.6-129.5 | ND | .012 | 35 | 10 | 255 | |
| 127.9 | | | | | | | | | | | |
| | 0.4 | 0.4 | 100 | | | | | | | | |
| 128.3 | | | | | | | | | | | |
| | 1.2 | 0.9 | 67 | | | | | | | | |
| 129.5 | | | | | | | | | | | |
| | 4.2 | 2.2 | 53 | 13867 | 129.5-133.7 | ND | .018 | 25 | 15 | 65 | |
| 133.7 | | | | | | | | | | | |
| | 2.9 | 1.0 | 34 | | | | | | | | |
| 136.6 | | | | 13868 | 133.7-138.2 | 002 | .085 | 60 | 15 | 60 | |
| | 1.6 | 1.2 | 75 | | | | | | | | |
| 138.2 | | | | | | | | | | | |
| | 2.9 | 2.7 | 93 | 13869 | 138.2-140.0 | .006 | .062 | 40 | 15 | 295 | |
| 141.1 | | | | | | | | | | | |
| | 3.1 | 3.1 | 100 | | | | | | | | |
| 144.2 | | | | | | | | | | | |
| | 1.9 | 1.9 | 100 | | | | | | | | |
| 146.1 | | | | | | | | | | | |
| | 3.6 | 1.9 | 53 | | | | | | | | |
| 149.7 | | | | | | | | | | | |
| | 5.0 | 4.7 | 94 | | | | | | | | |
| 154.7 | | | | | | | | | | | |
| | 8.6 | 7.8 | 91 | 13870 | 154.7-163.3 | ND | ND | ND | ND | 60 | |
| 163.3 | | | | | | | | | | | |
| | 5.2 | 5.2 | 100 | | | | | | | | |
| 168.5 | | | | | | | | | | | |
| | 3.4 | 3.4 | 100 | | | | | | | | |
| 171.9 | | | | | | | | | | | |
| | 9.7 | 9.7 | 100 | | | | | | | | |
| 181.6 | | | | | | | | | | | |
| | 8.8 | 8.8 | 100 | | | | | | | | |
| 190.4 | | | | | | | | | | | |
| | 5.3 | 5.3 | 100 | 13871 | 190.4-195.7 | ND | .018 | 25 | ND | 25 | |
| 195.7 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Little Maud
Location: Kantishna District
Coord. - Collar N: 3487331.33
E: 344042.58
Elev. - Collar: 2736.44
Date started: 7/24/83
Completed: 7/28/83

Hole No.: K-6
Bearing at Collar: S 30°E
Inclination at Collar: -50°
Length: 186.0 feet
Core Size: BW44 - IAX
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag oz/ton | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Overburden | | | | | | | | | | | | | | | |
| Metafelsite (SF) med gry, f-m grained musc-bio-qz schist, minor Fe stained calite veinlets (<1 mm), sl tr specularite on fracture surfaces | 10 | 55 | yellow-orange to orange FeOx on fractures, specularite and pyrolusite on some fractures, no sulfides noted | 7.0 / 10.4 | 3.4 | 2.9 | 85 | | | | | | | | 1 |
| | | | | 15.0 | 4.6 | 3.9 | 85 | | | | | | | | |
| Metafelsite (SF) as above, with more calcite veinlets, smaller veinlets at 45° to larger (1 mm) veinlets | 20 | 55 | FeOx as above, some red-orange colors, more pervasive than above | 16.5 | 3.5 | 2.7 | 77 | 13892 | 17.0-18.5 | .004 | .006 | ND | ND | 15 | |
| fault gouge at 24' recrystallized calcite in discontinuous veinlets | | | | 23.8 | 5.3 | 4.9 | 92 | | | | | | | | 2 |
| fractured at 27' 2 cm wide qz vein at 28.5' open spaced filling, a few vugs | | | | 27.2 / 28.1 | 3.4 | 3.1 | 91 | 13893 | 26.0-27.2 | ND | ND | 10 | ND | 20 | |
| Metafelsite (SF) grn-gry, f-m grained, chlor-musc-qz schist, small (<1 mm) qz and carb veinlets | 30 | 52 | qz veinlets and more intense fracturing with FeOx, no sulfides noted, FeOx stained fractures parallel to and cross cutting foliation | | 0.9 | 0.9 | 100 | 13894 | 28.1-32.0 | ND | .018 | 30 | 45 | 45 | |
| as above but med gry with less chlor, a few qz veinlets up to 7 mm, principal fractures at 20°, contains bio, some dendritic MnO on fracture surfaces | 40 | 50 | | 36.8 / 37.4 | 8.7 | 8.6 | 99 | | | | | | | | 3 |
| qz veinlets up to 5 mm, some minor offsets, clays and FeOx on fractures | | 50 | FeOx on fractures, no sulfides noted | 40.6 / 41.4 | 0.6 | 0.5 | 83 | | | | | | | | 4 |
| qz vein at 46.2', qz cemented breccia with clasts up to 1.5 cm, zone is ~15 cm thick | 50 | | | 45.6 / 46.2 / 47.1 / 48.6 | 3.2 / 0.8 / 4.2 / 0.6 / 0.9 / 1.5 | 1.8 / 0.7 / 4.1 / 0.6 / 0.9 / 1.4 | 56 / 87 / 98 / 100 / 100 / 93 | 13895 | 46.2-48.6 | .006 | ND | ND | 15 | 75 | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF) m gry, m-f grained, musc-bio-qz schist, numerous FeOx stained fractures and carbonate veinlets, some with solution cavities, 30° fractures, 10 cm thick qz vein at 53' (brecciated and recrystallized) isoclinal deformation, calcite needles on some fractures | | 55 | sericite associated with quartz veinlet, no sulfides noted |
| intense fracturing at 62.5 | 60 | 55 | |
| Vein quartz — cnt. missing ~68' fractured, recrystallized, FeOx and carbonate on fracture surfaces, some specularite, minor amounts of clayey limonite stained gouge material on some fracture surfaces | 70 | 45 | minor FeOx staining, no sulfides noted |
| cnt. missing ~76' | | | |
| Metafelsite (SF) m gry, m-f grained, musc-bio-qz schist, 1-5 mm thick qz veinlets with thin limonite selvages | 80 | | |
| cross cutting quartz veinlets | | | FeOx staining on fractures, no sulfides noted |
| Metafelsite (SFQ) as above but with conspicuous qz eyes | | | |
| | 90 | 55 | |
| calcite veinlets 3 cm wide at 91.5' parallel to foliation | | 40 | |
| calcite, FeOx, and specularite on fracture surfaces, some acicular recrystallized calcite crystals | | | |
| clayey gouge material at 98', 102', 107' thin calcite veinlets (0.25 mm) parallel to foliation | 100 | | |
| dk grn gry clayey gouge | | | |
| Chlorite phyllite (SCP) fractured, minor calcite veinlets | | | pervasive limonite staining on fractures |
| | | 40 | |
| | 110 | | pervasive FeOx 109'-113' and 115'-117' |
| Graphitic schist (SG) clayey | | | |
| breccia with quartz cement | 120 | | |

| RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4.0 | 4.0 | 100 | | | | | | | | |
| 52.6 | 1.9 | 1.8 | 95 | 13896 | 52.6-53.0 | .004 | .006 | ND | ND | 10 | 5 |
| 54.5 | | | | | | | | | | | |
| | 3.3 | 3.3 | 100 | | | | | | | | |
| 57.8 | | | | | | | | | | | |
| | 4.2 | 4.0 | 95 | | | | | | | | 6 |
| 62.0 | | | | | | | | | | | |
| | 1.8 | 1.3 | 72 | | | | | | | | |
| 63.8 | 1.1 | 1.0 | 91 | | | | | | | | |
| 64.9 | | | | | | | | | | | |
| | 3.8 | 3.7 | 97 | 13897 | 64.9-68.0 | ND | ND | ND | 5 | 15 | |
| 68.7 | | | | | | | | | | | 7 |
| | 3.9 | 3.4 | 87 | | | | | | | | |
| 72.6 | | | | 13898 | 68.7-76.0 | ND | ND | ND | ND | 5 | |
| | 1.5 | 0.5 | 33 | | | | | | | | |
| 74.1 | 0.7 | 0.7 | 100 | | | | | | | | |
| 74.8 | 1.5 | 1.5 | 100 | | | | | | | | |
| 76.3 | 1.1 | 1.1 | 100 | | | | | | | | |
| 77.4 | | | | | | | | | | | |
| | 1.7 | 0.5 | 29 | | | | | | | | |
| 79.1 | 0.3 | 0.3 | 100 | | | | | | | | 8 |
| 79.4 | 2.0 | 2.0 | 100 | | | | | | | | |
| 81.4 | | | | | | | | | | | |
| | 2.3 | 2.3 | 100 | | | | | | | | |
| 83.7 | 1.3 | 1.3 | 100 | | | | | | | | |
| 85.0 | 1.3 | 1.3 | 100 | 13899 | 84.0-86.3 | ND | ND | ND | ND | 15 | |
| 86.3 | 1.0 | 1.0 | 100 | | | | | | | | |
| 87.3 | | | | | | | | | | | |
| | 3.1 | 3.0 | 97 | 13900 | 88.0-91.0 | .020 | .012 | ND | 10 | 15 | 9 |
| 90.4 | 0.9 | 0.8 | 89 | | | | | | | | |
| 91.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| 92.0 | 0.9 | 0.6 | 66 | | | | | | | | |
| 92.9 | 1.0 | 1.0 | 100 | | | | | | | | |
| 93.9 | 1.4 | 1.0 | 71 | | | | | | | | |
| 95.3 | 0.9 | 0.9 | 100 | | | | | | | | |
| 96.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| 97.3 | 0.8 | 0.8 | 100 | | | | | | | | 10 |
| 98.1 | 0.4 | 0.1 | 25 | | | | | | | | |
| 98.5 | 1.5 | 1.4 | 93 | | | | | | | | |
| 100.0 | 0.2 | 0.2 | 100 | | | | | | | | |
| 100.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| 101.3 | 1.0 | 1.0 | 100 | | | | | | | | |
| 102.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| 103.0 | 0.8 | 0.8 | 100 | | | | | | | | |
| 103.8 | 0.5 | 0.5 | 100 | | | | | | | | |
| 104.3 | 0.2 | 0.2 | 100 | | | | | | | | 11 |
| 104.5 | 1.5 | 0.6 | 40 | | | | | | | | |
| 106.0 | 1.0 | 0.6 | 60 | | | | | | | | |
| 107.0 | 1.4 | 0.8 | 57 | | | | | | | | |
| 108.4 | 0.9 | 0.9 | 100 | | | | | | | | |
| 109.3 | 1.0 | 0.7 | 70 | 13872 | 108.4-113.0 | .013 | .029 | 15 | 20 | 290 | |
| 110.3 | | | | | | | | | | | |
| | 2.7 | 2.4 | 89 | | | | | | | | |
| 113.0 | | | | | | | | | | | |
| | 2.8 | 2.7 | 96 | | | | | | | | |
| 115.8 | | | | | | | | | | | 12 |
| | 2.2 | 2.2 | 100 | 13873 | 110-114.0 | ND | .032 | 20 | 40 | 45 | |
| 118.0 | 1.6 | 1.1 | 69 | | | | | | | | |
| 119.6 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Graphitic schist (SG) black, discontinuous qz veinlets parallel to foliation, good foliation cleavage | | 50 | orange FeOx on fractures | 120.4 | 1.7 | 1.7 | 100 | | | | | | | | |
| | | | | 122.1 | 2.4 | 0.7 | 29 | | | | | | | | |
| | | | | 124.5 | 1.3 | 0.4 | 31 | | | | | | | | |
| qz blebs up to 5.0 mm | | | | 125.8 | | | | | | | | | | | |
| brecciated qz at 127' and 130' | | | | | 2.5 | 2.0 | 80 | 13874 | 126.0-127.0 | ND | ND | 60 | ND | 100 | |
| mineralized cavities in qz | | | slight limonite staining associated with qz veinlets | 128.3 | | | | | | | | | | | 13 |
| Graphitic schist (SG) as above, crenulations, irregular and discontinuous qz veinlets | 130 | 50 | | | 4.7 | 2.8 | 60 | | | | | | | | |
| | | 70 | | 133.0 | | | | | | | | | | | |
| in dk grey color 133-136' | | | | | 2.4 | 1.3 | 54 | | | | | | | | |
| black, fissile graphitic schist | | | brecciated FeOx stained qz, yellow orange to red oxides, no sulfides noted | 135.4 | 1.0 | 0.9 | 90 | | | | | | | | |
| | | | | 136.4 | 3.5 | 1.0 | 29 | | | | | | | | |
| | 140 | 45 | | 139.9 | | | | | | | | | | | |
| unconsolidated 140-147' | | | | | 5.1 | 0.2 | 4 | | | | | | | | 14 |
| | | | | 145.0 | 1.9 | 1.5 | 79 | | | | | | | | |
| qz and limonite cemented breccia at 148', clasts may be SF | | | | 146.9 | 0.4 | 0.7 | 78 | | | | | | | | |
| | | | | 147.8 | 1.0 | 0.9 | 90 | 13875 | 147.8-148.8 | .002 | ND | 10 | ND | 140 | |
| 150.5' thin zone of clayey graphite at 149' cnt @ 55° | 150 | | orange-brn FeOx on fracture surfaces, tr t v. fine up (or sb?) on some fractures, sl tr py and gn (?) | 148.8 | 2.0 | 1.7 | 85 | | | | | | | | |
| Metafelsite (SFQ) grn gry, fsp-qz-chlorite schist, segregated qz and chlor layers, fluxion structure, cataclastic foliation | | 70 | | 150.8 | 2.9 | 2.9 | 100 | 13876 | 149.0-153.7 | ND | .018 | 10 | ND | 50 | |
| REDUCED TO IAX CORE | | | | 153.7 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 154.4 | 0.7 | 0.6 | 86 | | | | | | | | |
| | | | | 155.1 | 1.0 | 1.0 | 100 | | | | | | | | |
| Metafelsite (SF) dk gry, fractured, qz veinlets, 10 cm thick qz vein at 160, minor white clay on fracture surfaces | | | | 156.1 | 1.3 | 0.3 | 23 | | | | | | | | 15 |
| | | | sl tr pyrite | 157.4 | 1.9 | 1.0 | 53 | | | | | | | | |
| | 160 | | | 159.3 | 0.9 | 0.4 | 44 | | | | | | | | |
| | | | | 160.2 | 0.8 | 0.4 | 50 | 13877 | 160.2-161.0 | .010 | .018 | 5 | ND | 15 | |
| | | | | 161.0 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | 65 | | 161.7 | 0.6 | 0.6 | 100 | | | | | | | | |
| Metafelsite (SFQ) fractured but well lithified, grn gry | | | | 162.3 | | | | | | | | | | | |
| | | | sl tr py, ap, gn (?) | | 3.6 | 3.0 | 83 | 13878 | 164.0-165.9 | .001 | .011 | 5 | 5 | 65 | |
| breccia clasts up to 5.0 cm | | | | 165.9 | | | | | | | | | | | |
| | | | | | 2.6 | 1.9 | 73 | | | | | | | | 16 |
| Graphitic schist (SG) 168.2' cnt @ 40° black, fissile, qz veinlets up to 2 cm, limonite selvages on some veinlets | 170 | 42 | FeOx on fracture surfaces | 168.5 | 1.6 | 1.6 | 100 | 13879 | 168.5-170.1 | ND | .006 | 40 | 15 | 135 | |
| | | | | 170.1 | 1.4 | 1.2 | 86 | | | | | | | | |
| | | | | 171.5 | 1.0 | 1.0 | 100 | | | | | | | | |
| slightly vuggy | | | | 172.5 | | | | | | | | | | | |
| | | | | | 3.3 | 3.3 | 100 | | | | | | | | |
| carbonaceous in places | | | | 175.8 | | | | | | | | | | | |
| | | | | | 3.7 | 3.7 | 100 | | | | | | | | 17 |
| fractured with irregular, discontinuous qz blebs | 180 | | | 179.5 | 0.5 | 0.5 | 100 | | | | | | | | |
| | | | FeOx on fractures | 180.0 | 2.0 | 1.3 | 65 | 13880 | 180.0-182.0 | ND | .011 | 80 | 25 | 185 | |
| | | | | 182.0 | | | | | | | | | | | |
| | | | | | 2.5 | 1.9 | 76 | | | | | | | | |
| black, fissile graphitic schist, as above | | 45 | | 184.5 | 1.5 | 1.0 | 67 | | | | | | | | 18 |
| | | | | 186.0 | | | | | | | | | | | |
| | | EOH | | | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

| | |
|---|---|
| Property Silver Pick | Hole No. K-7 |
| Location Kantishna | Bearing at Collar N 30°W |
| | Inclination at Collar -55° |
| Coord. - Collar N 3 486 978.96 | |
| E 344 227.96 | Length 281.9' |
| Elev. - Collar 2909.0 | Core Size BW44 - IAX |
| Date started 7/29/83 | |
| Completed 8/4/83 | Logged by CHC |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag | Cu (percent) | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) m gry, fine grained, foliated with thin discontinuous fsp segregations, ≤1% biotite, schistose | | | | | 5.1 | 1.4 | 27 | | | | | | | | |
| slight calcite coating on some fractures | | | FeOx on fracture surfaces no sulfides noted | 5.1 | 3.4 | 2.9 | 85 | 12626 | 5.1-8.5 | .016 | ND | ND | .01 | .014 | |
| | 10 | | | 8.5 | 3.7 | 1.5 | 41 | | | | | | | | |
| brecciated: 12-14' clasts to 5 cm, qz cement with some calcite cement, clay | | | dendritic MnO on fractures limonite stained clay | 12.2 | 2.0 | 1.2 | 60 | | | | | | | | 1 |
| | | | | 14.2 | 1.8 | 1.6 | 89 | | | | | | | | |
| | | | | 15.0 | | | | | | | | | | | |
| | | | | 16.0 | 3.2 | 0 | 0 | | | | | | | | |
| as above fsp → clay, minor calcite veinlets (≤1 mm) with FeOx selvages, calcite with acicular crystals on fracture surfaces | 20 | | FeOx selvages on calcite veinlets | 19.2 | 4.8 | 3.1 | 66 | | | | | | | | |
| mylonite on 60° fracture at 28' also calcite, clay, MnO | | | | 24.0 | 3.1 | 3.0 | 97 | 12627 | 24.0-27.1 | ND | ND | ND | .008 | .013 | 2 |
| 8 cm qz vein at 31' | 30 | | | 27.1 | 2.2 | 2.0 | 91 | | | | | | | | |
| | | | | 29.3 | 0.5 | 0.5 | 100 | | | | | | | | |
| Schist (SCP) dk gry, thinly bedded, slightly graphitic, foliated, irregular shaped qz/fsp boudins up to 15 mm clayey FeOx on fracture surfaces also calcite | | | | | 3.5 | 3.4 | 97 | | | | | | | | |
| | | | | 33.3 | 3.1 | 3.0 | 97 | 12628 | 33.3-36.4 | ND | ND | ND | ND | .003 | 3 |
| minor carbonate veinlets parallel to foliation | 40 | | | 36.4 | 2.5 | 2.5 | 100 | | | | | | | | |
| | | | | 38.9 | 2.0 | 1.8 | 90 | | | | | | | | |
| Metafelsite (SF) m gry, gradational change from SCP (difficult to distinguish units) | | | FeOx stn, no sulfides noted | 40.9 | 4.2 | 4.1 | 98 | | | | | | | | |
| minor FeOx coated calcite veinlets parallel to foliation and crosscutting | | | | 45.1 | 3.9 | 3.5 | 90 | | | | | | | | 4 |
| | 50 | | | 49.0 | 1.5 | 0.5 | 33 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF)<br>med gry, fine grained, foliated, lacks biotite and qz eyes, as above | | | minor FeOx on fracture surfaces and on calcite veinlets |
| | | 75 | |
| | 60 | | |
| calcite veinlets up to 1 cm thick | | | |
| | | 55 | |
| | | 55 | |
| minor qz veinlets<br>some powdery carbonate on fractures | 70 | | qz vein is FeOx stained |
| | | 50 | |
| | 80 | | |
| qz veinlets with FeOx stained clay on fracture surfaces, up to 3 cm thick, cavities in veins | | | FeOx stn<br>no sulfides noted |
| | | 42 | |
| Metafelsite (SF)<br>as above, mylonitized fracture surfaces, fractured qz and calcite veinlets, FeOx stained unconsolidated matrix | 90 | | |
| breccia near contact | | | |
| Calcite vein<br>pure, well lithified, good cleavages, tr solution cavities | 100 | | no mineralization, v. sl limonite staining in places |
| Metafelsite (SF)<br>m gry, foliated, as above<br>minor lim stained qz veinlets, limonitic clay on fracture surfaces | | 35 | |
| veinlets have FeOx selvages | 110 | | |
| SF is more strongly fractured than the veins | | 55 | |
| | | 25 | |
| up to 3% disseminated fsp porphyroblasts | | | |
| | 120 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 51.5 | | | | | | | | | | | |
| | 1.1 | 1.1 | 100 | | | | | | | | |
| 52.6 | | | | | | | | | | | |
| 53.5 | 0.9 | 0.7 | 78 | | | | | | | | |
| | 2.3 | 1.7 | 74 | 12629 | 53.5-55.8 | ND | ND | ND | ND | .006 | |
| 55.8 | | | | | | | | | | | |
| 56.7 | 0.9 | 0.7 | 78 | | | | | | | | 5 |
| | 3.6 | 3.1 | 86 | | | | | | | | |
| 60.3 | | | | | | | | | | | |
| | 0.8 | 0.8 | 100 | | | | | | | | |
| 61.1 | | | | | | | | | | | |
| | 0.7 | 0.7 | 100 | | | | | | | | |
| 61.8 | | | | | | | | | | | |
| | 0.9 | 0.6 | 67 | | | | | | | | |
| 62.7 | | | | | | | | | | | |
| | 1.7 | 0.9 | 53 | | | | | | | | |
| 64.4 | | | | | | | | | | | |
| | 1.7 | 1.3 | 76 | | | | | | | | |
| 66.1 | | | | | | | | | | | |
| | 1.9 | 1.9 | 100 | | | | | | | | 6 |
| 68.0 | | | | | | | | | | | |
| | 2.9 | 2.9 | 100 | 12630 | 69.0-70.9 | ND | ND | ND | .006 | .013 | |
| 70.9 | | | | | | | | | | | |
| | 1.9 | 1.9 | 100 | | | | | | | | |
| 72.8 | | | | | | | | | | | |
| | 0.2 | 0.2 | 100 | | | | | | | | |
| 73.0 | | | | | | | | | | | |
| | 2.1 | 2.1 | 100 | | | | | | | | |
| 75.1 | | | | | | | | | | | |
| | 1.0 | 1.0 | 100 | | | | | | | | |
| 76.1 | | | | | | | | | | | |
| | 0.5 | 0 | 0 | | | | | | | | |
| 76.6 | | | | | | | | | | | |
| | 2.2 | 2.2 | 100 | | | | | | | | 7 |
| 78.8 | | | | | | | | | | | |
| | 1.3 | 0.5 | 38 | | | | | | | | |
| 80.1 | | | | | | | | | | | |
| | 1.0 | 1.0 | 100 | | | | | | | | |
| 81.1 | | | | | | | | | | | |
| | 1.4 | 0.5 | 36 | | | | | | | | |
| 82.5 | | | | | | | | | | | |
| | 0.9 | 0.9 | 100 | ~~12631~~ | ~~82.5-83.4~~ | ~~ND~~ | ~~ND~~ | ~~.002~~ | ~~.002~~ | ~~.004~~ | |
| 83.4 | | | | | | | | | | | |
| | 3.2 | 3.2 | 100 | | | | | | | | 8 |
| 86.6 | | | | | | | | | | | |
| | 1.4 | 1.1 | 79 | | | | | | | | |
| 88.0 | | | | | | | | | | | |
| | 2.0 | 1.6 | 80 | | | | | | | | |
| 90.0 | | | | | | | | | | | |
| | 1.7 | 1.0 | 59 | | | | | | | | |
| 91.7 | | | | | | | | | | | |
| | 1.4 | 1.2 | 80 | | | | | | | | |
| 93.1 | | | | | | | | | | | |
| | 1.5 | 1.2 | 80 | | | | | | | | |
| 94.6 | | | | | | | | | | | |
| | 0.7 | 0.5 | 71 | | | | | | | | |
| 95.3 | | | | | | | | | | | |
| | 3.3 | 3.1 | 94 | 12632 | 95.3-97.0 | ND | ND | ND | ND | ND | 9 |
| 98.6 | | | | | | | | | | | |
| | 1.6 | 1.6 | 100 | | | | | | | | |
| 100.2 | | | | | | | | | | | |
| | 6.8 | 5.8 | 85 | | | | | | | | 10 |
| 107.0 | | | | | | | | | | | |
| | 1.5 | 1.4 | 93 | | | | | | | | |
| 108.5 | | | | | | | | | | | |
| | 0.5 | 0.3 | 60 | | | | | | | | |
| 109.0 | | | | | | | | | | | |
| | 1.5 | 1.0 | 67 | | | | | | | | |
| 110.5 | | | | | | | | | | | |
| | 0.7 | 0.3 | 43 | | | | | | | | |
| 111.2 | | | | | | | | | | | |
| | 1.8 | 1.3 | 72 | | | | | | | | |
| 113.0 | | | | | | | | | | | |
| | 0.9 | 0.5 | 55 | | | | | | | | |
| 113.9 | | | | | | | | | | | |
| | 3.7 | 0.4 | 11 | | | | | | | | 11 |
| 117.6 | | | | | | | | | | | |
| | 1.4 | 1.0 | 71 | | | | | | | | |
| 119.0 | | | | 12633 | 119.0-120.3 | ND | ND | ND | .008 | .022 | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF) m gry, 2% fsp porphyroblasts, fine grained, foliated, minor calcite veinlets | | 45 | FeOx staining on fractures |
| 128' limonite selvage on qz veinlets cnt @ 55° | | | |
| brecciated: 128-135' 70% calcite + quartz cement, clasts to 5 mm, cross cutting calcite veinlets, many small voids, | 130 | | a couple of very small py(?) grains on breccia fragments; lim staining |
| POOR RECOVERY | 140 | | |
| clayey gouge with qz frags 157-158' | 150 | | lim stn |
| lim clay at 160 | | | |
| same mylonitization of fracture surfaces on fragments of metafelsite | 160 | | no sulfides noted |
| Metafelsite (SF) m gry, discontinuous fsp/qz segregations, thin Fe-stained calcite veinlets | | 50 | some pervasive FeOx staining |
| 169' minor qz and carbonate veinlets cnt. est @ 65° | 170 | 50 | strongly FeOx stained zone 166-169', orange to red |
| Graphitic schist (SG) foliated, discontinuous qz veinlets, weak fsp → cal + clay, thin laminations | | 75 | v. sl tr py(?) |
| vuggy qz vein with FeOx at 177' | 180 | | thin wisp of metallic mineral in qz vein, H3 gry streak, could be Sb or tet |
| Graphitic schist (SG) as above | | 65 | sl tr py |
| FeOx stained qz veinlets parallel to foliation | 190 | 60 | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 120.3 | 1.3 | 1.0 | 77 | | | | | | | | |
| 122.4 | 2.1 | 1.1 | 52 | | | | | | | | |
| 122.8 | 0.4 | 0.3 | 75 | | | | | | | | |
| 123.9 | 1.1 | 0.7 | 64 | | | | | | | | |
| | 2.3 | 0.7 | 30 | | | | | | | | |
| 126.2 | 0.8 | 0.3 | 38 | | | | | | | | |
| 127.0 | 0.8 | 0 | 0 | | | | | | | | |
| 127.8 | 0.4 | 0.4 | 100 | 12634 | 128.2-129.0 | .014 | ND | ND | ND | ND | |
| 128.2 | 0.8 | 0.7 | 88 | | | | | | | | |
| 129.0 | 0.3 | 0.3 | 100 | | | | | | | | |
| 129.3 | 1.7 | 0.8 | 47 | | | | | | | | |
| 132.0 | | | | | | | | | | | |
| | 3.0 | 0.1 | 3 | | | | | | | | |
| 135.0 | | | | | | | | | | | |
| | 3.0 | 0.5 | 17 | | | | | | | | |
| 138.0 | | | | | | | | | | | |
| | 3.1 | 0.3 | 10 | 12635 | 138.0-141.1 | ND | ND | ND | ND | ND | |
| 141.1 | | | | | | | | | | | |
| | 4.9 | 0.1 | 2 | | | | | | | | |
| 146.0 | | | | | | | | | | | |
| 147.7 | 1.7 | 0 | 0 | | | | | | | | 12 |
| | 2.3 | 0 | 0 | | | | | | | | |
| 150.0 | | | | | | | | | | | |
| | 3.0 | 0.2 | 7 | | | | | | | | |
| 153.0 | | | | | | | | | | | |
| 154.6 | 1.6 | 0 | 0 | | | | | | | | |
| 156.2 | 1.6 | 0.1 | 6 | | | | | | | | |
| 157.8 | 1.6 | 0.2 | 13 | | | | | | | | |
| 159.4 | 1.6 | 0.6 | 38 | | | | | | | | |
| 159.7 | 0.3 | 0.3 | 100 | 12636 | 159.4-162.5 | .005 | ND | .002 | .002 | .005 | |
| 160.5 | 0.8 | 0.4 | 50 | | | | | | | | |
| 161.1 | 0.6 | 0.5 | 83 | | | | | | | | |
| 162.1 | 1.0 | 0.6 | 60 | | | | | | | | |
| 162.5 | 0.4 | 0.4 | 100 | | | | | | | | |
| 163.5 | 1.0 | 0.5 | 50 | | | | | | | | |
| | 1.7 | 1.6 | 94 | | | | | | | | |
| 165.2 | 0.3 | 0.3 | 100 | | | | | | | | 13 |
| 165.5 | 1.5 | 1.5 | 100 | | | | | | | | |
| 167.0 | 2.0 | 2.0 | 100 | 12637 | 167.0-169.0 | .028 | ND | ND | .004 | .008 | |
| 169.0 | 0.8 | 0.8 | 100 | | | | | | | | |
| 169.8 | 1.8 | 1.8 | 100 | | | | | | | | |
| 171.6 | 0.9 | 0.9 | 100 | | | | | | | | |
| 172.5 | 2.3 | 1.6 | 70 | | | | | | | | 14 |
| 174.8 | 1.6 | 1.2 | 75 | | | | | | | | |
| 175.4 | 0.6 | 0.6 | 100 | | | | | | | | |
| 176.0 | 0.5 | 0.5 | 100 | | | | | | | | |
| 176.5 | 1.9 | 1.9 | 100 | 12638 | 176.5-178.4 | ND | ND | .006 | .006 | .016 | |
| 178.4 | 0.9 | 0.9 | 100 | | | | | | | | |
| 179.3 | 2.0 | 1.8 | 90 | | | | | | | | |
| 181.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| 182.0 | 2.0 | 2.0 | 100 | | | | | | | | 15 |
| 184.0 | 1.4 | 1.3 | 93 | | | | | | | | |
| 185.4 | 0.4 | 0.4 | 100 | | | | | | | | |
| 185.8 | 4.8 | 4.8 | 100 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Graphitic schist (SG) black, foliated, principal cleavage along foliation, minor lim stained qz veinlets | | 62 | | 190.6 | 4.7 | 4.0 | 85 | | | | | | | | 16 |
| | | | sl tr py | 194.7–195.2 | 0.5 | 0.5 | 100 | | | | | | | | |
| lim coating on fracture surfaces | | | | | | | | 12639 | 195.2-197.5 | ND | ND | .006 | .004 | .012 | |
| | 200 | | | | 7.8 | 7.8 | 100 | | | | | | | | 17 |
| fissile | | 75 | sl tr py | 203.0–203.8 | 0.8 | 0.7 | 88 | | | | | | | | |
| | | | | | 7.0 | 6.9 | 99 | | | | | | | | 18 |
| | 210 | | | | | | | | | | | | | | |
| as above | | | tr+ py increasing py, glomerophyric frambboidal py up to 3 mm, conforms to foliation | 210.8–213.4 | 2.6 | 2.5 | 96 | | | | | | | | |
| | | | up to 2% py | | 5.4 | 5.4 | 100 | 12640 | 215.4-218.8 | ND | ND | .004 | ND | .013 | 19 |
| poorly lithified at 217' | 220 | 60 | | 218.8 | 3.1 | 3.1 | 100 | | | | | | | | |
| Graphitic schist (SG) as above | | 60 | | 221.9–223.3 | 1.4 | 1.0 | 71 | | | | | | | | |
| | | | tr to 1% py | | 5.6 | 4.8 | 86 | | | | | | | | |
| gouge zone at 229' | 230 | | | 228.9 | 1.7 | 1.7 | 100 | 12641 | 228.9-231.6 | ND | ND | .004 | ND | .013 | 20 |
| | | | | 231.6–232.6 | 1.0 | 0.9 | 90 | | | | | | | | |
| | | 67 | | | | | | | | | | | | | |
| Graphitic schist (SG) as above | | | | | 8.4 | 8.4 | 100 | | | | | | | | 21 |
| | 240 | | | | | | | 12642 | 238.0-241.0 | ND | ND | .006 | ND | .012 | |
| | | | up to 5% py | 241.0–242.2 | 1.2 | 1.0 | 83 | | | | | | | | |
| | | 58 | | 244.8 | 2.6 | 2.6 | 100 | | | | | | | | |
| | | 58 | 1% py | 247.0 | 2.2 | 1.2 | 55 | | | | | | | | |
| | 250 | | | | 5.2 | 4.9 | 94 | | | | | | | | 22 |
| qz vein 5 cm thick slight FeOx staining | | 65 | no py in qz veinlets slight FeOx staining | 252.2 | | | | 12643 | 252.2-254.0 | ND | ND | .006 | .002 | .014 | |
| | | 47 | | | 6.0 | 6.0 | 100 | | | | | | | | |
| | | | tr+ to 2% py | | | | | | | | | | | | 23 |
| contact at 260' - bleached zone no evidence of movement | 260 | 0 | 8 cm of FeOx stn at contact | 258.2 | | | | 12644 | 258.2-261.2 | ND | ND | ND | .004 | .012 | |

| LITHOLOGY; ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SFQ)<br>m gry, foliated, a few very thin (<1mm) calcite layers parallel to foliation, 1% + augen qz eyes<br>at least 2 stages of qz veining at 267'<br>mylonitized fracture surfaces at 268' | 270 | 40<br>60 | tr py near contact |
| gouge at 274-275'<br>some vein qz<br>minor carbonate on some fracture surfaces | 280 | 60<br>EOH | FeOx on fracture surfaces<br>lim staining, no sulfides noted |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 261.2 | 3.0 | 2.7 | 90 | | | | | | | | |
| 264.0 | 2.8 | 2.8 | 100 | | | | | | | | |
| 266.0 | 2.0 | 2.0 | 100 | 12645 | 264.0-266.0 | | | | | | |
| 267.8 | 1.8 | 1.8 | 100 | | | | | | | | 24 |
| 270.0 | 2.2 | 1.8 | 82 | | | | | | | | |
| 270.5 | 0.5 | 0.5 | 100 | | | | | | | | |
| 272.0 | 1.5 | 1.1 | 100 | | | | | | | | |
| 274.0 | 2.0 | 1.8 | 90 | | | | | | | | |
| 275.2 | 1.2 | 1.1 | 92 | 12646 | 274.0-275.5 | | | | | | |
| 277.7 | 2.5 | 2.4 | 96 | | | | | | | | 25 |
| 279.0 | 1.3 | 1.3 | 100 | | | | | | | | |
| 280.0 | 1.0 | 0.8 | 80 | 12647 | 279.0-280.0 | | | | | | |
| 281.9 | 1.9 | 1.9 | 100 | | | | | | | | 26 |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Iron Gulch
Hole No.: K-8
Location: Kantishna
Bearing at Collar: N 45° W
Inclination at Collar: -50
Coord. - Collar N: 3 488 364.41
E: 348 963.49
Length: 182.7'
Elev. - Collar: 2464.6
Core Size: BW44 - IAX
Date started: 8/5/83
Completed: 8/8/83
Logged by: CHC

## LITHOLOGY, ALTERATION, MISC.

Metafelsite (SF)
med gry, fine grained to very fine grained, foliated, thin fsp/qz laminations, chloritic, tr qz boudins, fracture surfaces are limonite stained, clayey and oxidized 3.0-8.5'

limonite selvages on qz veinlets

fractured: 13.4-15.0'

2 cm qz vein at 17.5' conformable with 50° foliation slight offset

Metafelsite (SFQ)
as above, with 5% qz eyes

FeOx stained $CaCO_3$ on fractures

pronounced 0-5° fracture 131-133'

Metafelsite (SFQ)
m gry, very fine to fine grained, foliated, minor qz veinlets parallel to foliation

cross cutting veinlets with limonite selvages

## FT.

10, 20, 30, 40, 50

## GRAPHIC LOG

## MINERALIZATION

tr py in vein qz at 2.0'
FeOx stain

sl tr v. fine py

FeOx on fracture surfaces

lim + goe on fractures

tr + py
subhedral to euhedral accumulations up to 2 mm

one very small grain of Au on surface of core

lim and hem on fracture surfaces

hematite on fractures
tr py

tr py

## RECOVERY

| Run | Run length | Core | % |
|---|---|---|---|
| | 8.3 | 4.2 | 51 |
| 8.3 | 4.9 | 4.9 | 100 |
| 13.2–13.4 | 0.2 | 0.2 | 100 |
| | 5.4 | 5.4 | 100 |
| 18.8 | 4.0 | 3.7 | 93 |
| 22.8–23.7 | 0.9 | 0.8 | 89 |
| | 5.0 | 5.0 | 100 |
| 28.7 | 3.5 | 3.4 | 97 |
| 32.2–34.0 | 1.8 | 1.8 | 100 |
| | 4.2 | 4.2 | 100 |
| 38.2 | 3.0 | 2.7 | 90 |
| 41.2–42.3 | 1.1 | 1.1 | 100 |
| | 5.1 | 5.1 | 100 |
| 47.4 | 2.9 | 2.9 | 100 |

## ANALYTICAL

| Sample | Interval | Au oz/ton | Ag ppm | Cu ppm | Pb ppm | Zn ppm |
|---|---|---|---|---|---|---|
| 12648 | 18.8-22.8 | .003 | ND | 5 | 10 | 20 |
| 12649 | 26.0-28.7 | ND | ND | 10 | ND | 30 |
| 12650 | 34.0-38.2 | ND | .12 | 10 | 10 | 25 |
| 12651 | 46.4-47.4 | ND | ND | ND | ND | 30 |

## BOX

1, 2, 3, 4, 5

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) fewer qz eyes than above, m gry, fine grained, limonitic carbonate selvages on qz veinlets, principal fracture in foliation plane | | | FeOx | 50.5 | | | | | | | | | | | |
| | | | no sulfides noted | | 7.2 | 7.2 | 100 | | | | | | | | |
| clay on fracture surfaces at 57.6' with $CaCO_3$ | 60 | | v. sl tr py | 57.7 | 2.1 | 1.9 | 90 | 12652 | 56.7-58.7 | .001 | ND | ND | ND | 35 | 6 |
| | | | | 59.8 | | | | | | | | | | | |
| | | | | | 6.7 | 6.7 | 100 | | | | | | | | |
| qz vein 5 cm thick brecciated and recemented | | | | 66.5 | 1.7 | 1.7 | 100 | | | | | | | | 7 |
| | | | silver metallic on fracture surfaces, probably from drill rod | 68.2 | 0.6 | 0.6 | 100 | 12653 | 66.5-70.0 | .001 | ND | ND | 10 | 40 | |
| | 70 | | | 68.8 | | | | | | | | | | | |
| Metafelsite (SF) distinct foliation laminations, qz veining 170-173' | | | FeOx (orng-red-brn) on fractures | 70.0 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | | | | | | 12654 | 71.0-74.0 | ND | .006 | 15 | 10 | 40 | |
| Metafelsite (SFQ) as above with conspicuous qz eyes | | | more drill pipe contamination | | 7.8 | 7.8 | 100 | | | | | | | | 8 |
| | | | | 77.8 | | | | | | | | | | | |
| thin graphitic layers 80-81' slickensides on some surfaces | 80 | | FeOx stain | 80.0 | 2.2 | 2.2 | 100 | | | | | | | | |
| | | | | | | | | 12655 | 80.0-82.0 | ND | ND | 10 | 5 | 30 | |
| | | | | | 7.0 | 7.0 | 100 | | | | | | | | 9 |
| | | | | 87.0 | | | | | | | | | | | |
| Metafelsite (SF) distinct segregations of felsic and matic minerals, m gry, fine grained, schistose | 90 | | FeOx on fractures sl tr py | 88.8 | 1.8 | 1.7 | 94 | | | | | | | | |
| | | | | | 4.7 | 4.7 | 100 | | | | | | | | 10 |
| calcite veinlets up to 15 mm thick, minor qz in veinlets | | | | 93.5 | 2.3 | 2.1 | 91 | | | | | | | | |
| | | | | 95.8 | | | | | | | | | | | |
| kink banding | | | | | 4.5 | 2.5 | 56 | 12656 | 97.5-98.5 | ND | .012 | 40 | 10 | 25 | |
| Graphitic Phyllite (SG) with vein quartz | 100 | | 1% py parallel to foliation | | | | | | | | | | | | |
| | | | | 100.3 | 3.7 | 3.1 | 84 | | | | | | | | 11 |
| Metafelsite (SF) upper 2 feet are almost SCP with gradational change to more siliceous unit, m grn-gry to gry | | | tr py dissem and on fractures | 104.0 | | | | | | | | | | | |
| | | | | | 3.0 | 3.0 | 100 | | | | | | | | |
| slight amt calcite on some fractures | | | | 107.0 | 1.4 | 1.4 | 100 | | | | | | | | |
| faint slicks on some foliation fractures with slight mylonitization | 110 | | | 108.4 | 3.5 | 3.5 | 100 | | | | | | | | 12 |
| | | | | 111.9 | | | | | | | | | | | |
| | | | | | 3.1 | 3.1 | 100 | | | | | | | | |
| as above m lt. gry | | | | 115.0 | | | | | | | | | | | |
| | | | up to 2% py in foliation and in cross cutting fractures | | | | | 12657 | 115.0-120.0 | ND | .012 | 30 | 15 | 700 | 13 |
| carbonate on fracture surfaces | 120 | | | | 6.6 | 6.2 | 94 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SFQ) m gry, fine grained, foliated, conspicuous qz eyes, tr calcite on some fractures, sulfur (?) on fractures drusy qz veinlet 125' | | 65 | tr to 1% py on fractures, euhedral xtals some py → FeOx |
| | | | py veinlet cross-cutting qz |
| | | | tr + py |
| rock looks slightly propylitized | 130 | 65 | |
| 132.5' slickensides on some fracture surfaces sticks @ 70° | | | tr + py minor FeOx |
| Vein quartz some brecciation and recementing, argillic alteration of fsp in SFQ, some of the clay is talc-like | | | tr Sb and yel/red/orng oxides tr-1% py, tr asp |
| | 140 | | |
| Metafelsite (SF) brecciated, as above with fewer qz eyes | | | |
| Milky white vein - dolo/chalcedony banded, vuggy, fractured, slight effervescence, H 4-7 | 150 | | no py or FeOx in this vein |
| Metafelsite (SF) talc-like clay on fracture surfaces, 154.8' as above | | 70 | tr + py |
| | | | tr to 1% py |
| | 160 | | |
| gradational change to black Graphitic Schist (SG) | | | tr + py |
| | 170 | | |
| gradational change to Chlorite Phyllite (SCP) foliated and schistose, minor qz veinlets | | 65 | sl tr py |
| | | 62 | no sulfides noted |
| | 180 | | |
| | | EOH | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 121.6–129.1 | 1.5 | 1.5 | 100 | | | | | | | | |
| | | | | 12658 | 123.1-130.0 | ND | .018 | 25 | 5 | 95 | 14 |
| | 7.7 | 7.4 | 96 | | | | | | | | |
| 130.6–132.5 | 1.9 | 1.9 | 100 | | | | | | | | |
| | | | | 12665 | 132.5-134.5 | .011 | .026 | 45 | ND | 245 | |
| | 4.8 | 4.8 | 100 | 12659 | 134.5-137.0 | .009 | .012 | 15 | 5 | 15 | 15 |
| 137.3–139.3 | 2.0 | 1.7 | 85 | 12666 | 137.0-139.3 | .007 | .012 | 10 | 10 | 20 | |
| | 5.1 | 4.6 | 90 | 12660 | 139.3-144.4 | .009 | .047 | 15 | 40 | 35 | |
| 144.4–145.5 | 1.1 | 0 | 0 | | | | | | | | |
| 145.5–146.3 | 0.8 | 0 | 0 | | | | | | | | 16 |
| | 3.5 | 3.5 | 100 | 12661 | 147.0-150.0 | .294 | .276 | 10 | ND | 5 | |
| 149.8–150.8 | 1.0 | 0.9 | 90 | | | | | | | | |
| | 2.3 | 1.7 | 74 | 12667 | 150.0-154.8 | .012 | .026 | 20 | ND | 75 | |
| 153.1–154.8 | 1.7 | 1.7 | 100 | | | | | | | | |
| | 4.6 | 4.6 | 100 | 12662 | 154.8-159.4 | .002 | .024 | 15 | ND | 45 | 17 |
| 159.4–160.2 | 0.8 | 0.7 | 88 | | | | | | | | |
| 160.2–161.8 | 1.6 | 1.5 | 94 | 12668 | 159.4-164.6 | ND | .012 | 10 | ND | 10 | |
| | 2.8 | 2.7 | 96 | | | | | | | | |
| 164.6 | 2.7 | 2.7 | 100 | 12663 | 164.6-167.3 | .002 | ND | 20 | 15 | 30 | 18 |
| 167.3–168.4 | 1.1 | 1.1 | 100 | | | | | | | | |
| 168.4–168.6 | 0.2 | 0.2 | 100 | | | | | | | | |
| | 2.8 | 2.5 | 89 | 12664 | 168.4-171.4 | ND | ND | 10 | 15 | 25 | |
| 171.4–173.6 | 2.2 | 2.2 | 100 | | | | | | | | 19 |
| 176.3 | 2.7 | 2.5 | 93 | | | | | | | | |
| 177.5 | 1.2 | 1.0 | 83 | | | | | | | | |
| | 5.2 | 4.8 | 92 | | | | | | | | 20 |
| 182.7 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U.S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Iron Gulch
Hole No.: K-9
Location: Kantishna
Bearing at Collar: N45°W
Inclination at Collar: -50°
Coord. - Collar N: 3 488 739.69
E: 349 331.71
Length: 244'
Elev. - Collar: 2567.6
Core Size: BW44
Date started: 8/9/83
Completed: 8/11/83
Logged by: CHC

## LITHOLOGY, ALTERATION, MISC.

Metafelsite (SFQ)
dk gry, fine grained, qz-fsp-mica schist; qz eyes, upper 10' of hole are clayey and limonite stained

minor calcite veinlets and calcite on fracture surfaces

principal fracture follows foliation

Metafelsite (SFQ)
as above, with a few thin (1-5 mm) graphitic layers

fct. zone @ 33.5'

Vein quartz/dolo
fractured, botryoidal and banded above 35', limonite stained chalcedony coating fracture surfaces, tr calcite

[DRILLERS SUSPECT THAT THEY DRILLED THROUGH UNDERGROUND WORKINGS but there is no surface evidence]

FT.: 10, 20, 30, 40, 50

GRAPHIC LOG: 70, 70, 70, 65, 70

## MINERALIZATION

tr py → lim

lim on fracture surfaces
no sulfides noted

org-brn FeOx stain

FeOx stained calcite veinlets
lim/hem pseudomorphs of py on one fracture

tr py on fracture surfaces, sl tr ap, lim, hem, spec

## RECOVERY

| Run | Run length | Core | % |
|---|---|---|---|
| | 6.9 | 2.1 | 30 |
| 6.9 | 2.8 | 2.7 | 96 |
| 9.7 | 4.9 | 4.3 | 88 |
| 14.6 | 0.4 | 0.4 | 100 |
| 15.0 | 0.2 | 0.2 | 100 |
| 15.2 | 8.3 | 7.8 | 94 |
| 23.5 | 0.4 | 0.4 | 100 |
| 23.9 | 1.3 | 1.1 | 85 |
| 25.2 | 3.3 | 3.1 | 94 |
| 28.5 | 5.0 | 5.0 | 100 |
| 33.5 | 1.0 | 1.0 | 100 |
| 34.5 | 2.8 | 0.5 | 18 |
| 37.3 | 0.9 | 0.5 | 56 |
| 38.2 | 0.9 | 0.6 | 67 |
| 39.1 | 1.7 | 0.5 | 29 |
| 41.8 | 1.7 | 0.2 | 12 |
| 43.5 | 5.0 | 0 | 0 |
| 48.5 | 0.5 | 0.1 | 20 |
| 49.0 | | | |

## ANALYTICAL

| Sample | Interval | Au (oz/ton) | Ag (oz/ton) | Cu (percent) | Pb (percent) | Zn (percent) |
|---|---|---|---|---|---|---|
| 12669 | 9.7-14.6 | ND | ND | ND | ND | .005 |
| 12670 | 25.2-28.5 | .005 | ND | ND | ND | .005 |
| 12671 | 31.5-33.5 | ND | ND | .002 | ND | .006 |
| 12672 | 33.5-34.5 | .061 | ND | ND | .002 | ND |
| 12673 | 34.5-43.5 | .130 | ND | ND | ND | .003 |

BOX: 1, 2, 3, 4

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3.0 | 0 | 0 | | | | | | | | |
| | | | | 52.0 | | | | | | | | | | | |
| Calcite Breccia - pervasive FeOx staining; clasts are SFQ, qz, and calcite; cement is calcite and limonite | | | pervasive FeOx no sulfides noted | | 4.9 | 4.1 | 84 | 12674 | 52.0-56.9 | .006 | ND | ND | ND | .002 | 4 |
| clay gouge @ 57.5' | | | | 56.9 57.5 | 0.6 | 0.5 | 83 | 12675 | 56.9-60.3 | ND | ND | .002 | ND | .003 | |
| | 60 | | | | 2.8 | 1.5 | 54 | | | | | | | | |
| Metafelsite (SF) dk gry, fine grained, foliated, principal fracture along foliation, minor calcite veinlets and calcite on fracture surfaces, rock is siliceous in places | | 70 | sl tr py along foliation and fractures | 60.3 | 2.6 | 2.0 | 77 | | | | | | | | |
| | | | | 62.9 | 1.9 | 0.7 | 37 | | | | | | | | |
| | | | | 64.8 | 2.2 | 0.7 | 32 | 12676 | 64.8-68.5 | .005 | ND | ND | ND | .002 | |
| | | | | 67.0 | 1.5 | 1.4 | 93 | | | | | | | | |
| | 70 | 70 50 | | 68.5 | 1.7 | 0.3 | 18 | | | | | | | | 5 |
| fsp → clay spotty fsp porphyroblasts | | 70 | sl tr py | 70.2 | 3.6 | 0.2 | 6 | | | | | | | | |
| | | | | 73.8 | 0.2 | 0 | 0 | | | | | | | | |
| | | | | 74.0 | 0.8 | 0 | 0 | | | | | | | | |
| | | | | 74.8 | 0.8 | 0.8 | 100 | | | | | | | | |
| | | | | 75.6 | 0.5 | 0.5 | 100 | | | | | | | | |
| | | | | 76.1 | 0.8 | 0.7 | 88 | | | | | | | | |
| | | | | 76.9 | 3.8 | 3.8 | 100 | 12677 | 76.9-80.7 | ND | ND | ND | .002 | .004 | |
| | 80 | | | | | | | | | | | | | | |
| FeOx stained carbonate-rich gouge with a few vein quartz fragments | | | FeOx staining, no sulfides noted | 80.7 | 1.2 | 0.3 | 25 | | | | | | | | 6 |
| | | | | 81.9 | 2.2 | 1.3 | 59 | | | | | | | | |
| | | | | 84.1 | 2.9 | 2.7 | 93 | | | | | | | | |
| Metafelsite (SF) dk gry, slightly less feldspathic than above | | | v. sl tr py | | | | | | | | | | | | |
| | | | | 87.0 87.8 | 0.8 | 0.8 | 100 | | | | | | | | |
| fragments of fsp (→ clay) in qz veinlets | 90 | | 2% py on fracture at 91'. | | 2.9 | 2.7 | 93 | | | | | | | | |
| | | | | 90.7 | 2.8 | 2.6 | 93 | 12678 | 90.7-93.5 | ND | ND | .002 | ND | ND | 7 |
| | | | | 93.5 | 3.0 | 3.0 | 100 | | | | | | | | |
| Dolo/chalcedony Breccia lim stained with some botryoidal features, lots of calcite cement, some slicks | | | FeOx (lim, goe) | | | | | 12679 | 93.5-96.5 | .012 | ND | ND | .002 | ND | |
| | | | sl tr v. fine py subhedral to euhedral, unoxidized except on fracture surfaces | 96.5 96.9 | 0.4 | 0.4 | 100 | 12680 | 96.5-98.3 | ND | ND | ND | .004 | .003 | |
| | | | | 98.3 | 1.4 | 1.4 | 100 | | | | | | | | |
| | 100 | | | | | | | | | | | | | | |
| Metafelsite (SF) dk gry, as above, thin (< 1 mm) calcite layers in foliation, also crosscutting calcite veinlets | | | | | 5.2 | 4.0 | 77 | | | | | | | | 8 |
| | | 65 | | 103.5 | | | | | | | | | | | |
| | | | | | 3.5 | 3.4 | 97 | 12681 | 103.5-107.0 | ND | ND | ND | .004 | .008 | |
| | | | | 107.0 107.3 | 0.3 | 0.3 | 100 | | | | | | | | |
| | 110 | | FeOx on fractures sl tr py | | 7.7 | 7.6 | 99 | | | | | | | | 9 |
| | | 65 | | | | | | | | | | | | | |
| | | 65 | | 115.0 | 1.5 | 1.4 | 93 | | | | | | | | |
| Metafelsite (SF) increasing amt of qz, ½% qz eyes, propylitic alteration marginal to qz vein | | | | 116.5 | | | | | | | | | | | 10 |
| | 120 | | | | 4.6 | 4.6 | 100 | 12682 | 116.5-121.1 | ND | ND | .002 | .002 | .005 | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) as above but more feldspathic and has >1% qz eyes, prop. alteration near qz veins at 120' calcite veinlets parallel to and cross-cutting foliation | | 70 | tr py and gn(?) tiny silver cubes on fractures in qz FeOx on fractures up to 1% py on fracture surface | 121.1 | | | | | | | | | | | |
| | | | | 123.9 | 2.8 | 2.5 | 89 | | | | | | | | |
| | | | | 125.9 | 2.0 | 1.9 | 95 | | | | | | | | |
| | | 60 | sl tr FeOx | | | | | | | | | | | | |
| | 130 | 65 | | | 7.0 | 7.0 | 100 | | | | | | | | 11 |
| Metafelsite (SF) fewer qz eyes than above, m grey, lots of small carbonate veinlets, occasional minor qz veinlets | | | tr py v. fine, euhedral | 132.9 | | | | | | | | | | | |
| | | | | 135.0 | 2.1 | 2.0 | 95 | | | | | | | | |
| | | 65 | | | 2.5 | 2.1 | 84 | | | | | | | | |
| thin (<2 mm) propylitized envelopes around qz vein at 140' | | | sl tr v. fine py | 137.5 | 2.8 | 2.8 | 100 | 12683 | 137.5-140.3 | ND | ND | .004 | ND | .006 | |
| | 140 | | | 140.3 | | | | | | | | | | | 12 |
| | | 65 | | | 4.5 | 4.3 | 95 | | | | | | | | |
| | | | | 144.8 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | 65 | | 145.5 | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | | 147.5 | | | | | | | | | | | |
| Metafelsite (SF) as above, m grey to grn grey, gradual increase in chlorite | 150 | | | | 2.5 | 2.5 | 100 | | | | | | | | 13 |
| | | | | 151.0 | | | | | | | | | | | |
| a few thin (<1 mm) carbonaceous schist stringers in the metafelsite | | | | 153.9 | 2.9 | 2.6 | 90 | 12684 | 151.0-153.9 | ND | ND | .002 | ND | .007 | |
| | | | no py noted | | 2.9 | 2.9 | 100 | | | | | | | | |
| | | 60 | FeOx on fractures | 156.8 | | | | | | | | | | | |
| | 160 | | | | 6.4 | 6.1 | 95 | | | | | | | | 14 |
| | | 60 | | | | | | | | | | | | | |
| | | | | 163.2 | | | | | | | | | | | |
| | | | | 165.9 | 2.7 | 2.7 | 100 | | | | | | | | |
| | | | | | 4.4 | 4.3 | 98 | | | | | | | | |
| Metafelsite (SF) as above | 170 | | no sulfides noted | | | | | | | | | | | | 15 |
| | | 60 | | 170.3 | 0.8 | 0.7 | 88 | | | | | | | | |
| | | | | 171.1 | 1.3 | 1.3 | 100 | | | | | | | | |
| | | | | 172.4 | | | | | | | | | | | |
| | | | | | 6.5 | 6.5 | 100 | 12685 | 172.4-179.1 | ND | ND | ND | ND | .006 | |
| | | | strongly oxidized fracture lim, hem, goe | | | | | | | | | | | | |
| | 180 | | | 179.1 | | | | | | | | | | | 16 |
| | | 60 | | | 0.9 | 0.9 | 100 | | | | | | | | |
| | | | | 182.0 | | | | | | | | | | | |
| qz cemented breccia with small amount of clayey gouge | | | | | 6.0 | 6.0 | 100 | | | | | | | | |
| | | | | 188.0 | | | | | | | | | | | 17 |
| | 190 | | | | 3.3 | 3.2 | 97 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) m gry, fine grained, foliated | | 60 | tr py on fractures | 191.3 191.9 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | | 4.6 | 4.6 | 100 | | | | | | | | |
| vein qz with some calcite cement, brecciated, vuggy, chalcedony banding | | | up to 1% py on some surfaces, but most of the vein is barren, tr ap | 196.5 | 4.4 | 4.1 | 93 | 12686 12687 12688 | 196.0-197.0 197.0-198.0 198.0-200.9 | ND ND ND | ND ND ND | .002 ND .004 | ND ND ND | .006 ND .007 | 18 |
| | 200 | | | 200.9 | 2.7 | 2.5 | 93 | | | | | | | | |
| gradational change to Chlorite Phyllite (SCP) as above, metamorphic segregations of calcite, m gry to grn-gry, chlorite-rich, some minor qz veinlets along foliation planes, < 1% thin graphitic interbeds | | 65 | no sulfides noted no FeOx | 203.6 | 5.1 | 4.3 | 84 | | | | | | | | 19 |
| siliceous in places | 210 | | sl tr py | 208.7 | 3.0 | 2.5 | 83 | | | | | | | | |
| | | 70 | | 211.7 | 5.9 | 5.5 | 93 | 12689 | 211.7-217.6 | ND | ND | .004 | ND | .006 | |
| | | | no sulfides noted | 217.6 | 3.2 | 3.1 | 97 | | | | | | | | 20 |
| spotty grn mineral in aggregates up to 2 mm, looks acicular, could be actinolite | 220 | 70 | | 220.8 221.5 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | v. sl tr py | | 6.3 | 5.6 | 89 | | | | | | | | |
| gradational change to Metafelsite (SF) contains more fsp and is more siliceous than SCP | 230 | 70 | sl tr py | 227.8 | 3.9 | 3.9 | 100 | | | | | | | | 21 |
| | | | | 231.7 | 2.6 | 2.3 | 88 | 12690 | 231.7-234.3 | ND | ND | .006 | .004 | .012 | |
| | | | | 234.3 | 8.2 | 7.2 | 88 | | | | | | | | 22 |
| black fracture coating 243-244' carbonaceous | 240 | 62 | tr-2% py, tr ap along fractures and foliation | 242.5 244.0 | 1.5 | 1.5 | 100 | 12691 | 243.0-244.0 | .012 | ND | .004 | .004 | .003 | 23 |
| | | EOH | | | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

| | |
|---|---|
| Property Iron Gulch | Hole No. K-10 |
| Location Kantishna | Bearing at Collar N45°W |
| | Inclination at Collar -75° |
| Coord. - Collar N 3 488 739.69 | |
| E 349 331.71 | Length 103.0' |
| Elev. - Collar 2567.6 | Core Size BW44 - IAX |
| Date started 8/11/83 | |
| Completed 8/12/83 | Logged by CHC |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag | Cu (percent) | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) chips with fragments of clear vitreous vein qz, conspicuous qz eyes, oxidized and fractured, foliated, m dk gry | | | FeOx on fracture surfaces, no sulfides noted | | 10.0 | 2.4 | 24 | | | | | | | | |
| | 10 | | sl tr py | 10.0 | | | | | | | | | | | 1 |
| | | | | | 2.0 | 1.6 | 80 | 12692 | 10.0-12.0 | ND | ND | ND | ND | .005 | |
| | | 65 | well oxidized | 12.0 | | | | | | | | | | | |
| | | 65 | | | 4.7 | 4.7 | 100 | | | | | | | | |
| tr white clay in fracture at 16' | | | tr py, tarnished euhedral cubes and casts | 16.7 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | 65 | | 17.3 | | | | | | | | | | | |
| | 20 | | | | 5.0 | 5.0 | 100 | | | | | | | | |
| | | | | | | | | 12693 | 20.0-22.5 | ND | ND | ND | .002 | .003 | 2 |
| Vein 24.5' light tan, mostly dolo or ank, 30% chalcedony, colloform layering, botryoidal textures, fractured, calcite in veinlets and as crystals in vugs | | | | 22.3 | 3.2 | 3.1 | 97 | | | | | | | | |
| | | | FeOx stn on fractures | 25.5 | | | | 12694 | 22.5-27.0 | .008 | ND | ND | .004 | ND | |
| Metafelsite (SFQ) as above slicks at 30' | 30 | | no sulfides noted | | 7.3 | 7.0 | 96 | 12695 | 27.0-32.8 | ND | ND | ND | .002 | .002 | 3 |
| Vein as at 24-27, brecciation, clasts of SFQ up to 4 cm, calcite xtals in vugs | | | FeOx stn | 32.8 | 2.3 | 2.2 | 96 | 12696 | 32.8-35.1 | ND | ND | ND | ND | ND | |
| | | | sl tr py | 35.1 | | | | 12697 | 35.1-37.0 | ND | ND | ND | ND | ND | |
| | 40 | To | | | 7.1 | 7.1 | 100 | | | | | | | | 4 |
| Graphitic Phyllite (SG) 41-42' fractured, fissile, small amt of gouge | | | sl FeOx, tr py | 42.2 | 0.8 | 0.8 | 100 | 12698 | 40.5-42.2 | ND | ND | ND | ND | .005 | |
| Metafelsite (SFQ), as above | | | | 43.0 | | | | 12699 | 42.2-46.0 | ND | ND | .002 | .004 | .006 | |
| Vein more dolo/cal/qz/cal as at 24-27 irregular contact with vitreous vein qz at 49.5' | | | FeOx on fractures, limonite rosettes | | 8.2 | 7.3 | 89 | 12700 | 43.0-49.3 | ND | ND | ND | .002 | ND | 5 |
| | 50 | | tr py in vein qz | | | | | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) m dk gry, fine grained, foliated, qz veinlets siliceous with red tinge | | | | 51.2 | | | | 13616 | 49.3-52.0 | .023 | ND | ND | ND | ND | |
| | | | FeOx (orange & red) on fractures tr py | | 1.8 | 0.6 | 33 | | | | | | | | |
| Dolo/qz Vein at 53.0-54.5, travertine-like banding | | | | 53.0 | | | | | | | | | | | |
| | | | | 54.5 | 1.5 | 1.5 | 100 | | | | | | | | |
| | | | | 56.3 | 1.9 | 1.7 | 89 | | | | | | | | |
| | | | strongly oxidized (FeOx) fracture surfaces, red-brn to orng-brn, py coatings on fcts, 2% py | | 2.8 | 2.8 | 100 | 13617 | 55.5-59.0 | .005 | .02 | .004 | ND | .02 | |
| | 60 | | | 59.1 | 1.4 | 1.4 | 100 | 13618 | 59.0-60.0 | .029 | ND | ND | ND | .002 | 6 |
| thin clayey gouge zone (3 cm) at 62.6' | | | vein qz is only slightly oxidized on fractures, tr py & ap | 60.5 61.8 | 0.5 | 0.5 | 100 | 13619 | 60.0-62.0 | ND | ND | .002 | ND | .073 | |
| | | | | 62.7 63.3 | 1.7 0.6 | 1.7 0.5 | 100 83 | | | | | | | | |
| | | | strong FeOx with tr py | | | | | 13620 | 63.3-65.5 | .005 | ND | ND | ND | .002 | |
| dolo/qz veins comprise 70° of core between 65-68', banded, brecciated, calcite xtals in open spaces and calcite on fractures | | | | | 4.0 | 3.9 | 98 | | | | | | | | |
| | | | faint lim stn in vein no sulfides noted, | 67.3 67.8 | 0.5 | 0.5 | 100 | 13621 | 65.5-70.0 | .008 | ND | ND | ND | ND | |
| fractured with gouge at 69' and 69.5' | 70 | | strong oxidation with FeOx coatings on fractures (orange-brn) | 69.3 | 1.5 | 1.5 | 100 | | | | | | | | 7 |
| | | | | | 2.5 | 1.8 | 72 | | | | | | | | |
| | | | | 71.8 | 1.0 | 0.8 | 32 | 13622 | 70.0-72.8 | .005 | ND | ND | ND | .004 | |
| | | | tr py | 72.8 | | | | | | | | | | | |
| white clay on some fractures | | | | | 1.2 | 0.3 | 25 | | | | | | | | |
| | | | | 74.0 | 1.8 | 1.8 | 100 | | | | | | | | |
| Metafelsite (SF) m gry to light grn-gry, 3% fsp porphyroblasts, foliated, 1/4 qz lyes, some of the core between 76' and 85' has a slight pink color (hem?), dendritic pyrolusite on fractures | | | | 75.8 | 1.5 | 1.5 | 100 | | | | | | | | |
| | | | | 77.3 77.4 | 1.1 | 0.1 | 100 | | | | | | | | 8 |
| | 80 | | tr py on fractures, FeOx coatings on fracture surfaces | | 4.7 | 4.7 | 100 | 13623 | 77.4-82.1 | ND | ND | ND | ND | ND | |
| | | | | 82.1 | 1.8 | 1.8 | 100 | | | | | | | | |
| | | | | 83.9 | | | | 13624 | 83.9-86.0 | ND | ND | .002 | ND | ND | |
| | | | | | 4.7 | 4.7 | 100 | 13625 | 86.0-88.6 | ND | ND | ND | ND | ND | |
| Dolo/qz Vein as at 53.0-54.5, brecciated | | | | 88.6 | | | | | | | | | | | |
| | 90 | | | | 2.8 | 2.6 | 93 | 13626 | 88.6-91.4 | ND | ND | ND | .002 | .003 | 9 |
| Metafelsite (SF) as above, dk gry, micaceous to siliceous | | | tr py, sl tr ap | 91.4 | | | | | | | | | | | |
| | | | | 93.4 | 2.0 | 2.0 | 100 | | | | | | | | |
| gouge at 95.5 | | | tr py, lim stained | | 6.6 | 6.6 | 100 | | | | | | | | |
| | | | | | | | | | | | | | | | 10 |
| | 100 | | | 100.0 | | | | | | | | | | | |
| | | | | | 3.0 | 2.2 | 73 | 13627 | 100.0-103.0 | ND | ND | ND | ND | ND | 11 |
| | | EOH | | 103.0 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property East Gold King
Location Kantishna
Coord. - Collar N 3 489 167.62
E 348 035.49
Elev. - Collar 2900.7
Date started 8/14/83
Completed 8/15/83

Hole No. K-11
Bearing at Collar S5°E.
Inclination at Collar -60°
Length 146.8'
Core Size BW44 - IAX
Logged by CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | oz/ton Au | Ag | percent Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry, foliated, feldspathic qz-mica schist | | 66 | orange FeOx | | | | | | | | | | | | |
| | | | | | 13.0 | 2.2 | 17 | | | | | | | | |
| | 10 | 30 | | | | | | | | | | | | | |
| SFQ dips more steeply near the contact - may be drag folding, a few vitreous qz chips at contact | | | | 13.0 | | | | | | | | | | | |
| | | 65 | | | 5.0 | 1.4 | 28 | | | | | | | | |
| Graphitic Schist (SG) dk gry to blk, poorly lithified to 21', chloritic, lots of black clay | | | | 18.0 | | | | | | | | | | | 1 |
| | 20 | | slight FeOx | | 1.4 | 1.4 | 100 | | | | | | | | |
| | | | | 20.6 | | | | | | | | | | | |
| 20-25': more lithified, fissile ~4" of white clay at 22' | | | orange FeOx on some fractures, mostly unoxidized | | 4.7 | 3.8 | 81 | 13628 | 20.6-25.3 | ND | ND | .004 | ND | .010 | |
| | | 70 | | | | | | | | | | | | | |
| qz fragments intermixed with SG chips and mud at 26-27' | | 75 | FeOx stained qz chips | 25.3 | | | | 13629 | 25.3-26.3 | ND | ND | .012 | .002 | .021 | |
| | | | | | 4.0 | 4.0 | 100 | | | | | | | | |
| Graphitic Schist (SG) as above, clayey at 27-35', small folds in foliation | 30 | 40 | | 29.3 | | | | | | | | | | | |
| | | | py → FeOx some pseudomorphs of lim after pyrite | | 2.7 | 2.4 | 89 | | | | | | | | |
| | | | | 32.0 | | | | | | | | | | | |
| | | | | | 3.0 | 1.2 | 40 | | | | | | | | 2 |
| | | 75 | | 35.0 | | | | | | | | | | | |
| | | | | | 1.6 | 1.4 | 88 | | | | | | | | |
| | | | | 36.6 | | | | | | | | | | | |
| | 40 | | | | 3.7 | 3.7 | 100 | | | | | | | | |
| | | | | 40.3 | | | | | | | | | | | |
| | | 75 | | | 4.5 | 4.1 | 91 | | | | | | | | 3 |
| | | | | 44.8 | | | | | | | | | | | |
| | | | | | 1.2 | 1.1 | 92 | | | | | | | | |
| | | | | 46.0 | | | | | | | | | | | |
| fractured 46-52' | | | FeOx on fracture surfaces | | 2.5 | 2.5 | 100 | 13630 | 46.0-48.5 | ND | ND | .004 | .002 | .010 | |
| | 50 | | | 48.5 | | | | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Graphitic Schist (SG) black, fissile, foliated, major fracture along foliation plane | | 70 | FeOx (from py) on some fractures but most are unstained |
| indistinct contact at 57.5 appears to be conformable with foliation | | 70 | |
| slicks at 59.3 with 3 mm of gouge on surface, 10° from axis | 60 | | FeOx stn |
| Metafelsite (SFQ) fsp-qz-mica schist, m gry to grn gry, chloritic, fsp → clay, minor calcite and qz veinlets | | 65 | |
| Graphitic Schist (SG) as above, can't see contacts, but both top and bottom of unit are clayey - may be fault gouge | 70 | | |
| Metafelsite (SFQ) m gry, foliated, qz and fsp segregations (≤ 1 mm) | | | FeOx on fractures |
| | 80 | 75 | |
| Graphitic Schist (SG) black poorly lithified to 92', qz/fsp segregations parallel to foliation (~1 mm), sl amt of calcite | 90 | 70 | very minor amts of FeOx |
| | | 55 | |
| contact at 103.2', 60° sharp fractured qz and calcite | 100 | 22 | |
| 103.2 shp cnt @ 60° | | | |
| Metafelsite (SF) m gry, foliated, cross cutting qz veinlets, micaceous, folded foliation planes | | 20 | |
| 108 chlor → talc on some fracture surfaces clayey fault gouge at 108' | 110 | | |
| Graphitic Schist (GS) with interbedded SPC black, foliated, with qz lenses up to 4cm thick, interbedded chlorite units | | | |
| | 120 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| | 3.5 | 2.1 | 60 | | | | | | | | |
| 52.0 | | | | | | | | | | | |
| | 3.8 | 3.0 | 79 | | | | | | | | 4 |
| 55.8 | | | | | | | | | | | |
| 57.1 | 1.3 | 1.3 | 100 | | | | | | | | |
| 59.3 | 2.2 | 2.2 | 100 | 13631 | 57.1-59.3 | ND | ND | .008 | .004 | .013 | |
| | 4.2 | 4.2 | 100 | | | | | | | | |
| 63.5 | | | | | | | | | | | 5 |
| | 2.4 | 2.1 | 88 | | | | | | | | |
| 65.9 | | | | | | | | | | | |
| 67.4 | 1.5 | 1.2 | 80 | | | | | | | | |
| | 5.2 | 5.2 | 100 | 13632 | 67.4-70.5 | ND | ND | .006 | .004 | .013 | |
| | | | | 13633 | 70.5-72.6 | ND | ND | .002 | .004 | .013 | 6 |
| 72.6 | | | | | | | | | | | |
| 74.3 | 1.7 | 1.7 | 100 | | | | | | | | |
| | 9.7 | 9.4 | 97 | | | | | | | | 7 |
| 84.0 | | | | | | | | | | | |
| | 4.0 | 3.4 | 85 | 13634 | 84.0-88.0 | ND | ND | ND | ND | .002 | |
| 88.0 | | | | | | | | | | | |
| | 2.8 | 1.2 | 43 | | | | | | | | |
| 90.8 | | | | 13635 | 88.0-93.8 | ND | ND | .004 | ND | .011 | 8 |
| | 3.0 | 2.2 | 73 | | | | | | | | |
| 93.8 | | | | | | | | | | | |
| | 2.4 | 2.4 | 100 | | | | | | | | |
| 96.2 | | | | | | | | | | | |
| 96.9 | 0.7 | 0.7 | 100 | | | | | | | | |
| | 3.4 | 2.7 | 79 | | | | | | | | |
| 100.3 | | | | | | | | | | | |
| | 2.8 | 2.8 | 100 | 13636 | 100.3-103.2 | ND | ND | .004 | ND | .008 | 9 |
| 103.1 | | | | | | | | | | | |
| | 2.5 | 2.5 | 100 | | | | | | | | |
| 105.6 | | | | 13637 | 103.2-108.5 | ND | ND | ND | ND | .007 | |
| | 0.5 | 0.5 | 100 | | | | | | | | |
| 106.1 | | | | | | | | | | | |
| 108.5 | 2.4 | 2.4 | 100 | | | | | | | | |
| | | | | 13638 | 108.5-111.0 | ND | ND | .002 | ND | .005 | |
| | 4.0 | 4.0 | 100 | | | | | | | | 10 |
| 112.5 | | | | | | | | | | | |
| | 1.5 | 1.5 | 100 | 13639 | 111.0-114.0 | ND | ND | .006 | ND | .011 | |
| 114.0 | | | | | | | | | | | |
| | 3.3 | 3.3 | 100 | | | | | | | | |
| 117.3 | | | | | | | | | | | |
| | 5.1 | 5.1 | 100 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chlorite Phyllite (SCP) interfingers with SG, distinct small folds, calcite on fracture surfaces, qz segregations | | | 1in selvage on qz vein at 222' | 122.4 122.7 | 0.3 | 0.3 | 100 | | | | | | | | 11 |
| | | | FeOx (lim, hem, goe) on fracture surfaces | | 5.0 | 5.0 | 100 | | | | | | | | |
| | | | | 127.7 | | | | | | | | | | | 12 |
| brecciated vein qz with SCP clasts | 130 | | | | 4.1 | 4.1 | 100 | 13640 | 127.7-131.8 | ND | ND | .004 | ND | .010 | |
| | | | | 131.8 | | | | | | | | | | | |
| | | | | | 4.4 | 4.4 | 100 | | | | | | | | |
| Graphitic schist (SG) interfingers with SCP | | | | 136.2 | | | | | | | | | | | 13 |
| foliated with qz and calcite segregations calcite on fracture surfaces | 140 | | | 140.0 | 3.8 | 3.6 | 95 | | | | | | | | |
| | | | | 141.8 | 1.8 | 1.8 | 100 | | | | | | | | |
| | | | | | 5.0 | 5.0 | 100 | | | | | | | | 14 |
| | | EOH | | 146.8 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Jupiter-Mars
Location: Kantishna District
Coord. - Collar N: 349139.0.19
E: 355923.59
Elev. - Collar: 3299.2
Date started: 8/11/83
Completed: 8/19/83

Hole No.: K-12
Bearing at Collar: N10W
Inclination at Collar: -50°
Length: 304.8 feet
Core Size: BWG4
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL oz/ton, percent Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) [poor recovery in upper 8 feet of hole] m gry fsp-qz mica schist, foliation banding, micaceous on fracture surfaces, minor calcite on fractures and parallel to foliation, qz segregations up to 4.0 cm thick in foliation, thin crosscutting FeOx stained fractures and veinlets, chloritic layers are fissile, conspicuous qz eyes and fsp porphyroblasts (fsp → clay) | | 40 | FeOx on fracture surfaces and slight pink tinge (hem) on some of the core | | 8.2 | 0.8 | 10 | | | | | | | | |
| | | 40 | occasional slight trace of altered pyrite | 8.2 | | | | | | | | | | | |
| | 10 | | | | 2.9 | 2.2 | 76 | | | | | | | | |
| | | | | 11.1 | | | | | | | | | | | 1 |
| | | | | | 2.9 | 1.3 | 45 | | | | | | | | |
| tr biotite alt. → chlorite + FeOx | | 40 | FeOx on fractures (lim, hem, spec) | 14.0 | | | | | | | | | | | |
| | | | | | 3.8 | 3.5 | 92 | 13641 | 14.0-17.8 | ND | ND | .002 | .002 | .004 | |
| | | 32 | | 17.8 | | | | | | | | | | | |
| | 20 | | | 19.1 | 1.3 | 1.3 | 100 | | | | | | | | |
| | | | | | 3.5 | 2.8 | 80 | | | | | | | | |
| Metafelsite (SFQ) as above with minor folds in the foliation | | | v. sl tr ap, euhedral, altered | 22.6 | | | | | | | | | | | |
| | | | | | 2.8 | 2.8 | 100 | | | | | | | | 2 |
| | | | FeOx on fractures orange-brn, thin crust (<0.1 mm), trace amts of sulfides (py + ap) gce completely altered to lim, hem, and gce | 25.4 | | | | | | | | | | | |
| | | | | | 2.1 | 2.0 | 95 | | | | | | | | |
| | | | | 27.5 | 0.4 | 0.4 | 100 | | | | | | | | |
| | 30 | 35 | | 27.9 | 1.3 | 1.2 | 92 | | | | | | | | |
| | | | | 29.2 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 30.2 | 2.2 | 2.2 | 100 | | | | | | | | |
| | | | | 32.4 | 1.8 | 1.8 | 100 | 13642 | 32.4-34.2 | .012 | ND | ND | ND | .005 | 3 |
| up to 5% fsp porphyroblasts | | | | 34.2 | 2.3 | 2.3 | 100 | | | | | | | | |
| | | | | 36.5 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | | 37.7 | 1.4 | 1.4 | 100 | | | | | | | | |
| | 40 | | | 39.1 | 2.0 | 2.0 | 100 | | | | | | | | |
| 5 cm thick brecciated qz segregations at 41.1 | | | | 41.1 | 1.6 | 1.6 | 100 | | | | | | | | |
| | | | | 42.7 | 1.9 | 1.9 | 100 | | | | | | | | 4 |
| Metafelsite (SFQ) as above | | | | 44.6 | 1.0 | 1.0 | 100 | 13643 | 42.7-45.6 | ND | ND | ND | ND | .021 | |
| | | | | 45.6 | 0.8 | 0.8 | 100 | | | | | | | | |
| | | 30 | FeOx on fractures less intense than above | 46.4 | 1.0 | 1.0 | 100 | | | | | | | | |
| | 50 | | | 47.4 | 5.3 | 4.8 | 91 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry, fine grained, foliated, fsp qz layers (~0.5 mm) in foliation with boudinage of porphyroblasts, major fracture crosscut foliation, chlorite selvages on 5 mm qz veinlets (propylitic alteration), minor calcite, up to 7% fsp porphyroblasts (altering to clay) | 60 | 38 | orange-red-brn to yel-brn FeOx on fractures, also MnO | 52.7 | 2.2 | 2.2 | 100 | | | | | | | | 5 |
| | | | | 54.9 | 2.1 | 1.6 | 76 | | | | | | | | |
| | | | | 57.0 | 2.1 | 2.1 | 100 | | | | | | | | |
| | | | intense FeOx stain on fractures | 59.1 | 4.1 | 4.1 | 100 | 13644 | 59.1-63.2 | ND | ND | ND | ND | .013 | 6 |
| | | | | 63.2 | 2.8 | 2.8 | 100 | | | | | | | | |
| | | | sl tr tarnished py (-> FeOx) | 66.0 | 4.5 | 4.5 | 100 | | | | | | | | 7 |
| Metafelsite (SFQ) as above but with grn-gry color | 70 | 35 | | 70.5 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | FeOx in minor fractures and as envelopes on qz veins | 71.7 | 0.3 | 0.2 | 67 | | | | | | | | |
| | | | | 72.0 | 1.9 | 1.9 | 100 | | | | | | | | |
| fsp → clay | | 40 | | 73.9 | 5.0 | 5.0 | 100 | | | | | | | | |
| | | | hematite on fracture surfaces red-brn | | | | | | | | | | | | 8 |
| | | | | 78.9 | 1.6 | 1.5 | 94 | | | | | | | | |
| | 80 | 32 | | 80.5 | 2.7 | 2.7 | 100 | | | | | | | | |
| Metafelsite (SFQ) m gry, fsp qz-mica schist, chloritic, minor calcite on fractures | | | | 83.2 | 5.1 | 5.1 | 100 | | | | | | | | |
| | | 34 | | | | | | | | | | | | | 9 |
| fractured, moderate amounts of FeOx stained clay | | | intense FeOx on fractures | 88.3 | 1.4 | 1.2 | 86 | | | | | | | | |
| [small amount of metal shavings from drill pipe on core (non-magnetic)] | 90 | | | 89.7 | 1.9 | 1.9 | 100 | 13645 | 88.3-91.6 | .006 | ND | ND | ND | .020 | |
| 4 cm of lt. grn-gry to 1 mm yellow clayey gouge at 93' | | 20 | pervasive FeOx abun specularite + hem cement | 91.6 | 2.3 | 2.3 | 100 | | | | | | | | |
| | | | | 93.9 | 1.8 | 1.8 | 100 | | | | | | | | 10 |
| nearly vertical slicks at 98' | | | FeOx pseudomorphs after py (all py noted is altered) | 95.7 | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | | 97.7 | 0.3 | 0.3 | 100 | | | | | | | | |
| | | | | 98.0 | 1.6 | 1.6 | 100 | | | | | | | | |
| | 100 | 20 | | 99.6 | 2.9 | 2.9 | 100 | | | | | | | | |
| | | | | 102.5 | 2.6 | 2.6 | 100 | | | | | | | | 11 |
| tan FeOx stained gouge with chips of SFQ | | | | 105.1 | 0.9 | 0.9 | 100 | 13646 | 104.5-107.0 | ND | ND | .002 | .002 | .080 | |
| | | | | 106.0 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 107.0 | 2.1 | 2.1 | 100 | 13647 | 107.0-109.1 | ND | ND | ND | ND | .100 | |
| Metafelsite (SFQ) as above, m dk gry | 110 | | | 109.1 | 4.9 | 4.9 | 100 | | | | | | | | 12 |
| clayey fracture zone | | | | 114.0 | 2.9 | 2.9 | 100 | 13648 | 114.0-116.9 | .009 | ND | ND | ND | .110 | |
| 1 cm thick brecciated qz | | 20 | FeOx on fractures | 116.9 | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | | 118.9 | 1.4 | 1.4 | 100 | 13649 | 118.9-122.3 | .006 | ND | ND | ND | .185 | 13 |
| | 120 | | | | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry to grn gry, fine grained, foliated, fsp-qz-mica schist, crosscutting Fe-stained veinlets of qz and calcite, qz veinlets up to 7.5 mm thick, slickensides at 122', 70° to core axis | | 30 | euhedral py alt. → FeOx lim and hem on fractures, black qze or MnO on some fractures, minor specularite | 120.3 | 2.0 | 1.9 | 95 | | | | | | | | |
| | | | | 122.3 | 1.5 | 1.5 | 100 | | | | | | | | |
| | | | | 123.8 | 0.9 | 0.9 | 100 | | | | | | | | |
| | | | | 124.7 | 3.0 | 3.0 | 100 | | | | | | | | 14 |
| fractured with med. amt. clay | | | | 127.7 | 1.7 | 1.7 | 100 | | | | | | | | |
| | 130 | | FeOx stained fractures | 129.4 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | 130.0 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 131.0 | 2.8 | 2.8 | 100 | | | | | | | | |
| | | | | 133.8 | 1.8 | 1.8 | 100 | 13650 | 131.0-134.5 | ND | ND | ND | ND | .240 | 15 |
| | | | | 136.6 | 1.8 | 1.4 | 78 | | | | | | | | |
| | | 32 | | 137.4 | 1.0 | 1.0 | 100 | | | | | | | | |
| fracture zone - clayey, m dk gry to grn-gry, gouge 141'-142 | 140 | | | 138.4 | 1.1 | 1.1 | 100 | 13651 | 134.5-141.2 | ND | ND | ND | ND | .275 | |
| | | | | 139.5 | 1.7 | 1.7 | 100 | | | | | | | | |
| | | | slight FeOx stain on gouge | 141.2 | 2.9 | 2.9 | 100 | | | | | | | | 16 |
| Metafelsite (SFQ) m dk gry, ~2% fsp porphyroblasts, foliated, minor qz and calcite veinlets crosscutting foliation a few weathered out cavities in veinlets (dissolved $CaCO_3$?) | | | FeOx on fractures blk fracture coating (MnO or qze) lim selvage on some veinlets, some dendritic MnO | 144.1 | 2.7 | 2.7 | 100 | | | | | | | | |
| | | | | 146.8 | 2.3 | 2.2 | 96 | | | | | | | | |
| up to 7% white porphyroblasts (FeOx-stained, cloudy, weathered) also tr amts of clear vitreous qz eyes | 150 | 30 | | 149.1 | 4.8 | 4.8 | 100 | | | | | | | | 17 |
| | | | | 153.9 | 1.9 | 1.8 | 95 | | | | | | | | |
| | | 26 | | 155.8 | 1.2 | 1.2 | 100 | 13652 | 153.9-157.0 | ND | ND | ND | .006 | .305 | |
| | | | | 157.0 | 3.8 | 3.8 | 100 | | | | | | | | |
| | 160 | | | 160.8 | 2.6 | 2.6 | 100 | | | | | | | | 18 |
| as above, with slight grn-gry tinge | | | | 163.4 | 1.5 | 1.4 | 93 | | | | | | | | |
| vuggy, 3 cm thick qz veinlet, irregular, conforms to foliation | | 30 | FeOx on fractures, minor boxworks (py) in qz veinlet | 164.9 | 1.1 | 1.1 | 100 | | | | | | | | |
| | | | | 166.0 | 5.0 | 5.0 | 100 | | | | | | | | 19 |
| minor (<1 mm) cross-cutting FeOx stained calcite veinlets | 170 | | FeOx stain, sl tr euhedral pseudomorphs of lim after py | 171.0 | 3.0 | 3.0 | 100 | 13653 | 171.0-174.0 | ND | ND | ND | ND | .140 | |
| conformable 1 cm qz vein at 169.5', chlorite envelope (2 mm), slightly vuggy (weathered-out sulfides), fractured | | | FeOx stain | 174.0 | 4.0 | 3.8 | 95 | | | | | | | | |
| irregular qz vein as above at 173' | | | limonite stained calcite veinlets | 178.0 | 5.7 | 5.6 | 98 | | | | | | | | 20 |
| | 180 | 30 | | 183.7 | 4.4 | 4.4 | 100 | | | | | | | | |
| Metafelsite (SFQ) as above | | | tr py, FeOx stain | 188.1 | 4.6 | 4.6 | 100 | | | | | | | | 21 |
| | 190 | | | | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m dk gry, conspicuous qz eyes, foliated, powdered calcite (strongly effervescent) on some fractures | | 30 | FeOx on fractures lim, hem, goe and MnO | 192.7 193.8 | 1.1 | 1.1 | 100 | 13654 | 201.0-204.8 | ND | ND | ND | .002 | .120 | |
| 7 cm gouge zone at 196.6 | | | | 196.5 196.0 | 2.7 1.5 | 2.7 1.5 | 100 100 | | | | | | | | |
| lots of undulations and minor folds in foliation | 200 | | | | 3.6 | 3.5 | 97 | | | | | | | | 22 |
| fsp porphs → clay | | 30 26 | qz with lim and sericite | 201.6 203.4 204.8 | 1.8 1.4 | 1.8 1.4 | 100 100 | | | | | | | | |
| Metafelsite (SFQ) foliated, fractured 210.5-213', chloritic and feldspathic layers, sl amt gouge at 111', minor qz veinlets with minor chlorite | 210 | | sl tr oxidized py | 208.5 210.0 | 3.7 1.5 | 3.7 1.5 | 100 100 | | | | | | | | 23 |
| cnt. est @ 215' | | 60 | FeOx stn on fractures (from py) | 211.7 213.3 214.7 | 1.7 1.6 1.4 | 1.7 1.6 1.3 | 100 100 93 | 13655 | 211.0-215.9 | ND | ND | .006 | .006 | 1.45 | |
| slickensides on fractures | | | ubiquitous FeOx staining, tr+ py (→ FeOx), tr ap | | 3.6 | 3.6 | 100 | 13656 | 215.9-218.0 | .023 | .26 | .032 | .520 | 3.55 | 24 |
| Quartz breccia >90% qz with qz and lim cement, clasts are angular to subrounded, sheared with minor cataclastic foliation, minor clay, sulfides altering to FeOx (lim, hem, and goe) and a pale yellow arsenic or antimony oxide, minor (undistinguishable) boxworks | 220 | | tr py + ap, tr-2% tt or jm, tr sn, FeOx and As or Sb oxides, no Cu oxides | 218.3 | 4.8 | 4.7 | 98 | 13657 | 218.0-223.1 | ND | ND | .045 | .250 | .315 | |
| | | | up to 3% v. dk gry, v. fine grained mineral, H 3-5, yellow coating, can't see xtals, probably tt (ten) or jm | 223.1 224.7 | 1.6 | 0.9 | 56 | 13658 | 223.1-224.7 | .007 | .57 | .072 | .370 | .058 | |
| | | | 224.7-225.3: 30% dk gry mineral, sl tr py | | 4.4 | 3.7 | 84 | 13659 | 224.7-226.5 | .063 | 7.31 | .665 | 4.15 | .965 | 25 |
| breccia with FeOx and light yellow As-Sb oxide cement, well sheared with subrounded to subangular qz fragments, light grn-gry to FeOx stained clayey gouge | 230 | | pervasive yellow oxide, trace amts of the above sulfides | 229.1 | 2.9 | 2.7 | 93 | 13660 | 226.5-232.0 | .022 | .60 | .048 | .685 | .099 | |
| | | | sl tr sulfides: py, ap, gn(?), jm(?), tt(?) with yel, orange-brn, and purple-brn oxides | 232.0 234.6 | 2.6 | 2.3 | 88 | 13661 | 232.0-237.3 | .019 | .64 | .170 | 1.05 | .088 | 26 |
| | | | 2% sulfides (gn and jm or tt at 234.7' | 237.3 | 2.7 | 2.7 | 100 | | | | | | | | |
| Metafelsite (SFQ) strongly altered (fsp → clay), fractured with yellow gangue mineral (Sb or As oxide) coating fractures, foliated, fracture set at 70° crosscutting foliation, altered rock has an almost tuffaceous texture, clayey gouge (15 cm) at 243-256.8 | 240 | 54 | pervasive pale yellow oxide (stibiconite?), sl tr sulfides | 239.5 243.6 | 2.2 3.9 | 1.6 2.9 | 73 74 | 13662 | 237.3-243.6 | .032 | 1.39 | .100 | 2.25 | .078 | |
| | | | sl tr py, tt or jm, ap yellow oxides, minor orange-brn FeOx | 246.0 248.6 | 2.4 2.6 | 1.0 2.0 | 42 77 | 13663 | 243.6-248.6 | .008 | .78 | .130 | 1.95 | .062 | |
| Quartz breccia fractured, angular frags, clayey | 250 | | | | 5.1 | 0 | 0 | | | | | | | | 27 |
| Quartz breccia fractured, FeOx and $SiO_2$ cement, yel and pale grn powdery coatings (Sb oxide and Cu(?) phas(?)) | | 30 | boxworks, goe, hem, lim, up to 1% tt or jm, tr py | 253.7 254.7 256.3 | 1.0 1.6 | 0 1.5 | 0 94 | 13664 | 254.7-257.1 | .050 | ND | .250 | .05 | .076 | |
| Metafelsite (?) (SFQ?) brecciated, completely altered to FeOx | 260 | | up to 40% tt or jm at 255 tr sn, ap, py | 257.8 259.7 | 1.5 1.9 | 1.5 1.8 | 100 95 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) altered, lim & hem, fractured and brecciated, up to 20% qz, tr of extremely f grained white sericite (or possibly clay), tr calcite, slicks at 264', from 268-270' | | 55 | ubiquitous pervasive oxidation red brn, tr py → FeOx sl tr ap, gn, lim (?) | | 4.2 | 4.2 | 100 | 13665 | 257.1-263.7 | .023 | ND | .140 | .130 | 3.00 | |
| 267.8 clay is more yel and act as red-brn | | | | 263.9 | | | | | | | | | | | |
| | | | | | 2.1 | 2.1 | 100 | 13666 | 263.7-267.8 | .017 | ND | .051 | .014 | 1.60 | 28 |
| | | | | 266.0 | | | | | | | | | | | |
| | | | FeOx stain, tr amts of sulfides (mostly pyrite) | | 2.1 | 1.2 | 57 | | | | | | | | |
| | | | | 268.1 | | | | | | | | | | | |
| | 270 | | | | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 269.8 | | | | | | | | | | | |
| several small clay zones from 270-278' | | 26 | | | 2.2 | 1.9 | 86 | 13667 | 267.8-273.1 | ND | ND | .008 | .004 | .130 | |
| | | | | 272.0 | | | | | | | | | | | |
| gradational change to less altered SFQ | | | | | 1.1 | 1.0 | 91 | | | | | | | | |
| | | | | 273.1 | | | | | | | | | | | |
| | | | FeOx, tr py, sl tr of plymatic folded dk gry mineral (fuchsite) | | 4.8 | 1.1 | 23 | 13668 | 273.1-277.9 | ND | ND | .006 | .008 | .125 | 29 |
| | | | | 277.9 | | | | | | | | | | | |
| Metafelsite (SFQ) tsp-qz-mica schist, FeOx stained, thin (<1 mm) foliation laminations, chloritic slicks at 284' (40° from core axis), tsp → clay | 280 | 20 | | | 1.8 | 1.8 | 100 | | | | | | | | |
| | | | | 279.7 | | | | 13669 | 277.9-281.3 | ND | ND | .004 | ND | .030 | |
| | | | | | 1.6 | 1.5 | 94 | | | | | | | | |
| | | | | 281.3 | | | | | | | | | | | |
| | | | | | 3.5 | 3.5 | 100 | | | | | | | | |
| | | | FeOx stain (lim, goe, hem) | 284.8 | | | | 13670 | 281.3-287.8 | ND | ND | .006 | .004 | .059 | |
| slicks and small amt of gouge at 287.8' | | | | | 3.0 | 2.9 | 97 | | | | | | | | 30 |
| | | | | 287.8 | | | | | | | | | | | |
| Metafelsite (SF) gra-gry, chloritic, lacks conspicuous qz eyes of above | 290 | | | | 2.7 | 2.7 | 100 | | | | | | | | |
| | | | FeOx stn, v sl tr py | 290.5 | | | | 13671 | 287.8-293.4 | ND | ND | .004 | ND | .027 | |
| | | | | | 3.4 | 3.4 | 100 | | | | | | | | |
| fissile, fractured | | | | 293.9 | | | | | | | | | | | |
| | | | | | 2.6 | 2.6 | 100 | | | | | | | | |
| vertical slicks | | | FeOx stn on fractures | 296.5 | | | | 13672 | 293.9-299.4 | ND | ND | .006 | .002 | .029 | 31 |
| | | | | | 2.9 | 2.9 | 100 | | | | | | | | |
| | 300 | | | 299.4 | | | | | | | | | | | |
| | | | | | 1.4 | 1.4 | 100 | | | | | | | | |
| minor cross-cutting calcite veinlets and qz/cal veinlets | | | | 300.8 | | | | | | | | | | | |
| | | | | | 4.0 | 4.0 | 100 | 13673 | 299.4-304.8 | ND | ND | .004 | ND | .021 | 32 |
| | | EOH | | 304.8 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U.S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| | | | |
|---|---|---|---|
| Property | White Hawk | Hole No. | K-13 |
| Location | Kantishna | Bearing at Collar | N 55°W |
| | | Inclination at Collar | -50° |
| Coord. - Collar N | 3 485 887 | | |
| E | 345 560 | Length | 183.0' |
| Elev. - Collar | 2212' | Core Size | BW44 - IAX |
| Date started | 8/15/83 | | |
| Completed | 8/19/83 | Logged by | CHC |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag | Cu ppm | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quartz-muscovite Schist<br>minor bio → chlor | | 45 | | | | | | | | | | | | | |
| Greenschist (BG?)<br>muscovite-chlorite schist, med to coarse grained, m gry to m dk gry, small amts of plag, minor qz as segregations | 10 | | tr amts of FeOx as alteration product of pyrrhotite | | 11.6 | 1.9 | 16 | | | | | | | | |
| | | | | 11.6 | 3.4 | 2.9 | 85 | | | | | | | | 1 |
| increased amount of fsp and qz fim grained, qz segregations to 1 cm | | 60 | | 15.0 | 3.0 | 2.2 | 73 | | | | | | | | |
| tr of dissem altered metallic porphyroblasts deep red color, weakly magnetic | 20 | 80 | altered metallic tr dissem pyrrhotite (or py → mt) | 18.0 | 3.5 | 2.4 | 69 | | | | | | | | |
| Greenschist (BG)<br>as above, coarse grained 21.5-21.8', m gry to grn gry | | 50 | pervasive fim stn | 21.5<br>21.8 | 0.3 | 0.3 | 100 | 13674 | 21.5-24.0 | ND | ND | 10 | 15 | 520 | |
| Quartzofeldspathic muscovite-chlorite schist<br>thin (< 16") intervals of this unit are interbedded (or interfingered) with the coarser grained greenschist, looks like metafelsite (SF) at 18-19, 23-24 | | | tr euhedral py or po fim stn in clayey zone | 24.0 | 2.2 | 2.2 | 100 | | | | | | | | |
| | | | | 25.5 | 1.5 | 1.4 | 93 | | | | | | | | |
| | | | | 27.7 | 2.2 | 2.2 | 100 | | | | | | | | 2 |
| | 30 | 25 | | | 2.5 | 2.1 | 84 | | | | | | | | |
| Greenschist (BG)<br>muscovite-chlorite schist, as above, qz vein at 32.5, foliated | | 10 | sl tr to tr magnetic po altered to deep red hem (occasionally only slightly altered) | 30.3<br>30.6 | 0.3<br>2.4 | 0.3<br>1.7 | 100<br>71 | | | | | | | | |
| principal cleavage follows foliation, undulating cleavage | | | FeOx on fractures | 33.0 | 2.4 | 2.4 | 100 | 13675 | 33.0-35.4 | ND | ND | 5 | 10 | 90 | |
| | | 15 | | 35.4 | 2.0 | 2.0 | 100 | | | | | | | | 3 |
| | | | | 37.4 | 2.6 | 2.1 | 81 | | | | | | | | |
| as above | 40 | 20 | | 40.0 | | | | | | | | | | | |
| | | | tr-1% po → hem | | 2.7 | 2.7 | 100 | | | | | | | | |
| | | 10 | | 42.7 | | | | | | | | | | | |
| | | | | | 4.7 | 4.7 | 100 | 13676 | 42.7-47.4 | ND | ND | 5 | 10 | 65 | 4 |
| as above<br>bio → chlor | 50 | | xtal shapes of sulfide look more cubic than hexagonal but it is magnetic, up to 2% altered po | 47.4<br>48.6 | 1.2<br>2.7 | 0.9<br>2.7 | 75<br>100 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Greenschist (BG) muscovite-chlorite schist, m gry to grn-gry, med to coarse grained, foliated, with principal foliation fractures | | 25 | tr+ to 1% altered po (py?), disseminated, up to 2 mm, minor FeOx (lim) on fractures, po → hem (or possibly py → mt + hem) | 51.3 | | | | | | | | | | | |
| | | | | | 4.7 | 3.6 | 77 | | | | | | | | 5 |
| | | | | 56.0 | | | | | | | | | | | |
| | | 20 | | | 4.3 | 4.3 | 100 | | | | | | | | |
| biotite is less altered | 60 | | | | | | | | | | | | | | |
| | | | tr - sl tr altered po | 60.3 | 2.4 | 2.1 | 88 | | | | | | | | 6 |
| thin quartzose layers (to 6 cm) interfingered with coarse grained micaceous schist | | | | 62.7 | 1.6 | 1.5 | 94 | | | | | | | | |
| | | | | 64.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | 30 | | 65.0 | 2.7 | 2.7 | 100 | | | | | | | | |
| foliation banding of chlorite, musc, and fsp/qz, some nearly vertical fractures | | 20 | minor FeOx | 67.7 | 2.1 | 2.1 | 100 | | | | | | | | |
| | 70 | | | 69.8 | | | | | | | | | | | 7 |
| Greenschist (BG) musc-bio/chlor schist, m gry-grn gry, dk grn chlorite layers, ast 20% qz & fsp, rapid changes in foliation attitude, qz segregations up to 1 cm thick | | | | | 2.5 | 2.5 | 100 | 13677 | 69.8-72.3 | ND | ND | 65 | 15 | 185 | |
| | | 35 | | 72.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 73.0 | 1.4 | 1.4 | 100 | | | | | | | | |
| | | 75 | | 74.4 | | | | | | | | | | | |
| | | | sl tr altered po (→ hem) | | 4.0 | 4.0 | 100 | | | | | | | | |
| | 80 | | | 78.4 | | | | | | | | | | | 8 |
| as above, medium grained | | 80 | | | 5.2 | 3.4 | 65 | | | | | | | | |
| | | | | 83.6 | | | | | | | | | | | |
| | | | | 83.9 | 0.3 | 0.3 | 100 | | | | | | | | |
| clayey with minor tight folds (3 mm amplitude) | | | tr py | 85.4 | 1.5 | 0.5 | 33 | | | | | | | | |
| | | 40 | | | 4.7 | 1.6 | 34 | | | | | | | | |
| green | | 10 | | | | | | | | | | | | | |
| | 90 | | | 90.1 | | | | | | | | | | | |
| principal fracture follows foliation | | 25 | tr altered po | | 2.0 | 1.7 | 85 | 13678 | 90.1-93.1 | ND | ND | ND | 20 | 195 | 9 |
| | | | | 93.1 | | | | | | | | | | | |
| | | | | | 2.4 | 1.8 | 75 | | | | | | | | |
| | | | | 95.5 | 1.6 | 1.5 | 94 | | | | | | | | |
| | | | | 97.1 | 1.9 | 1.5 | 79 | | | | | | | | |
| | 100 | 15 | tr shiny unaltered py in qz veinlet, some pyritohedron xtals but no good cubes | 99.0 | 1.6 | 1.4 | 87 | | | | | | | | |
| Greenschist (BG) musc-chlor schist, med to coarse grained, fracture along foliation | | | | 100.6 | 1.8 | 1.6 | 89 | | | | | | | | |
| | | | tr+ py | 102.4 | 2.4 | 2.2 | 92 | | | | | | | | |
| | | 10 | hem staining | 104.8 | | | | | | | | | | | |
| minor clay at 107' | | | | | 2.8 | 1.8 | 64 | | | | | | | | 10 |
| | | | | 107.6 | 1.6 | 1.3 | 81 | | | | | | | | |
| | | | | 109.2 | 0.6 | 0.5 | 83 | | | | | | | | |
| | 110 | | | 109.8 | 1.2 | 1.2 | 100 | 13679 | 109.8-111.0 | ND | ND | 20 | 10 | 80 | |
| | | | | 111.0 | 1.5 | 0.4 | 27 | | | | | | | | |
| | | | tr+ py in qz no FeOx | 112.5 | 0.5 | 0.2 | 40 | | | | | | | | |
| | | | | 113.0 | 2.0 | 1.2 | 60 | | | | | | | | |
| | | | | 115.0 | 1.2 | 1.0 | 83 | | | | | | | | |
| | | | | 116.2 | 1.6 | 1.6 | 100 | | | | | | | | 11 |
| | | | | 117.8 | 2.2 | 1.0 | 45 | | | | | | | | |
| | 120 | | | 120.0 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Greenschist (BG) fsp-musc-chlor schist, foliated, medium to coarse grained, minor clay, qzt lens at 124' | | 20 | tr py |
| | | | tr+py |
| Quartzite (BQ) with chlor and calcite sericitic at 130.0-133.6' | 130 | | no sulfides noted no FeOx |
| Greenschist (BG) | | | |
| Quartzite (BQ), as above 5° cut | | | sl tr py |
| Quartzite (BQ) and interfingered Greenschist (BG) to 148.8, numberous thin layers, fine to medium grained | 140 | | |
| | | | v. sl tr py |
| | | 20 | |
| Greenschist (BG) grn-gry to grn, med to coarse grained, musc-chlor with minor fsp and qz | 150 | | |
| | 160 | | |
| | | 50 | |
| light grn clayey musc-chlorite with white clay, semi-consolidated to unconsolidated | 170 | | no sulfides noted |
| some qz fragments intermixed with the unconsolidated clay | | 50 | |
| | 180 | | |
| | | EOH | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 121.1 | 1.1 | 0.9 | 82 | | | | | | | | |
| 122.0 | 0.9 | | | | | | | | | | |
| 122.9 | 0.9 | 0. | | | | | | | | | |
| 124.0 | 1.1 | 0.3 | 27 | | | | | | | | |
| 125.3 | 1.3 | 1.1 | 85 | 13680 | 124.0-125.3 | ND | ND | 10 | 15 | 50 | |
| 127.5 | 2.2 | 2.2 | 100 | | | | | | | | |
| 130.0 | 2.5 | 0.9 | 36 | | | | | | | | 12 |
| 131.1 | 1.1 | 0.9 | 82 | | | | | | | | |
| 133.6 | 2.5 | 0.5 | 20 | | | | | | | | |
| 134.6 | 1.0 | 0.6 | 60 | | | | | | | | |
| 134.8 | 0.2 | 0.2 | 100 | | | | | | | | |
| 135.9 | 1.1 | 1.0 | 91 | | | | | | | | |
| 137.4 | 1.5 | 1.5 | 100 | 13681 | 135.9-137.9 | ND | ND | 10 | 15 | 25 | |
| 139.4 | 2.0 | 1.5 | 75 | | | | | | | | |
| | 3.0 | 2.7 | 90 | | | | | | | | |
| 142.4 | 0.9 | 0.4 | 44 | | | | | | | | |
| 143.3 | 0.7 | 0.5 | 71 | | | | | | | | 13 |
| 144.0 | 1.5 | 0.5 | 33 | | | | | | | | |
| 145.5 | 1.1 | 0.6 | 54 | | | | | | | | |
| 146.6 | 1.2 | 0.6 | 50 | | | | | | | | |
| 148.8 | 0.7 | 0.7 | 100 | | | | | | | | |
| 149.5 | 1.7 | 1.7 | 100 | | | | | | | | |
| 151.2 | 2.8 | 2.1 | 75 | 13682 | 151.2-154.0 | ND | ND | 55 | 10 | 55 | |
| 154.0 | 1.0 | 0.9 | 90 | | | | | | | | |
| 155.0 | 1.2 | 0.7 | 58 | | | | | | | | |
| 156.2 | 3.2 | 1.5 | 47 | | | | | | | | 14 |
| 159.4 | 0.6 | 0.6 | 100 | | | | | | | | |
| 160.0 | 1.1 | 1.1 | 100 | | | | | | | | |
| 161.1 | 4.9 | 1.5 | 31 | 13683 | 161.1-166.0 | ND | ND | 25 | 10 | 50 | |
| 166.0 | 3.1 | 0 | 0 | | | | | | | | |
| 169.1 | 4.9 | 0.5 | 10 | 13684 | 169.1-174.0 | ND | ND | 50 | 40 | 90 | 15 |
| 174.0 | 1.0 | 0.7 | 70 | | | | | | | | |
| 175.0 | 1.7 | 1.7 | 100 | | | | | | | | |
| 176.7 | 1.1 | 1.1 | 100 | | | | | | | | |
| 177.8 | 3.2 | 1.9 | 59 | | | | | | | | |
| 181.0 | 1.4 | 1.1 | 79 | 13685 | 181.0-182.4 | ND | ND | 35 | 20 | 90 | 16 |
| 182.4 | 0.6 | 0.2 | 33 | | | | | | | | |
| 183.0 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

| | |
|---|---|
| Property: Jupiter - Mars | Hole No.: K-14 |
| Location: Kantishna District | Bearing at Collar: N25°W |
| | Inclination at Collar: -50° |
| Coord. - Collar N: 3491259.12 | |
| E: 355633.98 | Length: 399.1 feet |
| Elev. - Collar: 3204.3 | Core Size: BW44 - IAX |
| Date started: 8/20/83 | |
| Completed: 8/29/83 | Logged by: CHC |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag oz/ton | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry, fine grained, qz-fsp-mica schist, surface oxidation to 14', foliated with thin (<1mm) discontinuous fsp segregations, conspicuous qz eyes, principal fracture in plane of foliation | | 35 | | | 8.8 | 1.2 | 14 | | | | | | | | |
| | 10 | | | 8.8 9.9 | 1.1 | 0.9 | 82 | | | | | | | | |
| | | | FeOx on fractures | | 2.3 | 1.6 | 70 | | | | | | | | 1 |
| irregular qz veinlets (up to 1 cm), conformable with foliation, a few vugs, thin chlorite selvages | | | | 12.2 13.7 | 1.5 | 0.6 | 40 | | | | | | | | |
| | | | FeOx (1cm, 4cm) in qz veinlet | | 3.6 | 3.2 | 89 | | | | | | | | |
| | | 37 | | 17.3 18.7 | 1.4 | 1.4 | 100 | | | | | | | | |
| minor cross-cutting calcite veinlets | 20 | | | | 3.3 | 2.9 | 88 | | | | | | | | |
| | | | | 22.0 22.8 | 0.8 | 0.8 | 100 | | | | | | | | |
| | | | | 24.1 | 1.3 | 1.0 | 77 | | | | | | | | 2 |
| | | | | | 3.7 | 3.7 | 100 | | | | | | | | |
| | | | orange FeOx on fractures | 27.8 29.0 | 1.2 | 1.1 | 92 | | | | | | | | |
| | 30 | 20 | | | 4.0 | 4.0 | 100 | 13695 | 29.0-33.0 | ND | ND | ND | 10 | 295 | |
| | | | orange to orange-red FeOx | 33.0 34.3 | 1.3 | 1.3 | 100 | | | | | | | | |
| minor brecciation in qz vein | | | | | 2.7 | 2.7 | 100 | | | | | | | | 3 |
| Metafelsite (SFQ) m gry, fine grained, qz-fsp-mica schist, slight alteration of some fsp porphyroblasts to clay, irregular qz segregations up to 15 mm in width | | | | 37.0 38.5 | 1.5 | 1.5 | 100 | | | | | | | | |
| | 40 | | FeOx on fractures yel-orange to sooty brn-blk fr py (2→1mm) | 40.8 | 2.3 | 2.0 | 87 | | | | | | | | |
| | | 35 | | 42.7 | 1.9 | 1.9 | 100 | | | | | | | | |
| | | | | | 2.8 | 2.5 | 89 | | | | | | | | 4 |
| chloritic at 45.5 | | | | 45.5 46.9 | 1.4 | 1.3 | 93 | | | | | | | | |
| | 50 | | | 49.6 | 2.7 | 2.7 | 100 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) qz-fsp-mica schist, foliated with thin foliation laminations, dk gry to grn gry, qz is usually conformable to foliation, chlorite selvages on qz veinlets | | 30 | red-orange FeOx on fractures | | 5.0 | 4.9 | 98 | | | | | | | | 5 |
| | | | | 54.6 | | | | | | | | | | | |
| | | | tr limonite pseudomorphs after pyrite | 56.8 | 2.2 | 1.8 | 82 | 13696 | 54.6-56.8 | ND | ND | ND | 15 | 880 | |
| fracture zone at 56' with qz fragments can't determine attitude | | | | | 5.0 | 4.6 | 92 | | | | | | | | |
| | 60 | 30 | slight increase in degree of FeOx staining | 61.8 | | | | | | | | | | | 6 |
| | | | | | 4.4 | 4.4 | 100 | | | | | | | | |
| | | | tr py → FeOx | | | | | | | | | | | | |
| metafelsite, as above | | | | 66.2 66.8 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | | 2.9 | 2.5 | 86 | | | | | | | | |
| | 70 | | | 69.7 | | | | | | | | | | | |
| | | 35 | | | 2.5 | 2.5 | 100 | | | | | | | | 7 |
| | | | | 72.2 | | | | | | | | | | | |
| | | | | | 2.8 | 2.8 | 100 | | | | | | | | |
| qz-rich zone, irregular but generally conformable to foliation, slightly brecciated, slightly vuggy, propylitic alteration (esp. chlor of wall rock | | | | 75.0 | 0.4 | 0.4 | 100 | | | | | | | | |
| | | | FeOx (from py) sl tr altered py cubes | 75.4 | 2.6 | 1.2 | 46 | 13697 | 75.4-78.0 | ND | ND | 10 | 15 | .32% | |
| | | | | 78.0 | | | | | | | | | | | |
| | 80 | | | | | | | | | | | | | | |
| Metafelsite (SFQ) as above | | | | | 4.6 | 4.2 | 91 | | | | | | | | 8 |
| | | 35 | | 82.6 83.2 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | | 2.3 | 2.3 | 100 | | | | | | | | |
| | | | | 85.5 86.7 | 1.2 | 1.0 | 83 | | | | | | | | |
| | 90 | | | | 4.1 | 3.7 | 90 | | | | | | | | |
| | | 35 | | 90.8 | | | | | | | | | | | |
| | | | | | 1.7 | 1.5 | 88 | | | | | | | | 9 |
| | | | | 92.5 | | | | | | | | | | | |
| | | | orange-red FeOx sl tr altered py | | 3.1 | 2.7 | 87 | 13698 | 92.5-95.6 | .005 | ND | 10 | 25 | .43% | |
| | | | | 95.6 | | | | | | | | | | | |
| | | | | | 2.6 | 2.4 | 92 | | | | | | | | |
| Metafelsite (SFQ) as above, principal fracture is not in the foliation plane - it's about 90° to it, minor amt. of vugs due to weathering of clay | 100 | 30 | | 98.2 100.0 | 1.8 | 1.6 | 89 | | | | | | | | |
| | | | | | 5.1 | 5.0 | 98 | | | | | | | | 10 |
| | | | sl tr altered (→FeOx) py | | | | | | | | | | | | |
| | | | | 105.1 | | | | | | | | | | | |
| qz veinlets (< 8mm) in foliation plane, distinct banding | | 25 | FeOx stain on veinlets | | 2.1 | 1.9 | 90 | | | | | | | | |
| | | | | 107.2 | | | | | | | | | | | |
| | 110 | | | | 3.2 | 3.2 | 100 | 13699 | 107.2-110.4 | ND | ND | 10 | 10 | .21% | |
| fracture zone - at least 3 sets of fractures | | | abundant lim, goe, & hem on fractures | 110.4 111.7 | 1.3 | 0.8 | 62 | | | | | | | | 11 |
| | | | | | 1.8 | 1.6 | 89 | | | | | | | | |
| | | | | 113.5 114.3 | 0.8 | 0.7 | 88 | | | | | | | | |
| Metafelsite (SFQ) gradational change from above to m. gry, more feldspathic, more brittle than above and more siliceous hence has a greater fracture density | | | lim and hem staining on fractures and foliation | 114.9 115.2 116.4 | 0.6 0.3 1.2 | 0.5 0.2 1.2 | 83 67 100 | | | | | | | | |
| | | | | | 2.7 | 2.5 | 93 | | | | | | | | |
| | 120 | | | 119.1 | 1.3 | 1.3 | 100 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SFQ) mica-qz-fsp schist, m gry to lt. gry, conspicuous qz eyes, musc, chlorite selvages on qz veinlets, possible hydrothermal silicification and albitization, core is fractured in several directions | | 20 | orange-red FeOx on fractures and as irregular wisps in foliation |
| | 130 | | |
| fracture zone | | 15 | pervasive FeOx in fracture zone (orange-yel), small amt of py boxwork |
| fracture zone | 140 | | pervasive FeOx |
| 10 cm of lt. grn-gry gouge at 142.5 | | 30 | |
| Metafelsite (SFQ) qz-fsp-mica schist, m gry to grn gry, foliated with small crenulations and thin (0.5-4.0 mm) color laminations, tr calcite on fractures, some of the qz segregations are slightly vuggy, thin layers of muscovite | 150 | 25 | orange FeOx on fractures |
| | | | sl tr py in qz |
| | 160 | | |
| several small fracture zones | | | sl tr py - altered to FeOx |
| | 170 | | FeOx on fractures |
| | | 25 | |
| | 180 | 10 | |
| chlorite selvages on margins of some of the qz segregations | | | |
| fracture zones - small amt. of light gry clay | | | sl tr FeOx<br>sl tr altered py |
| | 190 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | |
| 120.4 | | | | | | | | | | | |
| 121.6 | 1.2 | 1.0 | 83 | | | | | | | | |
| | 2.4 | 2.0 | 83 | 13700 | 121.6-124.0 | ND | ND | 5 | 25 | .33% | 12 |
| 124.0 | 0.5 | 0.5 | 100 | | | | | | | | |
| 124.5 | | | | | | | | | | | |
| | 4.6 | 3.2 | 70 | | | | | | | | |
| 129.1 | | | | | | | | | | | 13 |
| | 3.2 | 3.2 | 100 | | | | | | | | |
| 132.3 | 0.5 | 0.5 | 100 | | | | | | | | |
| 133.8 | 0.2 | 0.2 | 100 | | | | | | | | |
| 134.0 | 1.7 | 1.7 | 100 | 13901 | 132.3-135.7 | .011 | ND | 15 | 25 | .13% | |
| 135.7 | | | | | | | | | | | |
| | 1.7 | 1.6 | 94 | | | | | | | | |
| 137.4 | 1.1 | 1.0 | 91 | | | | | | | | |
| 138.5 | 1.3 | 1.2 | 92 | | | | | | | | |
| 139.8 | 1.3 | 0.7 | 54 | | | | | | | | |
| 141.1 | 1.4 | 1.2 | 86 | 13902 | 141.1-142.5 | .005 | ND | 20 | 10 | .17% | 14 |
| 142.5 | | | | | | | | | | | |
| | 3.7 | 1.3 | 35 | 13903 | 142.5-146.2 | .005 | ND | 10 | 25 | 435 | |
| 146.2 | | | | | | | | | | | |
| | 1.8 | 1.8 | 100 | | | | | | | | |
| 148.0 | | | | | | | | | | | |
| | 2.5 | 2.1 | 84 | | | | | | | | |
| 150.5 | | | | | | | | | | | |
| | 1.8 | 1.8 | 100 | | | | | | | | 15 |
| 152.3 | 1.4 | 1.3 | 93 | | | | | | | | |
| 153.7 | 1.0 | 1.0 | 100 | | | | | | | | |
| 154.7 | 0.9 | 0.7 | 78 | | | | | | | | |
| 155.6 | 0.7 | 0.6 | 86 | | | | | | | | |
| 156.3 | | | | | | | | | | | |
| | 1.7 | 1.4 | 82 | | | | | | | | |
| 158.0 | | | | | | | | | | | |
| | 1.6 | 1.6 | 100 | | | | | | | | |
| 159.6 | 0.9 | 0.5 | 56 | | | | | | | | |
| 160.5 | | | | | | | | | | | |
| | 5.5 | 3.3 | 60 | 13904 | 160.5-166.0 | ND | ND | 5 | 10 | .155% | 16 |
| 166.0 | | | | | | | | | | | |
| | 1.8 | 0.8 | 44 | | | | | | | | |
| 167.8 | 0.3 | 0.3 | 100 | | | | | | | | |
| 168.1 | 1.2 | 0.3 | 25 | | | | | | | | |
| 169.3 | 1.0 | 1.0 | 100 | | | | | | | | |
| 170.3 | | | | | | | | | | | |
| | 3.0 | 1.5 | 50 | | | | | | | | |
| 173.3 | | | | | | | | | | | |
| | 1.3 | 0.6 | 46 | | | | | | | | |
| 174.6 | | | | | | | | | | | |
| | 1.0 | 0.9 | 90 | | | | | | | | |
| 175.6 | 0.6 | 0.6 | 100 | | | | | | | | 17 |
| 176.2 | 1.1 | 0.8 | 73 | | | | | | | | |
| 177.3 | 1.0 | 0.8 | 80 | | | | | | | | |
| 178.3 | | | | | | | | | | | |
| | 2.0 | 0.8 | 40 | | | | | | | | |
| 180.3 | 1.0 | 0.5 | 50 | | | | | | | | |
| 181.3 | 0.3 | 0.3 | 100 | | | | | | | | |
| 181.6 | 0.6 | 0.5 | 83 | | | | | | | | |
| 182.2 | 1.1 | 0.6 | 55 | | | | | | | | |
| 183.3 | 1.3 | 1.0 | 77 | 13905 | 183.3-184.6 | ND | ND | ND | 10 | 620 | |
| 184.6 | | | | | | | | | | | |
| | 2.9 | 0.7 | 24 | | | | | | | | |
| 187.5 | 1.3 | 1.1 | 85 | | | | | | | | 18 |
| 188.8 | 1.2 | 1.0 | 83 | | | | | | | | |
| 190.0 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SFQ) m gry, musc-qz-fsp schist, foliated, color/comp laminations, chloritic in places, 10 cm gouge at 196' | | 5 | FeOx staining tr altered py on fracture surfaces |
| 10 cm breccia at 197' limn cement with subangular to sub-rounded qz clasts | | | FeOx (limn) cemented qz breccia |
| thin graphitic layers at 197.5' | 200 | | |
| undulations in foliation plane | | | dark FeOx (goe, limn) on fractures |
| fsp porphyroblasts alt. → clay | | | |
| | 210 | 30 | dk FeOx 211-211.5 |
| Metafelsite (SFQ) as above but more chloritic and fissile, fractured to 217.7' | | | |
| distinct alteration of fsp to 218.4' - (argillic alteration proximal to fracture zone) | | 30 | tr amts of orange FeOx on fractures |
| | 220 | | |
| Metafelsite (SFQ) grn-gry, foliated, as above, tr amts of calcite | | 32 | limn and goe (rust to blk) in qz py(?) is completely altered |
| vuggy vein qz 223-224.5, cavities up to 1 cm³ | | | orange FeOx on clayey fractures some dk brn goe up to 3 mm thick |
| | 230 | | |
| | | 30 | |
| many small calcite/clay veinlets | | | FeOx selvages on calcite veinlets |
| | 240 | | |
| | | 35 | |
| Metafelsite (SFQ) as above but more fractured | | | |
| | 250 | | dk orange-brn FeOx |
| | | | FeOx on fractures |
| breccia (~15 cm) qz cement and SFQ clasts | | 30 | pervasive limn staining at 257-257.6 |
| | 260 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | |
| | 2.2 | 1.7 | 77 | | | | | | | | |
| 192.2 | 1.1 | 1.1 | 100 | | | | | | | | |
| 193.3 | 2.2 | 0.5 | 23 | | | | | | | | 19 |
| 195.5 | 1.5 | 0.6 | 40 | | | | | | | | |
| 197.0 | 0.8 | 0.6 | 100 | 13906 | 197.0-197.6 | ND | ND | 10 | 5 | .19% | |
| 197.8 | 3.0 | 0.5 | 17 | | | | | | | | |
| 200.8 | 1.5 | 1.5 | 100 | 13907 | 200.8-202.3 | ND | ND | ND | 10 | .295% | |
| 202.3 | 1.0 | 0.7 | 70 | | | | | | | | 20 |
| 203.3 | 1.0 | 0.8 | 80 | | | | | | | | |
| 204.3 | 1.6 | 0.6 | 38 | | | | | | | | |
| 205.9 | 0.5 | 0.5 | 100 | | | | | | | | |
| 206.4 | 1.0 | 1.0 | 100 | | | | | | | | |
| 207.4 | 1.4 | 1.4 | 100 | | | | | | | | |
| 208.8 | 1.2 | 0.9 | 75 | | | | | | | | |
| 210.0 | 1.2 | 1.2 | 100 | | | | | | | | |
| 211.2 | 2.8 | 2.3 | 82 | 13908 | 211.2-214.0 | ND | ND | ND | 10 | .175% | 21 |
| 214.0 | 3.7 | 3.7 | 100 | | | | | | | | |
| 217.7 | 0.3 | 0.3 | 100 | | | | | | | | |
| 218.0 | | | | | | | | | | | |
| | 9.2 | 8.8 | 96 | 13909 | 220.0-225.0 | ND | ND | 5 | 15 | .325% | 22 |
| 227.2 | | | | | | | | | | | |
| | 7.8 | 7.7 | 99 | | | | | | | | 24 |
| 235.0 | 1.4 | 1.4 | 100 | | | | | | | | |
| 236.4 | | | | | | | | | | | |
| | 8.0 | 8.0 | 100 | | | | | | | | 25 |
| 244.6 | 1.0 | 1.0 | 100 | | | | | | | | |
| 245.6 | 1.5 | 1.4 | 93 | | | | | | | | |
| 247.1 | 1.1 | 1.0 | 91 | | | | | | | | |
| 248.2 | 1.4 | 0.7 | 50 | | | | | | | | |
| 249.6 | 2.1 | 2.1 | | 13910 | 249.6-252.7 | ND | ND | 10 | 20 | .960% | 26 |
| 252.7 | 3.0 | 2.8 | | | | | | | | | |
| 255.7 | 1.9 | 1.8 | | | | | | | | | |
| 257.6 | 2.7 | 2.7 | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry, qz and fsp augens, foliated with irregular qz and fsp segregations, micaceous (musc ± chlorite), qz veinlets also a few vuggy plag (→ clay) veinlets (possible albitization followed by argillic alteration), minor $CaCO_3$, argillization of fsp porphyroblasts at 267 | | 40 | orange-brn FeOx on fractures and as irregular wisps in foliation | 260.3 | 5.0 | 4.9 | 98 | | | | | | | | 27 |
| | | | | 265.3 | 4.5 | 4.4 | 98 | 13911 | 265.3-269.8 | ND | ND | 15 | 20 | .440% | |
| | 270 | | pervasive rust-orange FeOx on fractures and fsp porphyroblasts | 269.8 | 1.6 | 1.6 | 100 | | | | | | | | |
| Metafelsite (SFQ) as above, but with chloritized fractures and selvages on qz veinlets, grn-gry | | 35 | | 271.4 | 3.6 | 0.7 | 19 | | | | | | | | |
| | | | | 274.0 | 2.2 | 2.1 | 95 | | | | | | | | |
| | | | | 276.2 | 2.6 | 2.6 | 100 | | | | | | | | |
| | 280 | | | 278.8 | 2.2 | 2.2 | 100 | | | | | | | | |
| 5-7% altered fsp porphyroblasts | | | FeOx stn with lim envelopes around fractures | 281.0 | 3.4 | 3.2 | 94 | 13912 | 281.0-284.4 | ND | ND | 5 | 10 | .655% | |
| irregular qz and clay segregation | | | | 284.4 | 5.6 | 5.6 | 100 | | | | | | | | |
| | 290 | | tr py (most conspicuous in less oxidized rock) | 291.0 | 2.1 | 1.8 | 86 | | | | | | | | |
| | | | pervasive FeOx staining, tr py on fractures sl tr ap | 293.1 / 294.1 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | vuggy dk red hem fracture surfaces (boxwork-like) | | | | | | | | | | | | |
| breccia: SFQ and qz clasts with qz and lim cement, voids up to 1 cm × 0.5 cm increased amts of carbonate (possibly some ankerite), chert veinlet (1 cm) at 301.5' | 300 | | pervasive rusty lim; up to 1% py on some fractures | | 8.7 | 8.6 | 99 | 13913 | 294.1-302.8 | ND | ND | 60 | 20 | 2.25% | |
| | | | sl tr py | 302.6 | 0.5 | 0.3 | 60 | | | | | | | | |
| | | | | 303.3 | 0.3 | 0.3 | 100 | | | | | | | | |
| | | | tr py | 303.6 | 1.1 | 1.1 | 100 | | | | | | | | |
| 309.2' @ 50° grn-gry and white clay gouge | 310 | | | 305.7 | 3.5 | 3.5 | 100 | 13914 | 305.7-309.2 | .005 | ND | 160 | 20 | 2.50% | 30 |
| Metafelsite (SFQ) m dk gry to grn-gry, foliated, qz and fsp eyes, minor calcite on fractures well fractured small irregular veinlets of lim, qz, and minor calcite | | | pervasive FeOx, sl tr py but most py → lim + goe | 309.2 | 3.4 | 3.2 | 94 | 13915 | 309.2-312.6 | ND | ND | 520 | 120 | 1.00% | |
| | | | tr + py, tr ap, sl tr gn or tt pervasive FeOx to 323' | 312.6 / 313.0 | 0.4 | 0.4 | 100 | 13916 | 312.6-315.0 | ND | ND | 800 | 180 | 1.40% | |
| | 320 | | | | 9.0 | 8.8 | 98 | 13917 | 315.0-322.0 | .013 | ND | 670 | 210 | 2.85% | 31 |
| tr yel-grn oxide (scorodite?) | | | tr py, tr + tt (or jm?) | 322.0 | 1.2 | 0.4 | 33 | 13918 | 322.0-323.2 | .006 | ND | .21% | 630 | .730% | |
| brecciated and fractured up to 40% qz | | | up to 5% tt for 4" at 323.5' up to 15% py for 3" | 323.2 / 324.6 | 1.4 | 1.4 | 100 | 13919 | 323.2-324.6 | .046 | ND | .12% | 225 | .315% | |
| | | | FeOx stain, minor boxworks | | | | | | | | | | | | 32 |
| micaceous | 330 | | tr + tt (?), tr py and ap | | 5.7 | 5.2 | 91 | 13920 | 324.6-331.3 | .021 | ND | 740 | 285 | 1.20% | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) as above, well fractured, brecciated, frags, micaceous, qz is slightly vuggy | | | FeOx (orange-rust) with minor boxwork, tr-1% py, tr-1% tt, tr ap, v. sl tr gn (tt could be jm - can't get a positive identification) | 331.3 | 1.9 | 1.8 | 95 | 13921 | 331.3-333.2 | .007 | ND | 610 | 190 | 2.05% | |
| | | 55 | | 333.2 | 1.3 | 1.3 | 100 | 13922 | 333.2-334.5 | .018 | ND | .12% | 420 | .305% | |
| | | | | 334.5 | 7.3 | 7.2 | 99 | 13923 | 334.5-341.8 | .012 | ND | 320 | 85 | 3.55% | 33 |
| | 340 | | | | | | | | | | | | | | |
| clay in qz segregations | | | tr+ py, tr ap and tt | 341.8 | 1.1 | 1.0 | 100 | | | | | | | | |
| | | | | 342.9 | 2.7 | 2.7 | 100 | 13924 | 341.8-345.6 | .006 | ND | 300 | 90 | 5.95% | |
| drusy qz in 1 cm wide veinlet | | | | 345.6 | | | | | | | | | | | |
| | | | pervasive FeOx to 353' tr+ py, sl tr gn, tr-2% ap, tr tt(?), sulfides are disseminated and concentrated in fractures | | 4.0 | 4.0 | 100 | 13925 | 345.6-349.6 | .010 | ND | 25 | 40 | 1.65% | 34 |
| brecciated metafelsite as above qz + SFQ clasts | 350 | | | 349.6 | | | | | | | | | | | |
| | | | | | 2.5 | 2.4 | 96 | 13926 | 349.6-352.1 | .008 | ND | ND | 55 | 3.40% | |
| vuggy fractures | | | | 352.1 | | | | | | | | | | | |
| the rock is siliceous with dk grey color | | | 1-4% sulfides mostly ap, less tt, minor py, sl tr gn, rusty FeOx on fractures | | 6.9 | 6.6 | 96 | 13927 | 352.1-359.0 | .031 | ND | 25 | 40 | 1.55% | 35 |
| | 360 | | | 359.0 | | | | | | | | | | | |
| Metafelsite (SF) gm-gry, very micaceous, foliated with kink banding and undulations, argillization of fsp, qz veinlets, minor calcite | | | | | 2.0 | 1.7 | 85 | 13928 | 359.0-361.0 | .009 | ND | 5 | 10 | .52% | |
| 363.2 fractured and brecciated to 363.2 | | | tr py and ap | 361.0 | 1.0 | 1.0 | 100 | 13929 | 361.0-362.0 | .005 | ND | 5 | 15 | .285% | |
| | | | | 362.0 | 1.2 | 1.1 | 92 | 13930 | 362.0-363.2 | .025 | ND | 5 | 5 | 395 | |
| | | | 1% ap | 363.2 | 1.0 | 1.0 | 100 | 13931 | 363.2-364.2 | ND | ND | 5 | 10 | 230 | |
| | | 40 | tr py + minor FeOx | 364.2 | | | | | | | | | | | |
| | | | | | 3.9 | 3.4 | 87 | 13932 | 364.2-368.1 | ND | ND | 10 | 5 | 215 | 36 |
| increase in fsp porphyroblasts (to 2%) | | | | 368.1 | | | | | | | | | | | |
| | 370 | 30 | sl tr py | | 2.2 | 2.2 | 100 | | | | | | | | |
| calcareous clay on some fractures | | | | 370.3 | 1.6 | 1.4 | 88 | | | | | | | | |
| | | | no sulfides noted, minor FeOx | 371.9 | 2.5 | 2.5 | 100 | | | | | | | | |
| | | 30 | | 374.4 | 0.9 | 0.9 | 100 | 13933 | 374.4-375.3 | ND | ND | 25 | ND | 590 | |
| | | | | 375.3 | 1.2 | 0.4 | 33 | | | | | | | | |
| | | | | 376.5 | 1.1 | 0.9 | 81 | | | | | | | | 37 |
| chloritized fractures at 377.6' | | | | 377.6 | 1.4 | 0.5 | 36 | | | | | | | | |
| dark green SF chloritic few porphyroblasts | 380 | | sl tr ap | 379.0 | | | | | | | | | | | |
| | | | | | 2.6 | 2.6 | 100 | | | | | | | | |
| | | 55 | | 381.6 | 0.5 | 0.5 | 100 | | | | | | | | |
| | | | | 382.1 | 1.4 | 1.3 | 93 | | | | | | | | |
| | | | tr ap, sl tr py | 383.5 | | | | | | | | | | | |
| up to 7% fsp porphyroblasts | | | | | 2.6 | 2.6 | 100 | 13934 | 383.5-386.1 | .005 | ND | 5 | 10 | 145 | |
| good calcite xtals on fractures | | | | 386.1 | | | | | | | | | | | |
| | | | tr py and ap FeOx on fractures | 387.7 | 1.6 | 1.6 | 100 | 13935 | 386.1-389.0 | .009 | ND | 5 | 5 | 220 | 38 |
| | | | | 389.0 | 0.2 | 0.2 | 100 | | | | | | | | |
| Metafelsite (SFQ) m gry, foliated, mica-qz-fsp schist, qz veinlets up to 5 cm in width, minor calcite, 3% biotite | 390 | 40 | | | 1.1 | 1.1 | 100 | | | | | | | | |
| | | | FeOx (rust) on fractures tr+ ap, tr py | 390.6 | 1.6 | 1.5 | 94 | | | | | | | | |
| | | | | | 4.4 | 4.2 | 95 | | | | | | | | |
| | | | | 395.0 | | | | | | | | | | | |
| | | 55 | tr+ ap and py | | 4.1 | 4.1 | 100 | 13936 | 395.0-399.1 | .011 | ND | 5 | 5 | 730 | 39 |
| | | | | 399.1 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U.S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Star - Friday
Hole No.: K-15
Location: Kantishna
Bearing at Collar: N45°W
Inclination at Collar: -50°
Coord. - Collar N: 3487126.01
E: 342389.34
Length: 201.7'
Elev. - Collar: 2473.4
Core Size: BW44 - IAX - IEX
Date started: 8/19/83
Completed: 8/23/83
Logged by: CHC

## LITHOLOGY, ALTERATION, MISC.

Metafelsite (SF)
phyllitic, dk gry, 2% biotite, principal fracture ~ foliation plane, small amt of clay in fractures, rock is competent, a few faint slicks on foliation plane fractures, foliation layers are 1-30 mm thick

rock is more chlorite-rich and oxidized near fracture zone at 12.5'

minor calcite veinlets (<1 mm)

fracture zone: 18-20', cross cutting qtz veins (~1 cm) at top and bottom, thin sericite selvages on veins, a few slicks on fragments - can't determine attitude

vitreous qz segregations conformable to foliation

calcite on some fracture surfaces

30.0 cnt. ~@ 40°

fracture zone, gouge, minor qz and calcite veinlets (intersecting; high vein density in some fragments)

Metafelsite (SF)
m. gry, fine grained, cross-cutting qz veinlet at 46' - vitreous, brecciated, 3 cm thick, calcite selvages, small amt of sericite (or clay) tr+ dk brn Fe-stained carbonate (not pyrrhotite) calcite and qz veinlets, anastomising, generally <1 mm thick, irregular

## FT.

10, 20, 30, 40, 50

## GRAPHIC LOG

40, 40, 50, 40, 40

## MINERALIZATION

minor FeOx on fractures

intense FeOx (lim, hem, goe) in fracture zone, no sulfides noted

well oxidized (FeOx)

sl tr py in qz veinlet

FeOx stain on calcite veinlets
tr py - dissem and in qz veinlets

tr py

## RECOVERY

| Run | Run length | Core | % |
|---|---|---|---|
| | 9.1 | 1.5 | 17 |
| 9.1 | | | |
| | 3.6 | 3.6 | 100 |
| 12.6 | 1.1 | 1.1 | 100 |
| 13.7 | 2.3 | 2.3 | 100 |
| 16.0 | 0.7 | 0.7 | 100 |
| 16.7 | 1.3 | 1.3 | 100 |
| 18.0 | 1.9 | 1.9 | 100 |
| 19.9 | 1.3 | 1.3 | 100 |
| 21.2 | 1.9 | 1.9 | 100 |
| 23.1 | 0.2 | 0.2 | 100 |
| 23.3 | 2.0 | 1.9 | 80 |
| 25.3 | 3.1 | 2.6 | 84 |
| 28.4 | 1.3 | 1.3 | 100 |
| 29.7 | 2.9 | 2.2 | 76 |
| 32.6 | 0.3 | 0.3 | 100 |
| 32.9 | 1.4 | 1.4 | 100 |
| 34.3 | 3.5 | 3.4 | 97 |
| 37.8 | 0.9 | 0.8 | 89 |
| 38.7 | 0.7 | 0.2 | 29 |
| 39.4 | 3.0 | 2.6 | 87 |
| 42.4 | 2.0 | 1.5 | 75 |
| 44.4 | 4.4 | 4.2 | 95 |
| 48.8 | | | |

## ANALYTICAL

| Sample | Interval | Au oz/ton | Ag oz/ton | Cu ppm | Pb ppm | Zn |
|---|---|---|---|---|---|---|
| 13686 | 25.3-30.0 | ND | ND | ND | ND | 25 |
| 13687 | 30.0-34.3 | .018 | ND | 5 | 5 | 30 |
| 13688 | 34.3-37.8 | .020 | ND | ND | ND | 15 |

## BOX

1, 2, 3, 4, 5

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) dk gry, fine grained, foliated, prinidpal fracture is in foliation plane | | 35 | tr pyrite dissem and in qz veinlets | | 3.4 | 2.8 | 85 | | | | | | | | |
| | | | | 52.2 | | | | | | | | | | | |
| | | | | | 4.7 | 4.7 | 100 | | | | | | | | |
| 1 ft. thick milky quartz vein can't determine attitude - probably conformable to foliation | | | tr arsenopyrite in qz, some good xtal shapes; some of the silvery mineral is #4 - probably due to alteration | 56.9 | | | | 13689 | 56.0-57.0 | ND | ND | 10 | ND | 5 | |
| minor calcite veinlets | 60 | 40 | | | 5.1 | 2.7 | 53 | | | | | | | | 6 |
| | | | | 62.0 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | tr py in calcite veinlet | 63.2 | | | | | | | | | | | |
| | | | | | 3.9 | 3.7 | 95 | | | | | | | | |
| | | | | 67.1 | | | | | | | | | | | 6B |
| Metafelsite (SF) as above with minor qz and cal veinlets | 70 | 40 | | | 5.9 | 5.5 | 93 | | | | | | | | |
| | | | | 73.0 | 1.8 | 1.8 | 100 | | | | | | | | |
| | | | | 74.8 | 0.9 | 0.9 | 100 | 13690 | 73.0-75.7 | ND | ND | ND | 5 | 15 | |
| | | | | 75.7 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 7 |
| calcite on fracture surfaces | 80 | 40 25 | | | 7.1 | 6.3 | 89 | | | | | | | | |
| | | | | 82.8 | | | | | | | | | | | |
| small folds, lensoid quartz segregations and minor calcite veinlets | | | tr py in qz, tarnished, with FeOx stain | | 2.4 | 2.4 | 100 | | | | | | | | |
| | | | tr py in calcite veinlets, 1mm selvages | 85.2 | | | | | | | | | | | |
| Metafelsite (SF) dk gry. fine grained, foliated with corresponding principal fracture, minor qz veinlets with calcareous FeOx stained inclusions in veins (possibly siderite) | | | | | 5.5 | 5.5 | 100 | | | | | | | | 8 |
| | 90 | | pervasive FeOx stain in fracture zone | 90.7 | | | | | | | | | | | |
| | | | | | 2.7 | 0.7 | 26 | | | | | | | | |
| | | | | 93.4 | | | | | | | | | | | |
| | | | | | 2.0 | 0.9 | 45 | | | | | | | | |
| from 95 to 99.5' the rock is competent with only minor fracturing, a few hairlike qz veinlets | | 45 | | 95.4 | | | | | | | | | | | |
| | | | | | 2.9 | 2.9 | 100 | | | | | | | | |
| | | | | 98.3 | 1.7 | 1.2 | 71 | | | | | | | | 9 |
| | 100 | | | 100.0 | | | | | | | | | | | |
| | | | | 101.0 | 1.0 | 0 | 0 | | | | | | | | |
| | | | | 102.5 | 1.5 | 1.2 | 80 | | | | | | | | |
| qz fragments in fracture zone at 103.5 | | | FeOx stained calcite veinlets and fractures, tr py in qz | 103.7 | 1.2 | 0.7 | 58 | | | | | | | | |
| | | | | 105.0 | 1.3 | 1.0 | 77 | | | | | | | | |
| some fractures are chloritized | | | tr v. fine grained disseminated arsenopyrite | 105.4 | 0.4 | 0.4 | 100 | 13691 | 105.0-106.5 | .014 | ND | ND | 20 | 15 | |
| | | | | 106.5 | 1.1 | 0.9 | 82 | | | | | | | | |
| | 110 | 45 | | | | | | | | | | | | | |
| | | | | | 9.1 | 7.2 | 79 | | | | | | | | 10 |
| calcite on fractures | | | FeOx selvage on qz/cal veinlet tr py in qz veinlet | | | | | | | | | | | | |
| | | | | 114.6 | | | | | | | | | | | |
| Metafelsite (SF) as above, but slightly more felsic, foliation banding is more distinct than above | | | | | 4.4 | 3.7 | 84 | | | | | | | | |
| | 120 | | | 119.0 | 1.2 | 0.7 | 58 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) dk gry, fine grained, foliated at ~40°, qz/fsp and bio (→ chlor) laminations, competent rock | | 40 | no sulfides noted no FeOx | 120.2 | | | | | | | | | | | |
| | | | | | 4.6 | 3.7 | 80 | | | | | | | | 11 |
| | | | | 124.8 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | 125.4 | | | | | | | | | | | |
| | | | tr py in and near qz vein FeOx staining | | 3.1 | 2.9 | 93 | 13692 | 125.4-128.5 | ND | ND | ND | 5 | 15 | |
| | 130 | | | 128.5 | 1.5 | 1.3 | 87 | | | | | | | | |
| | | | | 130.0 | | | | | | | | | | | |
| | | 40 | | | 2.3 | 2.0 | 87 | | | | | | | | |
| | | | | 132.3 | | | | | | | | | | | |
| as above | | | | 133.3 | 1.0 | 0.7 | 70 | | | | | | | | 12 |
| | | | | | 2.9 | 1.7 | 59 | | | | | | | | |
| | | | | 136.2 | | | | | | | | | | | |
| | | | | 137.3 | 1.1 | 1.0 | 91 | | | | | | | | |
| | | | | 139.0 | 1.7 | 1.3 | 76 | | | | | | | | |
| | 140 | 25 | | 140.4 | 1.4 | 1.4 | 100 | | | | | | | | |
| curved foliation plane - could be drag folding near fault | | | | | 2.6 | 1.7 | 65 | | | | | | | | |
| | | | | 143.0 | | | | | | | | | | | |
| fractured, as above | | | | | | | | | | | | | | | 13 |
| | | | | | 5.7 | 0.5 | 9 | | | | | | | | |
| | | | FeOx staining on veinlets | 148.7 | 0.5 | 0.5 | 100 | | | | | | | | |
| minor calcite veinlets | 150 | | | 149.2 | | | | | | | | | | | |
| | | | | 150.8 | 1.6 | 1.2 | 75 | | | | | | | | |
| | | | | 151.7 | 0.9 | 0.8 | 89 | | | | | | | | |
| | | 40 | | | 4.0 | 3.6 | 90 | 13693 | 151.7-155.7 | ND | ND | ND | ND | 15 | |
| | | | cal + lim envelope on qz veinlet | | | | | | | | | | | | |
| | | | | 155.7 | 1.2 | 0.9 | 75 | | | | | | | | |
| | | | | 156.9 | 0.5 | 0 | 0 | | | | | | | | 14 |
| | | | | 157.4 | 0.1 | 0.1 | 100 | | | | | | | | |
| Metafelsite (SF) as above, principal fracture is in the foliation plane | 160 | | tr py | 157.5 | 3.0 | 2.8 | 93 | | | | | | | | |
| | | | | 160.5 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 161.2 | | | | | | | | | | | |
| | | | | | 3.3 | 2.5 | 76 | | | | | | | | |
| | | | | 164.5 | | | | | | | | | | | |
| | | 45 | | | 2.4 | 1.0 | 42 | | | | | | | | |
| | | | | 166.9 | | | | | | | | | | | |
| | | | | | 2.6 | 2.4 | 92 | | | | | | | | 15 |
| | 170 | | | 169.5 | | | | | | | | | | | |
| | | 42 | | | 2.7 | 2.5 | 93 | | | | | | | | |
| | | | | 172.2 | 0.8 | 0.6 | 75 | | | | | | | | |
| | | | | 173.0 | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | | 175.0 | | | | | | | | | | | |
| | | | | | 2.5 | 0 | 0 | | | | | | | | |
| | | | | 177.5 | | | | | | | | | | | |
| qz veinlets cross cut calcite veinlets | | | FeOx stn on calcite veinlets | | 2.0 | 0.4 | 20 | | | | | | | | |
| | 180 | | | 179.5 | | | | | | | | | | | |
| | | | sl tr arsenopyrite in veinlet | 181.4 | 1.9 | 1.3 | 68 | | | | | | | | |
| | | 45 | | | | | | | | | | | | | 16 |
| | | | | | 4.6 | 1.0 | 22 | | | | | | | | |
| increased alteration of bio → chlor | | | | | | | | | | | | | | | |
| | | | | 186.0 | 1.0 | 0.9 | 90 | 13694 | 186.0-188.2 | ND | ND | ND | 10 | 25 | |
| | | 35 | | 187.0 | | | | | | | | | | | |
| | | | | 188.2 | 1.2 | 1.0 | 83 | | | | | | | | |
| | 190 | | | 189.7 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) m dk gry, fine grained, qz-fsp and bio-chlor segregations, as above | | 40 | FeOx stained calcite veinlets & FeOx on fractures | 191.6 | | | | | | | | | | | |
| [ Box 17 was blown over by the helicopter] | | | | 195.0 | 13.5 | 7.2 | 53 | | | | | | | | 17 |
| | 200 | | | 199.3 | | | | | | | | | | | |
| | | | | 201.7 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Jupiter - Mars
Location: Kantishna District
Coord. - Collar N: 3491086.21
E: 355097.45
Elev. - Collar: 2990.8
Date started: 8/30/83
Completed: 9/1/83

Hole No.: K-16
Bearing at Collar: N30W
Inclination at Collar: -40°
Length: 237.3 feet
Core Size: BW44-IAX
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag oz/ton | Cu ppm | Pb ppm | Zn % | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry with slight grn-gry tnge fine to med. grained, qz-fsp-mica schist (mica is chlorite + musc) foliated with thin (<1 mm) quartzofeld-spathic color segregations | | 20 | FeOx stn on fractures tr py | | | | | | | | | | | | |
| | 10 | | | | 16.8 | 4.1 | 24 | | | | | | | | 1 |
| 2 types of qz in segregations vitreous, clear qz with inclusions of milky white qz | 20 | | FeOx on some fractures v. sl tr py | 16.8 | 2.2 | 1.2 | 55 | | | | | | | | |
| | | | | 19.0 | 2.5 | 2.5 | 100 | | | | | | | | |
| chlorite selvages on qz segregations | | 10 | | 21.5 | | | | | | | | | | | |
| Metafelsite (SFQ) as above | | | orange-rust to red-orange FeOx on some fractures and minor amt py, fsp-rich layers in foliation plane | 22.8 | 4.7 | 3.2 | 68 | | | | | | | | 2 |
| | 30 | | | 27.5 | | | | | | | | | | | |
| | | | | | 5.1 | 5.1 | 100 | 13980 | 27.5-32.6 | ND | ND | ND | 15 | .115 | |
| | | 10 | | 32.6 | 0.3 | 0.3 | 100 | | | | | | | | |
| | | | | 32.9 | | | | | | | | | | | |
| | | | | 34.3 | 1.4 | 1.4 | 100 | | | | | | | | |
| | | | | | 7.4 | 7.4 | 100 | | | | | | | | 3 |
| | 40 | | | | | | | | | | | | | | |
| rock is more chloritic near quartz segregations | | | | 41.7 | 2.7 | 2.7 | 100 | | | | | | | | |
| | | | | 44.4 | | | | | | | | | | | |
| | | | FeOx on fractures | | | | | | | | | | | | 4 |
| | 50 | | | | 7.0 | 6.1 | 96 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m dk gry, qz-fsp-mica, (chlor + musc) schist, thin (< 1 mm) irregular color segregations, qz and fsp porphyroblasts, minor qz veinlets, foliated | | 15 | rust-orange FeOx on fractures and veinlets | 51.4 | 2.7 | 2.6 | 96 | 13981 | 51.4-54.1 | .007 | ND | 30 | 10 | .235 | |
| | | | | 54.1 | 3.4 | 2.9 | 85 | | | | | | | | |
| chloritization in fracture zone | | | abundant FeOx on fractures minor FeOx in foliation | 57.5 | 3.6 | 3.6 | 100 | | | | | | | | 5 |
| minor FeOx stained gouge (5 mm thick) (can't determine attitude) | 60 | 10 | | 61.1 | | | | | | | | | | | |
| | | | no sulfides noted FeOx on fractures | | 9.8 | 9.5 | 97 | | | | | | | | 6 |
| Metafelsite (SFQ) as above, grn-gry to m dk gry | 70 | 10 | orange to blk FeOx on fractures | 70.9 71.9 | 1.0 | 1.0 | 100 | | | | | | | | |
| veinlets and fractures are vuggy in places | | | orange powdery FeOx coating on fractures v. sl tr py | | 8.2 | 8.2 | 100 | 13982 | 74.0-79.0 | ND | ND | 35 | 10 | .335 | 7 |
| | 80 | 10 | fractures and veinlets are FeOx stained, powdery coatings on some fractures | 80.1 | | | | | | | | | | | |
| chlorite selvages on qz segregations | | 10 | | | 8.3 | 8.3 | 100 | | | | | | | | 8 |
| Metafelsite (SFQ) as above minor carbonate | 90 | 10 | | 88.4 89.5 | 1.1 | 1.1 | 100 | | | | | | | | |
| | | | | | 6.0 | 6.0 | 100 | | | | | | | | 9 |
| SFQ is muscovite-rich in fractured zone minor amt. of clay | | | pervasive FeOx in fractured zone | 95.5 | 3.4 | 3.4 | 100 | | | | | | | | |
| | 100 | | | 98.9 | | | | | | | | | | | |
| | | | rust-orange to blk FeOx and jarosite (?) on fractures | | 6.8 | 6.8 | 100 | | | | | | | | 10 |
| FeOx stained calcite veinlets marginal to qz veinlets | | 6 | | 105.7 | 2.5 | 2.5 | 100 | 13983 | 105.7-108.2 | ND | ND | 10 | 35 | .120 | |
| | 110 | | | 108.2 | | | | | | | | | | | |
| | | 4 | | | 7.6 | 7.5 | 99 | | | | | | | | 11 |
| | | | powdery rust-orange FeOx on fractures | 115.8 117.8 | 2.0 | 2.0 | 100 | | | | | | | | |
| | 120 | | | | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m dk gry to grn-gry, qz-fsp-mica metafelsite, mica is chlor ± musc, foliated with thin segregations of quartzofeldspathic minerals (generally < 1 mm), chlorite selvages on qz veinlets | | 15 | orange-rust FeOx on fractures pervasive 120-122 FeOx stained gouge at 122' calcite veinlets have FeOx stn | | 5.2 | 5.1 | 98 | 13984 | 117.8-123.0 | .005 | ND | 20 | 45 | .520 | |
| | | | | 123.0 | | | | | | | | | | | |
| | | | sl tr py | 125.7 | 2.7 | 2.6 | 96 | | | | | | | | 12 |
| | | | | 127.1 | 1.4 | 1.4 | 100 | | | | | | | | |
| | 130 | | powdery red-orange FeOx on fractures | | 8.0 | 8.0 | 100 | | | | | | | | |
| qz, calcite, and ankerite(?) veinlets vuggy and drusy in places | | 15 | sl tr py | | | | | | | | | | | | 13 |
| REDUCED TO IAX | | | | 135.1 | 1.3 | 1.3 | 100 | | | | | | | | |
| | | | | 136.4 | | | | | | | | | | | |
| Metafelsite (SFQ) grn-gry, as above | 140 | | | | 4.6 | 3.9 | 85 | | | | | | | | |
| | | | | 141.0 | | | | | | | | | | | |
| | | | tr ap | | 5.7 | 5.3 | 93 | 13985 | 141.0-146.7 | ND | ND | 10 | 10 | .340 | 14 |
| | | | | 146.7 | | | | | | | | | | | |
| | | | | 148.2 | 1.5 | 1.4 | 93 | | | | | | | | |
| | 150 | 15 | | | 3.3 | 3.0 | 100 | | | | | | | | |
| fsp porphyroblasts → clay increased veinlet density | | | | 151.5 | | | | | | | | | | | |
| [ drillers report voids ] | | | | | | | | | | | | | | | |
| tr pale blue mineral on fracture at 161' acicular radiating spheres, does not effervesce (possibly shattuckite or cyanotrichite) | | | | | 10.5 | 3.1 | 30 | 13986 | 151.5-162.0 | ND | ND | 15 | 30 | .590 | |
| | 160 | 15 | | | | | | | | | | | | | 15 |
| 162.0 fct. zone | | | 3 mm thick veinlet of tt, tr ap also tr+ pale blue Cu(?) mineral | | | | | | | | | | | | |
| | | | | 162.0 | | | | | | | | | | | |
| vein qz fragments | | | 4 mm thick tt on qz frags, FeOx coating, gossanous | | 3.0 | 0.4 | 13 | 13987 | 162.0-165.0 | .008 | ND | 65 | 270 | .255 | |
| | | | | 165.0 | | | | | | | | | | | |
| yellow and grn oxides or phosphates fractured qz at 166.5' | | | 165-166.2 = gossanous sulfides 35% sulfides (18% tt, 16% py, tr ap) | | 1.2 | 0.7 | 58 | 13988 | 165.0-166.2 | .210 | 6.68 | 425 | 10.6% | .970 | |
| | | | | 166.2 | | | | 13989 | 166.2-166.7 | .040 | .03 | 95 | 290 | .140 | |
| | | | vein qz 166.2-166.7: 1% sulfides | 166.7 | 0.5 | 0.4 | 80 | | | | | | | | |
| | | | | | 2.5 | 0 | 0 | | | | | | | | |
| breccia'ed gossanous quartz limonite cement 60% + lim 170.5-172.5 fragments of qz with fractured SFQ chips | 170 | | 169.2-170.3 - poor recovery, up to 15% gn 170.3-170.8: 3-30% gn, tr+ tt intense pervasive lim+qze+hem rust orange to dk red-brn | 169.2 | 0.9 | 0.2 | 22 | 13990 | 169.2-170.3 | .110 | 32.4 | 215 | 30.4% | .155 | |
| | | | | 170.3 | | | | | | | | | | | |
| | | | | 172.5 | 2.2 | 2.2 | 100 | 13991 | 170.3-172.5 | .038 | 11.1 | 190 | 11.5% | .565 | |
| 174.4 approx. bxd cnt. | | | sl tr to tr py, sl tr tt and gn | 174.4 | 1.9 | 1.8 | 95 | 13992 | 172.5-174.4 | .007 | .35 | 95 | 6.2% | 4.50 | 16 |
| | | | pervasive FeOx to 180.0 | | 1.9 | 1.6 | 84 | 13993 | 174.4-176.3 | ND | ND | 105 | .088% | 3.20 | |
| | | | | 176.3 | | | | 13994 | 176.3-177.6 | ND | ND | 130 | 420 | 3.80 | |
| | | | | 177.6 | 1.3 | 1.3 | 100 | 13995 | 177.6-178.5 | .007 | 2.14 | 100 | 70 | .465 | |
| | | | | 178.5 | 0.9 | 0.7 | 78 | 13996 | 178.5-179.6 | ND | ND | 60 | 230 | 2.80 | |
| | 180 | | | 179.6 | 1.1 | 0.9 | 82 | 13997 | 179.6-180.0 | ND | ND | 100 | 370 | 3.50 | |
| | | | | 180.0 | 0.4 | 0.4 | 100 | | | | | | | | |
| | | | | 180.7 | 0.7 | 0.6 | 86 | | | | | | | | |
| Metafelsite (SFQ) dk gry, foliated, as above fsp porphyroblasts → clay minor qz veinlets, sl tr calcite qz segregations up to 1.5 cm thick | | 15 | orange-rust FeOx stn on fractures and veinlets | | 5.2 | 1.3 | 25 | 13998 | 180.7-185.9 | ND | .07 | 65 | 205 | 1.05 | |
| | | | | 185.9 | | | | | | | | | | | |
| | | | tr ap | | 1.5 | 1.5 | 100 | | | | | | | | 18 |
| | | | | 187.4 | | | | | | | | | | | |
| | 190 | | | 190.0 | 2.6 | 1.6 | 62 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) dk gry to grn-gry, foliated with thin (<1 mm) fsp segregations, qz eyes, fsp → clay, FeOx stained calcite in fractures, chloritization of fractures and chlorite selvages on qz segregations, carbonate veinlets | | 25 | pervasive FeOx orange-rust to blk to deep red v. st tr ap (?) | | 5.8 | 3.1 | 53 | 13999 | 190.0-195.8 | ND | ND | 40 | 85 | .920 | |
| | | | FeOx in fractures and stained fsp and veinlets no sulfides noted | 195.8 | 1.6 | 1.6 | 100 | | | | | | | | |
| | | | | 197.4 | 1.9 | 1.6 | 84 | | | | | | | | |
| dk grn-gry, fsp → clay, vugs in some veins | 200 | 55 | | 199.3 | | | | | | | | | | | |
| | | 15 | | | 4.3 | 4.3 | 100 | | | | | | | | 19 |
| | | | | 203.6 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 204.6 | | | | | | | | | | | |
| grn-gry, as above | | | | | 4.1 | 1.9 | 46 | 1400 | 204.6-208.7 | ND | ND | 10 | 30 | .325 | |
| | | | | 208.7 | | | | | | | | | | | |
| | 210 | | powdery FeOx on fractures and lim in foliation | | 4.0 | 1.4 | 35 | 3451 | 208.7-212.7 | ND | ND | 40 | 55 | .63 | |
| | | 10 | | 212.7 | | | | | | | | | | | |
| Metafelsite (SFQ) m gry, as above | | | orange-rust FeOx on fractures | | 2.7 | 0.8 | 30 | | | | | | | | 20 |
| | | | | 215.4 | | | | | | | | | | | |
| | | | | | 3.3 | 3.1 | 94 | | | | | | | | |
| 1 cm qz/ank (?) veinlet | 220 | | | 218.7 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | tr py and ap | 219.9 | 1.5 | 1.4 | 93 | | | | | | | | |
| | | | | 221.4 | | | | | | | | | | | |
| Metafelsite (SFQ) as above, siliceous qz segregations, 1-7 mm thick minor epidote colors marginal to veinlets | | | tr + py and ap | | 4.9 | 4.5 | 92 | 3452 | 223.0-226.3 | .012 | ND | ND | 90 | .41 | |
| | | 25 | tr py and ap | 226.3 | | | | | | | | | | | 21 |
| | | | | | 2.4 | 2.2 | 92 | | | | | | | | |
| less siliceous and more micaceous (musc+chlor), grn-gry to gry | 230 | 10 | moderate FeOx, stn on fractures tr py and ap | 228.7 | 1.2 | 1.1 | 92 | | | | | | | | |
| | | | | 229.9 | | | | | | | | | | | |
| | | | | | 2.6 | 2.5 | 96 | | | | | | | | |
| | | | rust-orange to blk FeOx tr ap and py | 232.5 | | | | | | | | | | | |
| | | 20 | | | 4.8 | 4.8 | 100 | 3453 | 232.5-237.5 | ND | ND | 15 | 25 | .305 | 22 |
| minor qz veinlets | | | | | | | | | | | | | | | |
| | | EOH | | 237.3 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Galena
Location: Kantishna District
Coord. - Collar N: 3485802.11
E: 342101.13
Elev. - Collar: 2158.9
Date started: 8/25/83
Completed: 8/29/83

Hole No.: K-17
Bearing at Collar: N 35°W
Inclination at Collar: -70°
Length: 262.5'
Core Size: BW44 - IAX
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag | Cu (ppm) | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) in gry, conspicuous qz eyes, foliated, pervasive oxidation to 9.2', slightly vuggy in places, 6 cm FeOx selvages on fractures, minor qz veinlets | | 60 | pervasive FeOx to 9.2' lim, goe, hem | | | | | | | | | | | | |
| | | | | | 9.2 | 2.9 | 31 | | | | | | | | |
| | | 40 | | | | | | | | | | | | | 1 |
| minor calcite on fractures | 10 | | | 9.2 | | | | | | | | | | | |
| | | | sl tr py | | | | | | | | | | | | |
| | | | | | 5.0 | 5.0 | 100 | | | | | | | | |
| slight blue/green tinge minor chlorite | | 45 | | 14.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| | | | | 15.3 | | | | | | | | | | | |
| | | | | | 4.0 | 4.0 | 100 | | | | | | | | |
| | 20 | | | 19.3 | | | | | | | | | | | 2 |
| | | | | | 4.2 | 4.1 | 98 | 13937 | 19.3-23.5 | | | | | | |
| slicks at 23.3' | | | | 23.5 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 24.2 | | | | | | | | | | | |
| | | | | 25.1 | | | | | | | | | | | |
| fracture zone several attitudes on fractures | | | | | 3.0 | 3.0 | 100 | | | | | | | | |
| | | | | 28.1 | | | | | | | | | | | |
| | 30 | | | | 3.7 | 3.7 | 100 | | | | | | | | 3 |
| Metafelsite (SFQ) as above | | 40 | sl tr disseminated py | 31.8 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 32.8 | | | | | | | | | | | |
| | | | | | 2.5 | 2.5 | 100 | 13938 | 32.8-35.3 | | | | | | |
| | | | | 35.3 | | | | | | | | | | | |
| | | | tr + ap on fracture | | 4.8 | 4.8 | 100 | | | | | | | | 4 |
| tr amts of calcite on fractures | 40 | | sl tr v. fine grained py | | | | | | | | | | | | |
| rock is cohesive, but with increased amt. of FeOx stained calcite veinlets | | | tr py in veinlets | 40.1 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 41.1 | | | | | | | | | | | |
| | | | at 43': py accumulations up to 3 cm × 1 cm | | 4.0 | 4.0 | 100 | 13939 | 41.1-45.1 | | | | | | |
| qz veinlets with FeOx selvages | | | | 45.1 | | | | | | | | | | | |
| | | 55 | sl tr py | | | | | | | | | | | | 5 |
| | 50 | | | | | | | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m gry to blue-grn-gry, qz eyes and ⅓p segregations, foliated, calcite on some fractures | | 45 | sl tr arsenopyrite (tr on some fractures) | | 10.2 | 9.2 | 90 | | | | | | | | |
| offset qz veinlets | | | | 55.3 | | | | | | | | | | | 6 |
| older vein is mostly qz | | | | | | | | 13940 | 57.0-58.0 | .011 | ND | 20 | 5 | 20 | |
| younger vein has more calcite and is mineralized | | | | | 6.9 | 6.6 | 96 | | | | | | | | |
| qz frags in fracture at 57' | 60 | | up to 1% py - yel and red/brn FeOx | | | | | 13941 | 58.0-62.2 | ND | ND | 10 | 5 | 70 | |
| | | | | 62.2 | | | | | | | | | | | |
| | | | | 64.1 | 1.9 | 1.7 | 89 | | | | | | | | |
| | | | | 65.4 | 1.3 | 1.1 | 85 | | | | | | | | |
| | | | | 67.8 | 2.4 | 2.3 | 96 | | | | | | | | 7 |
| white to light yellow clay gouge | 70 | | tr py glomerophyric accumulations up to 7 mm in breccia most py → FeOx | | 2.4 | 2.3 | 96 | | | | | | | | |
| | | | | 70.2 | 1.5 | 0.9 | 60 | | | | | | | | |
| chlorite selvages on qz vein | | | | 71.7 | 1.8 | 1.8 | 100 | | | | | | | | |
| moderate amts of lim stained clay gouge, tr calcite | | | red to orange FeOx, tr ap & py, v. fine grained gry metallic on fractures is probably specularite | 73.5 | 0.4 | 0.4 | 100 | | | | | | | | |
| | | | | 73.9 | 1.7 | 0.3 | 18 | | | | | | | | |
| | | 50 | pervasive yel-yel/orange FeOx | 75.6 | 1.8 | 1.8 | 100 | | | | | | | | 8 |
| | | | | 77.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| irregular qz veinlets, mostly conformable with foliation | 80 | | tr py in fractures and disseminated | 78.1 | 3.2 | 2.7 | 84 | | | | | | | | |
| | | 55 | | 81.3 | | | | | | | | | | | |
| Metafelsite (SFQ) m gry, as above minor qz veinlets | | | sl tr py in qz veinlets v. sl tr dissem py | | 4.8 | 4.7 | 98 | 13942 | 81.3-86.1 | .013 | ND | ND | ND | 30 | |
| | | | | 86.1 | | | | | | | | | | | 9 |
| | 90 | | tr py - some euhedral xtals | | 4.7 | 4.5 | 96 | | | | | | | | |
| qz vein at 91' | | | tr + py, ap, gn(?) or sb(?), very fine grained | 90.8 | | | | | | | | | | | |
| | | 50 | no sulfides noted | | 3.8 | 3.8 | 100 | | | | | | | | |
| | | | | 94.6 | | | | | | | | | | | |
| | | | sl tr py, sl tr sb(?) | | 4.8 | 4.4 | 92 | | | | | | | | 10 |
| Metafelsite (SFQ) as above | | | tr ap and py | | | | | | | | | | | | |
| | 100 | | | 99.4 | 0.6 | 0.6 | 100 | | | | | | | | |
| tr calcite on fractures | | 60 | sl tr dissem py and ap slight FeOx on fractures | 100.0 | 3.5 | 3.4 | 97 | 13943 | 100.0-103.5 | ND | ND | 5 | 5 | 25 | |
| | | | | 103.5 | | | | | | | | | | | |
| | | | no sulfides noted | | 4.8 | 4.6 | 96 | | | | | | | | 11 |
| | 110 | | | 108.3 | 1.3 | 1.3 | 100 | | | | | | | | |
| | | | | 109.6 | | | | | | | | | | | |
| thin (<1 mm) qz veinlets | | | sl tr ap and py | | 2.5 | 2.5 | 100 | | | | | | | | |
| | | | | 112.1 | | | | | | | | | | | |
| | | 55 | | | 4.8 | 4.5 | 94 | | | | | | | | 12 |
| | | | | 116.9 | | | | | | | | | | | |
| | 120 | | | | 4.6 | 4.6 | 100 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) m. to m. dk gry, qz eyes, (5%) foliated, small qz veinlets (to 3 mm), calcite on some fracture surfaces | | 55 | tr py dissem up to 1% py in small veinlets pervasive hem at 121.5 | 121.5 | 3.1 | 3.1 | 100 | 13944 | 121.5-124.6 | .008 | ND | ND | 5 | 50 | |
| core is competent | | | tr ap and py dissem & fracture controlled | 124.6 | | | | | | | | | | | 13 |
| | 130 | | | | 9.8 | 9.5 | 97 | | | | | | | | |
| qz veinlets small amt of ankerite marginal to qz | | | tr - tr + py and ap | 134.4 | 2.9 | 2.9 | 100 | 13945 | 134.4-137.3 | .011 | ND | 5 | ND | 25 | 14 |
| | | | yel-orange FeOx | 137.3 | 3.0 | 2.8 | 93 | | | | | | | | |
| | 140 | | | 140.3 | | | | | | | | | | | |
| | | | sl tr py and ap | | | | | | | | | | | | 15 |
| slickensides at 35° | | | sl tr ap | | 9.5 | 9.3 | 98 | | | | | | | | |
| Metafelsite (SFQ) m dk gry, ~3% qz eyes, foliated, sl tr py, minor qz veinlets with clay or sericite | 150 | 55 | sl tr py | 149.8 | | | | | | | | | | | |
| | | | | | 6.2 | 6.0 | 97 | | | | | | | | 16 |
| irregular vitreous white qz segregations in foliation plane (up to 3 cm) and minor cross-cutting qz/ank veinlets | | | | 156.0 | 3.6 | 3.5 | 97 | 13946 | 156.0-159.6 | .008 | ND | 5 | ND | 20 | |
| | 160 | | sl tr py | 159.6 | | | | | | | | | | | |
| | | | | | 5.8 | 5.8 | 100 | | | | | | | | 17 |
| | | 50 | | 165.4 | | | | | | | | | | | |
| Metafelsite (SFQ) as above | | | | | 4.0 | 3.8 | 95 | | | | | | | | |
| | 170 | | | 169.4 | 2.0 | 1.9 | 95 | | | | | | | | |
| | | | | 171.4 | 2.8 | 2.8 | 100 | | | | | | | | 18 |
| nearly vertical fractures 74-79' | | | no sulfides noted slight FeOx on fractures | 174.2 | | | | | | | | | | | |
| | | | | 177.2 | 3.0 | 2.1 | 70 | | | | | | | | |
| | | 55 | v. sl tr ap | | 3.7 | 3.4 | 92 | 13947 | 177.2-180.9 | ND | ND | ND | 5 | 20 | |
| slight chloritization of some fractures | 180 | | FeOx stn 3 cm on each side of fracture | 180.9 | | | | | | | | | | | 19 |
| | | | | | 3.5 | 3.5 | 100 | | | | | | | | |
| | | | | 184.4 | | | | | | | | | | | |
| | | | | | 4.6 | 4.1 | 89 | | | | | | | | |
| | | 55 | | 189.0 | | | | | | | | | | | |
| | 190 | | | | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SFQ) m. gry, fine grained ~5% qz eyes, foliated, qz veinlets up to 4 mm thick, minor calcite veinlets and calcite on fractures | | 50 | v. sl tr py<br>slight FeOx on fractures |
| | 200 | | |
| some fracture surfaces are slightly chloritized | | 60 | sl tr py on fractures |
| qz veinlets | 210 | 60 | v. sl tr dissem py v. fine grained |
| | | | tr py in qz<br>FeOx on fractures, sl tr py |
| calcite on fractures | 220 | | small amt of propylitic alteration tr py, FeOx |
| 4 mm offset on fractures through some veinlets, cataclasite margins on some qz veinlets with vitreous center, also minor carbonate (calcite + ankerite ?) | | | FeOx stain is flesh colored on some veinlets |
| SFQ is very siliceous, foliated (flexion structure ?), micaceous (musc/ser), tr amts of black micaceous clay | 230 | 55 | pervasive FeOx in gouge zone FeOx stn; tr py and ap |
| 234.1 qz is broken into small fragments | | | tr+ gn, tr py, ap, sp in qz |
| unconsolidated black clay 238.5-240.5. qz frags. at 239.5 with 7% py. Sandy with tr+ py from 239.8 to 240.5 | 240 | | massive py up to 3 cm thick tr red (kermasite ?) and yellow (stibiconite ?) ∴ sl tr Sb, approx 60% sulfide from 236-237 - mostly py with trace amounts of ap, sp, gn, tet (?) unverifiable sl tr cp and sp |
| 242.9 | | | |
| Metafelsite (SFQ) as above, fewer qz eyes (2%), calcite and qz veinlets | | 55 | |
| tr yellow oxide | 250 | | minor amts of FeOx, sl tr py |
| chlorite on fractures | 260 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| | 3.1 | 2.9 | 94 | 13948 | 200.4-203.2 | ND | ND | ND | 10 | 25 | 20 |
| 192.1 | | | | | | | | | | | |
| | 8.3 | 7.8 | 94 | | | | | | | | |
| 200.4 | | | | | | | | | | | |
| | 2.8 | 2.6 | 93 | | | | | | | | 21 |
| 203.2 | | | | | | | | | | | |
| | 2.2 | 2.0 | 91 | | | | | | | | |
| 205.4 | | | | | | | | | | | |
| | 2.1 | 2.1 | 100 | | | | | | | | |
| 207.5 | | | | | | | | | | | |
| | 4.5 | 4.4 | 98 | | | | | | | | |
| 212.0 | | | | | | | | | | | 22 |
| | 2.7 | 2.5 | 93 | | | | | | | | |
| 214.7 | | | | 13949 | 214.0-215.0 | ND | ND | 5 | 5 | .04% | |
| | 4.7 | 4.7 | 100 | | | | | | | | |
| 219.4 | | | | | | | | | | | 23 |
| | 3.6 | 3.6 | 100 | | | | | | | | |
| 223.0 | | | | | | | | | | | |
| 224.0 | 1.0 | 0.9 | 90 | | | | | | | | |
| 225.8 | 1.8 | 1.6 | 89 | | | | | | | | |
| | 3.0 | 3.0 | 100 | | | | | | | | |
| 228.8 | | | | 13950 | 227.5-229.5 | ND | ND | ND | ND | 40 | 24 |
| | 2.0 | 1.9 | 95 | 13951 | 229.5-230.8 | ND | ND | ND | 10 | .02% | |
| 230.8 | | | | | | | | | | | |
| | 3.3 | 1.6 | 48 | 13952 | 230.8-234.1 | ND | .07 | 25 | 60 | .02% | |
| 234.1 | 1.7 | 0.4 | 24 | 13953 | 234.1-235.8 | .031 | 3.17 | .05% | .25% | .12% | |
| 235.8 | | | | 13954 | 235.8-237.3 | .230 | 18.8 | .37% | .20% | .24% | |
| | 4.0 | 2.6 | 65 | 13955 | 237.3-239.8 | .360 | 5.58 | .12% | .30% | .17% | |
| 239.8 | 0.7 | 0.7 | 100 | 13956 | 239.8-240.5 | .140 | 4.84 | .06% | .06% | .05% | |
| 240.5 | | | | | | | | | | | |
| | 2.4 | 2.4 | 100 | 13957 | 240.5-242.9 | .023 | ND | 10 | 25 | 35 | 25 |
| 242.9 | | | | 13958 | 242.9-245.0 | .005 | ND | 10 | 20 | 50 | |
| | 4.6 | 4.6 | 100 | | | | | | | | |
| 247.5 | | | | | | | | | | | |
| | 4.9 | 4.7 | 96 | | | | | | | | |
| 252.4 | | | | | | | | | | | 26 |
| | 2.5 | 2.4 | 96 | | | | | | | | |
| 254.9 | | | | | | | | | | | |
| | 2.5 | 2.1 | 84 | | | | | | | | |
| 257.4 | | | | | | | | | | | |
| | 3.0 | 2.3 | 77 | 13959 | 257.4-260.4 | ND | ND | 10 | 15 | 30 | 27 |
| 260.4 | 2.1 | 1.1 | 52 | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Merry Widow
Hole No.: K-18
Location: Kantishna
Bearing at Collar: S 30°E
Inclination at Collar: -70
Coord. - Collar N: 3 489 174.02
E: 353 010.30
Length: 188.0'
Elev. - Collar: 2432.9
Core Size: BW44-IAX-E
Date started: 9/1/83
Completed: 9/6/83
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au (oz/ton) | Ag | Cu (ppm) | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) dk gry oxidized to 74' fine grained, foliated, minor carbonate ($CaCO_3$) vitreous qz fragments at top of hole, 1-2% qz eyes, poor recovery | | | surface oxidation (FeOx) to 74' on fractures, a few gossanous fragments (lim + goe with minor boxworks) near top of hole | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | |
| | | | | | 35.1 | 2.1 | 6 | | | | | | | | |
| | 20 | | | | | | | | | | | | | | |
| | | 55 | minor FeOx | | | | | | | | | | | | |
| rock is more friable and micaceous near the bottom of this interval | 30 | | | | | | | | | | | | | | 1 |
| | | 55 | | 35.1 | | | | | | | | | | | |
| | | | | | 3.2 | 3.1 | 97 | 3463 | 35.1-38.3 | ND | ND | 10 | 15 | 65 | |
| | 40 | | | 38.3 | 2.2 | 0.7 | 32 | | | | | | | | |
| | | | | 40.5 | 5.5 | 1.2 | 22 | | | | | | | | |
| | | 60 | tr + py dull red hem on fractures | 46.0 | 2.3 | 0.9 | 39 | | | | | | | | |
| | 50 | | | 48.3 | 2.1 | 0.7 | 14 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) | | | | 50.4 | | | | | | | | | | | |
| poor recovery, m gry to med dk gry, | | | FeOx on fractures | 52.0 | 1.6 | 0.4 | 25 | | | | | | | | |
| fine grained, fsp-mica-qz schist, mica | | | | 53.0 | 1.0 | 0 | 0 | | | | | | | | |
| is. musc + chlor, fsp phenos → clay, | | | | 54.1 | 1.1 | 0.3 | 27 | 3464 | 53.0-54.1 | ND | ND | 5 | 15 | 20 | |
| increasing amt. of sericite | | | | 54.9 | 0.8 | 0.1 | 12 | | | | | | | | |
| | | | | 55.6 | 0.7 | 0.3 | 43 | | | | | | | | |
| VERY LITTLE ROCK - | | | | | | | | | | | | | | | |
| just cuttings | | | | | | | | | | | | | | | |
| | 60 | | | | 12.5 | 0.1 | 1 | | | | | | | | |
| | | | | 68.1 | | | | | | | | | | | |
| | 70 | | | 68.9 | 0.8 | 0 | 0 | | | | | | | | |
| | | | | | 5.1 | 0.6 | 12 | | | | | | | | |
| a few chips of siliceous med gry SFQ | | | tr+ very fine grained py | 74.0 | | | | | | | | | | | 2 |
| cuttings are med gry, mostly qz | | | tr fine grained py | | 5.0 | 0.3 | 6 | | | | | | | | |
| | 80 | | | 79.0 | | | | | | | | | | | |
| Metafelsite (SFQ) | | | | | | | | | | | | | | | |
| just a few chips of rock, m. gry, | | | tr+ to 1% py | | 4.9 | 0.5 | 10 | 3465 | 79.0-83.9 | ND | ND | 105 | 295 | 310 | |
| as above | | | rusty red-orange FeOx | | | | | | | | | | | | |
| | | | | 83.9 | | | | | | | | | | | |
| cuttings are med gry, qz with minor | | | tr py, some euhedral xtals | | | | | | | | | | | | |
| fsp and clay | | | | | | | | | | | | | | | |
| | 90 | | | | 12.1 | 0.3 | 2 | | | | | | | | |
| a few chips of siliceous SFQ | | | tr py, sl tr ap | 96.0 | | | | | | | | | | | |
| brecciation noted in one fragment | | | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | | 3 |
| cuttings are light gry to med gry | | | tr py | | 12.0 | 0 | 0 | | | | | | | | |
| qz with minor musc and fsp + clay | | | | | | | | | | | | | | | |
| | | | | 108.0 | | | | | | | | | | | |
| | 110 | | | | 3.0 | 0 | 0 | 3466 | 108.0-111.0 | .011 | ND | 75 | 40 | 100 | |
| | | | | 111.0 | | | | | | | | | | | |
| | | | | | 11.0 | 0.3 | 3 | | | | | | | | |
| | 120 | | | | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) cuttings: lt. gry to med gry, qz-rich, a few milky white qz chips at 122.0 | | 20 | tr py in cuttings | 122.0 | 2.0 | 0.5 | 25 | 3467 | 122.0-124. | ND | ND | 40 | 20 | 90 | |
| Graphitic Phyllite (SG) 122-124' black, schistose | | | no py noted in SG | 124.0 | 5.0 | 0.1 | 2 | | | | | | | | 4 |
| Metafelsite (SFQ) as above one milky white quartz chip and a few chips of SG in cuttings | 130 | | tr py in cuttings | 129.0 | 2.1 | 0 | 0 | | | | | | | | |
| | | | | 131.1 | 2.9 | 0 | 0 | | | | | | | | |
| | | | | 134.0 | 4.0 | 0 | 0 | | | | | | | | |
| | 140 | | | 138.0 | | | | | | | | | | | |
| Graphitic Phyllite (SG) blk, clayey, more carbonaceous than graphitic; tr-1% white clay | | | tr py | | 5.8 | 0.4 | 7 | | | | | | | | |
| | | | | 143.8 | 1.4 | 0.9 | 64 | | | | | | | | 5 |
| | | 25 | | 145.2 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 145.9 | 4.0 | 1.7 | 42 | 3468 | 145.9-149.9 | ND | ND | 35 | 15 | 90 | |
| | 150 | | | 149.9 | 0.5 | 0.4 | 80 | | | | | | | | |
| | | | | 150.4 | 3.3 | 0.7 | 21 | | | | | | | | |
| | | 40 | | 153.7 | 2.3 | 1.2 | 52 | | | | | | | | |
| lt. gry SF(?) chips, altering to clay | | | | 156.0 | 5.0 | 0.8 | 16 | | | | | | | | |
| | 160 | | | 161.0 | 2.3 | 0.2 | 9 | | | | | | | | |
| | | | | 163.3 | 4.7 | 0.3 | 6 | | | | | | | | 6 |
| Metafelsite (SF?) with interfingered SG cuttings with a few siliceous chips | | | | 168.0 | | | | | | | | | | | |
| | 170 | | | | 6.4 | 0.1 | 2 | | | | | | | | |
| cuttings: dk gry to blk probably SF with interfingered SG | | | tr py | | | | | | | | | | | | |
| minor lt. gry clay in cuttings qz fragment | | | | 174.4 | 0.9 | 0.2 | 22 | | | | | | | | |
| | | | | 175.3 | | | | | | | | | | | |
| 7 cm of dk gry quartzite | | | qzt is 3% py | | 6.0 | 0.2 | 3 | 3469 | 175.3-181.3 | ND | ND | 80 | 35 | 255 | 7 |
| | 180 | | | 181.3 | | | | | | | | | | | |
| Graphitic Phyllite ? (SG) with interfingered SF? dk gry black cuttings are more clayey than above | | | tr py | | 6.7 | 0 | 0 | | | | | | | | 8 |
| | | EOH | | 188.0 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Red Top
Hole No.: K-19
Location: Kantishna District
Bearing at Collar: N35W
Inclination at Collar: -65°
Coord. - Collar N: 3487247.33
E: 341198.97
Length: 203.5 feet
Elev. - Collar: 1954.3
Core Size: BW44 - IAX
Date started: 8/29/83
Completed: 9/1/83
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag oz/ton | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) dk gry, foliated, fsp-qz-mica schist, (mica is bio + chlor ± musc), fine grained, thin discontinuous segregations of felsic minerals, few conspicuous qz eyes | | 65 | tr py in qz fragments; no sulfides noted, no FeOx | | 13.2 | 2.7 | 20 | | | | | | | | |
| | 10 | 60 | | 13.2 | 3.7 | 2.8 | 76 | | | | | | | | 1 |
| moderate amt. of gen-gry clay in fracture zone | | | sl amount of lim and goe in fracture zone | 16.9 | 2.3 | 2.2 | 96 | | | | | | | | |
| | 20 | | | 19.2 | 1.2 | 1.2 | 100 | | | | | | | | |
| 6" of gry gouge at 22.2' | | | FeOx stn on fractures | 20.4 | 3.1 | 2.7 | 87 | | | | | | | | |
| milky quartz | | | tr amts of very light limonite staining, no sulfides noted | 23.5 | 2.1 | 0.9 | 43 | 13960 | 22.5-27.5 | ND | ND | 5 | 30 | 85 | |
| Metafelsite (SF) as above, minor qz veinlets (<1mm), 3 cm wide qz segregation at 30° with thin chlorite selvages, tr amts of calcite on fractures | 30 | 50 | rust colored FeOx on fractures | 27.6 | 4.4 | 4.3 | 98 | | | | | | | | 2 |
| | | 55 | | 32.0 | 4.7 | 4.7 | 100 | 13961 | 32.0-35.0 | ND | ND | ND | 15 | 145 | |
| | 40 | 55 | | 36.7 | 4.5 | 4.5 | 100 | | | | | | | | 3 |
| as above | | | minor FeOx | 41.5 | 4.4 | 4.2 | 95 | | | | | | | | |
| | 50 | | | 45.6 | 5.4 | 4.9 | 91 | | | | | | | | 4 |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) mgry to dk gry, micq (bjc) - qz - fsp, foliated with thin color bands, minor qz veinlets, calite on fracture at 51', qz segregations in foliation plane up to 4" thick - qz is vitreous white - cross cutting veinlets are more Fe-stained, chlorite selvages marginal to some qz | 60 | 50 | light FeOx on fractures, a few pseudomorphs of lim after py noted | 51.0 | | | | 13962 | 51.0-55.0 | ND | ND | ND | ND | 45 | |
| | | | sl tr py in qz vein euhedral, shiny xtal | | 10.0 | 10.0 | 100 | | | | | | | | 5 |
| | | 55 | tr ap in qz | 61.0 | | | | | | | | | | | |
| qz segregations and veinlets | | | | | 5.5 | 5.1 | 93 | | | | | | | | |
| | | | sl tr py and ap dissem and on fractures | 66.5 | | | | | | | | | | | 6 |
| | 70 | 60 | minor FeOx staining | | 4.8 | 4.2 | 88 | | | | | | | | |
| | | | | 71.3 | | | | | | | | | | | |
| | | | | | 2.9 | 2.9 | 100 | | | | | | | | |
| minor calcite on fractures | | | | 74.2 | | | | | | | | | | | |
| | | | | | 5.1 | 5.1 | 100 | 13963 | 74.2-79.3 | ND | ND | ND | ND | 30 | 7 |
| Metafelsite (SF) as above | 80 | 60 | | 79.3 | | | | | | | | | | | |
| | | | | 79.9 | 0.6 | 0.6 | 100 | | | | | | | | |
| qz veinlets and small (<0.5 mm wide) calcite veinlets | | | | | 4.6 | 4.6 | 100 | | | | | | | | |
| | | | FeOx selvages on some veinlets | 84.5 | | | | | | | | | | | |
| | | 60 | | | 4.0 | 3.8 | 95 | | | | | | | | 8 |
| | | | sl tr lim pseudomorphs after pyrite on some fractures | 88.5 | | | | | | | | | | | |
| | 90 | | | 89.0 | 0.5 | 0.5 | 100 | | | | | | | | |
| | | | | | 4.4 | 4.1 | 93 | | | | | | | | |
| | | | | 93.4 | | | | | | | | | | | |
| | | 60 | | | | | | | | | | | | | 10 |
| | | | rust-orange FeOx on qz vein | | 4.8 | 4.8 | 100 | 13964 | 95.0-98.2 | .024 | ND | 5 | 20 | 40 | |
| grn-gry clay gouge | | | tr dissem py, also tr py on fractures | 98.2 | | | | | | | | | | | |
| | 100 | | | | 5.2 | 5.1 | 98 | | | | | | | | |
| | | | no py noted, minor FeOx on fractures | | | | | | | | | | | | |
| | | 60 | | 103.4 | | | | | | | | | | | 11 |
| Metafelsite (SF) as above, dk gry | | | | | 4.2 | 4.1 | 98 | | | | | | | | |
| | | | sl tr to tr py | 107.6 | | | | | | | | | | | |
| | 110 | | | | | | | | | | | | | | |
| | | | | | 8.1 | 7.6 | 94 | | | | | | | | |
| | | 65 | | | | | | | | | | | | | |
| | | | v. sl tr py FeOx on fractures | 115.7 | 1.0 | 1.0 | 100 | | | | | | | | 12 |
| | | 55 | | 116.7 | | | | 13965 | 115.7-116.7 | ND | ND | 10 | 10 | 360 | |
| | | | | | 3.1 | 2.6 | 84 | | | | | | | | |
| | 120 | | | 119.8 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) dk gry, foliated, fine grained, qz f'sp-mica (biotite) schist, thin color segregations | | 60 | rusty FeOx on fractures | | 4.2 | 4.2 | 100 | | | | | | | | |
| | | | | 124.0 | | | | | | | | | | | |
| | | | | | 3.2 | 3.2 | 100 | 13966 | 124.0-127.2 | ND | ND | ND | ND | 190 | |
| gouge - can't determine attitude with some rock fragments clay is gry | | | pervasive FeOx on gouge - except in impermeable zones | 127.2 | 1.2 | 1.2 | 100 | | | | | | | | |
| | 130 | 70 | | 128.4 | | | | | | | | | | | |
| | | | | | 3.6 | 3.6 | 100 | | | | | | | | |
| milky white vein qz | | | | 132.0 | | | | | | | | | | | 13 |
| Metafelsite (SF) as above, with a few more qz eyes (< 1%), qz veinlets up to 3 mm, | | | tr py in qz | | 3.0 | 3.0 | 100 | | | | | | | | |
| | | | tr py and ap | 135.0 | | | | | | | | | | | |
| | | | | | 1.3 | 1.3 | 100 | | | | | | | | |
| | | | | 136.3 | 1.3 | 0.4 | 31 | | | | | | | | |
| calcite on some fractures | | | | 137.6 | | | | | | | | | | | |
| | 140 | | sl tr py - mostly in qz veinlets | | 1.8 | 1.0 | 56 | | | | | | | | |
| | | | | 139.4 | 1.0 | 0.7 | 70 | | | | | | | | |
| | | | mod FeOx (lim) on fractures sl tr ap | 140.4 | | | | | | | | | | | |
| | | | | | 3.9 | 1.4 | 36 | 13967 | 140.4-144.3 | .005 | ND | 20 | 10 | 170 | 14 |
| some veinlets are vuggy offset veinlets | | | | 144.3 | | | | | | | | | | | |
| at 148': near vertical (5°) qz veinlets look like tension fracture fillings = up to 10% of rock | | | orange-rust FeOx, tr py and ap | | 4.7 | 4.7 | 100 | 13968 | 144.3-148.0 | ND | ND | 15 | 10 | .270% | |
| 148.0 | | | good mineralization: tt, ap, & py 148-149: up to 5% sulfides | | | | | 13969 | 148.0-149.0 | .100 | 1.32 | 315 | 110 | .260% | |
| | 150 | | | 149.0 | | | | | | | | | | | |
| Vein quartz breccia fractured, sulfide rich, pale blue/grn. oxide (or phosphate), contact is indistinct | | | 149-152.5: 10-30% sulfides massive in places up to 3" of sulfides: 80% tt, 20% py + ap in massive zones | | 3.7 | 3.7 | 100 | 13970 | 149.0-152.7 | .290 | 2.82 | 240 | 375 | 1.50% | |
| | | | | 152.7 | | | | | | | | | | | |
| sl tr gypsum on fractures | | | abun siderite on fractures. 152.5-155: est 1-3% sulfides FeOx on fractures | | 4.1 | 4.1 | 100 | 13971 | 152.7-156.8 | .098 | .09 | 100 | 65 | .520% | 15 |
| | | | | 156.8 | | | | | | | | | | | |
| Metafelsite (SF) as above, contact with qz breccia apparently follows foliation at 158.7' | | 65 | 155-158.7: 2-15% sulfides (70% tt, 20 ap, 10 py) | | 4.9 | 4.7 | 96 | 13972 | 156.8-161.7 | .039 | ND | 20 | 30 | .280% | |
| | 160 | | 158.7-162.5: tr + ap and py sl tr tt | | | | | | | | | | | | |
| | | 65 | | 161.7 | | | | | | | | | | | |
| Graphitic phyllite (SG): 162.5-163 | | | | | | | | | | | | | | | |
| Vein quartz breccia with SG, qz, and sulfide clasts, vuggy in places, tr gypsum | | | 2-5% py, up to 5% tt | | 4.7 | 2.8 | 60 | 13973 | 161.7-166.4 | .240 | 1.71 | 175 | 110 | .455% | 16 |
| | | | | 166.4 | | | | | | | | | | | |
| | | | tr + to 3% sulfides predominately py | | 4.6 | 4.5 | 98 | 13974 | 166.4-171.0 | .150 | 2.54 | 420 | 225 | .280% | |
| | 170 | | | | | | | | | | | | | | |
| | | | | 171.0 | 1.0 | 0.4 | 40 | 13975 | 171.0-172.0 | .250 | 63.6 | .40% | 630 | .600% | |
| | | | | 172.0 | | | | | | | | | | | |
| | | | | 173.6 | 1.6 | 1.3 | 81 | 13976 | 172.0-173.6 | .012 | ND | 40 | 25 | 870 | |
| 176.4 Graphitic phyllite (SG) | | | tr + py | | 2.8 | 0.9 | 32 | 13977 | 173.6-176.4 | .018 | .04 | 35 | 10 | 300 | |
| | | | | 176.4 | | | | | | | | | | | 17 |
| | 180 | | | | 6.1 | 0 | 0 | | | | | | | | |
| | | | | 182.5 | 1.4 | 1.4 | 100 | | | | | | | | |
| unconsolidated with qz fragments 182.5-183.5 | | 5 | tr py | 183.9 | 1.1 | 1.1 | 100 | | | | | | | | |
| | | | | 185.0 | | | | | | | | | | | |
| milky white qz segregations, fissile | | | | | 3.7 | 1.8 | 49 | | | | | | | | |
| | | | | 188.7 | 1.3 | 1.1 | 85 | | | | | | | | 18 |
| | 190 | | | 190.0 | | | | 13978 | 188.7-190.0 | ND | .03 | 60 | 10 | 100 | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| vitreous white quartz segregation can't determine attitude, probably conformable with foliation | | | no sulfides in qz | 191.3 | | | | | | | | | | | |
| | | | | 192.9 | 1.6 | 1.6 | 100 | | | | | | | | |
| | | | | 194.3 | 1.4 | 1.4 | 100 | | | | | | | | |
| Graphitic phyllite (SG) nearly vertical foliation minor fold features | | 4 | tr to 1% py subhedral to euhedral | 196.8 | 2.5 | 1.3 | 52 | | | | | | | | |
| | 200 | | | 199.0 | 2.2 | 2.2 | 100 | | | | | | | | 20 |
| | | | | 201.3 | 2.3 | 1.9 | 83 | | | | | | | | |
| | | | | 203.5 | 2.2 | 1.6 | 73 | 13979 | 201.3-203.5 | .015 | ND | 70 | 20 | 115 | |
| | | EOH | | | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

| | |
|---|---|
| Property: Red Top | Hole No.: K-20 |
| Location: Kantishna District | Bearing at Collar: N 35 W |
| | Inclination at Collar: -50 |
| Coord. - Collar N: 3487183.27 | |
| E: 340924.36 | Length: 186.6 feet |
| Elev. - Collar: 1837.5 | Core Size: BW44 - IAX |
| Date started: 9/6/83 | |
| Completed: 9/9/83 | Logged by: CHC |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag oz/ton | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mine Dump - from surface to at least 39' | 10 | | | | 12.4 | 2.7 | 21 | | | | | | | | |
| | | | | 12.4 | 2.8 | 2.2 | 79 | | | | | | | | 1 |
| | | | | 15.2 | 3.0 | 2.5 | 83 | | | | | | | | |
| | 20 | | | 18.2 | 4.3 | 1.9 | 44 | | | | | | | | |
| | | | | 22.5 | 4.5 | 1.0 | 22 | | | | | | | | |
| | 30 | | | 27.0 | 6.0 | 0 | 0 | | | | | | | | |
| | | | | 33.0 | 1.5 | 1.1 | 73 | 3470 | 330-34.5 | ND | .13 | 45 | 640 | 310 | |
| | | | | 34.5 | 1.5 | 0 | 0 | | | | | | | | |
| | | | | 36.0 | 0.4 | 0.4 | 100 | | | | | | | | |
| | 40 | | | 36.4 | 3.1 | 1.4 | 45 | | | | | | | | 2 |
| Graphitic Phyllite (SG) black, carbonaceous, moderately graphitic, 1-2% fsp (→clay)/qz in foliation | | 50 | minor lim stain of quartzo-feldspathic/clay segregations | 39.5 | 5.5 | 2.9 | 53 | | | | | | | | |
| | | | | 45.0 | 3.0 | 0 | 0 | | | | | | | | |
| cuttings | | | | 48.0 | | | | | | | | | | | |
| Metatelsite (SF) - oxidized, fractured. v. lt grey clay (fault gouge?) to 52.5' | 50 | | | | 4.5 | 1.6 | 36 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) med gry to dk gry, qz-fsp-mica schist, drag folds at 54°, fractured with qz veinlets and segregations, slightly vuggy | | | FeOx on fractures and qz veinlets, tr py - in fractures and disseminated | 52.5 | 3.4 | 0.7 | 20 | | | | | | | | |
| | 55 | | | 55.9 | 2.5 | 2.5 | 100 | | | | | | | | |
| chloritization near fractures, qz veinlets have limonite selvages with local sericitization | 60 | 0 | pervasive FeOx in gouge | 58.4 | 1.8 | 1.8 | 100 | | | | | | | | 3 |
| | | | tr py, sl tr ap, strong FeOx (orange-red to blk) | 60.2 | 3.3 | 3.2 | 97 | | | | | | | | |
| much of the SF to 71.5' is fissile with micas → clay, rock is incompetent | | 0 | tr py and ap, strong orange-red FeOx stn on fractures and clays | 63.5, 64.9 | 1.4 | 1.4 | 100 | 3471 | 63.5-64.9 | .009 | ND | 10 | 40 | 230 | |
| | | | | 67.9 | 3.0 | 3.0 | 100 | | | | | | | | |
| | 70 | 15 | | | 3.6 | 3.2 | 89 | | | | | | | | 4 |
| Metafelsite (SF) m gry, fine grained, fractured with cross cutting qz veinlets, qz-fsp-mica schist, foliated, sl tr $CaCO_3$, vugs and open spaces in fractures | | | sl tr py, orange-red FeOx on fractures | 71.5, 72.8 | 1.3 | 1.3 | 100 | | | | | | | | |
| | | | | | 3.3 | 3.3 | 100 | | | | | | | | |
| | | 20 | | 76.1, 77.7 | 1.6 | 1.1 | 69 | | | | | | | | 5 |
| | 80 | | tr py, minor FeOx | | 2.8 | 2.8 | 100 | | | | | | | | |
| as above, rock is claystone-like in places, moderate amount of white clayey layers (fsp → clay) up to 5mm thick | | | | 80.5 | 0.8 | 0.8 | 100 | | | | | | | | |
| | | | | 81.3 | 3.5 | 3.5 | 100 | | | | | | | | |
| rock is better indurated from 82.5 to 86.5' | | | FeOx (tin-then-goe) on fractures, tr py, sl tr ap | 84.8 | 3.0 | 2.7 | 90 | 3472 | 84.8-87.8 | .005 | ND | 5 | 20 | 120 | 6 |
| | | | | 87.8 | 2.0 | 1.6 | 80 | | | | | | | | |
| mostly claystone-like SF with some indurated rock, minor brecciation of qz veinlets with open spaced filling | 90 | | | 89.8 | 1.5 | 1.5 | 100 | | | | | | | | |
| metafelsite, as above | | 5 | tr + ap, accumulations up to 1.3 x 0.75 cm in qz veins, FeOx - rust orange | 91.3 | 3.8 | 3.8 | 100 | 3473 | 91.3-95.1 | .018 | ND | 10 | 40 | 325 | 7 |
| near vertical foliation with irregular qz segregations in foliation plane | | | | 95.1 | 2.2 | 2.2 | 100 | | | | | | | | |
| | | | | 97.3 | 2.1 | 2.1 | 100 | | | | | | | | |
| | 100 | | | 99.4 | | | | | | | | | | | |
| | | | pervasive lim staining | | 5.5 | 4.4 | 80 | | | | | | | | |
| 105.0 est. cont. | | | | 104.9 | | | | | | | | | | | |
| | | | | | 5.5 | 0 | 0 | | | | | | | | 8 |
| | 110 | | | | | | | | | | | | | | |
| 112.0 unconsolidated gry-tan clay with 10% milky white qz fragments | | | sl tr FeOx on qz chips | 110.4, 111.6 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | | | 1.9 | 1.1 | 58 | | | | | | | | |
| tan (FeOx) clay with interfingered med gry clay, 5% white clay (from fsp), with a few milky white qz chips | | | FeOx on tan clay and fractures | 113.5, 115.0 | 1.5 | 1.0 | 67 | 3474 | 113.5-115.0 | .005 | ND | 25 | 25 | 315 | |
| | | | | 115.4 | 0.4 | 0.3 | 75 | | | | | | | | |
| claystone-like poorly indurated med gry SF (?) | | | no FeOx | 116.8 | 1.4 | 0.9 | 64 | | | | | | | | 9 |
| | | 55 | | 118.2 | 1.4 | 1.0 | 71 | | | | | | | | |
| | 120 | | orange FeOx on fractures | 119.3 | 1.1 | 0.7 | 64 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) med gry, fine grained, foliated, qz-fsp-mica schist, mica & fsp → clay, minor qz segregations and veinlets, small undulations in foliation | | 5 | FeOx stn on clays, fractures, and qz veinlets | 121.0 | 1.7 | 0.5 | 29 | | | | | | | | |
| | | | | 122.3 | 1.3 | 0.8 | 47 | | | | | | | | |
| | | | | 123.8 | 0.5 | 0.5 | 100 | | | | | | | | |
| | | | | 124.8 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | sl tr py in veinlets | 125.8 | 1.0 | 0.7 | 90 | | | | | | | | |
| | | | | 126.5 | 0.7 | 0.6 | 86 | | | | | | | | |
| poorly indurated | | | | | 4.1 | 1.2 | 29 | 3475 | 126.5-130.6 | ND | ND | 10 | 15 | 170 | |
| Quartz vein breccia (SFV) - cataclastic angular qz fragments with qz and lim cement | 130 | | intense FeOx on fractures tr t ap (up to 3mm x 3mm) tr py | 130.6 | 2.1 | 1.8 | 86 | 3476 | 130.6-132.7 | .009 | ND | ND | 30 | 120 | |
| Metafelsite (SF) as above, poorly indurated, claystone-like | | 40 | | 132.7 | 0.3 | 0.3 | 100 | | | | | | | | |
| | | | | 133.6 | 1.1 | 0.9 | 82 | 3477 | 133.0-134.1 | ND | ND | ND | ND | 230 | 10 |
| | | | | 134.1 | | | | | | | | | | | |
| | | | | | 5.9 | 1.0 | 17 | 3478 | 134.1-140.0 | ND | ND | ND | 10 | 125 | |
| brecciated qz vein 1 cm white clay (alt fsp) vein at 143' | 140 | | intense FeOx on fractures sl tr py | 140.0 | 0.7 | 0.6 | 86 | | | | | | | | |
| claystone - probably an altered less feldspathic SF unit | | | | 140.7 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 141.7 | 1.3 | 1.2 | 92 | | | | | | | | |
| | | | | 143.0 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | 20 | | 143.7 | 1.1 | 1.0 | 91 | | | | | | | | |
| Metafelsite (SF) as above, gradational change from well indurated rock to poorly indurated claystone-like rock, minor altered (friable clay) qz/fsp veinlets (< 1 mm) | | | very minor FeOx sl tr py | 144.8 | 0.4 | 0.4 | 100 | | | | | | | | 11 |
| | | | | 145.2 | 1.9 | 1.9 | 100 | | | | | | | | |
| | | | | 147.1 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | 12 | | 148.3 | 1.7 | 1.7 | 100 | | | | | | | | |
| | 150 | | | 150.0 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | sl tr v. fine grained py | 150.6 | 0.9 | 0.8 | 89 | | | | | | | | |
| | | | | 151.5 | 1.0 | 0.9 | 90 | | | | | | | | |
| | | | | 152.5 | 1.4 | 1.4 | 100 | | | | | | | | |
| | | | | 153.9 | 1.1 | 0.9 | 82 | | | | | | | | 12 |
| | | | | 155.0 | | | | | | | | | | | |
| | | | moderate FeOx sl tr py | 156.1 | 1.1 | 1.0 | 91 | | | | | | | | |
| well indurated SF 156-159' minor brecciated qz veinlets | | | | 157.0 | 0.9 | 0.7 | 78 | | | | | | | | |
| | | | | | 2.0 | 1.6 | 80 | 3479 | 157.0-159.0 | .005 | ND | 10 | 25 | 185 | |
| | 160 | 40 | | 159.0 | 1.4 | 0.8 | 57 | | | | | | | | |
| | | | no FeOx | 160.4 | 1.6 | 0.7 | 44 | | | | | | | | |
| | | | FeOx on fractures | 162.0 | | | | | | | | | | | |
| Metafelsite (SF) m.gry, micaceous, as above with claystone-like intervals | | | | 164.1 | 2.1 | 1.5 | 71 | | | | | | | | 13 |
| | | | FeOx on fractures sl tr py | | 1.9 | 1.8 | 95 | | | | | | | | |
| | | | | 166.0 | 1.0 | 0.9 | 90 | | | | | | | | |
| indurated rock with intermixed clays | | 35 | | 167.0 | 2.0 | 1.7 | 85 | | | | | | | | |
| | 170 | | | 169.0 | 1.5 | 1.4 | 93 | 3480 | 169.0-170.5 | ND | ND | 5 | 25 | 120 | |
| | | | | 170.5 | 0.9 | 0.9 | 100 | | | | | | | | |
| | | | | 171.4 | 1.1 | 0.8 | 73 | | | | | | | | |
| | | | | 172.5 | 1.5 | 1.5 | 100 | | | | | | | | |
| | | | FeOx on fractures | 174.0 | 1.5 | 0.9 | 60 | | | | | | | | 14 |
| | | | | 175.5 | 0.9 | 0.8 | 89 | | | | | | | | |
| | | | | 176.4 | 0.5 | 0.4 | 80 | | | | | | | | |
| | | 50 | | 176.9 | 1.4 | 0.7 | 50 | | | | | | | | |
| | 180 | | | 178.3 | 0.3 | 0.3 | 100 | | | | | | | | |
| | | | | 178.6 | 0.8 | 0.6 | 75 | | | | | | | | |
| | | | | 179.4 | 0.9 | 0.8 | 89 | | | | | | | | |
| qz fragments in clay | | | | 180.3 | 1.8 | 1.7 | 94 | | | | | | | | |
| | | | | 182.1 | 1.5 | 1.5 | 100 | | | | | | | | 15 |
| | | | | 183.6 | | | | | | | | | | | |
| pale red clay on some foliation plane fractures | | 25 | | | 3.0 | 1.6 | 53 | 3481 | 183.6-186.6 | ND | ND | 10 | 15 | 75 | |
| | | E OH | | 186.6 | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company: BUREAU OF MINES

| | |
|---|---|
| Property: Red Top | Hole No.: K-21 |
| Location: Kantishna District | Bearing at Collar: N 35 W |
| | Inclination at Collar: -50 |
| Coord. - Collar N: 3487521.19 | |
| E: 341481.98 | Length: 175 feet |
| Elev. - Collar: 2063.9 | Core Size: BW44 - IAX |
| Date started: 9/1/83 | |
| Completed: 9/7/83 | Logged by: CHC |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz | Ag oz | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Graphitic Phyllite (SG) dk gry to black with interbedded calcareous schist (SCS), can't determine thickness or location of SCS due to poor recovery in upper 15' of hole | | 60 | tr py in SCS | | | | | | | | | | | | |
| | 10 | | | | 15.0 | 1.1 | 7 | | | | | | | | |
| clay (gouge?) at 15' | | | | 15.0 | | | | | | | | | | | |
| Graphitic Phyllite (SG) blk to dk gry with interbedded layers of qz in foliation plane (1-10 mm), also m gry feldspathic layers (<1-5 mm) | | 55 | tr to tr+ py, subhedral to euhedral ?al outlines with FeOx on rims, up to 5 mm, minor FeOx on foliation fractures, some felsic layers with ubiquitous staining | 17.6 | 2.6 | 2.6 | 100 | 3454 | 15.0-17.6 | ND | ND | 70 | 65 | 220 | 1 |
| | 20 | | | | 3.9 | 2.6 | 67 | | | | | | | | |
| phyllite is clayey and friable in places | | | | 21.5 | | | | | | | | | | | |
| Calcareous schist (SCS) [possibly SM] m gry, foliated, thin (<1-3 mm) color banding, gradational changes to and from SG, calcite effervescence [this unit could be Bunteen's SM but seems too fine grained] | | | tr fine grained py | | 4.0 | 0.8 | 20 | | | | | | | | |
| | | | | 25.5 | 1.5 | 0.8 | 53 | | | | | | | | |
| | | | | 27.0 | 1.5 | 1.2 | 80 | | | | | | | | |
| | | | | 28.5 | 0.9 | 0.9 | 100 | | | | | | | | |
| Graphitic Phyllite (SG) foliated as above, appears brecciated but fragments may be due to soft sediment deformation, slight amt calcite | 30 | 70 | FeOx stained layers in foliation | 29.4 | 2.6 | 1.9 | 73 | | | | | | | | |
| Calcareous schist (SCS) [or SM] med gry to white as above, calcite segregations to 1.2 cm thick, a few vdys with calcite xtals | | | | 32.0 | | | | | | | | | | | |
| | | | sl tr py with minor FeOx staining near py, py is fine grained | | 4.3 | 0.7 | 16 | | | | | | | | |
| | | 50 | | 36.3 | | | | | | | | | | | 2 |
| 6" of breccia at 139.5' | | | | | 2.7 | 0.8 | 30 | | | | | | | | |
| | 40 | | | 39.0 | | | | | | | | | | | |
| small amounts of calcareous interfingered clayey graphitic-carbonaceous phyllite at 39.5' and 47.5' | | 60 30 | | | 2.0 | 1.3 | 65 | | | | | | | | |
| | | | | 41.0 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | 41.6 | 0.6 | 0.7 | 88 | | | | | | | | |
| | | | | 42.4 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 43.4 | 1.1 | 0.5 | 45 | | | | | | | | |
| | | | | 44.5 | 2.1 | 1.2 | 57 | | | | | | | | |
| | | | | 46.6 | 0.8 | 0.7 | 88 | | | | | | | | |
| | | | | 47.4 | 1.5 | 1.5 | 100 | 3455 | 47.4-48.9 | ND | ND | 30 | 35 | 110 | 3 |
| | 50 | | | 48.9 | 1.4 | 1.4 | 100 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Calcareous schist (SCS) [or SM] med to dk gry with irregular white layers and segregations, thin (<0.5 mm) black phyllitic interbeds and fracture fillings, some zones with calcite xtals, marbleized white intervals are up to 6 cm thick, mica is musc + bio | | | sl tr fine grained py to tr py, minor FeOx on fractures |
| Graphitic Phyllite (SG) calcareous | 60 | 40 | |
| Calcareous schist (SCS) as above but brecciated with calcite cement - could be due to solution collapse | | 35 | tr + py in breccia, up to 2.5 cm × 1.2 cm, slight FeOx on fractures |
| graphitic calcareous schist | 70 | | minor FeOx, sl tr py |
| Calcareous schist (SCS) [or SM] as above, with more interbedded graphitic units (SG) up to 25% of rock is graphitic phyllite | | 25 | |
| fractured [poor recovery] SCS, SG, and marble | 80 | 15 | sl tr py<br>sl tr FeOx |
| graphitic calcareous schist, as above | 90 | 10 | sl tr to tr pyrite |
| Calcareous schist (SCS) [or SM] med gry to dk gry with marbly segregations; irregular, wavy bands of interbedded graphitic layers, rock is 10-20% graphitic phyllite, white marble segregations are up to 4 cm thick | 100<br>110 | 45<br>40 | sl tr to tr py occasional xtals up to 5 mm |
| | 120 | 55 | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | |
| 50.3 | 1.3 | 1.3 | 100 | | | | | | | | |
| 51.6 | 0.4 | 0.4 | 100 | | | | | | | | |
| 52.0 | 1.2 | 1.2 | 100 | | | | | | | | |
| 53.2 | 1.0 | 0.7 | 70 | | | | | | | | |
| 54.2 | 1.0 | 1.0 | 100 | | | | | | | | |
| 55.2 | 1.8 | 1.1 | 61 | | | | | | | | |
| 57.0 | 1.7 | 1.6 | 94 | | | | | | | | 4 |
| 58.7 | 1.1 | 1.1 | 100 | | | | | | | | |
| 59.8 | 3.0 | 1.5 | 50 | | | | | | | | |
| 62.8 | 6.8 | 2.9 | 43 | | | | | | | | |
| 69.6 | 1.9 | 1.9 | 100 | 3456 | 69.6-71.5 | ND | ND | 20 | 25 | 85 | |
| 71.5 | 0.9 | 0.8 | 89 | | | | | | | | 5 |
| 72.4 | 1.1 | 1.1 | 100 | | | | | | | | |
| 73.5 | 1.0 | 1.0 | 100 | | | | | | | | |
| 74.5 | 1.4 | 0.3 | 21 | | | | | | | | |
| 75.9 | 1.9 | 0.5 | 26 | | | | | | | | |
| 77.8 | 0.9 | 0.7 | 78 | | | | | | | | |
| 78.7 | 3.8 | 0.6 | 16 | | | | | | | | |
| 81.5 | 1.0 | 0.7 | 70 | | | | | | | | |
| 82.5 | 1.3 | 0.8 | 62 | | | | | | | | |
| 83.8 | 1.3 | 0.3 | 23 | | | | | | | | |
| 85.1 | 2.6 | 0.9 | 35 | | | | | | | | |
| 87.7 | 2.1 | 0.9 | 43 | | | | | | | | |
| 89.8 | 2.2 | 0.8 | 36 | | | | | | | | 6 |
| 92.0 | 3.0 | 0.5 | 17 | | | | | | | | |
| 95.0 | 5.0 | 0.5 | 10 | | | | | | | | |
| 100.0 | 1.5 | 1.1 | 73 | | | | | | | | |
| 101.5 | 1.3 | 1.2 | 92 | 3457 | 101.5-102.8 | ND | ND | 35 | 35 | 180 | |
| 102.8 | 0.7 | 0.3 | 43 | | | | | | | | |
| 103.5 | 1.5 | 0.9 | 60 | | | | | | | | |
| 105.0 | 1.0 | 1.0 | 100 | | | | | | | | |
| 106.0 | 1.3 | 1.1 | 85 | | | | | | | | |
| 107.3 | 2.6 | 1.2 | 46 | | | | | | | | 7 |
| 109.9 | 1.4 | 1.3 | 93 | | | | | | | | |
| 111.3 | 2.5 | 1.4 | 56 | | | | | | | | |
| 113.8 | 1.7 | 1.0 | 59 | | | | | | | | |
| 115.5 | 4.5 | 1.1 | 24 | | | | | | | | |
| 120.0 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au | Ag | Cu ppm | Pb ppm | Zn ppm | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Calcareous schist (SCS) [or SM] med gry to dk gry with white marble segregations, graphitic layers (SG) comprise up to 30% of the rock, mica is principally muscovite, white marble occurs in foliation plane and as cross-cutting fractures | | 20 | tr py, accumulations up to 5 mm | | 1.9 | 0.2 | 11 | | | | | | | | |
| | | | | 121.9 | 0.9 | 0.9 | 100 | 3458 | 121.9-122.8 | ND | ND | 55 | 30 | 145 | |
| | | | | 122.8 | | | | | | | | | | | |
| | | | sl tr py | 124.0 | 1.2 | 0.6 | 50 | | | | | | | | |
| | | 15 | | 125.4 | 1.4 | 0.2 | 14 | | | | | | | | 8 |
| | | | | | 3.8 | 3.8 | 100 | | | | | | | | |
| | 130 | | | 129.2 | 1.0 | 1.0 | 100 | | | | | | | | |
| | | | | 130.2 | | | | | | | | | | | |
| minor slickensides in foliation plane rake = 60° | | | | | 2.6 | 1.4 | 54 | | | | | | | | |
| | | | tr py | 132.8 | | | | | | | | | | | |
| | | | | | 1.4 | 1.1 | 79 | | | | | | | | |
| Graphitic phyllite (SG) with 20% SCS, fissile | | | | 134.2 | 1.6 | 0.8 | 50 | | | | | | | | |
| | | | tr py, minor FeOx | 135.8 | 1.2 | 0.7 | 58 | | | | | | | | |
| | | | | 137.0 | 0.8 | 0.7 | 88 | | | | | | | | 9 |
| | | | | 137.8 | | | | | | | | | | | |
| Calcareous schist (SCS) [or SM] as above | 140 | | | | 1.9 | 1.8 | 95 | | | | | | | | |
| | | | | 139.7 | 1.0 | 1.0 | 100 | 3459 | 137.8-140.7 | ND | ND | 25 | 25 | 85 | |
| | | | | 140.7 | 1.0 | 0.9 | 90 | | | | | | | | |
| | | | tr py, good euhedral xtals | 141.7 | 1.2 | 1.2 | 100 | | | | | | | | |
| | | | | 142.9 | 0.9 | 0.9 | 100 | | | | | | | | |
| | | | | 143.8 | | | | | | | | | | | |
| | | | | | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | | 145.8 | 0.9 | 0.4 | 44 | | | | | | | | |
| | | 35 | | 146.7 | 1.0 | 0 | 0 | | | | | | | | |
| graphite-rich zone | | | | 147.7 | 1.0 | 0.6 | 60 | | | | | | | | 10 |
| | 150 | | | 148.7 | | | | | | | | | | | |
| | | | | | 1.9 | 0.5 | 26 | | | | | | | | |
| | | | | 150.6 | 1.3 | 1.1 | 85 | 3460 | 150.6-151.9 | ND | ND | 20 | 40 | 75 | |
| | | | | 151.9 | | | | | | | | | | | |
| | | 30 | | | 2.2 | 0.8 | 36 | | | | | | | | |
| | | | | 153.1 | 0.9 | 0.6 | 67 | | | | | | | | |
| | | 15 | | 154.0 | | | | | | | | | | | |
| | | | | 155.4 | 1.4 | 0.6 | 43 | | | | | | | | |
| minor voids | | | | 156.1 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 156.8 | 0.7 | 0.7 | 100 | | | | | | | | |
| | | | | 157.7 | 0.9 | 0.7 | 78 | | | | | | | | |
| | 160 | | | 158.0 | 0.3 | 0.2 | 67 | 3461 | 158.0-159.6 | ND | ND | 15 | 35 | 75 | |
| Graphitic Phyllite (SG) with interbedded SCS, as above | | | tr py | 159.6 | 1.6 | 1.6 | 100 | | | | | | | | |
| | | | | | 4.1 | 0.5 | 12 | | | | | | | | 11 |
| | | 30 | 1 cm wide zone of 2% py | | | | | | | | | | | | |
| | | | | 163.7 | 0.5 | 0.5 | 100 | | | | | | | | |
| | | | | 164.2 | 1.1 | 0.8 | 80 | | | | | | | | |
| | | | | 165.3 | 0.6 | 0.6 | 100 | | | | | | | | |
| | | | | 165.9 | 1.7 | 1.5 | 88 | | | | | | | | |
| | | | | 167.6 | 0.9 | 0.3 | 33 | | | | | | | | |
| Calcareous schist (SCS) [or SM] as above | 170 | | | 168.5 | | | | | | | | | | | |
| | | | | | 1.7 | 0.9 | 53 | | | | | | | | |
| | | | | 170.2 | 1.4 | 0.7 | 50 | | | | | | | | 12 |
| | | | tr py | 171.6 | 1.2 | 0.9 | 75 | | | | | | | | |
| Graphitic Phyllite (SG) | | | | 172.8 | 0.7 | 0.1 | 14 | | | | | | | | |
| | | | | 173.5 | 1.5 | 1.5 | 100 | 3462 | 173.5-175.0 | ND | ND | 105 | 15 | 105 | |
| | | | | 175.0 | | | | | | | | | | | |
| | | EOH | | | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U.S. BUREAU OF MINES

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

Property: Golden Dollar
Hole No.: K-22
Location: Kantishna
Bearing at Collar: N 20° W
Inclination at Collar: -60
Coord. - Collar N: 3 489 398.79
E: 345 992.37
Length: 61'
Elev. - Collar: 2555.4
Core Size: BW44 - IAX
Date started: 9/6/83
Completed: 9/7/83
Logged by: CHC

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | BOX |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 12.0 | 0 | 0 | | | |
| | 10 | | | | | | | | | |
| | | | | 12.0 | | | | | | |
| | | | | 13.0 | 1.0 | 0 | 0 | | | |
| | | | | | 2.0 | 0 | 0 | | | |
| | | 85 | | 15.0 | | | | | | |
| Metafelsite (SFQ) dk gry, fine grained, foliated, some biotite-rich phyllitic chips, a few small chips of vitreous quartz, slightly vuggy, 2% qz eyes | | 60 | limonite on fractures and in foliation layers | | 2.0 | 0.4 | 20 | | | |
| | 20 | | | 17.0 | | | | | | |
| | | | | 19.0 | 2.0 | 0.3 | 15 | | | |
| | | | | 21.0 | 2.0 | 0 | 0 | | | |
| | | | | | 3.0 | 0 | 0 | | | 1 |
| | | | FeOx stn | 24.0 | | | | | | |
| as above POOR RECOVERY | | | | 26.0 | 2.0 | 0.2 | 10 | | | |
| | | | | 28.0 | 2.0 | 0 | 0 | | | |
| | 30 | | | 30.0 | 2.0 | 0 | 0 | | | |
| | | | | | 2.0 | 0 | 0 | | | |
| | | | | 32.0 | | | | | | |
| v. dk gry to blk mica-rich phase of SFQ (biot + chlor) intermixed with chips of SFQ as above, small amt of milky qz fragments | | | FeOx stn (lim) on qz, minor lim on fractures in SFQ, v. sl tr py | 33.5 | 1.5 | 0.7 | 47 | | | |
| | | | | | 5.5 | 0.8 | 14 | | | |
| | 40 | | minor hem stn on fractures | 39.0 | | | | | | |
| clay rich gouge (?) zone m. dk gry, can't determine attitude | | | | | 3.9 | 2.0 | 51 | | | |
| | | | | 42.9 | | | | | | |
| | | 35 | v. minor FeOx | 45.0 | 2.1 | 1.6 | 76 | | | |
| Metafelsite (SF) dk gry, fine grained, foliated, micaceous, 1% qz eyes | | | | 47.0 | 2.0 | 2.0 | 100 | | | |
| | 50 | | | | 5.0 | 2.0 | 40 | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SF) m gry, micaceous, foliated, schistose, as above | | 60 | v. sl tr FeOx | 52.0 | | | | | | | | | | | |
| | | | | 55.0 | 3.0 | 0.9 | 30 | | | | | | | | |
| | | | | | 2.7 | 0 | 0 | | | | | | | | |
| | | | | 57.7 | 0.3 | 0 | 0 | | | | | | | | |
| | 60 | | | 58.0 | 3.0 | 0 | 0 | | | | | | | | |
| | | EOH | | 61.0 | | | | | | | | | | | |
| STUCK ROD terminated hole. new hole in same location @ -70° is K-22B | | | | | | | | | | | | | | | |

# DIAMOND DRILL HOLE LOG

Company U. S. BUREAU OF MINES

| | |
|---|---|
| Property Golden Dollar | Hole No. K-22B |
| Location Kantishna | Bearing at Collar N20°W |
| | Inclination at Collar -70 |
| Coord. - Collar N 3 489 398.79 | |
| E 345 992.37 | Length 226.3' |
| Elev. - Collar 2555.4 | Core Size BW44-IAX |
| Date started 9/7/83 | |
| Completed 9/10/83 | Logged by CHC |

LEGEND

SURVEY

| Footage | Bearing | Inclination |
|---|---|---|
| | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION | RECOVERY Run | Run length | Core | % | ANALYTICAL Sample | Interval | Au oz/ton | Ag | Cu ppm | Pb | Zn | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Metafelsite (SFQ) dk gry, fine grained, qz-fsp-mica schist, some intermixed clay, 2% qz eyes | | | v. minor FeOx | | | | | | | | | | | | |
| POOR RECOVERY TO 25.6' | 10 | | | | | | | | | | | | | | |
| | | | | | 25.6 | 0.9 | 4 | | | | | | | | 1-3 |
| | 20 | | | | | | | | | | | | | | |
| | | | | 25.6 | 1.6 | 1.4 | 88 | 3482 | 25.6-27.2 | ND | ND | ND | 30 | 45 | |
| Metafelsite (SF) dk gry, micaceous, schistose, friable in places, thin segregations of quartzofeldspathic minerals | 30 | 30 | red-orange FeOx on fractures hem pseudomorphs after py | 27.2 | 0.9 | 0.9 | 100 | | | | | | | | |
| | | | | 28.1 | 1.9 | 1.9 | 100 | | | | | | | | |
| | | | | 30.0 | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | minor FeOx (lim) | 32.0 | 2.1 | 0.4 | 19 | | | | | | | | 4 |
| | | | | 34.1 | 1.9 | 1.3 | 68 | | | | | | | | |
| | | | | 36.0 | 0.1 | 0.1 | 100 | | | | | | | | |
| | 40 | 20 | | 36.1 | 2.9 | 1.3 | 45 | | | | | | | | |
| | | | | 39.0 | 2.0 | 2.0 | 100 | | | | | | | | |
| | | | | 41.0 | 3.0 | 1.6 | 53 | | | | | | | | |
| | | | | 44.0 | 3.5 | 3.5 | 100 | | | | | | | | 5 |
| | | 25 | | 47.5 | 0.7 | 0.7 | 100 | | | | | | | | |
| | 50 | | | 48.2 | 2.0 | 1.7 | 85 | | | | | | | | |

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| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF)<br>m gry to m dk gry, fsp-qz-mica, bio → chlor and musc, foliated with faint laminations | 60 | 20 | very slight amt. of FeOx (bio → lim) |
| as above | 70 | | slight hem on fractures |
| | 80 | | |
| Metafelsite<br>m dk gry, foliated with thin (<0.5mm) discontinuous fsp laminations, minor cross-cutting qz veinlets and calcite veinlets, calcite on some fractures, chlorite is more conspicuous than above, 1% qz porphyroblasts | 90 | 20 | minor FeOx<br>red hem on calcite on a few of the fractures |
| as above | 100<br>110<br>120 | | v. slight FeOx |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 50.2 | | | | | | | | | | | |
| | 2.3 | 2.3 | 100 | 3483 | 50.2-54.5 | ND | ND | ND | 35 | 55 | |
| 54.5 | | | | | | | | | | | |
| | 5.5 | 0.7 | 13 | | | | | | | | |
| 60.0 | | | | | | | | | | | |
| | 2.7 | 0 | 0 | | | | | | | | 6 |
| 62.7 | | | | | | | | | | | |
| | 2.3 | 0 | 0 | | | | | | | | |
| 65.0 | | | | | | | | | | | |
| | 2.0 | 0.4 | 20 | | | | | | | | |
| 67.0 | | | | | | | | | | | |
| | 2.0 | 1.7 | 85 | | | | | | | | |
| 69.0 | | | | | | | | | | | |
| | 3.0 | 1.7 | 57 | | | | | | | | |
| 72.0 | | | | | | | | | | | |
| | 3.0 | 1.7 | 57 | | | | | | | | |
| 75.0 | | | | | | | | | | | |
| | 2.0 | 0.7 | 35 | | | | | | | | |
| 77.0 | | | | | | | | | | | |
| | 2.5 | 0.9 | 36 | | | | | | | | |
| 79.5 | | | | | | | | | | | |
| | 2.5 | 1.4 | 56 | 3484 | 79.5-82.0 | ND | ND | ND | 45 | 125 | |
| 82.0 | | | | | | | | | | | 7 |
| | 1.2 | 1.2 | 100 | | | | | | | | |
| 83.2 | | | | | | | | | | | |
| | 1.9 | 0.4 | 21 | | | | | | | | |
| 85.1 | | | | | | | | | | | |
| | 1.5 | 1.3 | 87 | | | | | | | | |
| 86.6 | | | | | | | | | | | |
| | 1.1 | 0.7 | 64 | | | | | | | | |
| 87.7 | | | | | | | | | | | |
| | 1.0 | 0.7 | 70 | | | | | | | | |
| 88.7 | | | | | | | | | | | |
| | 1.6 | 0.6 | 38 | | | | | | | | |
| 90.3 | | | | | | | | | | | |
| | 2.7 | 0.7 | 26 | | | | | | | | |
| 93.0 | | | | | | | | | | | |
| | 0.7 | 0.6 | 100 | | | | | | | | |
| 93.7 | | | | | | | | | | | |
| | 1.6 | 0.6 | 60 | | | | | | | | |
| 94.7 | | | | | | | | | | | |
| | 0.6 | 0.4 | 67 | | | | | | | | |
| 95.3 | | | | | | | | | | | |
| | 2.7 | 1.0 | 37 | | | | | | | | 8 |
| 98.0 | | | | | | | | | | | |
| | 2.0 | 0.8 | 40 | | | | | | | | |
| 100.0 | | | | | | | | | | | |
| | 0.7 | 0.6 | 86 | | | | | | | | |
| 100.7 | | | | | | | | | | | |
| | 1.2 | 1.1 | 92 | 3485 | 100.7-101.9 | ND | ND | 5 | 80 | 110 | |
| 101.9 | | | | | | | | | | | |
| | 1.2 | 0.4 | 33 | | | | | | | | |
| 103.1 | | | | | | | | | | | |
| | 5.9 | 0.9 | 15 | | | | | | | | |
| 109.0 | | | | | | | | | | | |
| | 1.6 | 0.9 | 56 | | | | | | | | |
| 110.6 | | | | | | | | | | | |
| | 1.0 | 0.6 | 60 | | | | | | | | |
| 111.6 | | | | | | | | | | | |
| | 2.6 | 0.8 | 31 | | | | | | | | 9 |
| 114.2 | | | | | | | | | | | |
| | 2.8 | 0.9 | 32 | | | | | | | | |
| 117.0 | | | | | | | | | | | |
| | 1.5 | 0.6 | 40 | | | | | | | | |
| 118.5 | | | | | | | | | | | |
| | 2.5 | 0.4 | 16 | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF) m gry, fine grained, qz-fsp-mica schist, foliated with thin (<0.5 mm) irregular fsp laminations, cross-cutting qz/ank veinlets with minor chloritization (veinlets up to 5.0 mm thick), calcite on some fracture surfaces | | | tr py |
| | 130 | | |
| | | 25 | sl tr hem |
| 3% biotite grades into sl tr bio | | | |
| | 140 | | tr + py → mt 1 cm × 2 cm in fracture also disseminated |
| lt. gry clay with SF chips can't determine attitude | | | |
| biotite-rich (3%) phase of SF calcite veinlets, some fractures are chloritized | | 40 | sl pink-red (hem) staining no sulfides noted |
| minor sericite | | | |
| | 150 | | |
| | | | |
| | 160 | 55 | |
| poorly indurated, claystone-like SF grades into more cohesive better lithified rock | | | sl tr ap |
| | 170 | | |
| | 180 | 30 | |
| Metafelsite (SF) dk gry, biotite, foliated with thin fsp segregations, as above | | | no sulfides noted |
| | 190 | | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 121.0 | 1.4 | 0.6 | 43 | | | | | | | | |
| 122.4 | 0.9 | 0.8 | 89 | | | | | | | | |
| 123.3 | 1.0 | 0.4 | 40 | | | | | | | | |
| 124.3 | 1.5 | 1.5 | 100 | 3486 | 124.3-125.8 | ND | ND | 5 | 35 | 95 | |
| 125.8 | 1.0 | 0.6 | 60 | | | | | | | | |
| 126.8 | 1.5 | 0.4 | 27 | | | | | | | | |
| 128.3 | 0.7 | 0.7 | 100 | | | | | | | | |
| 129.0 | 1.0 | 0.9 | 90 | | | | | | | | |
| 130.0 | 1.3 | 1.3 | 100 | | | | | | | | |
| 131.3 | 1.6 | 1.4 | 88 | | | | | | | | |
| 132.9 | 1.1 | 1.1 | 100 | | | | | | | | |
| 134.0 | 1.4 | 1.2 | 86 | | | | | | | | |
| 135.4 | 0.9 | 0.8 | 89 | | | | | | | | |
| 136.3 | 1.0 | 0.9 | 90 | | | | | | | | 11 |
| 137.3 | 1.3 | 1.3 | 100 | | | | | | | | |
| 138.6 | 1.7 | 1.5 | 88 | 3487 | 138.6-140.3 | ND | ND | 35 | 45 | 485 | |
| 140.3 | 1.7 | 1.7 | 100 | | | | | | | | |
| 142.0 | 1.0 | 0.9 | 90 | | | | | | | | |
| 143.0 | 1.2 | 1.2 | 100 | | | | | | | | |
| 144.2 | 2.3 | 2.3 | 100 | | | | | | | | |
| 146.5 | 1.5 | 1.4 | 93 | | | | | | | | |
| 148.0 | 1.1 | 0.9 | 82 | | | | | | | | |
| 149.1 | 0.9 | 0.8 | 89 | | | | | | | | |
| 150.0 | 2.2 | 1.1 | 50 | | | | | | | | 12 |
| 152.2 | 2.4 | 1.4 | 58 | | | | | | | | |
| 154.6 | 1.0 | 0.9 | 90 | | | | | | | | |
| 155.6 | 1.3 | 0.9 | 69 | | | | | | | | |
| 156.9 | 1.3 | 0.7 | 54 | | | | | | | | |
| 158.2 | 1.7 | 0.4 | 24 | | | | | | | | |
| 159.9 | 1.9 | 1.3 | 68 | | | | | | | | |
| 161.8 | 1.1 | 1.1 | 100 | | | | | | | | 13 |
| 162.9 | 1.6 | 1.1 | 69 | | | | | | | | |
| 164.5 | 1.7 | 1.5 | 88 | 3488 | 164.5-166.2 | ND | ND | 5 | 85 | 70 | |
| 166.2 | 1.6 | 1.5 | 94 | | | | | | | | |
| 167.8 | 1.2 | 1.0 | 83 | | | | | | | | |
| 169.0 | 1.0 | 0.3 | 30 | | | | | | | | |
| 170.0 | 2.0 | 0.6 | 30 | | | | | | | | |
| 172.0 | 1.3 | 1.1 | 85 | | | | | | | | |
| 173.3 | 1.0 | 0.9 | 90 | | | | | | | | |
| 174.3 | 0.5 | 0.5 | 100 | | | | | | | | |
| 174.8 | 1.7 | 1.4 | 82 | | | | | | | | 14 |
| 176.5 | 0.7 | 0.1 | 14 | | | | | | | | |
| 177.2 | 2.8 | 0.9 | 32 | | | | | | | | |
| 180.0 | 1.0 | 0.8 | 80 | | | | | | | | |
| 181.0 | 2.0 | 0.1 | 5 | | | | | | | | |
| 183.0 | 1.3 | 0.6 | 46 | | | | | | | | |
| 184.3 | 1.0 | 1.0 | 100 | | | | | | | | |
| 185.3 | 1.0 | 1.0 | 100 | 3489 | 185.3-186.3 | ND | ND | 10 | 30 | 100 | |
| 186.3 | 0.6 | 0 | 0 | | | | | | | | |
| 186.9 | 0.8 | 0.8 | 100 | | | | | | | | 15 |
| 187.7 | 0.9 | 0.6 | 67 | | | | | | | | |
| 188.6 | 1.4 | 1.4 | 100 | | | | | | | | |
| 190.0 | | | | | | | | | | | |

| LITHOLOGY, ALTERATION, MISC. | FT. | GRAPHIC LOG | MINERALIZATION |
|---|---|---|---|
| Metafelsite (SF) dk gry, fine grained, foliated, very thin faint laminations, qz-fsp-mica (chlor+bio) schist, cross cutting calcite veinlets up to 2 mm thick, chlorite selvages on veinlets, some fractures are chloritized | | 30 | v. sl tr py – a couple of small grains noted |
| qz/ank veinlets (mostly carbonate) | 200 | | sl tr py |
| veinlets as above | 210 | | tr py marginal to veinlets |
| minor graphite on some fractures faint slicks at 25° | | | sl tr py slight red hematite staining |
| | 220 | | |
| Metafelsite (SF) as above minor calcite veinlets | | EOH | |

| RECOVERY | | | | ANALYTICAL | | | | | | | BOX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Run | Run length | Core | % | Sample | Interval | Au | Ag | Cu | Pb | Zn | |
| 191.3 | 1.3 | 0.9 | 70 | | | | | | | | |
| 192.5 | 1.2 | 1.2 | 100 | | | | | | | | |
| 194.0 | 1.5 | 1.3 | 87 | | | | | | | | |
| 195.1 | 1.1 | 1.1 | 100 | | | | | | | | |
| 196.1 | 1.0 | 1.0 | 100 | | | | | | | | |
| 197.1 | 1.0 | 0.7 | 70 | | | | | | | | 16 |
| 197.8 | 0.7 | 0.6 | 86 | | | | | | | | |
| 198.9 | 1.1 | 0.7 | 64 | | | | | | | | |
| 200.2 | 1.3 | 0.9 | 69 | | | | | | | | |
| | 3.5 | 1.7 | 49 | 3490 | 200.2-203.7 | .005 | ND | 10 | 35 | 170 | |
| 203.7 | 1.7 | 1.7 | 100 | | | | | | | | 17 |
| 205.4 | 1.1 | 0.3 | 27 | | | | | | | | |
| 206.5 | 1.0 | 0.9 | 90 | | | | | | | | |
| 207.5 | 1.0 | 0.9 | 90 | | | | | | | | |
| 208.5 | 1.2 | 1.2 | 100 | | | | | | | | |
| 209.7 | 1.0 | 1.0 | 100 | | | | | | | | |
| 210.7 | 1.4 | 0.8 | 57 | | | | | | | | |
| 212.1 | 1.6 | 1.6 | 100 | | | | | | | | |
| 213.1 | 0.9 | 0.6 | 67 | | | | | | | | |
| 214.6 | 0.5 | 0.2 | 40 | | | | | | | | |
| 215.1 | 2.0 | 2.0 | 100 | | | | | | | | 18 |
| 217.1 | 2.0 | 1.9 | 80 | | | | | | | | |
| 219.1 | 0.6 | 0.3 | 50 | | | | | | | | |
| 219.7 | 1.2 | 0.9 | 75 | | | | | | | | |
| 220.9 | 1.3 | 1.3 | 100 | | | | | | | | |
| 222.2 | 0.6 | 0.6 | 100 | | | | | | | | 19 |
| 222.8 | 1.3 | 1.3 | 100 | | | | | | | | |
| 224.1 | 2.2 | 2.2 | 100 | 3491 | 224.1-226.3 | ND | ND | ND | ND | 25 | |
| 226.3 | | | | | | | | | | | |

# APPENDIX D

## SAMPLE ANALYSIS AND INTERPRETATION

By Wm. G. Salisbury

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## SAMPLE ANALYSIS AND INTERPRETATION

### INTRODUCTION

A total of 2,421 samples were collected and analyzed during the 1983 study. The distribution of samples by type and quantity is shown in table AD-1. The table also shows the type of analysis performed on the various kinds of samples. All analyses were performed by Skyline Laboratories in Wheat Ridge, Colorado.

Ammonium citrate-dithizone cold extractable heavy metal (CxMH) analyses were performed on all Kantishna soil samples by field methods before transmittal to the laboratory for conventional determinations. CxHM results correlated well with laboratory analyses and proved to be a rapid and inexpensive indicator of anomalous metal concentrations.

Free gold was recovered from placer concentrates in the field by physical extraction and/or mercury amalgamation. The remaining concentrates were analyzed in the laboratory by the methods shown on table AD-1.

Detection limits for the various methods of analysis are shown on table AD-2.

### INTERPRETATION

Analytical data were interpreted by Salisbury & Dietz, Inc. utilizing computer software applications contained in "EARTH SCIENCE INFORMATION SYSTEM" (ESIS), a product of Control Data Corporation. ESIS provides data base management, statistical processing, and data presentation in a variety of formats.

Each of the sample types from both study areas were compiled into separate data bases for interpretation. Stream sediment, panned concentrate, soil, and rock chip samples from previous studies were also

accumulated in data base files. Data from previous studies were treated separately in statistical calculations because of differences in analytical techniques and detection limits. No statistics were performed on sample populations from the Dunkle area. Previous samples include 681 soils and 5 stream sediments from the Dunkle area and 453 stream sediments from the Kantishna area. All of the data is shown on tables AD-10 through AD-27.

Ordered arrays, frequency distributions, and correlation matrices were prepared for major elements in each sample type from the Kantishna Hills study area. Erratically high sample values were eliminated prior to statistical processing.

Threshold values for stream sediment and panned concentrate samples were defined as the lower value of the upper 25th percentile of the sample population. Third order anomalies were defined as those values ranging from threshold to mean plus one standard deviation. Second order anomalies were defined as those values between mean plus one and mean plus two standard deviation. First order anomalies were defined as those values exceeding mean plus two standard deviations and include the high values eliminated from statistical processing. All elements were treated in this manner except that any detectable gold was considered anomalous. The anomalous areas delineated on figures K-34 through K-41 in the text are based on values which exceed the lower limits for second order anomalies. A statistical breakdown of anomalous stream sediment samples from the Kantishna area is shown in table AD-3. Similar information for panned concentrates is contained in table AD-4. Anomalous samples in the Dunkle study area were selected by inspection of analytical results.

Element correlation matrices for stream sediment rock and soil samples from the Kantishna area are shown in tables AD-5 through AD-7. Lead and silver in stream sediments correlate moderately, but concentrations of other elements appear to vary independently. Lead-silver and tungsten-gold show

a high correlation and lead-zinc correlates moderately well in rock samples. All elements except arsenic in soil samples show an unusually high correlation and arsenic correlates moderately with the other elements. It should be noted that in all cases the samples have been combined from many diverse populations.

All analytical data were transferred to computer tape for archival with the Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys.

Combined element maps for stream sediments, rock chips, and panned concentrates were hand drafted from computer plots for each element (plates K-10, K-11, D-2, and D-3). Anomalous sample locations are shown on plates K-12 through K-15. Plan maps showing soil sample locations and value profiles are contained in this Appendix (figures AD-1 through AD-25. Soil grid locations are shown on plate 17.

Table AD-1 - Sample Types and Analytical Methods

| No. of Samples | Sample Types | Method of Analysis and Elements |
|---|---|---|
| 16 | Rock Chip Character Samples | Suite 1 Assay plus Suite 3 Geochem |
| 309 | Rock Chip Samples Kantishna | Suite 1 Assay |
| 94 | Rock Chip Samples Dunkle | Suite 2 Assay |
| 400 | Drill Core Samples | Suite 1 Assay |
| 944 | Soils Kantishna | Suite 1 Geochem |
| 53 | Soils Kantishna | Suite 1 plus Co, Sn, and V, Geochem |
| 88 | Soils Dunkle | Suite 2 Geochem |
| 217 | Stream Silt Samples Kantishna | Suite 1 Geochem |
| 55 | Stream Silt Samples Dunkle | Suite 1 Geochem |
| 15 | Placer (pits and cable tool) Samples | Suite 3 Geochem (after amalgamation) |
| 14 | Placer (pits) | 31 Element Spec (after amalgamation) |
| 66 | Reconnaissance Placer Kantishna | Suite 3 Geochem (after amalgamation) |
| 73 | Reconnaissance Placer Kantishna | 31 Element Spec (after amalgamation) |
| 4 | Reconnaissance Placer Dunkle | Suite 3 Geochem (after amalgamation) |
| 3 | Reconnaissance Placer Dunkle | 31 Element (after amalgamation) |
| 45 | Panned Concentrates Kantishna | Suite 1 Geochem |
| 10 | Panned Concentrates Kantishna | Suite 3 Geochem |
| 18 | Panned Concentrates Dunkle | Suite 1 plus Sn Geochem |
| 179 | Placer Samples Kantishna | Amalgamation |
| 9 | Placer Samples Dunkle | Amalgamation |

**Suite 1 - ASSAY**

Au, Ag - Fire
Cu, Pb, Zn, Sb, Bi, As - AA
Mo, W - Colorimetric

**Suite 2 - ASSAY**

Au, Ag - Fire
Cu, Pb, Zn, Co, Ni - AA
Sn, Mo, W - Colorimetric

**Suite 3 - GEOCHEM**

Au, Ag, Cu, Pb, Zn, Sb, As, Bi, Fe - AA
Cd, Co, Ni, Sn, Mo, Cr, Be, Te - AA
W, Nb - Colorimetric
Ba, B, Mn, V, Ga, Y, Ta, La - ICAP or Best Means
Zr, Th, Ti, Sc, Ce, Sc - ICAP or Best Means
Pt, Pd Group - Fire ICAP

**Suite 1 - GEOCHEM**

Au, Ag - AA Fire
Cu, Pb, Zn, Sb, Bi, Mo, W - AA

**Suite 2 - GEOCHEM**

Au, Ag - AA Fire
Cu, Pb, Zn, Co, Ni, Sn, Mo, W, As - AA

**31 ELEMENT SPEC**

Fe, Ca, Mg, Ag, As, B, Be, Bi, Cd, Co, Cr, Cu, Ga, Ge, La, Mn, Mo, Nb, Ni, Pb, Sb, Sc, Sn, Sr, Ti, V, W, Y, Zn, Zr

AA = Atomic Absorption
ICAP = Induced Coupled Argon Plasma

Table AD-2 - Detection Limits of Elements Analyzed by Atomic Absorption and Emission Spectrographic Methods, Skyline Labs, Inc. Wheat Ridge, Colorado

| Element | Atomic Absorption (ppm) | Emission Spectrographic (ppm) |
|---|---|---|
| Ag (Fire A.A.) | 0.2 | 1 |
| As | 10 | 500 |
| Au (Fire A.A.) | .02 | NA |
| B | NA | 10 |
| Ba | 10 | 10 |
| Be | 2 | 2 |
| Bi | 1 | 10 |
| Ca | NA | 200 |
| Cd | .01 | 50 |
| Co | 5 | 5 |
| Cr | 10 | 10 |
| Cu | 5 | 2 |
| F | 100 | NA |
| Fe | 5 | 500 |
| Ga | NA | 10 |
| Ge | NA | 20 |
| Hg | .01 | NA |
| I | 1 | NA |
| La | NA | 20 |
| Mg | NA | 200 |
| Mn | 10 | 10 |
| Mo | 2 | 2 |
| Nb | 10 | 20 |
| Ni | 5 | 5 |
| Pb | 5 | 10 |
| Pd | .01 | NA |
| Pt | .01 | NA |
| Sb | 1 | 100 |
| Sc | NA | 10 |
| Se | 2 | NA |
| Sn | 1 | 10 |
| Sr | NA | 100 |
| Te | 0.1 | NA |
| Ti | NA | 20 |
| Tl | 1 | NA |
| V | 10 | 10 |
| W | 2 | 50 |
| Y | NA | 10 |
| Zn | 5 | 200 |
| Zr | NA | 20 |

NOTE:

| | | | |
|---|---|---|---|
| Fire Assay: | Au and Ag | <0.001 | oz/ton |
| Colorimetric: | Mo, W, Sn | <2.0 | ppm |
| ICAP: | Pt, Pd | <0.01 | ppm |
| | Rare Earths | 10 | ppm |
| | Common Elements | 1 | ppm |

Table AD-3 - Anomalous Stream Sediment Samples
1983 Kantishna Hills Study

| Element | Mean | Std. Dev. | Upper 25 Percentile Range | #Spls | Rank % | 3rd Order Range | #Spls | Rank % | 2nd Order Range | #Spls | Rank % | 1st Order Range | #Spls | Rank % | Highly Anomalous Range | #Spls |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * Au | .05 | .03 | *.02-.42 | 31 | All values detectable are plotted as anomalous | | | | | | | | | | | |
| Ag | .58 | .44 | .7-2.0 | 21 | +77% | .7-1.0 | 9 | 77-85% | 1.1-1.4 | 7 | 86-94% | 1.5-2.0 | 5 | +94% | 2.8-8.3 | 5 |
| As | 71 | 101 | 100-550 | 45 | +77% | 100-165 | 25 | 81-90% | 166-225 | 9 | 91-95% | 256-550 | 11 | +95% | 1250-7500 | 8 |
| Cu | 42 | 20 | 55-185 | 45 | +85% | 55-60 | 24 | 85-90% | 61-80 | 18 | 86-98% | 91-185 | 4 | +98% | 255-5650 | 5 |
| Pb | 40 | 63 | 40-530 | 48 | +75% | 40-95 | 30 | 75-91% | 96-175 | 13 | 92-98% | 176-530 | 7 | +98% | | 0 |
| Sb | 21 | 34 | 16-205 | 55 | +75% | 16-55 | 39 | 75-92% | 56-90 | 7 | 93-95% | 91-205 | 9 | +95% | 680-115000 | 5 |
| W | 5 | 2 | 6-19 | 40 | +80% | 6-7 | 30 | 80-95% | 8-9 | 8 | 96-98% | 10-19 | 2 | 99% | 50 | 1 |
| Zn | 155 | 91 | 165-550 | 63 | +75% | 165-245 | 40 | 75-89% | 246-335 | 11 | 90-95% | 336-550 | 12 | +95% | 720-5900 | 6 |
| | | | | | Anomalous Values Prior Studies | | | | | | | | | | | |
| Au | .06 | .09 | .01-.59 | 40 | (All values above .025 plotted as anomalous) | | | | | | | | | | | |
| Ag | .33 | .28 | .4-2.0 | 46 | +75% | .4-.6 | 30 | 75-92% | .7-.89 | 11 | 93-96% | .9-2.0 | 5 | 97% | 2.8- +12 | 5 |
| Cu | 37 | 18 | 40-190 | 73 | +75% | 40-57 | 52 | 68-91% | 58-75 | 14 | 92-97% | 76-190 | 7 | 97-100% | | 0 |
| Pb | 30 | 13 | 33-122 | 76 | +75% | 33-43 | 48 | 68-88% | 44-54 | 18 | 89-96% | 55-122 | 10 | 98% | 548-NA | 2 |
| Sb | 14 | 17 | 15-133 | 40 | +75% | 15-31 | 24 | 70-90% | 32-44 | 10 | 91-96% | 45-133 | 6 | 98% | | 5 |
| Zn | 137 | 77 | 138-526 | 80 | +75% | 138-213 | 59 | 72-90% | 214-284 | 11 | 91-95% | 285-526 | 10 | 96-100% | | 0 |

Table AD-4 - Anomalous Reconnaissance Placer Panned Concentrates
Kantishna Hills Study Area

| Element | Mean | Std. Dev. | Upper 25 Percentile | | 3rd Order | | 2nd Order | | 1st Order | | Highly Anomalous | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Range | #Spls | Range | #Spls | Range | #Spls | Range | #Spls | Range | #Spls |
| Ag | 6 | 12 | 5-70 | 25 | 5-18 | 18 | 19-30 | 1 | 31-70 | 3 | 71-3680 | 3 |
| Au | .025 oz/cuyd | .060 oz/cuyd | All samples > .010 oz/cuyd Total 17 samples, all samples .001-.01 oz/cuyd = 38 spls | | | | | | | | | |
| As | 151 | 199 | 130-870 | 27 | 130-350 | 15 | 351-549 | 2 | 550-749 | 1 | 870-12500 | 9 |
| Cu | 34 | 37 | 40-380 | 37 | 40-71 | 27 | 72-108 | 2 | 109-380 | 5 | 381-3500 | 3 |
| Pb | 67 | 101 | 50-530 | 55 | 50-168 | 31 | 169-269 | 7 | 270-530 | 8 | 531-473000 | 9 |
| Sb | 82 | 155 | 32-730 | 29 | 32-237 | 14 | 238-392 | 4 | 393-730 | 3 | 731-7000 | 8 |
| W | 72 | 87 | 60-420 | 36 | 60-159 | 16 | 160-247 | 7 | 248-430 | 4 | 431-17850 | 9 |
| Zn | 141 | 87 | 200-500 | 30 | 200-228 | 20 | 229-316 | 8 | 317-500 | 1 | 501-5700 | 1 |

Table AD-5 - Stream Sediments Correlation Matrix
Kantishna Hills Study Area

| Position | Element | 1 Ag | 2 As | 3 Au | 4 Cu | 5 Pb | 6 Sb | 7 W | 8 Zn |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Ag | 100 | 10 | -21 | 10 | 54 | 1 | 3 | -6 |
| 2 | As | 10 | 100 | -26 | -1 | 44 | 30 | 14 | 3 |
| 3 | Au | -21 | -26 | 100 | -9 | -32 | -15 | 1 | -11 |
| 4 | Cu | 10 | -1 | -9 | 100 | 13 | -1 | -3 | 17 |
| 5 | Pb | 54 | 44 | -32 | 13 | 100 | 16 | 8 | 6 |
| 6 | Sb | 1 | 30 | 15 | -1 | 16 | 100 | 4 | -2 |
| 7 | W | 3 | 14 | 1 | -3 | 8 | 4 | 100 | -5 |
| 8 | Zn | -6 | 3 | -11 | 17 | 6 | -2 | -5 | 100 |

Table AD-6 - Rock Correlation Matrix
Kantishna Hills Study Area

| Position | Element | 1 Ag | 2 As | 3 Au | 4 Cu | 5 Pb | 6 Sb | 7 W | 8 Zn |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Ag | 100 | 13 | 21 | 46 | 85 | 2 | 32 | 33 |
| 2 | As | 13 | 100 | -4 | 18 | 16 | -4 | -2 | -1 |
| 3 | Au | 21 | -4 | 100 | -1 | 39 | -5 | 72 | -5 |
| 4 | Cu | 46 | 18 | -1 | 100 | 54 | 14 | 5 | 30 |
| 5 | Pb | 85 | 18 | 39 | 54 | 100 | 24 | 44 | 57 |
| 6 | Sb | 2 | -4 | -5 | 14 | 24 | 100 | -1 | 15 |
| 7 | W | 32 | -2 | 72 | 5 | 44 | -1 | 100 | -2 |
| 8 | Zn | 33 | -1 | -5 | 30 | 57 | 15 | -2 | 100 |

Table AD-7 - Soil Sample Correlation Matrix
Quigley Ridge/Jupiter Mars,
Kantishna Hills Study Area

| Position | Element | 1 Ag | 2 Au | 3 Cu | 4 Pb | 5 Sb | 6 Zn | 7 As |
|---|---|---|---|---|---|---|---|---|
| 1 | Ag | 100 | 93 | 91 | 97 | 97 | 91 | 57 |
| 2 | Au | 93 | 100 | 91 | 96 | 96 | 89 | 68 |
| 3 | Cu | 91 | 91 | 100 | 89 | 92 | 88 | 50 |
| 4 | Pb | 97 | 96 | 89 | 100 | 95 | 93 | 58 |
| 5 | Sb | 97 | 96 | 92 | 95 | 100 | 90 | 58 |
| 6 | Zn | 91 | 89 | 88 | 93 | 90 | 100 | 58 |
| 7 | As | 57 | 68 | 50 | 58 | 58 | 58 | 100 |

Table AD-8 - Soil Correlation Matrix
Kantishna Hills Study Area

| Position | Element | 1 Ag | 2 Au | 3 Cu | 4 Pb | 5 Sb | 6 Zn | 7 As | 8 W |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Ag | 100 | 88 | 77 | 81 | 82 | 70 | 54 | 2 |
| 2 | Au | 88 | 100 | 83 | 71 | 78 | 62 | 64 | 15 |
| 3 | Cu | 77 | 83 | 100 | 60 | 54 | 59 | 36 | -4 |
| 4 | Pb | 81 | 71 | 60 | 100 | 53 | 75 | 48 | -3 |
| 5 | Sb | 82 | 78 | 54 | 53 | 100 | 50 | 42 | 23 |
| 6 | Zn | 70 | 62 | 59 | 75 | 50 | 100 | 44 | -4 |
| 7 | As | 54 | 64 | 36 | 48 | 42 | 44 | 100 | 1 |
| 8 | W | 2 | 15 | -4 | -3 | 23 | -4 | 1 | 100 |

Table AD-9 - Soil Correlation Matrix,
Dunkle Mine Study Area

| Position | Element | 1 Ag | 2 Au | 3 Cu | 4 Pb | 5 Sb | 6 Zn | 7 As |
|---|---|---|---|---|---|---|---|---|
| 1 | Ag | 100 | 26 | -2 | 50 | 0 | -12 | 37 |
| 2 | Au | 26 | 100 | -8 | 26 | 0 | -8 | 12 |
| 3 | Cu | -2 | -8 | 100 | 16 | 0 | 56 | 75 |
| 4 | Pb | 50 | 26 | 16 | 100 | 0 | 22 | 21 |
| 5 | Sb | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | Zn | -12 | -8 | 56 | 22 | 0 | 100 | 38 |
| 7 | As | 37 | 12 | 75 | 21 | 0 | 38 | 100 |

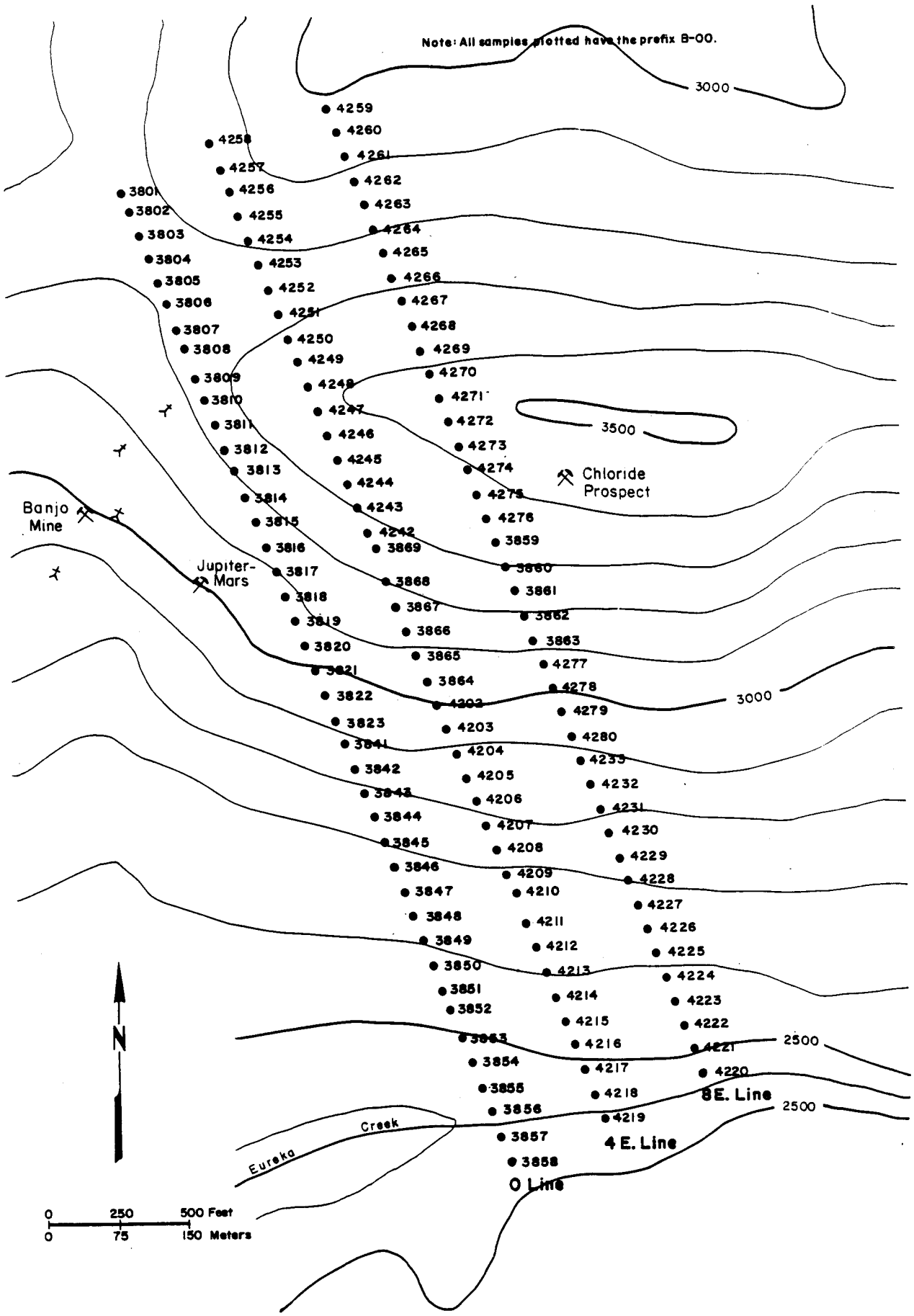


Figure AD-1 Jupiter-Mars soil grid

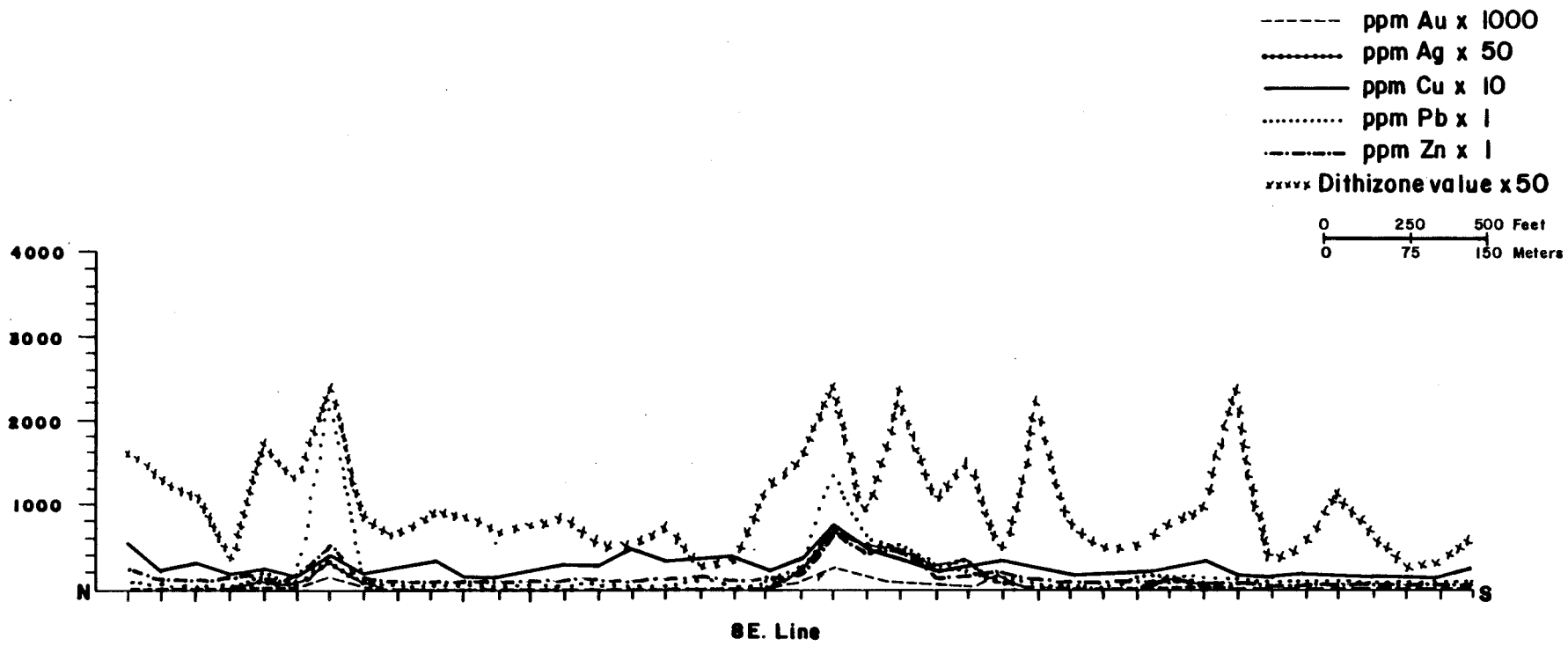


Figure AD-2 Jupiter-Mars soil profiles

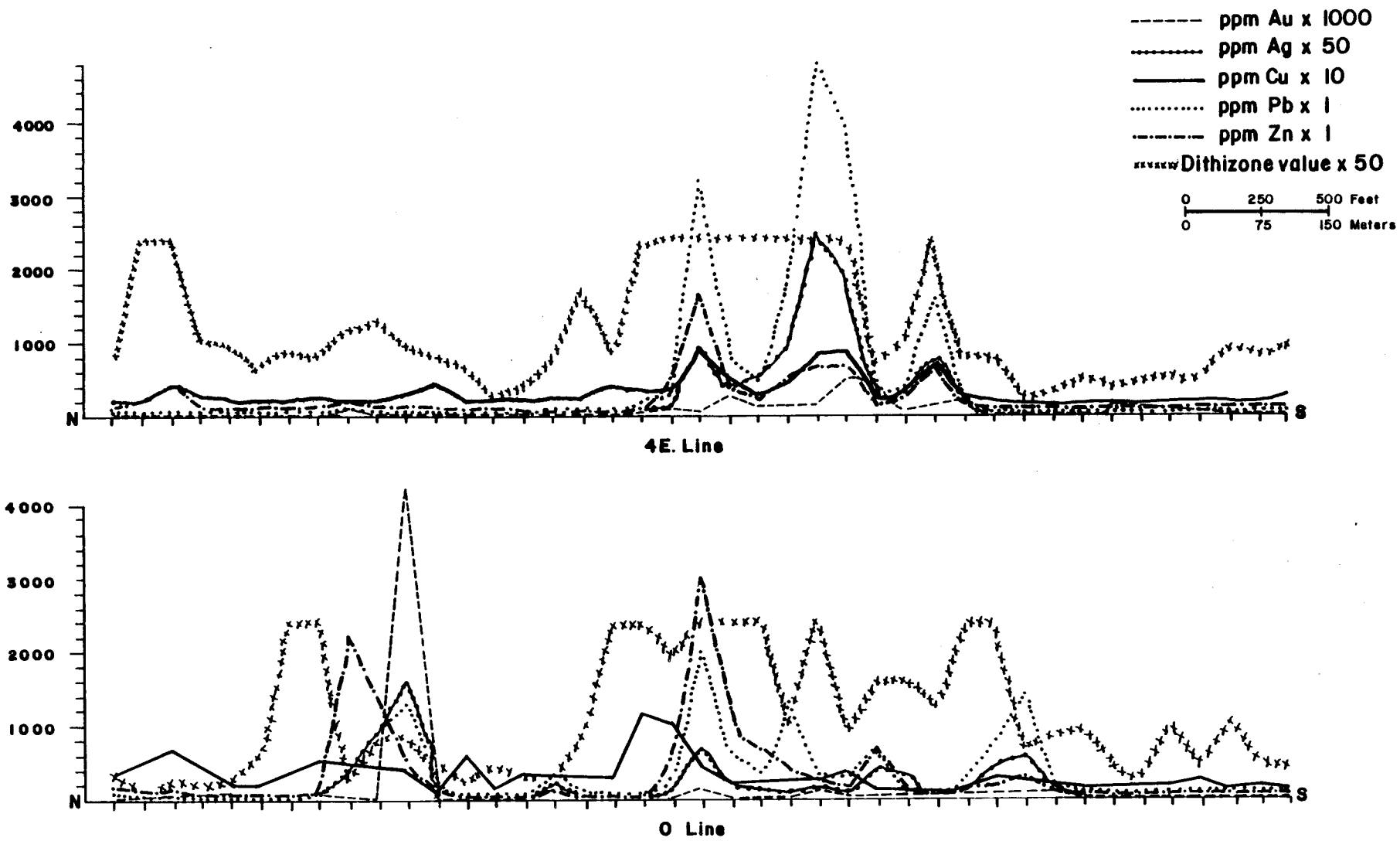


Figure AD-3 Jupiter-Mars soil profiles

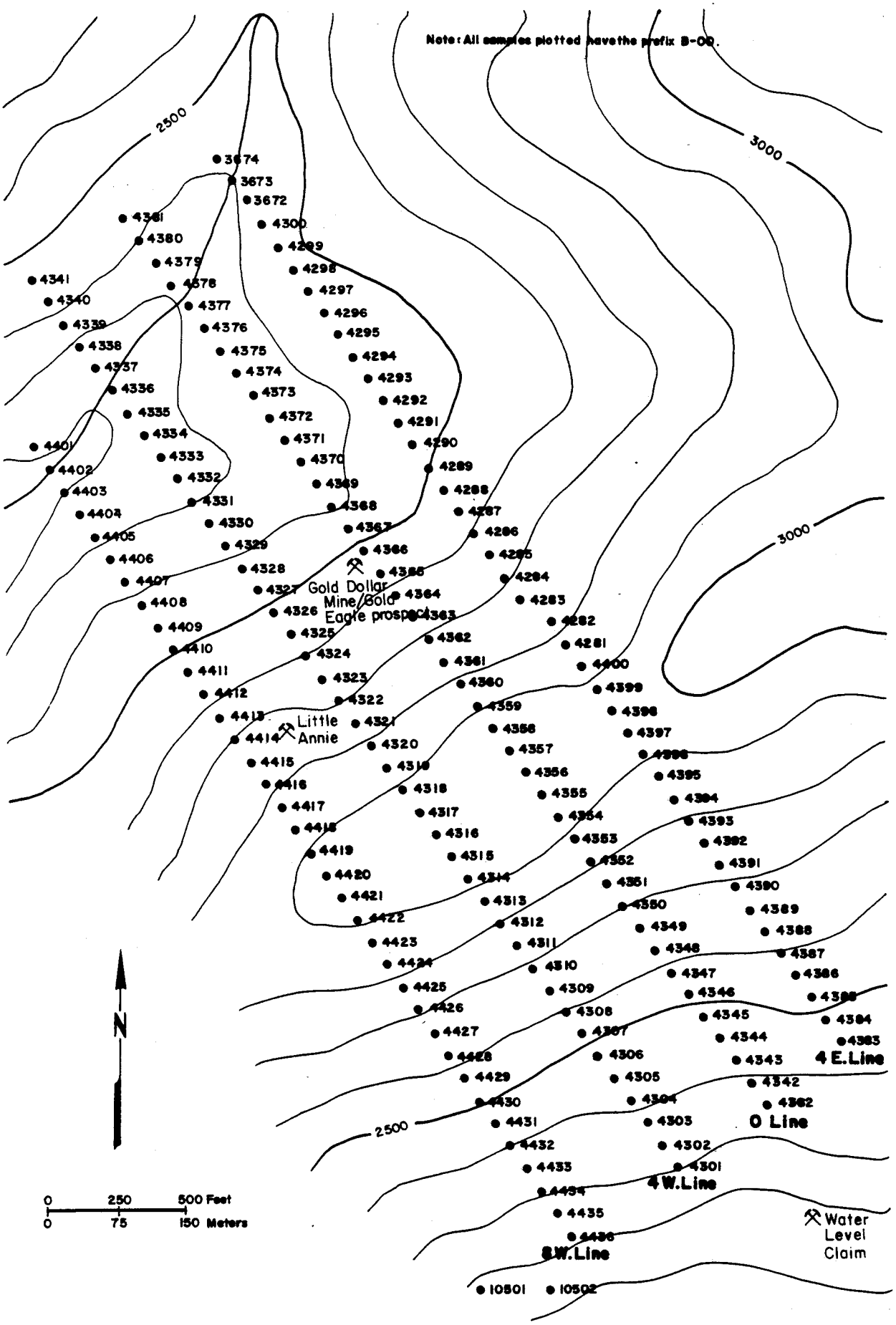


Figure AD-4. Little Annie soil grid

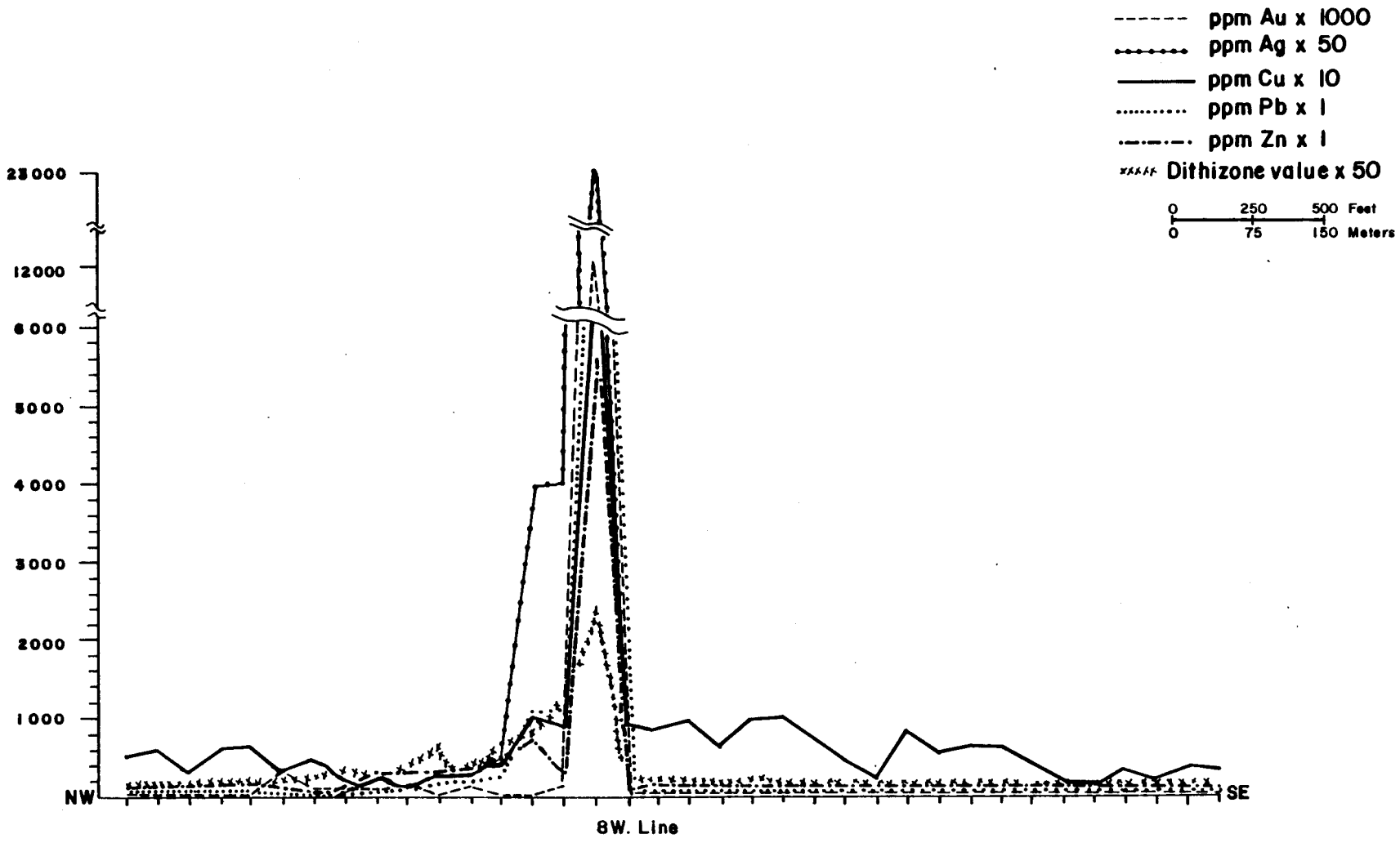


Figure AD-5 Little Annie soil profiles

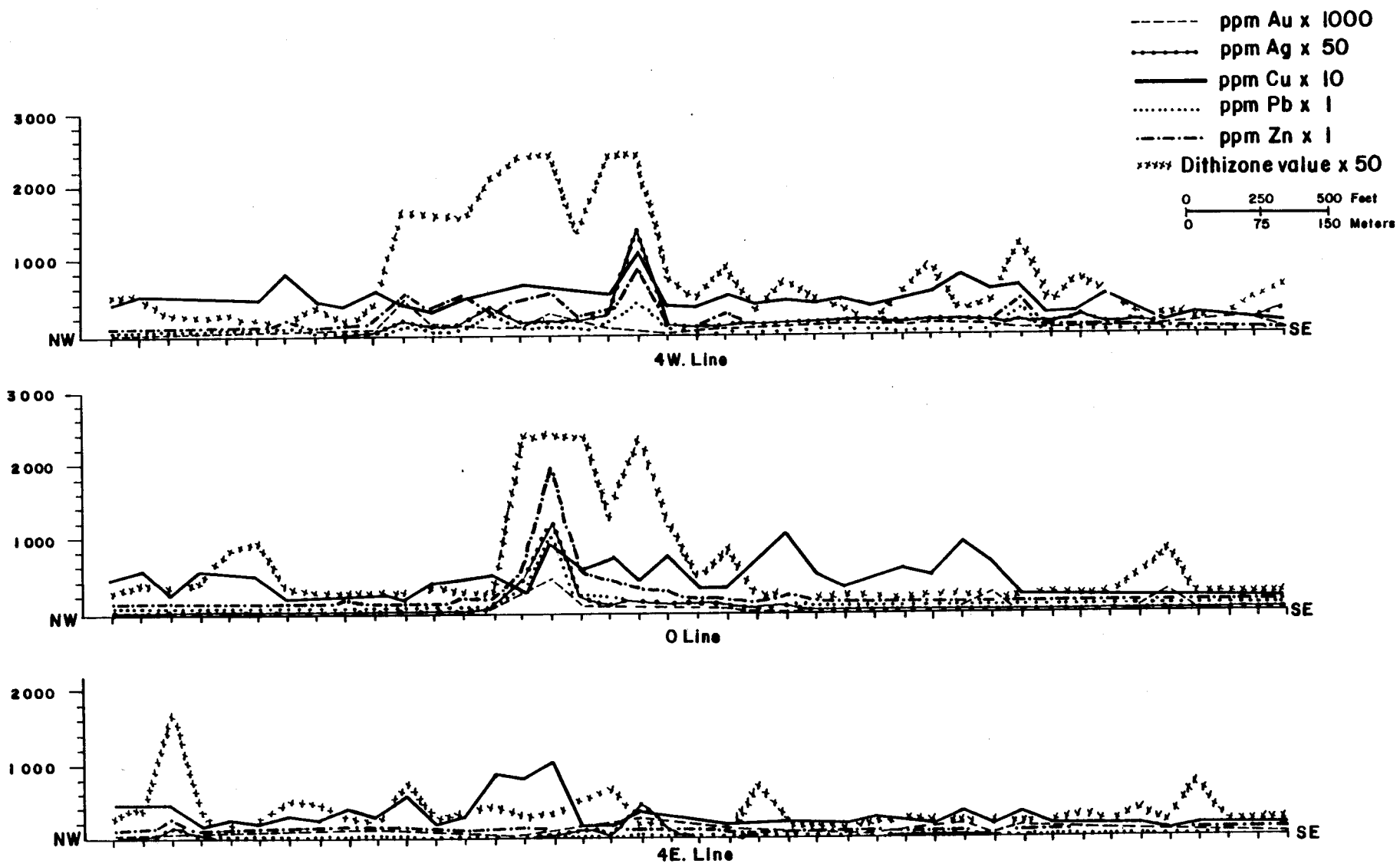


Figure AD-6 Little Annie soil profiles

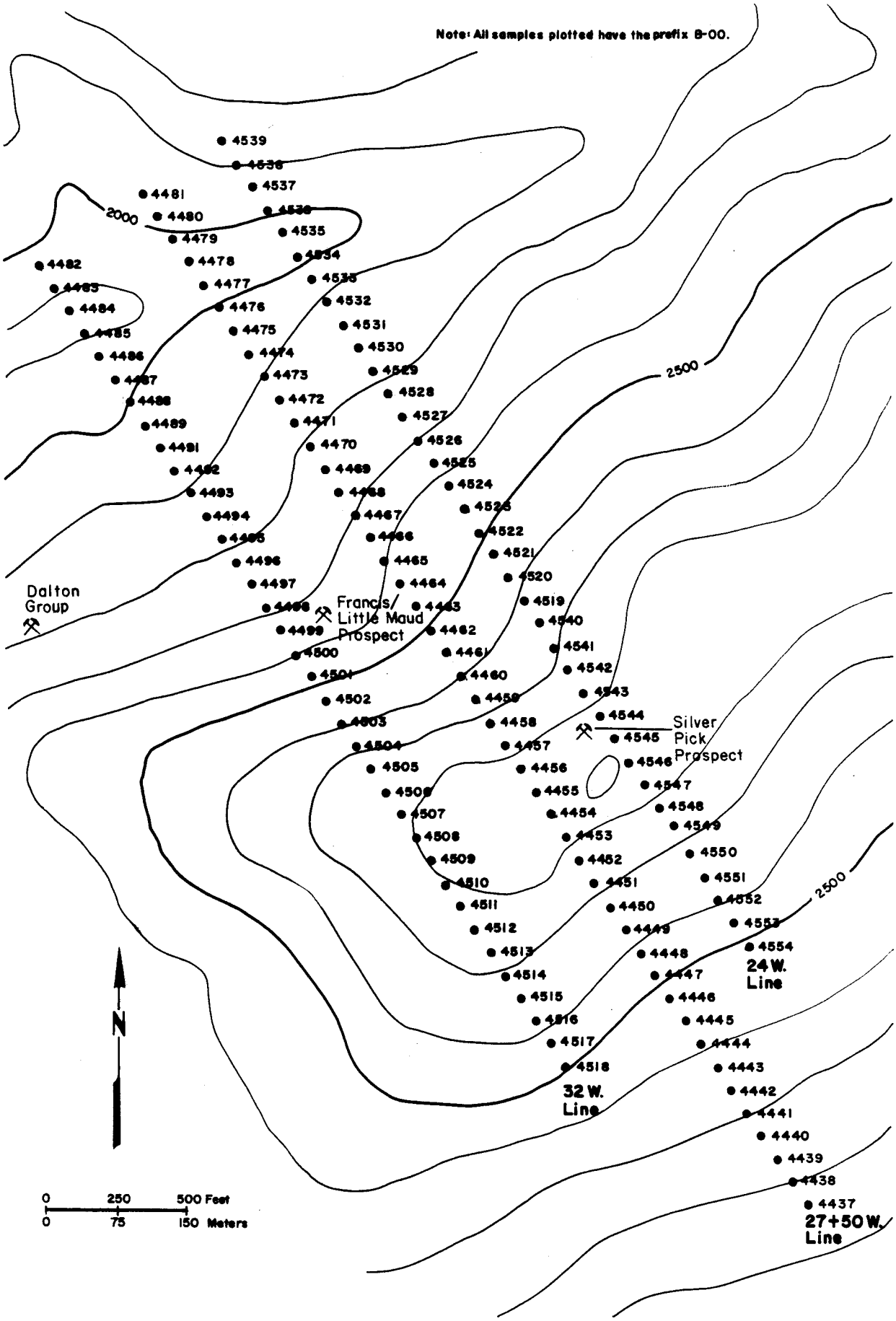


Figure AD-7 Silver Pick soil grid

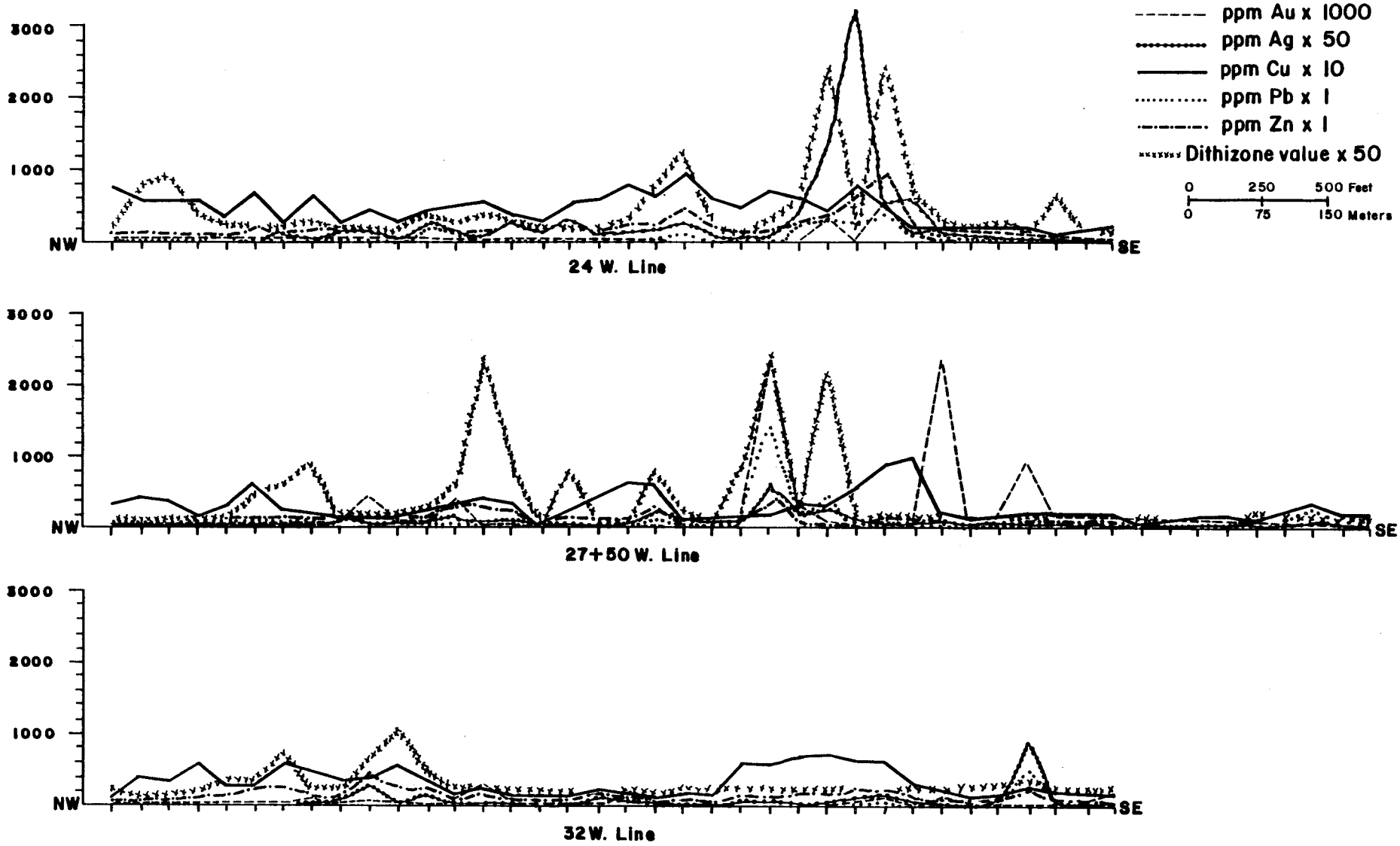


Figure AD-8 Silver Pick soil profiles

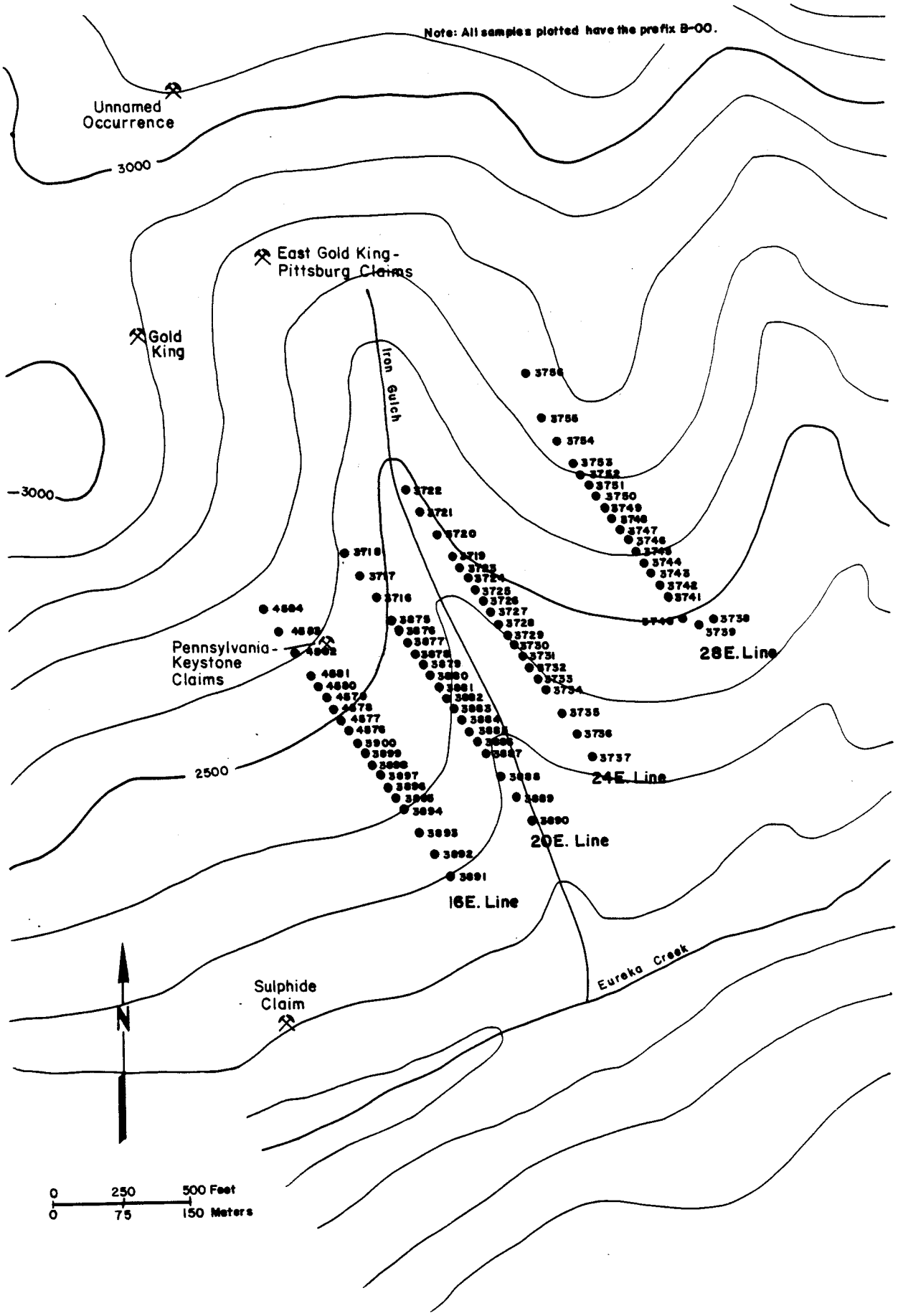


Figure AD-9 Iron Gulch soil grid

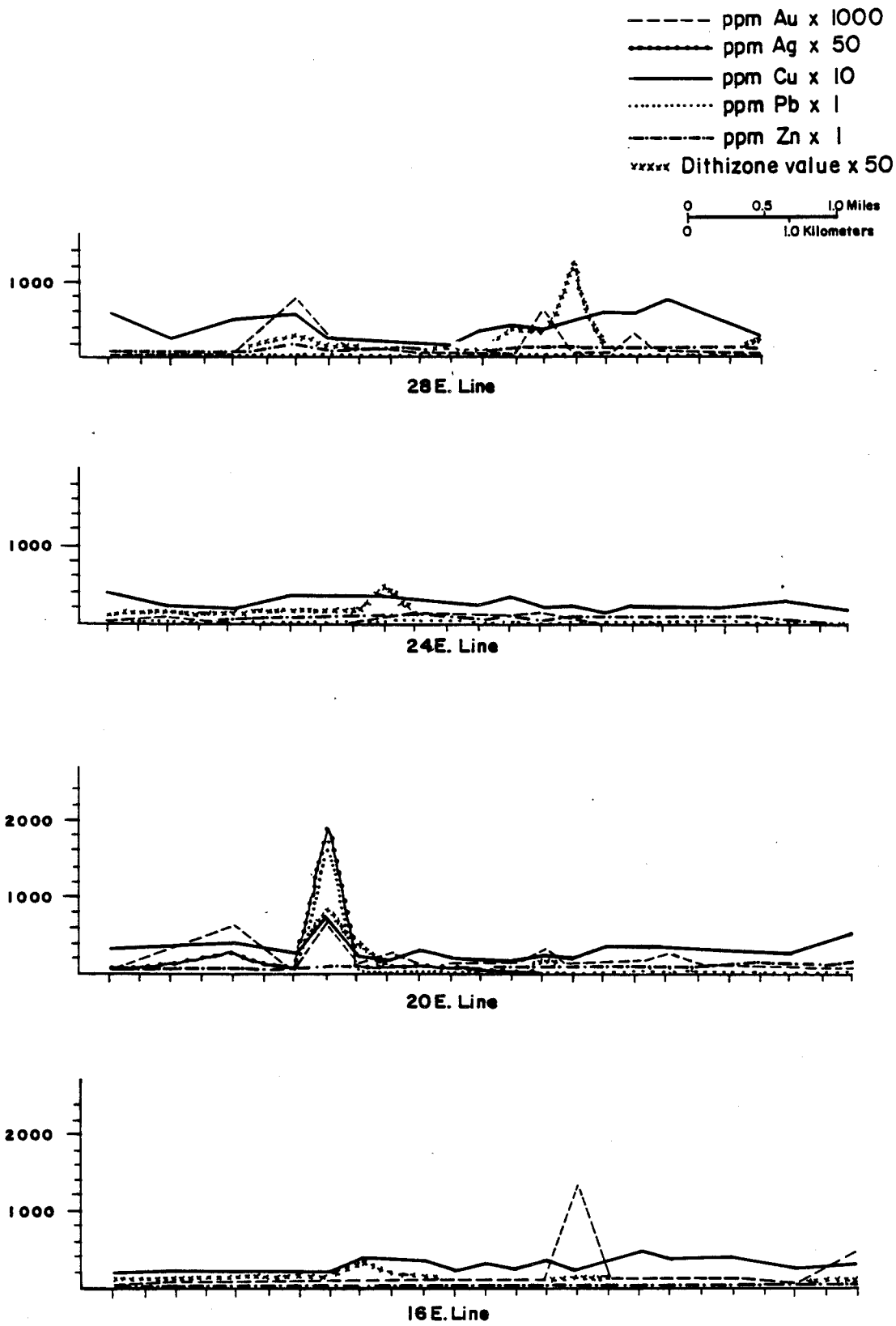


Figure AD-10 Iron Gulch soil profiles

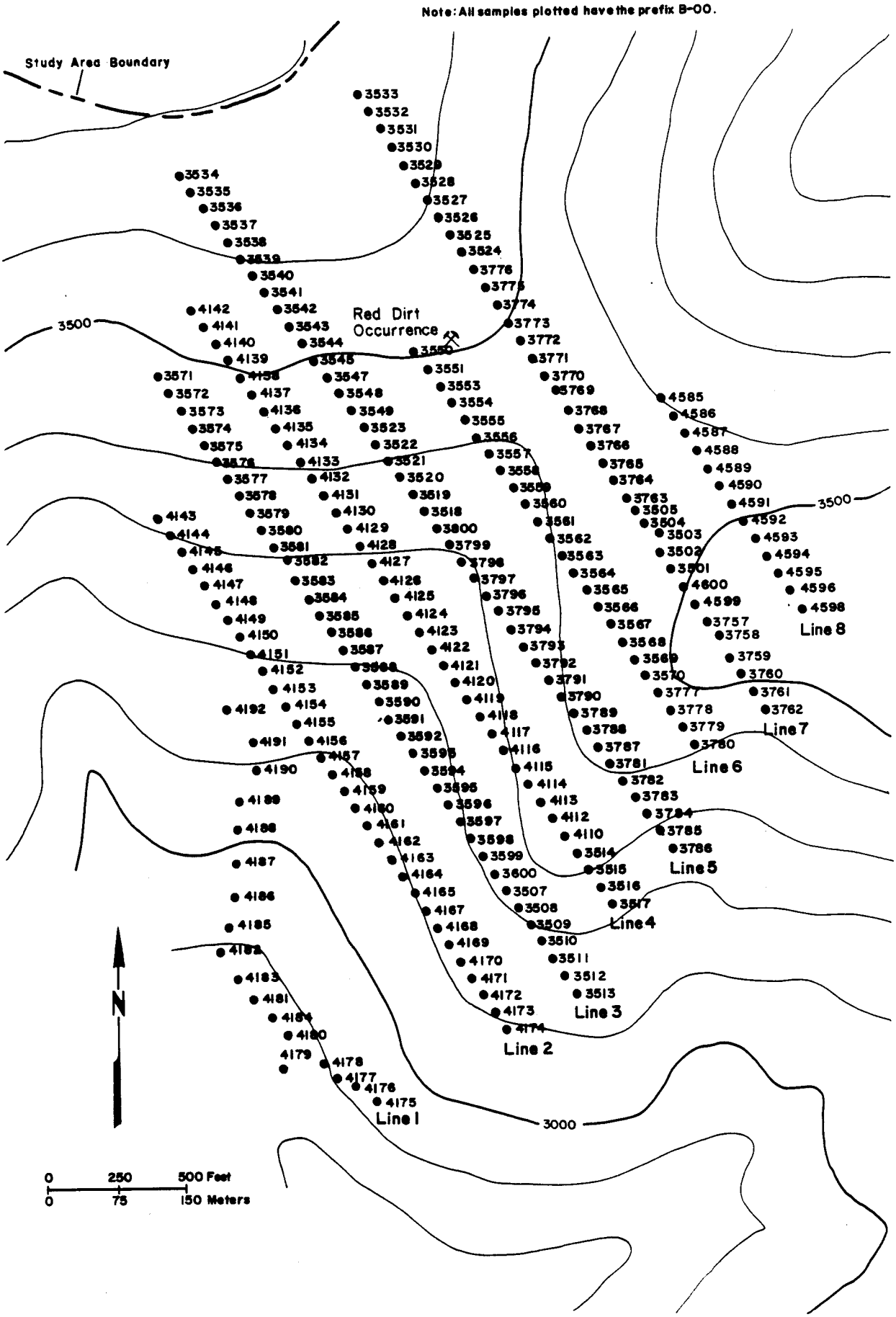


Figure AD-11 Red Dirt soil grid

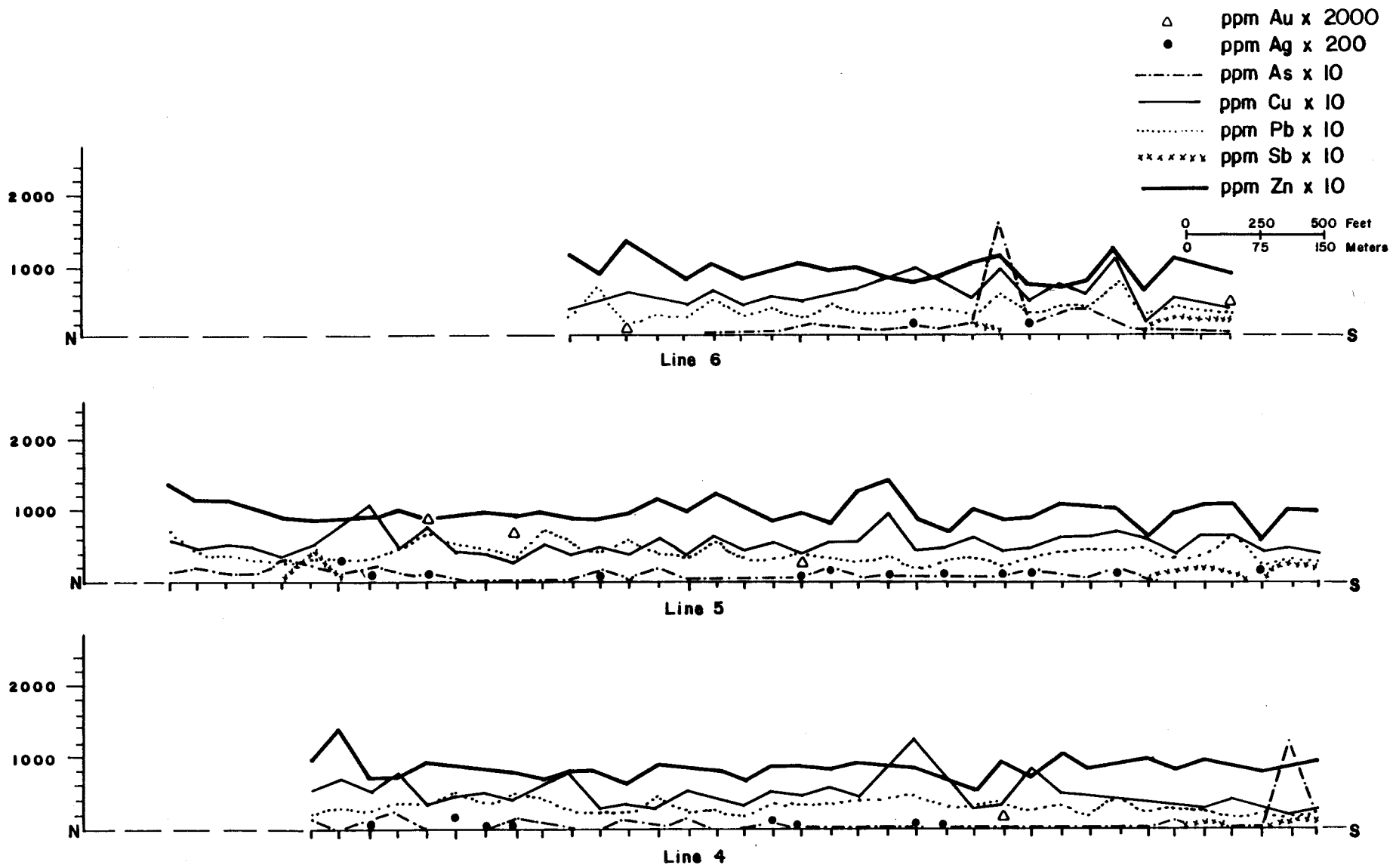


Figure AD-12 Red Dirt soil profiles

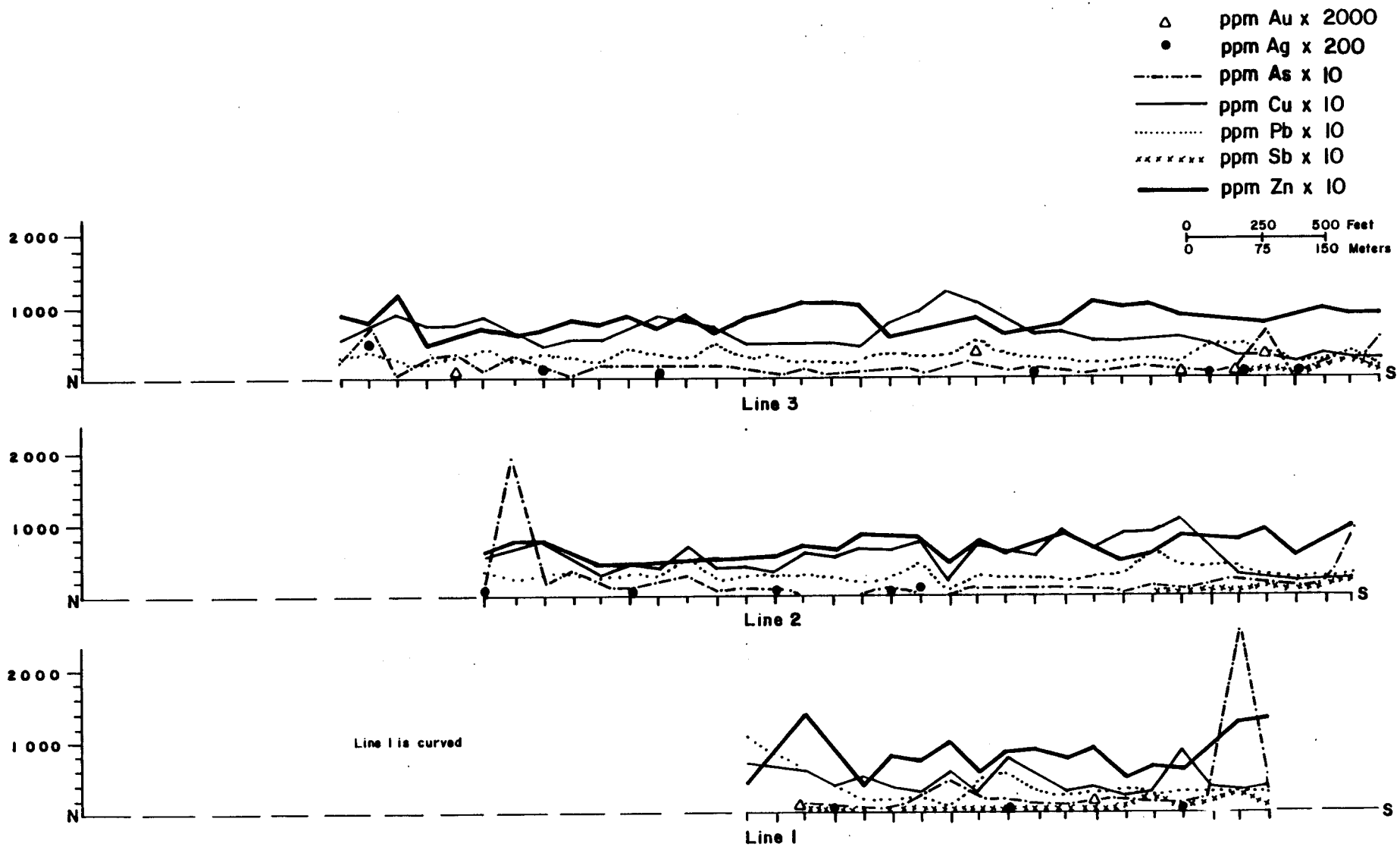


Figure AD-13 Red Dirt soil profile

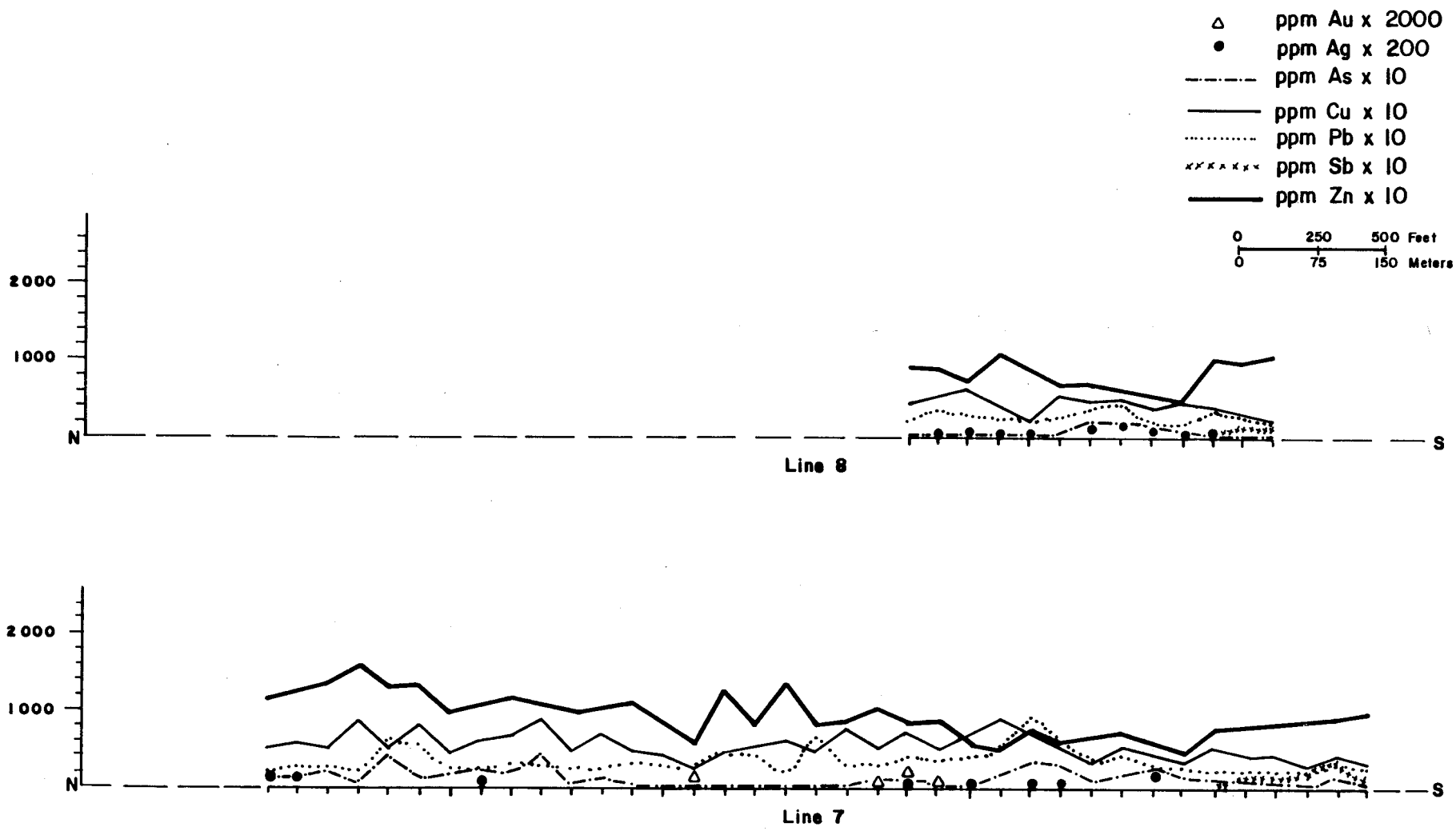


Figure AD-14 Red Dirt soil profiles

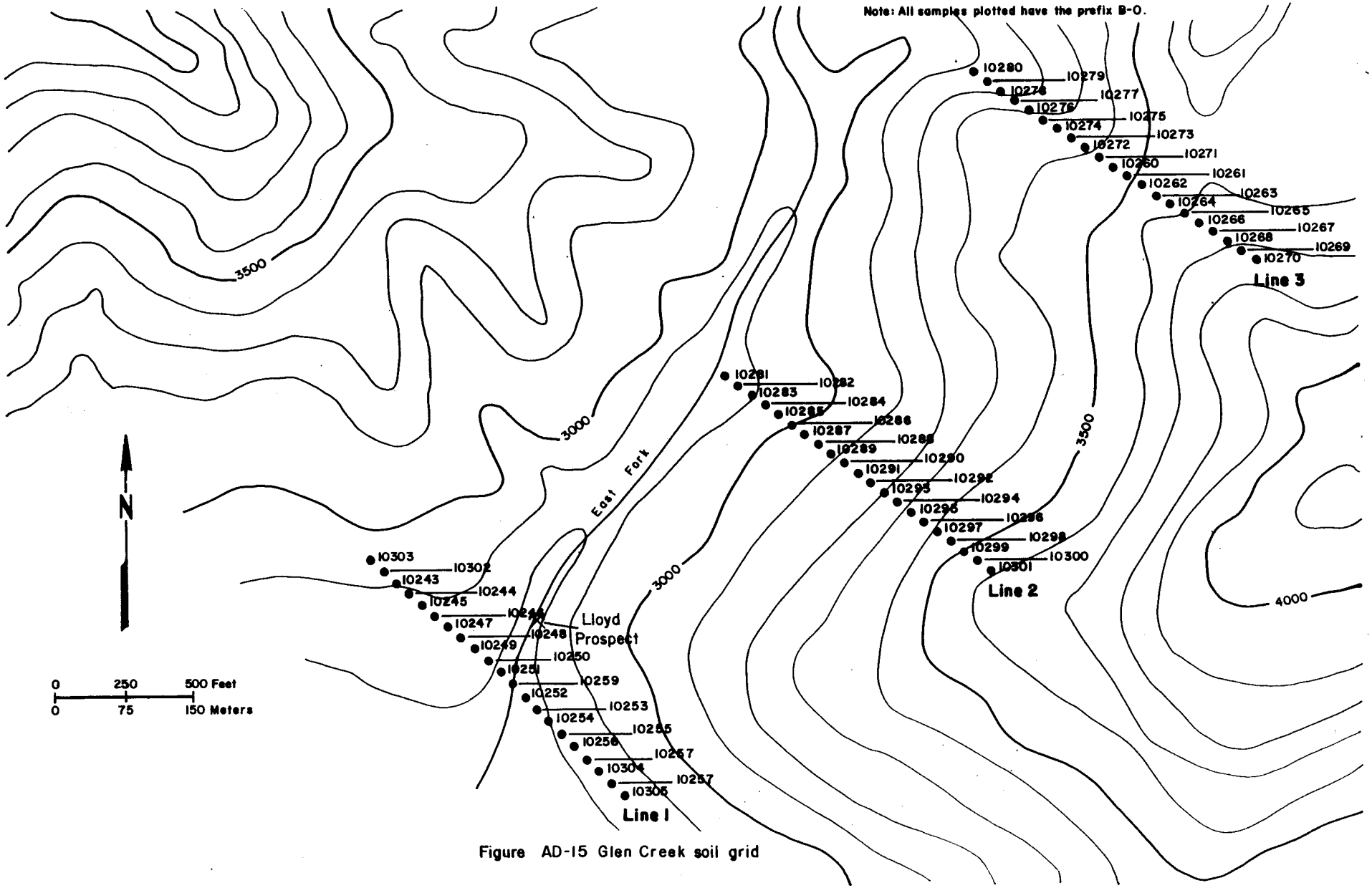


Figure AD-15 Glen Creek soil grid

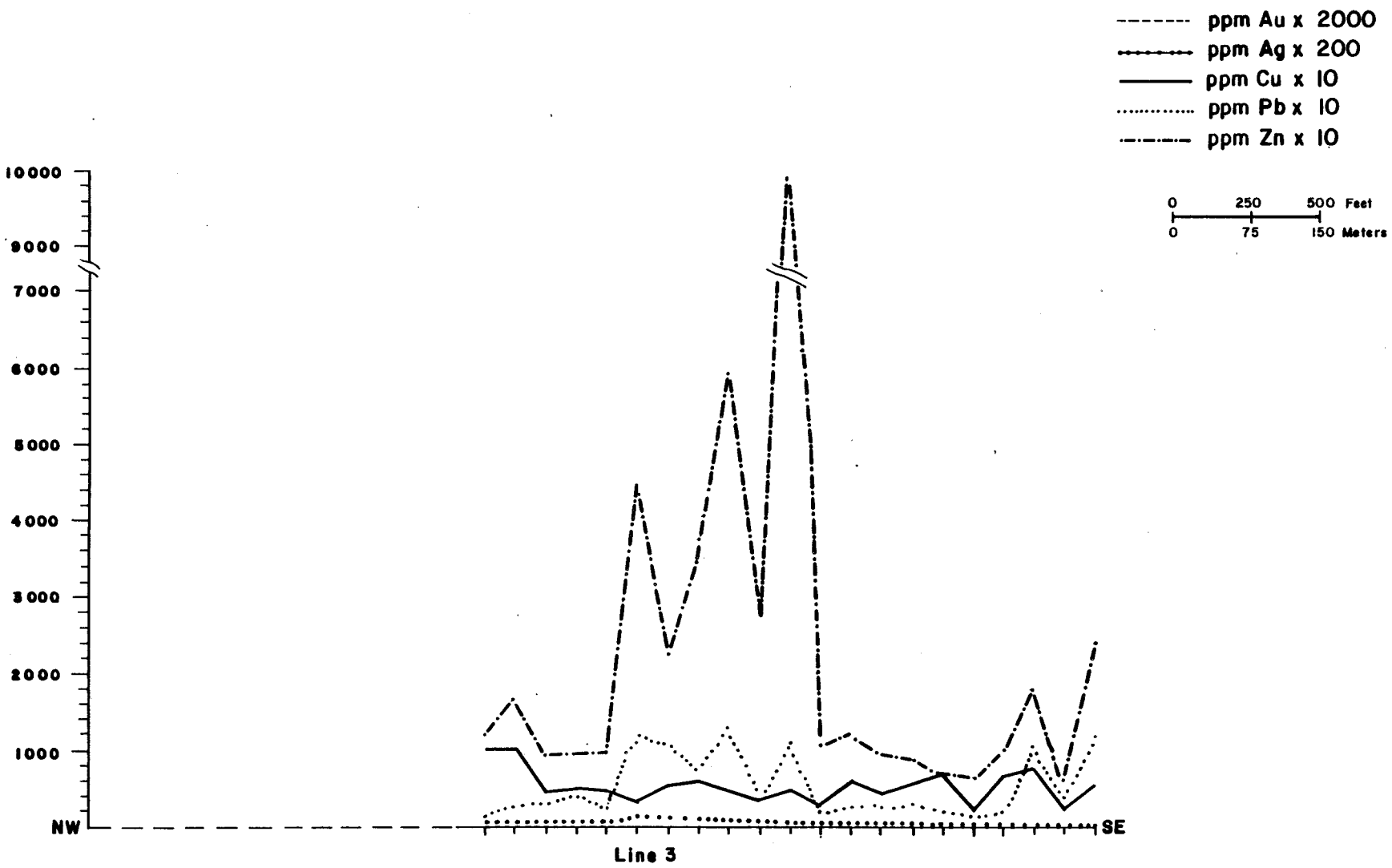


Figure AD-16 Glen Creek soil profiles

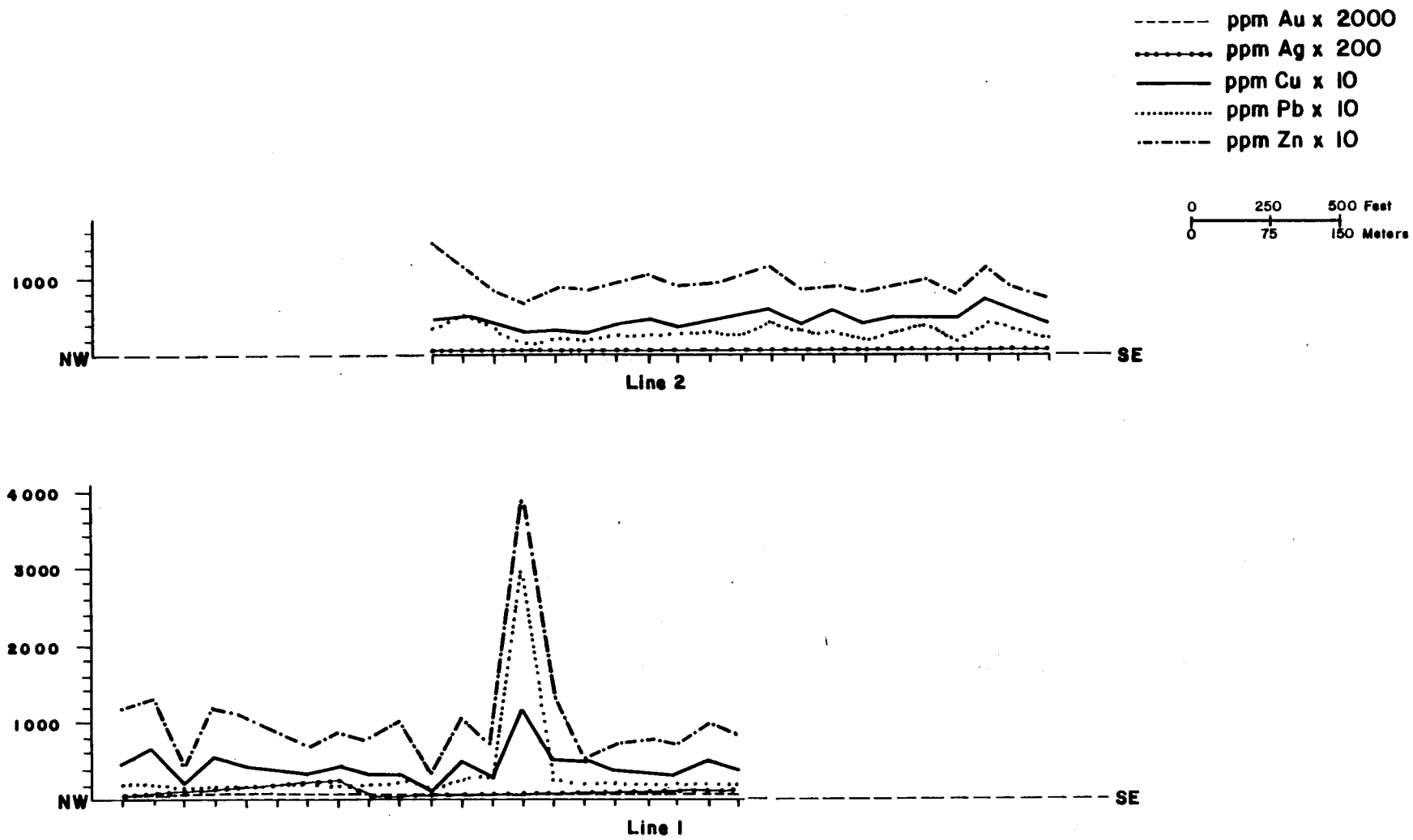


Figure AD-17 Glen Creek soil profiles

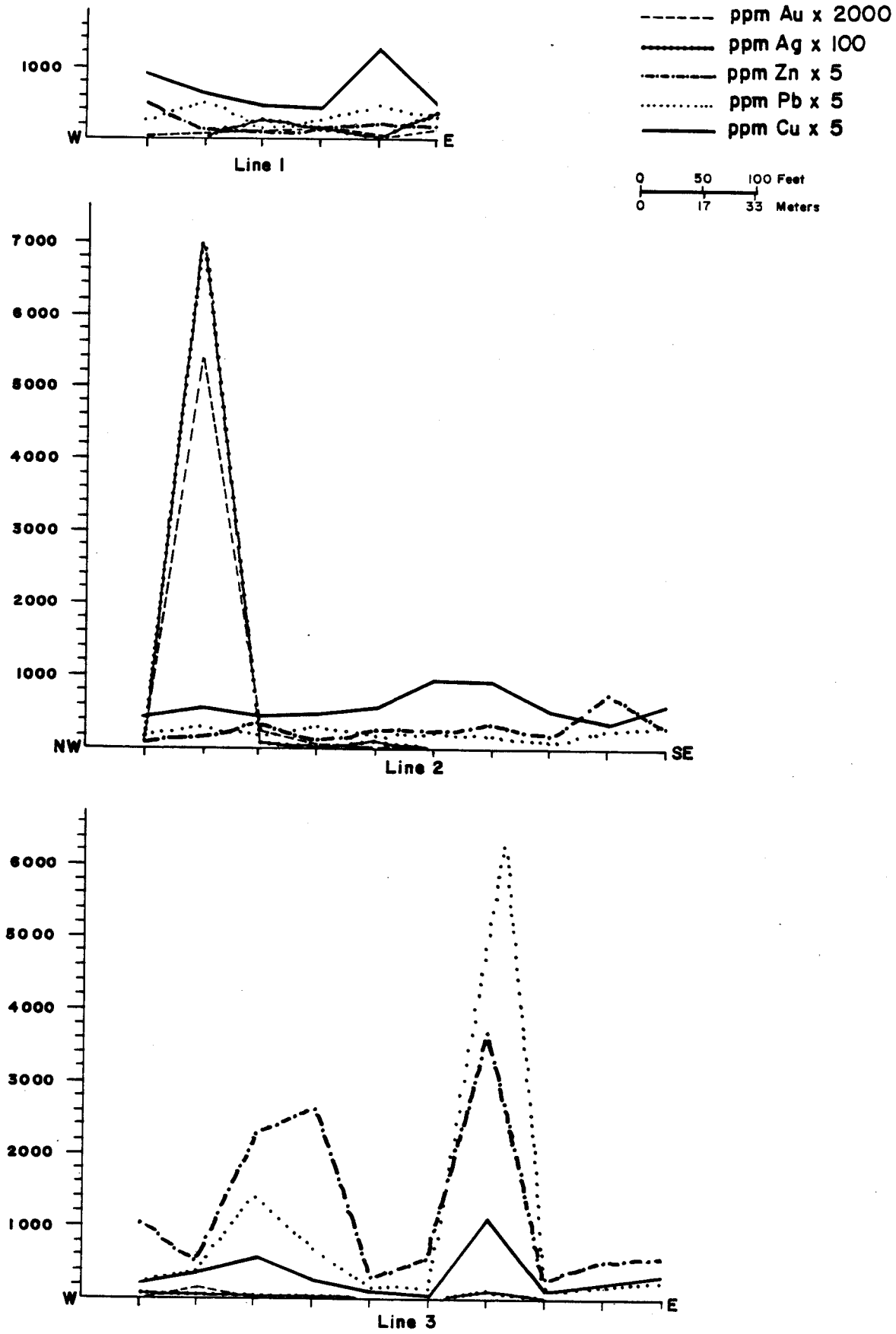


Figure AD-18 Spuce-Kankone soil profiles

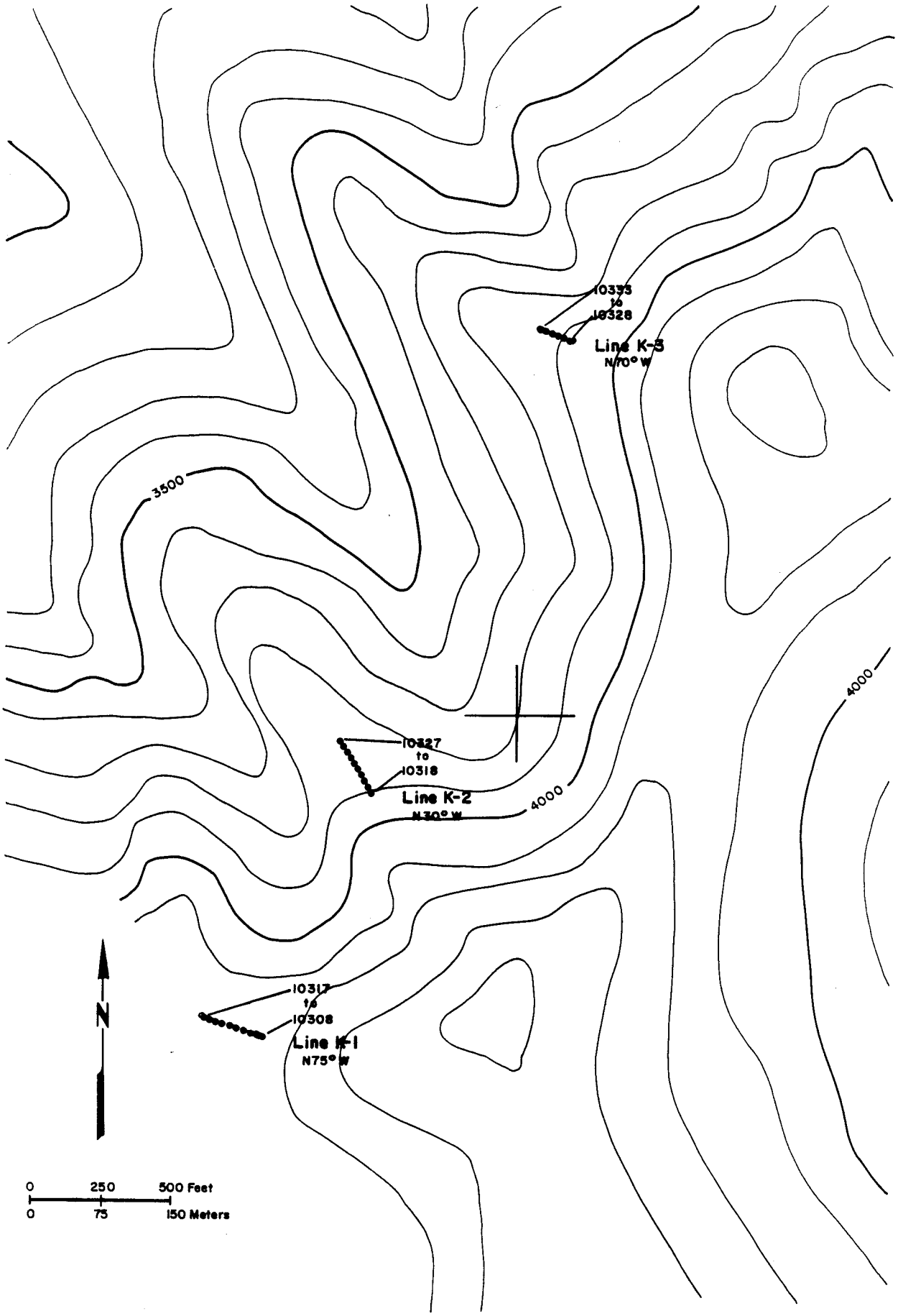


Figure AD-19 Spruce - Kankone soil lines

Samples were analyzed for Au, Ag, As, Bi, Cu, Mo, Pb, and Sb

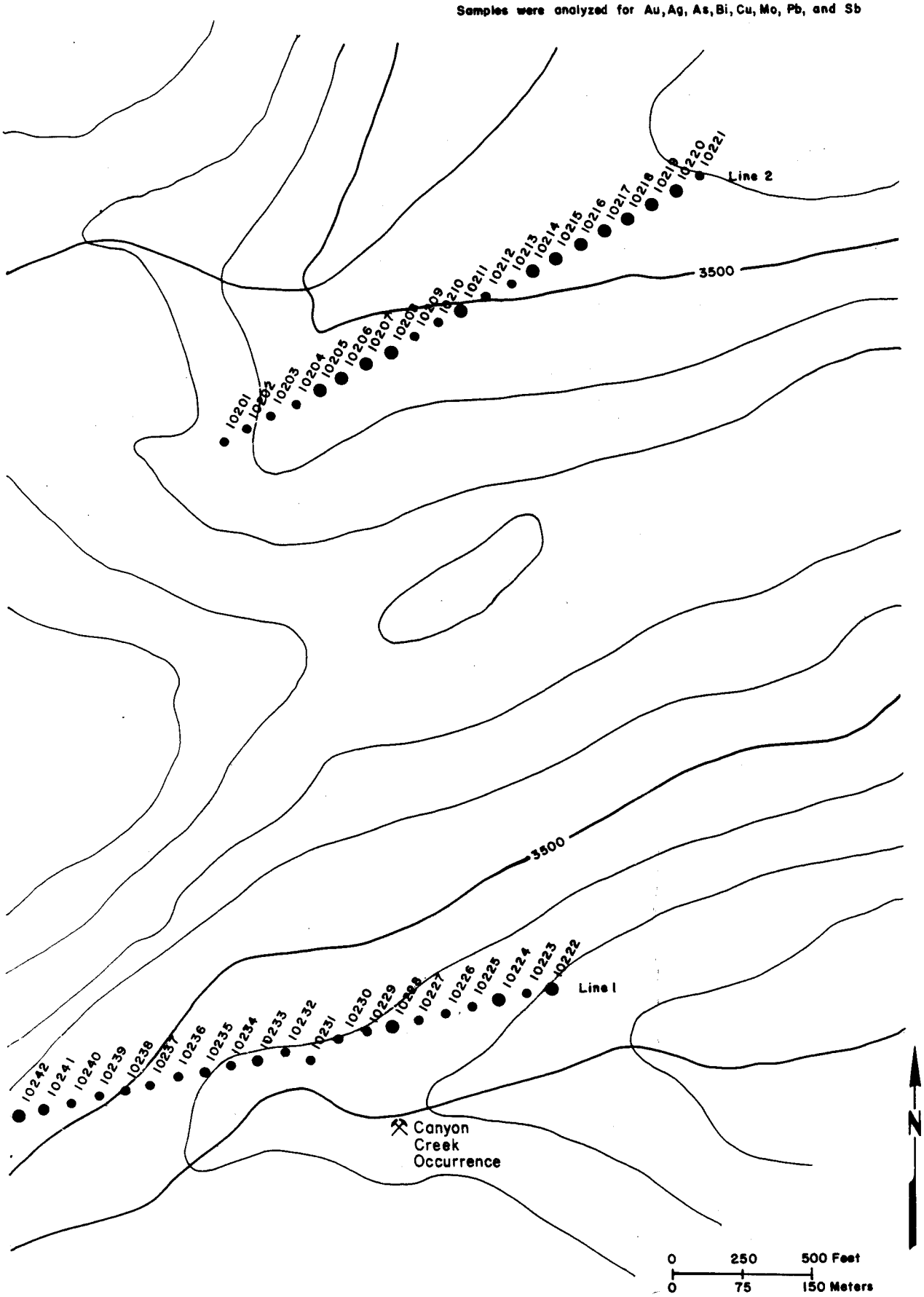


Figure AD-20 Canyon Creek soil grid

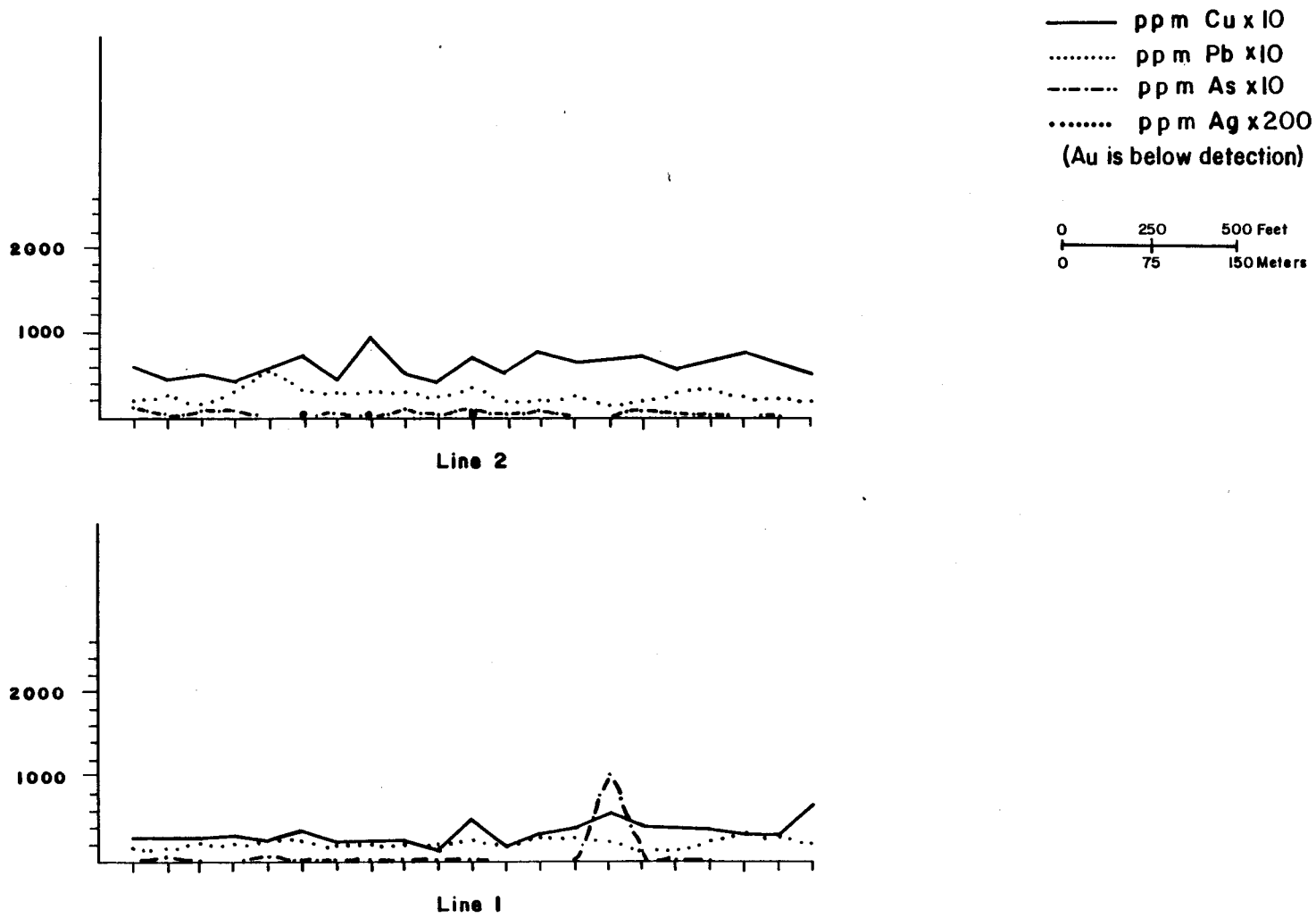


Figure AD-21 Canyon Creek soil profiles

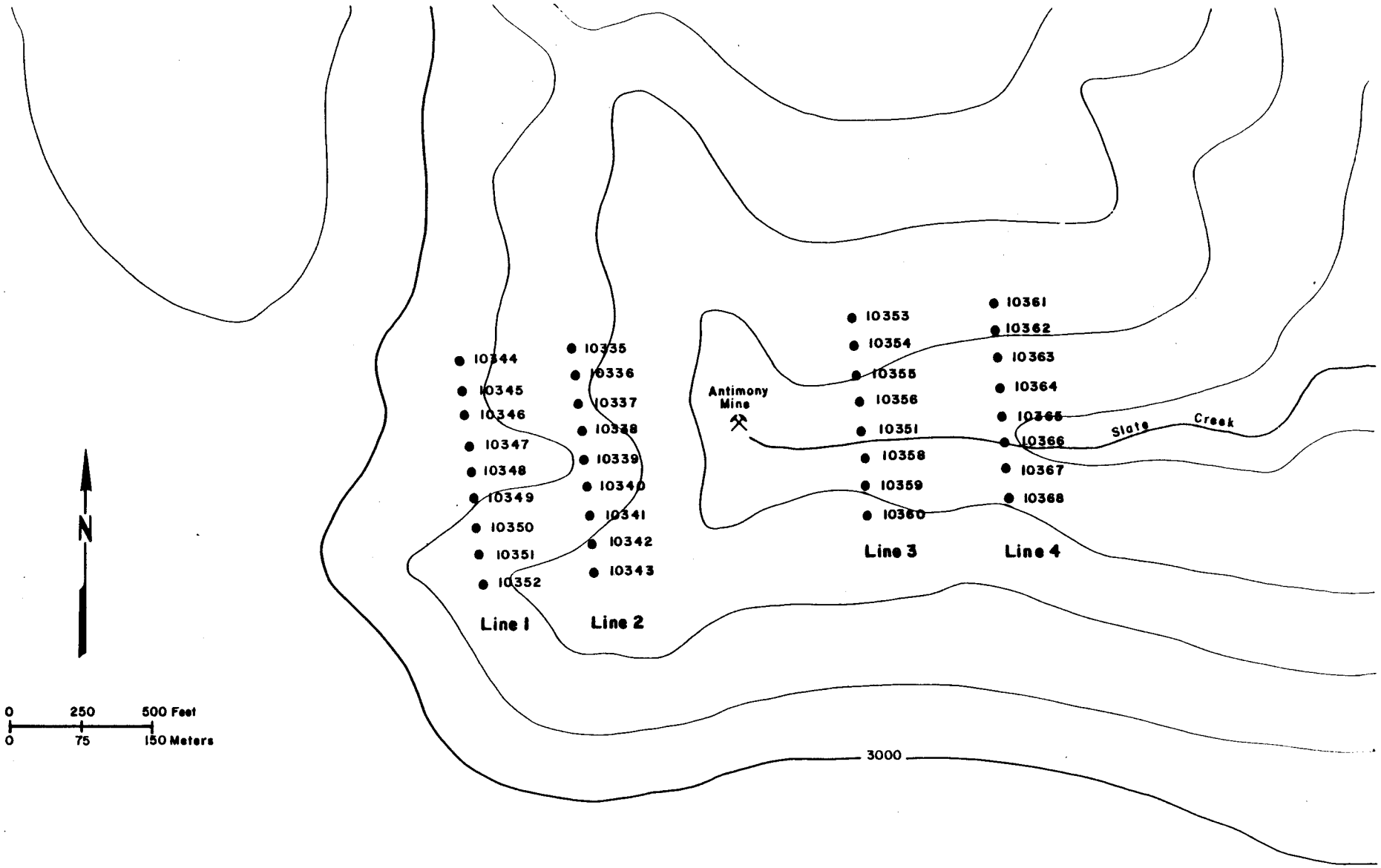


Figure AD-22 Slate Creek soil grid

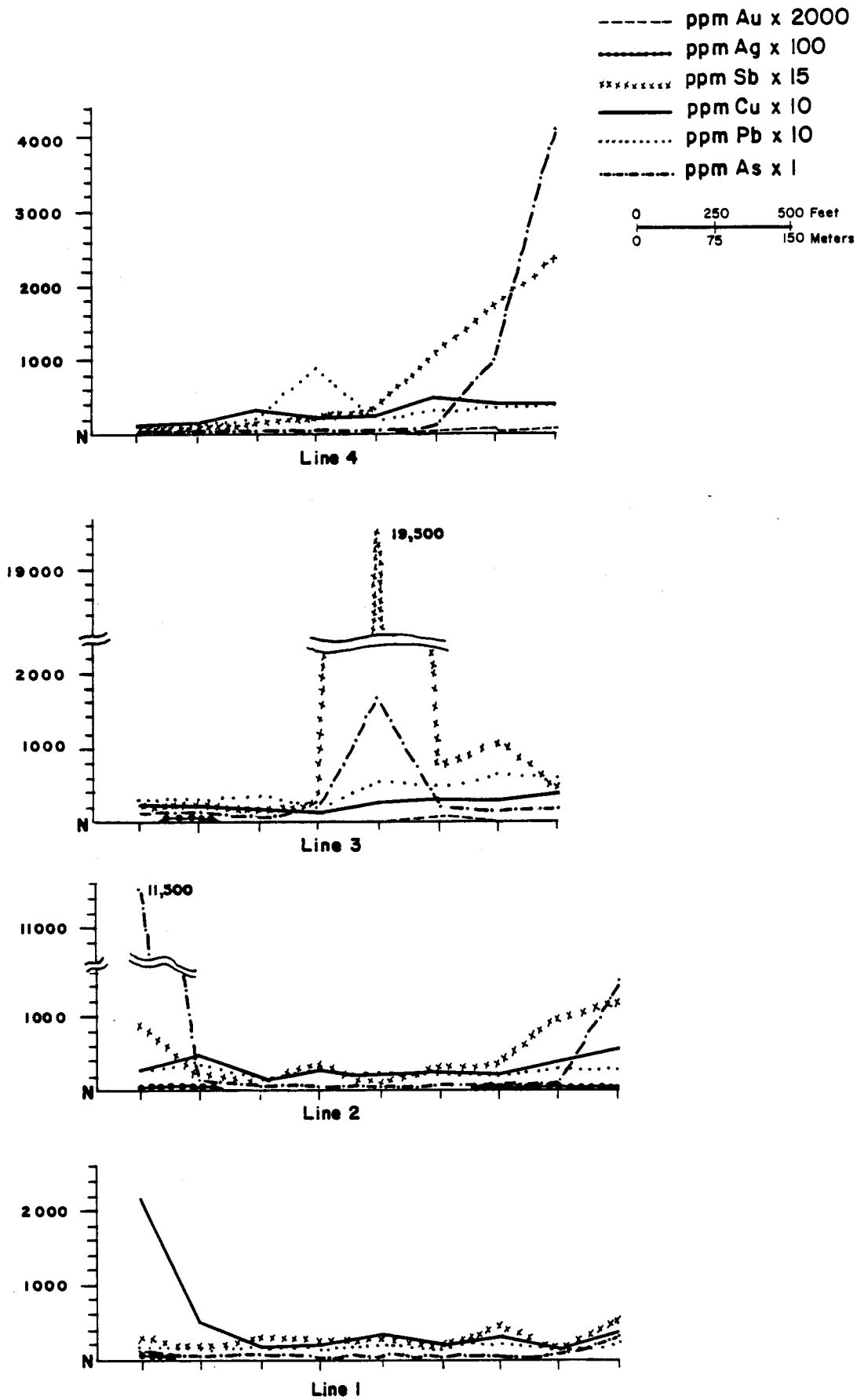


Figure AD-23 Slate Creek soil profiles

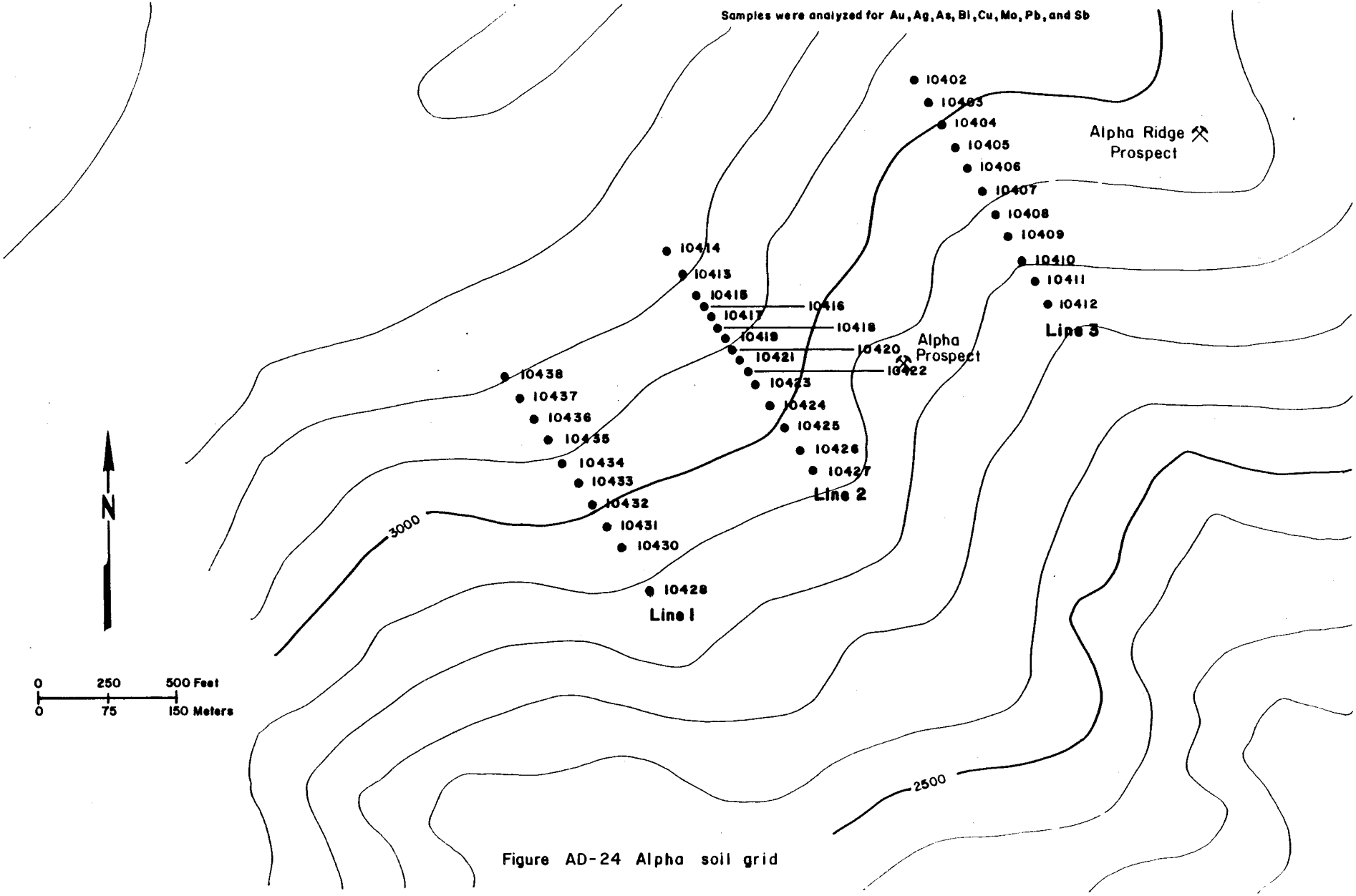


Figure AD-24 Alpha soil grid

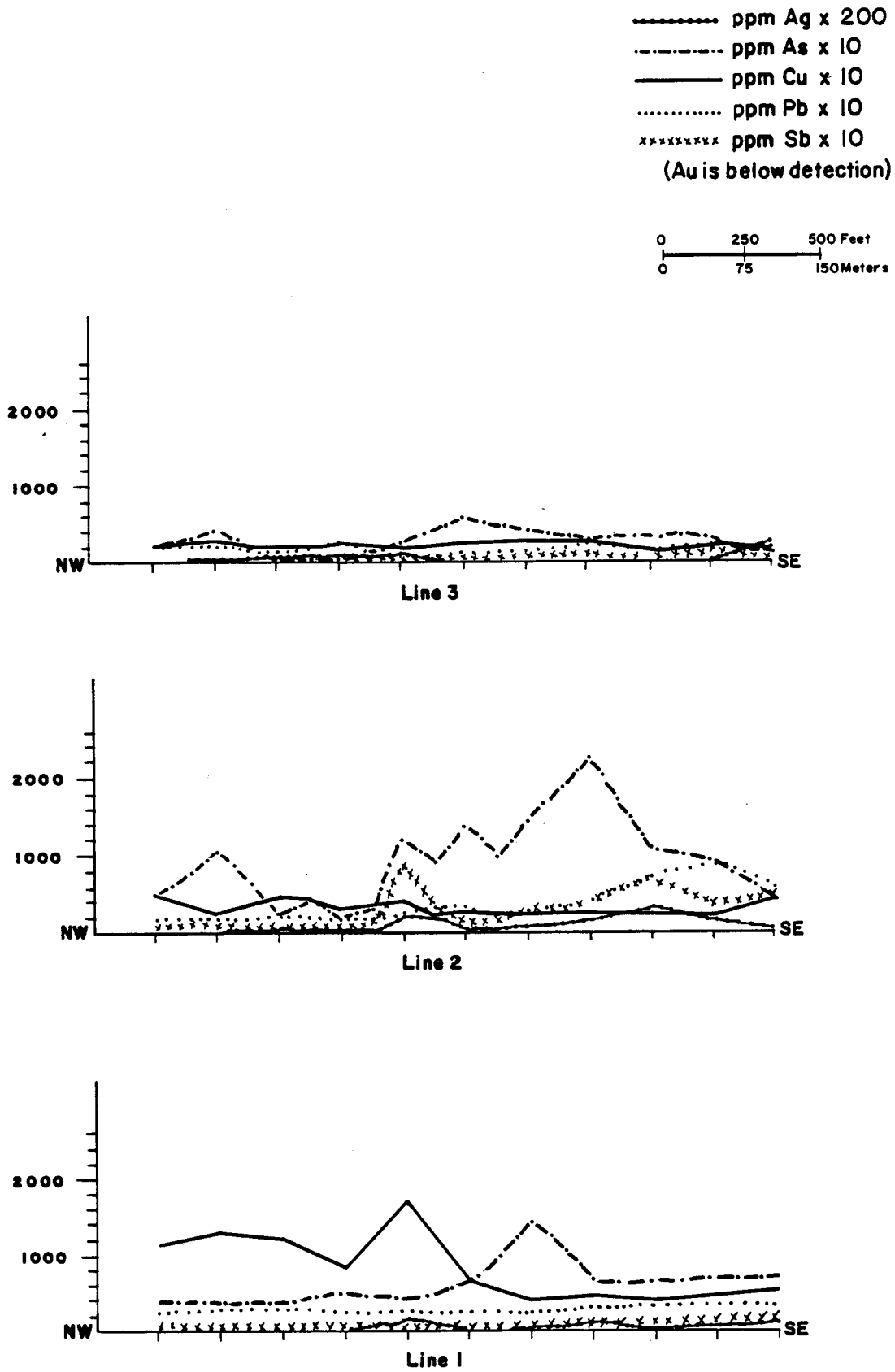


Figure AD-25 Alpha soil profiles

TABLE AD-10

KANTISHNA HILLS STREAM SEDIMENTS

ANALYTICAL RESULTS

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CD (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000801 | 374790. | 3502950. | 10 | 71 | -.9 | -.90 | 100.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| A000802 | 374830. | 3503100. | 10 | 71 | .2 | -.90 | 75.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| A000803 | 374300. | 3503000. | 10 | 71 | .6 | -.90 | 140.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 50.0 | 13.0 | -.8 | -.8 |
| A000805 | 362530. | 3505090. | 10 | 71 | -.9 | .08 | 70.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 20.0 | 7.0 | -.8 | -.8 |
| A000808 | 332460. | 3468450. | 10 | 71 | 3.4 | .05 | 35.0 | -.9 | 10.0 | 730.0 | 4.0 | 10.0 | 110.0 | 30.0 | -.9 | 45.0 |
| A000809 | 332550. | 3467820. | 10 | 71 | 7.3 | -.90 | 240.0 | -.9 | 25.0 | 1200.0 | 2.0 | 20.0 | 530.0 | 34.0 | -.9 | 45.0 |
| A000810 | 332430. | 3467740. | 10 | 71 | 1.7 | .02 | 235.0 | -.9 | 15.0 | 65.0 | -.9 | 110.0 | 100.0 | 46.0 | -.9 | 105.0 |
| A000811 | 408440. | 3548400. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 9.0 | -.8 | -.8 |
| A000901 | 398000. | 3520200. | 10 | 71 | -.9 | .02 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 10.0 | -.8 | -.8 |
| A000902 | 396400. | 3519500. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| A000903 | 397600. | 3517500. | 10 | 71 | .4 | .14 | 145.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 55.0 | 6.0 | -.8 | -.8 |
| A000904 | 394500. | 3518800. | 10 | 71 | -.9 | .10 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| A000905 | 393900. | 3516600. | 10 | 71 | .2 | -.90 | 55.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| A000906 | 393100. | 3516200. | 10 | 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 15.0 | 10.0 | -.8 | -.8 |
| A000908 | 388800. | 3514200. | 10 | 71 | -.9 | -.90 | 55.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 10.0 | -.8 | -.8 |
| A000909 | 383800. | 3513000. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| A000910 | 431200. | 3552400. | 10 | 71 | -.9 | -.90 | 65.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 9.0 | -.8 | -.8 |
| A000911 | 431400. | 3552500. | 10 | 71 | -.9 | .42 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 17.0 | -.8 | -.8 |
| A000912 | 437400. | 3546900. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| A000913 | 437600. | 3547100. | 10 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A000914 | 438700. | 3569700. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 20.0 | 190.0 | -.8 | -.8 |
| A000915 | 438600. | 3560000. | 10 | 71 | .2 | -.90 | 145.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 70.0 | -.8 | -.8 |
| A000916 | 426200. | 3560600. | 10 | 71 | .6 | -.90 | 45.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 20.0 | 15.0 | -.8 | -.8 |
| A000917 | 420300. | 3561600. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| A000918 | 418300. | 3556000. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| A000919 | 416000. | 3553800. | 10 | 71 | -.9 | -.90 | 70.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A000920 | 416300. | 3554000. | 10 | 71 | .4 | -.90 | 5.0 | -.9 | -.8 | 80.0 | 2.0 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| A000921 | 401800. | 3561100. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| A000924 | 388700. | 3551700. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.9 | 2.0 | 17.0 | -.8 |
| A000925 | 388300. | 3551600. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.9 | 2.0 | 12.0 | -.8 |
| A000926 | 405900. | 3540800. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| A000927 | 406500. | 3536800. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A000929 | 402100. | 3523400. | 10 | 71 | .2 | -.90 | 40.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 35.0 | 11.0 | -.8 | -.8 |
| A000930 | 401900. | 3523500. | 10 | 71 | .2 | -.90 | 115.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 20.0 | 24.0 | -.8 | -.8 |
| A000933 | 362475. | 3547700. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| A000934 | 362425. | 3547100. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| A000935 | 355550. | 3544075. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| A000937 | 365975. | 3525300. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A000938 | 365925. | 3525300. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| A000939 | 324600. | 3467050. | 10 | 71 | .6 | -.90 | 4150.0 | -.9 | 60.0 | 40.0 | -.9 | 130.0 | 45.0 | 205.0 | -.9 | 65.0 |
| A000940 | 326050. | 3466050. | 10 | 71 | 1.3 | .05 | 550.0 | -.9 | 25.0 | 100.0 | -.9 | 70.0 | 95.0 | 190.0 | -.9 | 90.0 |
| A000941 | 327100. | 3466500. | 10 | 71 | .6 | .04 | 2000.0 | -.9 | 5.0 | 30.0 | -.9 | 15.0 | 130.0 | 115000.0 | -.9 | 50.0 |
| A000942 | 327100. | 3467200. | 10 | 71 | .6 | -.90 | 510.0 | -.9 | 30.0 | 45.0 | -.9 | 65.0 | 60.0 | 155.0 | -.9 | 90.0 |
| A000943 | 330000. | 3468500. | 10 | 71 | 1.9 | -.90 | 95.0 | -.9 | 20.0 | 35.0 | -.9 | 40.0 | 60.0 | 60.0 | -.9 | 105.0 |
| A000944 | 329250. | 3467900. | 10 | 71 | .6 | -.90 | 200.0 | -.9 | 15.0 | 70.0 | -.9 | 30.0 | 150.0 | 65.0 | -.9 | 70.0 |
| A000946 | 333500. | 3470050. | 10 | 71 | 1.0 | .04 | 1600.0 | -.9 | 20.0 | 40.0 | -.9 | 35.0 | 50.0 | 21500.0 | -.9 | 80.0 |
| A000947 | 333900. | 3470000. | 10 | 71 | .4 | -.90 | 640.0 | -.9 | 15.0 | 35.0 | -.9 | 35.0 | 65.0 | 680.0 | -.9 | 95.0 |
| A000948 | 333200. | 3470900. | 10 | 71 | .4 | -.90 | 90.0 | -.9 | 15.0 | 25.0 | -.9 | 35.0 | 40.0 | 50.0 | -.9 | 110.0 |
| A000949 | 333200. | 3471900. | 10 | 71 | .4 | -.90 | 50.0 | -.9 | 15.0 | 30.0 | -.9 | 35.0 | 35.0 | 40.0 | -.9 | 110.0 |
| A000950 | 333200. | 3472450. | 10 | 71 | .4 | -.90 | 1250.0 | -.9 | 50.0 | 35.0 | -.9 | 120.0 | 35.0 | 150.0 | -.9 | 80.0 |
| A000952 | 333200. | 3473800. | 10 | 71 | .6 | .03 | 2300.0 | -.9 | 15.0 | 40.0 | -.9 | 30.0 | 145.0 | 40500.0 | -.9 | 110.0 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| A000801 | 6.0 | 170.0 |
| A000802 | 6.0 | 135.0 |
| A000803 | 4.0 | 200.0 |
| A000805 | 4.0 | 120.0 |
| A000808 | 5.0 | 45.0 |
| A000809 | 5.0 | 100.0 |
| A000810 | 4.0 | 485.0 |
| A000811 | 4.0 | 145.0 |
| A000901 | 3.0 | 120.0 |
| A000902 | 5.0 | 115.0 |
| A000903 | 4.0 | 165.0 |
| A000904 | 3.0 | 110.0 |
| A000905 | 4.0 | 125.0 |
| A000906 | 4.0 | 100.0 |
| A000908 | 4.0 | 105.0 |
| A000909 | 4.0 | 105.0 |
| A000910 | 6.0 | 105.0 |
| A000911 | 7.0 | 115.0 |
| A000912 | 5.0 | 145.0 |
| A000913 | 9.0 | 140.0 |
| A000914 | 4.0 | 180.0 |
| A000915 | 6.0 | 135.0 |
| A000916 | 4.0 | 120.0 |
| A000917 | 4.0 | 130.0 |
| A000918 | 4.0 | 65.0 |
| A000919 | 3.0 | 150.0 |
| A000920 | 3.0 | 55.0 |
| A000921 | 6.0 | 140.0 |
| A000924 | 19.0 | 80.0 |
| A000925 | -.9 | 110.0 |
| A000926 | 6.0 | 540.0 |
| A000927 | 5.0 | 110.0 |
| A000929 | 5.0 | 205.0 |
| A000930 | 7.0 | 125.0 |
| A000933 | -.9 | 75.0 |
| A000934 | -.9 | 150.0 |
| A000935 | -.9 | 55.0 |
| A000937 | 3.0 | 150.0 |
| A000938 | -.9 | 125.0 |
| A000939 | -.9 | 195.0 |
| A000940 | 50.0 | 220.0 |
| A000941 | -.9 | 75.0 |
| A000942 | 4.0 | 760.0 |
| A000943 | 4.0 | 275.0 |
| A000944 | 5.0 | 500.0 |
| A000946 | 8.0 | 140.0 |
| A000947 | 6.0 | 170.0 |
| A000948 | 5.0 | 210.0 |
| A000949 | 4.0 | 165.0 |
| A000950 | 3.0 | 240.0 |
| A000952 | 7.0 | 310.0 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000953 | 333200. | 3474150. | 10 | 71 | .8 | -.90 | 115.0 | -.9 | 15.0 | 35.0 | -.9 | 35.0 | 75.0 | 60.0 | -.9 | 95.0 |
| A000954 | 333500. | 3475400. | 10 | 71 | .6 | -.90 | 185.0 | -.9 | 25.0 | 55.0 | -.9 | 70.0 | 65.0 | 145.0 | -.9 | 150.0 |
| A000955 | 333480. | 3476100. | 10 | 71 | .6 | -.90 | 135.0 | -.9 | 80.0 | 5650.0 | -.9 | 170.0 | 45.0 | 55.0 | -.9 | 110.0 |
| A000956 | 334800. | 3477050. | 10 | 71 | .8 | -.90 | 130.0 | -.9 | 20.0 | 255.0 | -.9 | 50.0 | 80.0 | 80.0 | -.9 | 120.0 |
| A000957 | 337800. | 3478550. | 10 | 71 | 1.3 | .03 | 205.0 | -.9 | 15.0 | 185.0 | -.9 | 35.0 | 55.0 | 50.0 | -.9 | 115.0 |
| A000972 | 386600. | 3536600. | 10 | 71 | .4 | -.90 | 105.0 | -.9 | -.8 | 370.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| A001020 | 399100. | 3538825. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 45.0 | 10.0 | -.8 | -.8 |
| A001021 | 399900. | 3544775. | 10 | 71 | .2 | -.90 | 300.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| A001022 | 400325. | 3544650. | 10 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| A001023 | 400875. | 3544400. | 10 | 71 | .6 | -.90 | 50.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| A001024 | 401325. | 3544150. | 10 | 71 | .2 | -.90 | 25.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| A001025 | 392600. | 3513600. | 10 | 71 | 8.3 | .05 | 150.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 200.0 | 17.0 | -.8 | -.8 |
| A001026 | 394300. | 3512300. | 10 | 71 | .6 | .04 | 220.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 65.0 | 24.0 | -.8 | -.8 |
| A001027 | 395600. | 3513400. | 10 | 71 | .6 | .10 | 530.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 175.0 | 15.0 | -.8 | -.8 |
| A001028 | 396600. | 3515600. | 10 | 71 | -.9 | .04 | 110.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 60.0 | 16.0 | -.8 | -.8 |
| A001029 | 396900. | 3515800. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 50.0 | 6.0 | -.8 | -.8 |
| A001030 | 398900. | 3517900. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| A001031 | 398200. | 3516900. | 10 | 71 | -.9 | -.90 | 70.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 60.0 | 7.0 | -.8 | -.8 |
| A001032 | 392400. | 3512450. | 10 | 71 | 6.4 | .06 | 285.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 125.0 | 11.0 | -.8 | -.8 |
| A001033 | 394175. | 3512975. | 10 | 71 | .6 | .04 | 195.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 80.0 | 16.0 | -.8 | -.8 |
| A001034 | 394450. | 3514500. | 10 | 71 | 1.1 | -.90 | 140.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 80.0 | 13.0 | -.8 | -.8 |
| A001035 | 391800. | 3513500. | 10 | 71 | .4 | -.90 | 110.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 50.0 | 9.0 | -.8 | -.8 |
| A001251 | 400750. | 3542300. | 10 | 71 | .2 | -.90 | 5.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| A001252 | 402200. | 3543700. | 10 | 71 | .7 | -.90 | 140.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 295.0 | 22.0 | -.8 | -.8 |
| A001253 | 404700. | 3545300. | 10 | 71 | .2 | -.90 | 25.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 30.0 | 12.0 | -.8 | -.8 |
| A001254 | 404500. | 3544700. | 10 | 71 | .2 | -.90 | 35.0 | -.9 | -.8 | 150.0 | 2.0 | -.8 | 15.0 | 28.0 | -.8 | -.8 |
| A001255 | 409900. | 3544900. | 10 | 71 | -.9 | -.90 | 55.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 15.0 | 17.0 | -.8 | -.8 |
| A001256 | 410600. | 3546800. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| A001257 | 415450. | 3547500. | 10 | 71 | .2 | -.90 | 85.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 65.0 | -.8 | -.8 |
| A001258 | 415500. | 3548250. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| A001259 | 416450. | 3548900. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 80.0 | 2.0 | -.8 | 10.0 | 13.0 | -.8 | -.8 |
| A001260 | 417800. | 3547500. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | 42.0 | -.8 | -.8 |
| A001261 | 420250. | 3548200. | 10 | 71 | -.9 | -.90 | 70.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | 26.0 | -.8 | -.8 |
| A001262 | 342100. | 3477350. | 10 | 71 | 2.0 | .02 | 520.0 | -.9 | 25.0 | 45.0 | -.9 | 65.0 | 175.0 | 110.0 | -.9 | 120.0 |
| A001263 | 342400. | 3477700. | 10 | 71 | 1.7 | .02 | 7500.0 | -.9 | -.9 | 50.0 | -.9 | 15.0 | 400.0 | 90.0 | -.9 | -.9 |
| A001264 | 342380. | 3477700. | 10 | 71 | 1.4 | .02 | 4500.0 | -.9 | 20.0 | 30.0 | -.9 | 40.0 | 110.0 | 150.0 | -.9 | 80.0 |
| A001301 | 383525. | 3505800. | 10 | 71 | .8 | .29 | 255.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 70.0 | 9.0 | -.8 | -.8 |
| A001302 | 383075. | 3505550. | 10 | 71 | .4 | .03 | 280.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 20.0 | 11.0 | -.8 | -.8 |
| A001303 | 382925. | 3507550. | 10 | 71 | .2 | .10 | 105.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 40.0 | 13.0 | -.8 | -.8 |
| A001306 | 376475. | 3519650. | 10 | 71 | .2 | -.90 | 130.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 26.0 | -.8 | -.8 |
| A001308 | 364000. | 3505300. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | 8.0 | -.8 | -.8 |
| A001309 | 364700. | 3519550. | 10 | 71 | -.9 | -.90 | 60.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| A001311 | 434400. | 3551600. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| A001312 | 430600. | 3551900. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 10.0 | 30.0 | -.8 | -.8 |
| A001313 | 443800. | 3561200. | 10 | 71 | -.9 | -.90 | 75.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 30.0 | 8.0 | -.8 | -.8 |
| A001314 | 425100. | 3560000. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 70.0 | 2.0 | -.8 | 5.0 | 10.0 | -.8 | -.8 |
| A001315 | 418700. | 3554900. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 5.0 | 2.0 | -.8 | -.8 |
| A001316 | 419000. | 3554800. | 10 | 71 | -.9 | -.90 | 70.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 5.0 | 6.0 | -.8 | -.8 |
| A001317 | 400400. | 3560000. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| A001318 | 400400. | 3559700. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | 8.0 | -.8 | -.8 |
| A001320 | 397600. | 3551700. | 10 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 75.0 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| A000953 | 4.0 | 405.0 |
| A000954 | 5.0 | 200.0 |
| A000955 | 3.0 | 1250.0 |
| A000956 | 6.0 | 285.0 |
| A000957 | 4.0 | 215.0 |
| A000972 | 3.0 | 1350.0 |
| A001020 | 4.0 | 135.0 |
| A001021 | 5.0 | 135.0 |
| A001022 | 3.0 | 100.0 |
| A001023 | -.9 | 105.0 |
| A001024 | 3.0 | 130.0 |
| A001025 | 6.0 | 185.0 |
| A001026 | 4.0 | 200.0 |
| A001027 | 5.0 | 880.0 |
| A001028 | 4.0 | 175.0 |
| A001029 | 3.0 | 150.0 |
| A001030 | 3.0 | 120.0 |
| A001031 | 3.0 | 155.0 |
| A001032 | 4.0 | 240.0 |
| A001033 | 5.0 | 210.0 |
| A001034 | 6.0 | 190.0 |
| A001035 | 5.0 | 110.0 |
| A001251 | 4.0 | 115.0 |
| A001252 | 5.0 | 260.0 |
| A001253 | 5.0 | 165.0 |
| A001254 | 4.0 | 425.0 |
| A001255 | 5.0 | 105.0 |
| A001256 | 6.0 | 205.0 |
| A001257 | 8.0 | 95.0 |
| A001258 | 6.0 | 280.0 |
| A001259 | 4.0 | 235.0 |
| A001260 | 8.0 | 100.0 |
| A001261 | 7.0 | 100.0 |
| A001262 | 4.0 | 215.0 |
| A001263 | -.9 | 385.0 |
| A001264 | -.9 | 160.0 |
| A001301 | 5.0 | 120.0 |
| A001302 | 4.0 | 95.0 |
| A001303 | 7.0 | 140.0 |
| A001306 | 4.0 | 80.0 |
| A001308 | 3.0 | 95.0 |
| A001309 | 3.0 | 95.0 |
| A001311 | 5.0 | 105.0 |
| A001312 | 4.0 | 145.0 |
| A001313 | 3.0 | 145.0 |
| A001314 | -.9 | 400.0 |
| A001315 | 3.0 | 50.0 |
| A001316 | 4.0 | 50.0 |
| A001317 | 5.0 | 235.0 |
| A001318 | 5.0 | 105.0 |
| A001320 | 3.0 | 550.0 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001321 | 401400. | 3539400. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| A001322 | 401600. | 3534200. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| A001323 | 399300. | 3529000. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 14.0 | -.8 | -.8 |
| A001324 | 399300. | 3529400. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A001325 | 401325. | 3530100. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| A001326 | 367825. | 3558450. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| A001327 | 355990. | 3553990. | 10 | 71 | .8 | -.90 | 15.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A001328 | 356200. | 3539400. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| A001329 | 367010. | 3551000. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| A001501 | 374850. | 3548800. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 26.0 | -.8 | -.8 |
| A001502 | 375100. | 3549000. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| A001503 | 373700. | 3549300. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| A001505 | 373555. | 3554800. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| A001506 | 373500. | 3554500. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| A001507 | 370380. | 3557850. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| A001508 | 373750. | 3557600. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| A001510 | 431700. | 3534350. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| A001511 | 427600. | 3523600. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 18.0 | -.8 | -.8 |
| A001512 | 411550. | 3519500. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 14.0 | -.8 | -.8 |
| A001513 | 411100. | 3519300. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 9.0 | -.8 | -.8 |
| A001514 | 390600. | 3501600. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 11.0 | -.8 | -.8 |
| A001515 | 385500. | 3498850. | 10 | 71 | 1.5 | .07 | 110.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| A001516 | 385250. | 3498700. | 10 | 71 | .4 | .08 | 495.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| A001517 | 380800. | 3498750. | 10 | 71 | .4 | .08 | 365.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 35.0 | 24.0 | -.8 | -.8 |
| A001518 | 381100. | 3498800. | 10 | 71 | .4 | -.90 | 165.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 90.0 | 17.0 | -.8 | -.8 |
| A002469 | 431800. | 3533160. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 7.0 | -.8 | -.8 |
| A002470 | 424100. | 3519500. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | 55.0 | -.8 | -.8 |
| A002471 | 416350. | 3513100. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| A002472 | 404400. | 3512300. | 10 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 22.0 | -.8 | -.8 |
| A002473 | 404900. | 3512500. | 10 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 24.0 | -.8 | -.8 |
| A002474 | 405100. | 3511875. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| A002475 | 394800. | 3505075. | 10 | 71 | .4 | -.90 | 90.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | 18.0 | -.8 | -.8 |
| A002476 | 395100. | 3505000. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002477 | 388100. | 3496900. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | 22.0 | -.8 | -.8 |
| A002478 | 381500. | 3496000. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | 28.0 | -.8 | -.8 |
| A002479 | 381200. | 3497000. | 10 | 71 | .4 | -.90 | 115.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 50.0 | 28.0 | -.8 | -.8 |
| A002701 | 359000. | 3521800. | 10 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| A002702 | 358000. | 3521900. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| A002703 | 360000. | 3522000. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 25.0 | 16.0 | -.8 | -.8 |
| A002704 | 358700. | 3524000. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| A002705 | 359300. | 3525200. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002706 | 357600. | 3529600. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002707 | 359400. | 3525000. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.9 | 9.0 | -.9 | -.8 |
| A002708 | 359100. | 3524950. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.9 | 7.0 | -.8 | -.8 |
| A002709 | 359200. | 3527200. | 10 | 72 | -.9 | -.90 | 10.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.9 | 8.0 | -.8 | -.8 |
| A002750 | 390300. | 3538000. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A002751 | 382200. | 3537600. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| A002753 | 375700. | 3536240. | 10 | 71 | .2 | -.90 | 80.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 20.0 | 8.0 | -.8 | -.8 |
| A002756 | 368950. | 3534900. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| A002757 | 364250. | 3533800. | 10 | 71 | .2 | -.90 | 5.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| A002758 | 361200. | 3533800. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| A001321 | 3.0 | 195.0 |
| A001322 | 4.0 | 105.0 |
| A001323 | 4.0 | 95.0 |
| A001324 | 4.0 | 95.0 |
| A001325 | 3.0 | 140.0 |
| A001326 | 4.0 | 70.0 |
| A001327 | 4.0 | 115.0 |
| A001328 | -.9 | 65.0 |
| A001329 | 4.0 | 95.0 |
| A001501 | 5.0 | 130.0 |
| A001502 | 4.0 | 335.0 |
| A001503 | 5.0 | 140.0 |
| A001505 | 4.0 | 100.0 |
| A001506 | 5.0 | 185.0 |
| A001507 | 5.0 | 75.0 |
| A001508 | 6.0 | 70.0 |
| A001510 | 4.0 | 125.0 |
| A001511 | 5.0 | 115.0 |
| A001512 | 5.0 | 135.0 |
| A001513 | 4.0 | 100.0 |
| A001514 | 4.0 | 110.0 |
| A001515 | 5.0 | 130.0 |
| A001516 | 6.0 | 85.0 |
| A001517 | 5.0 | 135.0 |
| A001518 | 4.0 | 250.0 |
| A002469 | -.9 | 105.0 |
| A002470 | 3.0 | 120.0 |
| A002471 | 5.0 | 85.0 |
| A002472 | 3.0 | 120.0 |
| A002473 | 5.0 | 105.0 |
| A002474 | 5.0 | 90.0 |
| A002475 | 4.0 | 145.0 |
| A002476 | 5.0 | 85.0 |
| A002477 | 3.0 | 160.0 |
| A002478 | 4.0 | 135.0 |
| A002479 | 3.0 | 125.0 |
| A002701 | 8.0 | 255.0 |
| A002702 | 4.0 | 150.0 |
| A002703 | 4.0 | 100.0 |
| A002704 | 7.0 | 245.0 |
| A002705 | 5.0 | 150.0 |
| A002706 | 3.0 | 105.0 |
| A002707 | 3.0 | 265.0 |
| A002708 | 3.0 | 80.0 |
| A002709 | 4.0 | 70.0 |
| A002750 | 5.0 | 120.0 |
| A002751 | 5.0 | 115.0 |
| A002753 | 7.0 | 135.0 |
| A002756 | 4.0 | 130.0 |
| A002757 | 5.0 | 170.0 |
| A002758 | 3.0 | 100.0 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002902 | 398800. | 3520300. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002903 | 399000. | 3520300. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 6.0 | -.8 | -.8 |
| A002904 | 396400. | 3518600. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 7.0 | -.8 | -.8 |
| A002905 | 397850. | 3517800. | 10 | 71 | 1.4 | -.90 | 75.0 | -.9 | -.8 | 60.0 | 6.0 | -.8 | 35.0 | 11.0 | -.8 | -.8 |
| A002907 | 394400. | 3516800. | 10 | 71 | .2 | .25 | 60.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| A002908 | 393300. | 3515800. | 10 | 71 | .6 | .05 | 125.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 80.0 | 6.0 | -.8 | -.8 |
| A002909 | 391300. | 3514600. | 10 | 71 | .8 | -.90 | 175.0 | -.9 | -.9 | 50.0 | 2.0 | -.9 | 105.0 | 9.0 | -.9 | -.9 |
| A002910 | 389300. | 3513000. | 10 | 71 | -.9 | -.90 | 110.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| A002911 | 389300. | 3514100. | 10 | 71 | .4 | -.90 | 120.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 60.0 | 6.0 | -.8 | -.8 |
| A002913 | 386900. | 3513500. | 10 | 71 | .2 | -.90 | 105.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 11.0 | -.8 | -.8 |
| A002914 | 384700. | 3512800. | 10 | 71 | -.9 | -.90 | 75.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 15.0 | 26.0 | -.8 | -.8 |
| A002915 | 437900. | 3550100. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| A002916 | 430200. | 3550400. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| A002917 | 435400. | 3560100. | 10 | 71 | -.9 | -.90 | 95.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 36.0 | -.8 | -.8 |
| A002918 | 435700. | 3560400. | 10 | 71 | .4 | -.90 | 20.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 20.0 | 15.0 | -.8 | -.8 |
| A002919 | 425300. | 3568800. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002920 | 425000. | 3568900. | 10 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| A002921 | 420900. | 3559200. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| A002922 | 420900. | 3558900. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 20.0 | -.8 | -.8 |
| A002923 | 415800. | 3556900. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| A002924 | 416200. | 3555800. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 6.0 | -.8 | -.8 |
| A002925 | 415900. | 3558800. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| A002926 | 400300. | 3554200. | 10 | 71 | .2 | -.90 | 35.0 | 1.0 | -.8 | 70.0 | 4.0 | -.8 | 10.0 | 7.0 | -.8 | -.8 |
| A002927 | 399700. | 3555200. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| A002928 | 400500. | 3554100. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 5.0 | 5.0 | -.8 | -.8 |
| A002929 | 389700. | 3554500. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| A002930 | 411100. | 3540500. | 10 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| A002932 | 411100. | 3540500. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| A002934 | 405000. | 3529100. | 10 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 25.0 | 12.0 | -.8 | -.8 |
| A002935 | 404500. | 3529100. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| A002936 | 403900. | 3527300. | 10 | 71 | .4 | -.90 | 60.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 45.0 | 10.0 | -.8 | -.8 |
| A002937 | 363975. | 3556500. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| A002941 | 357000. | 3538800. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| A002942 | 371050. | 3525700. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| A002945 | 418300. | 3556000. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | 6.0 | -.8 | -.8 |
| A002946 | 417950. | 3556000. | 10 | 71 | .4 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| A002947 | 438700. | 3551800. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 35.0 | 20.0 | -.8 | -.8 |
| A002948 | 438400. | 3551900. | 10 | 71 | .6 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 15.0 | -.8 | -.8 |
| A002949 | 425000. | 3559100. | 10 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 38.0 | -.8 | -.8 |
| A002950 | 427200. | 3542400. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002951 | 430400. | 3541950. | 10 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 420.0 | 6.0 | -.8 | -.8 |
| A002952 | 429800. | 3526100. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| A002953 | 419100. | 3517800. | 10 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 16.0 | -.8 | -.8 |
| A002954 | 419300. | 3517900. | 10 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| A002955 | 399700. | 3509300. | 10 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A002956 | 338300. | 3479000. | 10 | 71 | 2.8 | .03 | 2300.0 | -.9 | 15.0 | 70.0 | -.9 | 30.0 | 140.0 | 35500.0 | -.9 | 105.0 |
| A002957 | 338900. | 3478950. | 10 | 71 | .6 | -.90 | 290.0 | -.9 | 30.0 | 60.0 | -.9 | 80.0 | 75.0 | 75.0 | -.9 | 130.0 |
| A002976 | 401600. | 3552600. | 10 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 90.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| A002977 | 401800. | 3553780. | 10 | 71 | -.9 | -.90 | 20.0 | 2.0 | -.8 | 50.0 | 4.0 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| A002978 | 401180. | 3554000. | 10 | 71 | -.9 | -.90 | 20.0 | 2.0 | -.8 | 45.0 | 2.0 | -.8 | 15.0 | 12.0 | -.8 | -.8 |
| A002979 | 400850. | 3553350. | 10 | 71 | -.9 | -.90 | 25.0 | 2.0 | -.8 | 55.0 | 4.0 | -.8 | 15.0 | 15.0 | -.8 | -.8 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| A002902 | 4.0 | 95.0 |
| A002903 | 5.0 | 130.0 |
| A002904 | 4.0 | 105.0 |
| A002905 | 4.0 | 145.0 |
| A002907 | 10.0 | 200.0 |
| A002908 | 6.0 | 185.0 |
| A002909 | 5.0 | 200.0 |
| A002910 | 5.0 | 110.0 |
| A002911 | 4.0 | 130.0 |
| A002913 | 5.0 | 125.0 |
| A002914 | 7.0 | 80.0 |
| A002915 | 3.0 | 145.0 |
| A002916 | -.9 | 145.0 |
| A002917 | 7.0 | 110.0 |
| A002918 | 8.0 | 90.0 |
| A002919 | 5.0 | 115.0 |
| A002920 | 4.0 | 110.0 |
| A002921 | 4.0 | 75.0 |
| A002922 | 6.0 | 80.0 |
| A002923 | 9.0 | 120.0 |
| A002924 | 4.0 | 85.0 |
| A002925 | 4.0 | 105.0 |
| A002926 | 3.0 | 390.0 |
| A002927 | 3.0 | 110.0 |
| A002928 | 3.0 | 5900.0 |
| A002929 | 4.0 | 140.0 |
| A002930 | 3.0 | 425.0 |
| A002932 | 8.0 | 115.0 |
| A002934 | 6.0 | 125.0 |
| A002935 | 3.0 | 90.0 |
| A002936 | 4.0 | 195.0 |
| A002937 | -.9 | 100.0 |
| A002941 | 4.0 | 80.0 |
| A002942 | -.9 | 95.0 |
| A002945 | 5.0 | 80.0 |
| A002946 | 3.0 | 75.0 |
| A002947 | 4.0 | 155.0 |
| A002948 | 4.0 | 145.0 |
| A002949 | 6.0 | 115.0 |
| A002950 | 4.0 | 105.0 |
| A002951 | 4.0 | 720.0 |
| A002952 | 5.0 | 80.0 |
| A002953 | 4.0 | 95.0 |
| A002954 | 3.0 | 130.0 |
| A002955 | 3.0 | 75.0 |
| A002956 | 4.0 | 170.0 |
| A002957 | -.9 | 500.0 |
| A002976 | 4.0 | 235.0 |
| A002977 | 5.0 | 190.0 |
| A002978 | 5.0 | 165.0 |
| A002979 | 4.0 | 270.0 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002985 | 399400. | 3509500. | 10 71 | .8 | -.90 | 10.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| A002986 | 401700. | 3509700. | 10 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 12.0 | -.8 | -.8 |
| A002987 | 401700. | 3509950. | 10 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| A002988 | 391800. | 3501500. | 10 71 | -.9 | -.90 | 65.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 8.0 | -.8 | -.8 |
| A002989 | 392100. | 3501600. | 10 71 | .4 | -.90 | 135.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 14.0 | -.8 | -.8 |
| A002990 | 386300. | 3497200. | 10 71 | 1.4 | -.90 | 35.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | 9.0 | -.8 | -.8 |
| A002991 | 386300. | 3497800. | 10 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| A002992 | 373800. | 3494400. | 10 71 | 1.1 | .05 | 355.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 120.0 | 26.0 | -.8 | -.8 |
| A002993 | 374100. | 3494550. | 10 71 | .7 | -.90 | 160.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 45.0 | 14.0 | -.8 | -.8 |
| A002994 | 411020. | 3554080. | 10 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 10.0 | -.8 | -.8 |
| A002995 | 411065. | 3554100. | 10 71 | .2 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| A003002 | 425300. | 3560150. | 10 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 10.0 | 9.0 | -.8 | -.8 |
| A003006 | 431700. | 3569350. | 10 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 15.0 | 9.0 | -.8 | -.8 |

TABLE AD-10 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| A002985 | 5.0 | 85.0 |
| A002986 | 6.0 | 80.0 |
| A002987 | 5.0 | 125.0 |
| A002988 | 5.0 | 125.0 |
| A002989 | 6.0 | 190.0 |
| A002990 | 4.0 | 130.0 |
| A002991 | 4.0 | 120.0 |
| A002992 | 4.0 | 195.0 |
| A002993 | 6.0 | 200.0 |
| A002994 | 3.0 | 200.0 |
| A002995 | 3.0 | 115.0 |
| A003002 | 4.0 | 380.0 |
| A003006 | 5.0 | 300.0 |

TABLE AD-11

DUNKLE MINE AREA STREAM SEDIMENTS

ANALYTICAL RESULTS

TABLE AD-11 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001006 | 582200. | 3399300. | 10 | 71 | 1.1 | -.90 | 20.0 | -.9 | 65.0 | -.9 | 75.0 | 14.0 | 5.0 | 175.0 |
| A001007 | 583550. | 3396200. | 10 | 71 | 1.2 | -.90 | 90.0 | -.9 | 45.0 | -.9 | 15.0 | 6.0 | 5.0 | 120.0 |
| A001008 | 583400. | 3393800. | 10 | 71 | 1.5 | -.90 | 25.0 | -.9 | 55.0 | -.9 | 125.0 | 32.0 | 6.0 | 200.0 |
| A001010 | 583300. | 3393700. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | 35.0 | -.9 | 20.0 | 4.0 | 3.0 | 115.0 |
| A001012 | 584000. | 3392800. | 10 | 71 | .9 | -.90 | 70.0 | -.9 | 35.0 | -.9 | 70.0 | 16.0 | 4.0 | 135.0 |
| A001014 | 582650. | 3392100. | 10 | 71 | .2 | -.90 | 65.0 | -.9 | 55.0 | -.9 | 25.0 | 6.0 | 3.0 | 120.0 |
| A001016 | 580000. | 3390700. | 10 | 71 | 1.4 | -.90 | 45.0 | -.9 | 45.0 | -.9 | 120.0 | 32.0 | 3.0 | 150.0 |
| A001017 | 597600. | 3382800. | 10 | 71 | .4 | -.90 | 400.0 | -.9 | 35.0 | -.9 | 20.0 | 4.0 | 3.0 | 155.0 |
| A001018 | 598800. | 3382100. | 10 | 71 | .6 | -.90 | 235.0 | -.9 | 30.0 | -.9 | 35.0 | 8.0 | 4.0 | 170.0 |
| A002402 | 579500. | 3381950. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | 50.0 | -.9 | 20.0 | 4.0 | 3.0 | 125.0 |
| A002404 | 579900. | 3382200. | 10 | 71 | .2 | -.90 | 55.0 | -.9 | 35.0 | -.9 | 15.0 | 4.0 | 3.0 | 165.0 |
| A002407 | 585100. | 3369200. | 10 | 71 | .6 | -.90 | 30.0 | -.9 | 35.0 | -.9 | 50.0 | 8.0 | 3.0 | 145.0 |
| A002408 | 589100. | 3376250. | 10 | 71 | 1.2 | -.90 | 275.0 | -.9 | 70.0 | -.9 | 30.0 | 6.0 | 6.0 | 330.0 |
| A002409 | 589075. | 3376275. | 10 | 71 | 1.2 | -.90 | 110.0 | -.9 | 65.0 | -.9 | 75.0 | 16.0 | 4.0 | 315.0 |
| A002411 | 587700. | 3369400. | 10 | 71 | .4 | -.90 | 45.0 | -.9 | 25.0 | -.9 | 15.0 | 2.0 | 3.0 | 125.0 |
| A002412 | 581300. | 3383700. | 10 | 71 | .4 | .02 | 55.0 | -.9 | 40.0 | -.9 | 35.0 | 6.0 | 3.0 | 170.0 |
| A002414 | 574800. | 3381150. | 10 | 71 | -.9 | -.90 | 50.0 | -.9 | 30.0 | -.9 | 10.0 | 4.0 | 3.0 | 125.0 |
| A002415 | 575100. | 3389700. | 10 | 71 | -.9 | .02 | 15.0 | -.9 | 55.0 | -.9 | 15.0 | 4.0 | 5.0 | 130.0 |
| A002416 | 576400. | 3394975. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | 55.0 | -.9 | 10.0 | 6.0 | 4.0 | 150.0 |
| A002417 | 576190. | 3399950. | 10 | 71 | .4 | -.90 | 30.0 | -.9 | 60.0 | -.9 | 15.0 | 9.0 | 3.0 | 135.0 |
| A002418 | 587050. | 3393500. | 10 | 71 | .2 | -.90 | 80.0 | -.9 | 15.0 | -.9 | 10.0 | 2.0 | 3.0 | 125.0 |
| A002419 | 603000. | 3390700. | 10 | 71 | .4 | .02 | 135.0 | -.9 | 30.0 | -.9 | 70.0 | 17.0 | -.9 | 130.0 |
| A002421 | 604800. | 3389700. | 10 | 71 | .2 | -.90 | 130.0 | -.9 | 40.0 | -.9 | 15.0 | 12.0 | 4.0 | 95.0 |
| A002422 | 600675. | 3392600. | 10 | 71 | .2 | -.90 | 120.0 | -.9 | 25.0 | -.9 | 20.0 | 4.0 | 3.0 | 120.0 |
| A002423 | 573500. | 3383200. | 10 | 71 | .2 | .19 | 45.0 | -.9 | 55.0 | -.9 | 10.0 | 8.0 | 5.0 | 135.0 |
| A002425 | 572600. | 3381100. | 10 | 71 | .4 | .23 | 195.0 | -.9 | 55.0 | -.9 | 20.0 | 8.0 | 4.0 | 135.0 |
| A002426 | 573200. | 3379200. | 10 | 71 | .4 | .03 | 75.0 | -.9 | 50.0 | -.9 | 10.0 | 8.0 | 4.0 | 135.0 |
| A002432 | 578350. | 3384900. | 10 | 71 | -.9 | -.90 | 15.0 | -.9 | 50.0 | -.9 | 15.0 | 2.0 | 4.0 | 120.0 |
| A002435 | 582100. | 3372600. | 10 | 71 | .4 | -.90 | 85.0 | -.9 | 60.0 | -.9 | 15.0 | 6.0 | 3.0 | 170.0 |
| A002436 | 582550. | 3378700. | 10 | 71 | 1.3 | -.90 | 80.0 | -.9 | 30.0 | -.9 | 45.0 | 6.0 | 2.0 | 205.0 |
| A002437 | 585500. | 3379700. | 10 | 71 | .4 | -.90 | 140.0 | -.9 | 45.0 | -.9 | 10.0 | 6.0 | 3.0 | 130.0 |
| A002438 | 582100. | 3372600. | 10 | 71 | .2 | -.90 | 20.0 | -.9 | 50.0 | -.9 | 15.0 | 2.0 | 3.0 | 125.0 |
| A002439 | 575400. | 3377100. | 10 | 71 | .2 | -.90 | 55.0 | -.9 | 40.0 | -.9 | 15.0 | 2.0 | 3.0 | 145.0 |
| A002440 | 575000. | 3378900. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | 30.0 | -.9 | 10.0 | -.9 | 5.0 | 130.0 |
| A002443 | 587100. | 3393500. | 10 | 71 | -.9 | -.90 | 205.0 | -.9 | 15.0 | -.9 | 5.0 | 2.0 | 4.0 | 140.0 |
| A002444 | 596700. | 3394400. | 10 | 71 | .2 | -.90 | 110.0 | -.9 | 25.0 | -.9 | 40.0 | 6.0 | 6.0 | 110.0 |
| A002445 | 600000. | 3392100. | 10 | 71 | -.9 | -.90 | 200.0 | -.9 | 25.0 | -.9 | 10.0 | 2.0 | 3.0 | 120.0 |
| A002446 | 581900. | 3371900. | 10 | 71 | -.9 | .10 | 20.0 | -.9 | 50.0 | -.9 | 15.0 | 2.0 | 3.0 | 120.0 |
| A002448 | 582300. | 3372300. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | 25.0 | -.9 | 15.0 | -.9 | 3.0 | 120.0 |
| A002449 | 590000. | 3377900. | 10 | 71 | 1.2 | -.90 | 40.0 | -.9 | 45.0 | -.9 | 45.0 | 6.0 | 5.0 | 290.0 |
| A002450 | 575500. | 3382800. | 10 | 71 | -.9 | .15 | 60.0 | -.9 | 25.0 | -.9 | 5.0 | 2.0 | 3.0 | 135.0 |
| A002451 | 575900. | 3384800. | 10 | 71 | -.9 | .27 | 35.0 | -.9 | 35.0 | -.9 | 15.0 | 2.0 | 2.0 | 130.0 |
| A002452 | 576300. | 3372600. | 10 | 71 | -.9 | -.90 | 20.0 | -.9 | 20.0 | -.9 | 5.0 | 2.0 | -.9 | 75.0 |
| A002453 | 576305. | 3372600. | 10 | 71 | -.9 | -.90 | 25.0 | -.9 | 30.0 | -.9 | 10.0 | 2.0 | 3.0 | 110.0 |
| A002454 | 576600. | 3387200. | 10 | 71 | -.9 | -.90 | 35.0 | -.9 | 60.0 | -.9 | 10.0 | 4.0 | 5.0 | 140.0 |
| A002455 | 585000. | 3396000. | 10 | 71 | .2 | -.90 | 20.0 | -.9 | 30.0 | -.9 | 15.0 | 2.0 | 3.0 | 110.0 |
| A002456 | 592000. | 3393000. | 10 | 71 | .4 | -.90 | 510.0 | -.9 | 20.0 | -.9 | 30.0 | 6.0 | 3.0 | 200.0 |
| A002457 | 604700. | 3396600. | 10 | 71 | -.9 | -.90 | 130.0 | -.9 | 15.0 | -.9 | 5.0 | 4.0 | 3.0 | 110.0 |
| A002458 | 600875. | 3385700. | 10 | 71 | .4 | -.90 | 385.0 | -.9 | 20.0 | -.9 | 15.0 | 6.0 | 4.0 | 155.0 |
| A002459 | 600500. | 3383500. | 10 | 71 | -.9 | -.90 | 305.0 | -.9 | 25.0 | -.9 | 10.0 | 4.0 | 4.0 | 145.0 |
| A002463 | 595275. | 3379100. | 10 | 71 | .2 | -.90 | 70.0 | -.9 | 30.0 | -.9 | 10.0 | 4.0 | 4.0 | 110.0 |

TABLE AD-11 CHEMICAL ANALYSIS OF STREAM SED. SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002464 | 593000. | 3382600. | 10 | 71 | .2 | -.90 | 85.0 | -.9 | 30.0 | -.9 | 35.0 | 8.0 | 5.0 | 115.0 |
| A002465 | 591800. | 3384700. | 10 | 71 | -.9 | -.90 | 170.0 | -.9 | 45.0 | -.9 | 20.0 | 4.0 | 5.0 | 115.0 |
| A002466 | 588900. | 3385500. | 10 | 71 | -.9 | .06 | 70.0 | -.9 | 30.0 | -.9 | 15.0 | 4.0 | 3.0 | 115.0 |
| A002468 | 578400. | 3388000. | 10 | 71 | -.9 | .04 | 35.0 | -.9 | 30.0 | -.9 | 10.0 | 2.0 | 4.0 | 95.0 |

TABLE AD-12

KANTISHNA HILLS PANNED CONCENTRATES

ANALYTICAL RESULTS

TABLE AD-12 CHEMICAL ANALYSIS OF PAN CON. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CO (PPM) | CR (PPM) | CU (PPM) | FE (%) | GA (PPM) | HG (PPM) | LA (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000804 | 373950. | 3503350. | 12 | 71 | .4 | -.90 | 110.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A000806 | 372570. | 3505620. | 12 | 71 | -.9 | -.90 | 65.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A000807 | 369120. | 3509850. | 12 | 72 | -.9 | -.90 | 45.0 | 420.0 | -.9 | -.9 | 15.0 | 75.0 | 30.0 | 4.8 | 10.0 | .01 | 30.0 |
| A000922 | 396200. | 3556300. | 12 | 71 | -.9 | .43 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A000923 | 397100. | 3556400. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 20.0 | -.8 | -.8 | -.80 | -.8 |
| A000928 | 406500. | 3532400. | 12 | 72 | .8 | .78 | 40.0 | 220.0 | -.9 | -.9 | 20.0 | 90.0 | 60.0 | 17.4 | 6.0 | .09 | 25.0 |
| A000931 | 367825. | 3558450. | 12 | 71 | -.9 | -.90 | 5.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | -.80 | -.8 |
| A000932 | 350600. | 3549300. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 20.0 | -.8 | -.8 | -.80 | -.8 |
| A000936 | 366150. | 3540400. | 12 | 71 | -.9 | -.90 | 5.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | -.80 | -.8 |
| A000945 | 333000. | 3469950. | 12 | 71 | 2.4 | .16 | -.9 | -.8 | -.8 | -.9 | 45.0 | -.9 | 105.0 | -.8 | -.8 | -.80 | -.8 |
| A000951 | 334200. | 3473800. | 12 | 71 | .6 | -.90 | 500.0 | -.8 | -.8 | -.9 | 45.0 | -.9 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A001003 | 360950. | 3526950. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A001004 | 376250. | 3525500. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A001005 | 384100. | 3524100. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | -.80 | -.8 |
| A001304 | 382425. | 3507500. | 12 | 71 | .6 | 2.40 | 150.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A001305 | 380175. | 3507150. | 12 | 71 | -.9 | 1.80 | 115.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | -.80 | -.8 |
| A001307 | 374150. | 3510200. | 12 | 71 | .2 | .44 | 115.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A001310 | 364750. | 3510500. | 12 | 71 | -.9 | 5.20 | 50.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 20.0 | -.8 | -.8 | -.80 | -.8 |
| A001319 | 400150. | 3559500. | 12 | 71 | -.9 | .70 | 20.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | -.80 | -.8 |
| A001330 | 358500. | 3534200. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A001504 | 373300. | 3549500. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | -.80 | -.8 |
| A001509 | 371450. | 3599500. | 12 | 72 | .6 | -.90 | 5.0 | 220.0 | -.9 | -.9 | 10.0 | 130.0 | 15.0 | 10.2 | 8.0 | .03 | 15.0 |
| A002752 | 382300. | 3537400. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A002754 | 371750. | 3535650. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A002755 | 371600. | 3535900. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 20.0 | -.8 | -.8 | -.80 | -.8 |
| A002759 | 358980. | 3535380. | 12 | 72 | -.9 | -.90 | -.9 | 540.0 | -.9 | -.9 | 20.0 | 70.0 | 20.0 | -.9 | 8.0 | .02 | 15.0 |
| A002760 | 358000. | 3536200. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | -.80 | -.8 |
| A002906 | 393700. | 3517400. | 12 | 71 | .2 | -.90 | 45.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | -.80 | -.8 |
| A002912 | 387600. | 3514000. | 12 | 72 | .8 | -.90 | 65.0 | 550.0 | -.9 | -.9 | 15.0 | 80.0 | 30.0 | 6.9 | 10.0 | .02 | 30.0 |
| A002931 | 411100. | 3540500. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A002933 | 411700. | 3540000. | 12 | 72 | -.9 | -.90 | 25.0 | 380.0 | -.9 | -.9 | 20.0 | -.9 | 35.0 | 8.1 | 10.0 | .07 | 25.0 |
| A002938 | 350900. | 3550500. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | -.80 | -.8 |
| A002939 | 356200. | 3550600. | 12 | 71 | -.9 | -.90 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | -.80 | -.8 |
| A002940 | 357000. | 3538800. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A002943 | 369850. | 3525100. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A002944 | 382475. | 3526150. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | -.80 | -.8 |
| A003001 | 425300. | 3560150. | 12 | 71 | -.9 | -.90 | 30.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 40.0 | -.8 | -.8 | -.80 | -.8 |
| A003003 | 425500. | 3559800. | 12 | 71 | -.9 | -.90 | 60.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | -.80 | -.8 |
| A003004 | 428700. | 3562600. | 12 | 71 | .2 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A003005 | 431300. | 3568950. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A003007 | 435400. | 3572000. | 12 | 71 | -.9 | -.90 | 20.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A003008 | 443600. | 3573100. | 12 | 72 | -.9 | -.90 | 10.0 | 290.0 | -.9 | -.9 | 20.0 | 50.0 | 20.0 | 11.6 | 8.0 | .03 | 55.0 |
| A003009 | 446000. | 3564600. | 12 | 71 | .2 | -.90 | 90.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 105.0 | -.8 | -.8 | -.80 | -.8 |
| A003010 | 402900. | 3542800. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 65.0 | -.8 | -.8 | -.80 | -.8 |
| A003011 | 402200. | 3543400. | 12 | 71 | -.9 | -.90 | 80.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 55.0 | -.8 | -.8 | -.80 | -.8 |
| A003012 | 405450. | 3544700. | 12 | 71 | -.9 | -.90 | 15.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 25.0 | -.8 | -.8 | -.80 | -.8 |
| A003013 | 411850. | 3546200. | 12 | 72 | -.9 | -.90 | 10.0 | 580.0 | -.9 | -.9 | 10.0 | 55.0 | 20.0 | 8.4 | 10.0 | .02 | 20.0 |
| A003014 | 417250. | 3551800. | 12 | 71 | -.9 | -.90 | 120.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 40.0 | -.8 | -.8 | -.80 | -.8 |
| A003015 | 420300. | 3547300. | 12 | 71 | -.9 | -.90 | 25.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | -.80 | -.8 |
| A003016 | 422750. | 3530450. | 12 | 72 | -.9 | -.90 | 25.0 | 320.0 | -.9 | -.9 | 15.0 | 50.0 | 35.0 | 4.3 | 8.0 | .04 | 25.0 |
| A003017 | 424600. | 3530750. | 12 | 71 | .9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.3 | 50.0 | -.8 | -.8 | -.80 | -.8 |

TABLE AD-12 CHEMICAL ANALYSIS OF PAN CON. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) | TE (PPM) | TH (PPM) | TI (%) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000804 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | 10.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 3.0 | -.8 | 140.0 | -.8 |
| A000806 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | 7.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 5.0 | -.8 | 95.0 | -.8 |
| A000807 | 1550.0 | -.9 | 20.0 | 30.0 | 10.0 | .1 | -.9 | 6.0 | 20.0 | -.9 | -.900 | -.9 | -.90 | 50.0 | 3.0 | 35.0 | 95.0 | 220.0 |
| A000922 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 4.0 | -.8 | 105.0 | -.8 |
| A000923 | -.8 | 2.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 7.0 | -.8 | 55.0 | -.8 |
| A000928 | 7850.0 | -.9 | 20.0 | 25.0 | 25.0 | -.9 | -.9 | 22.0 | 90.0 | -.9 | -.900 | -.9 | -.90 | 60.0 | 13.0 | 170.0 | 60.0 | 270.0 |
| A000931 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 45.0 | -.8 |
| A000932 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 60.0 | -.8 |
| A000936 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 65.0 | -.8 |
| A000945 | -.8 | -.9 | -.8 | 95.0 | 375.0 | -.8 | -.8 | 34000.0 | -.8 | 38.0 | -.800 | -.8 | -.80 | 85.0 | 940.0 | -.8 | 310.0 | -.8 |
| A000951 | -.8 | -.9 | -.8 | 120.0 | 30.0 | -.8 | -.8 | 160.0 | -.8 | -.9 | -.800 | -.8 | -.80 | 80.0 | -.9 | -.8 | 175.0 | -.8 |
| A001003 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 60.0 | -.8 |
| A001004 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 7.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 65.0 | -.8 |
| A001005 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | 7.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 60.0 | -.8 |
| A001304 | -.8 | 2.0 | -.8 | -.8 | 60.0 | -.8 | -.8 | 11.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 11.0 | -.8 | 90.0 | -.8 |
| A001305 | -.8 | -.9 | -.8 | -.8 | 35.0 | -.8 | -.8 | 7.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 6.0 | -.8 | 75.0 | -.8 |
| A001307 | -.8 | 2.0 | -.8 | -.8 | 30.0 | -.8 | -.8 | 16.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 7.0 | -.8 | 75.0 | -.8 |
| A001310 | -.8 | -.9 | -.8 | -.8 | 240.0 | -.8 | -.8 | 11.0 | -.8 | 12.0 | -.800 | -.8 | -.80 | -.8 | 8.0 | -.8 | 55.0 | -.8 |
| A001319 | -.8 | -.9 | -.8 | -.8 | 30.0 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 6.0 | -.8 | 60.0 | -.8 |
| A001330 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 6.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 55.0 | -.8 |
| A001504 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 7.0 | -.8 | 100.0 | -.8 |
| A001509 | 4400.0 | -.9 | 10.0 | 20.0 | -.9 | .1 | -.9 | 4.0 | 45.0 | -.9 | -.900 | 20.0 | -.90 | 25.0 | 3.0 | 90.0 | 55.0 | 140.0 |
| A002752 | -.8 | 2.0 | -.8 | -.8 | 10.0 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 4.0 | -.8 | 100.0 | -.8 |
| A002754 | -.8 | -.9 | -.8 | -.8 | 15.0 | -.8 | -.8 | -.9 | -.8 | .5 | -.800 | -.8 | -.80 | -.8 | 5.0 | -.8 | 110.0 | -.8 |
| A002755 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 5.0 | -.8 | 70.0 | -.8 |
| A002759 | 2350.0 | 2.0 | -.9 | 40.0 | -.9 | -.9 | -.9 | -.9 | 15.0 | -.9 | -.900 | -.9 | -.90 | 60.0 | 5.0 | 40.0 | 225.0 | 210.0 |
| A002760 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 3.0 | -.8 | 65.0 | -.8 |
| A002906 | -.8 | 2.0 | -.8 | -.8 | 15.0 | -.8 | -.8 | 6.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 3.0 | -.8 | 70.0 | -.8 |
| A002912 | 2100.0 | -.9 | -.9 | 25.0 | 50.0 | -.9 | -.9 | 5.0 | 25.0 | -.9 | -.900 | -.9 | -.90 | 70.0 | 13.0 | 45.0 | 100.0 | 180.0 |
| A002931 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 140.0 | -.8 |
| A002933 | 3000.0 | 2.0 | -.9 | 30.0 | 10.0 | -.9 | -.9 | 13.0 | 30.0 | -.9 | -.900 | -.9 | -.90 | 45.0 | 46.0 | 50.0 | 65.0 | 170.0 |
| A002938 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 40.0 | -.8 |
| A002939 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 50.0 | -.8 |
| A002940 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 6.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 70.0 | -.8 |
| A002943 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 5.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 60.0 | -.8 |
| A002944 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 6.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 65.0 | -.8 |
| A003001 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 8.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 5.0 | -.8 | 160.0 | -.8 |
| A003003 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 9.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 5.0 | -.8 | 60.0 | -.8 |
| A003004 | -.8 | 2.0 | -.8 | -.8 | 10.0 | -.8 | -.8 | 6.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 4.0 | -.8 | 65.0 | -.8 |
| A003005 | -.8 | 2.0 | -.8 | -.8 | 5.0 | -.8 | -.8 | 8.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 3.0 | -.8 | 85.0 | -.8 |
| A003007 | -.8 | -.9 | -.8 | -.8 | 5.0 | -.8 | -.8 | 11.0 | -.8 | 26.0 | -.800 | -.8 | -.80 | -.8 | 10.0 | -.8 | 100.0 | -.8 |
| A003008 | 7700.0 | 2.0 | -.9 | 30.0 | 5.0 | -.9 | -.9 | 8.0 | 50.0 | 7.0 | -.900 | 20.0 | -.90 | 55.0 | 3.0 | 95.0 | 70.0 | 240.0 |
| A003009 | -.8 | 2.0 | -.8 | -.8 | 20.0 | -.8 | -.8 | 730.0 | -.8 | 2.0 | -.800 | -.8 | -.80 | -.8 | 75.0 | -.8 | 120.0 | -.8 |
| A003010 | -.8 | -.9 | -.8 | -.8 | 5.0 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 3.0 | -.8 | 120.0 | -.8 |
| A003011 | -.8 | -.9 | -.8 | -.8 | 125.0 | -.8 | -.8 | 26.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 195.0 | -.8 |
| A003012 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 17.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | -.9 | -.8 | 75.0 | -.8 |
| A003013 | 4050.0 | 2.0 | -.9 | 15.0 | 5.0 | -.9 | -.9 | 4.0 | 35.0 | -.9 | -.900 | -.9 | -.90 | 65.0 | -.9 | 70.0 | 75.0 | 230.0 |
| A003014 | -.8 | 2.0 | -.8 | -.8 | 5.0 | -.8 | -.8 | 22.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 3.0 | -.8 | 65.0 | -.8 |
| A003015 | -.8 | 2.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 12.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 55.0 | -.8 | 135.0 | -.8 |
| A003016 | 1900.0 | -.9 | -.9 | 20.0 | 15.0 | -.9 | -.9 | 6.0 | 10.0 | -.9 | -.900 | -.9 | -.90 | 55.0 | 3.0 | 25.0 | 60.0 | 130.0 |
| A003017 | -.8 | 2.0 | -.8 | -.8 | 15.0 | -.8 | -.8 | 2.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 6.0 | -.8 | 115.0 | -.8 |

TABLE AD-12 CHEMICAL ANALYSIS OF PAN CON. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CO (PPM) | CR (PPM) | CU (PPM) | FE (%) | GA (PPM) | HG (PPM) | LA (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A003018 | 433600. | 3533500. | 12 | 71 | -.9 | -.90 | 10.0 | -.8 | -.8 | -.9 | -.8 | -.8 | 45.0 | -.8 | -.8 | -.80 | -.8 |
| A003019 | 438900. | 3541500. | 12 | 72 | .2 | -.90 | 10.0 | 340.0 | -.9 | -.9 | 20.0 | 40.0 | 35.0 | 7.2 | 10.0 | .17 | 30.0 |



TABLE AD-12 CHEMICAL ANALYSIS OF PAN CON. SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) | TE (PPM) | TH (PPM) | TI (%) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A003018 | -.8 | -.9 | -.8 | -.8 | 10.0 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.800 | -.8 | -.80 | -.8 | 5.0 | -.8 | 85.0 | -.8 |
| A003019 | 3600.0 | -.9 | 10.0 | 35.0 | 15.0 | -.9 | -.9 | 2.0 | 15.0 | -.9 | -.900 | -.9 | -.90 | 65.0 | 4.0 | 35.0 | 70.0 | 160.0 |

TABLE AD-13

KANTISHNA HILLS PLACER CONCENTRATES

ANALYTICAL RESULTS

TABLE AD-13 CHEMICAL ANALYSIS OF PAN CON.-PL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) | CS (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001450 | 343340. | 3481590. | 13 | 73 | -.9 | -.80 | -.9 | 10.0 | 300.0 | -.9 | -.9 | .5 | -.9 | -.8 | 100.0 | 1000.0 | -.8 |
| A001451 | 341962. | 3482639. | 13 | 71 | 8.6 | .27 | -.9 | -.9 | 740.0 | -.9 | 1.0 | -.8 | .4 | -.9 | 40.0 | 455.0 | -.9 |
| A001452 | 341668. | 3482937. | 13 | 73 | 10.0 | -.80 | 500.0 | -.9 | 1000.0 | -.9 | -.9 | .1 | -.9 | -.8 | 150.0 | 1500.0 | -.8 |
| A001453 | 337844. | 3488309. | 13 | 73 | 2.0 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .7 | -.9 | -.8 | 50.0 | 10000.0 | -.8 |
| A001454 | 338613. | 3487477. | 13 | 71 | 6.6 | 3.00 | 130.0 | -.9 | 90.0 | -.9 | -.9 | -.8 | -.9 | 260.0 | 15.0 | 140.0 | 25.0 |
| A001455 | 354844. | 3489032. | 13 | 73 | 15.0 | -.80 | 500.0 | -.9 | 100.0 | -.9 | -.9 | .1 | -.9 | -.8 | 500.0 | 20.0 | -.8 |
| A001456 | 354685. | 3489153. | 13 | 73 | 20.0 | -.80 | -.9 | 500.0 | 300.0 | -.9 | -.9 | .7 | -.9 | -.8 | 30.0 | 200.0 | -.8 |
| A001457 | 354442. | 3489311. | 13 | 71 | 65.0 | 2.00 | 310.0 | 10.0 | 200.0 | -.9 | 2.0 | -.8 | 1.0 | 170.0 | 20.0 | 265.0 | 15.0 |
| A001458 | 353068. | 3488530. | 13 | 71 | 11.0 | 1.30 | 455.0 | -.9 | 650.0 | -.9 | 2.0 | -.8 | .8 | 160.0 | 25.0 | 350.0 | 10.0 |
| A001459 | 340120. | 3487560. | 13 | 73 | -.9 | -.80 | -.9 | 50.0 | 1000.0 | -.9 | -.9 | .5 | -.9 | -.8 | 5.0 | 200.0 | -.8 |
| A001460 | 340350. | 3487880. | 13 | 71 | 22.0 | .50 | 75.0 | 15.0 | 190.0 | -.9 | -.9 | -.8 | .4 | 160.0 | 45.0 | 230.0 | 10.0 |
| A001461 | 340806. | 3484233. | 13 | 73 | -.9 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .7 | -.9 | -.8 | 30.0 | 1000.0 | -.8 |
| A001462 | 391063. | 3489583. | 13 | 73 | -.9 | -.80 | -.9 | -.9 | 500.0 | -.9 | -.9 | .2 | -.9 | -.8 | 70.0 | 200.0 | -.8 |
| A001463 | 391245. | 3489634. | 13 | 73 | 3.0 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .2 | -.9 | -.8 | 50.0 | 200.0 | -.8 |
| A001464 | 389976. | 3488359. | 13 | 71 | -.9 | .03 | -.9 | 20.0 | 190.0 | -.9 | -.9 | -.8 | -.9 | 120.0 | 25.0 | 190.0 | 10.0 |
| A001465 | 389787. | 3487998. | 13 | 73 | 2.0 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .5 | -.9 | -.8 | 20.0 | 100.0 | -.8 |
| A001466 | 390289. | 3485662. | 13 | 71 | -.9 | .42 | 15.0 | 10.0 | 90.0 | -.9 | 1.0 | -.8 | -.9 | 120.0 | 35.0 | 90.0 | 20.0 |
| A001467 | 377233. | 3493526. | 13 | 73 | 50.0 | -.80 | 500.0 | -.9 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 200.0 | 300.0 | -.8 |
| A001468 | 377242. | 3493593. | 13 | 71 | 16.0 | 1.20 | 900.0 | 80.0 | 710.0 | -.9 | -.9 | -.8 | -.9 | 280.0 | 50.0 | 195.0 | 20.0 |
| A001469 | 377211. | 3493508. | 13 | 73 | 7.0 | -.80 | 10000.0 | 1500.0 | 50.0 | -.9 | -.9 | .1 | 200.0 | -.8 | 70.0 | 10.0 | -.8 |
| A001470 | 379023. | 3492906. | 13 | 73 | 1.0 | -.80 | 1500.0 | 500.0 | 500.0 | -.9 | -.9 | .2 | -.9 | -.8 | 50.0 | 300.0 | -.8 |
| A001471 | 379168. | 3492866. | 13 | 71 | 10.0 | .18 | 160.0 | 95.0 | 270.0 | -.9 | -.9 | -.8 | 1.0 | 100.0 | 35.0 | 245.0 | 10.0 |
| A001472 | 384520. | 3483178. | 13 | 73 | -.9 | -.80 | -.9 | -.9 | 300.0 | -.9 | -.9 | .2 | -.9 | -.8 | 70.0 | 200.0 | -.8 |
| A001473 | 384617. | 3483462. | 13 | 71 | .4 | 2.70 | 55.0 | 35.0 | 130.0 | -.9 | -.9 | -.8 | -.9 | 100.0 | 45.0 | 145.0 | 20.0 |
| A001474 | 368748. | 3478301. | 13 | 71 | .4 | 1.70 | 30.0 | 30.0 | 180.0 | -.9 | -.9 | -.8 | -.9 | 320.0 | 25.0 | 245.0 | 20.0 |
| A001475 | 371029. | 3480841. | 13 | 71 | -.9 | .22 | 120.0 | 25.0 | 130.0 | -.9 | -.9 | -.8 | .6 | 80.0 | 35.0 | 115.0 | 20.0 |
| A001476 | 343340. | 3481589. | 13 | 71 | 32.0 | 1.10 | 1150.0 | 25.0 | 640.0 | 10.0 | 5.0 | -.8 | .8 | 120.0 | 70.0 | 210.0 | 10.0 |
| A001477 | 338181. | 3488467. | 13 | 71 | 4.4 | .02 | 990.0 | 25.0 | 350.0 | -.9 | -.9 | -.8 | 3.0 | 40.0 | 35.0 | 115.0 | -.9 |
| A001478 | 347527. | 3510424. | 13 | 71 | -.9 | .24 | 70.0 | 20.0 | 120.0 | -.9 | -.9 | -.8 | -.9 | 50.0 | 10.0 | 125.0 | -.9 |

TABLE AD-13 CHEMICAL ANALYSIS OF PAN CON.-PL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | HG (%) | LA (PPM) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001450 | 150.0 | 20.0 | 20.0 | -.9 | -.8 | 20.0 | 3.00 | 1500.0 | 10.0 | 20.0 | 150.0 | 70.0 | -.8 | -.8 | -.9 | 70.0 | 100.0 |
| A001451 | 55.0 | 39.3 | -.9 | -.8 | 80.0 | -.9 | -.80 | 4650.0 | -.9 | -.9 | 75.0 | 260.0 | -.9 | -.9 | 110.0 | -.9 | -.9 |
| A001452 | 100.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 1000.0 | 20.0 | 30.0 | 150.0 | 300.0 | -.8 | -.8 | 500.0 | 30.0 | 500.0 |
| A001453 | 200.0 | 20.0 | 50.0 | -.9 | -.8 | 20.0 | 2.00 | 2000.0 | 20.0 | 30.0 | 100.0 | 150.0 | -.8 | -.8 | -.9 | 50.0 | 100.0 |
| A001454 | 15.0 | 40.0 | 7.0 | -.8 | 45.0 | 80.0 | -.80 | 5450.0 | -.9 | 230.0 | 25.0 | 280.0 | .1 | .1 | 12.0 | 45.0 | 910.0 |
| A001455 | 150.0 | 20.0 | 15.0 | -.9 | -.8 | -.9 | 0.15 | 500.0 | 10.0 | -.9 | 500.0 | 2000.0 | -.8 | -.8 | 300.0 | -.9 | -.9 |
| A001456 | 100.0 | 15.0 | 20.0 | -.9 | -.8 | 20.0 | 1.00 | 5000.0 | 5.0 | 30.0 | 150.0 | 1000.0 | -.8 | -.8 | -.9 | 70.0 | 20.0 |
| A001457 | 45.0 | 27.3 | 7.0 | -.8 | 25.0 | 45.0 | -.80 | 5850.0 | -.9 | 130.0 | 45.0 | 920.0 | -.9 | -.9 | 34.0 | 50.0 | 6.0 |
| A001458 | 25.0 | 24.4 | 8.0 | -.8 | 30.0 | 35.0 | -.80 | 5550.0 | -.9 | 120.0 | 50.0 | 2900.0 | -.9 | -.9 | 44.0 | 50.0 | -.9 |
| A001459 | 30.0 | 10.0 | 15.0 | -.9 | -.8 | 30.0 | 1.50 | 2000.0 | 2.0 | 20.0 | 50.0 | 100.0 | -.8 | -.8 | -.9 | 20.0 | 10.0 |
| A001460 | 55.0 | 24.9 | 9.0 | -.8 | 20.0 | 60.0 | -.80 | 5650.0 | -.9 | 100.0 | 70.0 | 1600.0 | -.9 | -.9 | 24.0 | 60.0 | -.9 |
| A001461 | 70.0 | 20.0 | 20.0 | -.9 | -.8 | 20.0 | 2.00 | 3000.0 | 15.0 | 30.0 | 100.0 | 15.0 | -.8 | -.8 | -.9 | 70.0 | 100.0 |
| A001462 | 30.0 | 20.0 | 100.0 | -.9 | -.8 | -.9 | 0.30 | 500.0 | 30.0 | 20.0 | 200.0 | 10.0 | -.8 | -.8 | -.9 | 15.0 | 700.0 |
| A001463 | 50.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 1000.0 | 20.0 | 20.0 | 100.0 | 310.0 | -.8 | -.8 | -.9 | 30.0 | 500.0 |
| A001464 | 40.0 | 30.2 | 10.0 | -.8 | 18.0 | 50.0 | -.80 | 6650.0 | -.9 | 140.0 | 145.0 | 20.0 | -.9 | -.9 | -.9 | 30.0 | 18.0 |
| A001465 | 50.0 | 20.0 | 50.0 | -.9 | -.8 | -.9 | 0.20 | 3000.0 | 20.0 | 50.0 | 50.0 | 500.0 | -.8 | -.8 | -.9 | 30.0 | 70.0 |
| A001466 | 15.0 | 59.1 | 14.0 | -.8 | 40.0 | 20.0 | -.80 | 2450.0 | -.9 | 90.0 | 65.0 | 15.0 | -.9 | -.9 | 4.0 | 10.0 | 1100.0 |
| A001467 | 100.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 1.00 | 2000.0 | 30.0 | 20.0 | 150.0 | 1000.0 | -.8 | -.8 | 100.0 | 15.0 | 2000.0 |
| A001468 | 55.0 | 43.9 | 10.0 | -.8 | -.9 | 100.0 | -.80 | 2500.0 | -.9 | 90.0 | 170.0 | 3400.0 | -.9 | -.9 | 105.0 | 25.0 | 15000.0 |
| A001469 | 200.0 | 20.0 | 30.0 | -.9 | -.8 | -.9 | 0.20 | 200.0 | 20.0 | 20.0 | 20.0 | 10000.0 | -.8 | -.8 | 5000.0 | -.9 | 10000.0 |
| A001470 | 50.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 2000.0 | 30.0 | 20.0 | 100.0 | 500.0 | -.8 | -.8 | 500.0 | 20.0 | 10000.0 |
| A001471 | 55.0 | 37.7 | 11.0 | -.8 | 18.0 | 35.0 | -.80 | 2050.0 | -.9 | 40.0 | 120.0 | 510.0 | -.9 | -.9 | 90.0 | 15.0 | 17500.0 |
| A001472 | 200.0 | 20.0 | 70.0 | -.9 | -.8 | -.9 | 0.50 | 1500.0 | 30.0 | 20.0 | 150.0 | 70.0 | -.8 | -.8 | -.9 | 20.0 | 500.0 |
| A001473 | 40.0 | 47.8 | 15.0 | -.8 | 25.0 | 30.0 | -.80 | 2300.0 | -.9 | 20.0 | 115.0 | 25.0 | -.9 | -.9 | 18.0 | 15.0 | 4650.0 |
| A001474 | 30.0 | 35.9 | 12.0 | -.8 | 4.7 | 140.0 | -.80 | 4950.0 | -.9 | 120.0 | 60.0 | 20.0 | -.9 | -.9 | 12.0 | 35.0 | 1100.0 |
| A001475 | 45.0 | 44.7 | 13.0 | -.8 | 1.5 | 25.0 | -.80 | 3650.0 | -.9 | 60.0 | 85.0 | 145.0 | -.9 | -.9 | 48.0 | 25.0 | 1450.0 |
| A001476 | 65.0 | 24.5 | 10.0 | -.8 | 1.9 | 20.0 | -.80 | 2750.0 | -.9 | 40.0 | 65.0 | 7650.0 | -.9 | -.9 | 430.0 | 25.0 | 1850.0 |
| A001477 | 170.0 | 15.8 | 8.0 | -.8 | 4.8 | 30.0 | -.80 | 2300.0 | -.9 | 85.0 | 115.0 | 445.0 | -.9 | -.9 | 40.0 | -.9 | 8.0 |
| A001478 | 35.0 | 8.4 | 4.0 | -.8 | 5.7 | 25.0 | -.80 | 4050.0 | 12.0 | 25.0 | 20.0 | 140.0 | -.9 | -.9 | 75.0 | 35.0 | 22.0 |

TABLE AD-13 CHEMICAL ANALYSIS OF PAN CON.-PL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A001450 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | -.9 | 200.0 | -.9 | 700.0 |
| A001451 | -.8 | -.9 | -.900 | -.9 | -.9 | 630.0 | 2650.0 | -.9 | 150.0 | -.9 |
| A001452 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | 300.0 | 30.0 | -.9 | 700.0 |
| A001453 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | -.9 | 50.0 | -.9 | 700.0 |
| A001454 | -.8 | 40.0 | -.900 | -.9 | .2 | 980.0 | 95.0 | 40.0 | 50.0 | 800.0 |
| A001455 | -.9 | -.8 | -.800 | -.8 | -.9 | 20.0 | 50.0 | -.9 | 300.0 | 500.0 |
| A001456 | -.9 | -.8 | -.800 | -.8 | -.9 | 200.0 | 150.0 | 70.0 | -.9 | 1000.0 |
| A001457 | -.8 | 10.0 | -.900 | -.9 | .2 | 455.0 | 550.0 | 70.0 | 120.0 | 760.0 |
| A001458 | -.8 | -.9 | -.900 | -.9 | .1 | 280.0 | 3600.0 | 100.0 | 145.0 | 680.0 |
| A001459 | 100.0 | -.8 | -.800 | -.8 | -.9 | 100.0 | -.9 | 20.0 | -.9 | 300.0 |
| A001460 | -.8 | -.9 | -.900 | -.9 | .1 | 245.0 | 75.0 | 95.0 | 110.0 | 350.0 |
| A001461 | -.9 | -.8 | -.800 | -.8 | -.9 | 500.0 | 100.0 | 50.0 | -.9 | 1000.0 |
| A001462 | -.9 | -.8 | -.800 | -.8 | -.9 | 300.0 | -.9 | 50.0 | -.9 | 700.0 |
| A001463 | -.9 | -.8 | -.800 | -.8 | -.9 | 200.0 | -.9 | 70.0 | -.9 | 700.0 |
| A001464 | -.8 | 10.0 | -.900 | -.9 | .1 | 320.0 | 6.0 | 60.0 | 60.0 | 920.0 |
| A001465 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | -.9 | 50.0 | -.9 | 500.0 |
| A001466 | -.8 | 60.0 | -.900 | -.9 | .5 | 460.0 | 28.0 | 15.0 | 35.0 | 400.0 |
| A001467 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 300.0 | -.9 | 150.0 | -.9 | 100.0 |
| A001468 | -.8 | 60.0 | .190 | -.9 | -.9 | 255.0 | 120.0 | 110.0 | 115.0 | 460.0 |
| A001469 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 20.0 | -.9 | 10.0 | 10000.0 | 200.0 |
| A001470 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 200.0 | -.9 | 30.0 | 2000.0 | 300.0 |
| A001471 | -.8 | 20.0 | .085 | -.9 | 15000.0 | 285.0 | 275.0 | 40.0 | 170.0 | 400.0 |
| A001472 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 300.0 | -.9 | 20.0 | 500.0 | 500.0 |
| A001473 | -.8 | 80.0 | .060 | -.9 | 13000.0 | 340.0 | 15.0 | 30.0 | 65.0 | 440.0 |
| A001474 | -.8 | 60.0 | .040 | -.9 | 68000.0 | 540.0 | 150.0 | 55.0 | 90.0 | 600.0 |
| A001475 | -.8 | 60.0 | .065 | -.9 | 24000.0 | 285.0 | 17.0 | 50.0 | 155.0 | 730.0 |
| A001476 | -.8 | 40.0 | 1.600 | -.9 | 19000.0 | 165.0 | 810.0 | 35.0 | 165.0 | 400.0 |
| A001477 | -.8 | 185.0 | .080 | -.9 | 11000.0 | 80.0 | 4.0 | -.9 | 465.0 | 180.0 |
| A001478 | -.8 | -.9 | .025 | -.9 | 11000.0 | 105.0 | 4.0 | 50.0 | 75.0 | 145.0 |

TABLE AD-14

KANTISHNA HILLS RECONNAISSANCE PLACER CONCENTRATES

ANALYTICAL RESULTS

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000958 | 332200. | 3496500. | 14 | 71 | .4 | .18 | .008 | 110.0 | -.9 | 1250.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 10.0 | 125.0 |
| A000959 | 331950. | 3496150. | 14 | 73 | 1.0 | -.80 | .015 | 300.0 | 20.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 70.0 | 700.0 |
| A000960 | 330750. | 3502750. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 700.0 | 2.0 | -.9 | 2.0 | -.9 | -.8 | 15.0 | 500.0 |
| A000961 | 330600. | 3502750. | 14 | 71 | 1.5 | .04 | .009 | 150.0 | -.9 | 480.0 | -.9 | -.9 | -.9 | .2 | 160.0 | 25.0 | 620.0 |
| A000962 | 331950. | 3497050. | 14 | 71 | -.9 | -.90 | .017 | -.9 | -.9 | 270.0 | -.9 | -.9 | -.9 | -.9 | 140.0 | 15.0 | 425.0 |
| A000963 | 342800. | 3482250. | 14 | 73 | -.9 | -.80 | .074 | -.9 | 300.0 | 700.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 20.0 | 500.0 |
| A000964 | 398700. | 3554800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 500.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000965 | 397400. | 3556900. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 300.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000966 | 396100. | 3554900. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000967 | 392000. | 3555800. | 14 | 71 | -.9 | -.90 | -.900 | 10.0 | -.9 | 180.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 10.0 | 85.0 |
| A000968 | 389300. | 3554700. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000969 | 383600. | 3537000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 500.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 10.0 | 70.0 |
| A000970 | 372900. | 3536200. | 14 | 71 | 30.0 | 25.00 | -.900 | 55.0 | -.9 | 190.0 | -.9 | -.9 | -.9 | -.9 | 80.0 | 10.0 | 75.0 |
| A000971 | 372200. | 3535200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 1000.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 15.0 | 100.0 |
| A000973 | 402100. | 3523800. | 14 | 73 | 5.0 | -.80 | -.900 | -.9 | 200.0 | 2000.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 100.0 | 150.0 |
| A000974 | 404100. | 3528200. | 14 | 73 | 1.0 | -.80 | -.900 | -.9 | 200.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 30.0 | 100.0 |
| A000975 | 403700. | 3529200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 5.0 | 100.0 |
| A000976 | 407300. | 3533350. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000977 | 413300. | 3538000. | 14 | 71 | .8 | .99 | -.900 | 25.0 | -.9 | 230.0 | -.9 | -.9 | -.9 | .4 | 20.0 | 15.0 | 70.0 |
| A000978 | 380000. | 3507800. | 14 | 73 | 5.0 | -.80 | .002 | -.9 | 200.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 15.0 | 300.0 |
| A000979 | 380550. | 3508000. | 14 | 73 | 30.0 | -.80 | .022 | 200.0 | 100.0 | 500.0 | -.9 | -.9 | .7 | -.9 | -.8 | 20.0 | 70.0 |
| A000980 | 374100. | 3510300. | 14 | 71 | 1.7 | 5.70 | .002 | 90.0 | -.9 | 380.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 20.0 | 75.0 |
| A000981 | 408700. | 3538400. | 14 | 73 | 5.0 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 50.0 | 70.0 |
| A000982 | 411100. | 3540500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000983 | 403850. | 3535300. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 150.0 | 500.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000984 | 412900. | 3538700. | 14 | 71 | 7.6 | .08 | -.900 | 150.0 | 25.0 | 190.0 | -.9 | -.9 | -.9 | .6 | 160.0 | 15.0 | 80.0 |
| A000985 | 419200. | 3539000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000986 | 372200. | 3559200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 70.0 | 300.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A000987 | 365200. | 3557100. | 14 | 71 | -.9 | -.90 | -.900 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | 10.0 | 70.0 |
| A000989 | 358500. | 3554600. | 14 | 73 | -.9 | -.80 | .002 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A000990 | 343600. | 3480100. | 14 | 73 | 5.0 | -.80 | -.900 | 700.0 | 700.0 | 1000.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 100.0 |
| A000991 | 366500. | 3525050. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 1000.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 5.0 | 100.0 |
| A000992 | 359800. | 3527350. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000993 | 359400. | 3527100. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 100.0 |
| A000994 | 358500. | 3534800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 150.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 70.0 |
| A000995 | 359050. | 3535200. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 50.0 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 15.0 | 150.0 |
| A000996 | 358000. | 3536200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 70.0 |
| A000997 | 356700. | 3540000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 70.0 |
| A000998 | 356750. | 3539650. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A000999 | 355800. | 3550750. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 300.0 | -.9 | -.9 | 10.0 | -.9 | -.8 | 20.0 | 100.0 |
| A001000 | 353600. | 3551200. | 14 | 73 | -.9 | .14 | -.900 | -.9 | -.9 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 100.0 |
| A001400 | 350450. | 3550250. | 14 | 73 | -.9 | .28 | .002 | -.9 | -.9 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 10.0 | 100.0 |
| A001401 | 345550. | 3550300. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 70.0 | 100.0 |
| A001402 | 344700. | 3550000. | 14 | 73 | .6 | 13.50 | .026 | -.9 | -.9 | 100.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 150.0 |
| A001403 | 345000. | 3550450. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 200.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A001404 | 346200. | 3541500. | 14 | 73 | -.9 | -.80 | .305 | -.9 | 100.0 | 150.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A001405 | 344650. | 3547400. | 14 | 73 | -.9 | -.80 | .006 | -.9 | 50.0 | 100.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 15.0 | 100.0 |
| A001406 | 344500. | 3550500. | 14 | 73 | -.9 | -.80 | .003 | -.9 | 50.0 | 50.0 | -.9 | -.9 | 3.0 | -.9 | -.8 | 20.0 | 100.0 |
| A001407 | 374150. | 3503150. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 100.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 300.0 |
| A001408 | 371800. | 3506200. | 14 | 73 | 2.0 | -.80 | -.900 | -.9 | 150.0 | 500.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 30.0 | 300.0 |
| A001409 | 368100. | 3510800. | 14 | 73 | 1.4 | 3.80 | -.900 | -.9 | -.9 | 300.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 200.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CS (PPM) | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | LA (%) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A000958 | -.9 | 30.0 | 6.9 | 12.0 | -.8 | 20.0 | -.80 | 1500.0 | -.9 | 25.0 | 35.0 | 10.0 | -.9 | -.9 | 10.0 | 20.0 | 7.0 |
| A000959 | -.8 | 70.0 | 20.0 | 30.0 | -.9 | 30.0 | 2.00 | 5000.0 | 10.0 | 20.0 | 70.0 | 50.0 | -.8 | -.8 | 100.0 | 50.0 | 70.0 |
| A000960 | -.8 | 50.0 | 10.0 | 20.0 | -.9 | 100.0 | 2.00 | 5000.0 | 5.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | 100.0 | 30.0 | -.9 |
| A000961 | 10.0 | 20.0 | 33.3 | 8.0 | -.8 | 70.0 | -.80 | 7150.0 | -.9 | 95.0 | 45.0 | 25.0 | -.9 | -.9 | 13.0 | 60.0 | 245.0 |
| A000962 | 10.0 | 15.0 | 23.0 | 10.0 | -.8 | 50.0 | -.80 | 5400.0 | -.9 | 70.0 | 30.0 | 10.0 | -.9 | -.9 | 15.0 | 44.0 | 135.0 |
| A000963 | -.8 | 30.0 | 20.0 | 20.0 | -.9 | 100.0 | 3.00 | 5000.0 | 10.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | 30.0 |
| A000964 | -.8 | 15.0 | 15.0 | 20.0 | -.9 | -.9 | 1.00 | 5000.0 | 7.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000965 | -.8 | 15.0 | 20.0 | 30.0 | -.9 | 30.0 | 1.50 | 7000.0 | 10.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000966 | -.8 | 15.0 | 20.0 | 20.0 | -.9 | 30.0 | 1.50 | 10000.0 | 5.0 | 20.0 | 20.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 200.0 |
| A000967 | -.9 | 15.0 | 18.9 | 8.0 | -.8 | 35.0 | -.80 | 7900.0 | -.9 | 35.0 | 10.0 | -.9 | -.9 | -.9 | 2.0 | 90.0 | 95.0 |
| A000968 | -.8 | 15.0 | 20.0 | 30.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 7.0 | 20.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 200.0 |
| A000969 | -.8 | 20.0 | 15.0 | 20.0 | 20.0 | 20.0 | 1.00 | 10000.0 | 7.0 | 30.0 | 20.0 | 30.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A000970 | -.9 | 15.0 | 18.1 | 8.0 | -.8 | 40.0 | -.80 | 14000.0 | -.9 | 40.0 | 15.0 | 90.0 | -.9 | -.9 | 9.0 | 120.0 | 20.0 |
| A000971 | -.8 | 30.0 | 15.0 | 20.0 | -.9 | 20.0 | 1.00 | 10000.0 | 5.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000973 | -.8 | 70.0 | 15.0 | 20.0 | -.9 | 30.0 | 1.00 | 5000.0 | 5.0 | 20.0 | 100.0 | 200.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A000974 | -.8 | 100.0 | 20.0 | 30.0 | -.9 | 30.0 | 1.50 | 7000.0 | 7.0 | 20.0 | 70.0 | 100.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000975 | -.8 | 20.0 | 15.0 | 10.0 | 20.0 | 30.0 | 1.00 | 10000.0 | 7.0 | 20.0 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000976 | -.8 | 20.0 | 15.0 | 10.0 | -.9 | 30.0 | .70 | 10000.0 | 7.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 10.0 |
| A000977 | -.9 | 35.0 | 14.0 | 8.0 | -.8 | 25.0 | -.80 | 8150.0 | -.9 | 15.0 | 25.0 | 15.0 | -.9 | -.9 | 18.0 | 90.0 | 30.0 |
| A000978 | -.8 | 30.0 | 15.0 | 20.0 | -.9 | 30.0 | 1.50 | 5000.0 | 5.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | 100.0 | 20.0 | -.9 |
| A000979 | -.8 | 50.0 | 10.0 | 20.0 | -.9 | 20.0 | 1.00 | 700.0 | 2.0 | 30.0 | 50.0 | 2000.0 | -.8 | -.8 | -.9 | 10.0 | -.9 |
| A000980 | -.9 | 35.0 | 13.0 | 12.0 | -.8 | 25.0 | -.80 | 4100.0 | -.9 | 35.0 | 50.0 | 50.0 | -.9 | -.9 | 24.0 | 45.0 | -.9 |
| A000981 | -.8 | 20.0 | 20.0 | 20.0 | -.9 | 30.0 | 1.50 | 10000.0 | 10.0 | 30.0 | 50.0 | 150.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000982 | -.8 | 15.0 | 20.0 | 20.0 | -.9 | 30.0 | 1.50 | 10000.0 | 7.0 | 20.0 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000983 | -.8 | 15.0 | 15.0 | 10.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 10.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000984 | -.9 | 25.0 | 19.0 | 8.0 | -.8 | 40.0 | -.80 | 8950.0 | -.9 | 25.0 | 25.0 | 470.0 | -.9 | -.9 | 24.0 | 100.0 | 16.0 |
| A000985 | -.8 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 15.0 | 20.0 | 20.0 | 20.0 | -.8 | -.8 | -.9 | 70.0 | 150.0 |
| A000986 | -.8 | 7.0 | 20.0 | 20.0 | 20.0 | 20.0 | 3.00 | 10000.0 | 15.0 | 30.0 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000987 | -.9 | 10.0 | 20.0 | 8.0 | -.8 | 40.0 | -.80 | 9150.0 | -.9 | 20.0 | 10.0 | 5.0 | -.9 | -.9 | -.9 | 110.0 | 85.0 |
| A000989 | -.8 | 10.0 | 20.0 | 20.0 | 20.0 | 20.0 | 3.00 | 10000.0 | 20.0 | 30.0 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A000990 | -.8 | 30.0 | 10.0 | 30.0 | -.9 | 30.0 | 1.50 | 3000.0 | 5.0 | 30.0 | 70.0 | 300.0 | -.8 | -.8 | 300.0 | 30.0 | -.9 |
| A000991 | -.8 | 30.0 | 10.0 | 20.0 | -.9 | 20.0 | 3.00 | 10000.0 | 5.0 | 20.0 | 30.0 | 50.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A000992 | -.8 | 20.0 | 20.0 | 15.0 | 20.0 | 20.0 | 1.00 | 10000.0 | 10.0 | 30.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000993 | -.8 | 10.0 | 20.0 | 15.0 | -.9 | 20.0 | 2.00 | 7000.0 | 10.0 | 20.0 | 5.0 | 15.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000994 | -.8 | 15.0 | 20.0 | 15.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 10.0 | 20.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 10.0 |
| A000995 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 2.00 | 10000.0 | 15.0 | 30.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 100.0 | 50.0 |
| A000996 | -.8 | 7.0 | 15.0 | 20.0 | -.9 | 20.0 | 1.00 | 7000.0 | 10.0 | 20.0 | 15.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000997 | -.8 | 7.0 | 20.0 | 20.0 | -.9 | 20.0 | 1.50 | 7000.0 | 10.0 | 20.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 50.0 |
| A000998 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 20.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A000999 | -.8 | 15.0 | 20.0 | 30.0 | 20.0 | 20.0 | 3.00 | 10000.0 | 20.0 | 30.0 | 20.0 | -.9 | -.8 | -.8 | -.9 | 100.0 | -.9 |
| A001000 | -.8 | 7.0 | 20.0 | 30.0 | -.9 | 20.0 | 2.00 | 10000.0 | 15.0 | 50.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 100.0 |
| A001400 | -.8 | 10.0 | 20.0 | 30.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 30.0 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A001401 | -.8 | 20.0 | 15.0 | 15.0 | -.9 | 20.0 | 1.00 | 10000.0 | 10.0 | 30.0 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A001402 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 30.0 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | 30.0 |
| A001403 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 15.0 | 20.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A001404 | -.8 | 20.0 | 20.0 | 30.0 | 20.0 | 20.0 | 1.50 | 10000.0 | 20.0 | 30.0 | 10.0 | -.9 | -.8 | -.8 | -.9 | 100.0 | -.9 |
| A001405 | -.8 | 20.0 | 15.0 | 20.0 | -.9 | -.9 | 1.00 | 10000.0 | 10.0 | 20.0 | 20.0 | -.9 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A001406 | -.8 | 15.0 | 20.0 | 20.0 | 20.0 | 20.0 | 1.00 | 10000.0 | 15.0 | 50.0 | 5.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | 20.0 |
| A001407 | -.8 | 50.0 | 10.0 | 20.0 | -.9 | 50.0 | 1.00 | 3000.0 | 3.0 | 30.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A001408 | -.8 | 70.0 | 20.0 | 20.0 | -.9 | 50.0 | 2.00 | 7000.0 | 10.0 | 30.0 | 50.0 | 50.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A001409 | -.8 | 50.0 | 20.0 | 50.0 | -.9 | 20.0 | 3.00 | 10000.0 | 15.0 | 30.0 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A000958 | -.8 | -.9 | -.900 | -.9 | 10000.0 | 160.0 | 5.0 | 25.0 | 70.0 | 220.0 |
| A000959 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | 50.0 | 70.0 | -.9 | 500.0 |
| A000960 | 200.0 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | 50.0 | 200.0 | 300.0 |
| A000961 | -.8 | -.9 | .080 | -.9 | 69000.0 | 610.0 | 44.0 | 60.0 | 85.0 | 580.0 |
| A000962 | -.8 | -.9 | -.900 | -.9 | -.9 | 465.0 | 50.0 | 50.0 | 70.0 | 450.0 |
| A000963 | 200.0 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | 70.0 | 50.0 | 300.0 | 200.0 |
| A000964 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | 100.0 | -.9 | 500.0 |
| A000965 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 150.0 | -.9 | 500.0 |
| A000966 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 150.0 | -.9 | 200.0 |
| A000967 | -.8 | -.9 | .020 | -.9 | 12000.0 | 45.0 | 6.0 | 150.0 | 30.0 | 240.0 |
| A000968 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 50.0 | 200.0 | 200.0 | 300.0 |
| A000969 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 50.0 | 150.0 | -.9 | 500.0 |
| A000970 | -.8 | -.9 | .070 | -.9 | 15000.0 | 55.0 | 55.0 | 190.0 | 35.0 | 340.0 |
| A000971 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 200.0 |
| A000973 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | -.9 | 500.0 |
| A000974 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | 200.0 | 150.0 |
| A000975 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 200.0 | -.9 | 700.0 |
| A000976 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 100.0 | 200.0 | 200.0 | 200.0 |
| A000977 | -.8 | -.9 | .130 | -.9 | 9300.0 | 55.0 | 185.0 | 150.0 | 35.0 | 220.0 |
| A000978 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | 200.0 | 300.0 |
| A000979 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | 50.0 | 50.0 | 200.0 | 150.0 |
| A000980 | -.8 | -.9 | .085 | -.9 | 11000.0 | 120.0 | 65.0 | 90.0 | 60.0 | 190.0 |
| A000981 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | 1000.0 | 200.0 | 300.0 | 300.0 |
| A000982 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | 50.0 | 150.0 | 300.0 | 500.0 |
| A000983 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 50.0 | 200.0 | 200.0 | 700.0 |
| A000984 | -.8 | -.9 | .075 | -.9 | 11000.0 | 40.0 | 17850.0 | 170.0 | 50.0 | 220.0 |
| A000985 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 200.0 | 200.0 | 200.0 | 300.0 |
| A000986 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 200.0 | 200.0 | 300.0 |
| A000987 | -.8 | -.9 | .014 | -.9 | 7800.0 | 50.0 | 7.0 | 180.0 | 20.0 | 260.0 |
| A000989 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 200.0 | 200.0 | 300.0 |
| A000990 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | 150.0 | 70.0 | 500.0 | 700.0 |
| A000991 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 700.0 |
| A000992 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 200.0 | -.9 | 300.0 |
| A000993 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | 50.0 | 150.0 | -.9 | 200.0 |
| A000994 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | -.9 | 150.0 | -.9 | 1000.0 |
| A000995 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 50.0 | 200.0 | -.9 | 700.0 |
| A000996 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 150.0 | -.9 | 200.0 |
| A000997 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 150.0 | -.9 | 500.0 |
| A000998 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | -.9 | 150.0 | -.9 | 500.0 |
| A000999 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | 200.0 | -.9 | 100.0 |
| A001000 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 500.0 |
| A001400 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 50.0 | -.9 | 150.0 | -.9 | 300.0 |
| A001401 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 300.0 |
| A001402 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 200.0 | -.9 | 300.0 |
| A001403 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 200.0 |
| A001404 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 150.0 | -.9 | 300.0 |
| A001405 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 150.0 | -.9 | 200.0 |
| A001406 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 200.0 | -.9 | 500.0 |
| A001407 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | -.9 | 700.0 |
| A001408 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | 100.0 | -.9 | 150.0 |
| A001409 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 100.0 | -.9 | 150.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001410 | 365500. | 3511400. | 14 | 73 | .6 | 9.90 | -.900 | -.9 | -.9 | 200.0 | -.9 | -.9 | 7.0 | -.9 | -.8 | 20.0 | 150.0 |
| A001411 | 364450. | 3512000. | 14 | 73 | 8.2 | 7.40 | .019 | 1000.0 | -.9 | 300.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 50.0 | 200.0 |
| A001412 | 370500. | 3517600. | 14 | 73 | -.9 | .99 | -.900 | -.9 | 200.0 | 2000.0 | -.9 | -.9 | .5 | -.9 | -.8 | 10.0 | 100.0 |
| A001413 | 364700. | 3512700. | 14 | 73 | -.9 | 7.20 | -.900 | -.9 | 100.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 5.0 | 100.0 |
| A001414 | 437500. | 3559950. | 14 | 73 | 6.2 | 5.50 | .042 | -.9 | 100.0 | 700.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 10.0 | 50.0 |
| A001415 | 437600. | 3559800. | 14 | 73 | 1.3 | 8.40 | -.900 | -.9 | 100.0 | 1500.0 | -.9 | -.9 | .5 | -.9 | -.8 | 30.0 | 70.0 |
| A001416 | 441100. | 3558800. | 14 | 73 | 5.2 | 17.90 | .001 | 500.0 | -.9 | 10000.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 300.0 | 10.0 |
| A003020 | 342600. | 3481750. | 14 | 73 | 1.0 | -.80 | .001 | -.9 | 10.0 | 70.0 | -.9 | -.9 | .1 | -.9 | -.8 | 5.0 | 150.0 |
| A003021 | 345700. | 3489000. | 14 | 71 | 3680.0 | .06 | .009 | 8500.0 | -.9 | 140.0 | -.9 | 6.0 | -.9 | 520.0 | -.9 | 5.0 | 10.0 |
| A003022 | 340900. | 3480300. | 14 | 71 | -.9 | -.90 | .016 | 4650.0 | -.9 | 530.0 | -.9 | 140.0 | -.9 | 10.0 | -.9 | 150.0 | 150.0 |
| A003023 | 354800. | 3490700. | 14 | 71 | 320.0 | 128.00 | .006 | 870.0 | 25.0 | 390.0 | -.9 | -.9 | -.9 | 1.0 | 20.0 | 10.0 | 80.0 |
| A003024 | 425300. | 3560150. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 20.0 |
| A003025 | 425500. | 3559800. | 14 | 73 | -.9 | -.80 | .006 | -.9 | -.9 | 100.0 | -.9 | -.9 | .1 | -.9 | -.8 | 5.0 | 10.0 |
| A003026 | 429200. | 3563000. | 14 | 71 | 1.7 | 1.40 | .060 | 80.0 | -.9 | 300.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | 80.0 | 30.0 |
| A003027 | 431300. | 3568950. | 14 | 73 | -.9 | -.80 | .007 | -.9 | 15.0 | 50.0 | -.9 | -.9 | .5 | -.9 | -.8 | 20.0 | 50.0 |
| A003028 | 435400. | 3572000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 100.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 50.0 |
| A003029 | 446000. | 3564600. | 14 | 71 | 13.0 | 250.00 | .293 | 510.0 | 35.0 | 2150.0 | -.9 | 2.0 | -.9 | 1.0 | 380.0 | 55.0 | 30.0 |
| A003030 | 403700. | 3544100. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 15.0 | 100.0 | -.9 | -.9 | .2 | -.9 | -.8 | 5.0 | 30.0 |
| A003031 | 412500. | 3546700. | 14 | 71 | .2 | .66 | .001 | 20.0 | -.9 | 280.0 | -.9 | 2.0 | -.9 | -.9 | 80.0 | 20.0 | 30.0 |
| A003032 | 354650. | 3491650. | 14 | 73 | 1500.0 | -.80 | .164 | 3000.0 | 30.0 | 100.0 | -.9 | -.9 | .1 | -.9 | -.8 | 10.0 | 50.0 |
| A003033 | 335800. | 3494400. | 14 | 73 | 50.0 | -.80 | .001 | -.9 | 20.0 | 70.0 | -.9 | -.9 | .2 | -.9 | -.8 | 20.0 | 300.0 |
| A003034 | 416950. | 3551700. | 14 | 73 | -.9 | -.80 | -.900 | 500.0 | 20.0 | 70.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 50.0 |
| A003035 | 417250. | 3547950. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 10.0 | 20.0 | -.9 | -.9 | .5 | -.9 | -.8 | 15.0 | 15.0 |
| A003036 | 420300. | 3548350. | 14 | 71 | 1.3 | 2.00 | -.900 | 110.0 | -.9 | 340.0 | -.9 | -.9 | -.9 | -.9 | 40.0 | 20.0 | 25.0 |
| A003037 | 424900. | 3542250. | 14 | 71 | .4 | .55 | -.900 | 105.0 | -.9 | 130.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | 30.0 | 30.0 |
| A003038 | 418400. | 3527800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 10.0 | -.9 | -.9 | -.9 | -.9 | -.8 | -.9 | -.9 |
| A003039 | 433600. | 3533500. | 14 | 71 | 1.7 | .11 | -.900 | 180.0 | -.9 | 430.0 | -.9 | 3.0 | -.9 | -.9 | -.9 | 110.0 | 20.0 |
| A003040 | 438300. | 3536350. | 14 | 73 | .6 | 1.30 | -.900 | 50.0 | 60.0 | 340.0 | -.9 | -.9 | -.9 | -.9 | 170.0 | 50.0 | 135.0 |
| A003041 | 438400. | 3545250. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 10.0 | 1500.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 20.0 |
| A003042 | 367850. | 3488000. | 14 | 71 | 5.0 | -.80 | -.900 | -.9 | 200.0 | 700.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 150.0 |
| A003043 | 370250. | 3483200. | 14 | 71 | 9.6 | 3.60 | .010 | 80.0 | 90.0 | 440.0 | -.9 | -.9 | -.9 | .6 | 60.0 | 20.0 | 40.0 |
| A003044 | 373000. | 3480500. | 14 | 71 | .4 | 1.20 | -.900 | 10.0 | -.9 | 340.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.0 | 20.0 |
| A003045 | 371150. | 3478250. | 14 | 71 | 1.1 | .82 | .007 | 25.0 | 55.0 | 480.0 | -.9 | 2.0 | -.9 | .2 | 60.0 | 20.0 | 105.0 |
| A003046 | 371150. | 3478250. | 14 | 73 | -.9 | -.80 | .003 | -.9 | 10.0 | 50.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 300.0 |
| A003047 | 395150. | 3517550. | 14 | 73 | 15.0 | -.80 | .001 | -.9 | 50.0 | 150.0 | -.9 | -.9 | .2 | -.9 | -.8 | 20.0 | 200.0 |
| A003048 | 393200. | 3515500. | 14 | 73 | -.9 | -.80 | .008 | -.9 | 70.0 | 150.0 | -.9 | -.9 | .3 | -.9 | -.8 | 50.0 | 200.0 |
| A003049 | 389300. | 3513600. | 14 | 71 | 32.0 | .74 | .001 | 670.0 | -.9 | 840.0 | -.9 | -.9 | -.9 | -.9 | 120.0 | 30.0 | 75.0 |
| A003050 | 389400. | 3512950. | 14 | 73 | 10.0 | -.80 | -.900 | -.9 | 20.0 | 700.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 150.0 |
| A003051 | 333700. | 3469000. | 14 | 71 | 3.4 | 3.50 | -.900 | 12500.0 | 80.0 | 450.0 | -.9 | 3.0 | -.9 | .8 | 120.0 | 60.0 | 95.0 |
| A003052 | 334450. | 3472100. | 14 | 73 | -.9 | -.80 | .002 | -.9 | 70.0 | 500.0 | -.9 | -.9 | .1 | -.9 | -.8 | -.9 | 30.0 |
| A003053 | 334550. | 3474350. | 14 | 73 | 1.0 | -.80 | .018 | 200.0 | 50.0 | 150.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 300.0 |
| A003054 | 334300. | 3472350. | 14 | 73 | 10.0 | -.80 | .001 | 500.0 | 50.0 | 1500.0 | -.9 | -.9 | .1 | -.9 | -.8 | 5.0 | 100.0 |
| A003055 | 334400. | 3474000. | 14 | 73 | 50.0 | -.80 | -.900 | -.9 | 30.0 | 200.0 | -.9 | -.9 | .2 | -.9 | -.8 | 20.0 | 200.0 |
| A003056 | 334575. | 3474200. | 14 | 73 | 70.0 | -.80 | .018 | 2000.0 | 200.0 | 700.0 | -.9 | -.9 | .7 | -.9 | -.8 | 30.0 | 150.0 |
| A003057 | 335350. | 3475200. | 14 | 71 | -.9 | 20.00 | .071 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | .6 | -.9 | 30.0 | 940.0 |
| A003058 | 331500. | 3496100. | 14 | 71 | 3.9 | .43 | -.900 | 2200.0 | -.9 | 520.0 | -.9 | 2.0 | -.9 | -.9 | 120.0 | 25.0 | 380.0 |
| A003059 | 394750. | 3493300. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 150.0 | -.9 | -.9 | .3 | -.9 | -.8 | 7.0 | 70.0 |
| A003060 | 392800. | 3486250. | 14 | 71 | -.9 | .08 | -.900 | 10.0 | -.9 | 290.0 | -.9 | -.9 | -.9 | -.9 | 80.0 | 15.0 | 65.0 |
| A003061 | 389800. | 3526000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | -.9 | 10.0 | -.9 | -.9 | .2 | -.9 | -.8 | -.9 | 10.0 |
| A003062 | 384850. | 3524850. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 10.0 | 50.0 | -.9 | -.9 | .7 | -.9 | -.8 | 5.0 | 30.0 |
| A003063 | 384500. | 3524450. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | .5 | -.9 | -.8 | 5.0 | 20.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CS (PPM) | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | LA (%) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001410 | -.8 | 50.0 | 20.0 | 20.0 | -.9 | 20.0 | 2.00 | 10000.0 | 10.0 | 30.0 | 10.0 | 70.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A001411 | -.8 | 70.0 | 20.0 | 30.0 | -.9 | 20.0 | 1.50 | 10000.0 | 15.0 | 20.0 | 50.0 | 70.0 | -.8 | -.8 | 700.0 | 70.0 | -.9 |
| A001412 | -.8 | 70.0 | 7.0 | 50.0 | -.9 | 100.0 | 3.00 | 2000.0 | 2.0 | 30.0 | 50.0 | 50.0 | -.8 | -.8 | -.9 | 20.0 | -.9 |
| A001413 | -.8 | 20.0 | 10.0 | 20.0 | -.9 | 20.0 | 2.00 | 7000.0 | 2.0 | 30.0 | 30.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A001414 | -.8 | 30.0 | 7.0 | 10.0 | -.9 | 50.0 | 2.00 | 5000.0 | -.9 | 30.0 | 30.0 | 20.0 | -.8 | -.8 | 100.0 | 20.0 | -.9 |
| A001415 | -.8 | 50.0 | 5.0 | 30.0 | -.9 | 50.0 | 1.00 | 1500.0 | -.9 | 20.0 | 50.0 | 200.0 | -.8 | -.8 | 7000.0 | 10.0 | -.9 |
| A001416 | -.8 | 1000.0 | 20.0 | 50.0 | -.9 | 100.0 | 1.00 | 700.0 | 30.0 | 30.0 | 500.0 | 2000.0 | -.8 | -.8 | 300.0 | -.9 | -.9 |
| A003020 | -.8 | 20.0 | 7.0 | -.9 | -.9 | -.9 | 0.20 | 500.0 | -.9 | -.9 | 20.0 | 200.0 | -.8 | -.8 | -.9 | 10.0 | 10.0 |
| A003021 | -.9 | 3500.0 | 6.1 | 4.0 | -.8 | -.9 | -.80 | 260.0 | -.9 | -.9 | 15.0 | 473000.0 | -.9 | -.9 | 4700.0 | -.9 | 16.0 |
| A003022 | 10.0 | 380.0 | 27.3 | -.9 | -.8 | -.9 | -.80 | 2650.0 | -.9 | -.9 | 170.0 | -.9 | -.9 | -.9 | 1750.0 | -.9 | 510.0 |
| A003023 | -.9 | 35.0 | 9.6 | 8.0 | -.8 | 10.0 | -.80 | 4150.0 | -.9 | 10.0 | 30.0 | 530.0 | -.9 | -.9 | 55.0 | 35.0 | 6.0 |
| A003024 | -.8 | 50.0 | 10.0 | -.9 | -.9 | -.9 | .10 | 5000.0 | -.9 | -.9 | 30.0 | 70.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003025 | -.8 | 7.0 | 5.0 | -.9 | -.9 | -.9 | .15 | 1000.0 | -.9 | -.9 | 20.0 | -.9 | -.8 | -.8 | -.9 | 10.0 | -.9 |
| A003026 | 10.0 | 30.0 | 16.8 | 6.0 | -.8 | 35.0 | -.80 | 12000.0 | -.9 | -.9 | 65.0 | 30.0 | -.9 | -.9 | 14.0 | 90.0 | -.9 |
| A003027 | -.8 | 10.0 | 10.0 | -.9 | -.9 | -.9 | .20 | 5000.0 | -.9 | -.9 | 30.0 | 20.0 | -.8 | -.8 | -.9 | 30.0 | 10.0 |
| A003028 | -.8 | 15.0 | 10.0 | -.9 | -.9 | -.9 | .50 | 5000.0 | -.9 | -.9 | 30.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003029 | 10.0 | 155.0 | 16.2 | 7.0 | -.8 | 110.0 | -.80 | 5800.0 | -.9 | 50.0 | 115.0 | 110.0 | -.9 | -.9 | 2900.0 | 30.0 | 660.0 |
| A003030 | -.8 | 5.0 | 7.0 | -.9 | -.9 | -.9 | .20 | 1500.0 | -.9 | -.9 | 5.0 | 20.0 | -.8 | -.8 | -.9 | 20.0 | -.9 |
| A003031 | -.9 | 20.0 | 17.4 | 5.0 | -.8 | 40.0 | -.80 | 10000.0 | -.9 | 10.0 | 40.0 | 25.0 | -.9 | -.9 | 6.0 | 100.0 | 22.0 |
| A003032 | -.8 | 700.0 | 10.0 | -.9 | -.9 | 20.0 | .20 | 500.0 | -.9 | 30.0 | 15.0 | 2000.0 | -.8 | -.8 | 500.0 | 15.0 | 20.0 |
| A003033 | -.8 | 100.0 | 15.0 | -.9 | -.9 | -.9 | .10 | 2000.0 | 2.0 | 30.0 | 20.0 | 1500.0 | -.8 | -.8 | -.9 | 20.0 | 70.0 |
| A003034 | -.8 | 10.0 | 15.0 | -.9 | -.9 | -.9 | .50 | 5000.0 | -.9 | 20.0 | 15.0 | -.9 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A003035 | -.8 | 5.0 | 7.0 | -.9 | -.9 | -.9 | .20 | 2000.0 | -.9 | -.9 | 20.0 | -.9 | -.8 | -.8 | -.9 | 20.0 | -.9 |
| A003036 | -.9 | 40.0 | 13.2 | 8.0 | -.8 | 20.0 | -.80 | 11500.0 | -.9 | -.9 | 45.0 | 50.0 | -.9 | -.9 | 32.0 | 60.0 | 7.0 |
| A003037 | -.9 | 40.0 | 17.6 | 4.0 | -.8 | 40.0 | -.80 | 9800.0 | -.9 | 10.0 | 50.0 | 35.0 | -.9 | -.9 | 20.0 | 95.0 | 16.0 |
| A003038 | -.8 | 2.0 | 2.0 | -.9 | -.9 | -.9 | 0.03 | 300.0 | -.9 | -.9 | -.9 | -.9 | -.8 | -.8 | -.9 | -.9 | -.9 |
| A003039 | 10.0 | 145.0 | 29.5 | 6.0 | -.8 | 10.0 | -.80 | 8250.0 | -.9 | -.9 | 200.0 | 145.0 | -.9 | -.9 | 9.0 | 45.0 | -.9 |
| A003040 | 10.0 | 60.0 | 28.6 | 5.0 | -.8 | 70.0 | -.80 | 12000.0 | -.9 | 60.0 | 130.0 | 75.0 | -.9 | -.9 | 5.0 | 70.0 | 13.0 |
| A003041 | -.8 | 70.0 | 10.0 | -.9 | -.9 | 50.0 | .50 | 3000.0 | -.9 | -.9 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 15.0 | -.9 |
| A003042 | -.8 | 30.0 | 15.0 | 10.0 | -.9 | 100.0 | 1.50 | 2000.0 | 2.0 | 20.0 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 20.0 | 300.0 |
| A003043 | -.9 | 40.0 | 8.2 | 11.0 | -.8 | 40.0 | -.80 | 2100.0 | -.9 | -.9 | 55.0 | 330.0 | -.9 | -.9 | 34.0 | 25.0 | 175.0 |
| A003044 | -.9 | 20.0 | 5.9 | 10.0 | -.8 | 20.0 | -.80 | 3850.0 | -.9 | -.9 | 35.0 | 35.0 | -.9 | -.9 | 6.0 | 30.0 | 3.0 |
| A003045 | -.9 | 30.0 | 15.4 | 11.0 | -.8 | 30.0 | -.80 | 4700.0 | -.9 | 40.0 | 60.0 | 170.0 | -.9 | -.9 | 22.0 | 25.0 | 46.0 |
| A003046 | -.8 | 10.0 | 15.0 | -.9 | -.9 | -.9 | .50 | 500.0 | -.9 | 20.0 | 30.0 | 20.0 | -.8 | -.8 | -.9 | 10.0 | 300.0 |
| A003047 | -.8 | 30.0 | 20.0 | 15.0 | -.9 | -.9 | .30 | 1000.0 | -.9 | 20.0 | 50.0 | 500.0 | -.8 | -.8 | -.9 | 15.0 | -.9 |
| A003048 | -.8 | 20.0 | 15.0 | 10.0 | -.9 | -.9 | .30 | 1000.0 | -.9 | -.9 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 30.0 | 30.0 |
| A003049 | 10.0 | 45.0 | 21.0 | 9.0 | -.8 | 30.0 | -.80 | 5150.0 | -.9 | 20.0 | 60.0 | 1300.0 | -.9 | -.9 | 36.0 | 60.0 | 100.0 |
| A003050 | -.8 | 30.0 | 5.0 | 15.0 | -.9 | 20.0 | .50 | 500.0 | -.9 | -.9 | 50.0 | 300.0 | -.8 | -.8 | -.9 | 10.0 | -.9 |
| A003051 | 10.0 | 110.0 | 22.8 | 8.0 | -.8 | 30.0 | -.80 | 2400.0 | -.9 | 40.0 | 115.0 | 370.0 | -.9 | -.9 | 3800.0 | 20.0 | 195.0 |
| A003052 | -.8 | 10.0 | 2.0 | -.9 | -.9 | 20.0 | .05 | 300.0 | -.9 | -.9 | 20.0 | -.9 | -.8 | -.8 | -.9 | -.9 | -.9 |
| A003053 | -.8 | 50.0 | 7.0 | -.9 | -.9 | -.9 | .20 | 500.0 | -.9 | -.9 | 50.0 | 100.0 | -.8 | -.8 | 200.0 | -.9 | 300.0 |
| A003054 | -.8 | 20.0 | 5.0 | -.9 | -.9 | -.9 | .30 | 1000.0 | -.9 | -.9 | 20.0 | 100.0 | -.8 | -.8 | 200.0 | -.9 | 500.0 |
| A003055 | -.8 | 30.0 | 10.0 | 10.0 | -.9 | 20.0 | .50 | 1500.0 | -.9 | -.9 | 30.0 | 10000.0 | -.8 | -.8 | 1000.0 | 20.0 | 10.0 |
| A003056 | -.8 | 100.0 | 15.0 | 15.0 | -.9 | 20.0 | .50 | 1500.0 | 2.0 | 20.0 | 100.0 | 10000.0 | -.8 | -.8 | 2000.0 | 20.0 | 150.0 |
| A003057 | -.9 | 50.0 | -.9 | -.9 | -.8 | -.9 | -.80 | -.9 | -.9 | -.9 | 85.0 | 200.0 | -.9 | -.9 | 370.0 | -.9 | -.9 |
| A003058 | 20.0 | 50.0 | 32.9 | 7.0 | -.8 | 65.0 | -.80 | 5500.0 | -.9 | 120.0 | 60.0 | 200.0 | -.9 | -.9 | 60.0 | 55.0 | 640.0 |
| A003059 | -.8 | 10.0 | 10.0 | 10.0 | -.9 | -.9 | .50 | 5000.0 | -.9 | -.9 | 30.0 | 70.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003060 | -.9 | 20.0 | 13.7 | 12.0 | -.8 | 25.0 | -.90 | 7500.0 | -.9 | 20.0 | 40.0 | 5.0 | -.9 | -.9 | -.9 | 45.0 | 6.0 |
| A003061 | -.8 | 7.0 | 5.0 | -.9 | -.9 | -.9 | .07 | 2000.0 | -.9 | -.9 | 5.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003062 | -.8 | 10.0 | 10.0 | -.9 | -.9 | -.9 | .30 | 5000.0 | -.9 | -.9 | 10.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003063 | -.8 | 15.0 | 7.0 | -.9 | -.9 | -.9 | .50 | 5000.0 | -.9 | -.9 | 15.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | 20.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A001410 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 150.0 | -.9 | 100.0 |
| A001411 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | 50.0 | 200.0 | -.9 | 300.0 |
| A001412 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 50.0 | -.9 | 500.0 |
| A001413 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 500.0 | 100.0 | -.9 | 700.0 |
| A001414 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 2000.0 | 50.0 | -.9 | 200.0 |
| A001415 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 50.0 | 200.0 | 20.0 | -.9 | 150.0 |
| A001416 | 100.0 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | 3000.0 | 100.0 | -.9 | 150.0 |
| A003020 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 30.0 | 50.0 | -.9 | -.9 | 150.0 |
| A003021 | -.8 | -.9 | -.900 | -.9 | 1600.0 | 15.0 | 60.0 | 10.0 | 57000.0 | 50.0 |
| A003022 | -.8 | -.9 | -.900 | -.9 | -.9 | 145.0 | -.9 | -.9 | -.9 | -.9 |
| A003023 | -.8 | -.9 | .055 | -.9 | 30000.0 | 180.0 | 1950.0 | 55.0 | 170.0 | 240.0 |
| A003024 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | -.9 | 50.0 | -.9 | 500.0 |
| A003025 | -.9 | -.8 | -.800 | -.8 | 3000.0 | 10.0 | -.9 | -.9 | -.9 | 200.0 |
| A003026 | -.8 | 40.0 | .045 | -.9 | 11000.0 | 50.0 | 240.0 | 140.0 | 75.0 | 150.0 |
| A003027 | -.9 | -.8 | -.800 | -.8 | 3000.0 | 15.0 | -.9 | 50.0 | -.9 | 30.0 |
| A003028 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 20.0 | -.9 | 50.0 | -.9 | 100.0 |
| A003029 | -.8 | 40.0 | .065 | -.9 | 26000.0 | 90.0 | 17500.0 | 120.0 | 155.0 | 440.0 |
| A003030 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 15.0 | 50.0 | 30.0 | -.9 | 50.0 |
| A003031 | -.8 | 60.0 | .050 | -.9 | 17000.0 | 50.0 | 375.0 | 170.0 | 95.0 | 340.0 |
| A003032 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 2000.0 | 20.0 | 300.0 | 500.0 |
| A003033 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | -.9 | 10.0 | 200.0 | 500.0 |
| A003034 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 30.0 | -.9 | 100.0 | -.9 | 150.0 |
| A003035 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 20.0 | 50.0 | 50.0 | -.9 | 200.0 |
| A003036 | -.8 | 20.0 | .075 | -.9 | 8900.0 | 65.0 | 265.0 | 100.0 | 75.0 | 180.0 |
| A003037 | -.8 | -.9 | .095 | 20.0 | 12000.0 | 45.0 | 420.0 | 180.0 | 65.0 | 270.0 |
| A003038 | -.9 | -.8 | -.800 | -.8 | 700.0 | 10.0 | -.9 | -.9 | -.9 | -.9 |
| A003039 | -.8 | 60.0 | .200 | -.9 | 9700.0 | 85.0 | 90.0 | 75.0 | 85.0 | 170.0 |
| A003040 | -.8 | 80.0 | .110 | -.9 | 29000.0 | 240.0 | 50.0 | 110.0 | 95.0 | 600.0 |
| A003041 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | -.9 | 30.0 | -.9 | 100.0 |
| A003042 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | 100.0 | 30.0 | -.9 | 200.0 |
| A003043 | -.8 | -.9 | .080 | -.9 | 9300.0 | 90.0 | 19.0 | 45.0 | 100.0 | 230.0 |
| A003044 | -.8 | -.9 | .020 | -.9 | 7500.0 | 95.0 | 8.0 | 35.0 | 75.0 | 210.0 |
| A003045 | -.8 | 20.0 | .170 | -.9 | 20000.0 | 230.0 | 7.0 | 35.0 | 90.0 | 240.0 |
| A003046 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | -.9 | -.9 | 300.0 |
| A003047 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 20.0 | -.9 | 100.0 |
| A003048 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 100.0 | -.9 | 70.0 | -.9 | 100.0 |
| A003049 | -.8 | 20.0 | .095 | 20.0 | 13000.0 | 180.0 | 85.0 | 110.0 | 115.0 | 380.0 |
| A003050 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 50.0 | -.9 | 20.0 | -.9 | 200.0 |
| A003051 | -.8 | 20.0 | .400 | -.9 | 16000.0 | 195.0 | 3100.0 | 35.0 | 280.0 | 880.0 |
| A003052 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 15.0 | 70.0 | -.9 | -.9 | 30.0 |
| A003053 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | 100.0 | 10.0 | -.9 | 100.0 |
| A003054 | -.9 | -.8 | -.800 | -.8 | 2000.0 | 10.0 | 70.0 | -.9 | -.9 | 70.0 |
| A003055 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 30.0 | 200.0 | 200.0 |
| A003056 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | 300.0 | 20.0 | 200.0 | 500.0 |
| A003057 | -.8 | -.9 | .045 | -.9 | -.9 | -.9 | -.9 | -.9 | 250.0 | -.9 |
| A003058 | -.8 | 120.0 | .190 | -.9 | 96000.0 | 790.0 | 165.0 | 40.0 | 130.0 | 480.0 |
| A003059 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | -.9 | 30.0 | -.9 | 100.0 |
| A003060 | -.8 | 40.0 | .019 | -.9 | 12000.0 | 160.0 | 6.0 | 65.0 | 70.0 | 320.0 |
| A003061 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 10.0 | -.9 | 50.0 | -.9 | 100.0 |
| A003062 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 20.0 | -.9 | 70.0 | -.9 | 300.0 |
| A003063 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 20.0 | -.9 | 50.0 | -.9 | 300.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A003064 | 382750. | 3526400. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 20.0 | 150.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 10.0 | 30.0 |
| A003065 | 373800. | 3524750. | 14 | 71 | .2 | -.90 | -.900 | 100.0 | -.9 | 300.0 | -.9 | -.9 | -.9 | -.9 | 80.0 | 15.0 | 20.0 |
| A003066 | 379400. | 3492600. | 14 | 71 | 2.4 | -.90 | -.900 | 130.0 | 55.0 | 490.0 | -.9 | -.9 | -.9 | -.9 | 20.0 | 20.0 | 60.0 |
| A003067 | 328800. | 3467200. | 14 | 73 | -.9 | -.80 | -.900 | 2000.0 | 100.0 | 150.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 20.0 |
| A003068 | 333800. | 3474300. | 14 | 73 | 1.0 | -.80 | -.900 | 200.0 | 50.0 | 300.0 | -.9 | -.9 | .2 | -.9 | -.8 | 10.0 | 200.0 |
| A003069 | 374750. | 3477700. | 14 | 73 | -.9 | -.80 | .003 | -.9 | -.9 | 20.0 | -.9 | -.9 | .1 | -.9 | -.8 | 30.0 | 500.0 |
| A003070 | 371600. | 3477450. | 14 | 73 | -.9 | -.80 | .006 | -.9 | -.9 | 200.0 | -.9 | -.9 | .1 | -.9 | -.8 | 20.0 | 300.0 |
| A003071 | 370650. | 3477600. | 14 | 71 | -.9 | -.90 | .005 | 75.0 | -.9 | 240.0 | -.9 | -.9 | -.9 | -.9 | 200.0 | 15.0 | 205.0 |
| A003072 | 392250. | 3501450. | 14 | 73 | 1.0 | -.80 | .002 | -.9 | 150.0 | 500.0 | -.9 | -.9 | .3 | -.9 | -.8 | 20.0 | 150.0 |
| A003073 | 395350. | 3502800. | 14 | 73 | 5.0 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 20.0 | 100.0 |
| A003074 | 397000. | 3500850. | 14 | 71 | .8 | .22 | -.900 | 110.0 | 30.0 | 380.0 | 2.0 | -.9 | -.9 | .4 | 120.0 | 20.0 | 95.0 |
| A003075 | 399750. | 3499750. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 700.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 20.0 | 300.0 |
| A003076 | 404600. | 3502500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 500.0 | 300.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 30.0 | 200.0 |
| A003077 | 404600. | 3502500. | 14 | 71 | .8 | .25 | .005 | 35.0 | -.9 | 170.0 | -.9 | -.9 | -.9 | -.9 | 60.0 | 25.0 | 270.0 |
| A003078 | 404600. | 3502500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 500.0 | 300.0 | -.9 | -.9 | .5 | -.9 | -.8 | 20.0 | 150.0 |
| A003079 | 404600. | 3502500. | 14 | 71 | .4 | .42 | -.900 | 60.0 | 25.0 | 270.0 | -.9 | -.9 | -.9 | .2 | 40.0 | 15.0 | 75.0 |
| A003080 | 405400. | 3502700. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 300.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 20.0 | 100.0 |
| A003081 | 408450. | 3504250. | 14 | 73 | 2.0 | -.80 | -.900 | -.9 | 200.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 15.0 | 200.0 |
| A003082 | 402500. | 3509200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 700.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 10.0 | 100.0 |
| A003083 | 402800. | 3509800. | 14 | 71 | .6 | -.90 | .001 | 75.0 | 75.0 | 330.0 | -.9 | -.9 | -.9 | .2 | 80.0 | 45.0 | 385.0 |
| A003084 | 405800. | 3506350. | 14 | 73 | -.9 | -.80 | .012 | -.9 | 200.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 30.0 | 1000.0 |
| A003085 | 411000. | 3504800. | 14 | 71 | -.9 | -.90 | .001 | 25.0 | -.9 | 240.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | 220.0 |
| A003086 | 419200. | 3510700. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 50.0 | 150.0 |
| A003087 | 422650. | 3515500. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 50.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 30.0 | 100.0 |
| A003088 | 317400. | 3474850. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 100.0 | 200.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 10.0 | 500.0 |
| A003089 | 316900. | 3475800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 500.0 | 700.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 20.0 | 200.0 |
| A003090 | 317000. | 3481000. | 14 | 71 | .2 | 5.50 | -.900 | 180.0 | -.9 | 150.0 | -.9 | -.9 | -.9 | .6 | -.9 | 10.0 | 75.0 |
| A003091 | 322200. | 3483200. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 70.0 | 300.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 10.0 | 100.0 |
| A003092 | 327000. | 3481100. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 200.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 10.0 | 150.0 |
| A003093 | 337500. | 3488300. | 14 | 73 | 7.0 | -.80 | .019 | -.9 | 70.0 | 500.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 70.0 | 1000.0 |
| A003094 | 336900. | 3489800. | 14 | 71 | 1.2 | .05 | .001 | 500.0 | -.9 | 470.0 | -.9 | -.9 | -.9 | -.9 | 120.0 | 15.0 | 100.0 |
| A003095 | 335250. | 3476150. | 14 | 73 | 10.0 | -.80 | -.900 | -.9 | 70.0 | 700.0 | -.9 | -.9 | .2 | -.9 | -.8 | 15.0 | 200.0 |
| A003096 | 335250. | 3476150. | 14 | 71 | 8.3 | 8.00 | -.900 | 190.0 | 35.0 | 430.0 | -.9 | 1.0 | -.9 | 2.0 | 80.0 | 15.0 | 55.0 |
| A003097 | 340350. | 3496800. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 200.0 | 200.0 | -.9 | -.9 | 1.0 | -.9 | -.8 | 5.0 | 70.0 |
| A003098 | 342900. | 3503000. | 14 | 73 | -.9 | -.80 | -.900 | -.9 | 10.0 | 100.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 100.0 |
| A003099 | 342850. | 3503850. | 14 | 71 | 1.0 | 113.00 | .004 | 20.0 | -.9 | 140.0 | -.9 | -.9 | -.9 | 1.0 | 20.0 | 10.0 | 65.0 |
| A003100 | 332200. | 3496500. | 14 | 73 | -.9 | -.80 | .001 | -.9 | 200.0 | 700.0 | -.9 | -.9 | 1.5 | -.9 | -.8 | 15.0 | 200.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CS (PPM) | CU (PPM) | FE (%) | GA (PPM) | GE (PPM) | LA (%) | MG (PPM) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A003064 | -.8 | 20.0 | 10.0 | 10.0 | -.9 | -.9 | .70 | 5000.0 | -.9 | -.9 | 15.0 | 20.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003065 | -.9 | 25.0 | 14.6 | 7.0 | -.8 | 40.0 | -.80 | 12000.0 | -.9 | 40.0 | 30.0 | 50.0 | -.9 | -.9 | 4.0 | 100.0 | 5.0 |
| A003066 | -.9 | 45.0 | 13.0 | 14.0 | -.8 | 25.0 | -.80 | 1400.0 | -.9 | 10.0 | 65.0 | 35.0 | -.9 | -.9 | 18.0 | 15.0 | 460.0 |
| A003067 | -.8 | 70.0 | 5.0 | -.9 | -.9 | 20.0 | .10 | 500.0 | -.9 | 20.0 | 70.0 | 30.0 | -.8 | -.8 | 1500.0 | -.9 | -.9 |
| A003068 | -.8 | 20.0 | 5.0 | 10.0 | -.9 | 20.0 | .50 | 700.0 | -.9 | -.9 | 50.0 | 100.0 | -.8 | -.8 | 100.0 | 10.0 | -.9 |
| A003069 | -.8 | 20.0 | 20.0 | 15.0 | -.9 | -.9 | 1.00 | 500.0 | 2.0 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 10.0 | 200.0 |
| A003070 | -.8 | 15.0 | 10.0 | 15.0 | -.9 | -.9 | 1.50 | 700.0 | -.9 | -.9 | 30.0 | 150.0 | -.8 | -.8 | -.9 | 10.0 | 10.0 |
| A003071 | 20.0 | 25.0 | 21.1 | 8.0 | -.8 | 95.0 | -.80 | 4950.0 | -.9 | 160.0 | 35.0 | 25.0 | -.9 | -.9 | 290.0 | 55.0 | 400.0 |
| A003072 | -.8 | 30.0 | 7.0 | 15.0 | -.9 | 200.0 | 1.00 | 1000.0 | 2.0 | 20.0 | 70.0 | 150.0 | -.8 | -.8 | -.9 | 15.0 | 2000.0 |
| A003073 | -.8 | 15.0 | 10.0 | 15.0 | -.9 | 50.0 | 1.50 | 7000.0 | 5.0 | 20.0 | 50.0 | 300.0 | -.8 | -.8 | -.9 | 50.0 | 150.0 |
| A003074 | -.9 | 40.0 | 9.9 | 10.0 | -.8 | 25.0 | -.80 | 4050.0 | -.9 | 25.0 | 40.0 | 30.0 | -.9 | -.9 | 24.0 | 45.0 | 165.0 |
| A003075 | -.8 | 30.0 | 15.0 | 20.0 | -.9 | 20.0 | 1.50 | 5000.0 | 10.0 | 20.0 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 50.0 | 150.0 |
| A003076 | -.8 | 15.0 | 20.0 | 20.0 | -.9 | -.9 | .50 | 5000.0 | 15.0 | -.9 | 70.0 | 50.0 | -.8 | -.8 | -.9 | 30.0 | 500.0 |
| A003077 | 10.0 | 30.0 | 38.2 | 14.0 | -.8 | 25.0 | -.80 | 5000.0 | -.9 | 10.0 | 50.0 | 15.0 | -.9 | -.9 | 18.0 | 30.0 | 275.0 |
| A003078 | -.8 | 30.0 | 15.0 | 10.0 | -.9 | -.9 | .50 | 5000.0 | 10.0 | 20.0 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 30.0 | 30.0 |
| A003079 | -.9 | 45.0 | 15.9 | 10.0 | -.8 | 30.0 | -.80 | 6450.0 | -.9 | 35.0 | 40.0 | 20.0 | -.9 | -.9 | 16.0 | 50.0 | 80.0 |
| A003080 | -.8 | 30.0 | 15.0 | 10.0 | -.9 | -.9 | 1.00 | 5000.0 | 5.0 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | 20.0 |
| A003081 | -.8 | 20.0 | 10.0 | 15.0 | -.9 | -.9 | 1.50 | 5000.0 | 2.0 | 20.0 | 50.0 | 20.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003082 | -.8 | 30.0 | 7.0 | 10.0 | -.9 | 20.0 | 1.50 | 7000.0 | -.9 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003083 | -.9 | 50.0 | 14.5 | 12.0 | -.8 | 30.0 | -.80 | 4650.0 | -.9 | 30.0 | 70.0 | 55.0 | -.9 | -.9 | 17.0 | 40.0 | 415.0 |
| A003084 | -.8 | 50.0 | 20.0 | 20.0 | -.9 | -.9 | 1.00 | 5000.0 | 10.0 | 20.0 | 70.0 | 100.0 | -.8 | -.8 | -.9 | 30.0 | 500.0 |
| A003085 | 10.0 | 40.0 | 22.8 | 12.0 | -.8 | 25.0 | -.80 | 6100.0 | -.9 | -.9 | 45.0 | 15.0 | -.9 | -.9 | 6.0 | 45.0 | 14.0 |
| A003086 | -.8 | 70.0 | 20.0 | 30.0 | -.9 | -.9 | 1.00 | 5000.0 | 15.0 | 20.0 | 50.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | 20.0 |
| A003087 | -.8 | 50.0 | 20.0 | 20.0 | -.9 | -.9 | .70 | 7000.0 | 10.0 | 20.0 | 50.0 | 100.0 | -.8 | -.8 | -.9 | 50.0 | 20.0 |
| A003088 | -.8 | 10.0 | 7.0 | 15.0 | -.9 | 20.0 | 1.50 | 3000.0 | 2.0 | 20.0 | 30.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003089 | -.8 | 20.0 | 10.0 | 20.0 | -.9 | 20.0 | 3.00 | 7000.0 | 2.0 | 20.0 | 50.0 | 30.0 | -.8 | -.8 | -.9 | 50.0 | -.9 |
| A003090 | -.9 | 15.0 | 16.9 | 12.0 | -.8 | 15.0 | -.80 | 10500.0 | -.9 | 35.0 | 15.0 | 5.0 | -.9 | -.9 | 11.0 | 100.0 | 13.0 |
| A003091 | -.8 | 7.0 | 7.0 | 15.0 | -.9 | -.9 | 1.50 | 5000.0 | 2.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003092 | -.8 | 10.0 | 10.0 | 20.0 | -.9 | -.9 | 1.00 | 5000.0 | 2.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 50.0 | 70.0 |
| A003093 | -.8 | 50.0 | 20.0 | 50.0 | -.9 | 20.0 | 2.00 | 2000.0 | 15.0 | 30.0 | 50.0 | 200.0 | -.8 | -.8 | -.9 | 30.0 | 200.0 |
| A003094 | 10.0 | 40.0 | 17.3 | 12.0 | -.8 | 50.0 | -.80 | 4500.0 | -.9 | 60.0 | 30.0 | 130.0 | -.9 | -.9 | 85.0 | 40.0 | 55.0 |
| A003095 | -.8 | 30.0 | 10.0 | 20.0 | -.9 | 20.0 | 1.00 | 1500.0 | 5.0 | -.9 | 50.0 | 3000.0 | -.8 | -.8 | -.9 | 20.0 | 700.0 |
| A003096 | -.9 | 70.0 | 7.9 | 16.0 | -.8 | 30.0 | -.80 | 1750.0 | -.9 | 15.0 | 45.0 | 1100.0 | -.9 | -.9 | 115.0 | 25.0 | 225.0 |
| A003097 | -.8 | 10.0 | 7.0 | 20.0 | -.9 | 20.0 | 1.50 | 7000.0 | 2.0 | 20.0 | 20.0 | 15.0 | -.8 | -.8 | -.9 | 30.0 | -.9 |
| A003098 | -.8 | 20.0 | 15.0 | 30.0 | -.9 | 20.0 | 1.00 | 7000.0 | 10.0 | 20.0 | 20.0 | 10.0 | -.8 | -.8 | -.9 | 70.0 | -.9 |
| A003099 | -.9 | 20.0 | 13.4 | 10.0 | -.8 | 25.0 | -.80 | 10000.0 | -.9 | 30.0 | 15.0 | 10.0 | -.9 | -.9 | 8.0 | 100.0 | -.9 |
| A003100 | -.8 | 50.0 | 15.0 | 20.0 | -.9 | 50.0 | 3.00 | 3000.0 | 5.0 | 30.0 | 30.0 | 30.0 | -.8 | -.8 | -.9 | 50.0 | 30.0 |

TABLE AD-14 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | SR (PPM) | TA (PPM) | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|
| A003064 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 30.0 | -.9 | 50.0 | -.9 | 500.0 |
| A003065 | -.8 | 20.0 | .040 | -.9 | 14000.0 | 50.0 | 11.0 | 200.0 | 55.0 | 360.0 |
| A003066 | -.8 | 40.0 | .075 | -.9 | 6900.0 | 140.0 | 4.0 | 30.0 | 170.0 | 240.0 |
| A003067 | -.9 | -.8 | -.800 | -.8 | 3000.0 | 30.0 | 200.0 | -.9 | -.9 | 300.0 |
| A003068 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 70.0 | -.9 | 10.0 | 200.0 | 200.0 |
| A003069 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | -.9 | -.9 | 100.0 |
| A003070 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | -.9 | -.9 | 50.0 |
| A003071 | -.8 | 100.0 | .130 | 20.0 | 110000.0 | 820.0 | 13.0 | 35.0 | 90.0 | 480.0 |
| A003072 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 50.0 | -.9 | 150.0 |
| A003073 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 50.0 | 100.0 | 70.0 | -.9 | 300.0 |
| A003074 | -.9 | -.9 | .270 | -.9 | 8900.0 | -.9 | 9.0 | 65.0 | 110.0 | 180.0 |
| A003075 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 100.0 | 200.0 | 150.0 |
| A003076 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 150.0 | -.9 | 70.0 | 300.0 | 100.0 |
| A003077 | -.8 | 60.0 | .070 | -.9 | 11000.0 | -.9 | 19.0 | 50.0 | 60.0 | 260.0 |
| A003078 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 70.0 | 200.0 | 200.0 |
| A003079 | -.8 | -.9 | .080 | -.9 | 14000.0 | -.9 | 12.0 | 75.0 | 80.0 | 310.0 |
| A003080 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 70.0 | 200.0 | 200.0 |
| A003081 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 50.0 | -.9 | 200.0 |
| A003082 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 300.0 |
| A003083 | -.8 | -.9 | .240 | -.9 | 14000.0 | -.9 | 65.0 | 50.0 | 90.0 | 150.0 |
| A003084 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 100.0 | 200.0 | 50.0 |
| A003085 | -.8 | -.9 | .045 | -.9 | 11000.0 | -.9 | 4.0 | 60.0 | 65.0 | 280.0 |
| A003086 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 100.0 | -.9 | 100.0 | 200.0 | 200.0 |
| A003087 | -.9 | -.8 | -.800 | -.8 | 7000.0 | 150.0 | -.9 | 100.0 | -.9 | 150.0 |
| A003088 | 100.0 | -.8 | -.800 | -.8 | 10000.0 | 100.0 | -.9 | 70.0 | -.9 | 150.0 |
| A003089 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 70.0 | -.9 | 200.0 |
| A003090 | -.8 | -.9 | .050 | -.9 | 16000.0 | -.9 | 60.0 | 150.0 | 50.0 | 170.0 |
| A003091 | 100.0 | -.8 | -.800 | -.8 | 7000.0 | 70.0 | -.9 | 70.0 | -.9 | 150.0 |
| A003092 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 200.0 |
| A003093 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | 50.0 | 30.0 | -.9 | 300.0 |
| A003094 | -.8 | -.9 | .045 | -.9 | 42000.0 | -.9 | 12.0 | 60.0 | 110.0 | 210.0 |
| A003095 | -.9 | -.8 | -.800 | -.8 | 5000.0 | 100.0 | 50.0 | 20.0 | 300.0 | 100.0 |
| A003096 | -.8 | -.9 | .040 | -.9 | 11000.0 | -.9 | 65.0 | 30.0 | 220.0 | 160.0 |
| A003097 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 70.0 | -.9 | 100.0 | -.9 | 300.0 |
| A003098 | -.9 | -.8 | -.800 | -.8 | 10000.0 | 150.0 | -.9 | 150.0 | -.9 | 150.0 |
| A003099 | -.8 | -.9 | .040 | -.9 | 14000.0 | -.9 | 210.0 | 160.0 | 45.0 | 180.0 |
| A003100 | 200.0 | -.8 | -.800 | -.8 | 10000.0 | 200.0 | -.9 | 50.0 | 200.0 | 300.0 |

TABLE AD-15

DUNKLE MINE AREA PANNED CONCENTRATES

ANALYTICAL RESULTS

TABLE AD-15 CHEMICAL ANALYSIS OF PAN CON. SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A001009 | 583400. | 3393800. | 12 71 | -.9 | -.90 | 25.0 | -.9 | 25.0 | -.9 | 20.0 | 4.0 | -.9 | -.9 | 105.0 |
| A001011 | 583300. | 3393700. | 12 71 | -.9 | -.90 | 20.0 | -.9 | 15.0 | -.9 | -.9 | 2.0 | -.9 | 5.0 | 65.0 |
| A001013 | 584000. | 3392800. | 12 71 | -.9 | -.90 | 45.0 | -.9 | 30.0 | -.9 | 20.0 | 8.0 | 6.0 | 4.0 | 85.0 |
| A001015 | 582650. | 3392100. | 12 71 | -.9 | -.90 | 35.0 | -.9 | 40.0 | -.9 | -.9 | 2.0 | -.9 | 3.0 | 120.0 |
| A001019 | 598800. | 3382100. | 12 71 | -.9 | .08 | 60.0 | -.9 | 20.0 | -.9 | 10.0 | 2.0 | -.9 | 4.0 | 105.0 |
| A002403 | 579900. | 3382200. | 12 71 | -.9 | .83 | 30.0 | -.9 | 30.0 | -.9 | 10.0 | -.9 | -.9 | 4.0 | 120.0 |
| A002405 | 579500. | 3381950. | 12 71 | .4 | -.90 | 20.0 | -.9 | 45.0 | -.9 | 10.0 | 2.0 | -.9 | 2.0 | 125.0 |
| A002406 | 585100. | 3369200. | 12 71 | -.9 | -.90 | 20.0 | -.9 | 15.0 | -.9 | -.9 | -.9 | -.9 | 4.0 | 75.0 |
| A002410 | 587700. | 3369400. | 12 71 | .2 | -.90 | 35.0 | -.9 | 30.0 | -.9 | 25.0 | 4.0 | 120.0 | 4.0 | 120.0 |
| A002413 | 574800. | 3381150. | 12 71 | -.9 | -.90 | 25.0 | -.9 | 25.0 | -.9 | 5.0 | 2.0 | -.9 | -.9 | 95.0 |
| A002420 | 604800. | 3389700. | 12 71 | -.9 | -.90 | 55.0 | -.9 | 25.0 | -.9 | 10.0 | 8.0 | -.9 | 3.0 | 70.0 |
| A002433 | 582800. | 3374900. | 12 71 | -.9 | -.90 | 35.0 | -.9 | 45.0 | -.9 | 10.0 | 2.0 | -.9 | 3.0 | 115.0 |
| A002434 | 583200. | 3376500. | 12 71 | -.9 | -.90 | 60.0 | -.9 | 40.0 | -.9 | 10.0 | 4.0 | -.9 | 4.0 | 120.0 |
| A002441 | 575100. | 3389700. | 12 71 | -.9 | .08 | 20.0 | -.9 | 50.0 | -.9 | 10.0 | 2.0 | -.9 | 3.0 | 105.0 |
| A002442 | 574450. | 3391800. | 12 71 | -.9 | -.90 | 40.0 | -.9 | 15.0 | -.9 | 10.0 | 4.0 | -.9 | -.9 | 160.0 |
| A002447 | 582100. | 3369500. | 12 71 | -.9 | -.90 | 20.0 | -.9 | 40.0 | -.9 | 10.0 | 2.0 | -.9 | 3.0 | 120.0 |
| A002460 | 596500. | 3378700. | 12 71 | -.9 | -.90 | 45.0 | -.9 | 30.0 | -.9 | 10.0 | 2.0 | -.9 | 3.0 | 110.0 |
| A002461 | 605300. | 3388650. | 12 71 | -.9 | -.90 | 40.0 | -.9 | 35.0 | -.9 | -.9 | 2.0 | -.9 | -.9 | 85.0 |
| A002462 | 596500. | 3378700. | 12 71 | .4 | -.90 | 80.0 | -.9 | 40.0 | -.9 | 20.0 | 4.0 | -.8 | 4.0 | 140.0 |
| A002467 | 578400. | 3388000. | 12 71 | -.9 | .19 | 50.0 | -.9 | 25.0 | -.9 | 15.0 | 4.0 | 85.0 | -.9 | 85.0 |

TABLE AD-16

DUNKLE MINE AREA RECONNAISSANCE PLACER CONCENTRATES

ANALYTICAL RESULTS

TABLE AD-16 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (PPM) | AU (PPM) | AU (C/Y) | AS (PPM) | B (PPM) | BA (PPM) | BE (PPM) | BI (PPM) | CA (%) | CD (PPM) | CE (PPM) | CO (PPM) | CR (PPM) | CS (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002424 | 593600. | 3383200. | 14 | 73 | 7.0 | -.80 | .0078 | 10000.0 | 50.0 | 1500.0 | -.9 | 70.0 | 1.5 | -.9 | -.8 | 500.0 | 7000.0 | -.8 |
| A002427 | 575600. | 3369800. | 14 | 73 | -.9 | -.80 | .0006 | -.9 | 30.0 | 1000.0 | -.9 | -.9 | 2.0 | -.9 | -.8 | 20.0 | 7000.0 | -.8 |
| A002428 | 573400. | 3375900. | 14 | 71 | -.9 | .12 | -.8000 | 70.0 | -.8 | -.8 | -.8 | -.9 | -.8 | -.8 | -.8 | -.8 | -.8 | -.8 |
| A002429 | 573400. | 3375850. | 14 | 71 | 5.9 | 3.40 | .0047 | 420.0 | 50.0 | 1100.0 | -.9 | 30.0 | -.8 | -.9 | 20.0 | 20.0 | 2500.0 | -.9 |
| A002430 | 573250. | 3374750. | 14 | 73 | -.9 | -.80 | .0007 | -.9 | 100.0 | 2000.0 | -.9 | -.9 | 5.0 | -.9 | -.8 | 20.0 | 5000.0 | -.8 |
| A002431 | 582850. | 3374600. | 14 | 71 | .8 | 1.30 | .0029 | 1300.0 | 60.0 | 1500.0 | 3.0 | 4.0 | -.8 | .2 | 40.0 | 30.0 | 4250.0 | -.9 |
| A002489 | 598600. | 3374000. | 14 | 71 | .6 | .44 | .0010 | 230.0 | -.9 | 540.0 | -.9 | 3.0 | -.8 | .4 | 20.0 | 65.0 | 24000.0 | -.9 |



TABLE AD-16 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | TE (PPM) | TH (PPM) | TI (PPM) | V (PPM) | W (PPM) | WT (GRAMS) | Y (PPM) | ZN (PPM) | ZR (PPM) |
|---|---|---|---|---|---|---|---|---|---|
| A002424 | -.800 | -.8 | 5000.0 | 100.0 | 150.0 | 96.14 | 30.0 | 500.0 | 200.0 |
| A002427 | -.800 | -.8 | 7000.0 | 100.0 | -.9 | 106.54 | -.9 | 200.0 | 50.0 |
| A002428 | -.800 | -.8 | -.8 | -.8 | 3.0 | -.80 | -.8 | 130.0 | -.8 |
| A002429 | 6.400 | -.9 | 6000.0 | -.9 | 100.0 | 118.61 | 15.0 | 135.0 | 190.0 |
| A002430 | -.800 | -.8 | 7000.0 | 150.0 | -.9 | 87.60 | 20.0 | 200.0 | 100.0 |
| A002431 | .190 | -.9 | 10000.0 | -.9 | 6.0 | 105.09 | 20.0 | 285.0 | 280.0 |
| A002489 | 1.000 | -.9 | 18000.0 | -.9 | 9.0 | 95.25 | 30.0 | 280.0 | 280.0 |



TABLE AD-16 CHEMICAL ANALYSIS OF PAN CON.-RP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | CU (PPM) | FE (%) | GA (PPM) | LA (PPM) | MG (%) | MN (PPM) | MO (PPM) | NB (PPM) | NI (PPM) | PB (PPM) | PD (PPM) | PT (PPM) | SB (PPM) | SC (PPM) | SN (PPM) | SR (PPM) | TA (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A002424 | 200.0 | 10.0 | 30.0 | 20.0 | 1.00 | 1000.0 | 5.0 | -.9 | 200.0 | 500.0 | -.8 | -.8 | 300.0 | 20.0 | -.9 | 100.0 | -.8 |
| A002427 | 30.0 | 5.0 | 15.0 | -.9 | 1.50 | 1000.0 | -.9 | -.9 | 100.0 | 50.0 | -.8 | -.8 | -.9 | 10.0 | -.9 | 200.0 | -.8 |
| A002428 | 55.0 | -.8 | -.8 | -.8 | -.80 | -.8 | -.9 | -.8 | -.8 | -.9 | -.8 | -.8 | 4.0 | -.8 | -.9 | -.8 | -.8 |
| A002429 | 70.0 | 6.1 | 14.0 | 10.0 | -.80 | 1450.0 | -.9 | -.9 | 65.0 | 20.0 | -.9 | -.9 | 4.0 | 25.0 | 12.0 | -.8 | -.9 |
| A002430 | 50.0 | 7.0 | 20.0 | 20.0 | 2.00 | 1000.0 | 2.0 | -.9 | 70.0 | 70.0 | -.8 | -.8 | -.9 | 20.0 | -.9 | 300.0 | -.8 |
| A002431 | 70.0 | 9.2 | 14.0 | 10.0 | -.80 | 3050.0 | -.9 | 10.0 | 75.0 | 80.0 | -.9 | -.9 | 18.0 | 30.0 | 26.0 | -.8 | -.9 |
| A002489 | 65.0 | 13.5 | 10.0 | -.9 | -.80 | -.9 | -.9 | 10.0 | 230.0 | 50.0 | -.9 | -.9 | 9.0 | 30.0 | 265.0 | -.8 | 180.0 |

TABLE AD-17

DUNKLE MINE AREA ROCK CHIP SAMPLES

ANALYTICAL RESULTS

TABLE AD-17 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | HG (PPM) | MO (PPM) | NI (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CX00001 | 596550. | 3391250. | 30 | 71 | -.80 | .4 | -.800 | -.90 | 110.000 | -.8 | -.800 | 65.000 | .05 | 30.000 | -.800 |
| CX00002 | 596050. | 3391050. | 30 | 71 | -.80 | 1.6 | -.800 | .09 | 270.000 | -.8 | -.800 | 155.000 | .04 | 24.000 | -.800 |
| CX00003 | 594950. | 3391650. | 30 | 71 | -.80 | 3.3 | -.800 | .33 | 449000.000 | -.8 | -.800 | 25.000 | .02 | 8.000 | -.800 |
| CX00004 | 594950. | 3391500. | 30 | 71 | -.80 | 1.8 | -.800 | -.90 | 1450.000 | -.8 | -.800 | 215.000 | .02 | 6.000 | -.800 |
| CX00005 | 595890. | 3390420. | 30 | 71 | -.80 | .8 | -.800 | -.90 | 190.000 | -.8 | -.800 | 20.000 | .02 | 4.000 | -.800 |
| CX00006 | 594750. | 3391300. | 30 | 71 | -.80 | 2.4 | -.800 | -.90 | 1400.000 | -.8 | -.800 | 310.000 | .03 | 12.000 | -.800 |
| CX00007 | 594600. | 3391000. | 30 | 71 | -.80 | 1.2 | -.800 | -.90 | 260.000 | -.8 | -.800 | 220.000 | .04 | 8.000 | -.800 |
| CX00008 | 594700. | 3390780. | 30 | 71 | -.80 | 1.2 | -.800 | .12 | 510.000 | -.8 | -.800 | 35.000 | .02 | 16.000 | -.800 |
| CX00009 | 594750. | 3390050. | 30 | 71 | -.80 | .8 | -.800 | -.90 | 110.000 | -.8 | -.800 | 45.000 | .02 | -.900 | -.800 |
| CX00010 | 594700. | 3389420. | 30 | 71 | -.80 | .9 | -.800 | -.90 | 360.000 | -.8 | -.800 | 40.000 | .01 | -.900 | -.800 |
| CX00011 | 593950. | 3389950. | 30 | 71 | -.80 | 5.7 | -.800 | -.90 | 1200.000 | -.8 | -.800 | 355.000 | .02 | 4.000 | -.800 |
| CX00012 | 593850. | 3389500. | 30 | 71 | -.80 | 1.2 | -.800 | -.90 | 680.000 | -.8 | -.800 | 70.000 | -.90 | -.900 | -.800 |
| CX00013 | 594500. | 3388900. | 30 | 71 | -.80 | 3.7 | -.800 | .04 | 8250.000 | -.8 | -.800 | 235.000 | .01 | 4.000 | -.800 |
| CX00014 | 593800. | 3389250. | 30 | 71 | -.80 | 1.7 | -.800 | -.90 | 1450.000 | -.8 | -.800 | 105.000 | .01 | -.900 | -.800 |
| CX00015 | 593900. | 3388800. | 30 | 71 | -.80 | .8 | -.800 | -.90 | 680.000 | -.8 | -.800 | 145.000 | .02 | 2.000 | -.800 |
| CX00016 | 594400. | 3388320. | 30 | 71 | -.80 | 1.2 | -.800 | -.90 | 410.000 | -.8 | -.800 | 45.000 | .02 | 2.000 | -.800 |
| CX00017 | 594100. | 3388040. | 30 | 71 | -.80 | .6 | -.800 | -.90 | 580.000 | -.8 | -.800 | 20.000 | -.90 | 12.000 | -.800 |
| CX00018 | 594600. | 3387670. | 30 | 71 | -.80 | 1.0 | -.800 | -.90 | 420.000 | -.8 | -.800 | 30.000 | .01 | -.900 | -.800 |
| CX00019 | 592860. | 3389050. | 30 | 71 | -.80 | 1.9 | -.800 | -.90 | 1400.000 | -.8 | -.800 | 115.000 | .02 | -.900 | -.800 |
| CX00020 | 593500. | 3388500. | 30 | 71 | -.80 | 2.9 | -.800 | -.90 | 1200.000 | -.8 | -.800 | 210.000 | .02 | 6.000 | -.800 |
| CX00021 | 594900. | 3387300. | 30 | 71 | -.80 | 4.8 | -.800 | 13.00 | 2500.000 | -.8 | -.800 | 50.000 | .12 | 4.000 | -.800 |
| CX00022 | 593000. | 3388720. | 30 | 71 | -.80 | .4 | -.800 | .02 | 80.000 | -.8 | -.800 | 30.000 | -.90 | 4.000 | -.800 |
| CX00023 | 593720. | 3388050. | 30 | 71 | -.80 | 1.0 | -.800 | -.90 | 790.000 | -.8 | -.800 | 105.000 | .01 | 42.000 | -.800 |
| CX00024 | 592700. | 3388550. | 30 | 71 | -.80 | 1.8 | -.800 | -.90 | 3700.000 | -.8 | -.800 | 130.000 | .01 | 2.000 | -.800 |
| CX00025 | 592900. | 3388350. | 30 | 71 | -.80 | .4 | -.800 | -.90 | 660.000 | -.8 | -.800 | 35.000 | .01 | 4.000 | -.800 |
| CX00026 | 593200. | 3388150. | 30 | 71 | -.80 | .4 | -.800 | -.90 | 300.000 | -.8 | -.800 | 80.000 | .01 | 4.000 | -.800 |
| CX00027 | 594350. | 3387150. | 30 | 71 | -.80 | .6 | -.800 | .26 | 5200.000 | -.8 | -.800 | 5.000 | .02 | 4.000 | -.800 |
| CX00028 | 592400. | 3388800. | 30 | 71 | -.80 | 65.0 | -.800 | -.90 | 27000.000 | -.8 | -.800 | 15500.000 | .03 | 4.000 | -.800 |
| CX00029 | 593050. | 3388000. | 30 | 71 | -.80 | .2 | -.800 | -.90 | 360.000 | -.8 | -.800 | 15.000 | .01 | 6.000 | -.800 |
| CX00030 | 592850. | 3387900. | 30 | 71 | -.80 | 2.8 | -.800 | .13 | 1150.000 | -.8 | -.800 | 30.000 | .01 | 12.000 | -.800 |
| CX00031 | 594600. | 3386150. | 30 | 71 | -.80 | 1.9 | -.800 | .11 | 820.000 | -.8 | -.800 | 30.000 | .02 | 140.000 | -.800 |
| CX00032 | 593200. | 3387100. | 30 | 71 | -.80 | .6 | -.800 | -.90 | 1200.000 | -.8 | -.800 | 10.000 | .01 | -.900 | -.800 |
| CX00033 | 593550. | 3386500. | 30 | 71 | -.80 | .6 | -.800 | -.90 | 500.000 | -.8 | -.800 | 25.000 | -.90 | 22.000 | -.800 |
| CX00034 | 592350. | 3387450. | 30 | 71 | -.80 | .4 | -.800 | -.90 | 1350.000 | -.8 | -.800 | 20.000 | .02 | 16.000 | -.800 |
| CX00035 | 593450. | 3386090. | 30 | 71 | -.80 | 6.5 | -.800 | .03 | 1300.000 | -.8 | -.800 | 425.000 | .02 | 20.000 | -.800 |
| CX00036 | 592150. | 3386050. | 30 | 71 | -.80 | 7.1 | -.800 | .03 | 2300.000 | -.8 | -.800 | 135.000 | .02 | 70.000 | -.800 |
| CX00037 | 591800. | 3386700. | 30 | 71 | -.80 | .4 | -.800 | .04 | 3600.000 | -.8 | -.800 | 65.000 | .03 | 8.000 | -.800 |
| C012502 | 594050. | 3387050. | 34 | 71 | -.80 | 7.7 | -.800 | .04 | 700.000 | 8.0 | -.800 | 4650.000 | -.90 | 10.000 | -.800 |
| C012701 | 578250. | 3386050. | 32 | 72 | .10 | -.8 | .034 | -.80 | -.800 | -.8 | .002% | .026% | -.80 | -.900 | .010% |
| C012702 | 578250. | 3386050. | 32 | 72 | 8.67 | -.8 | .610 | -.80 | -.800 | -.8 | -.900 | .700% | -.80 | -.900 | .008% |
| C012703 | 578250. | 3386050. | 32 | 72 | 4.14 | -.8 | .240 | -.80 | -.800 | -.8 | .002% | .260% | -.80 | -.900 | .008% |
| C012704 | 578250. | 3386050. | 32 | 72 | 5.88 | -.8 | 2.270 | -.80 | -.800 | -.8 | -.900 | .815% | -.80 | -.900 | .008% |
| C012705 | 578250. | 3386050. | 32 | 72 | 4.03 | -.8 | .210 | -.80 | -.800 | -.8 | .002% | .115% | -.80 | -.900 | .002% |
| C012706 | 578250. | 3386050. | 32 | 72 | 72.20 | -.8 | .250 | -.80 | -.800 | -.8 | -.900 | .755% | -.80 | -.900 | .034% |
| C012707 | 578250. | 3386050. | 32 | 72 | .99 | -.8 | .190 | -.80 | -.800 | -.8 | .004% | .056% | -.80 | -.900 | .006% |
| C012708 | 578100. | 3386080. | 32 | 72 | 2.82 | -.8 | .860 | -.80 | -.800 | -.8 | .026% | .095% | -.80 | -.900 | .002% |
| C012709 | 578100. | 3386080. | 32 | 72 | 2.80 | -.8 | .170 | -.80 | -.800 | -.8 | .004% | .060% | -.80 | -.900 | .002% |
| C012710 | 578250. | 3386050. | 32 | 72 | 2.24 | -.8 | .170 | -.80 | -.800 | -.8 | .010% | .320% | -.80 | -.900 | .002% |
| C012711 | 576200. | 3385250. | 32 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | .002% | .053% | -.80 | .002% | .004% |
| C012713 | 576200. | 3385250. | 34 | 72 | 4.56 | -.8 | .046 | -.80 | -.800 | -.8 | .018% | .043% | -.80 | .002% | -.900 |
| C012714 | 576200. | 3385250. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .031% | -.80 | .001% | -.900 |

TABLE AO-17 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | PB (PPM) | SB (PPM) | SN (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|
| CX00001 | 20.000 | -.800 | -.900 | 15.0 | 15.000 |
| CX00002 | 20.000 | -.800 | 5.000 | 15.0 | 25.000 |
| CX00003 | 15.000 | -.800 | -.900 | -.9 | -.900 |
| CX00004 | 10.000 | -.800 | 10.000 | 3.0 | 10.000 |
| CX00005 | 30.000 | -.800 | -.900 | 13.0 | 10.000 |
| CX00006 | 15.000 | -.800 | 4.000 | 14.0 | 65.000 |
| CX00007 | 10.000 | -.800 | 3.000 | 10.0 | 15.000 |
| CX00008 | 10.000 | -.800 | -.900 | 14.0 | -.900 |
| CX00009 | 15.000 | -.800 | -.900 | 6.0 | 10.000 |
| CX00010 | 15.000 | -.800 | -.900 | 6.0 | 10.000 |
| CX00011 | 15.000 | -.800 | 10.000 | 10.0 | 25.000 |
| CX00012 | 15.000 | -.800 | -.900 | 8.0 | 30.000 |
| CX00013 | 20.000 | -.800 | -.900 | 4.0 | 30.000 |
| CX00014 | 10.000 | -.800 | -.900 | 6.0 | 5.000 |
| CX00015 | 15.000 | -.800 | -.900 | 8.0 | 25.000 |
| CX00016 | 20.000 | -.800 | -.900 | 6.0 | 30.000 |
| CX00017 | 15.000 | -.800 | -.900 | 5.0 | 5.000 |
| CX00018 | 15.000 | -.800 | 4.000 | 5.0 | -.900 |
| CX00019 | 15.000 | -.800 | -.900 | 5.0 | -.900 |
| CX00020 | 10.000 | -.800 | 4.000 | 9.0 | 10.000 |
| CX00021 | 90.000 | -.800 | -.900 | 5.0 | 10.000 |
| CX00022 | 15.000 | -.800 | -.900 | 6.0 | 10.000 |
| CX00023 | 15.000 | -.800 | -.900 | 6.0 | 5.000 |
| CX00024 | 15.000 | -.800 | -.900 | -.9 | -.900 |
| CX00025 | 15.000 | -.800 | -.900 | 6.0 | -.900 |
| CX00026 | 10.000 | -.800 | -.900 | 7.0 | 15.000 |
| CX00027 | 20.000 | -.800 | -.900 | 4.0 | 10.000 |
| CX00028 | 5.000 | -.800 | 17.000 | 6.0 | 300.000 |
| CX00029 | 10.000 | -.800 | -.900 | 4.0 | -.900 |
| CX00030 | 90.000 | -.800 | -.900 | 6.0 | 20.000 |
| CX00031 | 65.000 | -.800 | -.900 | 8.0 | 5.000 |
| CX00032 | 10.000 | -.800 | 3.000 | 3.0 | 5.000 |
| CX00033 | 15.000 | -.800 | -.900 | 8.0 | 25.000 |
| CX00034 | 15.000 | -.800 | -.900 | 7.0 | 5.000 |
| CX00035 | 70.000 | -.800 | 6.000 | 6.0 | 20.000 |
| CX00036 | -.900 | -.800 | -.900 | 5.0 | -.900 |
| CX00037 | 5.000 | -.800 | -.900 | 6.0 | 10.000 |
| C012502 | -.900 | -.800 | -.900 | 5.0 | 120.000 |
| C012701 | .056% | -.800 | -.900 | 5.0 | .024% |
| C012702 | .130% | -.800 | 16.000 | -.9 | .015% |
| C012703 | .010% | -.800 | 20.000 | 3.0 | .006% |
| C012704 | .285% | -.800 | 13.000 | -.9 | .038% |
| C012705 | .071% | -.800 | -.900 | -.9 | .007% |
| C012706 | 1.150% | -.800 | 4.000 | 3.0 | 1.600% |
| C012707 | .135% | -.800 | -.900 | -.9 | .040% |
| C012708 | .069% | -.800 | 4.000 | -.9 | .004% |
| C012709 | .036% | -.800 | 7.000 | -.9 | .003% |
| C012710 | .026% | -.800 | 14.000 | -.9 | .007% |
| C012711 | .002% | -.800 | -.900 | 8.0 | .004% |
| C012713 | .685% | -.800 | 4.000 | 3.0 | .016% |
| C012714 | -.900 | -.800 | -.900 | 5.0 | -.900 |

TABLE AD-17 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | HG (PPM) | MO (PPM) | NI (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C012715 | 587500. | 3380390. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .012% | -.80 | -.900 | .006% |
| C012743 | 586900. | 3380800. | 34 | 72 | -.90 | -.8 | .006 | -.80 | -.800 | -.8 | -.900 | .028% | -.80 | .002% | -.900 |
| C012744 | 573950. | 3382800. | 34 | 72 | .15 | -.8 | .010 | -.80 | -.800 | -.8 | .030% | .325% | -.80 | .008% | .004% |
| C012745 | 578250. | 3385800. | 30 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .006% | -.80 | .001% | .002% |
| C012746 | 586750. | 3380400. | 32 | 72 | .27 | -.8 | .016 | -.80 | -.800 | -.8 | .004% | .026% | -.80 | -.900 | .002% |
| C012747 | 586500. | 3380100. | 34 | 72 | .07 | -.8 | -.900 | -.80 | -.800 | -.8 | -.900 | .022% | -.80 | -.900 | -.900 |
| C012748 | 586150. | 3379100. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .048% | -.80 | -.900 | -.900 |
| C012749 | 586150. | 3379100. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .012% | -.80 | .001% | -.900 |
| C012750 | 586400. | 3379150. | 34 | 72 | -.90 | -.8 | .013 | -.80 | -.800 | -.8 | .006% | .043% | -.80 | -.900 | .010% |
| C012751 | 586400. | 3379150. | 34 | 72 | -.90 | -.8 | .005 | -.80 | -.800 | -.8 | .002% | .004% | -.80 | -.900 | .002% |
| C013761 | 577190. | 3383390. | 34 | 72 | .85 | -.8 | .870 | -.80 | -.800 | -.8 | .435% | .020% | -.80 | .009% | .099% |
| C013762 | 577340. | 3383320. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .105% | -.80 | -.900 | .004% |
| C013763 | 577460. | 3383330. | 34 | 72 | .12 | -.8 | .290 | -.80 | -.800 | -.8 | -.900 | .028% | -.80 | -.900 | -.900 |
| C013764 | 582900. | 3395650. | 34 | 71 | -.80 | .6 | -.800 | -.90 | 50.000 | -.8 | 5.000 | 10.000 | -.90 | 2.000 | 15.000 |
| C013765 | 594000. | 3387320. | 34 | 71 | -.80 | 4.9 | -.800 | -.90 | 2150.000 | -.8 | -.900 | 2150.000 | -.90 | -.900 | -.900 |
| C013766 | 596430. | 3390750. | 34 | 71 | -.80 | 2.7 | -.800 | -.90 | 360.000 | -.8 | -.900 | 60.000 | -.90 | 36.000 | -.900 |
| C013767 | 587820. | 3382640. | 34 | 71 | -.80 | .6 | -.800 | -.90 | 40.000 | -.8 | 20.000 | 360.000 | -.90 | -.900 | -.900 |
| C014009 | 592050. | 3388100. | 34 | 72 | .62 | -.8 | -.900 | -.80 | -.800 | -.8 | .002% | .175% | -.90 | .002% | .002% |
| C014010 | 592050. | 3388200. | 34 | 72 | .65 | -.8 | -.900 | -.80 | -.800 | -.8 | .097% | .955% | -.90 | .001% | .006% |
| C014011 | 592050. | 3391400. | 34 | 72 | -.90 | -.8 | .034 | -.80 | -.800 | -.8 | .006% | -.900 | -.90 | .005% | -.900 |
| C014012 | 594650. | 3391100. | 34 | 72 | .06 | -.8 | -.900 | -.80 | -.800 | -.8 | -.900 | .044% | -.90 | .003% | -.900 |
| C014013 | 592250. | 3386550. | 34 | 71 | -.80 | .4 | -.800 | -.90 | 130.000 | -.8 | -.900 | 105.000 | -.90 | 555.000 | -.900 |
| C014154 | 582800. | 3395900. | 34 | 71 | -.80 | 1.0 | -.800 | .04 | 10.000 | -.8 | -.900 | 80.000 | -.90 | -.900 | 10.000 |
| C014155 | 582600. | 3396000. | 34 | 71 | -.80 | 1.5 | -.800 | .07 | 20.000 | -.8 | -.900 | 115.000 | -.90 | -.900 | 10.000 |
| C014156 | 583400. | 3391600. | 34 | 71 | -.80 | 1.2 | -.800 | -.90 | 110.000 | -.8 | 5.000 | 50.000 | -.90 | -.900 | 15.000 |
| C014157 | 586000. | 3393400. | 30 | 72 | -.90 | -.8 | .470 | -.80 | -.800 | -.8 | .089% | .067% | -.90 | .002% | .008% |
| C014158 | 586000. | 3393400. | 32 | 72 | -.90 | -.8 | .420 | -.80 | -.800 | -.8 | .150% | .125% | -.90 | .002% | .014% |
| C014159 | 586000. | 3393400. | 34 | 72 | -.90 | -.8 | .920 | -.80 | -.800 | -.8 | .155% | .120% | -.90 | .004% | .034% |
| C014160 | 586000. | 3393200. | 32 | 71 | -.80 | -.9 | -.800 | .04 | 750.000 | -.8 | 10.000 | 15.000 | -.90 | -.900 | 5.000 |
| C014168 | 593100. | 3390600. | 34 | 72 | .32 | -.8 | -.900 | -.80 | -.800 | -.8 | .002% | .350% | -.90 | -.900 | -.900 |
| C014169 | 594300. | 3391000. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .061% | -.90 | .014% | -.900 |
| C014170 | 586500. | 3380100. | 30 | 71 | -.80 | 3.8 | -.800 | .25 | 3200.000 | -.8 | 10.000 | 260.000 | -.90 | -.900 | -.900 |
| C014171 | 586800. | 3380600. | 32 | 71 | -.80 | .2 | -.800 | -.90 | 30.000 | -.8 | -.900 | 20.000 | -.90 | -.900 | -.900 |
| C014172 | 586200. | 3380600. | 32 | 71 | -.80 | .2 | -.800 | -.90 | 90.000 | -.8 | 5.000 | 105.000 | -.90 | -.900 | 5.000 |
| C014173 | 586400. | 3381200. | 32 | 72 | -.90 | -.9 | -.900 | -.90 | -.800 | -.8 | -.900 | .016% | -.90 | -.900 | -.900 |
| C014174 | 583900. | 3378500. | 34 | 71 | -.80 | 990.0 | -.800 | .44 | 109000.000 | -.8 | 115.000 | 1700.000 | -.90 | -.900 | -.900 |
| C014290 | 578250. | 3386050. | 32 | 72 | 5.01 | -.8 | .280 | -.80 | -.900 | -.8 | .002% | .230% | -.90 | -.900 | -.900 |
| C014436 | 576200. | 3387900. | 34 | 72 | 3.52 | -.8 | 1.140 | -.80 | 17.000% | 920.0 | -.800 | .175% | -.90 | -.900 | -.800 |
| C014437 | 576100. | 3388350. | 34 | 72 | 3.04 | -.8 | .420 | -.80 | 5.500% | 100.0 | -.800 | .135% | -.90 | -.900 | -.800 |
| C014457 | 593750. | 3386500. | 34 | 71 | -.80 | 6.8 | -.800 | -.90 | 620.000 | -.8 | 10.000 | 2750.000 | -.90 | -.900 | -.900 |
| C014458 | 593725. | 3386225. | 34 | 71 | -.80 | 1.1 | -.800 | .03 | 2350.000 | -.8 | 5.000 | 50.000 | -.90 | 4.000 | -.900 |
| C014459 | 602100. | 3391200. | 34 | 71 | -.80 | -.9 | -.800 | .03 | 20.000 | -.8 | 5.000 | 5.000 | -.90 | 2.000 | -.900 |
| C014465 | 593700. | 3386000. | 34 | 71 | -.80 | 5.7 | -.800 | -.90 | 1850.000 | -.8 | 15.000 | 2900.000 | -.90 | -.900 | -.900 |

TABLE AD-17 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | PB (PPM) | SB (PPM) | SN (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|
| C012715 | -.900 | -.800 | -.900 | 3.0 | .005% |
| C012743 | -.900 | -.800 | -.900 | 22.0 | .008% |
| C012744 | -.900 | -.800 | -.900 | 5.0 | .011% |
| C012745 | -.900 | -.800 | -.900 | 4.0 | .003% |
| C012746 | -.900 | -.800 | -.900 | 4.0 | .007% |
| C012747 | -.900 | -.800 | -.900 | 7.0 | .004% |
| C012748 | -.900 | -.800 | -.900 | 9.0 | -.900 |
| C012749 | -.900 | -.800 | -.900 | 6.0 | .005% |
| C012750 | -.900 | -.800 | -.900 | 65.0 | .013% |
| C012751 | -.900 | -.800 | -.900 | 48.0 | .010% |
| C013761 | .024% | -.800 | -.900 | 3.0 | .003% |
| C013762 | -.900 | -.800 | -.900 | 4.0 | .007% |
| C013763 | -.900 | -.800 | -.900 | 3.0 | .003% |
| C013764 | 40.000 | -.800 | -.900 | 4.0 | 120.000 |
| C013765 | -.900 | -.800 | 11.000 | 16.0 | 155.000 |
| C013766 | 15.000 | -.800 | -.900 | 15.0 | 10.000 |
| C013767 | -.900 | -.800 | -.900 | 3.0 | 55.000 |
| C014009 | .195% | -.800 | -.900 | 8.0 | .044% |
| C014010 | .006% | -.800 | 28.000 | 3.0 | .039% |
| C014011 | .012% | -.800 | -.900 | -.9 | -.900 |
| C014012 | .016% | -.800 | -.900 | 7.0 | .004% |
| C014013 | 5.000 | -.800 | -.900 | 19.0 | 90.000 |
| C014154 | 10.000 | -.800 | -.900 | 3.0 | 205.000 |
| C014155 | 30.000 | -.800 | -.900 | 5.0 | 460.000 |
| C014156 | 5.000 | -.800 | -.900 | 5.0 | 160.000 |
| C014157 | .004% | -.800 | -.900 | -.9 | .007% |
| C014158 | .004% | -.800 | -.900 | 3.0 | .003% |
| C014159 | -.900 | -.800 | -.900 | 6.0 | -.900 |
| C014160 | -.900 | -.800 | -.900 | 4.0 | 50.000 |
| C014168 | .002% | -.800 | 6.000 | 4.0 | .039% |
| C014169 | .004% | -.800 | 7.000 | 8.0 | .002% |
| C014170 | 10.000 | -.800 | 4.000 | 4.0 | 60.000 |
| C014171 | 5.000 | -.800 | -.900 | 6.0 | 60.000 |
| C014172 | 5.000 | -.800 | -.900 | 5.0 | 60.000 |
| C014173 | .004% | -.800 | -.900 | 5.0 | .014% |
| C014174 | 5350.000 | -.800 | 8.000 | 12.0 | 1600.000 |
| C014290 | .066% | .210% | 11.000 | -.9 | .008% |
| C014436 | .095% | .057% | -.800 | -.9 | .047% |
| C014437 | .043% | .155% | -.800 | 3.0 | .041% |
| C014457 | 10.000 | -.800 | 3.000 | 14.0 | 105.000 |
| C014458 | 20.000 | -.800 | -.900 | 5.0 | 5.000 |
| C014459 | -.900 | -.800 | -.900 | 4.0 | 30.000 |
| C014465 | 5.000 | -.800 | 3.000 | 3.0 | 80.000 |

TABLE AD-18

KANTISHNA HILLS SOIL SAMPLES

ANALYTICAL RESULTS

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B001006 | 354180. | 3493450. | 20 71 | .5 | -.90 | 25.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 45.0 | 9.0 | -.8 | -.8 |
| B001007 | 354180. | 3493450. | 20 71 | .8 | -.90 | 85.0 | 2.0 | -.8 | 185.0 | -.9 | -.8 | 405.0 | 75.0 | -.8 | -.8 |
| B001008 | 354180. | 3493450. | 20 71 | .4 | -.90 | 70.0 | 1.0 | -.8 | 175.0 | -.9 | -.8 | 215.0 | 38.0 | -.8 | -.8 |
| B001009 | 351650. | 3495000. | 20 71 | 2.7 | .12 | 3500.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 1900.0 | 110.0 | -.8 | -.8 |
| B001010 | 375100. | 3509700. | 20 71 | 1.1 | -.90 | 45.0 | 20.0 | -.8 | 135.0 | 8.0 | -.8 | 520.0 | 17.0 | -.8 | -.8 |
| B001042 | 357500. | 3484900. | 20 71 | .4 | -.90 | 920.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 160.0 | 120.0 | -.8 | -.8 |
| B001043 | 357900. | 3484550. | 20 71 | .5 | .02 | 285.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 870.0 | 175.0 | -.8 | -.8 |
| B001044 | 354200. | 3484000. | 20 71 | 4.7 | 1.90 | 8550.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 115.0 | 165.0 | -.8 | -.8 |
| B003501 | 419203. | 3557745. | 20 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003502 | 419149. | 3557827. | 20 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003503 | 419149. | 3557910. | 20 71 | .2 | -.90 | 30.0 | 1.0 | -.8 | 55.0 | 2.0 | -.8 | 65.0 | -.9 | -.8 | -.8 |
| B003504 | 418041. | 3558993. | 20 71 | .2 | -.90 | 35.0 | 2.0 | -.8 | 75.0 | 2.0 | -.8 | 95.0 | -.9 | -.8 | -.8 |
| B003505 | 418987. | 3557075. | 20 71 | -.9 | -.90 | 20.0 | 1.0 | -.8 | 90.0 | 2.0 | -.8 | 50.0 | -.9 | -.8 | -.8 |
| B003507 | 418413. | 3556247. | 20 71 | .2 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003508 | 418467. | 3556166. | 20 71 | .2 | .02 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B003509 | 418521. | 3556085. | 20 71 | -.9 | .19 | 65.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | 12.0 | -.8 | -.8 |
| B003510 | 418575. | 3556005. | 20 71 | .2 | -.90 | 5.0 | -.9 | 10.0 | 20.0 | -.9 | 25.0 | 25.0 | 4.0 | -.9 | 95.0 |
| B003511 | 418629. | 3555924. | 20 71 | -.9 | -.90 | 20.0 | -.9 | 20.0 | 30.0 | -.9 | 40.0 | 20.0 | 12.0 | -.9 | 120.0 |
| B003512 | 418684. | 3555843. | 20 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 35.0 | 26.0 | -.8 | -.8 |
| B003513 | 418738. | 3555762. | 20 71 | -.9 | -.90 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 16.0 | -.8 | -.8 |
| B003514 | 418742. | 3556421. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B003515 | 418798. | 3556342. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003516 | 418854. | 3556262. | 20 71 | -.9 | .43 | 120.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| B003517 | 418910. | 3556182. | 20 71 | -.9 | -.90 | 10.0 | -.9 | 15.0 | 30.0 | -.9 | 35.0 | 35.0 | 8.0 | -.9 | 105.0 |
| B003518 | 418045. | 3558024. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003519 | 417987. | 3558103. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | -.8 |
| B003520 | 417930. | 3558183. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003521 | 417873. | 3558262. | 20 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003522 | 417815. | 3558341. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | -.8 |
| B003523 | 417758. | 3558420. | 20 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003524 | 418228. | 3559233. | 20 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003525 | 418174. | 3559316. | 20 71 | -.9 | -.90 | 20.0 | 1.0 | -.8 | 65.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B003526 | 418120. | 3559398. | 20 71 | .4 | -.90 | 25.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003527 | 418066. | 3559481. | 20 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003528 | 418012. | 3559564. | 20 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | -.8 |
| B003529 | 417957. | 3559646. | 20 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | -.8 |
| B003530 | 417903. | 3559729. | 20 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003531 | 417849. | 3559812. | 20 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003532 | 417795. | 3559894. | 20 71 | .8 | -.90 | 15.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003533 | 417741. | 3559977. | 20 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003534 | 416896. | 3559608. | 20 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 70.0 | 4.0 | -.8 | -.8 |
| B003535 | 416954. | 3559529. | 20 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | -.8 |
| B003536 | 417011. | 3559449. | 20 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B003537 | 417069. | 3559370. | 20 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B003538 | 417126. | 3559291. | 20 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B003539 | 417184. | 3559212. | 20 71 | -.9 | -.90 | 25.0 | -.9 | 15.0 | 50.0 | -.9 | 30.0 | 30.0 | 40.0 | -.9 | 115.0 |
| B003540 | 417241. | 3559133. | 20 71 | 1.5 | -.90 | 10.0 | -.9 | -.9 | 70.0 | -.9 | 30.0 | 30.0 | 2.0 | -.9 | 95.0 |
| B003541 | 417298. | 3559054. | 20 71 | .4 | -.90 | 20.0 | -.9 | -.9 | 105.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003542 | 417356. | 3558974. | 20 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B003543 | 417413. | 3558895. | 20 71 | .4 | .44 | 10.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | -.8 |
| B003544 | 417471. | 3558816. | 20 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B001006 | 5.0 | 100.0 |
| B001007 | 4.0 | 185.0 |
| B001008 | 6.0 | 340.0 |
| B001009 | -.9 | 1000.0 |
| B001010 | 4.0 | 95.0 |
| B001042 | 5.0 | 160.0 |
| B001043 | 3.0 | 3150.0 |
| B001044 | 6.0 | 330.0 |
| B003501 | 4.0 | 70.0 |
| B003502 | 4.0 | 65.0 |
| B003503 | 3.0 | 60.0 |
| B003504 | 3.0 | 75.0 |
| B003505 | 4.0 | 50.0 |
| B003507 | 4.0 | 85.0 |
| B003508 | 4.0 | 80.0 |
| B003509 | 4.0 | 75.0 |
| B003510 | 4.0 | 85.0 |
| B003511 | 5.0 | 95.0 |
| B003512 | 4.0 | 90.0 |
| B003513 | 5.0 | 90.0 |
| B003514 | 4.0 | 90.0 |
| B003515 | 5.0 | 80.0 |
| B003516 | 6.0 | 90.0 |
| B003517 | 5.0 | 95.0 |
| B003518 | 4.0 | 100.0 |
| B003519 | 3.0 | 120.0 |
| B003520 | 5.0 | 95.0 |
| B003521 | 4.0 | 110.0 |
| B003522 | 5.0 | 90.0 |
| B003523 | 4.0 | 85.0 |
| B003524 | 5.0 | 110.0 |
| B003525 | 6.0 | 115.0 |
| B003526 | 4.0 | 105.0 |
| B003527 | 6.0 | 100.0 |
| B003528 | 6.0 | 130.0 |
| B003529 | 5.0 | 130.0 |
| B003530 | 8.0 | 155.0 |
| B003531 | 7.0 | 135.0 |
| B003532 | 7.0 | 125.0 |
| B003533 | 6.0 | 115.0 |
| B003534 | 6.0 | 140.0 |
| B003535 | 5.0 | 115.0 |
| B003536 | 5.0 | 115.0 |
| B003537 | 6.0 | 105.0 |
| B003538 | 5.0 | 90.0 |
| B003539 | 6.0 | 85.0 |
| B003540 | 5.0 | 90.0 |
| B003541 | 6.0 | 90.0 |
| B003542 | 5.0 | 100.0 |
| B003543 | 9.0 | 85.0 |
| B003544 | 7.0 | 90.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B003545 | 417528. | 3558737. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003547 | 417586. | 3558658. | 20 | 71 | -.9 | .32 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003548 | 417643. | 3558578. | 20 | 71 | -.9 | -.90 | -.9 | 1.0 | -.8 | 50.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | -.8 |
| B003549 | 417700. | 3558499. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003550 | 418106. | 3558652. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | 30.0 | 35.0 | -.9 | 60.0 | 25.0 | -.9 | -.9 | 105.0 |
| B003551 | 418068. | 3558692. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 65.0 | 4.0 | -.8 | -.8 |
| B003553 | 418124. | 3558612. | 20 | 71 | -.9 | .03 | -.9 | -.9 | 30.0 | 60.0 | -.9 | 90.0 | 15.0 | 4.0 | -.9 | 105.0 |
| B003554 | 418180. | 3558531. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | 20.0 | 55.0 | -.9 | 50.0 | 25.0 | 2.0 | -.9 | 110.0 |
| B003555 | 418237. | 3558451. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003556 | 418293. | 3558371. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B003557 | 418349. | 3558290. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003558 | 418405. | 3558210. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003559 | 418461. | 3558130. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003560 | 418518. | 3558050. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003561 | 418574. | 3557969. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003562 | 418630. | 3557889. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003563 | 418686. | 3557809. | 20 | 71 | .6 | -.90 | 10.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003564 | 418742. | 3557729. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 65.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003565 | 418799. | 3557648. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| B003566 | 418855. | 3557568. | 20 | 71 | -.9 | -.90 | 150.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | -.8 |
| B003567 | 418911. | 3557488. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003568 | 418967. | 3557407. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003569 | 419024. | 3557327. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B003570 | 419080. | 3557247. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 100.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | -.8 |
| B003571 | 416786. | 3558668. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003572 | 416840. | 3558588. | 20 | 71 | 2.5 | -.90 | 70.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003573 | 416895. | 3558507. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 90.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003574 | 416949. | 3558426. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003575 | 417003. | 3558346. | 20 | 71 | -.9 | .03 | 35.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B003576 | 417057. | 3558265. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003577 | 417111. | 3558184. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003578 | 417166. | 3558103. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B003579 | 417220. | 3558023. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003580 | 417274. | 3557942. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003581 | 417328. | 3557861. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003582 | 417382. | 3557480. | 20 | 71 | .4 | -.90 | 20.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B003583 | 417432. | 3557700. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003584 | 417491. | 3557619. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B003585 | 417545. | 3557538. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003586 | 417599. | 3557458. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003587 | 417654. | 3557377. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | 20.0 | 50.0 | -.9 | 65.0 | 20.0 | -.9 | -.9 | 105.0 |
| B003588 | 417708. | 3557296. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003589 | 417762. | 3557215. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | 15.0 | 45.0 | -.9 | 40.0 | 25.0 | -.9 | -.9 | 100.0 |
| B003590 | 417816. | 3557135. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.9 | 75.0 | -.9 | 20.0 | 35.0 | -.9 | -.9 | 100.0 |
| B003591 | 417870. | 3557054. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003592 | 417925. | 3556973. | 20 | 71 | -.9 | -.90 | 20.0 | 1.0 | -.8 | 120.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003593 | 417979. | 3556893. | 20 | 71 | -.9 | .19 | 20.0 | 1.0 | -.8 | 105.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | -.8 |
| B003594 | 418033. | 3556812. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003595 | 418087. | 3556731. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003596 | 418141. | 3556650. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003597 | 418196. | 3556570. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B003545 | 2.0 | 95.0 |
| B003547 | 3.0 | 90.0 |
| B003548 | 4.0 | 95.0 |
| B003549 | 7.0 | 85.0 |
| B003550 | 4.0 | 110.0 |
| B003551 | 5.0 | 85.0 |
| B003553 | 4.0 | 125.0 |
| B003554 | 3.0 | 105.0 |
| B003555 | 5.0 | 75.0 |
| B003556 | 3.0 | 95.0 |
| B003557 | 3.0 | 75.0 |
| B003558 | 3.0 | 85.0 |
| B003559 | 3.0 | 95.0 |
| B003560 | 3.0 | 90.0 |
| B003561 | 2.0 | 90.0 |
| B003562 | 3.0 | 75.0 |
| B003563 | 3.0 | 70.0 |
| B003564 | -.9 | 80.0 |
| B003565 | 2.0 | 95.0 |
| B003566 | 5.0 | 105.0 |
| B003567 | 4.0 | 65.0 |
| B003568 | 3.0 | 60.0 |
| B003569 | 3.0 | 65.0 |
| B003570 | 8.0 | 115.0 |
| B003571 | 3.0 | 90.0 |
| B003572 | 3.0 | 80.0 |
| B003573 | -.9 | 120.0 |
| B003574 | 6.0 | 50.0 |
| B003575 | 8.0 | 60.0 |
| B003576 | 3.0 | 70.0 |
| B003577 | 6.0 | 60.0 |
| B003578 | -.9 | 65.0 |
| B003579 | 4.0 | 80.0 |
| B003580 | 8.0 | 75.0 |
| B003581 | 3.0 | 85.0 |
| B003582 | 2.0 | 70.0 |
| B003583 | -.9 | 90.0 |
| B003584 | 4.0 | 65.0 |
| B003585 | -.9 | 85.0 |
| B003586 | -.9 | 95.0 |
| B003587 | 3.0 | 105.0 |
| B003588 | 3.0 | 105.0 |
| B003589 | -.9 | 100.0 |
| B003590 | 3.0 | 55.0 |
| B003591 | -.9 | 65.0 |
| B003592 | -.9 | 70.0 |
| B003593 | -.9 | 85.0 |
| B003594 | 5.0 | 60.0 |
| B003595 | -.9 | 70.0 |
| B003596 | -.9 | 75.0 |
| B003597 | -.9 | 105.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B003598 | 418250. | 3556489. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003599 | 418304. | 3556408. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003600 | 418358. | 3556327. | 20 | 71 | -.9 | .02 | 10.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B003702 | 391150. | 3512400. | 20 | 71 | .6 | -.90 | 230.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 30.0 | 50.0 | -.8 | -.8 |
| B003703 | 394650. | 3511325. | 20 | 71 | .8 | .03 | 135.0 | 4.0 | -.8 | 65.0 | -.9 | -.8 | 240.0 | 8.0 | -.8 | -.8 |
| B003704 | 394275. | 3510425. | 20 | 71 | .8 | .02 | 120.0 | -.9 | -.8 | 60.0 | 4.0 | -.8 | 145.0 | 34.0 | -.8 | -.8 |
| B003705 | 399775. | 3518825. | 20 | 71 | .4 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.9 | 4.0 | -.8 | -.8 |
| B003708 | 372225. | 3496750. | 20 | 71 | 2.7 | .12 | 560.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 55.0 | 28.0 | -.8 | -.8 |
| B003716 | 348637. | 3488684. | 20 | 71 | 5.2 | .63 | 790.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 25.0 | 9.0 | -.8 | -.8 |
| B003717 | 348581. | 3488767. | 20 | 71 | 3.8 | .34 | 205.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 9.0 | -.8 | -.8 |
| B003718 | 348525. | 3488850. | 20 | 71 | 1.2 | .05 | 295.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B003719 | 348918. | 3488831. | 20 | 71 | .4 | .10 | 570.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B003720 | 348862. | 3488914. | 20 | 71 | -.9 | -.90 | 110.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| B003721 | 348800. | 3488997. | 20 | 71 | -.9 | .10 | 195.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B003722 | 348750. | 3489080. | 20 | 71 | .2 | .04 | 130.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 10.0 | 7.0 | -.8 | -.8 |
| B003723 | 348946. | 3488790. | 20 | 71 | -.9 | -.90 | 80.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B003724 | 348974. | 3488749. | 20 | 71 | 1.0 | .02 | 140.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003725 | 349002. | 3488707. | 20 | 71 | .2 | .09 | 90.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B003726 | 349029. | 3488666. | 20 | 71 | .4 | .18 | 485.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B003727 | 349057. | 3488624. | 20 | 71 | .8 | .08 | 230.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B003728 | 349085. | 3488583. | 20 | 71 | .2 | .09 | 310.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 24.0 | -.8 | -.8 |
| B003729 | 349113. | 3488542. | 20 | 71 | .2 | .13 | 365.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 22.0 | -.8 | -.8 |
| B003730 | 349141. | 3488500. | 20 | 71 | -.9 | .05 | 165.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| B003731 | 349168. | 3488459. | 20 | 71 | -.9 | .08 | 75.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B003732 | 349197. | 3488417. | 20 | 71 | .2 | -.90 | 30.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B003733 | 349225. | 3488376. | 20 | 71 | -.9 | -.90 | 175.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B003734 | 349253. | 3488335. | 20 | 71 | -.9 | .03 | 95.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003735 | 349309. | 3488252. | 20 | 71 | -.9 | .08 | 180.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | -.8 |
| B003736 | 349364. | 3488169. | 20 | 71 | .8 | .05 | 120.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 50.0 | 8.0 | -.8 | -.8 |
| B003737 | 349420. | 3488086. | 20 | 71 | .4 | -.90 | 70.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B003738 | 349870. | 3488589. | 20 | 71 | .4 | .04 | 110.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 8.0 | -.8 | -.8 |
| B003739 | 349814. | 3488566. | 20 | 71 | 1.0 | .03 | 35.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B003740 | 349758. | 3488589. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B003741 | 349703. | 3488672. | 20 | 71 | .6 | .02 | 25.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 5.0 | 8.0 | -.8 | -.8 |
| B003742 | 349675. | 3488713. | 20 | 71 | -.9 | .31 | 40.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 5.0 | 9.0 | -.8 | -.8 |
| B003743 | 349647. | 3488754. | 20 | 71 | .2 | .06 | 25.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| B003744 | 349619. | 3488796. | 20 | 71 | .2 | -.90 | 50.0 | -.9 | 35.0 | 50.0 | -.9 | -.9 | 20.0 | 6.0 | -.9 | 155.0 |
| B003745 | 349591. | 3488837. | 20 | 71 | -.9 | .69 | 45.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| B003746 | 349563. | 3488879. | 20 | 71 | .2 | .08 | 50.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B003747 | 349535. | 3488920. | 20 | 71 | .8 | -.90 | 60.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B003748 | 349507. | 3488961. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B003749 | 349479. | 3489003. | 20 | 71 | -.9 | .06 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B003750 | 349451. | 3489044. | 20 | 71 | -.9 | .09 | 40.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B003751 | 349423. | 3489086. | 20 | 71 | 1.0 | .05 | 30.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003752 | 349396. | 3489127. | 20 | 71 | .2 | .34 | 385.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| B003753 | 349368. | 3489168. | 20 | 71 | .6 | .80 | 115.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B003754 | 349312. | 3489251. | 20 | 71 | 1.7 | .09 | 405.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B003755 | 349256. | 3489334. | 20 | 71 | .2 | -.90 | 175.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B003756 | 349200. | 3489500. | 20 | 71 | 1.0 | .03 | 1850.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 40.0 | 7.0 | -.8 | -.8 |
| B003757 | 419366. | 3557497. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003758 | 419179. | 3557414. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 14.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B003598 | -.9 | 100.0 |
| B003599 | -.9 | 105.0 |
| B003600 | 2.0 | 90.0 |
| B003702 | 5.0 | 180.0 |
| B003703 | 3.0 | 360.0 |
| B003704 | 4.0 | 275.0 |
| B003705 | 2.0 | 30.0 |
| B003708 | 8.0 | 180.0 |
| B003716 | 5.0 | 100.0 |
| B003717 | 6.0 | 75.0 |
| B003718 | 4.0 | 75.0 |
| B003719 | 6.0 | 90.0 |
| B003720 | 5.0 | 50.0 |
| B003721 | 6.0 | 55.0 |
| B003722 | 5.0 | 75.0 |
| B003723 | 6.0 | 85.0 |
| B003724 | 5.0 | 85.0 |
| B003725 | 5.0 | 90.0 |
| B003726 | 6.0 | 80.0 |
| B003727 | 6.0 | 85.0 |
| B003728 | 5.0 | 80.0 |
| B003729 | 5.0 | 100.0 |
| B003730 | 4.0 | 70.0 |
| B003731 | 4.0 | 70.0 |
| B003732 | 4.0 | 30.0 |
| B003733 | 4.0 | 80.0 |
| B003734 | 6.0 | 55.0 |
| B003735 | 5.0 | 60.0 |
| B003736 | 5.0 | 125.0 |
| B003737 | 4.0 | 90.0 |
| B003738 | 5.0 | 90.0 |
| B003739 | 5.0 | 110.0 |
| B003740 | 6.0 | 135.0 |
| B003741 | 5.0 | 110.0 |
| B003742 | 4.0 | 105.0 |
| B003743 | 4.0 | 135.0 |
| B003744 | 4.0 | 140.0 |
| B003745 | 5.0 | 105.0 |
| B003746 | 7.0 | 155.0 |
| B003747 | 5.0 | 60.0 |
| B003748 | 5.0 | 30.0 |
| B003749 | 7.0 | 120.0 |
| B003750 | 6.0 | 65.0 |
| B003751 | 5.0 | 45.0 |
| B003752 | 7.0 | 75.0 |
| B003753 | 5.0 | 175.0 |
| B003754 | 6.0 | 135.0 |
| B003755 | 4.0 | 55.0 |
| B003756 | 4.0 | 120.0 |
| B003757 | 5.0 | 75.0 |
| B003758 | 3.0 | 80.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B003759 | 419474. | 3557331. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 10.0 | -.8 | -.8 |
| B003760 | 419528. | 3557249. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 20.0 | -.8 | -.8 |
| B003761 | 419582. | 3557166. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 36.0 | -.8 | -.8 |
| B003762 | 419637. | 3557083. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B003763 | 418987. | 3558075. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 70.0 | -.9 | -.8 | 40.0 | 4.0 | -.8 | -.8 |
| B003764 | 418932. | 3558158. | 20 | 71 | -.9 | .03 | 5.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 6.0 | -.8 | -.8 |
| B003765 | 418878. | 3558241. | 20 | 71 | .2 | .08 | 10.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003766 | 418824. | 3558323. | 20 | 71 | -.9 | .03 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003767 | 418770. | 3558406. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 75.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003768 | 418716. | 3558489. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | -.8 |
| B003769 | 418662. | 3558872. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003770 | 418607. | 3558654. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003771 | 418553. | 3558737. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | -.8 |
| B003772 | 418499. | 3558820. | 20 | 71 | -.9 | .06 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003773 | 418445. | 3558902. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003774 | 418391. | 3558985. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003775 | 418337. | 3559068. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003776 | 418282. | 3559150. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003777 | 419136. | 3557167. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 10.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B003778 | 419192. | 3557086. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 17.0 | -.8 | -.8 |
| B003779 | 419248. | 3557006. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 15.0 | -.8 | -.8 |
| B003780 | 419305. | 3556926. | 20 | 71 | -.9 | .20 | 5.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| B003781 | 418900. | 3556837. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | 10.0 | 30.0 | -.9 | 40.0 | 20.0 | 6.0 | -.9 | 75.0 |
| B003782 | 418964. | 3556757. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | 15.0 | -.8 | -.8 |
| B003783 | 419021. | 3556678. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 55.0 | 6.0 | -.8 | -.8 |
| B003784 | 419079. | 3556599. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B003785 | 419136. | 3556520. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| B003786 | 419193. | 3556441. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 9.0 | -.8 | -.8 |
| B003787 | 418849. | 3556916. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B003788 | 418791. | 3556995. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003789 | 418734. | 3557074. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003790 | 418677. | 3557153. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | 25.0 | 55.0 | -.9 | 45.0 | 30.0 | -.9 | -.9 | 115.0 |
| B003791 | 418619. | 3557232. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003792 | 418562. | 3557312. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B003793 | 418504. | 3557391. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003794 | 418447. | 3557470. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003795 | 418389. | 3557249. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B003796 | 418332. | 3557628. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 90.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003797 | 418275. | 3557708. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | 20.0 | 50.0 | -.9 | 70.0 | 20.0 | -.9 | -.9 | 115.0 |
| B003798 | 418217. | 3557787. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003799 | 418160. | 3557866. | 20 | 71 | .2 | .12 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B003800 | 418102. | 3557945. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B003801 | 354527. | 3493033. | 20 | 71 | .2 | -.90 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 80.0 | 20.0 | -.8 | -.8 |
| B003803 | 354641. | 3492853. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | 16.0 | -.8 | -.8 |
| B003804 | 354676. | 3492764. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 70.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B003806 | 354745. | 3492585. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B003807 | 354780. | 3492495. | 20 | 71 | .8 | -.90 | 15.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003808 | 354814. | 3492405. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B003809 | 354849. | 3492316. | 20 | 71 | 7.7 | .11 | 1900.0 | -.9 | 20.0 | 55.0 | 2.0 | 20.0 | 530.0 | 65.0 | -.9 | 100.0 |
| B003810 | 354884. | 3492226. | 20 | 71 | -.9 | .03 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| B003811 | 354918. | 3492137. | 20 | 71 | 34.0 | 4.30 | 2350.0 | -.9 | -.8 | 90.0 | 2.0 | -.8 | 1350.0 | 75.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B003759 | -.9 | 85.0 |
| B003760 | -.9 | 85.0 |
| B003761 | 3.0 | 90.0 |
| B003762 | -.9 | 95.0 |
| B003763 | -.9 | 55.0 |
| B003764 | 7.0 | 90.0 |
| B003765 | -.9 | 85.0 |
| B003766 | -.9 | 100.0 |
| B003767 | -.9 | 85.0 |
| B003768 | -.9 | 80.0 |
| B003769 | -.9 | 135.0 |
| B003770 | -.9 | 80.0 |
| B003771 | 4.0 | 125.0 |
| B003772 | -.9 | 55.0 |
| B003773 | -.9 | 85.0 |
| B003774 | -.9 | 110.0 |
| B003775 | -.9 | 100.0 |
| B003776 | -.9 | 100.0 |
| B003777 | -.9 | 55.0 |
| B003778 | 8.0 | 95.0 |
| B003779 | 4.0 | 90.0 |
| B003780 | -.9 | 80.0 |
| B003781 | -.9 | 85.0 |
| B003782 | 3.0 | 95.0 |
| B003783 | -.9 | 100.0 |
| B003784 | -.9 | 45.0 |
| B003785 | 6.0 | 90.0 |
| B003786 | -.9 | 85.0 |
| B003787 | -.9 | 55.0 |
| B003788 | -.9 | 90.0 |
| B003789 | -.9 | 90.0 |
| B003790 | -.9 | 95.0 |
| B003791 | -.9 | 80.0 |
| B003792 | -.9 | 80.0 |
| B003793 | 3.0 | 90.0 |
| B003794 | 4.0 | 60.0 |
| B003795 | 3.0 | 80.0 |
| B003796 | -.9 | 135.0 |
| B003797 | -.9 | 120.0 |
| B003798 | -.9 | 75.0 |
| B003799 | -.9 | 90.0 |
| B003800 | -.9 | 80.0 |
| B003801 | 4.0 | 195.0 |
| B003803 | 3.0 | 150.0 |
| B003804 | -.9 | 95.0 |
| B003806 | 4.0 | 85.0 |
| B003807 | 5.0 | 85.0 |
| B003808 | 4.0 | 110.0 |
| B003809 | -.9 | 2250.0 |
| B003810 | 3.0 | -.9 |
| B003811 | 12.0 | 425.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B003812 | 354953. | 3492047. | 20 | 71 | .7 | .03 | 290.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B003813 | 354987. | 3491957. | 20 | 71 | .2 | -.90 | 60.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003814 | 355022. | 3491868. | 20 | 71 | .4 | -.90 | 190.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003815 | 355057. | 3491778. | 20 | 71 | .2 | -.90 | 245.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003816 | 355091. | 3491689. | 20 | 71 | 4.2 | .16 | 950.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 375.0 | 9.0 | -.8 | -.8 |
| B003817 | 355126. | 3491599. | 20 | 71 | 1.6 | -.90 | 125.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 125.0 | -.9 | -.8 | -.8 |
| B003818 | 355160. | 3491509. | 20 | 71 | 1.2 | .02 | 120.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 110.0 | -.9 | -.8 | -.8 |
| B003819 | 355195. | 3491420. | 20 | 71 | 1.3 | .04 | 180.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 140.0 | -.9 | -.8 | -.8 |
| B003820 | 355230. | 3491330. | 20 | 71 | 3.9 | -.90 | 385.0 | -.9 | 5.0 | 120.0 | -.9 | 10.0 | 375.0 | 9.0 | -.9 | 80.0 |
| B003821 | 355264. | 3491240. | 20 | 71 | 14.0 | .17 | 860.0 | -.9 | 15.0 | 105.0 | 2.0 | 35.0 | 2050.0 | 20.0 | -.9 | 155.0 |
| B003822 | 355300. | 3491151. | 20 | 71 | 4.4 | .05 | 410.0 | 1.0 | -.8 | 50.0 | -.9 | -.8 | 670.0 | 4.0 | -.8 | -.8 |
| B003823 | 355333. | 3491061. | 20 | 71 | 2.4 | -.90 | 260.0 | -.9 | 10.0 | 25.0 | 2.0 | 15.0 | 380.0 | 6.0 | -.9 | 110.0 |
| B003824 | 332210. | 3469800. | 20 | 71 | .4 | .02 | 30.0 | -.9 | -.8 | 155.0 | 70.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B003825 | 336500. | 3481650. | 20 | 71 | 1.2 | .09 | 2700.0 | -.9 | -.8 | 100.0 | -.9 | -.8 | 20.0 | 130.0 | -.8 | -.8 |
| B003826 | 336500. | 3476150. | 20 | 71 | 5.5 | .06 | 770.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 105.0 | 750.0 | -.8 | -.8 |
| B003827 | 338250. | 3477900. | 20 | 71 | 1.0 | .04 | 190.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 175.0 | 38.0 | -.8 | -.8 |
| B003828 | 342500. | 3477100. | 20 | 71 | .4 | -.90 | 160.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | 245.0 | -.8 | -.8 |
| B003841 | 355368. | 3490972. | 20 | 71 | 1.9 | -.90 | 315.0 | -.9 | 10.0 | 25.0 | -.9 | 10.0 | 365.0 | 7.0 | -.9 | 105.0 |
| B003842 | 355403. | 3490882. | 20 | 71 | 3.1 | .08 | 550.0 | -.9 | -.9 | 30.0 | -.9 | 10.0 | 390.0 | 9.0 | -.9 | 85.0 |
| B003843 | 355437. | 3490793. | 20 | 71 | 3.1 | .03 | 315.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 320.0 | 6.0 | -.8 | -.8 |
| B003844 | 355472. | 3490703. | 20 | 71 | 8.1 | .06 | 690.0 | -.9 | 10.0 | 40.0 | 2.0 | 15.0 | 700.0 | 19.0 | -.9 | 75.0 |
| B003845 | 355506. | 3490613. | 20 | 71 | 2.6 | .06 | 215.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 155.0 | 6.0 | -.8 | -.8 |
| B003846 | 355541. | 3490524. | 20 | 71 | 2.7 | .04 | 80.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 130.0 | 22.0 | -.8 | -.8 |
| B003847 | 355576. | 3490434. | 20 | 71 | 3.5 | .04 | 560.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 390.0 | 10.0 | -.8 | -.8 |
| B003848 | 355610. | 3490345. | 20 | 71 | 10.0 | .12 | 1050.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 860.0 | 18.0 | -.8 | -.8 |
| B003849 | 355645. | 3490255. | 20 | 71 | 12.0 | .16 | 580.0 | -.9 | 5.0 | 35.0 | -.9 | 10.0 | 1450.0 | 26.0 | -.9 | 80.0 |
| B003850 | 355679. | 3490165. | 20 | 71 | 3.3 | -.90 | 570.0 | -.9 | 5.0 | 30.0 | 2.0 | 10.0 | 290.0 | 6.0 | -.9 | 80.0 |
| B003851 | 355714. | 3490076. | 20 | 71 | 1.7 | -.90 | 250.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 90.0 | 2.0 | -.8 | -.8 |
| B003852 | 355649. | 3489986. | 20 | 71 | .4 | -.90 | 295.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003853 | 355783. | 3489897. | 20 | 71 | .4 | .05 | 150.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003854 | 355818. | 3489807. | 20 | 71 | .4 | -.90 | 365.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B003855 | 355852. | 3489717. | 20 | 71 | 1.0 | -.90 | 230.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | -.8 |
| B003856 | 355887. | 3489628. | 20 | 71 | .4 | -.90 | 170.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B003857 | 355922. | 3489538. | 20 | 71 | .4 | -.90 | 310.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 40.0 | 2.0 | -.8 | -.8 |
| B003858 | 355956. | 3489449. | 20 | 71 | .4 | -.90 | 380.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B003859 | 355928. | 3491693. | 20 | 71 | .6 | -.90 | 115.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 55.0 | 4.0 | -.8 | -.8 |
| B003860 | 355961. | 3491605. | 20 | 71 | 1.4 | .03 | 135.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 95.0 | 4.0 | -.8 | -.8 |
| B003861 | 355994. | 3491517. | 20 | 71 | 4.0 | .14 | 300.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 280.0 | 8.0 | -.8 | -.8 |
| B003862 | 356027. | 3491429. | 20 | 71 | 16.0 | .26 | 1550.0 | -.9 | 15.0 | 80.0 | 2.0 | 25.0 | 1300.0 | 44.0 | -.9 | 105.0 |
| B003863 | 356060. | 3491341. | 20 | 71 | 9.1 | .18 | 1250.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 600.0 | 20.0 | -.8 | -.8 |
| B003864 | 355669. | 3491201. | 20 | 71 | 10.0 | .13 | 670.0 | -.9 | 5.0 | 30.0 | -.9 | 10.0 | 910.0 | 18.0 | -.9 | 100.0 |
| B003865 | 355634. | 3491290. | 20 | 71 | 7.6 | .11 | 470.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 800.0 | 24.0 | -.8 | -.8 |
| B003866 | 355600. | 3491379. | 20 | 71 | 19.0 | .32 | 1450.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 3200.0 | 70.0 | -.8 | -.8 |
| B003867 | 355565. | 3491468. | 20 | 71 | 2.3 | .03 | 305.0 | -.9 | 10.0 | 35.0 | 2.0 | 15.0 | 235.0 | 5.0 | -.9 | 90.0 |
| B003868 | 355530. | 3491557. | 20 | 71 | 1.6 | .04 | 150.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 215.0 | 2.0 | -.8 | -.8 |
| B003869 | 355460. | 3491734. | 20 | 71 | 1.1 | -.90 | 100.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 75.0 | 6.0 | -.8 | -.8 |
| B003872 | 345307. | 3490222. | 20 | 71 | 1.8 | -.90 | 510.0 | 1.0 | -.8 | 45.0 | -.9 | -.8 | 265.0 | 75.0 | -.8 | -.8 |
| B003873 | 345252. | 3490803. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 7.0 | -.8 | -.8 |
| B003874 | 345196. | 3490884. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 9.0 | -.8 | -.8 |
| B003875 | 348693. | 3488601. | 20 | 71 | .4 | .03 | 140.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B003876 | 348721. | 3488560. | 20 | 71 | 38.0 | .64 | 8850.0 | -.9 | 10.0 | 70.0 | -.9 | -.9 | 1750.0 | 32.0 | -.9 | 45.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B003812 | 3.0 | 85.0 |
| B003813 | 3.0 | 40.0 |
| B003814 | -.9 | 70.0 |
| B003815 | 4.0 | 65.0 |
| B003816 | 3.0 | 115.0 |
| B003817 | 3.0 | 80.0 |
| B003818 | 3.0 | 80.0 |
| B003819 | 5.0 | 110.0 |
| B003820 | 3.0 | 700.0 |
| B003821 | 4.0 | 3000.0 |
| B003822 | 3.0 | 900.0 |
| B003823 | 4.0 | 700.0 |
| B003824 | 9.0 | 20.0 |
| B003825 | 3.0 | 400.0 |
| B003826 | 3.0 | 125.0 |
| B003827 | 6.0 | 850.0 |
| B003828 | 5.0 | 165.0 |
| B003841 | 4.0 | 420.0 |
| B003842 | 3.0 | 345.0 |
| B003843 | 3.0 | 200.0 |
| B003844 | 3.0 | 680.0 |
| B003845 | 4.0 | 70.0 |
| B003846 | 4.0 | 45.0 |
| B003847 | 3.0 | 135.0 |
| B003848 | 3.0 | 185.0 |
| B003849 | 3.0 | 325.0 |
| B003850 | 5.0 | 155.0 |
| B003851 | 5.0 | 90.0 |
| B003852 | 3.0 | 95.0 |
| B003853 | 3.0 | 70.0 |
| B003854 | 3.0 | 70.0 |
| B003855 | 5.0 | 125.0 |
| B003856 | 4.0 | 65.0 |
| B003857 | 4.0 | 115.0 |
| B003858 | 4.0 | 95.0 |
| B003859 | 4.0 | 115.0 |
| B003860 | 3.0 | 105.0 |
| B003861 | 3.0 | 145.0 |
| B003862 | 4.0 | 670.0 |
| B003863 | 5.0 | 510.0 |
| B003864 | 3.0 | 230.0 |
| B003865 | 4.0 | 395.0 |
| B003866 | 3.0 | 1650.0 |
| B003867 | 5.0 | 425.0 |
| B003868 | 4.0 | 95.0 |
| B003869 | 3.0 | 125.0 |
| B003872 | 7.0 | 235.0 |
| B003873 | 3.0 | 90.0 |
| B003874 | 3.0 | 95.0 |
| B003875 | 5.0 | 60.0 |
| B003876 | 5.0 | 85.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B003877 | 348749. | 3488519. | 20 | 71 | .4 | .18 | 510.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B003878 | 348777. | 3488477. | 20 | 71 | 1.0 | .27 | 360.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B003879 | 348804. | 3488436. | 20 | 71 | 2.3 | .11 | 170.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 75.0 | 8.0 | -.8 | -.8 |
| B003880 | 348832. | 3488394. | 20 | 71 | .6 | .11 | 190.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 15.0 | -.8 | -.8 |
| B003881 | 348860. | 3488353. | 20 | 71 | .4 | .14 | 55.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B003882 | 348888. | 3488311. | 20 | 71 | .4 | .16 | 35.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B003883 | 348916. | 3488270. | 20 | 71 | .4 | .30 | 55.0 | 1.0 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B003884 | 348944. | 3488229. | 20 | 71 | .4 | .06 | 55.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003885 | 348972. | 3488187. | 20 | 71 | .6 | .15 | 255.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B003886 | 348999. | 3488146. | 20 | 71 | .6 | .12 | 280.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B003887 | 349028. | 3488105. | 20 | 71 | 1.0 | .25 | 205.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B003888 | 349083. | 3488022. | 20 | 71 | .4 | .10 | 65.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003889 | 349139. | 3487939. | 20 | 71 | -.9 | .05 | 80.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B003890 | 349195. | 3487856. | 20 | 71 | .8 | .07 | 310.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 85.0 | 10.0 | -.8 | -.8 |
| B003891 | 348895. | 3487656. | 20 | 71 | .4 | .50 | 190.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003892 | 348839. | 3487739. | 20 | 71 | .6 | .04 | 130.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B003893 | 348784. | 3487822. | 20 | 71 | .6 | .12 | 145.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B003894 | 348728. | 3487905. | 20 | 71 | .8 | .14 | 175.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B003895 | 348700. | 3487946. | 20 | 71 | .6 | .06 | 145.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B003896 | 348672. | 3487987. | 20 | 71 | .4 | .13 | 140.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B003897 | 348644. | 3488029. | 20 | 71 | .6 | 1.30 | 115.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B003898 | 348616. | 3488070. | 20 | 71 | 2.3 | .15 | 215.0 | 3.0 | -.8 | 35.0 | 2.0 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B003899 | 348588. | 3488112. | 20 | 71 | 1.7 | .06 | 155.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B003900 | 348559. | 3488153. | 20 | 71 | 1.5 | .06 | 280.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B004101 | 417100. | 3558950. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 15.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B004102 | 425400. | 3542500. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 20.0 | 30.0 | -.8 | -.8 |
| B004110 | 418687. | 3556501. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 10.0 | -.8 | -.8 |
| B004111 | 418687. | 3556501. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| B004112 | 418631. | 3556581. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004113 | 418575. | 3556661. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004114 | 418519. | 3556741. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | 20.0 | 45.0 | -.9 | 45.0 | 45.0 | -.9 | -.9 | 120.0 |
| B004115 | 418463. | 3556821. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004116 | 418407. | 3556901. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004117 | 418351. | 3556981. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 85.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004118 | 418295. | 3557060. | 20 | 71 | -.9 | .10 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004119 | 418239. | 3557140. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004120 | 418183. | 3557220. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 75.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004121 | 418127. | 3557300. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 125.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B004122 | 418071. | 3557380. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 90.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B004123 | 418015. | 3557460. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B004124 | 417960. | 3557540. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004125 | 417904. | 3557619. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004126 | 417848. | 3557699. | 20 | 71 | .4 | -.90 | 5.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004127 | 417792. | 3557779. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004128 | 417736. | 3557859. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004129 | 417680. | 3557939. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004130 | 417624. | 3558019. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B004131 | 417568. | 3558099. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004132 | 417512. | 3558179. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004133 | 417456. | 3558258. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 80.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004134 | 417400. | 3558338. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B003877 | 5.0 | 45.0 |
| B003878 | 4.0 | 35.0 |
| B003879 | 7.0 | 85.0 |
| B003880 | 7.0 | 50.0 |
| B003881 | 4.0 | 75.0 |
| B003882 | 5.0 | 40.0 |
| B003883 | 4.0 | 55.0 |
| B003884 | 5.0 | 40.0 |
| B003885 | 6.0 | 70.0 |
| B003886 | 4.0 | 90.0 |
| B003887 | 6.0 | 50.0 |
| B003888 | 5.0 | 70.0 |
| B003889 | 6.0 | 80.0 |
| B003890 | 7.0 | 150.0 |
| B003891 | 4.0 | 55.0 |
| B003892 | 3.0 | 55.0 |
| B003893 | 4.0 | 75.0 |
| B003894 | 9.0 | 80.0 |
| B003895 | 4.0 | 95.0 |
| B003896 | 4.0 | 60.0 |
| B003897 | 5.0 | 50.0 |
| B003898 | 4.0 | 75.0 |
| B003899 | 4.0 | 35.0 |
| B003900 | 5.0 | 80.0 |
| B004101 | -.9 | 45.0 |
| B004102 | 4.0 | 105.0 |
| B004110 | -.9 | 90.0 |
| B004111 | 3.0 | 95.0 |
| B004112 | -.9 | 85.0 |
| B004113 | -.9 | 100.0 |
| B004114 | -.9 | 95.0 |
| B004115 | -.9 | 85.0 |
| B004116 | -.9 | 105.0 |
| B004117 | 3.0 | 75.0 |
| B004118 | -.9 | 95.0 |
| B004119 | 4.0 | 55.0 |
| B004120 | -.9 | 75.0 |
| B004121 | -.9 | 85.0 |
| B004122 | -.9 | 85.0 |
| B004123 | -.9 | 90.0 |
| B004124 | 3.0 | 85.0 |
| B004125 | -.9 | 90.0 |
| B004126 | -.9 | 90.0 |
| B004127 | 4.0 | 70.0 |
| B004128 | -.9 | 85.0 |
| B004129 | -.9 | 85.0 |
| B004130 | -.9 | 85.0 |
| B004131 | -.9 | 65.0 |
| B004132 | -.9 | 80.0 |
| B004133 | -.9 | 80.0 |
| B004134 | -.9 | 70.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004135 | 417344. | 3558418. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 45.0 | 4.0 | -.8 | -.8 |
| B004136 | 417288. | 3558498. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B004137 | 417233. | 3558578. | 20 | 71 | .7 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 50.0 | 8.0 | -.8 | -.8 |
| B004138 | 417177. | 3558658. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B004139 | 417121. | 3558738. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004140 | 417065. | 3558817. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004141 | 417009. | 3558897. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | 40.0 | 70.0 | -.9 | 95.0 | 30.0 | 2.0 | -.9 | 185.0 |
| B004142 | 416953. | 3558977. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004143 | 416783. | 3558002. | 20 | 71 | .4 | -.90 | 20.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004144 | 416837. | 3557922. | 20 | 71 | -.9 | -.90 | 190.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004145 | 416891. | 3557841. | 20 | 71 | .9 | -.90 | 15.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004146 | 416945. | 3557761. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004147 | 416999. | 3557680. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004148 | 417054. | 3557600. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B004149 | 417108. | 3557519. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004150 | 417162. | 3557439. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | -.8 |
| B004151 | 417216. | 3557359. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004152 | 417271. | 3557278. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004153 | 417325. | 3557198. | 20 | 71 | .4 | -.90 | 10.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004154 | 417379. | 3557117. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004155 | 417433. | 3557037. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004156 | 417488. | 3556957. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004157 | 417542. | 3556876. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004158 | 417596. | 3556796. | 20 | 71 | .4 | -.90 | -.9 | -.9 | -.8 | 75.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B004159 | 417650. | 3556715. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004160 | 417705. | 3556635. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004161 | 417759. | 3556554. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004162 | 417813. | 3556474. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004163 | 417867. | 3556394. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004164 | 417922. | 3556313. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004165 | 417976. | 3556233. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004166 | 326100. | 3468550. | 20 | 71 | 3.7 | -.90 | 235.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 890.0 | 235.0 | -.8 | -.8 |
| B004167 | 418030. | 3556152. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 60.0 | 6.0 | -.8 | -.8 |
| B004168 | 418084. | 3556072. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | 15.0 | 105.0 | -.9 | 15.0 | 40.0 | 4.0 | -.9 | 105.0 |
| B004169 | 418139. | 3555992. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | -.8 |
| B004170 | 418193. | 3555911. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| B004171 | 418247. | 3555831. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| B004172 | 418301. | 3555750. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| B004173 | 418356. | 3555670. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | 14.0 | -.8 | -.8 |
| B004174 | 418410. | 3555589. | 20 | 71 | -.9 | -.90 | 95.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 30.0 | 32.0 | -.8 | -.8 |
| B004175 | 417800. | 3555265. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | 20.0 | 35.0 | -.9 | 45.0 | 25.0 | 18.0 | -.9 | 115.0 |
| B004176 | 417700. | 3555330. | 20 | 71 | -.9 | -.90 | 255.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 35.0 | 32.0 | -.8 | -.8 |
| B004177 | 417610. | 3555375. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | 10.0 | 35.0 | -.9 | 15.0 | 25.0 | 17.0 | -.9 | 125.0 |
| B004178 | 417545. | 3555440. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.9 | 85.0 | -.9 | 5.0 | 30.0 | 4.0 | -.9 | 90.0 |
| B004179 | 417355. | 3555415. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 22.0 | -.8 | -.8 |
| B004180 | 417375. | 3555570. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B004181 | 417215. | 3555745. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B004182 | 417060. | 3555965. | 20 | 71 | -.9 | -.90 | 20.0 | 2.0 | -.8 | 75.0 | -.9 | -.8 | 55.0 | 4.0 | -.8 | -.8 |
| B004183 | 417140. | 3555840. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004184 | 417305. | 3555655. | 20 | 71 | -.9 | .10 | 20.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B004185 | 417100. | 3556085. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004135 | -.9 | 85.0 |
| B004136 | -.9 | 85.0 |
| B004137 | 3.0 | 90.0 |
| B004138 | -.9 | 95.0 |
| B004139 | -.9 | 75.0 |
| B004140 | -.9 | 70.0 |
| B004141 | -.9 | 140.0 |
| B004142 | -.9 | 95.0 |
| B004143 | -.9 | 60.0 |
| B004144 | 4.0 | 75.0 |
| B004145 | -.9 | 75.0 |
| B004146 | -.9 | 55.0 |
| B004147 | 3.0 | 40.0 |
| B004148 | -.9 | 40.0 |
| B004149 | -.9 | 50.0 |
| B004150 | -.9 | 55.0 |
| B004151 | -.9 | 50.0 |
| B004152 | -.9 | 55.0 |
| B004153 | -.9 | 55.0 |
| B004154 | -.9 | 70.0 |
| B004155 | -.9 | 65.0 |
| B004156 | -.9 | 85.0 |
| B004157 | -.9 | 85.0 |
| B004158 | 4.0 | 80.0 |
| B004159 | -.9 | 45.0 |
| B004160 | -.9 | 75.0 |
| B004161 | 6.0 | 60.0 |
| B004162 | -.9 | 65.0 |
| B004163 | 5.0 | 85.0 |
| B004164 | -.9 | 65.0 |
| B004165 | -.9 | 50.0 |
| B004166 | 8.0 | 130.0 |
| B004167 | 3.0 | 55.0 |
| B004168 | 4.0 | 80.0 |
| B004169 | 3.0 | 80.0 |
| B004170 | 9.0 | 75.0 |
| B004171 | 4.0 | 90.0 |
| B004172 | 5.0 | 55.0 |
| B004173 | 5.0 | 80.0 |
| B004174 | 7.0 | 95.0 |
| B004175 | 5.0 | 130.0 |
| B004176 | 10.0 | 125.0 |
| B004177 | 6.0 | 85.0 |
| B004178 | 3.0 | 60.0 |
| B004179 | 4.0 | 65.0 |
| B004180 | 3.0 | 50.0 |
| B004181 | 3.0 | 75.0 |
| B004182 | 3.0 | 85.0 |
| B004183 | 4.0 | 90.0 |
| B004184 | 3.0 | 90.0 |
| B004185 | -.9 | 55.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004186 | 417130. | 3556220. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004187 | 417140. | 3556385. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004188 | 417145. | 3556540. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004189 | 417160. | 3556670. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004190 | 417240. | 3556815. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B004191 | 417225. | 3556955. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 60.0 | 2.0 | -.8 | -.8 |
| B004192 | 417105. | 3557105. | 20 | 71 | -.9 | .04 | 90.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 105.0 | 2.0 | -.8 | -.8 |
| B004193 | 417235. | 3557235. | 20 | 71 | -.9 | .02 | 5.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B004194 | 417245. | 3557395. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004201 | 355674. | 3491200. | 20 | 71 | .2 | .04 | 255.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004202 | 355704. | 3491112. | 20 | 71 | 19.0 | .19 | 940.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 1750.0 | 34.0 | -.8 | -.8 |
| B004203 | 355739. | 3491023. | 20 | 71 | 50.0 | .48 | 1850.0 | -.9 | -.8 | 85.0 | 2.0 | -.8 | 4800.0 | 85.0 | -.8 | -.8 |
| B004204 | 355774. | 3490934. | 20 | 71 | 36.0 | .41 | 2050.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 3850.0 | 85.0 | -.8 | -.8 |
| B004205 | 355808. | 3490845. | 20 | 71 | 2.3 | .06 | 640.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 265.0 | 8.0 | -.8 | -.8 |
| B004206 | 355843. | 3490757. | 20 | 71 | 4.6 | .17 | 750.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 445.0 | 14.0 | -.8 | -.8 |
| B004207 | 355878. | 3490668. | 20 | 71 | 13.0 | .20 | 1400.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 1600.0 | 28.0 | -.8 | -.8 |
| B004208 | 355913. | 3490579. | 20 | 71 | 2.4 | .02 | 260.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 120.0 | 11.0 | -.8 | -.8 |
| B004209 | 355948. | 3490490. | 20 | 71 | 1.0 | .06 | 425.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 100.0 | 4.0 | -.8 | -.8 |
| B004210 | 356982. | 3490401. | 20 | 71 | 1.3 | .06 | 630.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 100.0 | 6.0 | -.8 | -.8 |
| B004211 | 356017. | 3490312. | 20 | 71 | 1.0 | .03 | 430.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | -.8 |
| B004212 | 356052. | 3490223. | 20 | 71 | .6 | .07 | 600.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 85.0 | -.9 | -.8 | -.8 |
| B004213 | 356087. | 3490134. | 20 | 71 | 1.1 | .15 | 410.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | -.8 |
| B004214 | 356122. | 3490045. | 20 | 71 | .4 | .14 | 310.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B004215 | 356157. | 3489956. | 20 | 71 | .6 | -.90 | 315.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 45.0 | -.9 | -.8 | -.8 |
| B004216 | 356192. | 3489867. | 20 | 71 | 1.0 | -.90 | 415.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | -.8 |
| B004217 | 356226. | 3489778. | 20 | 71 | .8 | -.90 | 350.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 75.0 | 2.0 | -.8 | -.8 |
| B004218 | 356261. | 3489689. | 20 | 71 | 1.8 | .02 | 230.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 50.0 | -.9 | -.8 | -.8 |
| B004219 | 356296. | 3489600. | 20 | 71 | .6 | -.90 | 285.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 55.0 | -.9 | -.8 | -.8 |
| B004220 | 356654. | 3489759. | 20 | 71 | .4 | .03 | 160.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004221 | 356621. | 3489847. | 20 | 71 | -.9 | .03 | 210.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004222 | 356588. | 3489935. | 20 | 71 | .2 | -.90 | 290.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004223 | 356555. | 3490023. | 20 | 71 | .4 | .04 | 360.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004224 | 356522. | 3490111. | 20 | 71 | -.9 | -.90 | 220.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004225 | 356489. | 3490199. | 20 | 71 | .4 | -.90 | 700.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004226 | 356456. | 3490287. | 20 | 71 | -.9 | .04 | 600.0 | -.9 | -.8 | 15.0 | 12.0 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004227 | 356423. | 3490374. | 20 | 71 | -.9 | -.90 | 165.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B004228 | 356390. | 3490462. | 20 | 71 | 1.4 | .04 | 610.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 120.0 | 12.0 | -.8 | -.8 |
| B004229 | 356357. | 3490550. | 20 | 71 | 1.6 | .03 | 580.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 160.0 | 8.0 | -.8 | -.8 |
| B004230 | 356324. | 3490638. | 20 | 71 | 1.0 | .06 | 630.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 130.0 | 5.0 | -.8 | -.8 |
| B004231 | 356291. | 3490726. | 20 | 71 | .6 | .02 | 295.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 60.0 | 2.0 | -.8 | -.8 |
| B004232 | 356258. | 3490814. | 20 | 71 | -.9 | -.90 | 170.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 35.0 | 7.0 | -.8 | -.8 |
| B004233 | 356225. | 3490902. | 20 | 71 | .8 | -.90 | 570.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 65.0 | 2.0 | -.8 | -.8 |
| B004242 | 355466. | 3491734. | 20 | 71 | 1.0 | -.90 | 155.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 155.0 | 4.0 | -.8 | -.8 |
| B004243 | 355426. | 3491823. | 20 | 71 | 1.2 | -.90 | 125.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 85.0 | 2.0 | -.8 | -.8 |
| B004244 | 355391. | 3491912. | 20 | 71 | .2 | -.90 | 80.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B004245 | 355356. | 3492001. | 20 | 71 | -.9 | -.90 | 180.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B004246 | 355321. | 3492090. | 20 | 71 | .8 | .02 | -.9 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 60.0 | -.9 | -.8 | -.8 |
| B004247 | 355286. | 3492179. | 20 | 71 | .6 | -.90 | 185.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 80.0 | 4.0 | -.8 | -.8 |
| B004248 | 355252. | 3492268. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | -.9 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004249 | 355217. | 3492357. | 20 | 71 | 1.2 | -.90 | -.9 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 115.0 | -.9 | -.8 | -.8 |
| B004250 | 355182. | 3492446. | 20 | 71 | 1.8 | .09 | 600.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 95.0 | 7.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004186 | 4.0 | 100.0 |
| B004187 | 5.0 | 75.0 |
| B004188 | 5.0 | 80.0 |
| B004189 | 3.0 | 40.0 |
| B004190 | -.9 | 90.0 |
| B004191 | 3.0 | 135.0 |
| B004192 | 3.0 | 40.0 |
| B004193 | 4.0 | 55.0 |
| B004194 | 4.0 | 55.0 |
| B004201 | 3.0 | 85.0 |
| B004202 | -.9 | 550.0 |
| B004203 | 3.0 | 680.0 |
| B004204 | -.9 | 670.0 |
| B004205 | 4.0 | 120.0 |
| B004206 | 4.0 | 210.0 |
| B004207 | 3.0 | 510.0 |
| B004208 | 4.0 | 105.0 |
| B004209 | 4.0 | 85.0 |
| B004210 | 4.0 | 100.0 |
| B004211 | 4.0 | 60.0 |
| B004212 | 5.0 | 115.0 |
| B004213 | 4.0 | 80.0 |
| B004214 | 4.0 | 80.0 |
| B004215 | 4.0 | 100.0 |
| B004216 | 4.0 | 95.0 |
| B004217 | 5.0 | 100.0 |
| B004218 | 4.0 | 60.0 |
| B004219 | 5.0 | 95.0 |
| B004220 | 3.0 | 90.0 |
| B004221 | 5.0 | 80.0 |
| B004222 | 3.0 | 70.0 |
| B004223 | 4.0 | 65.0 |
| B004224 | -.9 | 60.0 |
| B004225 | 3.0 | 65.0 |
| B004226 | 8.0 | 85.0 |
| B004227 | 6.0 | 110.0 |
| B004228 | 7.0 | 175.0 |
| B004229 | 5.0 | 155.0 |
| B004230 | 5.0 | 135.0 |
| B004231 | 4.0 | 65.0 |
| B004232 | 4.0 | 50.0 |
| B004233 | 4.0 | 135.0 |
| B004242 | 4.0 | 85.0 |
| B004243 | 3.0 | 85.0 |
| B004244 | 3.0 | 75.0 |
| B004245 | 5.0 | 75.0 |
| B004246 | 3.0 | 65.0 |
| B004247 | 4.0 | 95.0 |
| B004248 | -.9 | -.9 |
| B004249 | 4.0 | 100.0 |
| B004250 | 5.0 | 215.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004251 | 355147. | 3492535. | 20 | 71 | -.9 | -.90 | 140.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B004252 | 355112. | 3492623. | 20 | 71 | -.9 | -.90 | 170.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004253 | 355078. | 3492712. | 20 | 71 | .6 | -.90 | 200.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 35.0 | 11.0 | -.8 | -.8 |
| B004254 | 355043. | 3492801. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 8.0 | -.8 | -.8 |
| B004255 | 355008. | 3492890. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 10.0 | -.8 | -.8 |
| B004256 | 354973. | 3492979. | 20 | 71 | .4 | -.90 | 105.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 85.0 | 30.0 | -.8 | -.8 |
| B004257 | 354938. | 3493068. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 65.0 | 16.0 | -.8 | -.8 |
| B004258 | 354904. | 3493157. | 20 | 71 | .4 | -.90 | 155.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 80.0 | 22.0 | -.8 | -.8 |
| B004259 | 355334. | 3493275. | 20 | 71 | 1.1 | -.90 | 35.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 40.0 | 6.0 | -.8 | -.8 |
| B004260 | 355367. | 3493187. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B004261 | 355400. | 3493099. | 20 | 71 | -.9 | -.90 | 55.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 40.0 | 8.0 | -.8 | -.8 |
| B004262 | 355433. | 3493011. | 20 | 71 | .4 | -.90 | 260.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 60.0 | 8.0 | -.8 | -.8 |
| B004263 | 355466. | 3492923. | 20 | 71 | 1.6 | -.90 | -.9 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 270.0 | 15.0 | -.8 | -.8 |
| B004264 | 355499. | 3492836. | 20 | 71 | 1.4 | -.90 | 125.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 85.0 | 4.0 | -.8 | -.8 |
| B004265 | 355532. | 3492748. | 20 | 71 | 7.7 | .18 | 455.0 | 4.0 | -.8 | 40.0 | 2.0 | -.8 | 2150.0 | 26.0 | -.8 | -.8 |
| B004266 | 355565. | 3492660. | 20 | 71 | .9 | -.90 | 95.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 155.0 | 2.0 | -.8 | -.8 |
| B004267 | 355598. | 3492572. | 20 | 71 | .6 | -.90 | 85.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | 45.0 | 4.0 | -.8 | -.8 |
| B004268 | 355631. | 3492484. | 20 | 71 | .6 | -.90 | 85.0 | 1.0 | -.8 | 35.0 | 2.0 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B004269 | 355664. | 3492396. | 20 | 71 | -.9 | -.90 | 50.0 | 1.0 | -.8 | 15.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004270 | 355697. | 3492308. | 20 | 71 | .2 | -.90 | 40.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B004271 | 355730. | 3492220. | 20 | 71 | -.9 | -.90 | 90.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B004272 | 355763. | 3492132. | 20 | 71 | .8 | -.90 | 235.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 35.0 | 7.0 | -.8 | -.8 |
| B004273 | 355796. | 3492044. | 20 | 71 | 1.6 | -.90 | 205.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 115.0 | 6.0 | -.8 | -.8 |
| B004274 | 355829. | 3491957. | 20 | 71 | .4 | -.90 | 85.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 45.0 | 7.0 | -.8 | -.8 |
| B004275 | 355862. | 3491869. | 20 | 71 | .4 | -.90 | 45.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B004276 | 355895. | 3491781. | 20 | 71 | .6 | .02 | 115.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 60.0 | 4.0 | -.8 | -.8 |
| B004277 | 356093. | 3491253. | 20 | 71 | 9.9 | .07 | 1850.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 560.0 | 26.0 | -.8 | -.8 |
| B004278 | 356126. | 3491166. | 20 | 71 | 4.5 | .04 | 650.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 300.0 | 12.0 | -.8 | -.8 |
| B004279 | 356159. | 3491078. | 20 | 71 | 6.0 | .06 | 920.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 290.0 | 11.0 | -.8 | -.8 |
| B004280 | 356192. | 3490990. | 20 | 71 | 1.8 | .20 | 860.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | 140.0 | 6.0 | -.8 | -.8 |
| B004281 | 346468. | 3489102. | 20 | 71 | .6 | -.90 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004282 | 346413. | 3489183. | 20 | 71 | 1.3 | .12 | 45.0 | 1.0 | -.8 | 15.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004283 | 346302. | 3489264. | 20 | 71 | .2 | .13 | 165.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004284 | 346247. | 3489345. | 20 | 71 | .9 | -.90 | 150.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004285 | 346192. | 3489426. | 20 | 71 | 9.1 | .27 | 750.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 65.0 | 17.0 | -.8 | -.8 |
| B004286 | 346137. | 3489507. | 20 | 71 | .7 | .17 | 640.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004287 | 346081. | 3489588. | 20 | 71 | 2.3 | -.90 | -.9 | -.9 | -.8 | 15.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | -.8 |
| B004288 | 346026. | 3489669. | 20 | 71 | .4 | -.90 | 5.0 | -.9 | -.8 | 100.0 | 2.0 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004289 | 345971. | 3489750. | 20 | 71 | -.9 | -.90 | 105.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004290 | 345915. | 3489831. | 20 | 71 | .6 | -.90 | 205.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004291 | 345860. | 3489912. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 30.0 | -.8 | -.8 |
| B004292 | 345805. | 3489993. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 13.0 | -.8 | -.8 |
| B004293 | 345749. | 3490074. | 20 | 71 | -.9 | -.90 | 35.0 | 1.0 | -.8 | 55.0 | -.9 | -.8 | 15.0 | 50.0 | -.8 | -.8 |
| B004294 | 345694. | 3490155. | 20 | 71 | .4 | .06 | 15.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.9 | 6.0 | -.8 | -.8 |
| B004295 | 345639. | 3490236. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | 17.0 | -.8 | -.8 |
| B004296 | 345584. | 3490317. | 20 | 71 | .2 | -.90 | 45.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 10.0 | 75.0 | -.8 | -.8 |
| B004297 | 345528. | 3490398. | 20 | 71 | .4 | -.90 | 150.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 40.0 | 70.0 | -.8 | -.8 |
| B004298 | 345473. | 3490479. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 32.0 | -.8 | -.8 |
| B004299 | 345418. | 3490560. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 50.0 | -.8 | -.8 |
| B004300 | 345362. | 3490641. | 20 | 71 | -.9 | .07 | 60.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | 65.0 | -.8 | -.8 |
| B004301 | 346871. | 3487188. | 20 | 71 | .6 | -.90 | 110.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004251 | 5.0 | 130.0 |
| B004252 | 4.0 | 85.0 |
| B004253 | 4.0 | 110.0 |
| B004254 | 3.0 | 85.0 |
| B004255 | 3.0 | 120.0 |
| B004256 | -.9 | 460.0 |
| B004257 | 3.0 | 225.0 |
| B004258 | 3.0 | 130.0 |
| B004259 | 3.0 | 205.0 |
| B004260 | 4.0 | 110.0 |
| B004261 | 3.0 | 125.0 |
| B004262 | 3.0 | 100.0 |
| B004263 | -.9 | 190.0 |
| B004264 | 16.0 | 65.0 |
| B004265 | 5.0 | 520.0 |
| B004266 | 6.0 | 90.0 |
| B004267 | 6.0 | 60.0 |
| B004268 | 6.0 | 80.0 |
| B004269 | 3.0 | 60.0 |
| B004270 | 3.0 | 55.0 |
| B004271 | 3.0 | 75.0 |
| B004272 | 5.0 | 105.0 |
| B004273 | 3.0 | 110.0 |
| B004274 | 3.0 | 110.0 |
| B004275 | 4.0 | 115.0 |
| B004276 | 4.0 | 90.0 |
| B004277 | 3.0 | 540.0 |
| B004278 | 3.0 | 175.0 |
| B004279 | 3.0 | 200.0 |
| B004280 | 4.0 | 190.0 |
| B004281 | 5.0 | 20.0 |
| B004282 | 7.0 | 40.0 |
| B004283 | 3.0 | 35.0 |
| B004284 | 4.0 | 50.0 |
| B004285 | 3.0 | 90.0 |
| B004286 | 4.0 | 55.0 |
| B004287 | -.9 | 65.0 |
| B004288 | 3.0 | 130.0 |
| B004289 | -.9 | 110.0 |
| B004290 | 3.0 | 100.0 |
| B004291 | 5.0 | 105.0 |
| B004292 | 3.0 | 40.0 |
| B004293 | 4.0 | 70.0 |
| B004294 | 4.0 | 30.0 |
| B004295 | 3.0 | 85.0 |
| B004296 | 3.0 | 40.0 |
| B004297 | 3.0 | 120.0 |
| B004298 | 3.0 | 45.0 |
| B004299 | 3.0 | 55.0 |
| B004300 | 3.0 | 75.0 |
| B004301 | 4.0 | 45.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004302 | 346812. | 3487269. | 20 | 71 | -.9 | .20 | 50.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004303 | 346753. | 3487351. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004304 | 346694. | 3487432. | 20 | 71 | .4 | .03 | 25.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004305 | 346636. | 3487513. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004306 | 346577. | 3487595. | 20 | 71 | 3.7 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004307 | 346518. | 3487676. | 20 | 71 | 1.5 | -.90 | 255.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 130.0 | 2.0 | -.8 | -.8 |
| B004308 | 346459. | 3487757. | 20 | 71 | 4.2 | -.90 | 95.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 75.0 | 4.0 | -.8 | -.8 |
| B004309 | 346400. | 3487839. | 20 | 71 | 3.1 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| B004310 | 346342. | 3487920. | 20 | 71 | 3.6 | .04 | 70.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 345.0 | 4.0 | -.8 | -.8 |
| B004311 | 346283. | 3488002. | 20 | 71 | 1.2 | .08 | 100.0 | -.9 | -.8 | 55.0 | 4.0 | -.8 | 55.0 | 8.0 | -.8 | -.8 |
| B004312 | 346224. | 3488083. | 20 | 71 | 1.3 | -.90 | 55.0 | -.9 | -.8 | 75.0 | 6.0 | -.8 | 60.0 | 4.0 | -.8 | -.8 |
| B004313 | 346165. | 3488164. | 20 | 71 | 3.8 | .14 | 260.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 145.0 | 6.0 | -.8 | -.8 |
| B004314 | 346106. | 3488246. | 20 | 71 | 1.8 | .10 | 245.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 65.0 | 8.0 | -.8 | -.8 |
| B004315 | 346048. | 3488327. | 20 | 71 | .4 | .06 | 120.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B004316 | 345989. | 3488409. | 20 | 71 | 1.5 | .10 | 200.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| B004317 | 345930. | 3488490. | 20 | 71 | 1.1 | -.90 | 240.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 50.0 | 6.0 | -.8 | -.8 |
| B004318 | 345871. | 3488571. | 20 | 71 | 1.1 | -.90 | 110.0 | -.9 | -.8 | 45.0 | 4.0 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B004319 | 345812. | 3488653. | 20 | 71 | 1.3 | -.90 | 50.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 15.0 | 7.0 | -.8 | -.8 |
| B004320 | 345754. | 3488734. | 20 | 71 | 1.3 | .20 | 480.0 | -.9 | -.8 | 50.0 | 4.0 | -.8 | 85.0 | 6.0 | -.8 | -.8 |
| B004321 | 345695. | 3488816. | 20 | 71 | .8 | -.90 | 65.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004322 | 345636. | 3488898. | 20 | 71 | 2.2 | -.90 | 105.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 65.0 | 6.0 | -.8 | -.8 |
| B004323 | 345577. | 3488978. | 20 | 71 | 28.0 | .03 | 285.0 | -.9 | 20.0 | 110.0 | 4.0 | 60.0 | 400.0 | 50.0 | -.9 | 220.0 |
| B004324 | 335518. | 3489059. | 20 | 71 | 4.4 | .06 | 570.0 | -.9 | 10.0 | 50.0 | 2.0 | 35.0 | 140.0 | 11.0 | -.9 | 135.0 |
| B004325 | 345460. | 3489141. | 20 | 71 | 2.6 | -.90 | 80.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 45.0 | 7.0 | -.8 | -.8 |
| B004326 | 345401. | 3489222. | 20 | 71 | 3.1 | .23 | 1600.0 | -.9 | 10.0 | 55.0 | 2.0 | 20.0 | 85.0 | 13.0 | -.9 | 90.0 |
| B004327 | 345342. | 3489304. | 20 | 71 | 3.4 | .05 | 1050.0 | -.9 | 15.0 | 60.0 | 2.0 | 30.0 | 115.0 | 11.0 | -.9 | 130.0 |
| B004328 | 345283. | 3489385. | 20 | 71 | 7.0 | .10 | 680.0 | -.9 | 15.0 | 50.0 | 2.0 | 40.0 | 205.0 | 13.0 | -.9 | 140.0 |
| B004329 | 345224. | 3489466. | 20 | 71 | 3.2 | .11 | 1250.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 90.0 | 15.0 | -.8 | -.8 |
| B004330 | 345166. | 3489548. | 20 | 71 | 1.6 | .15 | 890.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 45.0 | 12.0 | -.8 | -.8 |
| B004331 | 345107. | 3489629. | 20 | 71 | 3.2 | .43 | 1150.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 100.0 | 14.0 | -.8 | -.8 |
| B004332 | 345048. | 3489711. | 20 | 71 | .9 | .03 | 55.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 30.0 | 13.0 | -.8 | -.8 |
| B004333 | 344989. | 3489792. | 20 | 71 | .2 | .04 | 35.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 10.0 | 17.0 | -.8 | -.8 |
| B004334 | 344930. | 3489873. | 20 | 71 | .2 | -.90 | 45.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 15.0 | 24.0 | -.8 | -.8 |
| B004335 | 344872. | 3489955. | 20 | 71 | -.9 | -.90 | 60.0 | -.9 | -.8 | 80.0 | 4.0 | -.8 | 35.0 | 38.0 | -.8 | -.8 |
| B004336 | 344813. | 3490036. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004337 | 344754. | 3490118. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004338 | 344695. | 3490199. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004339 | 344636. | 3490280. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| B004340 | 344578. | 3490362. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | -.9 | 6.0 | -.8 | -.8 |
| B004341 | 344519. | 3490443. | 20 | 71 | -.9 | .02 | 45.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004342 | 347138. | 3487493. | 20 | 71 | 1.3 | -.90 | 160.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B004343 | 347079. | 3487575. | 20 | 71 | .4 | .07 | 365.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B004344 | 347021. | 3487656. | 20 | 71 | .4 | -.90 | 940.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| B004345 | 346962. | 3487737. | 20 | 71 | .4 | .32 | 1350.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| B004346 | 346904. | 3487819. | 20 | 71 | .4 | .10 | 355.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004347 | 346845. | 3487900. | 20 | 71 | .4 | -.90 | 35.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004348 | 346787. | 3487982. | 20 | 71 | -.9 | -.90 | 115.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004349 | 346728. | 3488063. | 20 | 71 | .2 | .06 | 210.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 10.0 | 32.0 | -.8 | -.8 |
| B004350 | 346670. | 3488144. | 20 | 71 | -.9 | -.90 | 370.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004351 | 346611. | 3488226. | 20 | 71 | .8 | .26 | 405.0 | -.9 | -.8 | 70.0 | 4.0 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B004352 | 346553. | 3488307. | 20 | 71 | .7 | .03 | 30.0 | 1.0 | -.8 | 95.0 | 6.0 | -.8 | 30.0 | 9.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004302 | 6.0 | 30.0 |
| B004303 | 4.0 | 35.0 |
| B004304 | 3.0 | 40.0 |
| B004305 | 3.0 | 15.0 |
| B004306 | 3.0 | 30.0 |
| B004307 | 4.0 | 145.0 |
| B004308 | 3.0 | 60.0 |
| B004309 | 4.0 | 70.0 |
| B004310 | 8.0 | 410.0 |
| B004311 | 4.0 | 130.0 |
| B004312 | 3.0 | 185.0 |
| B004313 | 7.0 | 165.0 |
| B004314 | 4.0 | 85.0 |
| B004315 | 7.0 | 95.0 |
| B004316 | 4.0 | 90.0 |
| B004317 | 4.0 | 45.0 |
| B004318 | 7.0 | 70.0 |
| B004319 | 3.0 | 55.0 |
| B004320 | 4.0 | 235.0 |
| B004321 | 3.0 | 70.0 |
| B004322 | 3.0 | 80.0 |
| B004323 | 3.0 | 820.0 |
| B004324 | 4.0 | 340.0 |
| B004325 | -.9 | 180.0 |
| B004326 | 4.0 | 540.0 |
| B004327 | 4.0 | 460.0 |
| B004328 | 3.0 | 420.0 |
| B004329 | 4.0 | 485.0 |
| B004330 | 5.0 | 340.0 |
| B004331 | 3.0 | 520.0 |
| B004332 | 4.0 | 105.0 |
| B004333 | 3.0 | 85.0 |
| B004334 | 3.0 | 85.0 |
| B004335 | 3.0 | 130.0 |
| B004336 | 4.0 | 65.0 |
| B004337 | 3.0 | 65.0 |
| B004338 | 3.0 | 70.0 |
| B004339 | -.9 | 75.0 |
| B004340 | 3.0 | 75.0 |
| B004341 | 5.0 | 75.0 |
| B004342 | 4.0 | 60.0 |
| B004343 | 3.0 | 80.0 |
| B004344 | 5.0 | 50.0 |
| B004345 | 4.0 | 65.0 |
| B004346 | 4.0 | 60.0 |
| B004347 | 3.0 | 30.0 |
| B004348 | 4.0 | 45.0 |
| B004349 | 3.0 | 60.0 |
| B004350 | 4.0 | 50.0 |
| B004351 | 5.0 | 140.0 |
| B004352 | 4.0 | 150.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8004353 | 346494. | 3488389. | 20 | 71 | .8 | -.90 | 30.0 | 1.0 | -.8 | 50.0 | 4.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| 8004354 | 346436. | 3488470. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 60.0 | 4.0 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004355 | 346377. | 3488551. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 50.0 | 4.0 | -.8 | 5.0 | 4.0 | -.8 | -.8 |
| 8004356 | 346319. | 3488633. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004357 | 346260. | 3488714. | 20 | 71 | .4 | -.90 | 25.0 | -.9 | -.8 | 55.0 | 4.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004358 | 346202. | 3488796. | 20 | 71 | .6 | -.90 | 30.0 | -.9 | -.8 | 110.0 | 8.0 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| 8004359 | 346143. | 3488877. | 20 | 71 | .7 | -.90 | 35.0 | -.9 | -.8 | 70.0 | 6.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| 8004360 | 346085. | 3488958. | 20 | 71 | .9 | -.90 | 40.0 | 1.0 | -.8 | 35.0 | 4.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004361 | 346026. | 3489040. | 20 | 71 | 1.3 | -.90 | 85.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| 8004362 | 345968. | 3489121. | 20 | 71 | 2.1 | -.90 | 740.0 | 1.0 | -.8 | 75.0 | 4.0 | -.8 | 90.0 | 7.0 | -.8 | -.8 |
| 8004363 | 345909. | 3489203. | 20 | 71 | 2.8 | -.90 | 490.0 | -.9 | 5.0 | 40.0 | 2.0 | 15.0 | 150.0 | 4.0 | -.9 | 135.0 |
| 8004364 | 345851. | 3489284. | 20 | 71 | 1.4 | -.90 | 980.0 | 1.0 | -.8 | 75.0 | 4.0 | -.8 | 180.0 | 15.0 | -.8 | -.8 |
| 8004365 | 345792. | 3489365. | 20 | 71 | 2.9 | .10 | 1200.0 | 1.0 | 5.0 | 55.0 | 4.0 | 15.0 | 220.0 | 8.0 | -.9 | 165.0 |
| 8004366 | 345734. | 3489447. | 20 | 71 | 24.0 | .42 | 2150.0 | -.9 | 10.0 | 95.0 | -.9 | 10.0 | 1050.0 | 48.0 | -.9 | 80.0 |
| 8004367 | 345675. | 3489528. | 20 | 71 | 8.4 | .28 | 830.0 | -.9 | -.9 | 30.0 | -.9 | 10.0 | 210.0 | 10.0 | -.9 | 60.0 |
| 8004368 | 345617. | 3489610. | 20 | 71 | .8 | .02 | 85.0 | -.9 | -.8 | 50.0 | 4.0 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| 8004369 | 345558. | 3489691. | 20 | 71 | .9 | -.90 | 105.0 | -.9 | -.8 | 45.0 | 4.0 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| 8004370 | 345500. | 3489772. | 20 | 71 | .2 | -.90 | 50.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 10.0 | 11.0 | -.8 | -.8 |
| 8004371 | 345441. | 3489854. | 20 | 71 | .2 | -.90 | 35.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 5.0 | 7.0 | -.8 | -.8 |
| 8004372 | 345383. | 3489935. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004373 | 345324. | 3490017. | 20 | 71 | .2 | -.90 | 40.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| 8004374 | 345266. | 3490098. | 20 | 71 | .4 | -.90 | 65.0 | 2.0 | -.8 | 20.0 | 2.0 | -.8 | 25.0 | 19.0 | -.8 | -.8 |
| 8004375 | 345207. | 3490179. | 20 | 71 | .2 | -.90 | 85.0 | 1.0 | -.8 | 15.0 | 2.0 | -.8 | 20.0 | 44.0 | -.8 | -.8 |
| 8004376 | 345148. | 3490261. | 20 | 71 | .4 | -.90 | 85.0 | 1.0 | -.8 | 50.0 | 2.0 | -.8 | 20.0 | 65.0 | -.8 | -.8 |
| 8004377 | 345090. | 3490342. | 20 | 71 | .2 | -.90 | 30.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| 8004378 | 345031. | 3490424. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| 8004379 | 344973. | 3490505. | 20 | 71 | -.9 | -.90 | 25.0 | 1.0 | -.8 | 25.0 | 2.0 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| 8004380 | 344914. | 3490586. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| 8004381 | 344856. | 3490668. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004382 | 347196. | 3487412. | 20 | 71 | -.9 | -.90 | 220.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004383 | 347464. | 3487644. | 20 | 71 | 1.7 | -.90 | 45.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004384 | 347409. | 3487725. | 20 | 71 | 1.5 | -.90 | 170.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 45.0 | 4.0 | -.8 | -.8 |
| 8004385 | 347353. | 3487806. | 20 | 71 | .7 | -.90 | 130.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| 8004386 | 347298. | 3487887. | 20 | 71 | .2 | -.90 | 50.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004387 | 347243. | 3487968. | 20 | 71 | .4 | .03 | 310.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004388 | 347187. | 3488049. | 20 | 71 | -.9 | .04 | 15.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| 8004389 | 347132. | 3488130. | 20 | 71 | .8 | -.90 | 40.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.9 | -.9 | -.8 | -.8 |
| 8004390 | 347076. | 3488211. | 20 | 71 | .4 | .09 | 270.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| 8004391 | 347021. | 3488292. | 20 | 71 | .6 | .02 | 400.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004392 | 346966. | 3488373. | 20 | 71 | 1.2 | .10 | 1000.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 15.0 | 8.0 | -.8 | -.8 |
| 8004393 | 346911. | 3488454. | 20 | 71 | .2 | -.90 | 75.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004394 | 346856. | 3488535. | 20 | 71 | .5 | .19 | 640.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | -.8 |
| 8004395 | 346800. | 3488616. | 20 | 71 | .2 | .06 | 165.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| 8004396 | 346745. | 3488697. | 20 | 71 | .2 | .03 | 155.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004397 | 346690. | 3488778. | 20 | 71 | .6 | .04 | 165.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| 8004398 | 346634. | 3488859. | 20 | 71 | .6 | .02 | 140.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004399 | 346579. | 3488940. | 20 | 71 | .4 | .06 | 265.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| 8004400 | 346523. | 3489021. | 20 | 71 | 1.2 | -.90 | 100.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| 8004401 | 344527. | 3489831. | 20 | 71 | .2 | .02 | 30.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| 8004402 | 344583. | 3489748. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| 8004403 | 344639. | 3489665. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004353 | 3.0 | 100.0 |
| B004354 | 4.0 | 120.0 |
| B004355 | 3.0 | 110.0 |
| B004356 | 5.0 | 105.0 |
| B004357 | 3.0 | 90.0 |
| B004358 | 5.0 | 190.0 |
| B004359 | 3.0 | 115.0 |
| B004360 | 5.0 | 100.0 |
| B004361 | 3.0 | 95.0 |
| B004362 | 4.0 | 300.0 |
| B004363 | 3.0 | 330.0 |
| B004364 | 6.0 | 465.0 |
| B004365 | 5.0 | 570.0 |
| B004366 | 4.0 | 1950.0 |
| B004367 | 5.0 | 540.0 |
| B004368 | 5.0 | 190.0 |
| B004369 | 3.0 | 165.0 |
| B004370 | 4.0 | 75.0 |
| B004371 | 6.0 | 35.0 |
| B004372 | 6.0 | 30.0 |
| B004373 | 4.0 | 155.0 |
| B004374 | 7.0 | 40.0 |
| B004375 | 6.0 | 80.0 |
| B004376 | 7.0 | 100.0 |
| B004377 | 3.0 | 85.0 |
| B004378 | 4.0 | 100.0 |
| B004379 | 5.0 | 90.0 |
| B004380 | 4.0 | 85.0 |
| B004381 | 3.0 | 75.0 |
| B004382 | 5.0 | 90.0 |
| B004383 | 4.0 | 20.0 |
| B004384 | 3.0 | 50.0 |
| B004385 | 4.0 | 45.0 |
| B004386 | 4.0 | 25.0 |
| B004387 | 3.0 | 90.0 |
| B004388 | 3.0 | 15.0 |
| B004389 | 3.0 | 50.0 |
| B004390 | 3.0 | 40.0 |
| B004391 | 3.0 | 50.0 |
| B004392 | -.9 | 175.0 |
| B004393 | 4.0 | 35.0 |
| B004394 | 3.0 | 105.0 |
| B004395 | -.9 | 55.0 |
| B004396 | 3.0 | 45.0 |
| B004397 | -.9 | 65.0 |
| B004398 | 4.0 | 45.0 |
| B004399 | -.9 | 60.0 |
| B004400 | -.9 | 60.0 |
| B004401 | 3.0 | 90.0 |
| B004402 | -.9 | 90.0 |
| B004403 | -.9 | 75.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004404 | 344694. | 3489583. | 20 | 71 | .4 | .04 | 130.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004405 | 344750. | 3489500. | 20 | 71 | .4 | -.90 | 65.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 5.0 | 2.0 | -.8 | -.8 |
| B004406 | 344806. | 3489418. | 20 | 71 | .4 | .34 | 195.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004407 | 344862. | 3489335. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 5.0 | 2.0 | -.8 | -.8 |
| B004408 | 344918. | 3489252. | 20 | 71 | 1.2 | -.90 | 245.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B004409 | 344973. | 3489170. | 20 | 71 | 4.1 | .14 | 1250.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 75.0 | 11.0 | -.8 | -.8 |
| B004410 | 345029. | 3489087. | 20 | 71 | 1.9 | .16 | 1450.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 105.0 | 8.0 | -.8 | -.8 |
| B004411 | 345085. | 3489005. | 20 | 71 | 6.6 | .05 | 810.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 195.0 | 15.0 | -.8 | -.8 |
| B004412 | 345141. | 3488922. | 20 | 71 | 5.4 | .17 | 560.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 210.0 | 22.0 | -.8 | -.8 |
| B004413 | 345197. | 3488839. | 20 | 71 | 9.7 | .20 | 1400.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 260.0 | 22.0 | -.8 | -.8 |
| B004414 | 345252. | 3488757. | 20 | 71 | 80.0 | .40 | 900.0 | -.9 | -.8 | 100.0 | 2.0 | -.8 | 1100.0 | 150.0 | -.8 | -.8 |
| B004415 | 345308. | 3488674. | 20 | 71 | 80.0 | .14 | 610.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 1100.0 | 90.0 | -.8 | -.8 |
| B004416 | 345364. | 3488592. | 20 | 71 | 460.0 | 12.00 | 20000.0 | 15.0 | -.8 | 850.0 | -.9 | -.8 | 9250.0 | 1500.0 | -.8 | -.8 |
| B004417 | 345420. | 3488509. | 20 | 71 | 3.1 | -.90 | 55.0 | -.9 | -.8 | 90.0 | -.9 | -.8 | 40.0 | 6.0 | -.8 | -.8 |
| B004418 | 345476. | 3488426. | 20 | 71 | 1.0 | -.90 | 25.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004419 | 345531. | 3488344. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 95.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004420 | 345587. | 3488261. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004421 | 345643. | 3488179. | 20 | 71 | .8 | -.90 | 20.0 | -.9 | -.8 | 100.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004422 | 345699. | 3488096. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 105.0 | -.9 | -.8 | -.9 | -.9 | -.8 | -.8 |
| B004423 | 345755. | 3488013. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | -.9 | 22.0 | -.8 | -.8 |
| B004424 | 345810. | 3487931. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| B004425 | 345866. | 3487848. | 20 | 71 | 2.1 | -.90 | 20.0 | 1.0 | -.8 | 25.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B004426 | 345922. | 3487766. | 20 | 71 | .4 | -.90 | 25.0 | -.9 | -.8 | 85.0 | 2.0 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004427 | 345978. | 3487683. | 20 | 71 | .4 | -.90 | 20.0 | -.9 | -.8 | 55.0 | 2.0 | -.8 | 5.0 | 4.0 | -.8 | -.8 |
| B004428 | 346033. | 3487600. | 20 | 71 | .7 | -.90 | 20.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004429 | 346089. | 3487518. | 20 | 71 | .4 | -.90 | 25.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 10.0 | 5.0 | -.8 | -.8 |
| B004430 | 346145. | 3487435. | 20 | 71 | .6 | -.90 | 85.0 | 1.0 | -.8 | 45.0 | 2.0 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004431 | 346201. | 3487353. | 20 | 71 | -.9 | -.90 | 75.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004432 | 346257. | 3487270. | 20 | 71 | .7 | .06 | 240.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004433 | 346313. | 3487187. | 20 | 71 | .4 | .03 | 380.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | 5.0 | -.8 | -.8 |
| B004434 | 346368. | 3487105. | 20 | 71 | .4 | -.90 | 115.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | 10.0 | 5.0 | -.8 | -.8 |
| B004435 | 346424. | 3487022. | 20 | 71 | .4 | .06 | 115.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B004436 | 346480. | 3486940. | 20 | 71 | .8 | -.90 | 110.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004437 | 345095. | 3485513. | 20 | 71 | .8 | -.90 | 570.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 40.0 | 11.0 | -.8 | -.8 |
| B004438 | 345039. | 3485596. | 20 | 71 | 1.1 | -.90 | 530.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 40.0 | 11.0 | -.8 | -.8 |
| B004439 | 344983. | 3485679. | 20 | 71 | 1.4 | .02 | 1150.0 | 2.0 | -.8 | 30.0 | -.9 | -.8 | 320.0 | 44.0 | -.8 | -.8 |
| B004440 | 344927. | 3485761. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004441 | 344871. | 3485844. | 20 | 71 | -.9 | -.90 | 295.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| B004442 | 344816. | 3485927. | 20 | 71 | -.9 | .02 | 125.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | 8.0 | -.8 | -.8 |
| B004443 | 344766. | 3486010. | 20 | 71 | .2 | -.90 | 140.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| B004444 | 344704. | 3486093. | 20 | 71 | -.9 | .14 | 495.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 35.0 | 7.0 | -.8 | -.8 |
| B004445 | 344648. | 3486176. | 20 | 71 | -.9 | .02 | 75.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | 5.0 | 2.0 | -.8 | -.8 |
| B004446 | 344592. | 3486259. | 20 | 71 | .6 | .02 | 135.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B004447 | 344536. | 3486341. | 20 | 71 | .6 | .18 | 540.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 35.0 | 10.0 | -.8 | -.8 |
| B004448 | 344480. | 3486424. | 20 | 71 | .4 | .20 | 400.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 30.0 | 7.0 | -.8 | -.8 |
| B004449 | 344424. | 3486507. | 20 | 71 | 1.5 | .46 | 540.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| B004450 | 344368. | 3486590. | 20 | 71 | .8 | .18 | 590.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 70.0 | 10.0 | -.8 | -.8 |
| B004451 | 344312. | 3486673. | 20 | 71 | 2.7 | .05 | 150.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B004452 | 344257. | 3486756. | 20 | 71 | .8 | .24 | 900.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 40.0 | 15.0 | -.8 | -.8 |
| B004453 | 344201. | 3486839. | 20 | 71 | 1.1 | -.90 | 580.0 | -.9 | -.8 | 100.0 | 4.0 | -.8 | 15.0 | 16.0 | -.8 | -.8 |
| B004454 | 344145. | 3486922. | 20 | 71 | 1.5 | -.90 | 80.0 | -.9 | -.8 | 90.0 | 4.0 | -.8 | 30.0 | 26.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004404 | 3.0 | 110.0 |
| B004405 | 4.0 | 135.0 |
| B004406 | 3.0 | 95.0 |
| B004407 | 4.0 | 40.0 |
| B004408 | 3.0 | 85.0 |
| B004409 | 4.0 | 355.0 |
| B004410 | -.9 | 330.0 |
| B004411 | 3.0 | 370.0 |
| B004412 | 3.0 | 375.0 |
| B004413 | -.9 | 520.0 |
| B004414 | 8.0 | 760.0 |
| B004415 | 3.0 | 375.0 |
| B004416 | -.9 | 5550.0 |
| B004417 | 3.0 | 195.0 |
| B004418 | -.9 | 165.0 |
| B004419 | -.9 | 125.0 |
| B004420 | -.9 | 95.0 |
| B004421 | -.9 | 115.0 |
| B004422 | -.9 | 120.0 |
| B004423 | -.9 | 130.0 |
| B004424 | -.9 | 105.0 |
| B004425 | -.9 | 70.0 |
| B004426 | -.9 | 195.0 |
| B004427 | 3.0 | 135.0 |
| B004428 | -.9 | 130.0 |
| B004429 | -.9 | 135.0 |
| B004430 | -.9 | 105.0 |
| B004431 | -.9 | 50.0 |
| B004432 | -.9 | 55.0 |
| B004433 | -.9 | 100.0 |
| B004434 | -.9 | 70.0 |
| B004435 | 4.0 | 95.0 |
| B004436 | 4.0 | 85.0 |
| B004437 | -.9 | 70.0 |
| B004438 | -.9 | 55.0 |
| B004439 | 4.0 | 175.0 |
| B004440 | 3.0 | 30.0 |
| B004441 | -.9 | 70.0 |
| B004442 | -.9 | 50.0 |
| B004443 | -.9 | 55.0 |
| B004444 | 3.0 | 65.0 |
| B004445 | -.9 | 25.0 |
| B004446 | -.9 | 30.0 |
| B004447 | 3.0 | 135.0 |
| B004448 | 3.0 | 85.0 |
| B004449 | 7.0 | 65.0 |
| B004450 | 3.0 | 105.0 |
| B004451 | 3.0 | 45.0 |
| B004452 | 3.0 | 160.0 |
| B004453 | 5.0 | 150.0 |
| B004454 | -.9 | 120.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004455 | 344089. | 3487005. | 20 | 71 | 2.3 | .03 | 120.0 | -.9 | -.8 | 55.0 | 4.0 | -.8 | 25.0 | 12.0 | -.8 | -.8 |
| B004456 | 344033. | 3487088. | 20 | 71 | 5.5 | .06 | 550.0 | -.9 | 10.0 | 35.0 | 2.0 | 25.0 | 410.0 | 10.0 | -.9 | 110.0 |
| B004457 | 343977. | 3487171. | 20 | 71 | 4.2 | .30 | 2250.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 105.0 | 15.0 | -.8 | -.8 |
| B004458 | 343921. | 3487253. | 20 | 71 | 12.0 | 2.30 | 5600.0 | -.9 | 15.0 | 20.0 | -.9 | -.9 | 1400.0 | 24.0 | -.9 | 40.0 |
| B004459 | 343865. | 3487336. | 20 | 71 | 1.1 | .45 | 1450.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 110.0 | 6.0 | -.8 | -.8 |
| B004460 | 343809. | 3487419. | 20 | 71 | 1.3 | -.90 | 90.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004461 | 343753. | 3487502. | 20 | 71 | 2.8 | -.90 | 50.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004462 | 343698. | 3487585. | 20 | 71 | 5.8 | .04 | 740.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 135.0 | 13.0 | -.8 | -.8 |
| B004463 | 343642. | 3487668. | 20 | 71 | 1.5 | -.90 | 145.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 35.0 | 10.0 | -.8 | -.8 |
| B004464 | 343586. | 3487751. | 20 | 71 | .5 | -.90 | 110.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B004465 | 343530. | 3487834. | 20 | 71 | .8 | -.90 | 40.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B004466 | 343474. | 3487917. | 20 | 71 | 1.1 | .12 | 360.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004467 | 343418. | 3487999. | 20 | 71 | 2.5 | .07 | 290.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 60.0 | 9.0 | -.8 | -.8 |
| B004468 | 343362. | 3488082. | 20 | 71 | 2.0 | -.90 | 155.0 | -.9 | 10.0 | 45.0 | -.9 | 40.0 | 65.0 | 6.0 | -.9 | 90.0 |
| B004469 | 343306. | 3488165. | 20 | 71 | 2.9 | .45 | 315.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 75.0 | 11.0 | -.8 | -.8 |
| B004470 | 343256. | 3488248. | 20 | 71 | 2.9 | .08 | 170.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 50.0 | 7.0 | -.8 | -.8 |
| B004471 | 343194. | 3488331. | 20 | 71 | .9 | .14 | 255.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 80.0 | 6.0 | -.8 | -.8 |
| B004472 | 343139. | 3488414. | 20 | 71 | .7 | .44 | 275.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 80.0 | 5.0 | -.8 | -.8 |
| B004473 | 343083. | 3488497. | 20 | 71 | 2.4 | .05 | 165.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 135.0 | 8.0 | -.8 | -.8 |
| B004474 | 343027. | 3488580. | 20 | 71 | 2.0 | .02 | 75.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 70.0 | 7.0 | -.8 | -.8 |
| B004475 | 342971. | 3488663. | 20 | 71 | 1.8 | .05 | 155.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 55.0 | 12.0 | -.8 | -.8 |
| B004476 | 342915. | 3488746. | 20 | 71 | 1.1 | .02 | 125.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 30.0 | 6.0 | -.8 | -.8 |
| B004477 | 342859. | 3488828. | 20 | 71 | 1.4 | .02 | 280.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 45.0 | 6.0 | -.8 | -.8 |
| B004478 | 342803. | 3488911. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004479 | 342747. | 3488994. | 20 | 71 | .2 | -.90 | 85.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004480 | 342691. | 3489077. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004481 | 342635. | 3489160. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| B004482 | 342259. | 3488897. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004483 | 342315. | 3488815. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B004484 | 342371. | 3488732. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004485 | 342426. | 3488650. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004486 | 342482. | 3488567. | 20 | 71 | .4 | -.90 | 120.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004487 | 342538. | 3488485. | 20 | 71 | .2 | .03 | 240.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004488 | 342594. | 3488402. | 20 | 71 | .4 | -.90 | 240.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B004489 | 342650. | 3488320. | 20 | 71 | .2 | .15 | 220.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004491 | 342705. | 3488237. | 20 | 71 | 1.1 | -.90 | 165.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004492 | 342761. | 3488155. | 20 | 71 | 5.9 | .06 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 65.0 | 7.0 | -.8 | -.8 |
| B004493 | 342817. | 3488072. | 20 | 71 | .4 | -.90 | 405.0 | -.9 | 25.0 | 55.0 | -.9 | 85.0 | 50.0 | 6.0 | -.9 | 190.0 |
| B004494 | 342873. | 3487990. | 20 | 71 | 2.7 | .04 | 325.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 65.0 | 8.0 | -.8 | -.8 |
| B004495 | 342929. | 3487907. | 20 | 71 | -.9 | .05 | 425.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004496 | 342984. | 3487825. | 20 | 71 | 1.2 | .34 | 395.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B004497 | 343040. | 3487742. | 20 | 71 | -.9 | .07 | 600.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004498 | 343096. | 3487660. | 20 | 71 | 1.5 | .02 | 650.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B004499 | 343152. | 3487577. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004500 | 343207. | 3487495. | 20 | 71 | 3.2 | .10 | 1050.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 75.0 | 4.0 | -.8 | -.8 |
| B004501 | 343263. | 3487412. | 20 | 71 | 2.6 | .20 | 890.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 140.0 | 4.0 | -.8 | -.8 |
| B004502 | 343319. | 3487330. | 20 | 71 | .4 | .05 | 145.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| B004503 | 343375. | 3487247. | 20 | 71 | .4 | .06 | 365.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B004504 | 343431. | 3487165. | 20 | 71 | .4 | .02 | 205.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 12.0 | -.8 | -.8 |
| B004505 | 343487. | 3487082. | 20 | 71 | 1.7 | -.90 | 280.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 10.0 | 13.0 | -.8 | -.8 |
| B004506 | 343542. | 3487000. | 20 | 71 | 1.6 | -.90 | 60.0 | -.9 | -.8 | 60.0 | 4.0 | -.8 | 10.0 | 9.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004455 | -.9 | 100.0 |
| B004456 | -.9 | 380.0 |
| B004457 | 4.0 | 195.0 |
| B004458 | 4.0 | 470.0 |
| B004459 | -.9 | 105.0 |
| B004460 | -.9 | 35.0 |
| B004461 | -.9 | 30.0 |
| B004462 | -.9 | 325.0 |
| B004463 | -.9 | 155.0 |
| B004464 | -.9 | 115.0 |
| B004465 | -.9 | 130.0 |
| B004466 | -.9 | 70.0 |
| B004467 | -.9 | 240.0 |
| B004468 | -.9 | 325.0 |
| B004469 | -.9 | 390.0 |
| B004470 | -.9 | 170.0 |
| B004471 | -.9 | 190.0 |
| B004472 | 4.0 | 175.0 |
| B004473 | -.9 | 215.0 |
| B004474 | -.9 | 130.0 |
| B004475 | -.9 | 180.0 |
| B004476 | -.9 | 190.0 |
| B004477 | -.9 | 165.0 |
| B004478 | -.9 | 45.0 |
| B004479 | 3.0 | 70.0 |
| B004480 | -.9 | 80.0 |
| B004481 | -.9 | 50.0 |
| B004482 | 5.0 | 40.0 |
| B004483 | -.9 | 95.0 |
| B004484 | -.9 | 85.0 |
| B004485 | -.9 | 105.0 |
| B004486 | 3.0 | 155.0 |
| B004487 | -.9 | 225.0 |
| B004488 | -.9 | 250.0 |
| B004489 | -.9 | 135.0 |
| B004491 | 4.0 | 45.0 |
| B004492 | -.9 | 420.0 |
| B004493 | -.9 | 275.0 |
| B004494 | -.9 | 265.0 |
| B004495 | -.9 | 70.0 |
| B004496 | -.9 | 160.0 |
| B004497 | -.9 | 70.0 |
| B004498 | -.9 | 85.0 |
| B004499 | -.9 | 30.0 |
| B004500 | 3.0 | 235.0 |
| B004501 | -.9 | 85.0 |
| B004502 | -.9 | 40.0 |
| B004503 | -.9 | 60.0 |
| B004504 | -.9 | 55.0 |
| B004505 | 3.0 | 130.0 |
| B004506 | -.9 | 145.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004507 | 343598. | 3486917. | 20 | 71 | .2 | -.90 | 25.0 | -.9 | -.8 | 70.0 | 2.0 | -.8 | 10.0 | 6.0 | -.8 | -.8 |
| B004508 | 343654. | 3486834. | 20 | 71 | 1.7 | -.90 | 145.0 | -.9 | -.8 | 70.0 | 2.0 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| B004509 | 343710. | 3486752. | 20 | 71 | 3.6 | -.90 | 610.0 | -.9 | -.8 | 55.0 | 6.0 | -.8 | 45.0 | 30.0 | -.8 | -.8 |
| B004510 | 343766. | 3486670. | 20 | 71 | 2.2 | .16 | -.9 | -.9 | -.8 | 55.0 | 8.0 | -.8 | 35.0 | 24.0 | -.8 | -.8 |
| B004511 | 343821. | 3486587. | 20 | 71 | .4 | .03 | 210.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 25.0 | 5.0 | -.8 | -.8 |
| B004512 | 343877. | 3486504. | 20 | 71 | .4 | .09 | 175.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 40.0 | 8.0 | -.8 | -.8 |
| B004513 | 343933. | 3486422. | 20 | 71 | -.9 | -.90 | 75.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004514 | 343989. | 3486339. | 20 | 71 | 2.7 | .02 | 205.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 65.0 | 4.0 | -.8 | -.8 |
| B004515 | 344045. | 3486257. | 20 | 71 | 17.0 | .02 | 145.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 420.0 | 22.0 | -.8 | -.8 |
| B004516 | 344100. | 3486174. | 20 | 71 | .6 | -.90 | 175.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B004517 | 344156. | 3486092. | 20 | 71 | .4 | .03 | 140.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004518 | 344212. | 3486009. | 20 | 71 | .9 | .18 | 14500.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004519 | 344038. | 3487695. | 20 | 71 | 4.6 | -.90 | 365.0 | 1.0 | 30.0 | 95.0 | 2.0 | 80.0 | 115.0 | 12.0 | -.9 | 330.0 |
| B004520 | 343982. | 3487778. | 20 | 71 | 3.5 | .06 | 590.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 65.0 | 15.0 | -.8 | -.8 |
| B004521 | 343926. | 3487861. | 20 | 71 | 2.0 | -.90 | 345.0 | -.9 | -.8 | 80.0 | 2.0 | -.8 | 75.0 | 10.0 | -.8 | -.8 |
| B004522 | 343871. | 3487944. | 20 | 71 | 1.5 | -.90 | 265.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 40.0 | 11.0 | -.8 | -.8 |
| B004523 | 343815. | 3488027. | 20 | 71 | 5.7 | -.90 | 265.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 60.0 | 13.0 | -.8 | -.8 |
| B004524 | 343759. | 3488110. | 20 | 71 | 2.2 | .09 | 355.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | 10.0 | -.8 | -.8 |
| B004525 | 343703. | 3488192. | 20 | 71 | 4.9 | .06 | 260.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 80.0 | 13.0 | -.8 | -.8 |
| B004526 | 343647. | 3488275. | 20 | 71 | 1.4 | .02 | 240.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 40.0 | 10.0 | -.8 | -.8 |
| B004527 | 343592. | 3488358. | 20 | 71 | 2.2 | -.90 | 210.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 45.0 | 7.0 | -.8 | -.8 |
| B004528 | 343536. | 3488441. | 20 | 71 | 4.1 | -.90 | 240.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 215.0 | 10.0 | -.8 | -.8 |
| B004529 | 343480. | 3488524. | 20 | 71 | .2 | -.90 | 65.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | -.8 |
| B004530 | 343424. | 3488607. | 20 | 71 | 2.6 | -.90 | 300.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 45.0 | 9.0 | -.8 | -.8 |
| B004531 | 343368. | 3488689. | 20 | 71 | 2.3 | .06 | 295.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 65.0 | 6.0 | -.8 | -.8 |
| B004532 | 343312. | 3488772. | 20 | 71 | .8 | -.90 | 385.0 | -.9 | -.8 | 65.0 | 2.0 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B004533 | 343256. | 3488855. | 20 | 71 | 1.8 | .03 | 180.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 35.0 | 6.0 | -.8 | -.8 |
| B004534 | 343200. | 3488938. | 20 | 71 | 1.4 | -.90 | 265.0 | -.9 | -.8 | 70.0 | 2.0 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| B004535 | 343144. | 3489021. | 20 | 71 | .2 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B004536 | 343088. | 3489104. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B004537 | 343033. | 3489186. | 20 | 71 | .2 | -.90 | 25.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004538 | 342977. | 3489269. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B004539 | 342921. | 3489352. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004540 | 344094. | 3486613. | 20 | 71 | .6 | -.90 | 130.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | 11.0 | -.8 | -.8 |
| B004541 | 344150. | 3487530. | 20 | 71 | .4 | -.90 | 215.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | 9.0 | -.8 | -.8 |
| B004542 | 344202. | 3487447. | 20 | 71 | .4 | .02 | 105.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 15.0 | 11.0 | -.8 | -.8 |
| B004543 | 344262. | 3487364. | 20 | 71 | 8.0 | .06 | 490.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 210.0 | 17.0 | -.8 | -.8 |
| B004544 | 344318. | 3487281. | 20 | 71 | 26.0 | .39 | 3050.0 | -.9 | 10.0 | 45.0 | -.9 | -.9 | 360.0 | 24.0 | -.9 | 50.0 |
| B004545 | 344374. | 3487198. | 20 | 71 | 65.0 | .30 | 3550.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | 270.0 | 48.0 | -.8 | -.8 |
| B004546 | 344429. | 3487115. | 20 | 71 | 11.0 | .54 | 1800.0 | -.9 | 10.0 | 45.0 | -.9 | -.9 | 380.0 | 18.0 | -.9 | 75.0 |
| B004547 | 344485. | 3487032. | 20 | 71 | 12.0 | .10 | 190.0 | -.9 | -.9 | 20.0 | -.9 | -.9 | 45.0 | 4.0 | -.9 | 75.0 |
| B004548 | 344541. | 3486949. | 20 | 71 | 2.3 | .20 | 1350.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | 36.0 | -.8 | -.8 |
| B004549 | 344597. | 3486886. | 20 | 71 | 1.0 | .03 | 200.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.9 | 10.0 | -.8 | -.8 |
| B004550 | 344653. | 3486783. | 20 | 71 | .6 | .12 | 680.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004551 | 344709. | 3486700. | 20 | 71 | .2 | .02 | 205.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004552 | 344765. | 3486617. | 20 | 71 | .2 | -.90 | 25.0 | -.9 | -.9 | 10.0 | -.9 | -.9 | 5.0 | -.9 | -.9 | 100.0 |
| B004553 | 344821. | 3486535. | 20 | 71 | .2 | .03 | 195.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004554 | 344877. | 3486452. | 20 | 71 | 1.0 | .05 | 480.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 6.0 | -.8 | -.8 |
| B004555 | 435750. | 3562150. | 20 | 71 | .8 | .07 | 680.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 205.0 | -.8 | -.8 |
| B004576 | 348532. | 3488194. | 20 | 71 | .2 | -.90 | 100.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004577 | 348504. | 3488236. | 20 | 71 | 1.2 | .05 | 170.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004507 | 4.0 | 180.0 |
| B004508 | 4.0 | 130.0 |
| B004509 | 5.0 | 210.0 |
| B004510 | 5.0 | 210.0 |
| B004511 | 4.0 | 90.0 |
| B004512 | 5.0 | 65.0 |
| B004513 | 5.0 | 25.0 |
| B004514 | 5.0 | 100.0 |
| B004515 | 5.0 | 285.0 |
| B004516 | 5.0 | 45.0 |
| B004517 | 3.0 | 50.0 |
| B004518 | 5.0 | 95.0 |
| B004519 | 4.0 | 475.0 |
| B004520 | 4.0 | 245.0 |
| B004521 | 4.0 | 220.0 |
| B004522 | 3.0 | 170.0 |
| B004523 | 5.0 | 245.0 |
| B004524 | 5.0 | 150.0 |
| B004525 | 6.0 | 235.0 |
| B004526 | 5.0 | 160.0 |
| B004527 | 4.0 | 160.0 |
| B004528 | 4.0 | 215.0 |
| B004529 | 3.0 | 20.0 |
| B004530 | 4.0 | 130.0 |
| B004531 | 3.0 | 145.0 |
| B004532 | 4.0 | 195.0 |
| B004533 | 4.0 | 115.0 |
| B004534 | 6.0 | 200.0 |
| B004535 | 6.0 | 80.0 |
| B004536 | 8.0 | 95.0 |
| B004537 | 4.0 | 120.0 |
| B004538 | 5.0 | 115.0 |
| B004539 | 4.0 | 125.0 |
| B004540 | 5.0 | 185.0 |
| B004541 | 7.0 | 110.0 |
| B004542 | 4.0 | 120.0 |
| B004543 | 5.0 | 265.0 |
| B004544 | 6.0 | 350.0 |
| B004545 | 4.0 | 610.0 |
| B004546 | 6.0 | 930.0 |
| B004547 | 6.0 | 60.0 |
| B004548 | 9.0 | 80.0 |
| B004549 | 5.0 | 30.0 |
| B004550 | 6.0 | 50.0 |
| B004551 | 4.0 | 35.0 |
| B004552 | 4.0 | 25.0 |
| B004553 | 6.0 | 40.0 |
| B004554 | 10.0 | 60.0 |
| B004555 | 6.0 | 160.0 |
| B004576 | 4.0 | 45.0 |
| B004577 | 4.0 | 85.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B004578 | 348476. | 3488277. | 20 | 71 | .6 | .04 | 185.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B004579 | 348449. | 3488319. | 20 | 71 | 1.7 | -.90 | 175.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 40.0 | 4.0 | -.8 | -.8 |
| B004580 | 348421. | 3488360. | 20 | 71 | .6 | -.90 | 95.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B004581 | 348393. | 3488401. | 20 | 71 | .6 | -.90 | 100.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B004582 | 348337. | 3488484. | 20 | 71 | .8 | -.90 | 50.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.9 | 2.0 | -.8 | -.8 |
| B004583 | 348281. | 3488567. | 20 | 71 | .6 | .07 | 145.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | 4.0 | -.8 | -.8 |
| B004584 | 348225. | 3488650. | 20 | 71 | 1.0 | -.90 | 160.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B004585 | 419159. | 3558543. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004586 | 419213. | 3558460. | 20 | 71 | .4 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B004587 | 419267. | 3558377. | 20 | 71 | .4 | -.90 | -.9 | -.9 | -.8 | 60.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B004588 | 419321. | 3558295. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B004589 | 419375. | 3558212. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B004590 | 419429. | 3558129. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B004591 | 419484. | 3558047. | 20 | 71 | .6 | -.90 | 20.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B004592 | 419538. | 3557964. | 20 | 71 | .8 | -.90 | 20.0 | -.9 | -.8 | 50.0 | 2.0 | -.8 | 45.0 | 2.0 | -.8 | -.8 |
| B004593 | 419592. | 3557881. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B004594 | 419646. | 3557799. | 20 | 71 | .4 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B004595 | 419700. | 3557716. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 4.0 | -.8 | -.8 |
| B004596 | 419754. | 3557633. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | 10.0 | -.8 | -.8 |
| B004598 | 419809. | 3557551. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 10.0 | -.8 | -.8 |
| B004599 | 419312. | 3557579. | 20 | 71 | 1.0 | -.90 | 15.0 | 1.0 | -.8 | 30.0 | 2.0 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B004600 | 419257. | 3557662. | 20 | 71 | .6 | -.90 | 25.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B010201 | 399794. | 3541332. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010202 | 399881. | 3541380. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010203 | 399967. | 3541427. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010204 | 400053. | 3541475. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B010205 | 400139. | 3541523. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 55.0 | 4.0 | -.8 | -.8 |
| B010206 | 400226. | 3541570. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 75.0 | -.9 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| B010207 | 400312. | 3541618. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010208 | 400398. | 3541666. | 20 | 71 | .2 | -.90 | -.9 | -.9 | -.8 | 95.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B010209 | 400485. | 3541713. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B010210 | 400571. | 3541761. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010211 | 400657. | 3541809. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B010212 | 400743. | 3541856. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010213 | 400836. | 3541904. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 80.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010214 | 400916. | 3541951. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 70.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010215 | 401002. | 3541999. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 70.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010216 | 401089. | 3542047. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010217 | 401175. | 3542094. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 30.0 | 6.0 | -.8 | -.8 |
| B010218 | 401261. | 3542142. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| B010219 | 401347. | 3542190. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 80.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010220 | 401434. | 3542237. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 70.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010221 | 401520. | 3542285. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010222 | 400979. | 3539374. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 70.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010223 | 400883. | 3539351. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B010224 | 400786. | 3539328. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B010225 | 400690. | 3539305. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010226 | 400594. | 3539282. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010227 | 400497. | 3539259. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010228 | 400401. | 3539236. | 20 | 71 | -.9 | -.90 | 105.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010229 | 400304. | 3539213. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B004578 | 5.0 | 70.0 |
| B004579 | 4.0 | 50.0 |
| B004580 | 4.0 | 70.0 |
| B004581 | 5.0 | 45.0 |
| B004582 | 3.0 | 35.0 |
| B004583 | 8.0 | 35.0 |
| B004584 | 5.0 | 40.0 |
| B004585 | 5.0 | 90.0 |
| B004586 | 3.0 | 90.0 |
| B004587 | 3.0 | 75.0 |
| B004588 | 4.0 | 110.0 |
| B004589 | -.9 | 85.0 |
| B004590 | -.9 | 70.0 |
| B004591 | -.9 | 70.0 |
| B004592 | 3.0 | 65.0 |
| B004593 | -.9 | 55.0 |
| B004594 | -.9 | 50.0 |
| B004595 | -.9 | 105.0 |
| B004596 | -.9 | 100.0 |
| B004598 | -.9 | 105.0 |
| B004599 | -.9 | 45.0 |
| B004600 | -.9 | 60.0 |
| B010201 | 3.0 | 115.0 |
| B010202 | 4.0 | 95.0 |
| B010203 | 4.0 | 115.0 |
| B010204 | 9.0 | 130.0 |
| B010205 | 3.0 | 110.0 |
| B010206 | 3.0 | 135.0 |
| B010207 | 3.0 | 115.0 |
| B010208 | 5.0 | 165.0 |
| B010209 | 5.0 | 130.0 |
| B010210 | 5.0 | 75.0 |
| B010211 | 4.0 | 150.0 |
| B010212 | 3.0 | 105.0 |
| B010213 | 4.0 | 70.0 |
| B010214 | 5.0 | 75.0 |
| B010215 | 3.0 | 55.0 |
| B010216 | 3.0 | 80.0 |
| B010217 | 3.0 | 110.0 |
| B010218 | 4.0 | 110.0 |
| B010219 | 5.0 | 135.0 |
| B010220 | 3.0 | 140.0 |
| B010221 | 3.0 | 120.0 |
| B010222 | 3.0 | 105.0 |
| B010223 | 4.0 | 120.0 |
| B010224 | 4.0 | 115.0 |
| B010225 | 3.0 | 115.0 |
| B010226 | 5.0 | 110.0 |
| B010227 | 3.0 | 100.0 |
| B010228 | 3.0 | 185.0 |
| B010229 | 2.0 | 150.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B010230 | 400208. | 3539189. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B010231 | 400111. | 3539116. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010232 | 400015. | 3539143. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010233 | 399918. | 3539120. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010234 | 399822. | 3539097. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010235 | 399725. | 3539074. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010236 | 399629. | 3539051. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010237 | 399532. | 3539028. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010238 | 399436. | 3539005. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010239 | 399339. | 3538982. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010240 | 399243. | 3538959. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010241 | 399146. | 3538936. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010242 | 399050. | 3538913. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B010243 | 378688. | 3493780. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010244 | 378762. | 3493712. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010245 | 378837. | 3493645. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010246 | 378911. | 3493578. | 20 | 71 | -.9 | .03 | 15.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010247 | 378985. | 3493511. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010248 | 379060. | 3493444. | 20 | 71 | 1.3 | -.90 | 15.0 | 2.0 | -.8 | 120.0 | -.9 | -.8 | 295.0 | 2.0 | -.8 | -.8 |
| B010249 | 379134. | 3493377. | 20 | 71 | .2 | -.90 | 15.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B010250 | 379208. | 3493309. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010251 | 379283. | 3493242. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010252 | 379422. | 3493100. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010253 | 379492. | 3493029. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010254 | 379561. | 3492958. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010255 | 379631. | 3492887. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010256 | 379701. | 3492816. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010257 | 379770. | 3492745. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010258 | 379910. | 3492603. | 20 | 71 | .4 | .04 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010259 | 379352. | 3493171. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010260 | 382811. | 3496144. | 20 | 71 | .4 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 110.0 | -.9 | -.8 | -.8 |
| B010261 | 382891. | 3496090. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010262 | 382971. | 3496036. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010263 | 382052. | 3495982. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010264 | 383132. | 3495927. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B010265 | 383212. | 3495873. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010266 | 383293. | 3495819. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 14.0 | -.8 | -.8 |
| B010267 | 383373. | 3495764. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 20.0 | 12.0 | -.8 | -.8 |
| B010268 | 383453. | 3495710. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 105.0 | 2.0 | -.8 | -.8 |
| B010269 | 383533. | 3495656. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 40.0 | 4.0 | -.8 | -.8 |
| B010270 | 383614. | 3495602. | 20 | 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 120.0 | 12.0 | -.8 | -.8 |
| B010271 | 382731. | 3496199. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B010272 | 382650. | 3496253. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 130.0 | 2.0 | -.8 | -.8 |
| B010273 | 382570. | 3496307. | 20 | 71 | .8 | -.90 | 40.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 75.0 | 10.0 | -.8 | -.8 |
| B010274 | 382490. | 3496362. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 105.0 | 2.0 | -.8 | -.8 |
| B010275 | 382409. | 3496416. | 20 | 71 | .8 | -.90 | 40.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 120.0 | 6.0 | -.8 | -.8 |
| B010276 | 382329. | 3496470. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010277 | 382249. | 3496524. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 40.0 | 13.0 | -.8 | -.8 |
| B010278 | 382169. | 3496579. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010279 | 382088. | 3496633. | 20 | 71 | .2 | -.90 | 10.0 | -.9 | -.8 | 100.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B010280 | 382008. | 3496687. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 100.0 | -.9 | -.8 | 15.0 | 11.0 | -.8 | -.8 |

TABLE AO-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B010230 | 5.0 | 130.0 |
| B010231 | 4.0 | 120.0 |
| B010232 | 4.0 | 70.0 |
| B010233 | 4.0 | 50.0 |
| B010234 | 4.0 | 65.0 |
| B010235 | 4.0 | 85.0 |
| B010236 | 4.0 | 80.0 |
| B010237 | 5.0 | 100.0 |
| B010238 | 3.0 | 90.0 |
| B010239 | 4.0 | 100.0 |
| B010240 | 3.0 | 85.0 |
| B010241 | 4.0 | 100.0 |
| B010242 | 3.0 | 110.0 |
| B010243 | 4.0 | 75.0 |
| B010244 | 3.0 | 80.0 |
| B010245 | 3.0 | 70.0 |
| B010246 | 3.0 | 55.0 |
| B010247 | 2.0 | 135.0 |
| B010248 | 3.0 | 385.0 |
| B010249 | 3.0 | 70.0 |
| B010250 | -.9 | 105.0 |
| B010251 | 4.0 | 35.0 |
| B010252 | -.9 | 80.0 |
| B010253 | 3.0 | 85.0 |
| B010254 | 4.0 | 70.0 |
| B010255 | 6.0 | 90.0 |
| B010256 | 3.0 | 110.0 |
| B010257 | -.9 | 120.0 |
| B010258 | 4.0 | 45.0 |
| B010259 | 2.0 | 100.0 |
| B010260 | 5.0 | 970.0 |
| B010261 | 3.0 | 105.0 |
| B010262 | 5.0 | 120.0 |
| B010263 | 4.0 | 95.0 |
| B010264 | 4.0 | 90.0 |
| B010265 | 4.0 | 70.0 |
| B010266 | 4.0 | 65.0 |
| B010267 | 3.0 | 100.0 |
| B010268 | 4.0 | 180.0 |
| B010269 | 3.0 | 60.0 |
| B010270 | 4.0 | 240.0 |
| B010271 | 4.0 | 275.0 |
| B010272 | 4.0 | 590.0 |
| B010273 | 4.0 | 355.0 |
| B010274 | 3.0 | 225.0 |
| B010275 | 4.0 | 450.0 |
| B010276 | -.9 | 100.0 |
| B010277 | 3.0 | 95.0 |
| B010278 | -.9 | 95.0 |
| B010279 | 3.0 | 165.0 |
| B010280 | 3.0 | 120.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B010281 | 380576. | 3494961. | 20 | 71 | .2 | -.90 | 40.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 35.0 | 10.0 | -.8 | -.8 |
| B010282 | 380651. | 3494905. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 50.0 | 15.0 | -.8 | -.8 |
| B010283 | 380727. | 3494849. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 2.0 | -.8 | -.8 |
| B010284 | 380802. | 3494792. | 20 | 71 | -.9 | -.90 | 175.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010285 | 380878. | 3494736. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010286 | 380954. | 3494680. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010287 | 381029. | 3494624. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010288 | 381105. | 3494568. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| B010289 | 381181. | 3494512. | 20 | 71 | .2 | -.90 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010290 | 381256. | 3494456. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010291 | 381332. | 3494399. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010292 | 381408. | 3494343. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | -.8 |
| B010293 | 381483. | 3494287. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | 8.0 | -.8 | -.8 |
| B010294 | 381559. | 3494231. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010295 | 381635. | 3494175. | 20 | 71 | .2 | -.90 | 25.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010296 | 381710. | 3494119. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010297 | 381786. | 3494062. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 40.0 | 4.0 | -.8 | -.8 |
| B010298 | 381862. | 3494006. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010299 | 381937. | 3493950. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 40.0 | 4.0 | -.8 | -.8 |
| B010300 | 382013. | 3493894. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B010301 | 382089. | 3493838. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010302 | 378613. | 3493847. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010303 | 378539. | 3493914. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010304 | 379840. | 3492674. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 20.0 | 2.0 | -.8 | -.8 |
| B010305 | 379979. | 3492533. | 20 | 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010308 | 395000. | 3510175. | 20 | 71 | -.9 | -.90 | 85.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 40.0 | 6.0 | -.8 | -.8 |
| B010309 | 395000. | 3510200. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 40.0 | 2.0 | -.8 | -.8 |
| B010310 | 395000. | 3510225. | 20 | 71 | -.9 | -.90 | 45.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 8.0 | -.8 | -.8 |
| B010311 | 395000. | 3510250. | 20 | 71 | 1.0 | -.90 | 175.0 | -.9 | -.8 | 225.0 | -.9 | -.8 | 1250.0 | 36.0 | -.8 | -.8 |
| B010312 | 395000. | 3510275. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| B010313 | 395000. | 3510300. | 20 | 71 | -.9 | -.90 | 105.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 48.0 | -.8 | -.8 |
| B010314 | 395000. | 3510325. | 20 | 71 | .4 | -.90 | 60.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 135.0 | 42.0 | -.8 | -.8 |
| B010315 | 395000. | 3510350. | 20 | 71 | .6 | -.90 | 185.0 | -.9 | -.8 | 115.0 | -.9 | -.8 | 280.0 | 46.0 | -.8 | -.8 |
| B010316 | 395000. | 3510375. | 20 | 71 | .8 | .04 | 335.0 | 3.0 | -.8 | 70.0 | -.9 | -.8 | 75.0 | 80.0 | -.8 | -.8 |
| B010317 | 395000. | 3510400. | 20 | 71 | .8 | -.90 | 45.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 40.0 | 14.0 | -.8 | -.8 |
| B010318 | 396150. | 3511025. | 20 | 71 | .2 | -.90 | 40.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 55.0 | 4.0 | -.8 | -.8 |
| B010319 | 396150. | 3511050. | 20 | 71 | -.9 | -.90 | 160.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 145.0 | 16.0 | -.8 | -.8 |
| B010320 | 396150. | 3511075. | 20 | 71 | .4 | -.90 | 120.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 30.0 | 50.0 | -.8 | -.8 |
| B010321 | 396150. | 3511100. | 20 | 71 | -.9 | -.90 | 110.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 65.0 | 38.0 | -.8 | -.8 |
| B010322 | 396150. | 3511125. | 20 | 71 | -.9 | -.90 | 185.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 40.0 | 40.0 | -.8 | -.8 |
| B010323 | 396150. | 3511150. | 20 | 71 | .8 | -.90 | 205.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 45.0 | 34.0 | -.8 | -.8 |
| B010324 | 396150. | 3511175. | 20 | 71 | .6 | .05 | 440.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 24.0 | -.8 | -.8 |
| B010325 | 396150. | 3511200. | 20 | 71 | .7 | .11 | 590.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 75.0 | 36.0 | -.8 | -.8 |
| B010326 | 396150. | 3511225. | 20 | 71 | 70.0 | 2.70 | 2500.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | 95.0 | -.8 | -.8 |
| B010327 | 396150. | 3511250. | 20 | 71 | .9 | -.90 | 35.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 15.0 | -.8 | -.8 |
| B010328 | 395800. | 3512950. | 20 | 71 | 1.2 | .18 | 70.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 95.0 | 8.0 | -.8 | -.8 |
| B010329 | 395795. | 3512960. | 20 | 71 | .4 | -.90 | 50.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 20.0 | 8.0 | -.8 | -.8 |
| B010330 | 395790. | 3512970. | 20 | 71 | 1.5 | .06 | 250.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | 70.0 | -.8 | -.8 |
| B010331 | 395785. | 3512980. | 20 | 71 | 1.2 | .14 | 180.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 42.0 | -.8 | -.8 |
| B010332 | 395780. | 3512990. | 20 | 71 | .9 | -.90 | 115.0 | -.9 | -.8 | 100.0 | -.9 | -.8 | 40.0 | 95.0 | -.8 | -.8 |
| B010333 | 395775. | 3513000. | 20 | 71 | .2 | -.90 | 35.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | 11.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B010281 | 3.0 | 145.0 |
| B010282 | 3.0 | 110.0 |
| B010283 | 3.0 | 85.0 |
| B010284 | 4.0 | 70.0 |
| B010285 | -.9 | 85.0 |
| B010286 | 3.0 | 85.0 |
| B010287 | 3.0 | 90.0 |
| B010288 | 3.0 | 100.0 |
| B010289 | 4.0 | 90.0 |
| B010290 | 3.0 | 90.0 |
| B010291 | -.9 | 100.0 |
| B010292 | 4.0 | 110.0 |
| B010293 | -.9 | 85.0 |
| B010294 | 3.0 | 90.0 |
| B010295 | 2.0 | 80.0 |
| B010296 | 3.0 | 85.0 |
| B010297 | 2.0 | 95.0 |
| B010298 | 4.0 | 80.0 |
| B010299 | -.9 | 110.0 |
| B010300 | 5.0 | 105.0 |
| B010301 | 3.0 | 90.0 |
| B010302 | 3.0 | 100.0 |
| B010303 | 3.0 | 90.0 |
| B010304 | 4.0 | 130.0 |
| B010305 | 3.0 | 120.0 |
| B010308 | 3.0 | 105.0 |
| B010309 | 4.0 | 105.0 |
| B010310 | 6.0 | 45.0 |
| B010311 | 3.0 | 740.0 |
| B010312 | 9.0 | 105.0 |
| B010313 | 4.0 | 55.0 |
| B010314 | 4.0 | 520.0 |
| B010315 | 5.0 | 455.0 |
| B010316 | 3.0 | 105.0 |
| B010317 | 7.0 | 205.0 |
| B010318 | 3.0 | 120.0 |
| B010319 | 6.0 | 75.0 |
| B010320 | 5.0 | 95.0 |
| B010321 | 4.0 | 185.0 |
| B010322 | 3.0 | 190.0 |
| B010323 | 7.0 | 115.0 |
| B010324 | 4.0 | 100.0 |
| B010325 | 4.0 | 85.0 |
| B010326 | -.9 | 115.0 |
| B010327 | 7.0 | 85.0 |
| B010328 | 3.0 | 185.0 |
| B010329 | 4.0 | 130.0 |
| B010330 | 5.0 | 90.0 |
| B010331 | 5.0 | 85.0 |
| B010332 | 3.0 | 245.0 |
| B010333 | 3.0 | 100.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B010334 | 395600. | 3513300. | 20 | 71 | 2.1 | -.90 | 445.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 45.0 | 46.0 | -.8 | -.8 |
| B010335 | 324600. | 3466800. | 20 | 71 | .2 | -.90 | 11500.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | 60.0 | -.8 | -.8 |
| B010336 | 324600. | 3466700. | 20 | 71 | .2 | -.90 | 195.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 35.0 | 16.0 | -.8 | -.8 |
| B010337 | 324600. | 3466600. | 20 | 71 | -.9 | -.90 | 90.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 11.0 | -.8 | -.8 |
| B010338 | 324600. | 3466500. | 20 | 71 | -.9 | -.90 | 55.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 30.0 | 24.0 | -.8 | -.8 |
| B010339 | 324600. | 3466400. | 20 | 71 | .8 | -.90 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B010340 | 324600. | 3466300. | 20 | 71 | -.9 | -.90 | 60.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 20.0 | -.8 | -.8 |
| B010341 | 324600. | 3466200. | 20 | 71 | .4 | -.90 | 65.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 24.0 | -.8 | -.8 |
| B010342 | 324600. | 3466100. | 20 | 71 | .2 | -.90 | 160.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | 65.0 | -.8 | -.8 |
| B010343 | 324600. | 3466000. | 20 | 71 | .4 | -.90 | 1500.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 30.0 | 80.0 | -.8 | -.8 |
| B010344 | 324200. | 3466700. | 20 | 71 | .2 | -.90 | 120.0 | -.9 | -.8 | 210.0 | 2.0 | -.8 | 15.0 | 19.0 | -.8 | -.8 |
| B010345 | 324200. | 3466600. | 20 | 71 | -.9 | -.90 | 60.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B010346 | 324200. | 3466500. | 20 | 71 | -.9 | -.90 | 80.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 20.0 | -.8 | -.8 |
| B010347 | 324200. | 3466400. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 16.0 | -.8 | -.8 |
| B010348 | 324200. | 3466300. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 19.0 | -.8 | -.8 |
| B010349 | 324200. | 3466200. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 12.0 | -.8 | -.8 |
| B010350 | 324200. | 3466100. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 28.0 | -.8 | -.8 |
| B010351 | 324200. | 3466000. | 20 | 71 | -.9 | -.90 | 85.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 15.0 | 10.0 | -.8 | -.8 |
| B010352 | 324200. | 3465900. | 20 | 71 | -.9 | -.90 | 320.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 34.0 | -.8 | -.8 |
| B010353 | 325250. | 3466900. | 20 | 71 | -.9 | -.90 | 175.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 30.0 | 14.0 | -.8 | -.8 |
| B010354 | 325250. | 3466800. | 20 | 71 | .2 | -.90 | 165.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 30.0 | 14.0 | -.8 | -.8 |
| B010355 | 325250. | 3466700. | 20 | 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 35.0 | 8.0 | -.8 | -.8 |
| B010356 | 325250. | 3466600. | 20 | 71 | -.9 | -.90 | 125.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 25.0 | 16.0 | -.8 | -.8 |
| B010357 | 325250. | 3466500. | 20 | 71 | -.9 | -.90 | 1700.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 55.0 | 1300.0 | -.8 | -.8 |
| B010358 | 325250. | 3466400. | 20 | 71 | -.9 | .02 | 210.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 50.0 | 48.0 | -.8 | -.8 |
| B010359 | 325250. | 3466300. | 20 | 71 | -.9 | -.90 | 185.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 65.0 | 70.0 | -.8 | -.8 |
| B010360 | 325250. | 3466200. | 20 | 71 | .2 | -.90 | 200.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 60.0 | 28.0 | -.8 | -.8 |
| B010361 | 326000. | 3467000. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 15.0 | 6.0 | -.8 | -.8 |
| B010362 | 326000. | 3466900. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010363 | 326000. | 3466800. | 20 | 71 | .2 | -.90 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 20.0 | 12.0 | -.8 | -.8 |
| B010364 | 326000. | 3466700. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 90.0 | 14.0 | -.8 | -.8 |
| B010365 | 326000. | 3466600. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | 20.0 | -.8 | -.8 |
| B010366 | 326000. | 3466500. | 20 | 71 | -.9 | -.90 | 85.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | 70.0 | -.8 | -.8 |
| B010367 | 326000. | 3466400. | 20 | 71 | -.9 | -.90 | 1000.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 35.0 | 115.0 | -.8 | -.8 |
| B010368 | 326000. | 3466300. | 20 | 71 | -.9 | .03 | 4100.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 40.0 | 155.0 | -.8 | -.8 |
| B010369 | 425950. | 3537500. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010370 | 426500. | 3537550. | 20 | 71 | .2 | -.90 | 35.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 30.0 | 2.0 | -.8 | -.8 |
| B010371 | 425475. | 3537500. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 55.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010372 | 426000. | 3537475. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010373 | 427000. | 3537700. | 20 | 71 | .6 | -.90 | 15.0 | -.9 | -.8 | 105.0 | 2.0 | -.8 | 35.0 | -.9 | -.8 | -.8 |
| B010374 | 427500. | 3537750. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010375 | 428475. | 3537500. | 20 | 71 | .4 | -.90 | 10.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010376 | 428500. | 3537550. | 20 | 71 | -.9 | -.90 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010377 | 428900. | 3537500. | 20 | 71 | -.9 | -.90 | 20.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 50.0 | 4.0 | -.8 | -.8 |
| B010378 | 429475. | 3537600. | 20 | 71 | 2.2 | -.90 | 100.0 | -.9 | -.8 | 75.0 | -.9 | -.8 | 25.0 | 8.0 | -.8 | -.8 |
| B010379 | 429450. | 3537700. | 20 | 71 | .6 | -.90 | 45.0 | -.9 | -.8 | 110.0 | -.9 | -.8 | 30.0 | 8.0 | -.8 | -.8 |
| B010380 | 430250. | 3537900. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B010381 | 430800. | 3538050. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010382 | 431050. | 3538300. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010383 | 431500. | 3538775. | 20 | 71 | 1.7 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010384 | 431900. | 3539050. | 20 | 71 | -.9 | -.90 | 5.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B010334 | 4.0 | 160.0 |
| B010335 | 3.0 | 50.0 |
| B010336 | 6.0 | 245.0 |
| B010337 | 4.0 | 65.0 |
| B010338 | 3.0 | 150.0 |
| B010339 | 3.0 | 55.0 |
| B010340 | 4.0 | 75.0 |
| B010341 | 3.0 | 70.0 |
| B010342 | 12.0 | 110.0 |
| B010343 | 3.0 | 110.0 |
| B010344 | 9.0 | 70.0 |
| B010345 | 4.0 | 65.0 |
| B010346 | 5.0 | 40.0 |
| B010347 | 4.0 | 65.0 |
| B010348 | 6.0 | 100.0 |
| B010349 | 4.0 | 65.0 |
| B010350 | 9.0 | 100.0 |
| B010351 | 3.0 | 40.0 |
| B010352 | 6.0 | 90.0 |
| B010353 | 4.0 | 95.0 |
| B010354 | 6.0 | 95.0 |
| B010355 | 8.0 | 65.0 |
| B010356 | 8.0 | 80.0 |
| B010357 | 15.0 | 80.0 |
| B010358 | 4.0 | 190.0 |
| B010359 | 6.0 | 105.0 |
| B010360 | 6.0 | 180.0 |
| B010361 | 3.0 | 45.0 |
| B010362 | 5.0 | 45.0 |
| B010363 | 4.0 | 65.0 |
| B010364 | 5.0 | 50.0 |
| B010365 | 4.0 | 50.0 |
| B010366 | 5.0 | 80.0 |
| B010367 | 5.0 | 85.0 |
| B010368 | 3.0 | 85.0 |
| B010369 | 5.0 | 55.0 |
| B010370 | 4.0 | 130.0 |
| B010371 | 3.0 | 105.0 |
| B010372 | 3.0 | 140.0 |
| B010373 | 6.0 | 85.0 |
| B010374 | 4.0 | 120.0 |
| B010375 | -.9 | 95.0 |
| B010376 | 3.0 | 110.0 |
| B010377 | 5.0 | 80.0 |
| B010378 | 6.0 | 85.0 |
| B010379 | 6.0 | 95.0 |
| B010380 | 6.0 | 80.0 |
| B010381 | 3.0 | 75.0 |
| B010382 | 4.0 | 70.0 |
| B010383 | 3.0 | 75.0 |
| B010384 | 3.0 | 80.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B010385 | 432075. | 3539625. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 20.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B010386 | 432675. | 3539870. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B010387 | 433020. | 3540050. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 11.0 | -.8 | -.8 |
| B010388 | 433650. | 3540500. | 20 | 71 | .9 | -.90 | 35.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010389 | 434000. | 3540800. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| B010390 | 434200. | 3541200. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010402 | 335501. | 3482089. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010403 | 335549. | 3482007. | 20 | 71 | .4 | -.90 | 40.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 6.0 | -.8 | -.8 |
| B010404 | 335598. | 3481925. | 20 | 71 | .4 | -.90 | -.9 | -.9 | -.8 | 20.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B010405 | 335647. | 3481844. | 20 | 71 | .6 | -.90 | -.9 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010406 | 335696. | 3481762. | 20 | 71 | -.9 | -.90 | 25.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.9 | 4.0 | -.8 | -.8 |
| B010407 | 335744. | 3481680. | 20 | 71 | -.9 | -.90 | 55.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 10.0 | 2.0 | -.8 | -.8 |
| B010408 | 335793. | 3481599. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 10.0 | 8.0 | -.8 | -.8 |
| B010409 | 335841. | 3481517. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010410 | 335889. | 3481435. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B010411 | 335939. | 3481353. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 14.0 | -.8 | -.8 |
| B010412 | 335987. | 3481272. | 20 | 71 | 1.2 | -.90 | -.9 | -.9 | -.8 | 15.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | -.8 |
| B010413 | 334642. | 3481381. | 20 | 71 | .2 | -.90 | 105.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 7.0 | -.8 | -.8 |
| B010414 | 334588. | 3481461. | 20 | 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 15.0 | 13.0 | -.8 | -.8 |
| B010415 | 334695. | 3481302. | 20 | 71 | .4 | -.90 | 25.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010416 | 334722. | 3481261. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 20.0 | 4.0 | -.8 | -.8 |
| B010417 | 334749. | 3481222. | 20 | 71 | .4 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 15.0 | 4.0 | -.8 | -.8 |
| B010418 | 334775. | 3481182. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 25.0 | 10.0 | -.8 | -.8 |
| B010419 | 334828. | 3481103. | 20 | 71 | 1.0 | -.90 | 120.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | 85.0 | -.8 | -.8 |
| B010420 | 334828. | 3481102. | 20 | 71 | .9 | -.90 | 90.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 30.0 | 38.0 | -.8 | -.8 |
| B010421 | 334855. | 3481063. | 20 | 71 | .2 | -.90 | 135.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 20.0 | 13.0 | -.8 | -.8 |
| B010422 | 334882. | 3481023. | 20 | 71 | -.9 | -.90 | 95.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 25.0 | 13.0 | -.8 | -.8 |
| B010423 | 334908. | 3480983. | 20 | 71 | .4 | -.90 | 145.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 40.0 | 22.0 | -.8 | -.8 |
| B010424 | 334962. | 3480903. | 20 | 71 | .6 | -.90 | 225.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 70.0 | 36.0 | -.8 | -.8 |
| B010425 | 335015. | 3480824. | 20 | 71 | 1.5 | -.90 | 105.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 85.0 | 70.0 | -.8 | -.8 |
| B010426 | 335068. | 3480744. | 20 | 71 | .6 | -.90 | 90.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | 55.0 | 38.0 | -.8 | -.8 |
| B010427 | 335122. | 3480664. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 20.0 | 42.0 | -.8 | -.8 |
| B010428 | 334523. | 3480223. | 20 | 71 | .4 | -.90 | 70.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 30.0 | 10.0 | -.8 | -.8 |
| B010430 | 334417. | 3480380. | 20 | 71 | -.9 | -.90 | 65.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 30.0 | 9.0 | -.8 | -.8 |
| B010431 | 334364. | 3480458. | 20 | 71 | .4 | -.90 | 60.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 30.0 | 9.0 | -.8 | -.8 |
| B010432 | 334312. | 3480537. | 20 | 71 | .2 | -.90 | 140.0 | -.9 | -.8 | 40.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B010433 | 334258. | 3480616. | 20 | 71 | -.9 | -.90 | 65.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010434 | 334206. | 3480694. | 20 | 71 | .7 | -.90 | 40.0 | -.9 | -.8 | 170.0 | 2.0 | -.8 | 25.0 | 4.0 | -.8 | -.8 |
| B010435 | 334152. | 3480772. | 20 | 71 | -.9 | -.90 | 50.0 | -.9 | -.8 | 85.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B010436 | 334100. | 3480851. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 125.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010437 | 334047. | 3480930. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 130.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010438 | 333994. | 3481009. | 20 | 71 | -.9 | -.90 | 40.0 | -.9 | -.8 | 115.0 | -.9 | -.8 | 25.0 | 6.0 | -.8 | -.8 |
| B010439 | 341624. | 3486309. | 20 | 71 | 1.5 | .30 | 1050.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 110.0 | 24.0 | -.8 | -.8 |
| B010440 | 341562. | 3486388. | 20 | 71 | 1.5 | .04 | 230.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 45.0 | 2.0 | -.8 | -.8 |
| B010441 | 341500. | 3486466. | 20 | 71 | .6 | .62 | 600.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B010442 | 341438. | 3486544. | 20 | 71 | 1.3 | .05 | 85.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010443 | 341376. | 3486623. | 20 | 71 | .8 | .16 | 380.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 60.0 | 2.0 | -.8 | -.8 |
| B010444 | 341314. | 3486701. | 20 | 71 | .4 | .14 | 475.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | -.8 |
| B010445 | 341251. | 3486779. | 20 | 71 | .7 | .11 | 235.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 15.0 | 2.0 | -.8 | -.8 |
| B010446 | 341189. | 3486857. | 20 | 71 | 1.5 | -.90 | 205.0 | -.9 | -.8 | -.9 | -.9 | -.8 | 30.0 | -.9 | -.8 | -.8 |
| B010447 | 341127. | 3486936. | 20 | 71 | .8 | .93 | 290.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B010385 | 3.0 | 70.0 |
| B010386 | 6.0 | 75.0 |
| B010387 | -.9 | 275.0 |
| B010388 | 3.0 | 45.0 |
| B010389 | 4.0 | 265.0 |
| B010390 | 7.0 | 110.0 |
| B010402 | 3.0 | 30.0 |
| B010403 | 3.0 | 75.0 |
| B010404 | 4.0 | 75.0 |
| B010405 | 4.0 | 55.0 |
| B010406 | 6.0 | 50.0 |
| B010407 | 9.0 | 45.0 |
| B010408 | 6.0 | 90.0 |
| B010409 | 8.0 | 70.0 |
| B010410 | 5.0 | 40.0 |
| B010411 | 4.0 | 65.0 |
| B010412 | 22.0 | 35.0 |
| B010413 | 4.0 | 115.0 |
| B010414 | 3.0 | 105.0 |
| B010415 | 5.0 | 110.0 |
| B010416 | 4.0 | 105.0 |
| B010417 | 3.0 | 65.0 |
| B010418 | 3.0 | 105.0 |
| B010419 | 8.0 | 415.0 |
| B010420 | 6.0 | 255.0 |
| B010421 | 3.0 | 105.0 |
| B010422 | 3.0 | 90.0 |
| B010423 | 4.0 | 125.0 |
| B010424 | 3.0 | 110.0 |
| B010425 | 4.0 | 90.0 |
| B010426 | 4.0 | 95.0 |
| B010427 | -.9 | 160.0 |
| B010428 | 3.0 | 105.0 |
| B010430 | 4.0 | 115.0 |
| B010431 | 4.0 | 115.0 |
| B010432 | 6.0 | 95.0 |
| B010433 | 4.0 | 85.0 |
| B010434 | -.9 | 265.0 |
| B010435 | 3.0 | 105.0 |
| B010436 | 3.0 | 110.0 |
| B010437 | 3.0 | 120.0 |
| B010438 | 4.0 | 115.0 |
| B010439 | 4.0 | 170.0 |
| B010440 | 4.0 | 70.0 |
| B010441 | 3.0 | 65.0 |
| B010442 | 4.0 | 35.0 |
| B010443 | 3.0 | 85.0 |
| B010444 | 4.0 | 65.0 |
| B010445 | 3.0 | 40.0 |
| B010446 | 6.0 | 60.0 |
| B010447 | 2.0 | 60.0 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | BI (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SB (PPM) | SN (PPM) | V (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B010448 | 341005. | 3487014. | 20 | 71 | .2 | .04 | 110.0 | -.9 | -.8 | 10.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | -.8 |
| B010449 | 341003. | 3487093. | 20 | 71 | 7.9 | .12 | 740.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 495.0 | 12.0 | -.8 | -.8 |
| B010450 | 340941. | 3487171. | 20 | 71 | 75.0 | 2.90 | 4450.0 | -.9 | -.8 | 135.0 | -.9 | -.8 | 2600.0 | 135.0 | -.8 | -.8 |
| B010451 | 340878. | 3487249. | 20 | 71 | 44.0 | .68 | 2450.0 | -.9 | -.8 | 95.0 | -.9 | -.8 | 1400.0 | 80.0 | -.8 | -.8 |
| B010452 | 340817. | 3487327. | 20 | 71 | 2.6 | -.90 | 150.0 | -.9 | -.8 | 45.0 | -.9 | -.8 | 95.0 | 4.0 | -.8 | -.8 |
| B010453 | 340754. | 3487406. | 20 | 71 | 3.3 | -.90 | 140.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 185.0 | 32.0 | -.8 | -.8 |
| B010454 | 340692. | 3487484. | 20 | 71 | .6 | -.90 | 25.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | -.9 | -.8 | -.8 |
| B010455 | 340630. | 3487562. | 20 | 71 | .6 | .05 | 30.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 40.0 | 8.0 | -.8 | -.8 |
| B010456 | 340568. | 3487641. | 20 | 71 | 3.6 | .03 | 105.0 | -.9 | -.8 | 110.0 | -.9 | -.8 | 410.0 | 11.0 | -.8 | -.8 |
| B010457 | 340506. | 3487719. | 20 | 71 | 7.7 | -.90 | 125.0 | -.9 | -.8 | 70.0 | -.9 | -.8 | 470.0 | 13.0 | -.8 | -.8 |
| B010458 | 340444. | 3487797. | 20 | 71 | .6 | -.90 | 75.0 | -.9 | -.8 | 65.0 | -.9 | -.8 | 55.0 | 14.0 | -.8 | -.8 |
| B010459 | 340382. | 3487876. | 20 | 71 | .6 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 2.0 | -.8 | -.8 |
| B010460 | 340316. | 3487954. | 20 | 71 | .2 | -.90 | 20.0 | -.9 | -.8 | 15.0 | -.9 | -.8 | 30.0 | 4.0 | -.8 | -.8 |
| B010461 | 340251. | 3488032. | 20 | 71 | .4 | -.90 | 20.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 65.0 | 20.0 | -.8 | -.8 |
| B010462 | 340195. | 3488111. | 20 | 71 | .2 | -.90 | 55.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | 6.0 | -.8 | -.8 |
| B010501 | 346150. | 3486750. | 20 | 71 | 4.0 | 1.30 | 5100.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 65.0 | 155.0 | -.8 | -.8 |
| B010502 | 346400. | 3486750. | 20 | 71 | 4.2 | 1.90 | 24000.0 | 2.0 | -.8 | 45.0 | -.9 | -.8 | 110.0 | 34.0 | -.8 | -.8 |
| B010503 | 433650. | 3563250. | 20 | 71 | .4 | .06 | 200.0 | -.9 | -.8 | 60.0 | -.9 | -.8 | 55.0 | 170.0 | -.8 | -.8 |
| B010504 | 430150. | 3559050. | 20 | 71 | 1.1 | .04 | 75.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 50.0 | 85.0 | -.8 | -.8 |
| B010505 | 431750. | 3556700. | 20 | 71 | -.9 | -.90 | 35.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 35.0 | 130.0 | -.8 | -.8 |
| B010506 | 437000. | 3558500. | 20 | 71 | .2 | -.90 | 95.0 | -.9 | -.8 | 30.0 | -.9 | -.8 | 20.0 | 170.0 | -.8 | -.8 |
| B011201 | 422300. | 3556400. | 20 | 71 | .2 | .09 | 25.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | 35.0 | 40.0 | -.8 | -.8 |
| B011202 | 425200. | 3554600. | 20 | 71 | .4 | -.90 | -.9 | -.9 | -.8 | 5.0 | -.9 | -.8 | 105.0 | 100.0 | -.8 | -.8 |
| B011203 | 425500. | 3554500. | 20 | 71 | .4 | -.90 | 25.0 | -.9 | -.8 | 5.0 | -.9 | -.8 | 25.0 | 30.0 | -.8 | -.8 |
| B011204 | 428700. | 3554000. | 20 | 71 | -.9 | -.90 | -.9 | -.9 | -.8 | 105.0 | -.9 | -.8 | 25.0 | 60.0 | -.8 | -.8 |
| B011205 | 429300. | 3554950. | 20 | 71 | 3.9 | .30 | 2550.0 | -.9 | -.8 | 50.0 | -.9 | -.8 | 25.0 | 85.0 | -.8 | -.8 |
| B011206 | 429700. | 3557300. | 20 | 71 | 1.0 | -.90 | 15.0 | -.9 | -.8 | 35.0 | -.9 | -.8 | 35.0 | 75.0 | -.8 | -.8 |
| B011207 | 429950. | 3557800. | 20 | 71 | .9 | .02 | 85.0 | -.9 | -.8 | 25.0 | -.9 | -.8 | 25.0 | 75.0 | -.8 | -.8 |

TABLE AD-18 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| B010448 | 3.0 | 40.0 |
| B010449 | 3.0 | 155.0 |
| B010450 | -.9 | 1050.0 |
| B010451 | 3.0 | 750.0 |
| B010452 | 2.0 | 120.0 |
| B010453 | 5.0 | 130.0 |
| B010454 | -.9 | 70.0 |
| B010455 | -.9 | 45.0 |
| B010456 | 4.0 | 300.0 |
| B010457 | -.9 | 310.0 |
| B010458 | 3.0 | 150.0 |
| B010459 | 10.0 | 55.0 |
| B010460 | 7.0 | 55.0 |
| B010461 | 10.0 | 105.0 |
| B010462 | 3.0 | 70.0 |
| B010501 | 4.0 | 265.0 |
| B010502 | 2.0 | 375.0 |
| B010503 | 5.0 | 150.0 |
| B010504 | 6.0 | 120.0 |
| B010505 | 5.0 | 65.0 |
| B010506 | 7.0 | 85.0 |
| B011201 | 22.0 | 15.0 |
| B011202 | 3.0 | 35.0 |
| B011203 | 5.0 | 10.0 |
| B011204 | 3.0 | 200.0 |
| B011205 | 24.0 | 95.0 |
| B011206 | 4.0 | 70.0 |
| B011207 | 5.0 | 70.0 |

TABLE AD-19
DUNKLE MINE AREA SOIL SAMPLES
ANALYTICAL RESULTS

TABLE AD-19 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SN (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B001016 | 592700. | 3387150. | 20 | 71 | .8 | .02 | 30.0 | 10.0 | 50.0 | -.9 | 15.0 | 85.0 | -.9 | 5.0 | 90.0 |
| B001017 | 592500. | 3387150. | 20 | 71 | -.9 | .03 | 130.0 | 10.0 | 70.0 | -.9 | 20.0 | 90.0 | -.9 | 5.0 | 120.0 |
| B001018 | 592300. | 3387150. | 20 | 71 | -.9 | .02 | 110.0 | 10.0 | 50.0 | -.9 | 20.0 | 20.0 | -.9 | 6.0 | 70.0 |
| B001019 | 592100. | 3387150. | 20 | 71 | -.9 | .01 | 120.0 | 10.0 | 65.0 | -.9 | 15.0 | 10.0 | -.9 | 4.0 | 95.0 |
| B001020 | 591900. | 3387150. | 20 | 71 | -.9 | -.90 | 30.0 | -.9 | 25.0 | -.9 | 15.0 | 20.0 | -.9 | 3.0 | 40.0 |
| B001021 | 591700. | 3387150. | 20 | 71 | -.9 | -.90 | 30.0 | 10.0 | 35.0 | -.9 | 25.0 | 10.0 | -.9 | 5.0 | 90.0 |
| B001022 | 591500. | 3387150. | 20 | 71 | -.9 | .01 | 30.0 | 10.0 | 30.0 | -.9 | 20.0 | 15.0 | -.9 | 3.0 | 70.0 |
| B001023 | 591300. | 3387150. | 20 | 71 | -.9 | -.90 | 50.0 | 15.0 | 40.0 | -.9 | 25.0 | 15.0 | -.9 | 3.0 | 110.0 |
| B001024 | 591000. | 3387150. | 20 | 71 | -.9 | -.90 | 40.0 | 15.0 | 30.0 | -.9 | 20.0 | 15.0 | -.9 | 4.0 | 100.0 |
| B001025 | 590700. | 3387150. | 20 | 71 | -.9 | -.90 | 30.0 | 15.0 | 40.0 | 4.0 | 30.0 | 20.0 | -.9 | -.9 | 105.0 |
| B001026 | 590450. | 3387150. | 20 | 71 | -.9 | -.90 | 20.0 | 15.0 | 25.0 | 4.0 | 15.0 | 10.0 | -.9 | 3.0 | 100.0 |
| B001027 | 590250. | 3387150. | 20 | 71 | -.9 | -.90 | 30.0 | 15.0 | 25.0 | 14.0 | 20.0 | 15.0 | -.9 | -.9 | 100.0 |
| B001028 | 590100. | 3387150. | 20 | 71 | -.9 | -.90 | 20.0 | 10.0 | 30.0 | 18.0 | 20.0 | 20.0 | -.9 | 3.0 | 60.0 |
| B001029 | 589900. | 3387150. | 20 | 71 | -.9 | .01 | 30.0 | 15.0 | 40.0 | -.9 | 30.0 | 20.0 | -.9 | -.9 | 105.0 |
| B001030 | 589800. | 3387150. | 20 | 71 | -.9 | -.90 | 20.0 | 15.0 | 25.0 | 10.0 | 20.0 | 15.0 | -.9 | 3.0 | 115.0 |
| B001031 | 589600. | 3387150. | 20 | 71 | -.9 | -.90 | 20.0 | 15.0 | 25.0 | -.9 | 25.0 | 10.0 | -.9 | 3.0 | 100.0 |
| B001032 | 589400. | 3387150. | 20 | 71 | -.9 | -.90 | 10.0 | 15.0 | 20.0 | -.9 | 20.0 | 10.0 | -.9 | 4.0 | 120.0 |
| B001033 | 589200. | 3387150. | 20 | 71 | -.9 | .01 | 20.0 | 15.0 | 25.0 | -.9 | 25.0 | 15.0 | -.9 | 3.0 | 100.0 |
| B001034 | 593600. | 3387150. | 20 | 71 | .6 | -.90 | 70.0 | 10.0 | 60.0 | -.9 | 20.0 | 20.0 | -.9 | 4.0 | 80.0 |
| B001035 | 593800. | 3387150. | 20 | 71 | .8 | .02 | 210.0 | 10.0 | 205.0 | 6.0 | 15.0 | 20.0 | 20.0 | 11.0 | 85.0 |
| B001036 | 594000. | 3387150. | 20 | 71 | -.9 | .01 | 110.0 | 10.0 | 140.0 | -.9 | 20.0 | 25.0 | -.9 | 19.0 | 135.0 |
| B001037 | 594200. | 3387150. | 20 | 71 | -.9 | -.90 | 50.0 | 10.0 | 80.0 | -.9 | 25.0 | 20.0 | -.9 | 3.0 | 100.0 |
| B001038 | 594400. | 3387150. | 20 | 71 | .4 | .01 | 100.0 | 10.0 | 75.0 | -.9 | 20.0 | 15.0 | -.9 | 15.0 | 90.0 |
| B001039 | 594600. | 3387150. | 20 | 71 | -.9 | .03 | 190.0 | 15.0 | 135.0 | -.9 | 20.0 | 15.0 | -.9 | 4.0 | 95.0 |
| B001040 | 594800. | 3387150. | 20 | 71 | -.9 | .02 | 80.0 | 10.0 | 80.0 | -.9 | 20.0 | 10.0 | -.9 | 4.0 | 75.0 |
| B001045 | 595000. | 3387150. | 20 | 71 | .4 | .02 | 100.0 | 10.0 | 55.0 | 18.0 | 30.0 | 20.0 | -.9 | 6.0 | 90.0 |
| B010601 | 596500. | 3388200. | 20 | 71 | -.9 | .01 | 140.0 | 10.0 | 170.0 | -.9 | 25.0 | 20.0 | -.9 | 6.0 | 140.0 |
| B010602 | 596500. | 3388400. | 20 | 71 | -.9 | -.90 | 190.0 | 10.0 | 40.0 | -.9 | 25.0 | 20.0 | -.9 | 10.0 | 75.0 |
| B010603 | 596500. | 3388600. | 20 | 71 | .6 | -.90 | 40.0 | 10.0 | 30.0 | 6.0 | 30.0 | 15.0 | -.9 | 5.0 | 80.0 |
| B010604 | 596500. | 3388800. | 20 | 71 | -.9 | -.90 | 50.0 | 10.0 | 25.0 | -.9 | 10.0 | 20.0 | -.9 | 5.0 | 40.0 |
| B010605 | 596000. | 3389000. | 20 | 71 | -.9 | -.90 | 70.0 | 5.0 | 45.0 | 6.0 | 10.0 | 30.0 | -.9 | 6.0 | 30.0 |
| B010606 | 596500. | 3389200. | 20 | 71 | -.9 | .01 | 250.0 | -.9 | 445.0 | -.9 | 20.0 | 40.0 | -.9 | 8.0 | 410.0 |
| B010607 | 596500. | 3389400. | 20 | 71 | -.9 | .02 | 130.0 | 10.0 | 35.0 | 6.0 | 25.0 | 20.0 | -.9 | 4.0 | 80.0 |
| B010608 | 596500. | 3389600. | 20 | 71 | -.9 | -.90 | 80.0 | 10.0 | 35.0 | -.9 | 25.0 | 25.0 | -.9 | 3.0 | 65.0 |
| B010609 | 596500. | 3389800. | 20 | 71 | .4 | -.90 | 20.0 | -.9 | 25.0 | -.9 | 15.0 | 15.0 | -.9 | 3.0 | 45.0 |
| B010610 | 596500. | 3390000. | 20 | 71 | -.9 | -.90 | 60.0 | 10.0 | 50.0 | -.9 | 30.0 | 25.0 | -.9 | 3.0 | 105.0 |
| B010611 | 596500. | 3390200. | 20 | 71 | -.9 | .02 | 90.0 | 10.0 | 50.0 | -.9 | 30.0 | 25.0 | -.9 | 4.0 | 95.0 |
| B010612 | 596500. | 3390400. | 20 | 71 | -.9 | -.90 | 80.0 | -.9 | 65.0 | -.9 | 25.0 | 15.0 | -.9 | 5.0 | 55.0 |
| B010613 | 596500. | 3390600. | 20 | 71 | -.9 | -.90 | 30.0 | 10.0 | 30.0 | -.9 | 25.0 | 15.0 | -.9 | -.9 | 55.0 |
| B010614 | 596500. | 3391000. | 20 | 71 | -.9 | -.90 | 230.0 | 10.0 | 80.0 | -.9 | 30.0 | 20.0 | -.9 | 4.0 | 100.0 |
| B010615 | 596500. | 3391200. | 20 | 71 | -.9 | -.90 | 3050.0 | 20.0 | 840.0 | -.9 | 30.0 | 35.0 | -.9 | 3.0 | 185.0 |
| B010616 | 596500. | 3391400. | 20 | 71 | .2 | .03 | 370.0 | 10.0 | 55.0 | -.9 | 35.0 | 15.0 | 2.0 | -.9 | 95.0 |
| B010617 | 596500. | 3391600. | 20 | 71 | .4 | -.90 | 720.0 | 10.0 | 960.0 | -.9 | 35.0 | 20.0 | -.9 | -.9 | 130.0 |
| B010618 | 596500. | 3391800. | 20 | 71 | -.9 | -.90 | 210.0 | 15.0 | 45.0 | -.9 | 35.0 | 15.0 | -.9 | -.9 | 100.0 |
| B010619 | 596500. | 3392000. | 20 | 71 | -.9 | -.90 | 1200.0 | 15.0 | 485.0 | -.9 | 35.0 | 20.0 | -.9 | 2.0 | 205.0 |
| B010620 | 596500. | 3392200. | 20 | 71 | -.9 | -.90 | 480.0 | 15.0 | 225.0 | -.9 | 20.0 | 15.0 | -.9 | 4.0 | 190.0 |
| B010621 | 596500. | 3392400. | 20 | 71 | -.9 | -.90 | 380.0 | 5.0 | 250.0 | -.9 | 15.0 | 15.0 | -.9 | 9.0 | 140.0 |
| B010622 | 596500. | 3392600. | 20 | 71 | -.9 | -.90 | 30.0 | 15.0 | 30.0 | -.9 | 25.0 | 15.0 | -.9 | 4.0 | 75.0 |
| B010623 | 596500. | 3392800. | 20 | 71 | -.9 | -.90 | 30.0 | 10.0 | 25.0 | -.9 | 25.0 | 15.0 | -.9 | 7.0 | 60.0 |
| B010624 | 596500. | 3393000. | 20 | 71 | .4 | -.90 | 20.0 | 15.0 | 20.0 | -.9 | 25.0 | 15.0 | -.9 | 3.0 | 65.0 |
| B010625 | 596500. | 3393200. | 20 | 71 | -.9 | .01 | 50.0 | 10.0 | 20.0 | -.9 | 30.0 | 15.0 | -.9 | -.9 | 75.0 |

TABLE AD-19 CHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE DUNKLE MINE STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AU (PPM) | AS (PPM) | CO (PPM) | CU (PPM) | MO (PPM) | NI (PPM) | PB (PPM) | SN (PPM) | W (PPM) | ZN (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B010626 | 596500. | 3393400. | 20 | 71 | -.9 | -.90 | -.9 | 5.0 | 10.0 | -.9 | 10.0 | 5.0 | -.9 | 3.0 | 20.0 |
| B010627 | 596500. | 3393600. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | 15.0 | -.9 | 10.0 | 20.0 | -.9 | -.9 | 35.0 |
| B010628 | 596500. | 3393800. | 20 | 71 | .4 | -.90 | 400.0 | -.9 | 40.0 | -.9 | 20.0 | 20.0 | -.9 | -.9 | 30.0 |
| B010629 | 596400. | 3387000. | 20 | 71 | .4 | .01 | 100.0 | 10.0 | 55.0 | -.9 | 15.0 | 20.0 | -.9 | 3.0 | 80.0 |
| B010630 | 596600. | 3387000. | 20 | 71 | -.9 | -.90 | 100.0 | 10.0 | 75.0 | -.9 | 15.0 | 15.0 | -.9 | 3.0 | 85.0 |
| B010631 | 596800. | 3387000. | 20 | 71 | -.9 | .01 | 120.0 | 10.0 | 65.0 | -.9 | 10.0 | 15.0 | -.9 | 5.0 | 80.0 |
| B011219 | 595200. | 3387150. | 20 | 71 | -.9 | .01 | 40.0 | 10.0 | 25.0 | -.9 | 20.0 | 20.0 | -.9 | 3.0 | 65.0 |
| B011220 | 595400. | 3387150. | 20 | 71 | -.9 | .01 | 60.0 | 10.0 | 40.0 | -.9 | 15.0 | 15.0 | -.9 | 3.0 | 110.0 |
| B011221 | 595600. | 3387150. | 20 | 71 | -.9 | .01 | 50.0 | 10.0 | 50.0 | -.9 | 20.0 | 20.0 | -.9 | 3.0 | 85.0 |
| B011222 | 595800. | 3387150. | 20 | 71 | -.9 | -.90 | 60.0 | 20.0 | 35.0 | -.9 | 15.0 | 15.0 | -.9 | -.9 | 90.0 |
| B011235 | 593500. | 3387200. | 20 | 71 | .4 | -.90 | 290.0 | 10.0 | 75.0 | -.9 | 10.0 | 10.0 | -.9 | 8.0 | 70.0 |
| B011236 | 593500. | 3387000. | 20 | 71 | -.9 | .01 | 140.0 | 10.0 | 65.0 | -.9 | 15.0 | 15.0 | -.9 | 4.0 | 100.0 |
| B011237 | 593500. | 3386800. | 20 | 71 | .4 | -.90 | 160.0 | 10.0 | 85.0 | -.9 | 15.0 | 20.0 | -.9 | 13.0 | 75.0 |
| B011238 | 593500. | 3386600. | 20 | 71 | .4 | .02 | 60.0 | 10.0 | 55.0 | -.9 | 20.0 | 20.0 | -.9 | 3.0 | 90.0 |
| B011239 | 593500. | 3386400. | 20 | 71 | .4 | .01 | 360.0 | 10.0 | 140.0 | -.9 | 15.0 | 20.0 | -.9 | 13.0 | 95.0 |
| B011240 | 593500. | 3386200. | 20 | 71 | .4 | .01 | 120.0 | 10.0 | 95.0 | -.9 | 20.0 | 20.0 | -.9 | 3.0 | 80.0 |
| B011241 | 593500. | 3386000. | 20 | 71 | -.9 | .01 | 90.0 | 10.0 | 70.0 | -.9 | 25.0 | 25.0 | -.9 | 4.0 | 85.0 |
| B011242 | 593500. | 3385800. | 20 | 71 | -.9 | .01 | 50.0 | 10.0 | 90.0 | -.9 | 15.0 | 15.0 | -.9 | 4.0 | 70.0 |
| B011243 | 593500. | 3385600. | 20 | 71 | -.9 | -.90 | 60.0 | 10.0 | 70.0 | -.9 | 20.0 | 20.0 | -.9 | 5.0 | 70.0 |
| B011244 | 593500. | 3385400. | 20 | 71 | .2 | .01 | 160.0 | 15.0 | 195.0 | -.9 | 25.0 | 20.0 | -.9 | 19.0 | 110.0 |
| B011245 | 593500. | 3385200. | 20 | 71 | .4 | .01 | 1050.0 | 15.0 | 185.0 | -.9 | 25.0 | 35.0 | -.9 | 4.0 | 140.0 |
| B011246 | 593500. | 3385000. | 20 | 71 | -.9 | .01 | 40.0 | 5.0 | 35.0 | -.9 | 5.0 | 10.0 | -.9 | 3.0 | 35.0 |
| B011247 | 593500. | 3384800. | 20 | 71 | -.9 | .01 | 110.0 | 10.0 | 50.0 | -.9 | 20.0 | 15.0 | 10.0 | 6.0 | 95.0 |
| B011248 | 593500. | 3384600. | 20 | 71 | .8 | .01 | 40.0 | 5.0 | 80.0 | 4.0 | 20.0 | 20.0 | -.9 | 11.0 | 75.0 |
| B011249 | 593500. | 3387400. | 20 | 71 | .4 | .02 | 130.0 | 10.0 | 85.0 | -.9 | 15.0 | 25.0 | -.9 | 8.0 | 100.0 |
| B011250 | 593500. | 3387600. | 20 | 71 | -.9 | .01 | 120.0 | 10.0 | 70.0 | -.9 | 25.0 | 20.0 | -.9 | 6.0 | 95.0 |
| B011251 | 593500. | 3387800. | 20 | 71 | .4 | .01 | 50.0 | 5.0 | 50.0 | -.9 | 25.0 | 25.0 | -.9 | 5.0 | 75.0 |
| B011252 | 593500. | 3388000. | 20 | 71 | .8 | .03 | 400.0 | -.9 | 100.0 | -.9 | 10.0 | 20.0 | 12.0 | 9.0 | 70.0 |
| B011253 | 593500. | 3388200. | 20 | 71 | .6 | .04 | 130.0 | 10.0 | 70.0 | -.9 | 25.0 | 20.0 | -.9 | 8.0 | 95.0 |
| B011254 | 593500. | 3388400. | 20 | 71 | -.9 | .02 | 70.0 | 5.0 | 45.0 | -.9 | 15.0 | 20.0 | 3.0 | 4.0 | 60.0 |
| B011255 | 593500. | 3388600. | 20 | 71 | 2.0 | -.90 | 950.0 | 5.0 | 145.0 | -.9 | 15.0 | 50.0 | -.9 | 4.0 | 80.0 |
| B011256 | 593500. | 3388800. | 20 | 71 | -.9 | .01 | 40.0 | -.9 | 225.0 | 6.0 | 15.0 | 20.0 | -.9 | 8.0 | 65.0 |
| B011257 | 593500. | 3389000. | 20 | 71 | .6 | -.90 | 20.0 | 5.0 | 25.0 | -.9 | 10.0 | 20.0 | -.9 | 4.0 | 25.0 |
| B011258 | 593500. | 3389200. | 20 | 71 | -.9 | -.90 | 110.0 | 10.0 | 80.0 | -.9 | 25.0 | 25.0 | -.9 | 10.0 | 85.0 |
| B011259 | 593500. | 3389400. | 20 | 71 | -.9 | .02 | 120.0 | 10.0 | 115.0 | -.9 | 25.0 | 20.0 | -.9 | 5.0 | 115.0 |
| B011260 | 593500. | 3389600. | 20 | 71 | -.9 | .01 | 130.0 | 10.0 | 65.0 | -.9 | 25.0 | 20.0 | -.9 | 5.0 | 75.0 |
| B011261 | 593500. | 3389800. | 20 | 71 | -.9 | -.90 | 10.0 | -.9 | 45.0 | -.9 | 10.0 | 20.0 | -.9 | 3.0 | 15.0 |

TABLE AD-20

KANTISHNA HILLS ROCK CHIP SAMPLES

ANALYTICAL RESULTS

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C003495 | 360650. | 3492400. | 30 | 72 | 1.02 | -.8 | .010 | -.80 | -.900 | -.9 | 60.000 | -.900 | 70.000 | -.900 |
| C003496 | 360640. | 3492390. | 30 | 72 | 2.16 | -.8 | .037 | -.80 | -.900 | -.9 | 350.000 | -.900 | 1300.000 | -.900 |
| C003497 | 360630. | 3492330. | 30 | 72 | 3.84 | -.8 | .100 | -.80 | -.900 | -.9 | 1750.000 | -.900 | 220.000 | -.900 |
| C003498 | 360660. | 3492410. | 30 | 72 | .21 | -.8 | .005 | -.80 | -.900 | -.9 | 900.000 | -.900 | 560.000 | -.900 |
| C003499 | 360670. | 3492420. | 30 | 72 | 377.00 | -.8 | .210 | -.80 | -.900 | -.9 | 17000.000 | -.900 | 282000.000 | -.900 |
| C012601 | 336750. | 3475800. | 34 | 72 | 2.76 | -.8 | -.900 | -.80 | .015% | -.9 | .014% | -.900 | -.900 | 44.300% |
| C012602 | 336600. | 3476100. | 34 | 72 | .20 | -.8 | .011 | -.80 | .066% | -.9 | -.900 | -.900 | -.900 | 11.400% |
| C012603 | 336600. | 3474300. | 34 | 72 | 40.10 | -.8 | .005 | -.80 | .065% | 330.0 | .830% | 6.000 | .077% | .910% |
| C012604 | 336550. | 3474250. | 32 | 71 | -.80 | .8 | -.800 | .67 | 4850.000 | 2.0 | -.900 | -.900 | 15.000 | .042% |
| C012605 | 336200. | 3477400. | 32 | 72 | .30 | -.8 | .005 | -.80 | .015% | -.9 | -.900 | -.900 | -.900 | 3.200% |
| C012606 | 336850. | 3476900. | 34 | 71 | -.80 | 3.6 | -.800 | .02 | 95.000 | 4.0 | 15.000 | -.900 | 230.000 | .017% |
| C012607 | 336550. | 3476050. | 34 | 71 | -.80 | 1.0 | -.800 | -.90 | 90.000 | -.9 | 5.000 | -.900 | 70.000 | .012% |
| C012608 | 343250. | 3479550. | 34 | 72 | .46 | -.8 | .015 | -.80 | .345% | 1.0 | .004% | -.900 | 1.000% | .925% |
| C012609 | 340750. | 3481100. | 32 | 72 | .16 | -.8 | .010 | -.80 | .465% | -.9 | .002% | -.900 | .235% | .028% |
| C012610 | 340400. | 3480500. | 34 | 72 | -.90 | -.8 | .005 | -.80 | .027% | -.9 | .004% | -.900 | .004% | -.900 |
| C012611 | 333750. | 3473100. | 30 | 72 | .77 | -.8 | .005 | -.80 | .215% | -.9 | .034% | -.900 | .795% | .105% |
| C012612 | 335200. | 3473250. | 34 | 72 | .50 | -.8 | -.900 | -.80 | .037% | -.9 | .004% | -.900 | -.900 | 6.400% |
| C012613 | 357850. | 3484600. | 34 | 72 | -.90 | -.8 | .007 | -.80 | .050% | 2.0 | .110% | -.900 | 1.050% | .067% |
| C012614 | 354200. | 3484000. | 34 | 71 | -.80 | 1.7 | -.800 | 1.20 | 9900.000 | -.9 | -.900 | -.900 | 10.000 | 48.000 |
| C012615 | 345600. | 3485900. | 34 | 72 | 4.30 | -.8 | .009 | -.80 | .530% | -.9 | .054% | -.900 | 11.000% | 5.450% |
| C012616 | 345400. | 3486100. | 34 | 72 | 11.60 | -.8 | .015 | -.80 | .093% | 11.0 | .340% | -.900 | 24.500% | 11.000% |
| C012617 | 346400. | 3486750. | 34 | 72 | .03 | -.8 | .091 | -.80 | 3.950% | 1.0 | .004% | -.900 | .074% | .050% |
| C012618 | 346900. | 3488450. | 34 | 72 | -.90 | -.8 | .008 | -.80 | .054% | -.9 | -.900 | -.900 | .071% | .038% |
| C012619 | 346850. | 3486300. | 34 | 72 | 49.20 | -.8 | .008 | -.80 | .130% | 4.0 | .010% | -.900 | .815% | .720% |
| C012620 | 345200. | 3484400. | 34 | 72 | .56 | -.8 | .027 | -.80 | 390.000 | 4.0 | -.900 | -.900 | -.900 | 51.000% |
| C013601 | 354100. | 3491000. | 30 | 70 | 1.88 | -.8 | .048 | -.80 | 54000.000 | 3.0 | .025% | -.900 | .490% | 95.000 |
| C013602 | 346065. | 3489530. | 30 | 70 | 30.90 | -.8 | .110 | -.80 | 20500.000 | 5.0 | .110% | -.900 | 5.100% | 1300.000 |
| C013603 | 346385. | 3489530. | 34 | 71 | -.80 | 3.1 | -.800 | -.90 | 260.000 | -.9 | -.900 | -.900 | 115.000 | 8.000 |
| C013604 | 341170. | 3487355. | 30 | 70 | .08 | -.8 | .026 | -.80 | 6000.000 | -.9 | .004% | -.900 | .006% | 22.000 |
| C013605 | 341165. | 3487365. | 30 | 70 | -.90 | -.8 | .013 | -.80 | 5600.000 | -.9 | .004% | -.900 | -.900 | 13.000 |
| C013606 | 341770. | 3487430. | 34 | 71 | -.80 | -.9 | -.800 | .16 | 2850.000 | -.9 | -.900 | -.900 | 10.000 | .001% |
| C013727 | 355750. | 3490265. | 34 | 71 | -.80 | 1.0 | -.800 | -.90 | 90.000 | 2.0 | 15.000 | 2.000 | 105.000 | -.900 |
| C013728 | 355295. | 3490860. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | 10.000 | -.900 | 20.000 | 2.000 |
| C013729 | 355175. | 3491285. | 34 | 71 | -.80 | 55.0 | -.800 | 9.60 | 137000.000 | -.9 | 550.000 | -.900 | 2500.000 | 180.000 |
| C013730 | 355080. | 3492630. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | 10.000 | -.900 | 5.000 | 10.000 |
| C013731 | 355030. | 3492680. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C013732 | 354270. | 3490490. | 34 | 71 | -.80 | .6 | -.800 | .04 | 770.000 | -.9 | 10.000 | -.900 | 20.000 | 4.000 |
| C013733 | 351535. | 3488685. | 34 | 71 | -.80 | .2 | -.800 | -.90 | 50.000 | -.9 | 40.000 | -.900 | 15.000 | 10.000 |
| C013734 | 323860. | 3472900. | 32 | 71 | -.80 | .6 | -.800 | -.90 | 40.000 | -.9 | 15.000 | -.900 | 10.000 | 180.000 |
| C013735 | 363000. | 3504750. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 45.000 | -.9 | 15.000 | -.900 | 10.000 | 2.000 |
| C013736 | 362530. | 3505090. | 34 | 71 | -.80 | .2 | -.800 | -.90 | 115.000 | -.9 | 10.000 | -.900 | 5.000 | 4.000 |
| C013737 | 369220. | 3509650. | 34 | 71 | -.80 | .4 | -.800 | -.90 | 35.000 | -.9 | 130.000 | -.900 | -.900 | -.900 |
| C013738 | 324830. | 3456400. | 34 | 71 | -.80 | -.9 | -.800 | .07 | 232000.000 | -.9 | 30.000 | -.900 | -.900 | 1400.000 |
| C013739 | 324830. | 3456400. | 34 | 72 | -.80 | .4 | -.800 | -.90 | 55.000 | -.9 | .006% | -.900 | -.900 | 606000.000 |
| C013740 | 324830. | 3456400. | 34 | 72 | -.80 | 1.0 | -.800 | -.90 | 1800.000 | -.9 | .012% | -.900 | -.900 | 610000.000 |
| C013741 | 332210. | 3469800. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 45.000 | 20.000 | -.900 | 1350.000 |
| C013742 | 332950. | 3468850. | 34 | 71 | -.80 | 90.0 | -.800 | .45 | 2800.000 | 1.0 | 720.000 | -.900 | 3450.000 | 7200.000 |
| C013743 | 329900. | 3477450. | 34 | 72 | -.80 | 275.0 | -.800 | 1.10 | 2450.000 | 2.0 | .030% | -.900 | 10.500% | 91500.000 |
| C013744 | 329900. | 3477450. | 34 | 71 | -.80 | 1.2 | -.800 | .03 | 85.000 | 3.0 | 105.000 | -.900 | 410.000 | 300.000 |
| C013745 | 330700. | 3476790. | 34 | 72 | -.80 | 4900.0 | -.800 | 1.60 | 18000.000 | -.9 | .365% | -.900 | 8.400% | 45000.000 |
| C013746 | 328430. | 3473250. | 34 | 72 | -.80 | 700.0 | -.800 | .15 | 13000.000 | -.9 | .079% | 2.000 | 3.000% | 15500.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C003495 | -.9 | 105.000 |
| C003496 | -.9 | 2750.000 |
| C003497 | -.9 | 1400.000 |
| C003498 | -.9 | 5700.000 |
| C003499 | -.9 | 37000.000 |
| C012601 | -.9 | -.900 |
| C012602 | -.9 | -.900 |
| C012603 | 3.0 | .110% |
| C012604 | -.9 | 60.000 |
| C012605 | -.9 | .004% |
| C012606 | -.9 | 570.000 |
| C012607 | -.9 | 1250.000 |
| C012608 | -.9 | .010% |
| C012609 | -.9 | .110% |
| C012610 | 3.0 | -.900 |
| C012611 | -.9 | 6.650% |
| C012612 | 3.0 | .007% |
| C012613 | -.9 | 11.000% |
| C012614 | 2.0 | 20.000 |
| C012615 | -.9 | 32.500% |
| C012616 | 3.0 | 12.000% |
| C012617 | 4.0 | .050% |
| C012618 | 4.0 | .039% |
| C012619 | 3.0 | .008% |
| C012620 | 9.0 | -.900 |
| C013601 | -.9 | .031% |
| C013602 | -.9 | .225% |
| C013603 | 5.0 | 55.000 |
| C013604 | -.9 | .120% |
| C013605 | 7.0 | .110% |
| C013606 | 8.0 | 55.000 |
| C013727 | 3.0 | 25.000 |
| C013728 | 3.0 | 50.000 |
| C013729 | 5.0 | 165.000 |
| C013730 | 2.0 | 30.000 |
| C013731 | 4.0 | 15.000 |
| C013732 | 8.0 | 130.000 |
| C013733 | 4.0 | 70.000 |
| C013734 | 3.0 | 30.000 |
| C013735 | 4.0 | 30.000 |
| C013736 | 26.0 | 45.000 |
| C013737 | -.9 | 60.000 |
| C013738 | 3.0 | 105.000 |
| C013739 | 3.0 | .006% |
| C013740 | -.9 | .014% |
| C013741 | 7.0 | 10.000 |
| C013742 | 4.0 | 8400.000 |
| C013743 | 4.0 | .905% |
| C013744 | 6.0 | 155.000 |
| C013745 | 3.0 | 3.750% |
| C013746 | -.9 | .280% |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013747 | 331850. | 3466000. | 34 | 72 | 5.16 | -.8 | -.900 | -.80 | .009% | 100.0 | 1.250% | -.900 | 4.450% | 2.450% |
| C013748 | 331850. | 3466000. | 34 | 71 | -.80 | 7.2 | -.800 | -.90 | 195.000 | -.9 | 105.000 | -.900 | 35.000 | .094% |
| C013751 | 333300. | 3466750. | 34 | 71 | -.80 | .7 | -.800 | -.90 | -.900 | -.9 | 135.000 | -.900 | 120.000 | .084% |
| C013752 | 336720. | 3461260. | 34 | 72 | .18 | -.8 | .006 | -.80 | .018% | -.9 | .004% | -.900 | -.900 | 54.200% |
| C013753 | 360650. | 3492400. | 32 | 72 | 247.90 | -.8 | .150 | -.80 | .700% | 2.0 | 1.050% | -.900 | 14.000% | 1.250% |
| C013754 | 352980. | 3489100. | 34 | 72 | 188.70 | -.8 | .047 | -.80 | .270% | 4.0 | .905% | -.900 | 58.500% | 1.000% |
| C013755 | 324830. | 3456400. | 34 | 71 | -.80 | 1.8 | -.800 | -.90 | 350.000 | -.9 | -.900 | -.900 | 35.000 | 155.000 |
| C013756 | 439680. | 3558420. | 34 | 72 | .03 | -.8 | .053 | -.80 | 880.000 | 4.0 | -.900 | -.900 | -.900 | 65.000% |
| C013757 | 439680. | 3558420. | 34 | 72 | .12 | -.8 | .070 | -.80 | 1000.000 | 4.0 | -.900 | -.900 | -.900 | 68.000% |
| C013758 | 408200. | 3550630. | 30 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | -.900 | -.900 |
| C013759 | 408030. | 3549230. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | 10.000 | 2.000 |
| C013760 | 409820. | 3552030. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 150.000 | -.900 | -.900 | 6.000 |
| C013768 | 384800. | 3501470. | 34 | 72 | 180.30 | -.8 | .270 | -.80 | -.900 | -.9 | .655% | .002% | 36.000% | -.900 |
| C013769 | 384850. | 3501550. | 34 | 72 | 129.60 | -.8 | .460 | -.80 | -.900 | -.9 | .145% | .008% | 52.500% | -.900 |
| C013770 | 391820. | 3508900. | 34 | 71 | -.80 | -.9 | -.800 | .10 | 50.000 | -.9 | 10.000 | -.900 | 10.000 | -.900 |
| C013771 | 392380. | 3509300. | 34 | 71 | -.80 | .4 | -.800 | -.90 | 90.000 | -.9 | 5.000 | 12.000 | 15.000 | -.900 |
| C014001 | 345850. | 3488850. | 34 | 71 | -.80 | .4 | -.800 | .21 | 10500.000 | -.9 | 55.000 | -.900 | -.900 | 18.000 |
| C014002 | 343840. | 3487250. | 30 | 71 | -.80 | 2.4 | -.800 | .12 | 1250.000 | -.9 | 115.000 | 2.000 | 35.000 | 26.000 |
| C014003 | 344210. | 3487260. | 30 | 71 | -.80 | 860.0 | -.800 | .52 | 6900.000 | -.9 | 1400.000 | -.900 | 30500.000 | 1000.000 |
| C014004 | 347900. | 3489250. | 30 | 71 | -.80 | 270.0 | -.800 | 6.50 | 810.000 | 2.0 | 350.000 | 8.000 | 90.000 | 305.000 |
| C014005 | 342020. | 3485930. | 30 | 71 | -.80 | 1555.0 | -.800 | 2.50 | 8350.000 | -.9 | 3700.000 | -.900 | 33000.000 | 1850.000 |
| C014006 | 442250. | 3553900. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 35.000 | -.900 | 25.000 | 4.000 |
| C014007 | 444750. | 3549220. | 30 | 71 | -.80 | 11.0 | -.800 | -.90 | 10.000 | 46.0 | 30.000 | -.900 | 5050.000 | 2.000 |
| C014008 | 342390. | 3487040. | 30 | 71 | -.80 | 355.0 | -.800 | .13 | 540.000 | -.9 | 15.000 | -.900 | 148000.000 | 710.000 |
| C014014 | 342420. | 3488700. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | 5.000 | -.900 | 30.000 | -.900 |
| C014101 | 385450. | 3498650. | 34 | 72 | 4.14 | -.8 | .060 | -.80 | 250000.000 | 105.0 | .008% | -.900 | 2.750% | 730.000 |
| C014102 | 384300. | 3496750. | 34 | 71 | -.80 | -.9 | -.800 | .04 | 20.000 | 10.0 | 25.000 | -.900 | 10.000 | -.900 |
| C014103 | 382800. | 3496100. | 30 | 72 | .47 | -.8 | -.900 | -.80 | 12500.000 | 34.0 | .049% | -.900 | .375% | 28.000 |
| C014104 | 383600. | 3496300. | 34 | 71 | -.80 | 3.2 | -.800 | -.90 | 390.000 | 3.0 | 215.000 | -.900 | 25.000 | 24.000 |
| C014105 | 384000. | 3496400. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 80.000 | -.9 | 40.000 | -.900 | 15.000 | 2.000 |
| C014106 | 383700. | 3497600. | 30 | 72 | 1.38 | -.8 | .006 | -.80 | 14000.000 | 2.0 | .006% | -.900 | .630% | 8400.000 |
| C014107 | 383600. | 3498300. | 34 | 71 | -.80 | .8 | -.800 | -.90 | 85.000 | 1.0 | 10.000 | -.900 | 95.000 | 7.000 |
| C014108 | 380400. | 3499900. | 34 | 71 | -.80 | .6 | -.800 | -.90 | 270.000 | 1.0 | 25.000 | -.900 | 10.000 | 14.000 |
| C014109 | 379500. | 3495450. | 30 | 72 | 2.06 | -.8 | .044 | -.80 | 223000.000 | 215.0 | .008% | -.900 | .115% | 2800.000 |
| C014110 | 379700. | 3496400. | 30 | 71 | -.80 | 30.0 | -.800 | .68 | 62500.000 | 3.0 | 55.000 | -.900 | 9950.000 | 6750.000 |
| C014111 | 375600. | 3496700. | 34 | 71 | -.80 | 65.0 | -.800 | 3.60 | 116000.000 | -.9 | 150.000 | -.900 | 11500.000 | 530.000 |
| C014112 | 375750. | 3496800. | 34 | 72 | 11.70 | -.8 | .053 | -.80 | 31000.000 | 2.0 | -.900 | -.900 | 7.900% | 400.000 |
| C014113 | 426800. | 3532800. | 30 | 71 | -.80 | .8 | -.800 | .03 | 960.000 | -.9 | 40.000 | -.900 | 85.000 | 14.000 |
| C014114 | 379400. | 3498700. | 30 | 71 | -.80 | 13.0 | -.800 | 1.80 | 4200.000 | 6.0 | 75.000 | 2.000 | 325.000 | 34.000 |
| C014115 | 384450. | 3502300. | 34 | 71 | -.80 | 12.0 | -.800 | 8.20 | 2600.000 | -.9 | 15.000 | -.900 | 1850.000 | 13.000 |
| C014116 | 372400. | 3496600. | 34 | 70 | 8.54 | -.8 | .027 | -.80 | 20500.000 | -.9 | .086% | 2.000 | 3.400% | 25000.000 |
| C014117 | 398950. | 3520200. | 34 | 71 | -.80 | 11.0 | -.800 | -.90 | 250.000 | -.9 | 30.000 | -.900 | 10000.000 | 475.000 |
| C014118 | 375875. | 3497300. | 32 | 72 | 5.28 | -.8 | -.900 | -.80 | .054% | 85.0 | .018% | -.900 | 1.100% | .024% |
| C014119 | 375875. | 3497300. | 32 | 72 | .07 | -.8 | -.900 | -.80 | .019% | 6.0 | -.900 | -.900 | .110% | -.900 |
| C014120 | 375975. | 3497100. | 32 | 71 | -.80 | 1.7 | -.800 | -.90 | 40.000 | -.9 | -.900 | -.900 | 30.000 | 4.000 |
| C014121 | 375975. | 3497100. | 32 | 71 | -.80 | .2 | -.800 | -.90 | 20.000 | -.9 | 5.000 | -.900 | 5.000 | 6.000 |
| C014122 | 375950. | 3496725. | 34 | 72 | 3.69 | -.8 | .008 | -.80 | 1.100% | -.9 | .004% | -.900 | 1.700% | .021% |
| C014123 | 375850. | 3496675. | 34 | 72 | 8.07 | -.8 | .150 | -.80 | 7.450% | -.9 | .016% | -.900 | 1.200% | .065% |
| C014124 | 375825. | 3496750. | 34 | 72 | 13.00 | -.8 | .230 | -.80 | 5.050% | 2.0 | .014% | -.900 | .845% | .079% |
| C014125 | 417250. | 3558400. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | .021% | -.9 | .004% | -.900 | .004% | -.900 |
| C014126 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 20.000 | -.900 | 10.000 | 6.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C013747 | -.9 | 33.000% |
| C013748 | -.9 | 29500.000 |
| C013751 | -.9 | 600.000 |
| C013752 | -.9 | .090% |
| C013753 | -.9 | 4.100% |
| C013754 | -.9 | 13.500% |
| C013755 | 5.0 | 15.000 |
| C013756 | 6.0 | -.900 |
| C013757 | 4.0 | -.900 |
| C013758 | 4.0 | 150.000 |
| C013759 | 4.0 | 55.000 |
| C013760 | 3.0 | 185.000 |
| C013768 | 65.0 | 1.450% |
| C013769 | 80.0 | 8.200% |
| C013770 | 3.0 | 10.000 |
| C013771 | 4.0 | 20.000 |
| C014001 | 3.0 | 1100.000 |
| C014002 | 7.0 | 3950.000 |
| C014003 | 6.0 | 76500.000 |
| C014004 | 9.0 | 1200.000 |
| C014005 | 3.0 | 55000.000 |
| C014006 | 3.0 | 50.000 |
| C014007 | 2.0 | 5.000 |
| C014008 | 4.0 | 93500.000 |
| C014014 | 4.0 | 60.000 |
| C014101 | -.9 | .265% |
| C014102 | 5.0 | 10.000 |
| C014103 | -.9 | 1.300% |
| C014104 | 3.0 | 630.000 |
| C014105 | 4.0 | 15.000 |
| C014106 | -.9 | .013% |
| C014107 | 6.0 | 55.000 |
| C014108 | 7.0 | 10.000 |
| C014109 | -.9 | .051% |
| C014110 | -.9 | 145.000 |
| C014111 | 7.0 | 1650.000 |
| C014112 | 2.0 | .180% |
| C014113 | 3.0 | 285.000 |
| C014114 | 3.0 | 7400.000 |
| C014115 | 26.0 | 1500.000 |
| C014116 | 4.0 | .480% |
| C014117 | 5.0 | 235.000 |
| C014118 | -.9 | .140% |
| C014119 | -.9 | .002% |
| C014120 | 3.0 | 15.000 |
| C014121 | -.9 | 10.000 |
| C014122 | -.9 | .016% |
| C014123 | -.9 | .067% |
| C014124 | -.9 | .098% |
| C014125 | -.9 | .003% |
| C014126 | 2.0 | 50.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C014127 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 25.000 | -.900 | 10.000 | 12.000 |
| C014128 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | 25.000 | -.900 | 10.000 | 22.000 |
| C014129 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | 30.000 | -.900 | 15.000 | 22.000 |
| C014130 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 130.000 | -.9 | 20.000 | -.900 | -.900 | 20.000 |
| C014131 | 425400. | 3542500. | 32 | 71 | -.80 | .4 | -.800 | -.90 | 70.000 | -.9 | 20.000 | -.900 | 10.000 | 20.000 |
| C014132 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 5.000 | -.9 | 25.000 | -.900 | 5.000 | 7.000 |
| C014133 | 425400. | 3542500. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 50.000 | -.9 | 30.000 | -.900 | 10.000 | 20.000 |
| C014134 | 418800. | 3558100. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 25.000 | -.900 | 15.000 | -.900 |
| C014135 | 417150. | 3557500. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 20.000 | -.900 | 15.000 | 2.000 |
| C014136 | 417150. | 3557000. | 30 | 71 | -.80 | 7.4 | -.800 | -.90 | -.900 | -.9 | 40.000 | -.900 | 10.000 | -.900 |
| C014137 | 416200. | 3554800. | 30 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 30.000 | -.900 | 40.000 | 2.000 |
| C014138 | 416200. | 3554800. | 30 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 45.000 | 2.000 |
| C014139 | 418200. | 3556450. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 140.000 | -.900 | 50.000 | 4.000 |
| C014140 | 417800. | 3556200. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 20.000 | -.900 | 20.000 | -.900 |
| C014141 | 417800. | 3556850. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 15.000 | -.900 | 30.000 | -.900 |
| C014142 | 419200. | 3557950. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | 40.000 | 4.000 |
| C014143 | 418300. | 3558700. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | 4.000 | 15.000 | -.900 |
| C014144 | 434950. | 3545200. | 30 | 71 | -.80 | 1.7 | -.800 | -.90 | 15.000 | -.9 | 65.000 | 2.000 | 310.000 | 6.000 |
| C014145 | 438300. | 3550800. | 34 | 71 | -.80 | .4 | -.800 | -.90 | 5.000 | -.9 | 55.000 | 2.000 | 115.000 | 2.000 |
| C014146 | 421800. | 3556800. | 30 | 71 | -.80 | .4 | -.800 | 1.00 | 770.000 | -.9 | 40.000 | -.900 | 55.000 | 38.000 |
| C014147 | 429700. | 3557250. | 34 | 71 | -.80 | 1.2 | -.800 | -.90 | 40.000 | -.9 | -.900 | -.900 | 70.000 | 12.000 |
| C014148 | 427000. | 3556050. | 30 | 71 | -.90 | -.9 | -.900 | -.90 | 130.000 | -.9 | 25.000 | -.900 | -.900 | 6.000 |
| C014201 | 355350. | 3492200. | 32 | 71 | -.80 | .2 | -.800 | -.90 | 205.000 | -.9 | -.900 | -.900 | 30.000 | 4.000 |
| C014202 | 355500. | 3492900. | 32 | 71 | -.80 | .4 | -.800 | -.90 | 130.000 | -.9 | 30.000 | -.900 | 15.000 | 4.000 |
| C014203 | 355600. | 3491300. | 34 | 71 | -.80 | 4.6 | -.800 | -.90 | 260.000 | -.9 | 95.000 | -.900 | 2000.000 | 8.000 |
| C014204 | 355600. | 3491300. | 34 | 71 | -.80 | 315.0 | -.800 | 2.30 | 12500.000 | 4.0 | 470.000 | -.900 | 33000.000 | 480.000 |
| C014205 | 355750. | 3491100. | 34 | 71 | -.80 | 490.0 | -.800 | 2.90 | 45500.000 | -.9 | 6700.000 | -.900 | 124000.000 | 590.000 |
| C014206 | 355900. | 3490750. | 34 | 71 | -.80 | 1.4 | -.800 | -.90 | 150.000 | -.9 | 25.000 | -.900 | 460.000 | 4.000 |
| C014207 | 355750. | 3491950. | 32 | 71 | -.80 | 1.1 | -.800 | -.90 | 260.000 | -.9 | 25.000 | -.900 | 210.000 | 8.000 |
| C014208 | 355550. | 3491400. | 34 | 71 | -.80 | 140.0 | -.800 | 2.50 | 67500.000 | 15.0 | 445.000 | -.900 | 41500.000 | 250.000 |
| C014209 | 355500. | 3492650. | 34 | 71 | -.80 | .9 | -.800 | .41 | 1050.000 | 1.0 | 10.000 | -.900 | 325.000 | 4.000 |
| C014210 | 355400. | 3492800. | 34 | 71 | -.80 | 3.6 | -.800 | -.90 | 610.000 | 9.0 | -.900 | -.900 | 170.000 | 4.000 |
| C014211 | 356600. | 3491700. | 34 | 71 | -.80 | 1.7 | -.800 | .22 | 1200.000 | 2.0 | 10.000 | -.900 | 185.000 | 14.000 |
| C014212 | 354880. | 3491980. | 32 | 72 | .21 | -.8 | .720 | -.80 | 7850.000 | 2.0 | .004% | 2.000 | .030% | 32.000 |
| C014213 | 354880. | 3491980. | 30 | 72 | .40 | -.8 | .370 | -.80 | 3450.000 | -.9 | .006% | -.900 | .078% | 34.000 |
| C014214 | 354880. | 3491980. | 32 | 71 | -.80 | .8 | -.800 | 1.10 | 4800.000 | -.9 | 40.000 | -.900 | 65.000 | 14.000 |
| C014215 | 354900. | 3492080. | 32 | 72 | 3.04 | -.8 | .061 | -.80 | 1800.000 | -.9 | .018% | -.900 | .500% | 220.000 |
| C014216 | 354900. | 3492080. | 32 | 72 | 2.09 | -.8 | .210 | -.80 | 800.000 | -.9 | .008% | -.900 | 1.300% | 55.000 |
| C014217 | 354930. | 3492080. | 34 | 71 | -.80 | 7.6 | -.800 | 1.10 | 1250.000 | -.9 | 75.000 | -.900 | 25.000 | 22.000 |
| C014218 | 354930. | 3492080. | 34 | 71 | -.80 | -.9 | -.800 | .11 | 720.000 | -.9 | 10.000 | -.900 | 15.000 | 2.000 |
| C014219 | 354800. | 3491980. | 34 | 72 | .41 | -.8 | .480 | -.80 | 2150.000 | -.9 | .002% | -.900 | .092% | 15.000 |
| C014220 | 354700. | 3492000. | 34 | 72 | 1.15 | -.8 | .013 | -.80 | 215.000 | -.9 | .004% | -.900 | 1.100% | 42.000 |
| C014223 | 354560. | 3491320. | 34 | 71 | -.80 | 70.0 | -.800 | 2.60 | 1950.000 | -.9 | 65.000 | -.900 | 770.000 | 85.000 |
| C014224 | 354540. | 3491340. | 34 | 71 | -.80 | 165.0 | -.800 | 210.00 | 3200.000 | 3.0 | 80.000 | -.900 | 3300.000 | 60.000 |
| C014226 | 355180. | 3491300. | 32 | 72 | 10.40 | -.8 | .100 | -.80 | 50000.000 | 4.0 | .035% | -.900 | 1.800% | 320.000 |
| C014227 | 355170. | 3491240. | 34 | 72 | 6.30 | -.8 | .200 | -.80 | 117000.000 | 3.0 | .195% | -.900 | .790% | 205.000 |
| C014228 | 355220. | 3491320. | 32 | 72 | 9.81 | -.8 | .110 | -.80 | 67500.000 | 1.0 | .032% | -.900 | 1.200% | 420.000 |
| C014229 | 355210. | 3491310. | 34 | 71 | -.80 | 1.6 | -.800 | .08 | 1100.000 | -.9 | 45.000 | -.900 | 320.000 | 16.000 |
| C014230 | 355620. | 3491500. | 34 | 71 | -.80 | 60.0 | -.800 | 1.30 | 6100.000 | -.9 | 140.000 | -.900 | 3800.000 | 26.000 |
| C014231 | 355890. | 3491570. | 34 | 71 | -.80 | 165.0 | -.800 | 1.20 | 10000.000 | -.9 | 165.000 | -.900 | 1950.000 | 32.000 |
| C014232 | 355890. | 3491550. | 34 | 71 | -.80 | 1500.0 | -.800 | 16.00 | 50500.000 | -.9 | 2000.000 | -.900 | 140000.000 | 2900.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C014127 | 3.0 | 70.000 |
| C014128 | 3.0 | 40.000 |
| C014129 | 4.0 | 40.000 |
| C014130 | 3.0 | 15.000 |
| C014131 | 5.0 | 20.000 |
| C014132 | -.9 | 40.000 |
| C014133 | 4.0 | 40.000 |
| C014134 | -.9 | 125.000 |
| C014135 | 3.0 | 90.000 |
| C014136 | 3.0 | 80.000 |
| C014137 | -.9 | 55.000 |
| C014138 | -.9 | 55.000 |
| C014139 | 4.0 | 40.000 |
| C014140 | -.9 | 50.000 |
| C014141 | -.9 | 40.000 |
| C014142 | -.9 | 230.000 |
| C014143 | 4.0 | 45.000 |
| C014144 | 3.0 | 345.000 |
| C014145 | -.9 | 190.000 |
| C014146 | 4.0 | 25.000 |
| C014147 | -.9 | 35.000 |
| C014148 | 3.0 | 60.000 |
| C014201 | 3.0 | 20.000 |
| C014202 | 6.0 | 35.000 |
| C014203 | 7.0 | 3600.000 |
| C014204 | -.9 | 2550.000 |
| C014205 | -.9 | 3250.000 |
| C014206 | 2.0 | 115.000 |
| C014207 | 3.0 | 55.000 |
| C014208 | 5.0 | 1300.000 |
| C014209 | 3.0 | 15.000 |
| C014210 | 3.0 | 10.000 |
| C014211 | 6.0 | 10.000 |
| C014212 | 4.0 | .004% |
| C014213 | 3.0 | .011% |
| C014214 | 5.0 | 145.000 |
| C014215 | 660.0 | .025% |
| C014216 | 140.0 | .765% |
| C014217 | 7.0 | 1000.000 |
| C014218 | 7.0 | 40.000 |
| C014219 | 105.0 | .028% |
| C014220 | 95.0 | .275% |
| C014223 | 9.0 | 165.000 |
| C014224 | 315.0 | 630.000 |
| C014226 | 2.0 | .067% |
| C014227 | -.9 | .575% |
| C014228 | -.9 | .041% |
| C014229 | 4.0 | 125.000 |
| C014230 | 4.0 | 40.000 |
| C014231 | -.9 | 45.000 |
| C014232 | -.9 | 4400.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C014233 | 355870. | 3491500. | 34 | 71 | -.80 | 360.0 | -.800 | 3.20 | 36000.000 | -.9 | 1350.000 | -.900 | 48000.000 | 700.000 |
| C014234 | 356180. | 3491570. | 34 | 71 | -.80 | 100.0 | -.800 | 3.60 | 28000.000 | 4.0 | 300.000 | 2.000 | 3150.000 | 340.000 |
| C014235 | 356540. | 3491730. | 34 | 71 | -.80 | 60.0 | -.800 | 2.70 | 12000.000 | 18.0 | 70.000 | -.900 | 11500.000 | 100.000 |
| C014236 | 356560. | 3491620. | 34 | 71 | -.80 | 1800.0 | -.800 | 4.70 | 34500.000 | 3.0 | 1100.000 | 4.000 | 200000.000 | 3550.000 |
| C014237 | 359900. | 3492250. | 32 | 71 | -.80 | 2.7 | -.800 | 2.90 | 12000.000 | 2.0 | 35.000 | -.900 | 80.000 | 30.000 |
| C014238 | 360500. | 3492800. | 34 | 71 | -.80 | 1.5 | -.800 | .17 | 1450.000 | -.9 | 15.000 | -.900 | 145.000 | 50.000 |
| C014239 | 360400. | 3493200. | 34 | 71 | -.80 | .2 | -.800 | -.90 | 35.000 | -.9 | 15.000 | -.900 | 15.000 | 17.000 |
| C014240 | 357200. | 3493950. | 32 | 71 | -.80 | .8 | -.800 | -.90 | 85.000 | -.9 | 90.000 | 2.000 | 5.000 | 17.000 |
| C014241 | 349550. | 3489550. | 34 | 71 | -.80 | 2.2 | -.800 | 1.70 | 90.000 | -.9 | 10.000 | -.900 | 15.000 | 2.000 |
| C014242 | 348550. | 3488600. | 34 | 71 | -.80 | -.9 | -.800 | .16 | 395.000 | -.9 | 10.000 | -.900 | 10.000 | 4.000 |
| C014243 | 348900. | 3488400. | 30 | 71 | -.80 | 1.1 | -.800 | .04 | 2150.000 | -.9 | 10.000 | -.900 | 100.000 | 6.000 |
| C014244 | 349900. | 3488600. | 34 | 71 | -.80 | 200.5 | -.800 | .95 | 5350.000 | 3.0 | 2550.000 | -.900 | 85500.000 | 2500.000 |
| C014245 | 357525. | 3491850. | 34 | 71 | -.80 | 9.1 | -.800 | .03 | 2500.000 | -.9 | 180.000 | -.900 | 260.000 | 165.000 |
| C014246 | 340500. | 3480600. | 32 | 71 | -.80 | 7.2 | -.800 | .34 | 2450.000 | -.9 | 20.000 | 2.000 | 265.000 | 16.000 |
| C014247 | 334150. | 3474600. | 34 | 71 | -.80 | 1.8 | -.800 | -.90 | 25.000 | -.9 | 50.000 | -.900 | 75.000 | 55.000 |
| C014248 | 335700. | 3476900. | 32 | 71 | -.80 | .8 | -.800 | -.90 | 10.000 | -.9 | 75.000 | -.900 | 25.000 | 50.000 |
| C014249 | 334550. | 3479550. | 34 | 71 | -.80 | .8 | -.800 | .05 | 135.000 | -.9 | -.900 | -.900 | 60.000 | 60.000 |
| C014250 | 334800. | 3480750. | 34 | 72 | -.80 | 1640.0 | -.800 | .13 | 4350.000 | 155.0 | 1.650% | -.900 | 7.850% | 43500.000 |
| C014251 | 334800. | 3480750. | 34 | 72 | 163.90 | -.8 | .025 | -.80 | .380% | 90.0 | 1.750% | -.900 | 6.200% | 5.500% |
| C014252 | 334800. | 3480750. | 34 | 71 | -.80 | 4.4 | -.800 | .05 | 45.000 | -.9 | 20.000 | 4.000 | 85.000 | 110.000 |
| C014253 | 336350. | 3481700. | 34 | 71 | -.80 | .6 | -.800 | .24 | 480.000 | -.9 | 10.000 | -.900 | 15.000 | 18.000 |
| C014254 | 339100. | 3481400. | 34 | 71 | -.80 | .2 | -.800 | -.90 | 30.000 | -.9 | 270.000 | -.900 | 25.000 | 8.000 |
| C014255 | 339100. | 3481400. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 200.000 | -.900 | -.900 | 4.000 |
| C014256 | 337100. | 3480400. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | -.900 | -.900 | 20.000 | 4.000 |
| C014257 | 335800. | 3489200. | 34 | 71 | -.80 | 85.0 | -.800 | 1.10 | 5200.000 | 1.0 | 550.000 | -.900 | 4800.000 | .505% |
| C014258 | 335800. | 3489200. | 34 | 71 | -.80 | 255.0 | -.800 | 2.60 | 17000.000 | 2.0 | 520.000 | -.900 | 2600.000 | .092% |
| C014259 | 333800. | 3473450. | 34 | 72 | .11 | -.8 | -.900 | -.80 | .034% | 2.0 | .002% | -.900 | .460% | .305% |
| C014260 | 354900. | 3491400. | 32 | 72 | 3.53 | -.8 | .110 | -.80 | 7.300% | 1.0 | .048% | -.900 | 2.050% | .052% |
| C014261 | 354900. | 3491400. | 32 | 72 | 3.78 | -.8 | .150 | -.80 | 3.350% | 2.0 | .080% | -.900 | 2.950% | .036% |
| C014262 | 360650. | 3492400. | 32 | 72 | 95.40 | -.8 | .120 | -.80 | 1.000% | 4.0 | .450% | -.900 | 4.850% | .320% |
| C014263 | 360650. | 3492400. | 34 | 72 | 4.69 | -.8 | .035 | -.80 | .830% | -.9 | .052% | 6.000 | .105% | .051% |
| C014264 | 348000. | 3490400. | 34 | 71 | -.80 | 1.6 | -.800 | .04 | 670.000 | -.9 | 40.000 | -.900 | 45.000 | 6.000 |
| C014265 | 348350. | 3491550. | 34 | 71 | -.80 | .4 | -.800 | -.90 | 105.000 | -.9 | -.900 | -.900 | 10.000 | 4.000 |
| C014266 | 332760. | 3474080. | 34 | 72 | 4.59 | -.8 | .005 | -.80 | .062% | 85.0 | .029% | -.900 | 11.500% | 3.350% |
| C014267 | 324000. | 3468000. | 34 | 71 | -.80 | .4 | -.800 | -.90 | 20.000 | -.9 | 40.000 | -.900 | 70.000 | 20.000 |
| C014268 | 323400. | 3466000. | 34 | 71 | -.80 | .2 | -.800 | -.90 | 3450.000 | -.9 | -.900 | -.900 | 130.000 | 90.000 |
| C014269 | 323650. | 3466750. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | 690.000 | -.900 | -.900 | 4.000 |
| C014270 | 335000. | 3480600. | 34 | 72 | 5.27 | -.8 | .007 | -.80 | .750% | 28.0 | .088% | -.900 | 1.300% | .620% |
| C014271 | 367480. | 3511350. | 32 | 72 | -.90 | -.8 | .080 | -.80 | 1.000% | -.9 | .002% | -.900 | .006% | .250% |
| C014272 | 367880. | 3511380. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | 10.000 | -.900 |
| C014273 | 367950. | 3511600. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 35.000 | -.900 | 15.000 | -.900 |
| C014274 | 360810. | 3511800. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 45.000 | -.900 | 20.000 | -.900 |
| C014275 | 354180. | 3493450. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | .004% | 5.0 | .019% | -.900 | .067% | .024% |
| C014276 | 354180. | 3493450. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | 3.0 | .021% | -.900 | .040% | .003% |
| C014277 | 351350. | 3494650. | 30 | 72 | 35.80 | -.8 | -.900 | -.80 | .035% | 5.0 | 1.150% | -.900 | 49.500% | 2.400% |
| C014278 | 351350. | 3494650. | 34 | 72 | 2.30 | -.8 | -.900 | -.80 | .030% | 3.0 | .059% | -.900 | 5.500% | .625% |
| C014279 | 351350. | 3494650. | 34 | 72 | .89 | -.8 | -.900 | -.80 | .026% | 1.0 | .033% | -.900 | 2.950% | .595% |
| C014280 | 351800. | 3495150. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | .125% | -.9 | .002% | -.900 | .078% | .007% |
| C014281 | 349200. | 3489550. | 34 | 71 | -.80 | .6 | -.800 | -.90 | 710.000 | -.9 | 10.000 | -.900 | 15.000 | 4.000 |
| C014282 | 433750. | 3564050. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 30.000 | -.900 | 20.000 | 2.000 |
| C014283 | 433950. | 3564090. | 34 | 72 | -.90 | -.8 | .026 | -.80 | 4500.000 | 3.0 | 85.000 | -.900 | -.900 | 38.500% |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C014233 | -.9 | 2200.000 |
| C014234 | 5.0 | 200.000 |
| C014235 | -.9 | 45.000 |
| C014236 | 4.0 | 1250.000 |
| C014237 | 3.0 | 130.000 |
| C014238 | 3.0 | 45.000 |
| C014239 | 6.0 | 265.000 |
| C014240 | 7.0 | 160.000 |
| C014241 | 5.0 | 30.000 |
| C014242 | 4.0 | 10.000 |
| C014243 | 4.0 | 25.000 |
| C014244 | -.9 | 7300.000 |
| C014245 | -.9 | 1650.000 |
| C014246 | 6.0 | 900.000 |
| C014247 | 3.0 | 195.000 |
| C014248 | 5.0 | 85.000 |
| C014249 | 7.0 | 20.000 |
| C014250 | 6.0 | 6.950% |
| C014251 | -.9 | 2.900% |
| C014252 | 4.0 | 145.000 |
| C014253 | -.9 | 20.000 |
| C014254 | -.9 | 245.000 |
| C014255 | -.9 | 20.000 |
| C014256 | -.9 | 10.000 |
| C014257 | -.9 | 1400.000 |
| C014258 | -.9 | 1450.000 |
| C014259 | -.9 | .010% |
| C014260 | -.9 | .150% |
| C014261 | -.9 | .115% |
| C014262 | -.9 | .505% |
| C014263 | -.9 | .038% |
| C014264 | 3.0 | 70.000 |
| C014265 | 3.0 | 10.000 |
| C014266 | -.9 | 1.900% |
| C014267 | 3.0 | 55.000 |
| C014268 | -.9 | 20.000 |
| C014269 | 3.0 | 25.000 |
| C014270 | -.9 | .044% |
| C014271 | -.9 | .006% |
| C014272 | -.9 | 115.000 |
| C014273 | 2.0 | 65.000 |
| C014274 | 3.0 | 135.000 |
| C014275 | 3.0 | .055% |
| C014276 | 2.0 | .048% |
| C014277 | 4.0 | 4.000% |
| C014278 | 3.0 | .900% |
| C014279 | 3.0 | .295% |
| C014280 | 3.0 | .130% |
| C014281 | 4.0 | 15.000 |
| C014282 | -.9 | 40.000 |
| C014283 | -.9 | 50.000 |

TABLE A0-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C014284 | 435750. | 3562150. | 34 | 71 | -.80 | 3.8 | -.800 | 1.60 | 1100.000 | 6.0 | 30.000 | -.900 | 5.000 | 8850.000 |
| C014285 | 439200. | 3559500. | 34 | 72 | -.90 | -.8 | .038 | -.80 | 2600.000 | -.9 | 20.000 | -.900 | 70.000 | 3.650% |
| C014286 | 437310. | 3561500. | 30 | 72 | .05 | -.8 | .016 | -.80 | 600.000 | 2.0 | 10.000 | 14.000 | 5.000 | .795% |
| C014287 | 437310. | 3561500. | 34 | 72 | 2.76 | -.8 | .460 | -.80 | 5650.000 | 1.0 | 205.000 | 6.000 | -.900 | 6.050% |
| C014288 | 437400. | 3560080. | 34 | 72 | -.90 | -.8 | .007 | -.80 | 570.000 | 2.0 | 5.000 | -.900 | -.900 | 19.000% |
| C014289 | 340800. | 3487850. | 34 | 70 | -.80 | 2400.0 | -.800 | 210.00 | 550.000 | 4.0 | 320.000 | -.900 | 229000.000 | 1200.000 |
| C014291 | 352720. | 3497440. | 34 | 72 | 23.60 | -.8 | -.900 | -.80 | .020% | 1.0 | .365% | -.900 | 32.000% | .830% |
| C014292 | 353700. | 3497240. | 30 | 72 | 95.00 | -.8 | .012 | -.80 | .310% | 9.0 | 3.100% | -.900 | 23.500% | 7.250% |
| C014293 | 353700. | 3497240. | 34 | 72 | 12.60 | -.8 | -.900 | -.80 | .145% | -.9 | .145% | -.900 | 3.950% | .425% |
| C014294 | 353700. | 3497240. | 30 | 72 | 55.50 | -.8 | .016 | -.80 | .640% | 8.0 | .585% | -.900 | 11.500% | 4.050% |
| C014295 | 345700. | 3484500. | 34 | 72 | .16 | -.8 | .120 | -.80 | .400% | -.9 | .004% | -.900 | .210% | .150% |
| C014296 | 361300. | 3493200. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 240.000 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C014297 | 361300. | 3493200. | 32 | 71 | -.80 | .2 | -.800 | -.90 | 55.000 | -.9 | 10.000 | -.900 | -.900 | -.900 |
| C014298 | 361300. | 3493200. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 45.000 | -.9 | -.900 | -.900 | 15.000 | -.900 |
| C014299 | 362420. | 3492800. | 32 | 71 | -.80 | 1.5 | -.800 | -.90 | 125.000 | -.9 | 35.000 | -.900 | 680.000 | 2.000 |
| C014300 | 375100. | 3509700. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 5.000 | 2.000 | 10.000 | -.900 |
| C014301 | 372000. | 3501000. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | 640.000 | -.9 | -.900 | -.900 | .008% | 4.000 |
| C014302 | 393250. | 3493000. | 34 | 72 | .12 | -.8 | -.900 | -.80 | 30.000 | -.9 | .023% | -.900 | 8.550% | 73500.000 |
| C014303 | 393250. | 3493000. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | .081% | -.900 | 10.500% | 90500.000 |
| C014305 | 340850. | 3481300. | 30 | 72 | .04 | -.8 | .042 | -.80 | 6900.000 | -.9 | .002% | -.900 | .078% | 660.000 |
| C014306 | 340850. | 3481300. | 34 | 72 | .04 | -.8 | .028 | -.80 | 3150.000 | -.9 | -.900 | -.900 | .018% | 140.000 |
| C014307 | 360830. | 3492000. | 34 | 72 | 174.00 | -.8 | .140 | -.80 | 3150.000 | 2.0 | .955% | -.900 | 12.500% | 9250.000 |
| C014308 | 400900. | 3542100. | 34 | 70 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | .006% | 2.000 | .002% | -.900 |
| C014309 | 400900. | 3542100. | 34 | 70 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | .004% | 2.000 | .002% | -.900 |
| C014310 | 425600. | 3542250. | 30 | 70 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | .004% | -.900 | -.900 | 19.000 |
| C014311 | 425600. | 3542250. | 34 | 70 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | .002% | 2.000 | -.900 | 12.000 |
| C014312 | 392750. | 3515100. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | .002% | -.9 | .002% | -.900 | .002% | .002% |
| C014313 | 380200. | 3526350. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .008% | -.900 | .002% | .002% |
| C014314 | 380200. | 3526350. | 32 | 72 | -.90 | -.9 | -.900 | -.90 | .001% | -.9 | .010% | -.900 | .002% | .001% |
| C014315 | 380300. | 3494400. | 34 | 72 | 245.80 | -.8 | .061 | -.80 | .079% | 20.0 | .205% | -.900 | 82.000% | 1.350% |
| C014316 | 333250. | 3484750. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .390% | 22.000 | .006% | .002% |
| C014317 | 332750. | 3483350. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .048% | 105.000 | -.900 | -.900 |
| C014318 | 332750. | 3483350. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | .004% | -.9 | .175% | 16.000 | .002% | -.900 |
| C014320 | 335250. | 3476150. | 34 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | 19.0 | .006% | 16.000 | .002% | -.900 |
| C014321 | 411100. | 3540500. | 30 | 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | .004% | 4.000 | .004% | 2.000 |
| C014401 | 387000. | 3500000. | 30 | 71 | -.80 | 9.7 | -.800 | .12 | 465.000 | -.9 | 25.000 | -.900 | 710.000 | 20.000 |
| C014402 | 387450. | 3500000. | 30 | 71 | -.80 | 7.4 | -.800 | .04 | 155.000 | -.9 | 25.000 | -.900 | 435.000 | 18.000 |
| C014403 | 388850. | 3499550. | 30 | 71 | -.80 | 2.2 | -.800 | -.90 | 180.000 | -.9 | 35.000 | -.900 | 110.000 | 15.000 |
| C014404 | 390250. | 3498350. | 30 | 71 | -.80 | 1.0 | -.800 | -.90 | 40.000 | -.9 | 60.000 | -.900 | 50.000 | 305.000 |
| C014405 | 388900. | 3503100. | 30 | 71 | -.80 | 1.1 | -.800 | -.90 | 170.000 | 1.0 | -.900 | -.900 | 70.000 | 4.000 |
| C014406 | 385350. | 3502250. | 30 | 71 | -.80 | 1.1 | -.800 | .13 | 350.000 | -.9 | 20.000 | -.900 | 35.000 | 6.000 |
| C014407 | 386175. | 3502850. | 30 | 71 | -.80 | .7 | -.800 | .35 | 1400.000 | -.9 | 10.000 | -.900 | 40.000 | 10.000 |
| C014408 | 350750. | 3504100. | 30 | 71 | -.80 | .8 | -.800 | -.90 | 285.000 | -.9 | 20.000 | -.900 | 35.000 | 6.000 |
| C014409 | 392400. | 3509275. | 30 | 72 | 2.94 | -.8 | .120 | -.80 | 39500.000 | -.9 | .006% | -.900 | 2.800% | 145.000 |
| C014410 | 394650. | 3511325. | 30 | 71 | -.80 | .4 | -.800 | -.90 | 125.000 | -.9 | -.900 | -.900 | 20.000 | 10.000 |
| C014411 | 394275. | 3510425. | 30 | 71 | -.80 | 7.0 | -.800 | .22 | 980.000 | -.9 | 30.000 | -.900 | 1900.000 | 55.000 |
| C014412 | 395175. | 3512850. | 30 | 70 | 51.30 | -.8 | .230 | -.80 | 28500.000 | -.9 | .325% | -.900 | 21.500% | 3850.000 |
| C014413 | 394025. | 3510450. | 34 | 70 | 112.40 | -.8 | .930 | -.80 | 26500.000 | 3.0 | .120% | 6.000 | 33.000% | 4350.000 |
| C014414 | 399775. | 3518825. | 32 | 71 | -.80 | 9.6 | -.800 | -.90 | 65.000 | -.9 | 15.000 | 2.000 | 650.000 | 16.000 |
| C014415 | 372775. | 3491725. | 30 | 71 | -.80 | 6.4 | -.800 | -.90 | 1650.000 | -.9 | 15.000 | -.900 | 830.000 | 480.000 |
| C014416 | 372525. | 3492000. | 30 | 71 | -.80 | .2 | -.800 | -.90 | 20.000 | -.9 | 35.000 | -.900 | 15.000 | 6.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C014284 | -.9 | 10.000 |
| C014285 | 4.0 | 105.000 |
| C014286 | 6.0 | 15.000 |
| C014287 | -.9 | 20.000 |
| C014288 | -.9 | -.900 |
| C014289 | 7450.0 | 410.000 |
| C014291 | 4.0 | 18.000% |
| C014292 | 3.0 | 6.900% |
| C014293 | 22.0 | 5.450% |
| C014294 | -.9 | .795% |
| C014295 | -.9 | .004% |
| C014296 | 4.0 | 20.000 |
| C014297 | 4.0 | 10.000 |
| C014298 | -.9 | -.900 |
| C014299 | 7.0 | 115.000 |
| C014300 | 4.0 | 10.000 |
| C014301 | 3.0 | .008% |
| C014302 | -.9 | 3.100% |
| C014303 | -.9 | 10.500% |
| C014305 | -.9 | .945% |
| C014306 | 3.0 | .260% |
| C014307 | -.9 | 8.950% |
| C014308 | -.9 | .006% |
| C014309 | 6.0 | -.900 |
| C014310 | 3.0 | .004% |
| C014311 | -.9 | .004% |
| C014312 | -.9 | .005% |
| C014313 | -.9 | .006% |
| C014314 | -.9 | .008% |
| C014315 | -.9 | 1.700% |
| C014316 | 5.0 | .003% |
| C014317 | 8.0 | -.900 |
| C014318 | 6.0 | .039% |
| C014320 | 3.0 | -.900 |
| C014321 | 3.0 | .004% |
| C014401 | -.9 | 55.000 |
| C014402 | 3.0 | 35.000 |
| C014403 | 7.0 | 30.000 |
| C014404 | 3.0 | 100.000 |
| C014405 | 10.0 | 30.000 |
| C014406 | 9.0 | 15.000 |
| C014407 | 4.0 | 20.000 |
| C014408 | 5.0 | 35.000 |
| C014409 | -.9 | 8.150% |
| C014410 | 7.0 | 20.000 |
| C014411 | -.9 | 225.000 |
| C014412 | 3.0 | 14.000% |
| C014413 | 3.0 | .265% |
| C014414 | 2.0 | 125.000 |
| C014415 | -.9 | 20.000 |
| C014416 | 3.0 | 35.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C014417 | 371975. | 3492650. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | 30.000 | -.900 | 5.000 | 10.000 |
| C014418 | 371950. | 3492925. | 30 | 72 | -.80 | 3330.0 | -.800 | 2.20 | 5100.000 | 10.0 | .460% | -.900 | 4.550% | 18000.000 |
| C014419 | 372850. | 3493125. | 30 | 72 | -.80 | 55.0 | -.800 | .64 | 22500.000 | 0.0 | .006% | -.900 | 1.450% | 12000.000 |
| C014420 | 373500. | 3493125. | 30 | 71 | -.80 | 105.0 | -.800 | 2.00 | 1000.000 | 12.0 | 135.000 | -.900 | 31000.000 | 15000.000 |
| C014421 | 373950. | 3493250. | 32 | 72 | -.80 | 80.0 | -.800 | 4.00 | 56500.000 | 6.0 | .012% | -.900 | 3.550% | 19000.000 |
| C014422 | 372325. | 3494225. | 30 | 71 | -.80 | 10.0 | -.800 | .40 | 5150.000 | -.9 | 45.000 | -.900 | 840.000 | .030% |
| C014423 | 369750. | 3493250. | 30 | 71 | -.80 | 1.4 | -.800 | -.90 | 75.000 | -.9 | 20.000 | -.900 | 105.000 | .010% |
| C014424 | 419100. | 3557925. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 95.000 | -.900 | -.900 | -.900 |
| C014425 | 419100. | 3557875. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 20.000 | -.900 | 10.000 | -.900 |
| C014426 | 369450. | 3496675. | 30 | 71 | -.80 | 80.0 | -.800 | .95 | 4550.000 | -.9 | 95.000 | -.900 | 7650.000 | 3400.000 |
| C014427 | 369375. | 3496675. | 30 | 71 | -.80 | 11.0 | -.800 | .13 | 2150.000 | -.9 | 15.000 | -.900 | 1550.000 | 960.000 |
| C014428 | 372575. | 3496475. | 30 | 72 | 23.80 | -.8 | .054 | -.80 | .870% | 1.0 | .093% | -.900 | 6.550% | .870% |
| C014429 | 378500. | 3499000. | 30 | 71 | -.80 | 9.3 | -.800 | 35.00 | 460.000 | -.9 | 35.000 | -.900 | 55.000 | 20.000 |
| C014430 | 378475. | 3498975. | 30 | 71 | -.80 | 1.9 | -.800 | 2.40 | 900.000 | -.9 | 10.000 | -.900 | 95.000 | 32.000 |
| C014431 | 379875. | 3498500. | 33 | 71 | -.80 | 1.6 | -.800 | .10 | 6950.000 | 1.0 | 45.000 | -.900 | 75.000 | 32.000 |
| C014432 | 379875. | 3498475. | 30 | 71 | -.80 | 5.1 | -.800 | 4.20 | 8400.000 | -.9 | 10.000 | -.900 | 305.000 | 24.000 |
| C014433 | 379425. | 3493600. | 30 | 72 | .85 | -.8 | -.900 | -.80 | .002% | 55.0 | 1.100% | -.900 | .215% | -.900 |
| C014434 | 379375. | 3493600. | 33 | 71 | -.80 | 2.5 | -.800 | -.90 | 25.000 | 7.0 | 1050.000 | -.900 | 285.000 | -.900 |
| C014435 | 379400. | 3493550. | 33 | 72 | .15 | -.8 | -.900 | -.80 | -.900 | 14.0 | .355% | -.900 | .070% | -.900 |
| C014438 | 400975. | 3542250. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 30.000 | -.900 | 10.000 | -.900 |
| C014439 | 400960. | 3542240. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 20.000 | -.900 | 5.000 | 4.000 |
| C014440 | 400930. | 3542230. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | 1.0 | 20.000 | -.900 | 5.000 | -.900 |
| C014441 | 400900. | 3542225. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 20.000 | -.900 | 20.000 | -.900 |
| C014442 | 400890. | 3542220. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 10.000 | -.900 |
| C014443 | 400870. | 3542215. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | 25.000 | -.900 | 5.000 | -.900 |
| C014444 | 400860. | 3542210. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 20.000 | -.900 | 10.000 | -.900 |
| C014445 | 400850. | 3542205. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 10.000 | -.900 |
| C014446 | 400840. | 3542000. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 10.000 | -.900 |
| C014447 | 400840. | 3541995. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 10.000 | -.900 |
| C014448 | 400830. | 3541990. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 40.000 | -.900 | 5.000 | -.900 |
| C014449 | 400830. | 3541985. | 32 | 71 | -.80 | .8 | -.800 | -.90 | -.900 | -.9 | 30.000 | -.900 | 15.000 | 4.000 |
| C014450 | 400820. | 3541880. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 10.000 | -.900 |
| C014451 | 400810. | 3541975. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 30.000 | -.900 | 10.000 | -.900 |
| C014452 | 400800. | 3541975. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 35.000 | -.900 | 10.000 | -.900 |
| C014453 | 400790. | 3541970. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 25.000 | -.900 | 15.000 | -.900 |
| C014454 | 400790. | 3541965. | 32 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 30.000 | -.900 | 15.000 | -.900 |
| C014455 | 394000. | 3511975. | 34 | 72 | 53.30 | -.8 | .340 | -.80 | 5700.000 | 2.0 | 100.000 | -.900 | 383000.000 | .365% |
| C014456 | 396400. | 3514200. | 34 | 71 | -.90 | -.9 | -.900 | -.90 | 105.000 | -.9 | 5.000 | -.900 | 5.000 | 12.000 |

TABLE AD-20 CHEMICAL ANALYSIS OF ROCK CHIP SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C014417 | -.9 | 70.000 |
| C014418 | 3.0 | .285% |
| C014419 | -.9 | .008% |
| C014420 | 4.0 | 14000.000 |
| C014421 | -.9 | .495% |
| C014422 | -.9 | 1000.000 |
| C014423 | -.9 | 55.000 |
| C014424 | 4.0 | 45.000 |
| C014425 | 3.0 | 60.000 |
| C014426 | 3.0 | 2200.000 |
| C014427 | -.9 | 1250.000 |
| C014428 | -.9 | 1.000% |
| C014429 | 3.0 | 30.000 |
| C014430 | 5.0 | 40.000 |
| C014431 | 3.0 | 35.000 |
| C014432 | -.9 | 40.000 |
| C014433 | -.9 | 5.600% |
| C014434 | -.9 | 7350.000 |
| C014435 | -.9 | 2.200% |
| C014438 | 4.0 | 60.000 |
| C014439 | 4.0 | 35.000 |
| C014440 | 3.0 | 25.000 |
| C014441 | 5.0 | 40.000 |
| C014442 | 4.0 | 40.000 |
| C014443 | 4.0 | 45.000 |
| C014444 | -.9 | 60.000 |
| C014445 | 5.0 | 65.000 |
| C014446 | 3.0 | 25.000 |
| C014447 | 6.0 | 35.000 |
| C014448 | 4.0 | 30.000 |
| C014449 | 4.0 | 40.000 |
| C014450 | 4.0 | 45.000 |
| C014451 | 5.0 | 65.000 |
| C014452 | 4.0 | 105.000 |
| C014453 | 3.0 | 95.000 |
| C014454 | 3.0 | 60.000 |
| C014455 | 3.0 | 76500.000 |
| C014456 | 4.0 | 20.000 |

TABLE AD-21

KANTISHNA HILLS DRILL CORE SAMPLES

ANALYTICAL RESULTS

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C003451 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 150.000 | -.9 | 40.000 | -.900 | 55.000 | 2.000 |
| C003452 | 355097. | 3491086. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 4450.000 | -.9 | -.900 | -.900 | 90.000 | 4.000 |
| C003453 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 750.000 | -.9 | 15.000 | -.900 | 25.000 | -.900 |
| C003454 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 50.000 | -.9 | 70.000 | -.900 | 65.000 | 6.000 |
| C003455 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 100.000 | -.9 | 30.000 | -.900 | 35.000 | 10.000 |
| C003456 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 55.000 | -.9 | 20.000 | -.900 | 25.000 | -.900 |
| C003457 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 440.000 | -.9 | 35.000 | -.900 | 35.000 | 4.000 |
| C003458 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 55.000 | -.900 | 30.000 | -.900 |
| C003459 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | 25.000 | -.900 | 25.000 | 4.000 |
| C003460 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 390.000 | -.9 | 20.000 | -.900 | 40.000 | -.900 |
| C003461 | 341482. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | 15.000 | -.900 | 35.000 | -.900 |
| C003462 | 341432. | 3487521. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | 105.000 | -.900 | 15.000 | -.900 |
| C003463 | 353010. | 3489174. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 10.000 | -.900 | 15.000 | 2.000 |
| C003464 | 353010. | 3489174. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | 5.000 | -.900 | 15.000 | 14.000 |
| C003465 | 353010. | 3489174. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 290.000 | -.9 | 105.000 | -.900 | 295.000 | 12.000 |
| C003466 | 353010. | 3489174. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 1400.000 | -.9 | 75.000 | -.900 | 40.000 | 4.000 |
| C003467 | 353010. | 3489174. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 95.000 | -.9 | 40.000 | -.900 | 20.000 | 2.000 |
| C003468 | 353010. | 3489174. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 35.000 | -.900 | 15.000 | 12.000 |
| C003469 | 353010. | 3489174. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 75.000 | -.9 | 80.000 | -.900 | 35.000 | 6.000 |
| C003470 | 340924. | 3487183. | 31 | 72 | .13 | -.8 | -.900 | -.80 | 870.000 | -.9 | 45.000 | -.900 | 640.000 | 18.000 |
| C003471 | 340924. | 3487183. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 3800.000 | -.9 | 10.000 | -.900 | 40.000 | 6.000 |
| C003472 | 340924. | 3487183. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 195.000 | -.9 | 5.000 | -.900 | 20.000 | 2.000 |
| C003473 | 340924. | 3487183. | 31 | 72 | -.90 | -.8 | .018 | -.80 | 1300.000 | -.9 | 10.000 | -.900 | 40.000 | 6.000 |
| C003474 | 340924. | 3487183. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1700.000 | -.9 | 25.000 | -.900 | 25.000 | 10.000 |
| C003475 | 340924. | 3487183. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 290.000 | -.9 | 10.000 | -.900 | 15.000 | -.900 |
| C003476 | 340924. | 3487183. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 1500.000 | -.9 | -.900 | -.900 | 30.000 | 2.000 |
| C003477 | 340924. | 3487183. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 190.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C003478 | 340924. | 3487183. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 290.000 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C003479 | 340924. | 3487183. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 255.000 | -.9 | 10.000 | -.900 | 25.000 | 24.000 |
| C003480 | 340924. | 3487183. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 60.000 | -.9 | 5.000 | -.900 | 25.000 | 4.000 |
| C003481 | 340924. | 3487183. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | 10.000 | -.900 | 15.000 | -.900 |
| C003482 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 65.000 | -.9 | -.900 | -.900 | 30.000 | -.900 |
| C003483 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 50.000 | -.9 | -.900 | -.900 | 35.000 | -.900 |
| C003484 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 60.000 | -.9 | -.900 | -.900 | 45.000 | -.900 |
| C003485 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 65.000 | -.9 | 5.000 | -.900 | 80.000 | 4.000 |
| C003486 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 70.000 | -.9 | 5.000 | -.900 | 35.000 | -.900 |
| C003487 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 35.000 | -.900 | 45.000 | 8.000 |
| C003488 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | 5.000 | -.900 | 85.000 | 10.000 |
| C003489 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | 10.000 | -.900 | 30.000 | -.900 |
| C003490 | 345992. | 3489399. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1800.000 | -.9 | 10.000 | -.900 | 35.000 | 2.000 |
| C003491 | 345992. | 3489399. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 115.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C012626 | 344228. | 3486978. | 31 | 72 | -.90 | -.8 | .016 | -.80 | 415.000 | -.9 | -.900 | -.900 | .010% | 4.000 |
| C012627 | 344223. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | .008% | -.900 |
| C012628 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C012629 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 115.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C012630 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 1150.000 | -.9 | -.900 | -.900 | .006% | 6.000 |
| C012631 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 85.000 | -.9 | .002% | -.900 | .002% | 9.000 |
| C012632 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C012633 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 680.000 | -.9 | -.900 | -.900 | .008% | 6.000 |
| C012634 | 344228. | 3486978. | 31 | 72 | -.90 | -.8 | .014 | -.80 | 445.000 | -.9 | -.900 | 2.000 | -.900 | 14.000 |
| C012635 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 125.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C003451 | 5.0 | 6300.000 |
| C003452 | 10.0 | 4100.000 |
| C003453 | 5.0 | 3050.000 |
| C003454 | 3.0 | 220.000 |
| C003455 | 6.0 | 110.000 |
| C003456 | -.9 | 85.000 |
| C003457 | 5.0 | 180.000 |
| C003458 | 4.0 | 145.000 |
| C003459 | 3.0 | 85.000 |
| C003460 | -.9 | 75.000 |
| C003461 | -.9 | 75.000 |
| C003462 | -.9 | 105.000 |
| C003463 | 5.0 | 65.000 |
| C003464 | 5.0 | 20.000 |
| C003465 | 80.0 | 310.000 |
| C003466 | 70.0 | 100.000 |
| C003467 | 6.0 | 90.000 |
| C003468 | 6.0 | 90.000 |
| C003469 | 175.0 | 255.000 |
| C003470 | 16.0 | 310.000 |
| C003471 | 14.0 | 230.000 |
| C003472 | 8.0 | 120.000 |
| C003473 | 6.0 | 325.000 |
| C003474 | 13.0 | 315.000 |
| C003475 | 26.0 | 170.000 |
| C003476 | 3.0 | 120.000 |
| C003477 | 3.0 | 230.000 |
| C003478 | 8.0 | 125.000 |
| C003479 | 6.0 | 185.000 |
| C003480 | 6.0 | 120.000 |
| C003481 | 4.0 | 75.000 |
| C003482 | 3.0 | 45.000 |
| C003483 | 2.0 | 55.000 |
| C003484 | 4.0 | 125.000 |
| C003485 | 4.0 | 110.000 |
| C003486 | 2.0 | 95.000 |
| C003487 | 3.0 | 485.000 |
| C003488 | 9.0 | 70.000 |
| C003489 | 3.0 | 100.000 |
| C003490 | 6.0 | 170.000 |
| C003491 | 8.0 | 25.000 |
| C012626 | 8.0 | .014% |
| C012627 | 3.0 | .013% |
| C012628 | 2.0 | .003% |
| C012629 | 12.0 | .006% |
| C012630 | 5.0 | .013% |
| C012631 | -.9 | .004% |
| C012632 | 11.0 | -.900 |
| C012633 | 14.0 | .022% |
| C012634 | 4.0 | -.900 |
| C012635 | 6.0 | -.900 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C012636 | 344228. | 3486978. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1900.000 | -.9 | .002% | -.900 | .002% | 9.000 |
| C012637 | 344228. | 3486978. | 31 | 72 | -.90 | -.8 | .028 | -.80 | 4350.000 | -.9 | -.900 | -.900 | .004% | 10.000 |
| C012638 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 115.000 | -.9 | .006% | 4.000 | .006% | 4.000 |
| C012639 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | .006% | 2.000 | .004% | 2.000 |
| C012640 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | .004% | 4.000 | -.900 | 8.000 |
| C012641 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 5.000 | -.9 | .004% | 4.000 | -.900 | 6.000 |
| C012642 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .006% | 2.000 | -.900 | 2.000 |
| C012643 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .006% | -.900 | .002% | 6.000 |
| C012644 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | .004% | 4.000 | .004% | 13.000 |
| C012645 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 65.000 | -.9 | -.900 | -.900 | -.900 | 32.000 |
| C012646 | 344228. | 3486978. | 31 | 72 | -.90 | -.8 | .007 | -.80 | 600.000 | -.9 | .002% | -.900 | .004% | 4.000 |
| C012647 | 344228. | 3486978. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C012648 | 348963. | 3488364. | 31 | 71 | -.80 | -.9 | -.800 | .10 | 30.000 | -.9 | 5.000 | -.900 | 10.000 | 2.000 |
| C012649 | 348963. | 3488364. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | -.900 | 2.000 |
| C012650 | 348963. | 3488364. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 40.000 | -.9 | 10.000 | -.900 | 10.000 | 2.000 |
| C012651 | 348963. | 3488364. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | -.900 | 6.000 |
| C012652 | 348963. | 3488364. | 31 | 71 | -.80 | -.9 | -.800 | .03 | 240.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C012653 | 348963. | 3488364. | 31 | 71 | -.80 | -.9 | -.800 | .05 | 20.000 | -.9 | -.900 | -.900 | 10.000 | 2.000 |
| C012654 | 348963. | 3488364. | 31 | 71 | -.80 | .2 | -.800 | -.90 | 30.000 | -.9 | 15.000 | -.900 | 10.000 | 4.000 |
| C012655 | 348963. | 3488364. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | 4.000 | 5.000 | 14.000 |
| C012656 | 348963. | 3488364. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 40.000 | -.9 | 40.000 | 10.000 | 10.000 | 12.000 |
| C012657 | 348963. | 3488364. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 460.000 | -.9 | 30.000 | -.900 | 15.000 | 4.000 |
| C012658 | 348963. | 3488364. | 31 | 71 | -.80 | .6 | -.800 | -.90 | 190.000 | -.9 | 25.000 | -.900 | 5.000 | 2.000 |
| C012659 | 348963. | 3488364. | 31 | 71 | -.80 | .4 | -.800 | .29 | 1400.000 | -.9 | 15.000 | -.900 | 5.000 | 8.000 |
| C012660 | 348963. | 3488364. | 31 | 71 | -.80 | 1.6 | -.800 | .23 | 2900.000 | -.9 | 15.000 | -.900 | 40.000 | 16.000 |
| C012661 | 348963. | 3488364. | 31 | 71 | -.80 | 9.4 | -.800 | 10.00 | 20.000 | -.9 | 10.000 | -.900 | -.900 | 6.000 |
| C012662 | 348963. | 3488364. | 31 | 71 | -.80 | .8 | -.800 | .07 | 80.000 | -.9 | 15.000 | -.900 | -.900 | 8.000 |
| C012663 | 348963. | 3488364. | 31 | 71 | -.80 | -.9 | -.800 | .06 | 130.000 | -.9 | 20.000 | 12.000 | 15.000 | 4.000 |
| C012664 | 348963. | 3488364. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 10.000 | -.900 | 15.000 | -.900 |
| C012665 | 348963. | 3488364. | 31 | 71 | -.80 | .9 | -.800 | .37 | 1850.000 | -.9 | 45.000 | -.900 | -.900 | 12.000 |
| C012666 | 348963. | 3488364. | 31 | 71 | -.80 | .4 | -.800 | .25 | 1200.000 | -.9 | 10.000 | -.900 | 10.000 | 6.000 |
| C012667 | 348963. | 3488364. | 31 | 71 | -.80 | .9 | -.800 | .41 | 160.000 | -.9 | 20.000 | -.900 | -.900 | 8.000 |
| C012668 | 348963. | 3488364. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 40.000 | -.9 | 10.000 | -.900 | -.900 | 4.000 |
| C012669 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C012670 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 120.000 | -.9 | -.900 | 2.000 | -.900 | 8.000 |
| C012671 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 130.000 | -.9 | .002% | -.900 | -.900 | 2.000 |
| C012672 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .061 | -.80 | 190.000 | -.9 | -.900 | -.900 | .002% | 4.000 |
| C012673 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .130 | -.80 | 580.000 | -.9 | -.900 | 4.000 | -.900 | 4.000 |
| C012674 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .006 | -.80 | 260.000 | -.9 | -.900 | -.900 | -.900 | 10.000 |
| C012675 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | .002% | -.900 | -.900 | 6.000 |
| C012676 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 150.000 | -.9 | -.900 | -.900 | -.900 | 36.000 |
| C012677 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 165.000 | -.9 | -.900 | -.900 | .002% | 7.000 |
| C012678 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | .002% | -.900 | -.900 | 9.000 |
| C012679 | 349332. | 3488740. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 520.000 | -.9 | -.900 | -.900 | .002% | 20.000 |
| C012680 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | -.900 | -.900 | .004% | 8.000 |
| C012681 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | .004% | 4.000 |
| C012682 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .002% | 2.000 | .002% | 8.000 |
| C012683 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | -.900 | -.900 | 8.000 |
| C012684 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .002% | -.900 | -.900 | 8.000 |
| C012685 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 5.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C012686 | 349332. | 3488740. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 5.000 | -.9 | .002% | -.900 | -.900 | 11.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C012636 | 10.5 | .005% |
| C012637 | 20.0 | .008% |
| C012638 | 4.0 | .016% |
| C012639 | 5.0 | .012% |
| C012640 | 4.0 | .013% |
| C012641 | 3.0 | .013% |
| C012642 | 4.0 | .012% |
| C012643 | 4.0 | .014% |
| C012644 | 5.0 | .012% |
| C012645 | 10.0 | .005% |
| C012646 | 16.0 | .005% |
| C012647 | 5.0 | -.900 |
| C012648 | 6.0 | 20.000 |
| C012649 | 4.0 | 30.000 |
| C012650 | 7.0 | 25.000 |
| C012651 | 4.0 | 30.000 |
| C012652 | 5.0 | 35.000 |
| C012653 | -.9 | 40.000 |
| C012654 | 3.0 | 40.000 |
| C012655 | 3.0 | 30.000 |
| C012656 | 4.0 | 25.000 |
| C012657 | 13.0 | 700.000 |
| C012658 | 9.0 | 95.000 |
| C012659 | 5.0 | 15.000 |
| C012660 | 6.0 | 35.000 |
| C012661 | 3.0 | 5.000 |
| C012662 | 13.0 | 45.000 |
| C012663 | 24.0 | 30.000 |
| C012664 | 3.0 | 25.000 |
| C012665 | 12.0 | 245.000 |
| C012666 | 11.0 | 20.000 |
| C012667 | 11.0 | 75.000 |
| C012668 | 12.0 | 10.000 |
| C012669 | 3.0 | .005% |
| C012670 | 9.0 | .005% |
| C012671 | 5.0 | .006% |
| C012672 | 6.0 | -.900 |
| C012673 | 3.0 | .003% |
| C012674 | 6.0 | .002% |
| C012675 | 13.0 | .003% |
| C012676 | 3.0 | .002% |
| C012677 | 4.0 | .004% |
| C012678 | 4.0 | -.900 |
| C012679 | 4.0 | -.900 |
| C012680 | 5.0 | .003% |
| C012681 | 3.0 | .008% |
| C012682 | 4.0 | .005% |
| C012683 | 4.0 | .006% |
| C012684 | 5.0 | .007% |
| C012685 | 8.0 | .006% |
| C012686 | 5.0 | .006% |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C012687 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 80.000 | -.9 | -.900 | -.900 | -.900 | 80.000 |
| C012688 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | -.900 | -.900 | 14.000 |
| C012689 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | -.900 | -.900 | 2.000 |
| C012690 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .006% | -.900 | .004% | 2.000 |
| C012691 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .012 | -.80 | -.900 | -.9 | .004% | 2.000 | .004% | 10.000 |
| C012692 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C012693 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | -.900 | -.900 | .002% | 4.000 |
| C012694 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .008 | -.80 | 55.000 | -.9 | -.900 | -.900 | .004% | 2.000 |
| C012695 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | -.900 | -.900 | .002% | 4.000 |
| C012696 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C012697 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | -.900 | 2.000 | -.900 | -.900 |
| C012698 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 35.000 | -.9 | -.900 | -.900 | -.900 | 6.000 |
| C012699 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 105.000 | -.9 | .002% | 2.000 | .004% | 4.000 |
| C012700 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 60.000 | -.9 | -.900 | -.900 | .002% | 4.000 |
| C013616 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .023 | -.80 | 390.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013617 | 349332. | 3488740. | 31 72 | .02 | -.8 | .005 | -.80 | 1250.000 | -.9 | .004% | -.900 | -.900 | 12.000 |
| C013618 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .029 | -.80 | 270.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C013619 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 590.000 | -.9 | .002% | 2.000 | -.900 | 6.000 |
| C013620 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .005 | -.80 | 720.000 | -.9 | -.900 | -.900 | -.900 | 9.000 |
| C013621 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .008 | -.80 | 435.000 | -.9 | -.900 | -.900 | -.900 | 6.000 |
| C013622 | 349332. | 3488740. | 31 72 | -.90 | -.8 | .005 | -.80 | 700.000 | -.9 | -.900 | -.900 | -.900 | 10.000 |
| C013623 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 195.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C013624 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | .002% | -.900 | -.900 | 4.000 |
| C013625 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 240.000 | -.9 | -.900 | -.900 | -.900 | 8.000 |
| C013626 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 35.000 | -.9 | -.900 | -.900 | .002% | 2.000 |
| C013627 | 349332. | 3488740. | 31 72 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013628 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | -.900 | -.900 | 14.000 |
| C013629 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | 5.000 | -.9 | .012% | -.900 | .002% | 13.000 |
| C013630 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | -.900 | .002% | 20.000 |
| C013631 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .008% | -.900 | .004% | 2.000 |
| C013632 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .006% | -.900 | .004% | 4.000 |
| C013633 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | 125.000 | -.9 | .002% | -.900 | .004% | -.900 |
| C013634 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013635 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | .004% | -.900 | -.900 | 4.000 |
| C013636 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | -.900 | -.900 | -.900 |
| C013637 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013638 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .002% | -.900 | -.900 | 2.000 |
| C013639 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .006% | -.900 | -.900 | 4.000 |
| C013640 | 348035. | 3489168. | 31 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | .004% | 2.000 | -.900 | -.900 |
| C013641 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 50.000 | -.9 | .002% | -.900 | .002% | 6.000 |
| C013642 | 355924. | 3491390. | 31 72 | -.90 | -.8 | .012 | -.80 | 2950.000 | -.9 | -.900 | 2.000 | -.900 | 12.000 |
| C013643 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 325.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C013644 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 770.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013645 | 355924. | 3491390. | 31 72 | -.90 | -.8 | .006 | -.80 | 1250.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013646 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 890.000 | -.9 | .002% | -.900 | .002% | 4.000 |
| C013647 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 265.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013648 | 355924. | 3491390. | 31 72 | -.90 | -.8 | .009 | -.80 | 3000.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013649 | 355924. | 3491390. | 31 72 | -.90 | -.8 | .006 | -.80 | 1600.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C013650 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 315.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013651 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 245.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013652 | 355924. | 3491390. | 31 72 | -.90 | -.9 | -.900 | -.90 | 730.000 | -.9 | -.900 | -.900 | .006% | 2.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C012687 | 15.0 | -.900 |
| C012688 | 3.0 | .007% |
| C012689 | 3.0 | .006% |
| C012690 | 4.0 | .012% |
| C012691 | 4.0 | .003% |
| C012692 | 4.0 | .005% |
| C012693 | 6.0 | .003% |
| C012694 | 3.0 | -.900 |
| C012695 | 3.0 | .002% |
| C012696 | 5.0 | -.900 |
| C012697 | 4.0 | -.900 |
| C012698 | 5.0 | .005% |
| C012699 | 5.0 | .006% |
| C012700 | 9.0 | -.900 |
| C013616 | 4.0 | -.900 |
| C013617 | 14.0 | .020% |
| C013618 | 9.0 | .002% |
| C013619 | 11.0 | .073% |
| C013620 | 15.0 | .002% |
| C013621 | 4.0 | -.900 |
| C013622 | 13.0 | .004% |
| C013623 | 11.0 | -.900 |
| C013624 | 14.0 | -.900 |
| C013625 | 5.0 | -.900 |
| C013626 | 9.0 | .003% |
| C013627 | 13.0 | -.900 |
| C013628 | 3.0 | .010% |
| C013629 | 3.0 | .021% |
| C013630 | 3.0 | .010% |
| C013631 | 3.0 | .013% |
| C013632 | 5.0 | .013% |
| C013633 | 6.0 | .013% |
| C013634 | 4.0 | .002% |
| C013635 | 3.0 | .011% |
| C013636 | 3.0 | .008% |
| C013637 | 3.0 | .007% |
| C013638 | 3.0 | .005% |
| C013639 | 4.0 | .011% |
| C013640 | -.9 | .010% |
| C013641 | 4.0 | .004% |
| C013642 | 2.0 | .005% |
| C013643 | 5.0 | .021% |
| C013644 | 4.0 | .013% |
| C013645 | 9.0 | .020% |
| C013646 | 10.0 | .080% |
| C013647 | 5.0 | .100% |
| C013648 | 3.0 | .110% |
| C013649 | 6.0 | .185% |
| C013650 | 3.0 | .240% |
| C013651 | 3.0 | .275% |
| C013652 | 5.0 | .305% |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013653 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 135.000 | -.9 | -.900 | -.900 | -.900 | 4.000 |
| C013654 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 205.000 | -.9 | -.900 | -.900 | .002% | -.900 |
| C013655 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 1750.000 | -.9 | .006% | -.900 | .006% | 4.000 |
| C013656 | 355924. | 3491390. | 31 | 72 | .26 | -.8 | .023 | -.80 | 9750.000 | -.9 | .032% | -.900 | .520% | 32.000 |
| C013657 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 6700.000 | -.9 | .045% | -.900 | .250% | 55.000 |
| C013658 | 355924. | 3491390. | 31 | 72 | .57 | -.8 | .007 | -.80 | 5550.000 | -.9 | .072% | -.900 | .370% | 46.000 |
| C013659 | 355924. | 3491390. | 31 | 72 | 7.31 | -.8 | .063 | -.80 | 16500.000 | -.9 | .665% | -.900 | 4.150% | 445.000 |
| C013660 | 355924. | 3491390. | 31 | 72 | .60 | -.8 | .022 | -.80 | 16500.000 | -.9 | .048% | -.900 | .685% | 85.000 |
| C013661 | 355924. | 3491390. | 31 | 72 | .64 | -.8 | .019 | -.80 | 14000.000 | -.9 | .170% | -.900 | 1.050% | 85.000 |
| C013662 | 355924. | 3491390. | 31 | 72 | 1.39 | -.8 | .032 | -.80 | 10500.000 | -.9 | .100% | 2.000 | 2.250% | 90.000 |
| C013663 | 355924. | 3491390. | 31 | 72 | .78 | -.8 | .008 | -.80 | 7350.000 | -.9 | .130% | -.900 | 1.950% | 80.000 |
| C013664 | 355924. | 3491390. | 31 | 72 | -.90 | -.8 | .050 | -.80 | 45500.000 | 1.0 | .250% | -.900 | .050% | 65.000 |
| C013665 | 355924. | 3491390. | 31 | 72 | -.90 | -.8 | .023 | -.80 | 9150.000 | -.9 | .140% | -.900 | .130% | 22.000 |
| C013666 | 355924. | 3491390. | 31 | 72 | -.90 | -.8 | .017 | -.80 | 1150.000 | -.9 | .051% | -.900 | .014% | 6.000 |
| C013667 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 130.000 | -.9 | .008% | -.900 | .004% | 6.000 |
| C013668 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 160.000 | -.9 | .006% | -.900 | .008% | 4.000 |
| C013669 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 35.000 | -.9 | .004% | -.900 | -.900 | 2.000 |
| C013670 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 70.000 | -.9 | .006% | -.900 | .004% | 2.000 |
| C013671 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 60.000 | -.9 | .004% | -.900 | -.900 | 9.000 |
| C013672 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | .006% | -.900 | .002% | 4.000 |
| C013673 | 355924. | 3491390. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | .004% | -.900 | -.900 | 2.000 |
| C013674 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 55.000 | -.9 | 10.000 | -.900 | 15.000 | 15.000 |
| C013675 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | 5.000 | -.900 | 10.000 | 4.000 |
| C013676 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 80.000 | -.9 | 5.000 | -.900 | 10.000 | -.900 |
| C013677 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | 65.000 | -.900 | 15.000 | 8.000 |
| C013678 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 65.000 | -.9 | -.900 | -.900 | 20.000 | 14.000 |
| C013679 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 35.000 | -.9 | 20.000 | -.900 | 10.000 | 4.000 |
| C013680 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | 15.000 | 6.000 |
| C013681 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 10.000 | -.900 | 15.000 | -.900 |
| C013682 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 55.000 | -.900 | 10.000 | 20.000 |
| C013683 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | 25.000 | -.900 | 10.000 | 2.000 |
| C013684 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 205.000 | -.9 | 50.000 | -.900 | 40.000 | 24.000 |
| C013685 | 345560. | 3485887. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | 35.000 | -.900 | 20.000 | 9.000 |
| C013686 | 342389. | 3487126. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013687 | 342389. | 3487126. | 31 | 72 | -.90 | -.8 | .018 | -.80 | 560.000 | -.9 | 5.000 | -.900 | 5.000 | -.900 |
| C013688 | 342389. | 3487126. | 31 | 72 | -.90 | -.8 | .020 | -.80 | 265.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013689 | 342389. | 3487126. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 570.000 | -.9 | 10.000 | -.900 | -.900 | 2.000 |
| C013690 | 342389. | 3487126. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 20.000 | -.9 | -.900 | -.900 | 5.000 | -.900 |
| C013691 | 342389. | 3487126. | 31 | 72 | -.90 | -.8 | .014 | -.80 | 4950.000 | -.9 | -.900 | -.900 | 20.000 | -.900 |
| C013692 | 342389. | 3487126. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 290.000 | -.9 | -.900 | -.900 | 5.000 | -.900 |
| C013693 | 342389. | 3487126. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 80.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013694 | 342389. | 3487126. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 30.000 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C013695 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C013696 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 580.000 | -.9 | -.900 | -.900 | 15.000 | 2.000 |
| C013697 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 205.000 | -.9 | 10.000 | -.900 | 15.000 | -.900 |
| C013698 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 2150.000 | -.9 | 10.000 | -.900 | 25.000 | -.900 |
| C013699 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 125.000 | -.9 | 5.000 | -.900 | 10.000 | -.900 |
| C013700 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 500.000 | -.9 | 5.000 | -.900 | 25.000 | -.900 |
| C013801 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 35.000 | -.9 | .002% | -.900 | .030% | 6.000 |
| C013802 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | -.900 | -.900 | .008% | 8.000 |
| C013803 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 165.000 | -.9 | .002% | -.900 | .004% | 4.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C013653 | 5.0 | .140% |
| C013654 | 4.0 | .120% |
| C013655 | 16.0 | 1.450% |
| C013656 | 3.0 | 3.550% |
| C013657 | -.9 | .315% |
| C013658 | 3.0 | .058% |
| C013659 | 3.0 | .965% |
| C013660 | 2.0 | .099% |
| C013661 | 2.0 | .088% |
| C013662 | 3.0 | .078% |
| C013663 | 4.0 | .062% |
| C013664 | 2.0 | .076% |
| C013665 | 4.0 | 3.000% |
| C013666 | 5.0 | 1.600% |
| C013667 | 4.0 | .130% |
| C013668 | 3.0 | .125% |
| C013669 | 2.0 | .030% |
| C013670 | 3.0 | .059% |
| C013671 | 3.0 | .027% |
| C013672 | 2.0 | .029% |
| C013673 | 4.0 | .021% |
| C013674 | 3.0 | 520.000 |
| C013675 | 3.0 | 90.000 |
| C013676 | 4.0 | 65.000 |
| C013677 | 3.0 | 185.000 |
| C013678 | 4.0 | 195.000 |
| C013679 | 6.0 | 80.000 |
| C013680 | -.9 | 50.000 |
| C013681 | -.9 | 25.000 |
| C013682 | 4.0 | 55.000 |
| C013683 | 3.0 | 50.000 |
| C013684 | 70.0 | 90.000 |
| C013685 | 4.0 | 90.000 |
| C013686 | 3.0 | 25.000 |
| C013687 | 9.0 | 30.000 |
| C013688 | 6.0 | 15.000 |
| C013689 | 4.0 | 5.000 |
| C013690 | 4.0 | 15.000 |
| C013691 | 12.0 | 15.000 |
| C013692 | 3.0 | 15.000 |
| C013693 | 3.0 | 15.000 |
| C013694 | 3.0 | 25.000 |
| C013695 | -.9 | 295.000 |
| C013696 | 7.0 | 880.000 |
| C013697 | 4.0 | 3200.000 |
| C013698 | -.9 | 4300.000 |
| C013699 | -.9 | 2100.000 |
| C013700 | 3.0 | 3300.000 |
| C013801 | 4.0 | .009% |
| C013802 | -.9 | .005% |
| C013803 | 5.0 | .079% |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013804 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 1100.000 | -.9 | .002% | -.900 | .002% | 36.000 |
| C013805 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 255.000 | -.9 | .002% | -.900 | .002% | 4.000 |
| C013806 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 315.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013807 | 345821. | 3489340. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 355.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013808 | 345547. | 3488421. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | .008% | -.900 | -.900 | -.900 |
| C013809 | 345547. | 3488421. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | .004% | 4.000 | .002% | -.900 |
| C013810 | 345547. | 3488421. | 31 | 70 | -.90 | -.8 | .016 | -.80 | 10.000 | -.9 | .004% | 4.000 | -.900 | 2.000 |
| C013811 | 345547. | 3488421. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | .004% | 6.000 | -.900 | 4.000 |
| C013812 | 345547. | 3488421. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | 2.000 | -.900 | -.900 |
| C013813 | 345547. | 3488421. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 15.000 | -.9 | .004% | 4.000 | -.900 | 15.000 |
| C013814 | 345547. | 3488421. | 31 | 70 | -.90 | -.9 | -.900 | -.90 | 340.000 | -.9 | -.900 | -.900 | .010% | 2.000 |
| C013815 | 345547. | 3488421. | 31 | 70 | -.90 | -.8 | .006 | -.80 | 1500.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013816 | 345547. | 3488421. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 650.000 | -.9 | .004% | -.900 | .002% | -.900 |
| C013817 | 345547. | 3488421. | 31 | 72 | 1.79 | -.8 | .047 | -.80 | 19500.000 | -.9 | .006% | -.900 | .785% | 65.000 |
| C013818 | 345547. | 3488421. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 550.000 | -.9 | .002% | -.900 | .004% | 2.000 |
| C013819 | 345547. | 3488421. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1400.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013820 | 345547. | 3488421. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 430.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013821 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .015 | -.80 | 2650.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013822 | 345437. | 3488557. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 890.000 | -.9 | -.900 | -.900 | -.900 | 6.000 |
| C013823 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 4150.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013824 | 345437. | 3488557. | 31 | 72 | 1.43 | -.8 | .005 | -.80 | 1600.000 | -.9 | .010% | -.900 | .002% | 18.000 |
| C013825 | 345437. | 3488557. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 850.000 | -.9 | .002% | -.900 | .002% | 2.000 |
| C013826 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 5750.000 | -.9 | .004% | -.900 | .002% | 9.000 |
| C013827 | 345437. | 3488557. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 460.000 | -.9 | .002% | 2.000 | .004% | -.900 |
| C013828 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 5750.000 | -.9 | .008% | -.900 | .002% | 2.000 |
| C013829 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 2850.000 | -.9 | .004% | -.900 | .002% | 2.000 |
| C013830 | 345437. | 3488557. | 31 | 72 | 5.89 | -.8 | .094 | -.80 | 18000.000 | 2.0 | .077% | -.900 | .415% | 220.000 |
| C013831 | 345437. | 3488557. | 31 | 72 | .21 | -.8 | .039 | -.80 | 26000.000 | -.9 | .014% | -.900 | .053% | 28.000 |
| C013832 | 345437. | 3488557. | 31 | 72 | .11 | -.8 | .024 | -.80 | 9900.000 | -.9 | .040% | -.900 | .140% | 20.000 |
| C013833 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .086 | -.80 | 9350.000 | -.9 | .006% | -.900 | .016% | 12.000 |
| C013834 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .010 | -.80 | 2000.000 | -.9 | .004% | -.900 | .008% | -.900 |
| C013835 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .007 | -.80 | 840.000 | -.9 | .002% | -.900 | .006% | -.900 |
| C013836 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 1500.000 | -.9 | .002% | -.900 | .002% | -.900 |
| C013837 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 240.000 | -.9 | .002% | -.900 | -.900 | -.900 |
| C013838 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 390.000 | -.9 | -.900 | -.900 | .002% | -.900 |
| C013839 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .014 | -.80 | 4800.000 | -.9 | .002% | -.900 | .006% | 4.000 |
| C013840 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 3000.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013841 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .023 | -.80 | 9700.000 | -.9 | .002% | -.900 | .008% | 6.000 |
| C013842 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .015 | -.80 | 5400.000 | -.9 | .004% | -.900 | .004% | 4.000 |
| C013843 | 345437. | 3488557. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 930.000 | -.9 | .002% | -.900 | .002% | 2.000 |
| C013844 | 345437. | 3488557. | 31 | 72 | .05 | -.8 | .140 | -.80 | 5100.000 | 2.0 | .048% | 6.000 | .016% | 10.000 |
| C013845 | 345437. | 3488557. | 31 | 72 | .25 | -.8 | .420 | -.80 | 2050.000 | 1.0 | .076% | 6.000 | .010% | 10.000 |
| C013846 | 345437. | 3488557. | 31 | 72 | .08 | -.8 | .200 | -.80 | 4800.000 | -.9 | .048% | 4.000 | .002% | 4.000 |
| C013847 | 345437. | 3488557. | 31 | 72 | -.90 | -.8 | .017 | -.80 | 7550.000 | -.9 | .016% | 4.000 | .004% | 8.000 |
| C013848 | 344073. | 3487263. | 31 | 71 | -.80 | -.9 | -.800 | .04 | 265.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013849 | 344073. | 3487263. | 31 | 71 | -.80 | 1.1 | -.800 | .22 | 1050.000 | -.9 | 10.000 | -.900 | 60.000 | 4.000 |
| C013850 | 344073. | 3487263. | 31 | 71 | -.80 | -.9 | -.800 | .09 | 830.000 | -.9 | 5.000 | -.900 | 5.000 | 2.000 |
| C013851 | 344073. | 3487263. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 220.000 | -.9 | 95.000 | -.900 | -.900 | 4.000 |
| C013852 | 344073. | 3487263. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 110.000 | -.9 | 95.000 | -.900 | 5.000 | 2.000 |
| C013853 | 344073. | 3487263. | 31 | 71 | -.80 | 1.2 | -.800 | .34 | 3700.000 | -.9 | 185.000 | -.900 | 45.000 | 12.000 |
| C013854 | 344073. | 3487263. | 31 | 71 | -.80 | .4 | -.800 | .14 | 5800.000 | -.9 | 140.000 | -.900 | 10.000 | 6.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | AU (PPM) | ZN (PPM) |
|---|---|---|
| C013804 | 5.0 | .905% |
| C013805 | 6.0 | .007% |
| C013806 | 3.0 | .008% |
| C013807 | 9.0 | .008% |
| C013808 | -.9 | .011% |
| C013809 | 3.0 | .014% |
| C013810 | -.9 | .008% |
| C013811 | 3.0 | .015% |
| C013812 | -.9 | .002% |
| C013813 | 3.0 | .007% |
| C013814 | 6.0 | .017% |
| C013815 | 9.0 | .003% |
| C013816 | 6.0 | .043% |
| C013817 | -.9 | .037% |
| C013818 | 8.0 | .021% |
| C013819 | 7.0 | .010% |
| C013820 | 4.0 | .012% |
| C013821 | 7.0 | .150% |
| C013822 | 6.0 | .100% |
| C013823 | -.9 | .014% |
| C013824 | 60.0 | .140% |
| C013825 | 8.0 | .165% |
| C013826 | -.9 | .450% |
| C013827 | 6.0 | .115% |
| C013828 | 20.0 | .180% |
| C013829 | 18.0 | .081% |
| C013830 | -.9 | .345% |
| C013831 | -.9 | .085% |
| C013832 | 1050.0 | .054% |
| C013833 | -.9 | .015% |
| C013834 | 3.0 | .011% |
| C013835 | -.9 | .007% |
| C013836 | -.9 | .006% |
| C013837 | -.9 | .004% |
| C013838 | -.9 | .006% |
| C013839 | -.9 | .017% |
| C013840 | -.9 | .008% |
| C013841 | -.9 | .034% |
| C013842 | 345.0 | .041% |
| C013843 | 7.0 | .049% |
| C013844 | 1400.0 | .034% |
| C013845 | 2500.0 | .064% |
| C013846 | 3500.0 | .046% |
| C013847 | 1700.0 | .052% |
| C013848 | 12.0 | 65.000 |
| C013849 | 10.0 | 120.000 |
| C013850 | 9.0 | 90.000 |
| C013851 | 6.0 | 780.000 |
| C013852 | 6.0 | 520.000 |
| C013853 | 4.0 | 730.000 |
| C013854 | 5.0 | 610.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013855 | 344073. | 3487263. | 31 | 71 | -.80 | 1.0 | -.800 | .43 | 4350.000 | -.9 | 120.000 | -.900 | 10.000 | 8.000 |
| C013856 | 344073. | 3487263. | 31 | 71 | -.80 | 42.0 | -.800 | .31 | 1900.000 | -.9 | 180.000 | -.900 | 365.000 | 42.000 |
| C013857 | 344073. | 3487263. | 31 | 71 | -.80 | 295.0 | -.800 | 2.80 | 15000.000 | -.9 | 495.000 | -.900 | 4200.000 | 345.000 |
| C013858 | 344073. | 3487263. | 31 | 71 | -.80 | 2.9 | -.800 | 1.00 | 17000.000 | -.9 | 380.000 | -.900 | 45.000 | 24.000 |
| C013859 | 344073. | 3487263. | 31 | 71 | -.80 | .6 | -.800 | .24 | 4000.000 | -.9 | 40.000 | -.900 | 95.000 | 6.000 |
| C013860 | 344073. | 3487263. | 31 | 71 | -.80 | 2.1 | -.800 | .47 | 13500.000 | -.9 | 45.000 | -.900 | 380.000 | 14.000 |
| C013861 | 344073. | 3487263. | 31 | 71 | -.80 | 2.1 | -.800 | .08 | 1050.000 | -.9 | 15.000 | -.900 | 205.000 | 4.000 |
| C013862 | 344073. | 3487263. | 31 | 71 | -.80 | 1.0 | -.800 | .44 | 1700.000 | -.9 | 25.000 | -.900 | 180.000 | 20.000 |
| C013863 | 344073. | 3487263. | 31 | 71 | -.80 | 2.1 | -.800 | 2.10 | 5550.000 | -.9 | 45.000 | -.900 | 60.000 | 12.000 |
| C013864 | 344073. | 3487263. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 540.000 | -.9 | 35.000 | -.900 | -.900 | 6.000 |
| C013865 | 344073. | 3487263. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 1450.000 | -.9 | 100.000 | -.900 | 15.000 | 8.000 |
| C013866 | 344073. | 3487263. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 105.000 | -.9 | 35.000 | -.900 | 10.000 | 6.000 |
| C013867 | 344073. | 3487263. | 31 | 71 | -.80 | .6 | -.800 | -.90 | 375.000 | -.9 | 25.000 | -.900 | 15.000 | 4.000 |
| C013868 | 344073. | 3487263. | 31 | 71 | -.80 | 2.9 | -.800 | .08 | 660.000 | -.9 | 60.000 | -.900 | 15.000 | 10.000 |
| C013869 | 344073. | 3487263. | 31 | 71 | -.80 | 2.1 | -.800 | .20 | 1950.000 | -.9 | 40.000 | -.900 | 15.000 | 18.000 |
| C013870 | 344073. | 3487263. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013871 | 344073. | 3487263. | 31 | 71 | -.80 | .6 | -.800 | -.90 | 30.000 | -.9 | 25.000 | -.900 | -.900 | 2.000 |
| C013872 | 344043. | 3487331. | 31 | 71 | -.80 | 1.0 | -.800 | .45 | 2650.000 | -.9 | 15.000 | -.900 | 20.000 | 6.000 |
| C013873 | 344043. | 3487331. | 31 | 71 | -.80 | 1.1 | -.800 | -.90 | 110.000 | -.9 | 20.000 | -.900 | 40.000 | 6.000 |
| C013874 | 344043. | 3487331. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 5.000 | -.9 | 60.000 | -.900 | -.900 | -.900 |
| C013875 | 344043. | 3487331. | 31 | 71 | -.80 | -.9 | -.800 | .07 | 710.000 | -.9 | 10.000 | -.900 | -.900 | 2.000 |
| C013876 | 344043. | 3487331. | 31 | 71 | -.80 | .6 | -.800 | -.90 | 340.000 | -.9 | 10.000 | -.900 | -.900 | 2.000 |
| C013877 | 344043. | 3487331. | 31 | 71 | -.80 | .6 | -.800 | .33 | 400.000 | -.9 | 5.000 | -.900 | -.900 | -.900 |
| C013878 | 344043. | 3487331. | 31 | 71 | -.80 | .4 | -.800 | .04 | 35.000 | -.9 | 5.000 | -.900 | 5.000 | -.900 |
| C013879 | 344043. | 3487331. | 31 | 71 | -.80 | .2 | -.800 | -.90 | 15.000 | -.9 | 40.000 | -.900 | 15.000 | 12.000 |
| C013880 | 344043. | 3487331. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 50.000 | -.9 | 80.000 | -.900 | 25.000 | 12.000 |
| C013881 | 345639. | 3488893. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | 5.000 | -.900 | 15.000 | 4.000 |
| C013882 | 345639. | 3488893. | 31 | 71 | -.80 | .2 | -.800 | -.90 | -.900 | -.9 | 65.000 | 2.000 | 15.000 | -.900 |
| C013883 | 345639. | 3488893. | 31 | 71 | -.80 | .4 | -.800 | -.90 | -.900 | -.9 | 70.000 | -.900 | 20.000 | 6.000 |
| C013884 | 345639. | 3488893. | 31 | 71 | -.80 | .4 | -.800 | -.90 | -.900 | -.9 | 45.000 | -.900 | 10.000 | 4.000 |
| C013885 | 345639. | 3488893. | 31 | 71 | -.80 | .4 | -.800 | .04 | 560.000 | -.9 | 15.000 | -.900 | 10.000 | 4.000 |
| C013886 | 345639. | 3488893. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013887 | 345639. | 3488893. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 15.000 | -.9 | 55.000 | -.900 | 20.000 | 2.000 |
| C013888 | 345639. | 3488893. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | 45.000 | -.900 | 35.000 | 14.000 |
| C013889 | 345639. | 3488893. | 31 | 71 | -.80 | .2 | -.800 | -.90 | 25.000 | -.9 | 60.000 | -.900 | 10.000 | 2.000 |
| C013890 | 345639. | 3488893. | 31 | 71 | -.80 | .4 | -.800 | -.90 | 60.000 | -.9 | 35.000 | -.900 | 10.000 | 2.000 |
| C013892 | 344043. | 3487331. | 31 | 71 | -.80 | .2 | -.800 | .12 | 115.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013893 | 344043. | 3487331. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 50.000 | -.9 | 10.000 | -.900 | -.900 | -.900 |
| C013894 | 344043. | 3487331. | 31 | 71 | -.80 | .6 | -.800 | -.90 | 170.000 | -.9 | 30.000 | -.900 | 45.000 | 6.000 |
| C013895 | 344043. | 3487331. | 31 | 71 | -.80 | -.9 | -.800 | .20 | 1000.000 | -.9 | -.900 | -.900 | 15.000 | 2.000 |
| C013896 | 344043. | 3487331. | 31 | 71 | -.80 | .2 | -.800 | .13 | 385.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013897 | 344043. | 3487331. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 100.000 | -.9 | -.900 | -.900 | 5.000 | -.900 |
| C013898 | 344043. | 3487331. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 80.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013899 | 344043. | 3487331. | 31 | 71 | -.90 | -.9 | -.900 | -.90 | 50.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013900 | 344043. | 3487331. | 31 | 71 | -.80 | .4 | -.800 | .67 | 1150.000 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C013901 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 690.000 | -.9 | 15.000 | -.900 | 25.000 | 2.000 |
| C013902 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1150.000 | -.9 | 20.000 | -.900 | 10.000 | 6.000 |
| C013903 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 50.000 | -.9 | 10.000 | -.900 | 25.000 | 7.000 |
| C013904 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 130.000 | -.9 | 5.000 | -.900 | 10.000 | -.900 |
| C013905 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 45.000 | -.9 | -.900 | -.900 | 10.000 | -.900 |
| C013906 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 120.000 | -.9 | 10.000 | -.900 | 5.000 | -.900 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C013855 | 4.0 | 920.000 |
| C013856 | 4.0 | 1700.000 |
| C013857 | 3.0 | 4250.000 |
| C013858 | 3.0 | 3900.000 |
| C013859 | 5.0 | 475.000 |
| C013860 | 3.0 | 1150.000 |
| C013861 | 6.0 | 940.000 |
| C013862 | 13.0 | 1100.000 |
| C013863 | 4.0 | 310.000 |
| C013864 | 10.0 | 3150.000 |
| C013865 | 11.0 | 1450.000 |
| C013866 | 8.0 | 255.000 |
| C013867 | 5.0 | 65.000 |
| C013868 | 110.0 | 60.000 |
| C013869 | 5.0 | 295.000 |
| C013870 | 6.0 | 60.000 |
| C013871 | 6.0 | 25.000 |
| C013872 | 9.0 | 290.000 |
| C013873 | 4.0 | 45.000 |
| C013874 | 3.0 | 100.000 |
| C013875 | 12.0 | 140.000 |
| C013876 | 8.0 | 50.000 |
| C013877 | 6.0 | 15.000 |
| C013878 | -.9 | 65.000 |
| C013879 | 3.0 | 135.000 |
| C013880 | 5.0 | 185.000 |
| C013881 | -.9 | 35.000 |
| C013882 | 5.0 | 115.000 |
| C013883 | 4.0 | 170.000 |
| C013884 | 4.0 | 155.000 |
| C013885 | 6.0 | 170.000 |
| C013886 | 3.0 | 30.000 |
| C013887 | 3.0 | 220.000 |
| C013888 | 3.0 | 130.000 |
| C013889 | 3.0 | 160.000 |
| C013890 | 5.0 | 100.000 |
| C013892 | 18.0 | 15.000 |
| C013893 | 5.0 | 20.000 |
| C013894 | 9.0 | 45.000 |
| C013895 | 16.0 | 75.000 |
| C013896 | 7.0 | 10.000 |
| C013897 | 4.0 | 15.000 |
| C013898 | -.9 | 5.000 |
| C013899 | 5.0 | 15.000 |
| C013900 | 16.0 | 15.000 |
| C013901 | -.9 | 1300.000 |
| C013902 | -.9 | 1700.000 |
| C013903 | -.9 | 435.000 |
| C013904 | 4.0 | 1550.000 |
| C013905 | 2.0 | 620.000 |
| C013906 | 5.0 | 1900.000 |

TABLE AD-21

CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013907 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 360.000 | -.9 | -.900 | -.900 | 10.000 | 6.000 |
| C013908 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 265.000 | -.9 | -.900 | -.900 | 10.000 | 2.000 |
| C013909 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 210.000 | -.9 | 5.000 | -.900 | 15.000 | -.900 |
| C013910 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 230.000 | -.9 | 10.000 | -.900 | 20.000 | -.900 |
| C013911 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 25.000 | -.9 | 15.000 | -.900 | 20.000 | 8.000 |
| C013912 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 530.000 | -.9 | 5.000 | -.900 | 10.000 | 7.000 |
| C013913 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 1400.000 | -.9 | 60.000 | -.900 | 20.000 | 2.000 |
| C013914 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1500.000 | -.9 | 160.000 | -.900 | 20.000 | 7.000 |
| C013915 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 2750.000 | -.9 | 520.000 | -.900 | 120.000 | 9.000 |
| C013916 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 2350.000 | -.9 | 800.000 | -.900 | 180.000 | 10.000 |
| C013917 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .013 | -.80 | 9050.000 | -.9 | 670.000 | -.900 | 210.000 | 24.000 |
| C013918 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .006 | -.80 | 9000.000 | -.9 | 2100.000 | -.900 | 630.000 | 70.000 |
| C013919 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .046 | -.80 | 37000.000 | 3.0 | 1200.000 | -.900 | 225.000 | 60.000 |
| C013920 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .021 | -.80 | 15500.000 | -.9 | 740.000 | -.900 | 285.000 | 28.000 |
| C013921 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .007 | -.80 | 9000.000 | -.9 | 610.000 | -.900 | 190.000 | 22.000 |
| C013922 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .018 | -.80 | 13500.000 | -.9 | 1150.000 | -.900 | 420.000 | 55.000 |
| C013923 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 17000.000 | -.9 | 320.000 | -.900 | 85.000 | 26.000 |
| C013924 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .006 | -.80 | 8050.000 | -.9 | 300.000 | -.900 | 90.000 | 16.000 |
| C013925 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .010 | -.80 | 13500.000 | -.9 | 25.000 | -.900 | 40.000 | 18.000 |
| C013926 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .008 | -.80 | 10500.000 | -.9 | -.900 | -.900 | 55.000 | 15.000 |
| C013927 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .031 | -.80 | 19500.000 | -.9 | 25.000 | -.900 | 40.000 | 22.000 |
| C013928 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 3300.000 | -.9 | 5.000 | -.900 | 10.000 | 4.000 |
| C013929 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 6250.000 | -.9 | 5.000 | -.900 | 15.000 | 9.000 |
| C013930 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .025 | -.80 | 2100.000 | -.9 | 5.000 | -.900 | 5.000 | 4.000 |
| C013931 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 325.000 | -.9 | 5.000 | -.900 | 10.000 | 4.000 |
| C013932 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 135.000 | -.9 | 10.000 | -.900 | 5.000 | 5.000 |
| C013933 | 355633. | 3491259. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 170.000 | -.9 | 25.000 | -.900 | -.900 | 6.000 |
| C013934 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1450.000 | -.9 | 5.000 | -.900 | 10.000 | -.900 |
| C013935 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .009 | -.80 | 1350.000 | -.9 | 5.000 | -.900 | 5.000 | -.900 |
| C013936 | 355633. | 3491259. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 1650.000 | -.9 | 5.000 | -.900 | 5.000 | 2.000 |
| C013937 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 115.000 | -.9 | 10.000 | -.900 | 10.000 | 4.000 |
| C013938 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 230.000 | -.9 | 10.000 | -.900 | 5.000 | -.900 |
| C013939 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 810.000 | -.9 | 15.000 | -.900 | 10.000 | -.900 |
| C013940 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 1050.000 | -.9 | 20.000 | -.900 | 5.000 | 2.000 |
| C013941 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 295.000 | -.9 | 10.000 | -.900 | 5.000 | 2.000 |
| C013942 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .013 | -.80 | 15.000 | -.9 | -.900 | -.900 | -.900 | 6.000 |
| C013943 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 480.000 | -.9 | 5.000 | -.900 | 5.000 | 4.000 |
| C013944 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .008 | -.80 | 290.000 | -.9 | -.900 | -.900 | 5.000 | 4.000 |
| C013945 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .011 | -.80 | 670.000 | -.9 | 5.000 | -.900 | -.900 | 10.000 |
| C013946 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .008 | -.80 | 20.000 | -.9 | 5.000 | -.900 | 5.000 | 4.000 |
| C013947 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 560.000 | -.9 | -.900 | -.900 | -.900 | 6.000 |
| C013948 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 325.000 | -.9 | -.900 | -.900 | 10.000 | 8.000 |
| C013949 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 45.000 | -.9 | 5.000 | -.900 | 5.000 | 4.000 |
| C013950 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 55.000 | -.9 | -.900 | -.900 | -.900 | 2.000 |
| C013951 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 120.000 | -.9 | -.900 | -.900 | 10.000 | 8.000 |
| C013952 | 342101. | 3485802. | 31 | 72 | .07 | -.8 | -.900 | -.80 | 750.000 | -.9 | 25.000 | -.900 | 60.000 | 32.000 |
| C013953 | 342101. | 3485802. | 31 | 72 | 3.17 | -.8 | .031 | -.80 | 18500.000 | -.9 | 510.000 | -.900 | 2500.000 | 530.000 |
| C013954 | 342101. | 3485802. | 31 | 72 | 18.80 | -.8 | .230 | -.80 | 93500.000 | 7.0 | 3700.000 | -.900 | 1950.000 | 3800.000 |
| C013955 | 342101. | 3485802. | 31 | 72 | 5.58 | -.8 | .360 | -.80 | 74000.000 | 4.0 | 1150.000 | -.900 | 2900.000 | 1300.000 |
| C013956 | 342101. | 3485802. | 31 | 72 | 4.84 | -.8 | .140 | -.80 | 990.000 | -.9 | 570.000 | -.900 | 620.000 | 305.000 |
| C013957 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .023 | -.80 | 10000.000 | -.9 | 10.000 | -.900 | 25.000 | 19.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C013907 | 9.0 | 2950.000 |
| C013908 | 3.0 | 1750.000 |
| C013909 | 4.0 | 3250.000 |
| C013910 | 6.0 | 9600.000 |
| C013911 | 6.0 | 4400.000 |
| C013912 | 8.0 | 6550.000 |
| C013913 | 5.0 | 22500.000 |
| C013914 | 6.0 | 25000.000 |
| C013915 | -.9 | 10000.000 |
| C013916 | -.9 | 14000.000 |
| C013917 | -.9 | 28500.000 |
| C013918 | -.9 | 7300.000 |
| C013919 | 36.0 | 3150.000 |
| C013920 | -.9 | 12000.000 |
| C013921 | -.9 | 20500.000 |
| C013922 | 10.0 | 3050.000 |
| C013923 | 3.0 | 35500.000 |
| C013924 | -.9 | 59500.000 |
| C013925 | 55.0 | 16500.000 |
| C013926 | 195.0 | 34000.000 |
| C013927 | 375.0 | 15500.000 |
| C013928 | 4.0 | 5200.000 |
| C013929 | 5.0 | 2850.000 |
| C013930 | 2.0 | 395.000 |
| C013931 | 4.0 | 230.000 |
| C013932 | -.9 | 215.000 |
| C013933 | 3.0 | 590.000 |
| C013934 | 11.0 | 145.000 |
| C013935 | 19.0 | 220.000 |
| C013936 | 310.0 | 730.000 |
| C013937 | 11.0 | 35.000 |
| C013938 | 12.0 | 35.000 |
| C013939 | 9.0 | 25.000 |
| C013940 | 6.0 | 20.000 |
| C013941 | 7.0 | 70.000 |
| C013942 | -.9 | 30.000 |
| C013943 | 5.0 | 25.000 |
| C013944 | 7.0 | 50.000 |
| C013945 | 10.0 | 25.000 |
| C013946 | 6.0 | 20.000 |
| C013947 | 4.0 | 20.000 |
| C013948 | 9.0 | 25.000 |
| C013949 | 2.0 | 350.000 |
| C013950 | 9.0 | 40.000 |
| C013951 | 8.0 | 235.000 |
| C013952 | 9.0 | 200.000 |
| C013953 | -.9 | 1200.000 |
| C013954 | -.9 | 2400.000 |
| C013955 | 55.0 | 1650.000 |
| C013956 | 900.0 | 510.000 |
| C013957 | 11.0 | 35.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV | IT CODE | AG (OZ/T) | AG (PPM) | AU (OZ/T) | AU (PPM) | AS (PPM) | BI (PPM) | CU (PPM) | MO (PPM) | PB (PPM) | SB (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013958 | 342101. | 3485802. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 1100.000 | -.9 | 10.000 | -.900 | 20.000 | 16.000 |
| C013959 | 342101. | 3485802. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 100.000 | -.9 | 10.000 | -.900 | 15.000 | 6.000 |
| C013960 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 40.000 | -.9 | 5.000 | -.900 | 30.000 | -.900 |
| C013961 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | 15.000 | -.900 |
| C013962 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 10.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013963 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | -.900 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013964 | 341199. | 3487247. | 31 | 72 | -.90 | -.8 | .024 | -.80 | 510.000 | -.9 | 5.000 | -.900 | 20.000 | -.900 |
| C013965 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 65.000 | -.9 | 10.000 | -.900 | 10.000 | -.900 |
| C013966 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 860.000 | -.9 | -.900 | -.900 | -.900 | -.900 |
| C013967 | 341199. | 3487247. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 990.000 | -.9 | 20.000 | -.900 | 10.000 | -.900 |
| C013968 | 341199. | 3487247. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 750.000 | -.9 | 15.000 | -.900 | 10.000 | -.900 |
| C013969 | 341199. | 3487247. | 31 | 72 | 1.32 | -.8 | .100 | -.80 | 19500.000 | -.9 | 315.000 | -.900 | 110.000 | 50.000 |
| C013970 | 341199. | 3487247. | 31 | 72 | 2.82 | -.8 | .290 | -.80 | 64000.000 | -.9 | 240.000 | -.900 | 375.000 | 100.000 |
| C013971 | 341199. | 3487247. | 31 | 72 | .09 | -.8 | .098 | -.80 | 53000.000 | -.9 | 100.000 | -.900 | 65.000 | 55.000 |
| C013972 | 341199. | 3487247. | 31 | 72 | -.90 | -.8 | .039 | -.80 | 22500.000 | -.9 | 20.000 | 10.000 | 30.000 | 26.000 |
| C013973 | 341199. | 3487247. | 31 | 72 | 1.71 | -.8 | .240 | -.80 | 30500.000 | -.9 | 175.000 | -.900 | 110.000 | 165.000 |
| C013974 | 341199. | 3487247. | 31 | 72 | 2.54 | -.8 | .150 | -.80 | 14500.000 | -.9 | 420.000 | -.900 | 225.000 | 340.000 |
| C013975 | 341199. | 3487247. | 31 | 72 | 63.60 | -.8 | .250 | -.80 | 14500.000 | -.9 | 4000.000 | -.900 | 630.000 | 3350.000 |
| C013976 | 341199. | 3487247. | 31 | 72 | -.90 | -.8 | .012 | -.80 | 1350.000 | -.9 | 40.000 | -.900 | 25.000 | 30.000 |
| C013977 | 341199. | 3487247. | 31 | 72 | .04 | -.8 | .018 | -.80 | 3450.000 | -.9 | 35.000 | -.900 | 10.000 | 80.000 |
| C013978 | 341199. | 3487247. | 31 | 72 | .03 | -.8 | -.900 | -.80 | 65.000 | -.9 | 60.000 | -.900 | 10.000 | 10.000 |
| C013979 | 341199. | 3487247. | 31 | 72 | -.90 | -.8 | .015 | -.80 | 400.000 | -.9 | 70.000 | 6.000 | 20.000 | 18.000 |
| C013980 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 115.000 | -.9 | -.900 | -.900 | 15.000 | -.900 |
| C013981 | 355097. | 3491086. | 31 | 72 | -.90 | -.8 | .007 | -.80 | 245.000 | -.9 | 30.000 | -.900 | 10.000 | -.900 |
| C013982 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 740.000 | -.9 | 35.000 | -.900 | 10.000 | -.900 |
| C013983 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 375.000 | -.9 | 10.000 | -.900 | 35.000 | 6.000 |
| C013984 | 355097. | 3491086. | 31 | 72 | -.90 | -.8 | .005 | -.80 | 2050.000 | -.9 | 20.000 | -.900 | 45.000 | 4.000 |
| C013985 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 2200.000 | -.9 | 10.000 | -.900 | 10.000 | 2.000 |
| C013986 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 1600.000 | -.9 | 15.000 | -.900 | 30.000 | 2.000 |
| C013987 | 355097. | 3491086. | 31 | 72 | -.90 | -.8 | .008 | -.80 | 3600.000 | -.9 | 65.000 | -.900 | 270.000 | 26.000 |
| C013988 | 355097. | 3491086. | 31 | 72 | 6.68 | -.8 | .210 | -.80 | 111000.000 | -.9 | 425.000 | -.900 | 106000.000 | 375.000 |
| C013989 | 355097. | 3491086. | 31 | 72 | .03 | -.8 | .040 | -.80 | 22500.000 | -.9 | 95.000 | -.900 | 290.000 | 32.000 |
| C013990 | 355097. | 3491086. | 31 | 72 | 32.40 | -.8 | .110 | -.80 | 3950.000 | 115.0 | 215.000 | -.900 | 304000.000 | 1250.000 |
| C013991 | 355097. | 3491086. | 31 | 72 | 11.10 | -.8 | .038 | -.80 | 9150.000 | 60.0 | 190.000 | -.900 | 115000.000 | 360.000 |
| C013992 | 355097. | 3491086. | 31 | 72 | .35 | -.8 | .007 | -.80 | 1950.000 | 2.0 | 95.000 | -.900 | 6200.000 | 32.000 |
| C013993 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 1500.000 | -.9 | 105.000 | -.900 | 980.000 | 10.000 |
| C013994 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 3250.000 | -.9 | 130.000 | -.900 | 420.000 | 14.000 |
| C013995 | 355097. | 3491086. | 31 | 72 | 2.14 | -.8 | .007 | -.80 | 1450.000 | -.9 | 100.000 | -.900 | 70.000 | 160.000 |
| C013996 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 980.000 | -.9 | 60.000 | -.900 | 230.000 | 11.000 |
| C013997 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 1150.000 | -.9 | 100.000 | -.900 | 370.000 | 18.000 |
| C013998 | 355097. | 3491086. | 31 | 72 | .07 | -.8 | -.900 | -.80 | 320.000 | -.9 | 65.000 | -.900 | 205.000 | 4.000 |
| C013999 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 335.000 | -.9 | 40.000 | -.900 | 85.000 | 10.000 |
| C014000 | 355097. | 3491086. | 31 | 72 | -.90 | -.9 | -.900 | -.90 | 85.000 | -.9 | 10.000 | -.900 | 30.000 | 4.000 |

TABLE AD-21 CHEMICAL ANALYSIS OF CORE SPLIT SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON). ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | W (PPM) | ZN (PPM) |
|---|---|---|
| C013958 | 9.0 | 50.000 |
| C013959 | 7.0 | 30.000 |
| C013960 | 7.0 | 85.000 |
| C013961 | 3.0 | 145.000 |
| C013962 | -.9 | 45.000 |
| C013963 | 2.0 | 30.000 |
| C013964 | 9.0 | 40.000 |
| C013965 | 6.0 | 360.000 |
| C013966 | 10.0 | 190.000 |
| C013967 | 8.0 | 170.000 |
| C013968 | 10.0 | 2700.000 |
| C013969 | 28.0 | 2600.000 |
| C013970 | 4.0 | 15000.000 |
| C013971 | -.9 | 5200.000 |
| C013972 | 5.0 | 2800.000 |
| C013973 | 3.0 | 4550.000 |
| C013974 | 3.0 | 2800.000 |
| C013975 | -.9 | 6000.000 |
| C013976 | 7.0 | 870.000 |
| C013977 | 6.0 | 300.000 |
| C013978 | 5.0 | 100.000 |
| C013979 | 3.0 | 115.000 |
| C013980 | -.9 | 1150.000 |
| C013981 | 22.0 | 2350.000 |
| C013982 | 8.0 | 3350.000 |
| C013983 | 4.0 | 1200.000 |
| C013984 | 8.0 | 5200.000 |
| C013985 | 3.0 | 3400.000 |
| C013986 | 7.0 | 5900.000 |
| C013987 | 19.0 | 2550.000 |
| C013988 | -.9 | 9700.000 |
| C013989 | -.9 | 1400.000 |
| C013990 | 20.0 | 1550.000 |
| C013991 | 4.0 | 5650.000 |
| C013992 | 6.0 | 45000.000 |
| C013993 | 4.0 | 32000.000 |
| C013994 | 5.0 | 38000.000 |
| C013995 | -.9 | 4650.000 |
| C013996 | 4.0 | 28000.000 |
| C013997 | 9.0 | 35000.000 |
| C013998 | 6.0 | 10500.000 |
| C013999 | 5.0 | 9200.000 |
| C014000 | 4.0 | 3250.000 |

TABLE AD-22

KANTISHNA HILLS ROCK CHARACTER SAMPLES

ANALYTICAL RESULTS

TABLE AD-22 CHEMICAL ANALYSIS OF CHARACTER SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON).ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT
-.8 REPRESENTS ELEMENT NOT ANALYZED

| SAMPLE ID | X (EAST) | Y (NORTH) | IV CODE | IT | AG (PPM) | AG (OZ/T) | AU (PPM) | AU (OZ/T) | AL2O3 (%) | AS (%) | BA (PPM) | BI (PPM) | CAO (%) | CD (PPM) | CO (PPM) | CO2 (PPM) | CU (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013701 | 324830. | 3456400. | 35 | 73 | .8 | -.80 | -.90 | -.800 | 7.90 | -.900 | 360.0 | -.9 | .071 | -.9 | 5.0 | -.9 | .002 |
| C013704 | 324830. | 3456400. | 35 | 73 | -.8 | -.90 | -.80 | -.900 | .09 | -.900 | 50.0 | -.9 | .020 | -.9 | -.9 | -.9 | -.900 |
| C013706 | 324830. | 3456400. | 35 | 73 | -.8 | -.90 | -.80 | .005 | .96 | .028 | 50.0 | -.9 | .033 | -.9 | -.9 | .5 | .016 |
| C013707 | 334310. | 3473470. | 35 | 73 | -.8 | 18.60 | -.80 | .059 | .50 | .795 | 50.0 | 10.0 | 2.200 | 2050.0 | 15.0 | 3.1 | .145 |
| C013709 | 334310. | 3473470. | 35 | 73 | -.8 | 23.80 | -.80 | .029 | .34 | .225 | 50.0 | 22.0 | 2.100 | 1800.0 | 5.0 | 3.0 | .105 |
| C013711 | 334310. | 3473470. | 35 | 73 | 2.0 | -.80 | .78 | -.800 | 13.00 | 2.050 | 670.0 | -.9 | .073 | 7.0 | -.9 | -.9 | .001 |
| C013713 | 341180. | 3487460. | 35 | 73 | -.8 | 10.10 | -.80 | .180 | .51 | 1.100 | 50.0 | 3.0 | .510 | 1350.0 | 10.0 | .3 | .120 |
| C013714 | 341180. | 3487460. | 35 | 73 | -.8 | 142.60 | -.80 | .630 | .12 | 4.600 | -.9 | -.9 | .100 | 1550.0 | 20.0 | -.9 | .695 |
| C013716 | 341180. | 3487460. | 35 | 73 | 1.1 | -.80 | .79 | -.800 | 12.10 | .895 | 860.0 | -.9 | 1.300 | 95.0 | -.9 | 2.1 | .038 |
| C013717 | 345570. | 3488880. | 35 | 73 | -.8 | 44.40 | -.80 | .024 | 2.40 | .290 | 140.0 | -.9 | .350 | 310.0 | 5.0 | 3.1 | .485 |
| C013719 | 345570. | 3488830. | 35 | 73 | .4 | -.80 | .04 | -.800 | 12.20 | .072 | 750.0 | -.9 | 1.200 | 6.0 | -.9 | 1.1 | .001 |
| C013720 | 345850. | 3488550. | 35 | 73 | -.8 | 65.70 | -.80 | .053 | 2.00 | .965 | 140.0 | -.9 | .094 | 285.0 | -.9 | 1.5 | .200 |
| C013721 | 354820. | 3492050. | 35 | 73 | -.8 | 10.50 | -.80 | 1.340 | .09 | .405 | -.9 | 3.0 | .820 | 130.0 | -.9 | .5 | .041 |
| C013723 | 354450. | 3491480. | 35 | 73 | 1.1 | -.80 | .70 | -.800 | .64 | .615 | 50.0 | -.9 | .032 | .6 | -.9 | -.9 | .001 |
| C013725 | 354450. | 3491480. | 35 | 73 | .2 | -.80 | .04 | -.800 | 14.10 | .063 | 630.0 | -.9 | .120 | .4 | -.9 | -.9 | .003 |
| C013726 | 354870. | 3491900. | 35 | 73 | -.8 | .42 | -.80 | .950 | 2.80 | .595 | 100.0 | 3.0 | .055 | .6 | -.9 | -.9 | -.900 |

TABLE AD-22 CHEMICAL ANALYSIS OF CHARACTER SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON).ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT

| SAMPLE ID | F (%) | FE2O3 (%) | FEO (%) | GA (PPM) | HG (PPM) | IN (PPM) | K2O (%) | LI2O (%) | LOI (%) | MGO (%) | MNO (%) | MO (PPM) | MOIST (%) | NA2O (%) | NI (PPM) | P2O5 (%) | PB (%) | PT (PPM) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013701 | .039 | 2.50 | .52 | 10.0 | .07 | -.9 | 1.80 | .010 | 2.4 | .390 | .016 | -.9 | .1 | .13 | 10.0 | .06 | .002 | -.9 |
| C013704 | .016 | .28 | -.90 | -.9 | .05 | -.9 | .02 | -.900 | 25.5 | .005 | .001 | -.9 | -.9 | .03 | -.9 | -.90 | -.900 | -.9 |
| C013706 | .016 | .80 | -.90 | -.9 | .12 | -.9 | .26 | .002 | 8.9 | .039 | -.900 | -.9 | .4 | .03 | -.9 | -.90 | -.900 | -.9 |
| C013707 | .019 | 10.50 | 3.00 | -.9 | 1.90 | -.9 | .16 | -.900 | 8.6 | .470 | .400 | -.9 | .6 | .01 | 10.0 | .10 | 13.000 | -.9 |
| C013709 | .019 | 5.90 | -.90 | -.9 | .27 | 3.0 | .10 | -.900 | 7.6 | .480 | .370 | -.9 | .3 | .01 | -.9 | .03 | 17.000 | -.9 |
| C013711 | .100 | 3.90 | .34 | 19.0 | .05 | -.9 | 3.50 | .002 | 4.7 | .260 | .005 | -.9 | .2 | .09 | -.9 | .02 | .115 | -.9 |
| C013713 | .014 | 27.30 | 1.70 | -.9 | 1.50 | -.9 | .11 | .002 | 19.6 | .087 | .031 | -.9 | .9 | .05 | -.9 | .13 | 2.900 | -.9 |
| C013714 | .014 | 31.10 | 6.60 | -.9 | 7.20 | 2.0 | .02 | -.900 | 25.1 | .060 | .049 | -.9 | 1.2 | .02 | -.9 | .24 | .240 | -.9 |
| C013716 | .045 | 2.50 | 1.30 | 12.0 | .07 | -.9 | 1.90 | .002 | 3.2 | .560 | .082 | -.9 | .3 | 3.20 | -.9 | .04 | .005 | -.9 |
| C013717 | .017 | 26.30 | 12.00 | 4.0 | 2.00 | -.9 | .49 | .002 | 13.7 | 1.100 | .940 | -.9 | .5 | .11 | -.9 | .17 | .465 | -.9 |
| C013719 | .055 | 2.40 | .55 | 14.0 | .05 | -.9 | 1.80 | .002 | 5.8 | .350 | .110 | 2.0 | .2 | .85 | -.9 | .03 | .006 | -.9 |
| C013720 | .018 | .68 | 2.60 | 2.0 | 8.00 | -.9 | .23 | .002 | 3.9 | .043 | .130 | -.9 | .1 | .31 | -.9 | -.90 | 10.500 | -.9 |
| C013721 | .022 | .42 | .51 | -.9 | 2.50 | -.9 | .01 | -.900 | 1.0 | .006 | .007 | -.9 | .1 | .01 | -.9 | .05 | 4.600 | -.9 |
| C013723 | .017 | .70 | .21 | -.9 | .03 | -.9 | .02 | -.900 | .5 | .008 | .004 | -.9 | .1 | .24 | -.9 | -.90 | .002 | -.9 |
| C013725 | .050 | 1.10 | .72 | 14.0 | .03 | -.9 | 1.90 | .002 | 1.5 | .400 | .026 | -.9 | .2 | 4.10 | 10.0 | -.90 | .001 | -.9 |
| C013726 | .020 | 1.30 | .25 | -.9 | .05 | -.9 | .16 | -.900 | .9 | .033 | .014 | -.9 | .1 | 1.20 | -.9 | -.90 | .019 | -.9 |

TABLE AD-22 CHEMICAL ANALYSIS OF CHARACTER SAMPLES FROM THE KANTISHNA HILLS STUDY AREA, ALASKA.

FIRE ASSAY VALUES SHOWN IN OUNCES PER TON (OZ/TON).ALL OTHER RESULTS IN % OR PPM.
-.9 REPRESENTS LOWER THAN DETECTION LIMIT

| SAMPLE ID | R2O (%) | SB (%) | SC (PPM) | SE (PPM) | SIO2 (%) | SN (PPM) | SRO (%) | TE (PPM) | TH (PPM) | TIO2 (%) | U (PPM) | V (PPM) | W (PPM) | ZN (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C013701 | .009 | .001 | -.9 | -.9 | 84.5 | -.9 | .007 | .050 | -.9 | .41 | 3.0 | 30.0 | 6.0 | .004 |
| C013704 | .001 | 59.500 | -.9 | 3.0 | 10.4 | 2.0 | .002 | .017 | -.9 | -.90 | -.9 | -.9 | 4.0 | -.900 |
| C013706 | .002 | 38.500 | -.9 | 4.0 | 41.5 | 2.0 | .002 | .010 | -.9 | -.90 | -.9 | -.9 | 4.0 | .006 |
| C013707 | .002 | .640 | -.9 | -.9 | 30.4 | 60.0 | .009 | .040 | -.9 | .31 | -.9 | -.9 | 5.0 | 17.000 |
| C013709 | .002 | 2.000 | -.9 | -.9 | 44.7 | 16.0 | .007 | .085 | -.9 | -.90 | -.9 | -.9 | 3.0 | 13.500 |
| C013711 | .027 | .048 | -.9 | -.9 | 71.5 | -.9 | .002 | .025 | -.9 | .18 | 10.0 | -.9 | -.9 | .048 |
| C013713 | .002 | .062 | -.9 | 6.0 | 32.4 | -.9 | .003 | .250 | -.9 | .03 | -.9 | -.9 | 6.0 | 11.000 |
| C013714 | .002 | .680 | -.9 | -.9 | 18.0 | 2.0 | .003 | -.900 | -.9 | -.90 | -.9 | -.9 | 3.0 | 12.000 |
| C013716 | .009 | .001 | -.9 | -.9 | 73.0 | -.9 | .009 | -.900 | -.9 | .38 | -.9 | 20.0 | 3.0 | .585 |
| C013717 | .003 | .150 | -.9 | -.9 | 37.8 | -.9 | .003 | .025 | -.9 | .06 | -.9 | -.9 | 3.0 | 2.750 |
| C013719 | .009 | .001 | -.9 | -.9 | 72.9 | -.9 | .003 | -.900 | 20.0 | .42 | -.9 | 20.0 | 10.0 | .275 |
| C013720 | .002 | .260 | -.9 | -.9 | 73.9 | -.9 | .007 | -.900 | -.9 | .06 | -.9 | -.9 | 3.0 | 2.350 |
| C013721 | .001 | .050 | -.9 | -.9 | 83.2 | -.9 | .018 | -.900 | 10.0 | -.90 | -.9 | -.9 | 24500.0 | 1.650 |
| C013723 | .001 | .001 | -.9 | -.9 | 95.2 | -.9 | .002 | .030 | -.9 | -.90 | -.9 | -.9 | 7.0 | .005 |
| C013725 | .008 | -.900 | -.9 | -.9 | 73.6 | -.9 | .005 | -.900 | -.9 | .32 | -.9 | 10.0 | 6.0 | .014 |
| C013726 | .001 | .005 | -.9 | -.9 | 94.3 | -.9 | .004 | .055 | -.9 | .06 | -.9 | -.9 | 18.0 | .006 |

TABLE AD-23

KANTISHNA HILLS

VAN EECKHOUT ET AL., 1979 ANALYTICAL RESULTS

TABLE AD-23



KANTISHNA HILLS AREA - 4000 SERIES - VAN EECKHART ET AL 1979
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AL | BA | BE | CA | WCA | CE | CL | CO | WCO | CR | WCR | CS | CU | WCU | DY | EU | FE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4159 | 376336.7 | 3484153.5 | 50 | 89370.0 | 1130.0 | 1.0 | 10340.0 | 31484.0 | 111.0 | -.9 | 20.5 | -.9 | 108.0 | -.9 | 5.5 | 29.0 | 10.0 | 4.0 | 1.7 | 28660.0 |
| 4160 | 382252.7 | 3484646.2 | 50 | -.9 | -.9 | -.9 | -.9 | 8257.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 12.0 | -.9 | -.9 | -.9 |
| 4180 | 435180.2 | 3544771.4 | 51 | 50780.0 | 751.0 | 1.0 | 12400.0 | 55814.0 | 128.0 | -.9 | 19.0 | -.9 | 75.0 | -.9 | 10.6 | 34.0 | 7.0 | 7.0 | 1.6 | 33110.0 |
| 4181 | 434175.4 | 3533842.9 | 51 | 54750.0 | 871.0 | 2.0 | 27210.0 | 85700.0 | 119.0 | -.9 | 17.9 | 85.0 | 90.0 | -.9 | 3.5 | 36.0 | 21.0 | 5.0 | 1.3 | 33860.0 |
| 4182 | 428028.3 | 3523561.6 | 51 | 42080.0 | 459.0 | 1.0 | 8452.0 | 42343.0 | 89.0 | -.9 | 10.0 | -.9 | 62.0 | -.9 | 4.3 | 27.0 | 9.0 | 5.0 | 1.2 | 25210.0 |
| 4183 | 413054.8 | 3508223.1 | 51 | 29440.0 | 659.0 | 2.0 | 5205.0 | 31831.0 | 119.0 | -.9 | 21.2 | -.9 | 117.0 | -.9 | 9.5 | 30.0 | 10.0 | 3.0 | 1.7 | 46970.0 |
| 4184 | 403361.6 | 3501580.0 | 51 | 64660.0 | 1261.0 | 2.0 | 9399.0 | 38415.0 | 132.0 | -.9 | 34.7 | -.9 | 215.0 | -.9 | 8.2 | -.9 | 5.0 | 7.0 | 2.4 | 65540.0 |
| 4185 | 386469.0 | 3497173.5 | 51 | 71980.0 | 957.0 | 2.0 | 11480.0 | 63988.0 | 138.0 | -.9 | 32.4 | -.9 | 167.0 | -.9 | 10.9 | -.9 | 13.0 | 4.0 | 2.2 | 51710.0 |
| 4186 | 374180.9 | 3503408.9 | 51 | 32740.0 | 604.0 | 2.0 | 5649.0 | 46313.0 | 242.0 | -.9 | 39.3 | -.9 | 295.0 | -.9 | 11.3 | -.9 | 13.0 | 3.0 | 3.3 | 70550.0 |
| 4435 | 448401.5 | 3583789.3 | 50 | 90430.0 | 1432.0 | 2.0 | 12430.0 | 61028.0 | 85.0 | -.9 | 18.2 | 102.0 | 148.0 | 49.0 | 7.8 | 57.0 | 20.0 | 6.0 | 1.8 | 27170.0 |
| 4436 | 442588.1 | 3573234.5 | 51 | 82500.0 | 1733.0 | 2.0 | 12080.0 | 57905.0 | -.9 | -.9 | 26.6 | 92.0 | 134.0 | 53.0 | -.9 | 64.0 | 22.0 | 3.0 | -.9 | 49230.0 |
| 4437 | 446674.4 | 3565858.3 | 51 | 13800.0 | 1729.0 | 2.0 | -.9 | 4358.0 | 137.0 | -.9 | 32.0 | -.9 | 117.0 | 51.0 | 16.3 | 18.0 | 20.0 | 7.0 | 1.7 | 34780.0 |
| 4438 | 423687.6 | 3520410.5 | 51 | 59880.0 | 644.0 | 2.0 | 25450.0 | -.9 | 33.0 | -.9 | 16.5 | -.9 | 128.0 | -.9 | -.9 | 87.0 | -.9 | 4.0 | 1.1 | 35600.0 |
| 4439 | 418354.7 | 3511716.7 | 51 | 64210.0 | 799.0 | 2.0 | 24730.0 | 42553.0 | 59.0 | -.9 | 19.9 | 127.0 | 146.0 | 95.0 | -.9 | 105.0 | 70.0 | 4.0 | 1.5 | 36990.0 |
| 4440 | 340570.8 | 3480993.9 | 51 | 200.0 | 1060.0 | 2.0 | 5478.0 | 28264.0 | 127.0 | -.9 | 18.1 | 57.0 | 122.0 | 46.0 | 9.5 | 39.0 | 16.0 | 5.0 | 1.5 | 38500.0 |
| 4441 | 335499.5 | 3488873.2 | 51 | 66680.0 | 815.0 | 2.0 | 16150.0 | 6031.0 | 85.0 | -.9 | 18.8 | -.9 | 105.0 | 47.0 | -.9 | 11.0 | 13.0 | 6.0 | 1.5 | 29450.0 |
| 4442 | 318614.6 | 3493020.9 | 50 | 76330.0 | 1135.0 | 2.0 | 12940.0 | 1044.0 | 70.0 | -.9 | 11.7 | -.9 | 87.0 | -.9 | -.9 | 43.0 | 20.0 | 5.0 | 1.5 | 25230.0 |
| 4470 | 320314.4 | 3507599.6 | 11 | 9376.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 4471 | 333788.3 | 3508583.3 | 51 | 77950.0 | 1270.0 | 2.0 | 13600.0 | 1416.0 | 61.0 | -.9 | 12.2 | -.9 | 119.0 | -.9 | -.9 | 25.0 | 6.0 | 5.0 | 1.0 | 23190.0 |
| 4472 | 343093.7 | 3503258.8 | 50 | 66590.0 | 828.0 | -.9 | 15210.0 | 910.0 | 42.0 | 547.0 | 10.7 | -.9 | 95.0 | -.9 | -.9 | 28.0 | 5.0 | 4.0 | 1.2 | 14700.0 |
| 4473 | 355355.5 | 3498687.5 | 51 | 68730.0 | 971.0 | -.9 | 15940.0 | 1484.0 | 66.0 | -.9 | 13.2 | -.9 | 91.0 | -.9 | -.9 | 25.0 | 6.0 | 4.0 | 1.5 | 19530.0 |
| 4474 | 346035.7 | 3485315.7 | 51 | 83470.0 | 936.0 | -.9 | 4687.0 | 57535.0 | 114.0 | -.9 | 15.9 | 86.0 | 121.0 | 71.0 | 13.2 | 28.0 | 47.0 | 4.0 | 1.6 | 30800.0 |
| 4475 | 327233.6 | 3481556.1 | 51 | 82250.0 | 812.0 | 2.0 | 10340.0 | 10703.0 | 102.0 | -.9 | 19.6 | -.9 | 99.0 | -.9 | 5.1 | 37.0 | 6.0 | 6.0 | 2.1 | 28170.0 |
| 4476 | 316788.5 | 3481112.3 | 51 | 69040.0 | 751.0 | 1.0 | 9586.0 | 8962.0 | 99.0 | -.9 | 12.5 | -.9 | 73.0 | -.9 | -.9 | 39.0 | 17.0 | 6.0 | 1.4 | 26330.0 |
| 4516 | 320707.7 | 3524169.0 | 50 | 69430.0 | 883.0 | 1.0 | 10390.0 | 847.0 | 74.0 | -.9 | 9.6 | -.9 | 104.0 | 26.0 | -.9 | 32.0 | 12.0 | 5.0 | 1.1 | 15430.0 |
| 4518 | 323372.0 | 3528450.0 | 50 | 77290.0 | 1012.0 | 2.0 | 14480.0 | 1709.0 | 75.0 | -.9 | 13.0 | -.9 | 100.0 | -.9 | 3.7 | 28.0 | 16.0 | 6.0 | 1.2 | 25890.0 |
| 4519 | 336153.1 | 3521144.6 | 11 | 45450.0 | -.9 | -.9 | 8177.0 | -.9 | 33.0 | 416.0 | 15.1 | -.9 | 66.0 | -.9 | -.9 | 24.0 | -.9 | 3.0 | 1.0 | 24940.0 |
| 4520 | 350776.8 | 3516295.3 | 50 | 68620.0 | 796.0 | 1.0 | 14190.0 | 1286.0 | 63.0 | -.9 | 9.4 | -.9 | 93.0 | -.9 | -.9 | 26.0 | 12.0 | 3.0 | 1.4 | 19090.0 |
| 4521 | 338342.3 | 3533667.3 | 51 | 67140.0 | 865.0 | 2.0 | 14260.0 | 939.0 | 49.0 | -.9 | 8.0 | -.9 | 97.0 | -.9 | 2.7 | 19.0 | 13.0 | 4.0 | 1.0 | 15150.0 |
| 4522 | 350070.2 | 3543879.1 | 51 | 68490.0 | 884.0 | 2.0 | 15170.0 | 919.0 | 69.0 | -.9 | 8.4 | -.9 | 101.0 | 37.0 | -.9 | 21.0 | 11.0 | 4.0 | 1.2 | 20290.0 |
| 4523 | 348029.7 | 3560121.4 | 50 | 18080.0 | -.9 | -.9 | -.9 | 977.0 | -.9 | 486.0 | 22.8 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.0 | -.9 | -.9 | 4600.0 |
| 4547 | 329238.8 | 3537366.3 | 50 | -.9 | -.9 | -.9 | -.9 | 1150.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.0 | -.9 | -.9 | -.9 |
| 4548 | 358504.3 | 3534056.5 | 50 | 76130.0 | 825.0 | 2.0 | 6929.0 | 36396.0 | 136.0 | -.9 | 18.8 | -.9 | 64.0 | -.9 | 8.8 | 20.0 | 15.0 | 5.0 | 1.4 | 27890.0 |

TABLE AD-23



KANTISHNA HILLS AREA - 4000 SERIES - VAN EECKHART ET AL 1979
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | WFE | HF | K | LA | LI | LU | MG | WMG | MN | WMN | NA | NI | WNI | PB | WPB | RB | SB | SC | SM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4159 | 2859.0 | 7.6 | 26460.0 | 58.0 | 18.0 | .6 | 19150.0 | 5838.0 | 353.0 | 75.0 | 10620.0 | 18.0 | 30.0 | 13.0 | -.9 | 96.0 | -.9 | 17.2 | 7.8 |
| 4160 | 585.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1760.0 | -.9 | 18.0 | -.9 | -.9 | 68.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 4180 | 151.0 | 14.2 | 21410.0 | 68.0 | 23.0 | .7 | 11950.0 | 15772.0 | 1062.0 | 9.0 | 15640.0 | 36.0 | -.9 | 22.0 | -.9 | -.9 | 20.0 | 13.6 | 8.4 |
| 4181 | 9051.0 | 8.8 | 18370.0 | 75.0 | 48.0 | .5 | 18310.0 | 40779.0 | 620.0 | 132.0 | 12010.0 | 17.0 | -.9 | 12.0 | -.9 | 50.0 | 7.0 | 13.6 | 8.0 |
| 4182 | 3791.0 | 13.6 | 14750.0 | 56.0 | 20.0 | .5 | 12080.0 | 8095.0 | 756.0 | 56.0 | 13150.0 | 16.0 | -.9 | 5.0 | -.9 | 41.0 | 5.0 | 12.3 | 6.2 |
| 4183 | 3510.0 | 10.9 | 12330.0 | 41.0 | 26.0 | .4 | 12190.0 | 6186.0 | 425.0 | 53.0 | 7279.0 | 20.0 | -.9 | 18.0 | -.9 | 106.0 | 5.0 | 21.9 | 4.8 |
| 4184 | 91.0 | 13.2 | 31020.0 | 43.0 | 47.0 | .3 | 31670.0 | 5822.0 | 1175.0 | -.9 | 20190.0 | -.9 | -.9 | -.9 | -.9 | 110.0 | 10.0 | 33.9 | 6.4 |
| 4185 | 4883.0 | 10.4 | 37650.0 | 42.0 | 38.0 | .4 | 33820.0 | 8723.0 | 1525.0 | 179.0 | 23280.0 | -.9 | -.9 | -.9 | -.9 | 77.0 | 9.0 | 26.8 | 5.9 |
| 4186 | 511.0 | 15.2 | 13320.0 | 57.0 | 42.0 | .7 | 14240.0 | 6858.0 | 868.0 | 21.0 | 9105.0 | -.9 | -.9 | -.9 | -.9 | 121.0 | 8.0 | 38.2 | 9.6 |
| 4435 | 146.0 | 6.2 | 23630.0 | 47.0 | 30.0 | .4 | 19580.0 | 16091.0 | 349.0 | 26.0 | 8008.0 | 30.0 | 86.0 | 6.0 | 274.0 | -.9 | 7.0 | 17.2 | 8.4 |
| 4436 | 61.0 | -.9 | 24120.0 | -.9 | 45.0 | -.9 | 47130.0 | 21914.0 | 1037.0 | 8.0 | 13050.0 | 46.0 | 105.0 | 5.0 | 519.0 | -.9 | -.9 | 17.7 | 2.5 |
| 4437 | 1145.0 | 6.4 | 32310.0 | 73.0 | 24.0 | .5 | 12280.0 | 1215.0 | 357.0 | 115.0 | 7812.0 | 54.0 | 120.0 | 10.0 | 403.0 | 108.0 | 96.0 | 16.9 | 8.6 |
| 4438 | -.9 | 4.1 | 7647.0 | 19.0 | 18.0 | .2 | 20630.0 | -.9 | 967.0 | -.9 | 11300.0 | 31.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 16.1 | 3.5 |
| 4439 | 23560.0 | 5.1 | 7647.0 | 21.0 | 29.0 | .5 | 21730.0 | 17879.0 | 1072.0 | 558.0 | 11350.0 | 49.0 | 193.0 | -.9 | 659.0 | -.9 | -.9 | 17.8 | 3.7 |
| 4440 | 97.0 | 7.4 | 31500.0 | 64.0 | 40.0 | .6 | 22360.0 | 12742.0 | 1228.0 | 6.0 | 9425.0 | 30.0 | 109.0 | 54.0 | 413.0 | 79.0 | 39.0 | 18.5 | 8.1 |
| 4441 | 1307.0 | 10.3 | 14080.0 | 42.0 | 21.0 | .5 | 20610.0 | 1571.0 | 987.0 | 38.0 | 13750.0 | -.9 | 125.0 | 17.0 | 414.0 | 66.0 | -.9 | 15.2 | 6.2 |
| 4442 | 717.0 | 3.9 | 14350.0 | 25.0 | 26.0 | .3 | 20300.0 | 473.0 | 384.0 | 40.0 | 13570.0 | -.9 | 37.0 | 11.0 | -.9 | -.9 | -.9 | 14.3 | 4.4 |
| 4470 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.9 | 165.0 | -.9 | 2273.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 4471 | 671.0 | 5.3 | 18630.0 | 32.0 | 31.0 | .4 | 22400.0 | 785.0 | 420.0 | 23.0 | 14210.0 | 19.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 14.4 | 5.2 |
| 4472 | 342.0 | 3.0 | 14300.0 | 27.0 | 9.0 | .3 | 17570.0 | 552.0 | 421.0 | 16.0 | 16840.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.5 | 3.4 |
| 4473 | 3187.0 | 6.7 | 13200.0 | 32.0 | 15.0 | .5 | 18300.0 | 891.0 | 443.0 | 38.0 | 15380.0 | 25.0 | -.9 | 11.0 | -.9 | -.9 | -.9 | 12.7 | 4.5 |
| 4474 | 30256.0 | 5.6 | 20770.0 | 54.0 | 17.0 | .3 | 22800.0 | 27592.0 | 892.0 | 1230.0 | 5519.0 | 70.0 | 139.0 | 49.0 | -.9 | -.9 | 20.0 | 14.1 | 6.6 |
| 4475 | 271.0 | 6.0 | 20640.0 | 59.0 | 28.0 | .6 | 24130.0 | 3999.0 | 1460.0 | 24.0 | 9451.0 | 63.0 | 29.0 | 20.0 | -.9 | -.9 | 6.0 | 14.1 | 9.3 |
| 4476 | 2409.0 | 5.4 | 15820.0 | 59.0 | 20.0 | .4 | 19480.0 | 3569.0 | 511.0 | 297.0 | 9802.0 | 40.0 | 39.0 | 14.0 | -.9 | -.9 | 4.0 | 13.1 | 7.3 |
| 4516 | 838.0 | 5.5 | 10830.0 | 34.0 | 25.0 | .3 | 18120.0 | 448.0 | 306.0 | 27.0 | 12980.0 | 24.0 | 49.0 | 10.0 | -.9 | -.9 | -.9 | 13.2 | 3.8 |
| 4518 | 447.0 | 5.0 | 15520.0 | 39.0 | 26.0 | .4 | 22120.0 | 652.0 | 518.0 | 12.0 | 13620.0 | 17.0 | -.9 | 9.0 | -.9 | 61.0 | -.9 | 15.8 | 5.4 |
| 4519 | -.9 | -.9 | 10330.0 | 15.0 | 2.0 | -.9 | 15260.0 | -.9 | 227.0 | -.9 | 7526.0 | 15.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 8.2 | 2.7 |
| 4520 | 2079.0 | 5.3 | 16140.0 | 32.0 | 28.0 | .5 | 18890.0 | 579.0 | 336.0 | 43.0 | 13930.0 | 15.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 13.9 | 3.7 |
| 4521 | 1164.0 | 6.1 | 13540.0 | 28.0 | 25.0 | .3 | 17610.0 | 618.0 | 345.0 | 22.0 | 15370.0 | -.9 | 41.0 | -.9 | -.9 | 36.0 | 2.0 | 11.6 | 4.0 |
| 4522 | 1376.0 | 6.9 | 13770.0 | 33.0 | 26.0 | .4 | 19850.0 | 512.0 | 381.0 | 17.0 | 15140.0 | -.9 | 45.0 | -.9 | 238.0 | -.9 | 2.0 | 12.7 | 4.5 |
| 4523 | 963.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | 467.0 | 88.0 | 28.0 | 2347.0 | -.9 | 42.0 | -.9 | -.9 | -.9 | -.9 | 2.4 | -.9 |
| 4547 | 507.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 622.0 | -.9 | 72.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 4548 | 127.0 | 16.6 | 21180.0 | 60.0 | 30.0 | .6 | 13360.0 | 8421.0 | 796.0 | 4.0 | 12790.0 | 32.0 | -.9 | 23.0 | -.9 | 62.0 | 8.0 | 13.3 | 8.8 |

TABLE AD-23



KANTISHNA HILLS AREA - 4000 SERIES - VAN EECKHART ET AL 1979
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | SN | SR | TA | TH | TI | WTI | V | W | YB | ZN | WZN |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4159 | -.9 | -.9 | -.9 | 18.6 | 5249.0 | 22.0 | 108.0 | -.9 | 4.0 | 151.00 | 59.00 |
| 4160 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | 58.00 |
| 4180 | -.9 | -.9 | -.9 | 19.8 | 7774.0 | 5.0 | 63.0 | -.9 | 6.3 | -.90 | 77.00 |
| 4181 | -.9 | -.9 | -.9 | 21.1 | 5374.0 | 97.0 | 78.0 | -.9 | 4.5 | 128.00 | 123.00 |
| 4182 | -.9 | -.9 | 1.0 | 15.2 | 7560.0 | 25.0 | 57.0 | -.9 | 4.2 | -.90 | -.90 |
| 4183 | -.9 | -.9 | -.9 | 20.4 | 3395.0 | 19.0 | 92.0 | -.9 | 3.1 | -.90 | -.90 |
| 4184 | -.9 | -.9 | -.9 | 19.4 | 9147.0 | -.9 | 75.0 | -.9 | 2.6 | 354.00 | -.90 |
| 4185 | -.9 | -.9 | -.9 | 18.2 | 8139.0 | 31.0 | 114.0 | -.9 | 3.0 | 272.00 | -.90 |
| 4186 | -.9 | -.9 | -.9 | 26.2 | 3843.0 | 17.0 | 55.0 | -.9 | 5.7 | 307.00 | -.90 |
| 4435 | -.9 | -.9 | -.9 | 17.2 | 6671.0 | 16.0 | 145.0 | -.9 | 4.1 | 298.00 | 204.00 |
| 4436 | -.9 | -.9 | -.9 | 6.7 | 4056.0 | 14.0 | 196.0 | -.9 | -.9 | -.90 | 147.00 |
| 4437 | -.9 | -.9 | -.9 | 22.6 | 7136.0 | 13.0 | 128.0 | -.9 | -.9 | 182.00 | 142.00 |
| 4438 | -.9 | -.9 | -.9 | 3.7 | 6112.0 | -.9 | 169.0 | -.9 | 2.2 | 144.00 | -.90 |
| 4439 | -.9 | -.9 | -.9 | 4.4 | 6157.0 | 25.0 | 161.0 | 15.0 | 3.1 | 117.00 | 241.00 |
| 4440 | -.9 | -.9 | -.9 | 19.4 | 5370.0 | 12.0 | 123.0 | -.9 | 2.9 | -.90 | 129.00 |
| 4441 | -.9 | -.9 | -.9 | 11.2 | 8180.0 | 16.0 | 136.0 | -.9 | 3.8 | 63.00 | 109.00 |
| 4442 | -.9 | -.9 | -.9 | 8.4 | 5651.0 | 5.0 | 131.0 | -.9 | -.9 | 137.00 | 60.00 |
| 4470 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 |
| 4471 | -.9 | -.9 | -.9 | 9.5 | 5530.0 | 7.0 | 145.0 | -.9 | 3.0 | 130.00 | -.90 |
| 4472 | -.9 | -.9 | -.9 | 6.9 | 3619.0 | -.9 | 100.0 | -.9 | 2.5 | 50.00 | 69.00 |
| 4473 | -.9 | -.9 | -.9 | 6.1 | 5285.0 | 23.0 | 102.0 | -.9 | 2.6 | 154.00 | 95.00 |
| 4474 | -.9 | -.9 | -.9 | 16.9 | 6030.0 | 30.0 | 95.0 | -.9 | 3.2 | -.90 | 311.00 |
| 4475 | -.9 | -.9 | -.9 | 14.3 | 5966.0 | 6.0 | 114.0 | -.9 | 3.6 | 234.00 | 69.00 |
| 4476 | -.9 | -.9 | -.9 | 10.3 | 5254.0 | 27.0 | 98.0 | -.9 | 4.3 | -.90 | -.90 |
| 4516 | 11.0 | -.9 | -.9 | 8.1 | 4790.0 | 15.0 | 114.0 | -.9 | 2.7 | 146.00 | -.90 |
| 4518 | -.9 | 409.0 | -.9 | 10.5 | 5613.0 | 7.0 | 147.0 | -.9 | 3.7 | 158.00 | -.90 |
| 4519 | -.9 | -.9 | -.9 | 6.2 | 3373.0 | -.9 | 87.0 | -.9 | -.9 | 172.00 | -.90 |
| 4520 | -.9 | -.9 | -.9 | 8.7 | 5085.0 | 9.0 | 126.0 | -.9 | 2.9 | -.90 | -.90 |
| 4521 | -.9 | -.9 | -.9 | 6.6 | 5449.0 | 14.0 | 102.0 | -.9 | 2.1 | -.90 | -.90 |
| 4522 | -.9 | -.9 | -.9 | 9.2 | 5643.0 | 7.0 | 117.0 | -.9 | 2.5 | -.90 | -.90 |
| 4523 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | 476.00 | -.90 |
| 4547 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | 75.00 |
| 4548 | -.9 | -.9 | 1.0 | 20.7 | 7092.0 | -.9 | 63.0 | 17.0 | 5.5 | 100.00 | -.90 |

TABLE AD-24

KANTISHNA HILLS

BUNDTZEN, ET AL., 1976 ANALYTICAL RESULTS

TABLE AD-24



KANTISHNA HILLS AREA - 100 SERIES - BUNDTZEN ET AL 1976
ATOMIC ABSORBTION TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A # BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AU | CU | MO | PB | SB | ZN |
|---|---|---|---|---|---|---|---|---|---|---|
| 180 | 348119.5 | 3564370.3 | 10 | .20 | .060 | 16.0 | 4.0 | 20.0 | -.9 | 69.00 |
| 182 | 345792.6 | 3549753.8 | 10 | .40 | -.900 | 28.0 | -.9 | 30.0 | 2.0 | 68.00 |
| 183 | 350638.4 | 3549839.8 | 10 | -.90 | -.900 | 26.0 | -.9 | 23.0 | 3.0 | 104.00 |
| 184 | 351059.9 | 3550183.3 | 10 | .10 | -.900 | 19.0 | 27.0 | 17.0 | 4.0 | 46.00 |
| 185 | 353562.4 | 3551162.8 | 10 | -.90 | .020 | 88.0 | 37.0 | 15.0 | 10.0 | 39.00 |
| 186 | 354273.3 | 3550873.7 | 10 | -.90 | -.900 | 17.0 | 27.0 | 11.0 | 5.0 | 48.00 |
| 187 | 359174.1 | 3554573.6 | 10 | -.90 | -.900 | 24.0 | -.9 | 28.0 | 224.0 | 88.00 |
| 188 | 360494.7 | 3560510.4 | 10 | .10 | -.900 | 17.0 | -.9 | 20.0 | 1.0 | 58.00 |
| 189 | 361073.9 | 3560326.6 | 10 | .10 | .010 | 12.0 | 1.0 | 19.0 | 13.0 | 75.00 |
| 190 | 363573.9 | 3557428.6 | 10 | .40 | -.900 | 34.0 | -.9 | 36.0 | -.9 | 146.00 |
| 191 | 363731.5 | 3556769.4 | 10 | .10 | -.900 | 20.0 | 1.0 | 16.0 | -.9 | 80.00 |
| 192 | 370580.8 | 3559997.3 | 10 | .20 | -.900 | 24.0 | -.9 | 22.0 | -.9 | 100.00 |
| 193 | 370001.7 | 3560444.9 | 10 | -.90 | -.900 | 24.0 | -.9 | 38.0 | 2.0 | 92.00 |
| 194 | 372978.7 | 3562163.7 | 10 | .10 | .020 | 18.0 | 37.0 | 20.0 | -.9 | 48.00 |
| 203 | 375745.9 | 3565148.3 | 10 | 1.20 | -.900 | 28.0 | 2.0 | 16.0 | -.9 | 132.00 |
| 206 | 381591.7 | 3564154.3 | 10 | -.90 | -.900 | 25.0 | 2.0 | 16.0 | -.9 | 118.00 |
| 226 | 443960.1 | 3573554.5 | 10 | -.90 | .070 | 19.0 | -.9 | 17.0 | 20.0 | 95.00 |
| 226A | 438587.2 | 3572940.2 | 10 | 3.00 | .100 | 50.0 | 3.0 | 88.0 | 5000.0 | 238.00 |
| 226B | 433819.8 | 3571851.9 | 10 | .10 | .030 | 25.0 | 45.0 | 18.0 | 3.0 | 71.00 |
| 226C | 430499.1 | 3568075.1 | 10 | .20 | .030 | 40.0 | -.9 | 23.0 | 5.0 | 203.00 |
| 226D | 428784.5 | 3563694.0 | 10 | -.90 | .020 | 27.0 | 30.0 | 19.0 | 1.0 | 67.00 |
| 226E | 424436.8 | 3559994.9 | 10 | -.90 | -.900 | 70.0 | 2.0 | 27.0 | 3.0 | 370.00 |
| 226F | 425095.1 | 3559864.0 | 10 | -.90 | -.900 | 28.0 | 1.0 | 22.0 | 6.0 | 92.00 |
| 226G | 433076.8 | 3563067.1 | 30 | -.90 | .260 | 8.0 | -.9 | 9.0 | -.9 | 41.00 |
| 226H | 433683.3 | 3564307.7 | 30 | .20 | .060 | 46.0 | 2.0 | 25.0 | 5.0 | 130.00 |
| 226I | 434079.3 | 3565759.0 | 30 | .15 | -.900 | 14.0 | 83.0 | 7.0 | -.9 | 7.00 |
| 226J | 437848.0 | 3569984.8 | 30 | -.90 | .040 | 17.0 | 75.0 | 5.0 | -.9 | 9.00 |
| 227 | 445298.0 | 3565458.5 | 10 | .50 | .025 | 25.0 | 2.0 | 33.0 | -.9 | 95.00 |
| 228 | 445824.5 | 3565116.3 | 10 | .75 | -.900 | 40.0 | 2.0 | 33.0 | 451.0 | 140.00 |
| 229 | 445323.8 | 3564693.6 | 10 | .85 | .020 | 34.0 | 3.0 | 26.0 | 417.0 | 130.00 |
| 230 | 443926.0 | 3561499.9 | 10 | -.90 | .030 | 33.0 | 4.0 | 32.0 | 15.0 | 114.00 |
| 231 | 442950.9 | 3560469.7 | 10 | .35 | .030 | 31.0 | 3.0 | 36.0 | 10.0 | 110.00 |
| 232 | 441871.4 | 3560784.7 | 10 | 1.25 | .150 | 35.0 | 32.0 | 30.0 | 1269.0 | 138.00 |
| 233 | 441949.4 | 3559228.6 | 10 | -.90 | -.900 | 33.0 | 3.0 | 36.0 | 10.0 | 107.00 |
| 234 | 441790.7 | 3558173.2 | 10 | .35 | -.900 | 25.0 | 3.0 | 37.0 | 15.0 | 134.00 |
| 235 | 441763.6 | 3557038.9 | 10 | .50 | .020 | 29.0 | 32.0 | 34.0 | 49.0 | 160.00 |
| 236 | 441104.9 | 3556431.3 | 10 | .15 | .040 | 37.0 | 5.0 | 46.0 | 25.0 | 142.00 |
| 237 | 441420.5 | 3555825.1 | 10 | .20 | .070 | 18.0 | -.9 | 26.0 | -.9 | 90.00 |
| 238 | 441025.1 | 3555297.0 | 10 | .50 | .090 | 20.0 | 21.0 | 27.0 | 26.0 | 100.00 |
| 239 | 441129.9 | 3554426.6 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 240 | 445976.2 | 3555304.0 | 10 | -.90 | -.900 | 58.0 | -.9 | 27.0 | 4.0 | 146.00 |
| 241 | 441180.5 | 3551235.0 | 20 | .35 | .080 | 10.0 | 17.0 | 28.0 | -.9 | 50.00 |
| 242 | 441283.2 | 3546988.4 | 10 | -.90 | -.900 | 33.0 | 1.0 | 23.0 | 5.0 | 85.00 |
| 243 | 439227.6 | 3544848.8 | 10 | -.90 | -.900 | 33.0 | 1.0 | 23.0 | 5.0 | 85.00 |
| 244 | 437728.2 | 3547431.7 | 10 | .10 | -.900 | 41.0 | 2.0 | 32.0 | 6.0 | 135.00 |
| 245 | 434229.1 | 3552913.3 | 10 | .70 | .090 | 35.0 | -.9 | 26.0 | 19.0 | 175.00 |
| 246 | 435651.8 | 3553917.7 | 20 | .40 | -.900 | 41.0 | -.9 | 18.0 | 3.0 | 118.00 |
| 247 | 434598.6 | 3554259.1 | 10 | .35 | .040 | 20.0 | -.9 | 17.0 | -.9 | 110.00 |
| 248 | 432176.3 | 3555178.8 | 10 | .35 | .100 | 22.0 | 35.0 | 26.0 | -.9 | 100.00 |

TABLE AD-24



KANTISHNA HILLS AREA - 100 SERIES - BUNDTZEN ET AL 1976
ATOMIC ABSORBTION TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AU | CU | MO | PB | SB | ZN |
|---|---|---|---|---|---|---|---|---|---|---|
| 249 | 438760.4 | 3555478.4 | 30 | .15 | -.900 | 15.0 | 48.0 | 67.0 | 5.0 | 610.00 |
| 250 | 437681.6 | 3556901.2 | 10 | .40 | .150 | 24.0 | 14.0 | 26.0 | 12.0 | 170.00 |
| 253A | 435337.6 | 3556660.5 | 30 | 3.00 | .320 | 16.0 | 26.0 | 14.0 | -.9 | 90.00 |
| 253B | 435996.1 | 3556846.1 | 10 | .60 | .100 | 36.0 | 3.0 | 12.0 | 8.0 | 80.00 |
| 253C | 436575.6 | 3557084.3 | 10 | .50 | .100 | 32.0 | 4.0 | 20.0 | -.9 | 95.00 |
| 253D | 437155.2 | 3557428.0 | 10 | .70 | .060 | 37.0 | 35.0 | 36.0 | -.9 | 150.00 |
| 253E | 437840.2 | 3557930.2 | 10 | .60 | .020 | 41.0 | 5.0 | 16.0 | -.9 | 218.00 |
| 253F | 438209.3 | 3558484.7 | 10 | .60 | .250 | 28.0 | 2.0 | 34.0 | -.9 | 180.00 |
| 253G | 438473.0 | 3558986.2 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 254 | 434100.2 | 3557265.4 | 30 | .50 | .150 | 20.0 | -.9 | 18.0 | 24.0 | 60.00 |
| 255 | 439342.8 | 3560174.4 | 10 | 12.00 | .420 | 36.0 | 2.0 | 33.0 | 1512.0 | 154.00 |
| 256 | 440027.8 | 3560597.5 | 10 | .70 | .220 | 36.0 | 4.0 | 32.0 | 1848.0 | 140.00 |
| 257 | 440765.1 | 3560466.6 | 10 | .70 | .190 | 33.0 | 25.0 | 33.0 | 1380.0 | 140.00 |
| 258 | 435155.3 | 3559878.3 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 259 | 435076.9 | 3560801.4 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 260 | 400682.3 | 3560092.9 | 10 | .10 | .050 | 17.0 | 1.0 | 15.0 | -.9 | 62.00 |
| 261 | 400734.4 | 3559275.3 | 10 | -.90 | -.900 | 51.0 | 2.0 | 29.0 | 2.0 | 221.00 |
| 262 | 397520.0 | 3556870.3 | 10 | -.90 | -.900 | 31.0 | 2.0 | 34.0 | -.9 | 131.00 |
| 263 | 397256.2 | 3556236.9 | 10 | 12.70 | .040 | 34.0 | 45.0 | 2090.0 | 133.0 | 410.00 |
| 264 | 396308.1 | 3556209.2 | 10 | .20 | -.900 | 54.0 | -.9 | 26.0 | -.9 | 284.00 |
| 265 | 389434.3 | 3555777.3 | 10 | .40 | .010 | 21.0 | 34.0 | 56.0 | -.9 | 78.00 |
| 266 | 389249.5 | 3555117.6 | 10 | .10 | .030 | 26.0 | 1.0 | 13.0 | -.9 | 120.00 |
| 267 | 388773.2 | 3551529.6 | 10 | .20 | -.900 | 23.0 | 28.0 | 41.0 | 5.0 | 67.00 |
| 268 | 388219.8 | 3551001.2 | 10 | .10 | .010 | 36.0 | 1.0 | 14.0 | 2.0 | 117.00 |
| 269 | 391115.0 | 3548341.2 | 10 | .10 | .010 | 57.0 | 2.0 | 29.0 | -.9 | 156.00 |
| 270 | 386978.4 | 3545354.6 | 10 | -.90 | .010 | 23.0 | 1.0 | 17.0 | 3.0 | 62.00 |
| 271 | 386477.7 | 3544800.0 | 10 | .40 | .060 | 48.0 | 2.0 | 38.0 | 2.0 | 164.00 |
| 272 | 386722.6 | 3557118.7 | 10 | .10 | .050 | 36.0 | -.9 | 23.0 | 3.0 | 87.00 |
| 273 | 385721.6 | 3556748.0 | 10 | -.90 | .080 | 34.0 | -.9 | 18.0 | -.9 | 144.00 |
| 274 | 383986.2 | 3561071.5 | 10 | -.90 | -.900 | 22.0 | 27.0 | 17.0 | 3.0 | 78.00 |
| 275 | 371016.5 | 3541190.6 | 10 | -.90 | -.900 | 27.0 | -.9 | 22.0 | -.9 | 119.00 |
| 276 | 368725.8 | 3542031.4 | 10 | .10 | -.900 | 75.0 | 1.0 | 22.0 | -.9 | 82.00 |
| 277 | 368909.8 | 3541398.6 | 10 | -.90 | -.900 | 27.0 | -.9 | 24.0 | -.9 | 152.00 |
| 278 | 361560.0 | 3537985.4 | 10 | .10 | .020 | 30.0 | 1.0 | 23.0 | -.9 | 213.00 |
| 279 | 353058.3 | 3545253.5 | 10 | -.90 | .010 | 12.0 | -.9 | 14.0 | -.9 | 42.00 |
| 280 | 353743.1 | 3545439.1 | 10 | -.90 | .030 | 25.0 | -.9 | 24.0 | 2.0 | 86.00 |
| 281 | 356979.0 | 3540221.0 | 10 | .20 | .060 | 22.0 | -.9 | 28.0 | -.9 | 144.00 |
| 282 | 356767.9 | 3539587.6 | 10 | .10 | .020 | 12.0 | 1.0 | 17.0 | -.9 | 52.00 |
| 283 | 358240.6 | 3536318.9 | 10 | .20 | -.900 | 22.0 | -.9 | 31.0 | -.9 | 134.00 |
| 284 | 358240.1 | 3535553.9 | 10 | 3.80 | -.900 | 42.0 | 72.0 | 548.0 | 20.0 | 200.00 |
| 284A | 358977.3 | 3535132.9 | 10 | -.90 | .040 | 26.0 | 1.0 | 21.0 | 3.0 | 194.00 |
| 284B | 358503.0 | 3534789.3 | 10 | .20 | .010 | 27.0 | 1.0 | 26.0 | 112.0 | 99.00 |
| 285 | 366481.6 | 3533165.3 | 10 | .10 | .030 | 24.0 | -.9 | 24.0 | 10.0 | 90.00 |
| 286 | 366930.0 | 3534168.3 | 10 | -.90 | -.900 | 26.0 | 1.0 | 24.0 | 3.0 | 174.00 |
| 287 | 371987.6 | 3536021.9 | 10 | -.90 | .010 | 25.0 | 2.0 | 21.0 | 2.0 | 121.00 |
| 288 | 372171.4 | 3535230.9 | 10 | .20 | -.900 | 40.0 | 1.0 | 31.0 | -.9 | 212.00 |
| 289 | 380074.2 | 3538565.7 | 10 | .20 | -.900 | 42.0 | 1.0 | 26.0 | 2.0 | 180.00 |
| 290 | 380574.2 | 3538091.6 | 10 | .20 | -.900 | 56.0 | 2.0 | 46.0 | 7.0 | 165.00 |
| 291 | 386525.7 | 3537572.6 | 10 | .20 | -.900 | 34.0 | 2.0 | 26.0 | 9.0 | 135.00 |

TABLE AD-24

KANTISHNA HILLS AREA - 100 SERIES - BUNDTZEN ET AL 1976



ATOMIC ABSORBTION TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AU | CU | MO | PB | SB | ZN |
|---|---|---|---|---|---|---|---|---|---|---|
| 292 | 384444.5 | 3536435.4 | 10 | .50 | -.900 | 36.0 | 2.0 | 30.0 | 39.0 | 105.00 |
| 293 | 347990.0 | 3526676.4 | 10 | -.90 | -.900 | 26.0 | -.9 | 26.0 | 38.0 | 82.00 |
| 294 | 348435.2 | 3522852.3 | 10 | .10 | -.900 | 28.0 | -.9 | 27.0 | 37.0 | 91.00 |
| 295 | 349093.7 | 3522932.3 | 10 | -.90 | -.900 | 38.0 | 1.0 | 27.0 | 7.0 | 77.00 |
| 296 | 359393.5 | 3527167.5 | 10 | .10 | -.900 | 30.0 | 1.0 | 23.0 | 6.0 | 133.00 |
| 297 | 358890.1 | 3522366.0 | 10 | -.90 | -.900 | 28.0 | 1.0 | 46.0 | 16.0 | 134.00 |
| 298 | 358861.8 | 3519279.8 | 10 | -.90 | -.900 | 26.0 | -.9 | 27.0 | 8.0 | 143.00 |
| 299 | 358282.0 | 3518725.0 | 10 | -.90 | -.900 | 40.0 | 1.0 | 24.0 | -.9 | 48.00 |
| 300 | 360210.1 | 3527353.3 | 10 | -.90 | .020 | 28.0 | -.9 | 24.0 | 6.0 | 88.00 |
| 301 | 364369.0 | 3524114.7 | 10 | -.90 | -.900 | 32.0 | -.9 | 32.0 | 8.0 | 84.00 |
| 302 | 367924.7 | 3524805.6 | 10 | .10 | -.900 | 31.0 | -.9 | 41.0 | 10.0 | 200.00 |
| 303 | 367371.3 | 3524250.9 | 10 | .20 | -.900 | 33.0 | -.9 | 27.0 | 20.0 | 91.00 |
| 304 | 372981.1 | 3524786.5 | 10 | .10 | -.900 | 34.0 | -.9 | 38.0 | 10.0 | 110.00 |
| 305 | 377616.9 | 3525927.3 | 10 | .10 | -.900 | 36.0 | 1.0 | 48.0 | 8.0 | 105.00 |
| 306 | 382383.8 | 3526171.5 | 10 | -.90 | -.900 | 32.0 | 1.0 | 30.0 | 9.0 | 107.00 |
| 307 | 382409.6 | 3525459.3 | 10 | -.90 | -.900 | 32.0 | -.9 | 28.0 | 18.0 | 88.00 |
| 308 | 384673.6 | 3524117.3 | 10 | -.90 | -.900 | 30.0 | -.9 | 28.0 | 8.0 | 105.00 |
| 309 | 387676.2 | 3524596.4 | 10 | -.90 | -.900 | 33.0 | -.9 | 34.0 | 18.0 | 101.00 |
| 310 | 390231.8 | 3526314.6 | 10 | -.90 | .020 | 32.0 | -.9 | 33.0 | 12.0 | 108.00 |
| 311 | 390468.5 | 3525734.6 | 10 | -.90 | -.900 | 40.0 | -.9 | 32.0 | 10.0 | 108.00 |
| 312 | 386837.5 | 3530873.1 | 10 | .10 | -.900 | 39.0 | 1.0 | 25.0 | 5.0 | 168.00 |
| 313 | 387706.3 | 3530505.0 | 10 | -.90 | -.900 | 38.0 | 1.0 | 35.0 | 10.0 | 116.00 |
| 314A | 404675.9 | 3545379.9 | 10 | -.90 | -.900 | 22.0 | -.9 | 21.0 | 7.0 | 78.00 |
| 314B | 403990.6 | 3544561.2 | 10 | .20 | .030 | -.9 | 3.0 | 34.0 | 18.0 | 273.00 |
| 314C | 409468.9 | 3545334.0 | 10 | .10 | -.900 | 53.0 | 2.0 | 31.0 | 17.0 | 257.00 |
| 315 | 410760.1 | 3546575.5 | 10 | -.90 | -.900 | 26.0 | 1.0 | 30.0 | 5.0 | 123.00 |
| 316 | 414711.6 | 3548427.6 | 10 | -.90 | .080 | 36.0 | -.9 | 34.0 | 12.0 | 228.00 |
| 317 | 416476.5 | 3549116.0 | 10 | .20 | -.900 | 102.0 | 1.0 | 33.0 | 39.0 | 267.00 |
| 318 | 416663.2 | 3552756.3 | 10 | -.90 | -.900 | 190.0 | 2.0 | 40.0 | 6.0 | 432.00 |
| 319 | 417374.4 | 3552915.6 | 10 | -.90 | -.900 | 58.0 | 2.0 | 34.0 | 36.0 | 70.00 |
| 320 | 420294.8 | 3548462.0 | 10 | .10 | -.900 | 40.0 | 1.0 | 25.0 | 31.0 | 97.00 |
| 321 | 419557.0 | 3547880.6 | 10 | -.90 | -.900 | 81.0 | 2.0 | 27.0 | 18.0 | 357.00 |
| 322 | 430852.5 | 3544124.7 | 10 | -.90 | -.900 | 52.0 | -.9 | 32.0 | 11.0 | 140.00 |
| 323 | 425137.2 | 3543325.2 | 10 | -.90 | .070 | 53.0 | -.9 | 28.0 | 16.0 | 183.00 |
| 324 | 424873.3 | 3542428.0 | 10 | .10 | -.900 | 36.0 | 1.0 | 21.0 | 17.0 | 78.00 |
| 325 | 410888.0 | 3540588.0 | 10 | .60 | -.900 | 67.0 | 1.0 | 54.0 | 40.0 | 380.00 |
| 326 | 410439.9 | 3540086.2 | 10 | -.90 | -.900 | 51.0 | -.9 | 28.0 | 16.0 | 108.00 |
| 327 | 405041.6 | 3540790.7 | 10 | .10 | -.900 | 80.0 | 1.0 | 38.0 | -.9 | 512.00 |
| 328 | 404616.9 | 3535646.4 | 10 | .20 | -.900 | 39.0 | -.9 | 30.0 | 5.0 | 127.00 |
| 329 | 404164.6 | 3528339.2 | 10 | .20 | -.900 | 48.0 | 3.0 | 28.0 | 27.0 | 116.00 |
| 330 | 407037.6 | 3532141.6 | 10 | -.90 | .020 | 38.0 | -.9 | 20.0 | -.9 | 106.00 |
| 331 | 406432.2 | 3532615.6 | 10 | .90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 332 | 408697.6 | 3533568.4 | 10 | .20 | -.900 | 40.0 | -.9 | 22.0 | 5.0 | 103.00 |
| 333 | 412913.1 | 3536423.2 | 10 | -.90 | -.900 | 46.0 | 1.0 | 28.0 | 25.0 | 103.00 |
| 334 | 412940.3 | 3537768.5 | 10 | -.90 | -.900 | 43.0 | 1.0 | 32.0 | 20.0 | 103.00 |
| 335 | 431898.9 | 3534335.3 | 10 | .10 | -.900 | 37.0 | -.9 | 37.0 | 1.0 | 154.00 |
| 336 | 431450.4 | 3533754.0 | 10 | .40 | -.900 | 60.0 | -.9 | 48.0 | 4.0 | 124.00 |
| 337 | 431898.1 | 3533120.9 | 10 | .10 | -.900 | 45.0 | 1.0 | 29.0 | 5.0 | 85.00 |
| 338 | 426810.5 | 3533194.5 | 10 | .40 | -.900 | 63.0 | 2.0 | 44.0 | 2.0 | 438.00 |

TABLE AD-24

KANTISHNA HILLS AREA - 100 SERIES - BUNDTZEN ET AL 1976 
ATOMIC ABSORBTION TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AU | CU | MO | PB | SB | ZN |
|---|---|---|---|---|---|---|---|---|---|---|
| 339 | 426862.7 | 3532534.5 | 10 | .20 | -.900 | 42.0 | 1.0 | 27.0 | 38.0 | 83.00 |
| 340 | 424409.8 | 3530657.4 | 10 | .10 | -.900 | 38.0 | -.9 | 25.0 | 12.0 | 76.00 |
| 341 | 423751.1 | 3531026.3 | 10 | -.90 | -.900 | 40.0 | 1.0 | 34.0 | 6.0 | 126.00 |
| 342 | 417528.0 | 3528326.6 | 10 | -.90 | -.900 | 30.0 | -.9 | 34.0 | 3.0 | 104.00 |
| 343 | 417711.9 | 3527455.6 | 10 | .20 | -.900 | 40.0 | -.9 | 34.0 | 12.0 | 75.00 |
| 344 | 415566.1 | 3525585.8 | 10 | .30 | -.900 | 47.0 | -.9 | 35.0 | 14.0 | 107.00 |
| 345 | 415354.6 | 3524372.1 | 10 | .10 | -.900 | 40.0 | -.9 | 28.0 | 12.0 | 73.00 |
| 346 | 412588.1 | 3522389.8 | 10 | .30 | -.900 | 51.0 | -.9 | 39.0 | 14.0 | 92.00 |
| 347 | 412483.2 | 3523154.6 | 10 | -.90 | -.900 | 42.0 | 1.0 | 34.0 | 26.0 | 90.00 |
| 348 | 409717.0 | 3521594.4 | 10 | .20 | -.900 | 53.0 | -.9 | 48.0 | 103.0 | 88.00 |
| 349 | 413119.6 | 3529934.6 | 20 | -.90 | -.900 | 24.0 | -.9 | 38.0 | 19.0 | 96.00 |
| 350 | 410564.1 | 3528295.5 | 20 | -.90 | -.900 | 13.0 | -.9 | 24.0 | -.9 | 60.00 |
| 351 | 427410.0 | 3523664.6 | 10 | -.90 | -.900 | 98.0 | -.9 | 30.0 | -.9 | 108.00 |
| 352 | 424033.2 | 3519964.9 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 353 | 421842.5 | 3516081.6 | 10 | .10 | .030 | 50.0 | -.9 | 32.0 | 7.0 | 120.00 |
| 354 | 419413.3 | 3510534.8 | 10 | -.90 | -.900 | 30.0 | -.9 | 18.0 | 8.0 | 74.00 |
| 355 | 412373.5 | 3508388.6 | 10 | .20 | .020 | 31.0 | 1.0 | 31.0 | -.9 | 96.00 |
| 356 | 412367.5 | 3499993.3 | 10 | -.90 | -.900 | 22.0 | -.9 | 30.0 | -.9 | 102.00 |
| 357 | 409180.5 | 3503712.3 | 10 | .20 | -.900 | 56.0 | -.9 | 33.0 | 21.0 | 92.00 |
| 358 | 406569.5 | 3502019.8 | 10 | .20 | -.900 | 28.0 | 2.0 | 40.0 | 44.0 | 136.00 |
| 359 | 404935.4 | 3502308.3 | 10 | .70 | -.900 | 38.0 | 1.0 | 47.0 | 65.0 | 177.00 |
| 360 | 402888.6 | 3509767.4 | 10 | .30 | -.900 | 40.0 | -.9 | 28.0 | 4.0 | 78.00 |
| 361 | 401835.1 | 3509634.0 | 10 | .20 | -.900 | 37.0 | -.9 | 32.0 | 21.0 | 104.00 |
| 362 | 393043.2 | 3516189.6 | 10 | .10 | -.900 | 30.0 | -.9 | 30.0 | 20.0 | 92.00 |
| 363 | 390145.2 | 3514497.2 | 10 | .30 | -.900 | 38.0 | 2.0 | 85.0 | 3.0 | 147.00 |
| 364 | 389117.6 | 3513651.7 | 10 | .80 | -.900 | 40.0 | -.9 | 122.0 | 6.0 | 193.00 |
| 365 | 385246.5 | 3514015.5 | 10 | -.90 | -.900 | 31.0 | 1.0 | 26.0 | 14.0 | 84.00 |
| 366 | 383771.2 | 3513142.9 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 367 | 379820.8 | 3513110.9 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 368 | 378003.1 | 3512211.5 | 10 | -.90 | -.900 | 18.0 | -.9 | 25.0 | 7.0 | 70.00 |
| 369 | 367679.2 | 3511563.7 | 10 | -.90 | .040 | 72.0 | 2.0 | 44.0 | 1026.0 | 206.00 |
| 370 | 369762.5 | 3515892.6 | 10 | .30 | .020 | 36.0 | 2.0 | 30.0 | 18.0 | 197.00 |
| 371 | 369420.6 | 3516577.9 | 10 | -.90 | -.900 | 36.0 | 1.0 | 29.0 | 2.0 | 526.00 |
| 372 | 353985.4 | 3512467.4 | 10 | .20 | .070 | 33.0 | 1.0 | 26.0 | 66.0 | 79.00 |
| 373 | 353221.2 | 3511754.1 | 10 | -.90 | .040 | 36.0 | 1.0 | 25.0 | 21.0 | 108.00 |
| 374 | 350959.0 | 3515892.1 | 10 | .20 | -.900 | 38.0 | -.9 | 29.0 | 8.0 | 138.00 |
| 375 | 355958.5 | 3509384.0 | 10 | -.90 | .040 | 20.0 | -.9 | 10.0 | 10.0 | 46.00 |
| 376 | 355431.3 | 3508565.5 | 10 | -.90 | .010 | 30.0 | 1.0 | 22.0 | 26.0 | 116.00 |
| 377 | 348713.9 | 3505680.8 | 10 | .20 | -.900 | 42.0 | 1.0 | 28.0 | 10.0 | 121.00 |
| 378 | 349530.1 | 3505365.4 | 10 | .20 | .030 | 27.0 | 1.0 | 26.0 | 14.0 | 117.00 |
| 379 | 352425.4 | 3502916.4 | 10 | .60 | .020 | 31.0 | 1.0 | 33.0 | 9.0 | 169.00 |
| 380 | 351687.9 | 3502651.6 | 10 | -.90 | .020 | 38.0 | 1.0 | 21.0 | 9.0 | 107.00 |
| 381 | 342889.5 | 3498998.9 | 10 | .40 | .020 | 38.0 | -.9 | 28.0 | 12.0 | 150.00 |
| 382 | 340544.3 | 3496911.7 | 10 | .40 | -.900 | 30.0 | -.9 | 26.0 | -.9 | 108.00 |
| 383 | 355741.6 | 3499650.3 | 10 | .30 | .020 | 55.0 | -.9 | 36.0 | 11.0 | 229.00 |
| 384 | 356400.2 | 3499888.6 | 10 | .70 | .090 | 29.0 | 1.0 | 39.0 | 9.0 | 177.00 |
| 385 | 354581.3 | 3497248.3 | 10 | .20 | .040 | 43.0 | 5.0 | 33.0 | 13.0 | 169.00 |
| 386 | 355397.7 | 3497196.7 | 10 | .20 | -.900 | 50.0 | 22.0 | 28.0 | 7.0 | 155.00 |
| 387 | 358954.2 | 3499074.6 | 10 | .60 | .050 | 32.0 | -.9 | 40.0 | 9.0 | 206.00 |

TABLE AD-24



KANTISHNA HILLS AREA - 100 SERIES - BUNDTZEN ET AL 1976
ATOMIC ABSORBTION TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AU | CU | MO | PB | SB | ZN |
|---|---|---|---|---|---|---|---|---|---|---|
| 388 | 364299.5 | 3497895.2 | 10 | .80 | -.900 | 32.0 | -.9 | 36.0 | 12.0 | 144.00 |
| 389 | 363903.8 | 3496865.9 | 10 | .80 | -.900 | 45.0 | 1.0 | 78.0 | 14.0 | 321.00 |
| 390 | 364296.7 | 3493542.9 | 10 | 2.80 | .120 | 60.0 | 4.0 | 48.0 | 8.0 | 184.00 |
| 391 | 365218.5 | 3493649.7 | 10 | 1.10 | .590 | 44.0 | 2.0 | 58.0 | 8.0 | 329.00 |
| 392 | 378385.9 | 3493088.2 | 10 | .60 | -.900 | 58.0 | 1.0 | 72.0 | 14.0 | 153.00 |
| 393 | 379228.6 | 3493089.4 | 10 | .40 | .020 | 50.0 | 1.0 | 58.0 | 12.0 | 140.00 |
| 394 | 379491.4 | 3492113.8 | 10 | .40 | -.900 | 34.0 | 1.0 | 43.0 | 8.0 | 97.00 |
| 395 | 381048.0 | 3496494.7 | 10 | .20 | -.900 | 69.0 | 1.0 | 32.0 | 8.0 | 225.00 |
| 396 | 380943.5 | 3497787.0 | 10 | .60 | .020 | 55.0 | 2.0 | 52.0 | 8.0 | 128.00 |
| 397 | 387157.8 | 3496477.0 | 10 | .20 | -.900 | 65.0 | 1.0 | 49.0 | 9.0 | 153.00 |
| 398 | 387895.2 | 3496530.8 | 10 | .40 | -.900 | 64.0 | 2.0 | 44.0 | 11.0 | 123.00 |
| 399 | 389347.2 | 3502125.0 | 10 | -.90 | -.900 | -.9 | -.9 | -.9 | -.9 | -.90 |
| 400 | 390296.3 | 3503656.2 | 10 | .60 | -.900 | 45.0 | 1.0 | 43.0 | 26.0 | 177.00 |
| 401 | 394087.7 | 3502210.9 | 10 | 2.00 | -.900 | 76.0 | -.9 | 46.0 | 18.0 | 182.00 |
| 402 | 396747.0 | 3501317.8 | 10 | .50 | -.900 | 44.0 | -.9 | 32.0 | 5.0 | 135.00 |
| 403 | 410010.5 | 3484784.2 | 10 | -.90 | -.900 | 16.0 | 23.0 | 15.0 | -.9 | 93.00 |
| 404 | 402340.2 | 3485726.1 | 10 | -.90 | -.900 | 16.0 | 2.0 | 18.0 | 2.0 | 100.00 |
| 405 | 398387.0 | 3486988.9 | 10 | -.90 | .010 | 37.0 | -.9 | 20.0 | 3.0 | 96.00 |
| 406 | 397358.7 | 3486618.2 | 10 | .10 | -.900 | 26.0 | 25.0 | 12.0 | 1.0 | 71.00 |
| 407 | 394197.5 | 3489650.7 | 10 | -.90 | -.900 | 32.0 | 2.0 | 24.0 | -.9 | 94.00 |
| 408 | 391350.8 | 3489964.4 | 10 | -.90 | -.900 | 38.0 | -.9 | 26.0 | -.9 | 84.00 |
| 409 | 386467.7 | 3488087.9 | 10 | .50 | .040 | 45.0 | 1.0 | 44.0 | 17.0 | 113.00 |
| 410 | 383123.8 | 3489191.0 | 10 | .20 | -.900 | 36.0 | 1.0 | 40.0 | 7.0 | 102.00 |
| 411 | 383699.6 | 3483626.1 | 10 | .20 | -.900 | 36.0 | 1.0 | 28.0 | 4.0 | 88.00 |
| 412 | 384961.7 | 3480436.2 | 10 | .20 | -.900 | 33.0 | 1.0 | 34.0 | 9.0 | 82.00 |
| 413 | 374877.6 | 3484246.6 | 10 | -.90 | .020 | 34.0 | 1.0 | 22.0 | 16.0 | 103.00 |
| 414 | 375456.7 | 3483799.0 | 10 | -.90 | -.900 | 32.0 | 1.0 | 29.0 | 6.0 | 135.00 |
| 415 | 372374.0 | 3481473.4 | 10 | .20 | -.900 | 44.0 | 1.0 | 28.0 | 14.0 | 156.00 |
| 416 | 370583.4 | 3481866.5 | 10 | .20 | -.900 | 39.0 | 1.0 | 23.0 | 32.0 | 97.00 |
| 417 | 367348.1 | 3488007.9 | 10 | .40 | .040 | 39.0 | 1.0 | 41.0 | 15.0 | 223.00 |
| 418 | 367848.3 | 3487665.7 | 10 | .40 | .020 | 40.0 | 1.0 | 47.0 | 5.0 | 207.00 |
| 419 | 364392.7 | 3478929.8 | 10 | -.90 | -.900 | 26.0 | -.9 | 16.0 | 9.0 | 81.00 |
| 420 | 361890.4 | 3478266.8 | 10 | -.90 | -.900 | 26.0 | -.9 | 21.0 | 6.0 | 98.00 |
| 421 | 356069.9 | 3477730.9 | 10 | -.90 | -.900 | 14.0 | -.9 | 13.0 | 6.0 | 50.00 |
| 422 | 346221.1 | 3478692.8 | 10 | .20 | .120 | 45.0 | -.9 | 44.0 | 27.0 | 204.00 |
| 423 | 328367.8 | 3481991.0 | 10 | .10 | .070 | 35.0 | -.9 | 33.0 | -.9 | 176.00 |
| 424 | 327577.7 | 3481989.8 | 10 | .20 | -.900 | 58.0 | 1.0 | 25.0 | -.9 | 180.00 |
| 425 | 322942.1 | 3481139.1 | 10 | .20 | .010 | 28.0 | -.9 | 26.0 | -.9 | 169.00 |
| 426 | 317411.9 | 3481474.2 | 10 | -.90 | -.900 | 24.0 | 1.0 | 22.0 | 5.0 | 112.00 |
| 427 | 316119.3 | 3478175.1 | 10 | .10 | -.900 | 24.0 | -.9 | 24.0 | 5.0 | 92.00 |
| 428 | 316775.3 | 3474377.7 | 10 | -.90 | -.900 | 18.0 | -.9 | 14.0 | 4.0 | 75.00 |
| 429 | 317723.7 | 3474853.8 | 10 | .30 | -.900 | 26.0 | -.9 | 23.0 | 9.0 | 129.00 |
| 430 | 320772.2 | 3464913.8 | 10 | .20 | -.900 | 36.0 | -.9 | 43.0 | 39.0 | 128.00 |

TABLE AD-25

KANTISHNA HILLS

HINDERMAN, 1982 ANALYTICAL RESULTS

TABLE AD-25



KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AL | AS | B | BA | BE | CA | CD | CR | CU | FE | WFE | LA | LI | MN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q009 | 425692.2 | 3560405.9 | 10 | -.90 | 10000.0 | -.9 | 20.0 | 30.0 | 2.0 | 500.0 | 10.0 | -.9 | 20.0 | 50000.0 | -.9 | 200.0 | 20.0 | 700.0 |
| Q010 | 426277.0 | 3560574.2 | 52 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 7.0 | -.9 | -.9 | -.9 |
| Q012 | 424465.3 | 3559094.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| Q013 | 420714.0 | 3560414.7 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X007 | 441139.8 | 3564932.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X008 | 442166.2 | 3573220.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X055 | 418310.0 | 3521117.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X056 | 422092.3 | 3524099.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X072 | 354849.6 | 3550898.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X073 | 354429.0 | 3551755.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X074 | 370965.6 | 3559894.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X075 | 400652.2 | 3559899.8 | 10 | -.90 | 100000.0 | -.9 | 30.0 | 100.0 | 3.0 | 1000.0 | 20.0 | 10.0 | 10.0 | 20000.0 | -.9 | 100.0 | 50.0 | 500.0 |
| X077 | 444997.2 | 3563635.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X078 | 430333.7 | 3564736.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X079 | 429442.7 | 3564048.9 | 10 | -.90 | 70000.0 | -.9 | 30.0 | 100.0 | 5.0 | 5000.0 | 20.0 | 10.0 | 30.0 | 50000.0 | -.9 | 300.0 | 50.0 | 1000.0 |
| X080 | 426285.9 | 3569999.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X087 | 355052.6 | 3491620.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X088 | 354692.5 | 3491894.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X089 | 404051.5 | 3529177.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X090 | 404264.1 | 3528405.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X091 | 408565.2 | 3534461.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X092 | 413095.1 | 3537766.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X093 | 417936.7 | 3537602.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X099 | 387397.2 | 3496540.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X100 | 387926.1 | 3496604.3 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X134 | 426534.8 | 3556236.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X136 | 372212.4 | 3492824.5 | 30 | 700.00 | 1000.0 | 10000.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.0 | 700.0 | 20000.0 | -.9 | 20.0 | 10.0 | 20.0 |
| X137 | 372864.9 | 3491802.8 | 30 | 1.00 | 70000.0 | -.9 | 10.0 | 1000.0 | 2.0 | 5000.0 | -.9 | -.9 | 10.0 | 20000.0 | -.9 | 20.0 | 20.0 | 200.0 |
| X138 | 373912.2 | 3490769.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X154 | 363164.7 | 3558109.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X155 | 389003.0 | 3551384.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X156 | 385777.7 | 3556835.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X157 | 388342.6 | 3551324.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X158 | 371690.6 | 3541208.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X159 | 410917.9 | 3540547.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X160 | 410587.1 | 3540081.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X165 | 425520.9 | 3559988.3 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X166 | 425213.5 | 3560261.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X167 | 416796.8 | 3552340.9 | 10 | -.90 | 100000.0 | -.9 | 30.0 | 10.0 | 3.0 | 1000.0 | 10.0 | 10.0 | 50.0 | 20000.0 | -.9 | 300.0 | 50.0 | 500.0 |
| X168 | 417542.9 | 3552610.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X169 | 419505.3 | 3538059.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X170 | 425259.7 | 3542596.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X171 | 436618.0 | 3546922.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X172 | 437730.1 | 3547101.8 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X173 | 423510.9 | 3520653.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X179 | 335704.9 | 3473739.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X180 | 426617.5 | 3565501.7 | 30 | -.90 | 70000.0 | -.9 | 30.0 | 1000.0 | 2.0 | 2000.0 | 5.0 | 30.0 | 10.0 | 50000.0 | -.9 | 20.0 | 20.0 | 500.0 |
| X181 | 436599.4 | 3562130.3 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X183 | 348128.9 | 3531657.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |

TABLE AO-25

KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982



SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | MO | NA | NB | NI | PB | SB | SC | SM | WSO4 | SR | WTDS | TI | U3O8P | U3O8T | V | Y | ZN | WZN | ZR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q009 | -.9 | 5000.0 | -.9 | 15.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1000.0 | 36.0 | -.9 | 50.0 | 70.0 | -.90 | -.90 | 50.0 |
| Q010 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 200.0 | -.9 | 37.0 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | .09 | -.9 |
| Q012 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| Q013 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X007 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X008 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X055 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X056 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X072 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X073 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X074 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 7.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X075 | -.9 | 7000.0 | 20.0 | 50.0 | 10.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | 2000.0 | 17.0 | -.9 | 50.0 | 20.0 | -.90 | -.90 | 100.0 |
| X077 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X078 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X079 | -.9 | 7000.0 | 20.0 | 150.0 | 10.0 | -.9 | 10.0 | -.9 | -.9 | 100.0 | -.9 | 3000.0 | 18.0 | -.9 | 50.0 | 100.0 | 200.00 | -.90 | 300.0 |
| X080 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X087 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X088 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X089 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X090 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X091 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X092 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X093 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X099 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X100 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X134 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X136 | -.9 | 100.0 | 20.0 | -.9 | 10000.0 | 10000.0 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | -.9 | 10.0 | -.9 | 2000.00 | -.90 | -.9 |
| X137 | -.9 | 30000.0 | 20.0 | 5.0 | 70.0 | -.9 | 10.0 | -.9 | -.9 | 200.0 | -.9 | 1500.0 | -.9 | -.9 | 20.0 | 20.0 | 300.00 | -.90 | 100.0 |
| X138 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X154 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X155 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X156 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X157 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X158 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 9.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X159 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 9.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X160 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X165 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X166 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X167 | -.9 | 7000.0 | 20.0 | 20.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | 2000.0 | 55.0 | -.9 | 30.0 | 50.0 | -.90 | -.90 | 20.0 |
| X168 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 7.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X169 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X170 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X171 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X172 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X173 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X179 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | 8.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X180 | -.9 | 10000.0 | 30.0 | 20.0 | 30.0 | -.9 | 10.0 | -.9 | -.9 | 200.0 | -.9 | 5000.0 | 2.0 | 2.0 | 50.0 | 10.0 | -.90 | -.90 | 100.0 |
| X181 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X183 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |

TABLE AD-25

KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982 
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AL | AS | B | BA | BE | CA | CD | CR | CU | FE | WFE | LA | LI | MN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X184 | 344405.3 | 3548818.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X185 | 338775.3 | 3534905.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X186 | 336589.2 | 3526597.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X201 | 384887.9 | 3481128.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X203 | 371618.3 | 3479059.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X204 | 369633.2 | 3479590.8 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X207 | 346851.1 | 3486334.3 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X208 | 354438.5 | 3488865.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X209 | 389067.1 | 3513495.8 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X210 | 390044.6 | 3514418.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X211 | 374053.1 | 3511016.3 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X212 | 368539.4 | 3510749.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X213 | 365277.7 | 3510895.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X214 | 364701.2 | 3512653.8 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X215 | 371769.0 | 3518737.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X216 | 355212.2 | 3498321.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X217 | 363849.8 | 3497417.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X218 | 360422.0 | 3527243.3 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X219 | 359199.0 | 3535198.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X220 | 358515.0 | 3534691.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X221 | 359374.0 | 3536566.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X222 | 372108.7 | 3535282.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X223 | 372185.6 | 3536045.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X224 | 385042.4 | 3536949.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X225 | 384599.5 | 3536275.2 | 10 | -.90 | 100000.0 | -.9 | 30.0 | 50.0 | 2.0 | 1000.0 | -.9 | 10.0 | 10.0 | 15000.0 | -.9 | 100.0 | 50.0 | 500.0 |
| X226 | 400917.4 | 3559126.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X227 | 389748.7 | 3555799.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X228 | 389077.4 | 3555395.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X229 | 357144.6 | 3540193.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X230 | 407134.5 | 3545010.4 | 10 | -.90 | 70000.0 | -.9 | 50.0 | 30.0 | 2.0 | 700.0 | 7.0 | 10.0 | 30.0 | 70000.0 | -.9 | 200.0 | 50.0 | 300.0 |
| X231 | 400261.8 | 3539264.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X251 | 383089.8 | 3525202.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X252 | 387174.4 | 3531080.4 | 10 | -.90 | 10000.0 | -.9 | 50.0 | 300.0 | 2.0 | 2000.0 | 5.0 | 20.0 | 15.0 | 20000.0 | -.9 | 100.0 | 50.0 | 200.0 |
| X253 | 387623.9 | 3530302.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X282 | 396112.5 | 3542154.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X283 | 400552.2 | 3540945.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X284 | 418357.4 | 3545062.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X289 | 354497.8 | 3484085.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X304 | 444626.6 | 3562748.0 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X331 | 375588.9 | 3529560.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X332 | 370944.9 | 3530140.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X333 | 366794.2 | 3528832.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X351 | 395577.6 | 3521945.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X352 | 390843.3 | 3518013.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X353 | 380040.6 | 3519586.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X354 | 369309.4 | 3519256.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X376 | 388222.6 | 3540053.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X377 | 381545.9 | 3544651.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X445 | 320762.8 | 3468538.1 | 30 | -.90 | 70000.0 | -.9 | -.9 | -.9 | -.9 | 50000.0 | 30.0 | 70.0 | 50.0 | 100000.0 | -.9 | -.9 | 30.0 | 700.0 |

TABLE AD-25

KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982 
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | MO | NA | NB | NI | PB | SB | SC | SM | WSO4 | SR | WTDS | TI | U3O8P | U3O8T | V | Y | ZN | WZN | ZR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X184 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X185 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X186 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X201 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X203 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X204 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X207 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X208 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X209 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X210 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X211 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X212 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X213 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X214 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X215 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X216 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X217 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X218 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X219 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X220 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X221 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X222 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X223 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X224 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X225 | -.9 | 10000.0 | 20.0 | 10.0 | 10.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | 2000.0 | 11.0 | -.9 | 50.0 | 10.0 | -.90 | -.90 | 50.0 |
| X226 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X227 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X228 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X229 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X230 | -.9 | 7000.0 | 20.0 | 20.0 | 10.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | 1500.0 | 13.0 | -.9 | 50.0 | 30.0 | -.90 | -.90 | 30.0 |
| X231 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X251 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X252 | -.9 | 10000.0 | 20.0 | 20.0 | 20.0 | -.9 | 10.0 | -.9 | -.9 | 100.0 | -.9 | 2000.0 | 12.0 | -.9 | 100.0 | 10.0 | -.90 | -.90 | 100.0 |
| X253 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X282 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X283 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X284 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X289 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X304 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X331 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X332 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X333 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X351 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X352 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X353 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X354 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X376 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X377 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X445 | 2.0 | 20000.0 | 20.0 | 30.0 | 30.0 | -.9 | 50.0 | -.9 | -.9 | 200.0 | -.9 | 7000.0 | -.9 | -.9 | 300.0 | 20.0 | -.90 | -.90 | 30.0 |

TABLE AD-25



KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AL | AS | B | BA | BE | CA | CO | CR | CU | FE | WFE | LA | LI | MN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X446 | 316814.7 | 3469468.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X451 | 339696.6 | 3497467.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X452 | 342566.5 | 3499920.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X453 | 327920.9 | 3485787.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X454 | 322324.4 | 3482909.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X455 | 316402.5 | 3480568.8 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X483 | 402803.1 | 3509727.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X484 | 402061.2 | 3509590.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X485 | 395341.0 | 3502836.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X486 | 395063.6 | 3502395.6 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X595 | 411152.0 | 3554586.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X596 | 411290.2 | 3554793.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X597 | 413526.8 | 3553885.5 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X730 | 413011.8 | 3558414.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X731 | 418193.0 | 3561489.3 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X732 | 371324.7 | 3493905.7 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X733 | 386172.5 | 3507769.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X734 | 404322.9 | 3517790.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X735 | 408273.9 | 3516120.6 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X736 | 401359.4 | 3515709.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X737 | 393158.3 | 3497961.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X738 | 389485.0 | 3490936.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X739 | 384348.2 | 3494250.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X740 | 378562.1 | 3500354.3 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X741 | 382679.4 | 3502270.8 | 30 | -.90 | 20000.0 | 1000.0 | 10.0 | 200.0 | -.9 | 300.0 | -.9 | 10.0 | 5.0 | 15000.0 | -.9 | -.9 | 70.0 | 200.0 |
| X742 | 376631.8 | 3505108.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X743 | 369744.9 | 3500577.4 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X744 | 367258.2 | 3506060.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X749 | 435381.6 | 3557781.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X750 | 432052.7 | 3561625.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X774 | 429125.2 | 3561659.9 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X775 | 424733.9 | 3558426.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X826 | 425424.0 | 3558591.7 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X827 | 427163.5 | 3556958.4 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X828 | 427140.9 | 3556246.2 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X872 | 414536.5 | 3553328.9 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X873 | 413231.0 | 3554527.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X874 | 407180.9 | 3553959.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X875 | 409437.2 | 3561156.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X895 | 416759.2 | 3552817.2 | 52 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X896 | 419269.4 | 3554726.3 | 52 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.1 | -.9 | -.9 | -.9 |
| X897 | 418693.0 | 3554821.8 | 52 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X917 | 417238.4 | 3552143.6 | 10 | -.90 | 70000.0 | -.9 | 20.0 | 50.0 | 2.0 | 200.0 | -.9 | 10.0 | 20.0 | 20000.0 | -.9 | 50.0 | 50.0 | 100.0 |
| X918 | 416964.3 | 3551808.1 | 10 | -.90 | 150000.0 | -.9 | 30.0 | 100.0 | 5.0 | 2000.0 | 20.0 | 10.0 | 20.0 | 15000.0 | -.9 | 300.0 | 50.0 | 2000.0 |
| X920 | 416375.8 | 3554016.1 | 10 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X925 | 417678.7 | 3552738.4 | 52 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 9.9 | -.9 | -.9 | -.9 |
| X971 | 429872.9 | 3557673.8 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X972 | 425684.6 | 3548525.1 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X973 | 419161.6 | 3543006.8 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |

TABLE AD-25



KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | MO | NA | NB | NI | PB | SB | SC | SM | WSO4 | SR | WTDS | TI | U3O8P | U3O8T | V | Y | ZN | WZN | ZR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X446 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X451 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X452 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X453 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X454 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 7.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X455 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X483 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X484 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X485 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X486 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X595 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 9.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X596 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 7.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X597 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 6.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X730 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X731 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X732 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X733 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X734 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X735 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X736 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X737 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X738 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X739 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X740 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X741 | 2.0 | 500.0 | 20.0 | 10.0 | 15.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | 1000.0 | -.9 | -.9 | 70.0 | -.9 | -.90 | -.90 | 20.0 |
| X742 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X743 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X744 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X749 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X750 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X774 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X775 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X826 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X827 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X828 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X872 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X873 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X874 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X875 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X895 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | 9.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X896 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 250.0 | -.9 | 58.0 | -.9 | 22.0 | -.9 | -.9 | -.9 | -.90 | .36 | -.9 |
| X897 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | 7.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X917 | -.9 | 5000.0 | -.9 | -.9 | 10.0 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | 700.0 | 20.0 | -.9 | 30.0 | 10.0 | -.90 | -.90 | 20.0 |
| X918 | -.9 | 5000.0 | -.9 | 50.0 | 10.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2000.0 | 65.0 | -.9 | 30.0 | 100.0 | 200.00 | -.90 | 70.0 |
| X920 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 9.0 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X925 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 600.0 | -.9 | 79.0 | -.9 | 8.0 | -.9 | -.9 | -.9 | -.90 | .57 | -.9 |
| X971 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X972 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X973 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |

TABLE AD-25



KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | AL | AS | B | BA | BE | CA | CO | CR | CU | FE | WFE | LA | LI | MN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X974 | 434898.2 | 3550007.0 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9. | -.9 | -.9 | -.9 | -.9 |
| X990 | 341900.8 | 3474751.8 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X991 | 339424.9 | 3473924.2 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X992 | 428188.7 | 3567701.5 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| X993 | 423746.4 | 3563840.4 | 30 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |

TABLE AD-25



KANTISHNA HILLS AREA - Q & X SERIES - HINDERMAN 1982
SEMI - QUANITATIVE TECHNIQUES

WATER RESULTS IN PPB AND MG/L (INDICATED BY A W BEFORE THE ELEMENT)
SEDIMENT RESULTS IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | MO | NA | NB | NI | PB | SB | SC | SM | WSO4 | SR | WTDS | TI | U3O8P | U3O8T | V | Y | ZN | WZN | ZR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X974 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X990 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X991 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X992 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |
| X993 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.90 | -.90 | -.9 |

TABLE AD-26

KANTISHNA HILLS

PROSPECT LOCATIONS

TABLE AD-26



PROSPECT LOCATIONS

| ID | X | Y | IV CODE |
|---|---|---|---|
| 1 | 324668.4 | 3466387.7 | 40 |
| 2 | 328243.8 | 3473625.7 | 40 |
| 3 | 333730.0 | 3472962.1 | 40 |
| 4 | 334172.1 | 3473609.4 | 40 |
| 5 | 336405.2 | 3474230.4 | 40 |
| 6 | 336644.5 | 3475966.7 | 40 |
| 7 | 341402.8 | 3477279.3 | 40 |
| 8 | 329571.1 | 3478103.6 | 40 |
| 9 | 335025.4 | 3481429.6 | 40 |
| 10 | 336233.5 | 3482133.6 | 40 |
| 11 | 335916.6 | 3485444.9 | 40 |
| 12 | 336306.8 | 3486120.2 | 40 |
| 13 | 335883.5 | 3477732.6 | 40 |
| 14 | 339195.0 | 3479959.5 | 40 |
| 15 | 340831.8 | 3480888.6 | 40 |
| 16 | 338701.1 | 3481004.2 | 40 |
| 17 | 345605.0 | 3484340.3 | 40 |
| 18 | 340697.2 | 3490798.3 | 40 |
| 19 | 341363.0 | 3487688.1 | 40 |
| 20 | 342286.5 | 3486894.8 | 40 |
| 21 | 342560.8 | 3483901.8 | 40 |
| 22 | 342103.5 | 3487771.9 | 40 |
| 23 | 343340.8 | 3487735.4 | 40 |
| 24 | 344243.0 | 3487101.3 | 40 |
| 25 | 345281.7 | 3489949.9 | 40 |
| 26 | 345417.9 | 3489259.1 | 40 |
| 27 | 346005.9 | 3488687.1 | 40 |
| 28 | 347083.6 | 3488602.4 | 40 |
| 29 | 347757.6 | 3489084.5 | 40 |
| 30 | 349433.3 | 3488744.5 | 40 |
| 31 | 345689.7 | 3486186.9 | 40 |
| 32 | 347236.6 | 3486775.3 | 40 |
| 33 | 348138.4 | 3486960.0 | 40 |
| 34 | 353821.8 | 3489196.2 | 40 |
| 35 | 354611.0 | 3491656.0 | 40 |
| 36 | 355444.2 | 3491340.9 | 40 |
| 37 | 356145.4 | 3491848.5 | 40 |
| 38 | 348195.1 | 3490418.8 | 40 |
| 39 | 351229.4 | 3494714.2 | 40 |
| 40 | 351465.9 | 3495526.1 | 40 |
| 41 | 352525.1 | 3498189.3 | 40 |
| 42 | 353596.9 | 3497919.9 | 40 |
| 43A | 353979.9 | 3484199.1 | 40 |
| 43B | 359078.0 | 3484633.0 | 40 |
| 44 | 357836.1 | 3491983.6 | 40 |
| 45 | 360757.4 | 3491871.0 | 40 |
| 46 | 360684.7 | 3492903.3 | 40 |
| 47 | 359966.4 | 3492686.8 | 40 |
| 48 | 361998.5 | 3492785.4 | 40 |
| 49 | 368221.0 | 3492073.6 | 40 |

TABLE AD-26



PROSPECT LOCATIONS

| ID | X | Y | IV CODE |
|---|---|---|---|
| 50 | 369713.2 | 3493429.6 | 40 |
| 51 | 369141.4 | 3497012.5 | 40 |
| 52 | 372802.3 | 3496957.4 | 40 |
| 53 | 375785.5 | 3497133.6 | 40 |
| 54 | 372375.0 | 3494275.7 | 40 |
| 55 | 373558.4 | 3493369.1 | 40 |
| 56 | 379295.4 | 3493965.9 | 40 |
| 57 | 372924.7 | 3498327.4 | 40 |
| 58 | 381195.3 | 3496551.5 | 40 |
| 59 | 383724.6 | 3497375.0 | 40 |
| 60 | 385487.0 | 3501443.8 | 40 |
| 61 | 380755.6 | 3499311.6 | 40 |
| 62 | 384441.9 | 3502557.7 | 40 |
| 63A | 377327.3 | 3508393.9 | 40 |
| 63B | 367663.1 | 3511928.0 | 40 |
| 64 | 376068.9 | 3505261.2 | 40 |
| 65 | 386051.9 | 3502642.3 | 40 |
| 66AB | 392050.6 | 3509016.4 | 40 |
| 66C | 394218.4 | 3510907.2 | 40 |
| 67 | 394827.5 | 3513504.4 | 40 |
| 68 | 401765.7 | 3517922.5 | 40 |
| 69 | 402598.4 | 3520090.4 | 40 |
| 70A | 424104.1 | 3537709.4 | 40 |
| 70B | 413902.6 | 3530085.5 | 40 |
| 71 | 422020.2 | 3546804.9 | 40 |
| 72A | 436718.7 | 3556647.0 | 40 |
| 72B | 433498.6 | 3556477.8 | 40 |
| 73 | 439095.1 | 3559297.8 | 40 |
| 74 | 440171.0 | 3560824.5 | 40 |
| 75 | 445473.3 | 3570177.7 | 40 |
| 76A | 435970.1 | 3562137.1 | 40 |
| 76B | 433934.6 | 3563597.1 | 40 |
| 77A | 418313.4 | 3569578.5 | 40 |
| 77B | 418610.9 | 3570652.8 | 40 |
| 78 | 436061.7 | 3577534.6 | 40 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROSPECT

RAA, 1971 ANALYTICAL RESULTS

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 590307.7 | 3375524.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 27.0 | -.9 | -.9 |
| 2 | 590934.2 | 3375496.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 28.0 | -.9 | -.9 |
| 3 | 591530.0 | 3375517.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 4 | 592055.9 | 3375556.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 60.0 | -.9 | -.9 |
| 5 | 592612.4 | 3375556.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 6 | 593198.3 | 3375577.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 7 | 593745.1 | 3375557.0 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 8 | 594370.4 | 3375599.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 9 | 595531.8 | 3375660.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 10 | 596098.2 | 3375660.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 11 | 596833.7 | 3375646.9 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 12 | 597280.3 | 3375682.6 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 13 | 597955.9 | 3375686.7 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 14 | 590908.7 | 3374126.0 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 15 | 591534.2 | 3374158.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 16 | 592070.7 | 3374157.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 17 | 593223.3 | 3374158.6 | 20 | .50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 10.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 10.0 | -.9 | -.9 |
| 18 | 593878.2 | 3374211.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 19.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 19 | 594394.9 | 3374210.2 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 20 | 594911.5 | 3374218.6 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 21 | 595506.8 | 3374269.5 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 22 | 596125.8 | 3374102.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 23 | 596718.8 | 3374282.8 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 24 | 597295.2 | 3374273.5 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 25 | 597950.6 | 3374296.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 15.0 | -.9 | -.9 |
| 26 | 599043.7 | 3374296.0 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 18.0 | -.9 | -.9 |
| 27 | 599719.3 | 3374300.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 20.0 | -.9 | -.9 |
| 28 | 581615.5 | 3372594.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 29 | 582906.6 | 3372630.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 20.0 | -.9 | -.9 |
| 30 | 583969.3 | 3372658.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 32 | 585142.8 | 3372600.9 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 27.0 | -.9 | -.9 |
| 33 | 586323.8 | 3372682.5 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 12.0 | -.9 | -.9 |
| 34 | 587506.0 | 3372694.8 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 15.0 | -.9 | -.9 |
| 35 | 588687.9 | 3372726.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 36 | 589780.9 | 3372726.0 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 37 | 592046.0 | 3372746.9 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 12.0 | -.9 | -.9 |
| 38 | 592671.3 | 3372789.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 39 | 593177.5 | 3372816.9 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 40 | 593734.1 | 3372806.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 22.0 | -.9 | -.9 |
| 41 | 594320.2 | 3372817.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 32.0 | -.9 | -.9 |
| 42 | 594906.2 | 3372828.7 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 32.0 | -.9 | -.9 |
| 43 | 595532.0 | 3372841.0 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 17.0 | -.9 | -.9 |
| 44 | 596127.7 | 3372872.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 122.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 45 | 596704.0 | 3372872.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 46 | 597399.2 | 3372887.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 47 | 597895.8 | 3372905.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 48 | 599077.6 | 3372937.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 25.0 | -.9 | -.9 |
| 49 | 600289.6 | 3372950.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 50 | 601501.5 | 3372973.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 1 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 2 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 3 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 4 | -.9 | -.9 | -.9 | 190.00 | -.9 |
| 5 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 6 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 7 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 8 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 9 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 10 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 11 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 12 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 13 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 14 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 15 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 16 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 17 | -.9 | -.9 | -.9 | 50.00 | -.9 |
| 18 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 19 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 20 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 21 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 22 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 23 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 24 | -.9 | -.9 | -.9 | 145.00 | -.9 |
| 25 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 26 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 27 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 28 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 29 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 30 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 32 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 33 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 34 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 35 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 36 | -.9 | -.9 | -.9 | 50.00 | -.9 |
| 37 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 38 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 39 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 40 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 41 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 42 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 43 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 44 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 45 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 46 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 47 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 48 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 49 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 50 | -.9 | -.9 | -.9 | 160.00 | -.9 |

DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | 602583.0 | 3373025.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 52 | 603895.5 | 3373009.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 53 | 603681.2 | 3373329.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 20.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 54 | 604168.3 | 3373316.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 55 | 604148.0 | 3372779.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 56 | 593811.7 | 3372353.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 22.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 57 | 597611.3 | 3372696.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 |
| 58 | 597949.3 | 3372688.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 59 | 593178.5 | 3372201.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 60 | 594390.5 | 3372214.8 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 61 | 596167.1 | 3372327.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 30.0 | -.9 | -.9 |
| 62 | 596730.8 | 3372476.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 63 | 597915.3 | 3372359.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 35.0 | -.9 | -.9 |
| 64 | 593779.5 | 3371925.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 65 | 595275.7 | 3372166.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 1.2 | -.9 | -.9 | -.9 | -.9 |
| 66 | 595853.9 | 3372058.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 98.0 | -.9 | -.9 | -.9 | 30.0 | -.9 | 30.0 | -.9 | -.9 |
| 67 | 593216.9 | 3371716.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 67.0 | -.9 | -.9 | -.9 | 4.5 | -.9 | 27.0 | -.9 | -.9 |
| 68 | 594246.4 | 3371931.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 69 | 594944.9 | 3371767.9 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 70 | 594631.4 | 3372074.5 | 20 | 5.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 220.0 | -.9 | -.9 | -.9 | 13.0 | -.9 | 35.0 | -.9 | -.9 |
| 71 | 595281.6 | 3371829.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 520.0 | -.9 | -.9 | -.9 | 12.0 | -.9 | 30.0 | -.9 | -.9 |
| 72 | 596136.5 | 3371810.3 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 99.0 | -.9 | -.9 | -.9 | 44.0 | -.9 | 20.0 | -.9 | -.9 |
| 73 | 596721.0 | 3371910.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 63.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 74 | 597020.8 | 3371811.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 930.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 75 | 597408.1 | 3371825.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 |
| 76 | 597645.2 | 3371903.6 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 17.0 | -.9 | 17.0 | -.9 | -.9 |
| 77 | 597845.0 | 3371841.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 78 | 594073.5 | 3371598.0 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 79 | 594369.3 | 3371727.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 55.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 80 | 594628.9 | 3371657.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 110.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 25.0 | -.9 | -.9 |
| 81 | 595831.8 | 3371620.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 300.0 | -.9 | -.9 | -.9 | 5.5 | -.9 | 27.0 | -.9 | -.9 |
| 82 | 596482.8 | 3371892.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 560.0 | -.9 | -.9 | -.9 | 52.0 | -.9 | 20.0 | -.9 | -.9 |
| 84 | 581580.8 | 3371183.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 84.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 25.0 | -.9 | -.9 |
| 85 | 582382.2 | 3371200.3 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 51.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 28.0 | -.9 | -.9 |
| 86 | 584024.5 | 3371221.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 28.0 | -.9 | -.9 |
| 87 | 585196.6 | 3371242.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 88 | 586328.3 | 3371302.9 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 89 | 587510.5 | 3371315.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 90 | 588702.5 | 3371337.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 91 | 589775.7 | 3371336.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 92 | 590907.9 | 3371366.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 93 | 592079.6 | 3371408.0 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 75.0 | -.9 | -.9 |
| 94 | 593222.1 | 3371418.9 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 49.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 95 | 593788.7 | 3371409.2 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 96 | 594354.9 | 3371419.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 120.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 97 | 595556.8 | 3371442.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 130.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 35.0 | -.9 | -.9 |
| 98 | 596152.4 | 3371473.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 280.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 55.0 | -.9 | -.9 |
| 99 | 596718.6 | 3371483.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 11.0 | -.9 | 25.0 | -.9 | -.9 |
| 100 | 597393.8 | 3371507.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 32.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 51 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 52 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 53 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 54 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 55 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 56 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 57 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 58 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 59 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 60 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 61 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 62 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 63 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 64 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 65 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 66 | -.9 | -.9 | -.9 | 310.00 | -.9 |
| 67 | -.9 | -.9 | -.9 | 155.00 | -.9 |
| 68 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 69 | -.9 | -.9 | -.9 | 114.00 | -.9 |
| 70 | -.9 | -.9 | -.9 | 170.00 | -.9 |
| 71 | -.9 | -.9 | -.9 | 175.00 | -.9 |
| 72 | -.9 | -.9 | -.9 | 180.00 | -.9 |
| 73 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 74 | -.9 | -.9 | -.9 | 240.00 | -.9 |
| 75 | -.9 | -.9 | -.9 | 300.00 | -.9 |
| 76 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 77 | -.9 | -.9 | -.9 | 250.00 | -.9 |
| 78 | -.9 | -.9 | -.9 | 145.00 | -.9 |
| 79 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 80 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 81 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 82 | -.9 | -.9 | -.9 | 170.00 | -.9 |
| 84 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 85 | -.9 | -.9 | -.9 | 9.00 | -.9 |
| 86 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 87 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 88 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 89 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 90 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 91 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 92 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 93 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 94 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 95 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 96 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 97 | -.9 | -.9 | -.9 | 164.00 | -.9 |
| 98 | -.9 | -.9 | -.9 | 121.00 | -.9 |
| 99 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 100 | -.9 | -.9 | -.9 | 145.00 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 | 597970.1 | 3371508.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 12.0 | -.9 | -.9 |
| 102 | 598516.1 | 3371537.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 |
| 103 | 598834.4 | 3371519.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 23.0 | -.9 | -.9 |
| 104 | 599132.3 | 3371529.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 105 | 600303.6 | 3371601.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 132.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 106 | 601486.3 | 3371583.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 107 | 602677.9 | 3371625.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 74.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 108 | 592611.5 | 3371109.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 109 | 593209.5 | 3371011.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 126.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 45.0 | -.9 | -.9 |
| 110 | 593534.9 | 3371152.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 53.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 111 | 593775.3 | 3371041.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 72.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 35.0 | -.9 | -.9 |
| 112 | 594090.3 | 3371211.5 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 170.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 30.0 | -.9 | -.9 |
| 113 | 594371.1 | 3371062.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 94.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 25.0 | -.9 | -.9 |
| 114 | 594625.8 | 3371270.2 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 122.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 25.0 | -.9 | -.9 |
| 115 | 594917.6 | 3371062.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 132.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 116 | 595241.8 | 3371272.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 90.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 117 | 595590.2 | 3371235.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 158.0 | -.9 | -.9 | -.9 | 5.3 | -.9 | 30.0 | -.9 | -.9 |
| 118 | 595847.5 | 3371293.8 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 280.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 30.0 | -.9 | -.9 |
| 119 | 596119.3 | 3371095.0 | 20 | 5.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 192.0 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 |
| 120 | 596714.8 | 3371136.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 320.0 | -.9 | -.9 | -.9 | 10.0 | -.9 | 40.0 | -.9 | -.9 |
| 121 | 597410.4 | 3371130.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 141.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 25.0 | -.9 | -.9 |
| 122 | 597888.1 | 3371088.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 |
| 123 | 598225.2 | 3371130.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 124 | 588686.4 | 3370562.8 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 27.0 | -.9 | -.9 |
| 125 | 589153.5 | 3370559.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 126 | 589729.8 | 3370560.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 41.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 127 | 590940.7 | 3370633.0 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 19.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 128 | 592072.9 | 3370663.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 129 | 592648.2 | 3370723.5 | 20 | 4.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 40.0 | -.9 | -.9 |
| 130 | 592921.7 | 3370991.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 82.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 85.0 | -.9 | -.9 |
| 131 | 593513.0 | 3370704.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 96.0 | -.9 | -.9 | -.9 | 35.0 | -.9 | 30.0 | -.9 | -.9 |
| 132 | 594087.3 | 3370814.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 192.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 133 | 594359.8 | 3370575.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 230.0 | -.9 | -.9 | -.9 | 25.0 | -.9 | 27.0 | -.9 | -.9 |
| 134 | 594593.8 | 3370832.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 220.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 35.0 | -.9 | -.9 |
| 135 | 594926.4 | 3370566.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 170.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 136 | 595259.1 | 3370855.9 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 130.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 137 | 595523.7 | 3371063.9 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 290.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | -.9 | -.9 | -.9 |
| 138 | 595844.1 | 3370926.4 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 180.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 30.0 | -.9 | -.9 |
| 139 | 596496.0 | 3370990.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 140 | 596118.2 | 3370598.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 81.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 32.0 | -.9 | -.9 |
| 141 | 596724.3 | 3370600.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 64.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 39.0 | -.9 | -.9 |
| 142 | 597399.2 | 3370644.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 143 | 597926.0 | 3370633.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 144 | 592307.5 | 3370324.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 20.0 | -.9 | -.9 |
| 145 | 592894.2 | 3370295.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 110.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 146 | 593471.6 | 3370236.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 82.0 | -.9 | -.9 | -.9 | 3.2 | -.9 | 25.0 | -.9 | -.9 |
| 147 | 594076.6 | 3370297.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 220.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 148 | 594623.3 | 3370287.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 270.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 32.0 | -.9 | -.9 |
| 149 | 595268.8 | 3370310.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 260.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 45.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 101 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 102 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 103 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 104 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 105 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 106 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 107 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 108 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 109 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 110 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 111 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 112 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 113 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 114 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 115 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 116 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 117 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 118 | -.9 | -.9 | -.9 | 145.00 | -.9 |
| 119 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 120 | -.9 | -.9 | -.9 | 310.00 | -.9 |
| 121 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 122 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 123 | -.9 | -.9 | -.9 | 190.00 | -.9 |
| 124 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 125 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 126 | -.9 | -.9 | -.9 | 40.00 | -.9 |
| 127 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 128 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 129 | -.9 | -.9 | -.9 | 40.00 | -.9 |
| 130 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 131 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 132 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 133 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 134 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 135 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 136 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 137 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 138 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 139 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 140 | -.9 | -.9 | -.9 | 128.00 | -.9 |
| 141 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 142 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 143 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 144 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 145 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 146 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 147 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 148 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 149 | -.9 | -.9 | -.9 | 100.00 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 150 | 581614.6 | 3369835.0 | 20 | 1.40 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 15.0 | -.9 | -.9 |
| 151 | 582905.5 | 3369880.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 152 | 583988.8 | 3369869.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 153 | 587505.8 | 3369895.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 27.0 | -.9 | -.9 |
| 154 | 588706.7 | 3369977.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 155 | 589173.7 | 3369974.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 156 | 589760.5 | 3369945.8 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 157 | 590365.9 | 3369987.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 39.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 158 | 590893.1 | 3369956.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 159 | 591568.5 | 3369970.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 160 | 592064.6 | 3370007.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 161 | 593196.9 | 3370038.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 110.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 162 | 594348.8 | 3370079.1 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 22.0 | -.9 | -.9 |
| 163 | 594915.3 | 3370069.5 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 92.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 35.0 | -.9 | -.9 |
| 164 | 595550.7 | 3370102.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 32.0 | -.9 | -.9 |
| 165 | 596136.5 | 3370122.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 170.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 35.0 | -.9 | -.9 |
| 166 | 596742.5 | 3370134.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 12.0 | -.9 | -.9 |
| 167 | 597417.7 | 3370158.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 1.5 | -.9 | -.9 |
| 168 | 597964.4 | 3370148.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 169 | 598510.9 | 3370147.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 170 | 599106.5 | 3370178.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 171 | 600278.8 | 3370190.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 172 | 601490.3 | 3370233.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 33.0 | -.9 | -.9 |
| 173 | 602682.4 | 3370246.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 8.0 | -.9 | 25.0 | -.9 | -.9 |
| 174 | 603879.6 | 3371658.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 35.0 | -.9 | -.9 |
| 175 | 603884.0 | 3370288.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 18.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 20.0 | -.9 | -.9 |
| 176 | 587494.4 | 3369418.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 177 | 588695.9 | 3369461.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 178 | 589163.5 | 3369428.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 21.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 179 | 589659.5 | 3369475.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 180 | 590345.2 | 3369470.3 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 181 | 590921.7 | 3369461.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 182 | 591528.0 | 3369452.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 183 | 592083.7 | 3369492.4 | 20 | 2.10 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 47.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 23.0 | -.9 | -.9 |
| 184 | 592332.1 | 3369491.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | -.9 | -.9 | -.9 |
| 185 | 592610.2 | 3369501.1 | 20 | 4.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 490.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 186 | 593002.8 | 3369773.2 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 187 | 593558.0 | 3369842.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 19.0 | -.9 | -.9 | -.9 | -.9 |
| 188 | 593236.0 | 3369513.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 80.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 22.0 | -.9 | -.9 |
| 189 | 593742.6 | 3369521.5 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 90.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 190 | 594095.7 | 3369782.2 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 260.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 191 | 594368.2 | 3369543.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 170.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 27.0 | -.9 | -.9 |
| 192 | 594721.1 | 3369814.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 210.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | -.9 | -.9 | -.9 |
| 193 | 594324.4 | 3369553.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 450.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 37.0 | -.9 | -.9 |
| 194 | 595367.8 | 3369767.9 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 95.0 | -.9 | -.9 | -.9 | 30.0 | -.9 | 35.0 | -.9 | -.9 |
| 195 | 595345.7 | 3369330.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 120.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 35.0 | -.9 | -.9 |
| 196 | 596135.7 | 3369606.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 76.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 197 | 596751.8 | 3369608.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 198 | 597407.3 | 3369622.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 150 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 151 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 152 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 153 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 154 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 155 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 156 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 157 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 158 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 159 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 160 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 161 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 162 | -.9 | -.9 | -.9 | 170.00 | -.9 |
| 163 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 164 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 165 | -.9 | -.9 | -.9 | 145.00 | -.9 |
| 166 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 167 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 168 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 169 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 170 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 171 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 172 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 173 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 174 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 175 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 176 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 177 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 178 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 179 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 180 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 181 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 182 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 183 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 184 | -.9 | -.9 | -.9 | 50.00 | -.9 |
| 185 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 186 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 187 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 188 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 189 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 190 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 191 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 192 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 193 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 194 | -.9 | -.9 | -.9 | 35.00 | -.9 |
| 195 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 196 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 197 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 198 | -.9 | -.9 | -.9 | 110.00 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 199 | 597914.3 | 3369610.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 200 | 598595.3 | 3369306.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 201 | 537485.1 | 3368822.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 202 | 533686.6 | 3368865.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 203 | 589143.7 | 3368861.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 204 | 589769.2 | 3368893.9 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 205 | 590365.2 | 3368905.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 206 | 590901.6 | 3368914.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 207 | 591546.8 | 3368947.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 208 | 592053.3 | 3368965.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 209 | 592366.7 | 3369224.5 | 20 | 3.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 71.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 210 | 592610.1 | 3368945.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 120.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 211 | 592882.9 | 3369252.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 420.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | -.9 | -.9 | -.9 |
| 212 | 593479.2 | 3369244.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 200.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 70.0 | -.9 | -.9 |
| 213 | 593166.3 | 3368955.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 125.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | -.9 | -.9 | -.9 |
| 214 | 593749.1 | 3369154.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 215 | 594035.8 | 3369234.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 280.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 55.0 | -.9 | -.9 |
| 216 | 593732.5 | 3368965.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 20.0 | -.9 | -.9 |
| 217 | 594348.6 | 3368967.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 95.0 | -.9 | -.9 | -.9 | 16.0 | -.9 | 27.0 | -.9 | -.9 |
| 218 | 594641.2 | 3369275.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 219 | 594934.6 | 3368978.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 380.0 | -.9 | -.9 | -.9 | 44.0 | -.9 | 30.0 | -.9 | -.9 |
| 220 | 595550.5 | 3368990.2 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 221 | 596165.9 | 3369022.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 222 | 596732.8 | 3368992.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 223 | 597348.0 | 3369044.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 30.0 | -.9 | -.9 |
| 224 | 597934.2 | 3369045.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 136.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 225 | 598498.0 | 3368628.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 226 | 599123.3 | 3368670.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 227 | 600314.9 | 3368712.8 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 11.0 | -.9 | 30.0 | -.9 | -.9 |
| 228 | 601517.1 | 3368715.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 20.0 | -.9 | -.9 |
| 229 | 602698.5 | 3368777.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 230 | 603900.2 | 3368810.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 20.0 | -.9 | -.9 |
| 231 | 581631.3 | 3368326.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 55.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.9 |
| 232 | 582208.3 | 3368287.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 98.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 40.0 | -.9 | -.9 |
| 233 | 582903.1 | 3368332.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 78.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 234 | 583479.4 | 3368332.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 35.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 235 | 583996.1 | 3368331.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 62.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 60.0 | -.9 | -.9 |
| 236 | 584562.1 | 3368351.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 63.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 237 | 585168.1 | 3368363.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 238 | 585794.0 | 3368365.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 239 | 586280.2 | 3368402.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 55.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 240 | 587476.1 | 3368206.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 25.0 | -.9 | -.9 |
| 241 | 588658.3 | 3368219.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 22.0 | -.9 | -.9 |
| 242 | 589155.0 | 3368226.9 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 243 | 589751.0 | 3368238.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 244 | 590356.2 | 3368289.4 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 245 | 590902.7 | 3368289.0 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 246 | 591538.4 | 3368301.6 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 55.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 26.0 | -.9 | -.9 |
| 247 | 592074.6 | 3368320.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 140.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 2.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 199 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 200 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 201 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 202 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 203 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 204 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 205 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 206 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 207 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 208 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 209 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 210 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 211 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 212 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 213 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 214 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 215 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 216 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 217 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 218 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 219 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 220 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 221 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 222 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 223 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 224 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 225 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 226 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 227 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 228 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 229 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 230 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 231 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 232 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 233 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 234 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 235 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 236 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 237 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 238 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 239 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 240 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 241 | -.9 | -.9 | -.9 | 4.00 | -.9 |
| 242 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 243 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 244 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 245 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 246 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 247 | -.9 | -.9 | -.9 | 120.00 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 248 | 592352.3 | 3368350.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 80.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 249 | 592744.6 | 3368642.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 62.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 20.0 | -.9 | -.9 |
| 250 | 593186.4 | 3368380.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 140.0 | -.9 | -.9 | -.9 | 9.5 | -.9 | 42.0 | -.9 | -.9 |
| 251 | 593713.1 | 3368378.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 160.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 55.0 | -.9 | -.9 |
| 252 | 594075.4 | 3368679.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 79.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | -.9 | -.9 | -.9 |
| 253 | 594328.1 | 3368440.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 254 | 594642.8 | 3368620.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 140.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 255 | 594964.8 | 3368393.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 256 | 595560.6 | 3368414.8 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 140.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 32.0 | -.9 | -.9 |
| 257 | 596143.4 | 3368614.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 258 | 596729.6 | 3368615.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 259 | 597315.6 | 3368626.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 260 | 597921.0 | 3368667.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 261 | 587496.4 | 3367622.0 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 262 | 589174.9 | 3367661.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 27.0 | -.9 | -.9 |
| 263 | 589801.0 | 3367654.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 264 | 590367.2 | 3367664.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 265 | 590933.4 | 3367674.6 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 266 | 592083.9 | 3367794.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 85.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 267 | 592362.5 | 3367775.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 80.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 268 | 592660.2 | 3367795.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 195.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 32.0 | -.9 | -.9 |
| 269 | 592810.3 | 3368131.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 26.0 | -.9 | 20.0 | -.9 | -.9 |
| 270 | 593167.9 | 3368153.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 168.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 70.0 | -.9 | -.9 |
| 271 | 593214.7 | 3367904.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 273 | 593791.0 | 3367905.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 274 | 594113.3 | 3368114.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 92.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 275 | 594780.2 | 3368076.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 17.0 | -.9 | -.9 |
| 276 | 594387.2 | 3367906.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 277 | 594943.6 | 3367906.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 278 | 595569.4 | 3367918.8 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 61.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 |
| 279 | 596155.3 | 3367939.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 90.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 280 | 596760.5 | 3367990.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 30.0 | -.9 | -.9 |
| 281 | 597348.0 | 3367922.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 35.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 282 | 597943.9 | 3367933.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 283 | 581635.9 | 3366947.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 104.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 15.0 | -.9 | -.9 |
| 284 | 582897.5 | 3366962.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 82.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 285 | 584030.1 | 3366972.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 286 | 585212.3 | 3366984.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 287 | 586295.4 | 3366983.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 288 | 587467.2 | 3367025.3 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 289 | 587484.6 | 3366599.1 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 5.0 | -.9 | -.9 |
| 290 | 588678.8 | 3367058.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 291 | 589235.3 | 3367058.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 39.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 292 | 589792.0 | 3367038.5 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 25.0 | -.9 | -.9 |
| 293 | 589819.3 | 3366622.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 294 | 590417.6 | 3367060.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 35.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 295 | 590706.0 | 3367051.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 |
| 296 | 590377.8 | 3366503.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | -.9 | -.9 | -.9 |
| 297 | 590963.8 | 3367080.1 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 248 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 249 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 250 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 251 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 252 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 253 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 254 | -.9 | -.9 | -.9 | 30.00 | -.9 |
| 255 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 256 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 257 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 258 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 259 | -.9 | -.9 | -.9 | 1.50 | -.9 |
| 260 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 261 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 262 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 263 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 264 | -.9 | -.9 | -.9 | 1.50 | -.9 |
| 265 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 266 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 267 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 268 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 269 | -.9 | -.9 | -.9 | 250.00 | -.9 |
| 270 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 271 | -.9 | -.9 | -.9 | 50.00 | -.9 |
| 273 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 274 | -.9 | -.9 | -.9 | 10.00 | -.9 |
| 275 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 276 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 277 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 278 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 279 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 280 | -.9 | -.9 | -.9 | 9.00 | -.9 |
| 281 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 282 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 283 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 284 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 285 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 286 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 287 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 288 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 289 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 290 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 291 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 292 | -.9 | -.9 | -.9 | 8.50 | -.9 |
| 293 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 294 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 295 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 296 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 297 | -.9 | -.9 | -.9 | 85.00 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 298 | 591241.9 | 3367090.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 299 | 591238.1 | 3366742.4 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 300 | 590955.2 | 3366444.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 301 | 591579.3 | 3367111.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 302 | 591838.0 | 3367091.3 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 303 | 591833.5 | 3366783.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 304 | 592066.2 | 3367109.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 160.0 | -.9 | -.9 | -.9 | 12.0 | -.9 | 27.0 | -.9 | -.9 |
| 305 | 592359.2 | 3367397.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 190.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 32.0 | -.9 | -.9 |
| 306 | 592373.7 | 3367140.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 90.0 | -.9 | -.9 | -.9 | 8.0 | -.9 | 25.0 | -.9 | -.9 |
| 307 | 592359.5 | 3366822.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 10.0 | -.9 | 30.0 | -.9 | -.9 |
| 308 | 592657.4 | 3366832.6 | 20 | 4.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 80.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 309 | 592949.8 | 3367150.7 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 215.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 27.0 | -.9 | -.9 |
| 310 | 593213.6 | 3366842.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 78.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 311 | 593208.5 | 3367130.1 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 145.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 30.0 | -.9 | -.9 |
| 312 | 593212.2 | 3367487.6 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 210.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 50.0 | -.9 | -.9 |
| 313 | 593565.7 | 3367162.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 185.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 314 | 593837.9 | 3367499.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 150.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 32.0 | -.9 | -.9 |
| 315 | 593863.4 | 3367183.2 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 210.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 316 | 593808.3 | 3366835.5 | 20 | 5.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 317 | 594151.9 | 3367163.6 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 248.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 318 | 594365.0 | 3366843.7 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 64.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 319 | 594400.2 | 3367172.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 321 | 594687.6 | 3367212.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 120.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 323 | 594976.1 | 3367192.9 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 324 | 595264.6 | 3367173.4 | 20 | 3.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 260.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 27.0 | -.9 | -.9 |
| 325 | 595536.5 | 3367530.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 6.5 | -.9 | 25.0 | -.9 | -.9 |
| 326 | 595582.6 | 3367174.8 | 20 | 2.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 40.0 | -.9 | -.9 |
| 327 | 595549.2 | 3366816.2 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 47.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 30.0 | -.9 | -.9 |
| 328 | 596168.4 | 3367195.6 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 329 | 596476.1 | 3367216.4 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 330 | 596754.5 | 3367206.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 331 | 597091.9 | 3367228.4 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 63.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 332 | 597369.6 | 3367258.1 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 28.0 | -.9 | -.9 |
| 333 | 597648.2 | 3367238.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 39.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 334 | 597965.8 | 3367259.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 1.2 | -.9 | 22.0 | -.9 | -.9 |
| 335 | 598233.9 | 3367269.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 336 | 598551.9 | 3367270.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 49.0 | -.9 | -.9 | -.9 | 4.5 | -.9 | 22.0 | -.9 | -.9 |
| 337 | 598860.0 | 3367261.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 338 | 599128.2 | 3367271.0 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 339 | 600310.0 | 3367303.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 340 | 601522.0 | 3367316.3 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 341 | 591520.7 | 3366494.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 342 | 592087.2 | 3366484.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 120.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 30.0 | -.9 | -.9 |
| 343 | 592682.0 | 3366565.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 160.0 | -.9 | -.9 | -.9 | 15.0 | -.9 | 22.0 | -.9 | -.9 |
| 344 | 592960.2 | 3366565.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 25.0 | -.9 | -.9 |
| 345 | 593564.2 | 3366686.1 | 20 | 3.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 305.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 346 | 594130.4 | 3366696.3 | 20 | 3.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 300.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 75.0 | -.9 | -.9 |
| 347 | 594717.5 | 3366647.7 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 120.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 348 | 595333.0 | 3366579.5 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 298 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 299 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 300 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 301 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 302 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 303 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 304 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 305 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 306 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 307 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 308 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 309 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 310 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 311 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 312 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 313 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 314 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 315 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 316 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 317 | -.9 | -.9 | -.9 | 50.00 | -.9 |
| 318 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 319 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 321 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 323 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 324 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 325 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 326 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 327 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 328 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 329 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 330 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 331 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 332 | -.9 | -.9 | -.9 | 155.00 | -.9 |
| 333 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 334 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 335 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 336 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 337 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 338 | -.9 | -.9 | -.9 | 155.00 | -.9 |
| 339 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 340 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 341 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 342 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 343 | -.9 | -.9 | -.9 | 252.00 | -.9 |
| 344 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 345 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 346 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 347 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 348 | -.9 | -.9 | -.9 | 60.00 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 349 | 596196.2 | 3366749.9 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 350 | 596881.6 | 3366764.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 32.0 | -.9 | -.9 |
| 351 | 597348.3 | 3366780.9 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 352 | 597964.8 | 3366753.2 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 353 | 587512.9 | 3366123.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 354 | 588694.8 | 3366155.7 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 355 | 589777.2 | 3366194.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 20.0 | -.9 | -.9 |
| 356 | 590938.5 | 3366265.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 357 | 591146.8 | 3366282.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 20.0 | -.9 | -.9 |
| 358 | 591624.5 | 3366240.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 64.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | -.9 | -.9 | -.9 |
| 359 | 592111.1 | 3366257.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 8.0 | -.9 | 30.0 | -.9 | -.9 |
| 360 | 592766.7 | 3366270.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 108.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 361 | 593472.1 | 3366275.9 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 340.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 90.0 | -.9 | -.9 |
| 362 | 594087.4 | 3366317.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 97.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 363 | 594702.9 | 3366349.4 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 154.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 364 | 595248.5 | 3366398.5 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 116.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 28.0 | -.9 | -.9 |
| 365 | 595794.8 | 3366408.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 90.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 30.0 | -.9 | -.9 |
| 366 | 581622.8 | 3365437.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 367 | 582904.2 | 3365463.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 368 | 584036.9 | 3365464.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 76.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 35.0 | -.9 | -.9 |
| 369 | 585228.9 | 3365486.6 | 20 | 4.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 300.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 35.0 | -.9 | -.9 |
| 370 | 586310.2 | 3365584.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 22.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 371 | 587523.1 | 3365548.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 372 | 588685.6 | 3365549.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 23.0 | -.9 | -.9 |
| 373 | 589798.2 | 3365569.6 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 374 | 590959.5 | 3365640.6 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 375 | 591530.7 | 3365928.9 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 376 | 591808.2 | 3365968.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 64.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | -.9 |
| 377 | 592106.8 | 3365939.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 | -.9 | -.9 |
| 378 | 592132.1 | 3365632.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 379 | 592693.0 | 3365940.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 89.0 | -.9 | -.9 | -.9 | 10.0 | -.9 | 25.0 | -.9 | -.9 |
| 380 | 593267.0 | 3366070.0 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 80.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 381 | 592986.3 | 3365653.1 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 360.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 35.0 | -.9 | -.9 |
| 382 | 593562.4 | 3365663.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 87.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 383 | 593303.8 | 3366059.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 384 | 594119.0 | 3365653.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 78.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 15.0 | -.9 | -.9 |
| 385 | 594714.6 | 3365684.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 80.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 386 | 594399.8 | 3366070.6 | 20 | 2.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 155.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 387 | 594965.8 | 3366090.7 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 128.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 388 | 595350.2 | 3365707.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 389 | 595571.2 | 3366132.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 390 | 595852.6 | 3365969.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 28.0 | -.9 | -.9 |
| 391 | 596343.1 | 3366127.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 392 | 597359.7 | 3366136.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 4.5 | -.9 | 39.0 | -.9 | -.9 |
| 393 | 597936.2 | 3366126.8 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 23.0 | -.9 | -.9 | -.9 | 65.0 | -.9 | 22.0 | -.9 | -.9 |
| 394 | 599124.7 | 3365781.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 395 | 600297.8 | 3365744.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 396 | 601499.2 | 3365796.8 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 397 | 602700.8 | 3365839.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 349 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 350 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 351 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 352 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 353 | -.9 | -.9 | -.9 | 225.00 | -.9 |
| 354 | -.9 | -.9 | -.9 | 8.50 | -.9 |
| 355 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 356 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 357 | -.9 | -.9 | -.9 | 20.00 | -.9 |
| 358 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 359 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 360 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 361 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 362 | -.9 | -.9 | -.9 | 190.00 | -.9 |
| 363 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 364 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 365 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 366 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 367 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 368 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 369 | -.9 | -.9 | -.9 | 230.00 | -.9 |
| 370 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 371 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 372 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 373 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 374 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 375 | -.9 | -.9 | -.9 | 50.00 | -.9 |
| 376 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 377 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 378 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 379 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 380 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 381 | -.9 | -.9 | -.9 | 220.00 | -.9 |
| 382 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 383 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 384 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 385 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 386 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 387 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 388 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 389 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 390 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 391 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 392 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 393 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 394 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 395 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 396 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 397 | -.9 | -.9 | -.9 | 90.00 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 398 | 603892.6 | 3365871.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 399 | 586330.5 | 3364999.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 35.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 400 | 587502.1 | 3365051.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 401 | 588693.9 | 3365083.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 6.5 | -.9 | 24.0 | -.9 | -.9 |
| 402 | 589796.3 | 3365112.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 47.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 403 | 590948.5 | 3365134.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 17.0 | -.9 | -.9 |
| 404 | 591485.3 | 3365123.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 405 | 591788.4 | 3365402.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 406 | 591773.3 | 3365133.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 17.0 | -.9 | -.9 |
| 407 | 592100.8 | 3365155.1 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 76.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 408 | 592077.8 | 3365332.9 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 20.0 | -.9 | -.9 |
| 409 | 592438.6 | 3365157.1 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 410 | 596853.1 | 3365562.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 22.0 | -.9 | -.9 |
| 412 | 592953.7 | 3365244.9 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 17.0 | -.9 | -.9 |
| 413 | 593599.0 | 3365277.8 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 84.0 | -.9 | -.9 | -.9 | 4.5 | -.9 | 22.0 | -.9 | -.9 |
| 414 | 593834.2 | 3365464.8 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 415 | 594166.1 | 3365238.4 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 102.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 416 | 594370.6 | 3365474.0 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 90.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 417 | 594742.2 | 3365248.9 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 418 | 594956.5 | 3365494.8 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 100.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 27.0 | -.9 | -.9 |
| 419 | 595318.5 | 3365249.6 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 33.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 22.0 | -.9 | -.9 |
| 420 | 595964.5 | 3365242.7 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 86.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 421 | 596108.9 | 3365506.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 4.5 | -.9 | 37.0 | -.9 | -.9 |
| 422 | 597379.4 | 3365580.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 423 | 597955.7 | 3365581.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 20.0 | -.9 | -.9 |
| 424 | 586350.8 | 3364414.7 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 19.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 425 | 587512.6 | 3364456.0 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |
| 426 | 588695.2 | 3364448.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 427 | 589807.7 | 3364468.1 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 86.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 428 | 591569.5 | 3364858.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 |
| 429 | 592085.8 | 3364876.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 17.0 | -.9 | -.9 |
| 430 | 592751.7 | 3364870.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 40.0 | -.9 | -.9 |
| 431 | 593374.7 | 3364860.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 26.0 | -.9 | -.9 |
| 432 | 594411.4 | 3364850.0 | 20 | 2.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 115.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 17.0 | -.9 | -.9 |
| 433 | 595047.0 | 3364872.6 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 50.0 | -.9 | -.9 |
| 434 | 595573.6 | 3364871.5 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 150.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 55.0 | -.9 | -.9 |
| 435 | 596209.5 | 3364874.2 | 20 | 4.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 103.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 60.0 | -.9 | -.9 |
| 436 | 596854.3 | 3364936.8 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 35.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 20.0 | -.9 | -.9 |
| 437 | 597390.8 | 3364936.1 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 39.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 25.0 | -.9 | -.9 |
| 438 | 597917.7 | 3364925.0 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 17.0 | -.9 | -.9 |
| 439 | 592080.5 | 3364618.3 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 12.0 | -.9 | -.9 |
| 440 | 581626.6 | 3364097.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 441 | 582947.5 | 3364134.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 442 | 584040.6 | 3364134.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 443 | 585211.8 | 3364205.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 40.0 | -.9 | -.9 |
| 444 | 586331.3 | 3363828.3 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 16.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 445 | 587502.4 | 3363909.7 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 446 | 588594.7 | 3363912.3 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 447 | 589549.1 | 3363922.8 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 398 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 399 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 400 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 401 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 402 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 403 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 404 | -.9 | -.9 | -.9 | 40.00 | -.9 |
| 405 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 406 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 407 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 408 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 409 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 410 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 412 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 413 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 414 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 415 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 416 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 417 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 418 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 419 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 420 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 421 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 422 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 423 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 424 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 425 | -.9 | -.9 | -.9 | 106.00 | -.9 |
| 426 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 427 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 428 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 429 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 430 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 431 | -.9 | -.9 | -.9 | 15.00 | -.9 |
| 432 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 433 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 434 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 435 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 436 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 437 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 438 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 439 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 440 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 441 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 442 | -.9 | -.9 | -.9 | 135.00 | -.9 |
| 443 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 444 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 445 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 446 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 447 | -.9 | -.9 | -.9 | -.90 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 448 | 589833.7 | 3364121.5 | 20 | 1.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 63.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | -.9 | -.9 | -.9 |
| 449 | 589817.2 | 3363932.4 | 20 | 2.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 285.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 30.0 | -.9 | -.9 |
| 450 | 590979.5 | 3363943.9 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 94.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 451 | 592115.5 | 3364321.8 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 452 | 592092.2 | 3363953.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 453 | 593247.6 | 3364362.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 53.0 | -.9 | -.9 |
| 454 | 594370.6 | 3364352.3 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 110.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 35.0 | -.9 | -.9 |
| 456 | 595572.6 | 3364365.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 25.0 | -.9 | -.9 |
| 457 | 596853.6 | 3364410.7 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 152.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 33.0 | -.9 | -.9 |
| 458 | 597976.8 | 3364391.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 20.0 | -.9 | -.9 |
| 459 | 599159.0 | 3364403.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 22.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 15.0 | -.9 | -.9 |
| 460 | 600340.7 | 3364445.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 461 | 601473.6 | 3364435.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 462 | 602754.2 | 3364501.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 18.0 | -.9 | -.9 |
| 463 | 603917.1 | 3364483.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 464 | 586331.6 | 3363252.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 465 | 587493.4 | 3363293.9 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 466 | 588676.0 | 3363286.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 467 | 589817.8 | 3363336.8 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 468 | 589821.9 | 3363664.5 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 469 | 590940.2 | 3363356.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.5 | -.9 | 27.0 | -.9 | -.9 |
| 470 | 581653.8 | 3362560.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 471 | 582935.7 | 3362556.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 50.0 | -.9 | -.9 |
| 472 | 584057.6 | 3362606.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 473 | 585220.2 | 3362607.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 35.0 | -.9 | -.9 |
| 474 | 586322.2 | 3362656.7 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 30.0 | -.9 | -.9 |
| 475 | 587524.0 | 3362689.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 2.5 | -.9 | 15.0 | -.9 | -.9 |
| 476 | 588696.8 | 3362671.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 25.0 | -.9 | -.9 |
| 477 | 589828.6 | 3362721.7 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 96.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 478 | 590941.7 | 3362711.6 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 20.0 | -.9 | -.9 |
| 479 | 592083.5 | 3362762.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 480 | 593236.1 | 3362763.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 64.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 481 | 594377.5 | 3362833.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 482 | 595559.6 | 3362855.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 483 | 596751.4 | 3362888.3 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 484 | 597923.1 | 3362930.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 485 | 536332.8 | 3362061.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 27.0 | -.9 | -.9 |
| 486 | 587485.9 | 3362033.0 | 20 | 2.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 487 | 588666.9 | 3362114.6 | 20 | 4.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 144.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 |
| 488 | 589829.1 | 3362136.1 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 65.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 |
| 489 | 590961.1 | 3362176.3 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 4.5 | -.9 | 32.0 | -.9 | -.9 |
| 490 | 581548.4 | 3361180.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 45.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 491 | 582978.9 | 3361237.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 78.0 | -.9 | -.9 | -.9 | 6.0 | -.9 | 35.0 | -.9 | -.9 |
| 492 | 584072.5 | 3361206.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 66.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 493 | 585243.9 | 3361268.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 494 | 587515.8 | 3361468.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 89.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| 495 | 588667.0 | 3361548.8 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 496 | 589819.9 | 3361530.2 | 20 | 2.20 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 25.0 | -.9 | -.9 |
| 497 | 590951.8 | 3361580.4 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.3 | -.9 | 30.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 448 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 449 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 450 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 451 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 452 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 453 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 454 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 456 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 457 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 458 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 459 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 460 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 461 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 462 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 463 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 464 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 465 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 466 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 467 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 468 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 469 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 470 | -.9 | -.9 | -.9 | 200.00 | -.9 |
| 471 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 472 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 473 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 474 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 475 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 476 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 477 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 478 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 479 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 480 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 481 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 482 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 483 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 484 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 485 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 486 | -.9 | -.9 | -.9 | 145.00 | -.9 |
| 487 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 488 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 489 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 490 | -.9 | -.9 | -.9 | 75.00 | -.9 |
| 491 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 492 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 493 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 494 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 495 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 496 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 497 | -.9 | -.9 | -.9 | -.90 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 498 | 592127.6 | 3361393.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 55.0 | -.9 | -.9 |
| 499 | 593231.2 | 3361353.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 500 | 594383.1 | 3361394.6 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 66.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 20.0 | -.9 | -.9 |
| 501 | 595574.6 | 3361446.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 502 | 596915.5 | 3361474.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 503 | 581684.9 | 3359682.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 29.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 30.0 | -.9 | -.9 |
| 504 | 583005.6 | 3359729.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 7.0 | -.9 | 30.0 | -.9 | -.9 |
| 505 | 584088.3 | 3359748.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 506 | 585270.4 | 3359770.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 10.0 | -.9 | 30.0 | -.9 | -.9 |
| 507 | 586383.4 | 3359760.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 508 | 587535.7 | 3359781.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 105.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 80.0 | -.9 | -.9 |
| 509 | 588707.2 | 3359833.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 88.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 510 | 589243.7 | 3359842.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 86.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 511 | 589820.1 | 3359832.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 512 | 590972.0 | 3359873.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 30.0 | -.9 | -.9 |
| 513 | 592104.1 | 3359914.0 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 4.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 514 | 593286.6 | 3359906.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 515 | 594408.4 | 3359966.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 5.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 516 | 595611.0 | 3359949.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 517 | 596723.9 | 3359949.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 518 | 597925.4 | 3359991.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 519 | 582962.7 | 3358219.2 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 520 | 584075.1 | 3358248.8 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 75.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 521 | 585286.6 | 3358291.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 522 | 586340.4 | 3358259.9 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 523 | 587552.1 | 3358293.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 524 | 588704.1 | 3358324.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 525 | 589816.7 | 3358343.7 | 20 | 3.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 70.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 23.0 | -.9 | -.9 |
| 526 | 590969.6 | 3358325.1 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 35.0 | -.9 | -.9 |
| 527 | 592061.4 | 3358393.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 528 | 593243.8 | 3358396.0 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 529 | 594415.4 | 3358447.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 530 | 595607.3 | 3358470.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 531 | 596878.4 | 3358515.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 532 | 586373.3 | 3361457.4 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 27.0 | -.9 | -.9 |
| 533 | 595453.3 | 3365492.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 20.0 | -.9 | -.9 |
| 534 | 603886.3 | 3367350.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 18.0 | -.9 | -.9 | -.9 | -.9 | -.9 | 25.0 | -.9 | -.9 |
| 535 | 588678.6 | 3367634.2 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 27.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 600 | 595541.0 | 3371769.3 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 400.0 | -.9 | -.9 | -.9 | 16.0 | -.9 | 40.0 | -.9 | -.9 |
| 601 | 592630.7 | 3368340.5 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 140.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 22.0 | -.9 | -.9 |
| 602 | 591558.3 | 3367736.5 | 20 | 1.70 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 25.0 | -.9 | -.9 |
| H001 | 573961.1 | 3371657.5 | 10 | -.90 | 70.0 | 1500.0 | 1.0 | .7 | 15.0 | 300.0 | 70.0 | 5.0 | 1.5 | 700.0 | -.9 | 70.0 | 15.0 | 20.0 | 100.0 |
| H002 | 574279.8 | 3371619.2 | 10 | -.90 | 70.0 | 1000.0 | 1.0 | .3 | 15.0 | 200.0 | 70.0 | 5.0 | 1.0 | 500.0 | -.9 | 100.0 | 15.0 | 15.0 | 150.0 |
| H003 | 575829.2 | 3367723.5 | 10 | .50 | 100.0 | 1500.0 | 1.0 | .5 | 15.0 | 200.0 | 70.0 | 7.0 | 1.5 | 700.0 | -.9 | 70.0 | 20.0 | 15.0 | 150.0 |
| H004 | 576172.8 | 3373016.7 | 10 | -.90 | 50.0 | 1000.0 | -.9 | 1.5 | 10.0 | 70.0 | 50.0 | 3.0 | .7 | 700.0 | -.9 | 30.0 | 15.0 | 15.0 | 70.0 |
| H005 | 578236.0 | 3365913.1 | 10 | -.90 | 70.0 | 1500.0 | 1.0 | .7 | 15.0 | 300.0 | 70.0 | 5.0 | 1.5 | 500.0 | -.9 | 70.0 | 15.0 | 20.0 | 100.0 |
| 5415 | 581925.8 | 3379206.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 31.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 15.0 | -.9 | -.9 |
| 5906 | 592419.1 | 3381426.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 20.0 | -.9 | -.9 |
| 6181 | 596038.7 | 3380710.9 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 28.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 22.0 | -.9 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 498 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 499 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 500 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 501 | -.9 | -.9 | -.9 | 9.00 | -.9 |
| 502 | -.9 | -.9 | -.9 | 55.00 | -.9 |
| 503 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 504 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 505 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 506 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 507 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 508 | -.9 | -.9 | -.9 | 115.00 | -.9 |
| 509 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 510 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 511 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 512 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 513 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 514 | -.9 | -.9 | -.9 | 60.00 | -.9 |
| 515 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 516 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 517 | -.9 | -.9 | -.9 | 65.00 | -.9 |
| 518 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 519 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 520 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 521 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 522 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 523 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 524 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 525 | -.9 | -.9 | -.9 | 300.00 | -.9 |
| 526 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 527 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 528 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 529 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 530 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 531 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 532 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 533 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 534 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 535 | -.9 | -.9 | -.9 | 40.00 | -.9 |
| 600 | -.9 | -.9 | -.9 | 280.00 | -.9 |
| 601 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 602 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| H001 | .5 | 150.0 | 20.0 | -.90 | 150.0 |
| H002 | .5 | 150.0 | 15.0 | -.90 | 100.0 |
| H003 | .5 | 100.0 | 20.0 | -.90 | 150.0 |
| H004 | .5 | 70.0 | 15.0 | -.90 | 150.0 |
| H005 | .5 | 150.0 | 20.0 | -.90 | 150.0 |
| 5415 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 5906 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6181 | -.9 | -.9 | -.9 | 125.00 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6182 | 596799.4 | 3379834.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 6277 | 605098.3 | 3372982.4 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6367 | 573375.5 | 3372182.7 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 20.0 | -.9 | 20.0 | -.9 | -.9 |
| 6368 | 573625.4 | 3371536.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 1.5 | -.9 | 20.0 | -.9 | -.9 |
| 6369 | 573866.7 | 3370820.4 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 6370 | 574255.9 | 3370159.2 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 54.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6371 | 574332.7 | 3369189.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 15.0 | -.9 | -.9 |
| 6372 | 574973.8 | 3368894.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6373 | 575081.7 | 3368411.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 23.0 | -.9 | -.9 |
| 6374 | 575396.3 | 3367479.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6375 | 575750.5 | 3367115.2 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 41.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6411 | 575879.4 | 3366573.8 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 37.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 28.0 | -.9 | -.9 |
| 6412 | 576683.0 | 3366642.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 47.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 6413 | 577682.9 | 3366290.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 6414 | 577841.8 | 3365730.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 51.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 20.0 | -.9 | -.9 |
| 6415 | 577875.4 | 3364957.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 55.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6416 | 577889.7 | 3364143.8 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6417 | 577962.3 | 3363411.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6418 | 578097.0 | 3363098.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 43.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 35.0 | -.9 | -.9 |
| 6419 | 578268.2 | 3362410.2 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 28.0 | -.9 | -.9 |
| 6420 | 578392.3 | 3361570.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 6421 | 578646.3 | 3360696.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 6422 | 579291.3 | 3360183.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6423 | 579363.5 | 3359471.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6424 | 579583.3 | 3358843.6 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6425 | 579763.3 | 3358214.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 50.0 | -.9 | -.9 | -.9 | 20.0 | -.9 | 25.0 | -.9 | -.9 |
| 6426 | 579747.0 | 3357449.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 40.0 | -.9 | -.9 | -.9 | 20.0 | -.9 | 25.0 | -.9 | -.9 |
| 6427 | 580257.7 | 3356663.9 | 20 | 3.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 3.5 | -.9 | 30.0 | -.9 | -.9 |
| 6428 | 580319.1 | 3356001.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 6429 | 580967.7 | 3355289.5 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6500 | 572083.4 | 3358160.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 55.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6501 | 572338.5 | 3357782.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6502 | 572555.3 | 3357323.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 23.0 | -.9 | -.9 |
| 6503 | 572623.1 | 3356859.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 23.0 | -.9 | -.9 |
| 6504 | 572820.4 | 3356379.8 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 49.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 6506 | 572964.7 | 3356087.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6507 | 573121.0 | 3355675.7 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6508 | 573275.4 | 3355373.5 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6539 | 577333.2 | 3368084.7 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 6541 | 578762.2 | 3368185.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 66.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6542 | 580032.9 | 3368250.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 52.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | -.9 | -.9 | -.9 |
| 6543 | 580817.6 | 3368268.1 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6544 | 581571.2 | 3368354.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |
| 6567 | 580989.9 | 3354029.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 46.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6568 | 580274.2 | 3353488.0 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 30.0 | -.9 | -.9 |
| 6569 | 580370.4 | 3352538.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6570 | 580622.9 | 3351187.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6571 | 581024.4 | 3350397.7 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 32.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 6572 | 580879.2 | 3349052.5 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 30.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |

TABLE AD-27

DUNKLE AREA - SNOOPY PROJECT RAA 1971



* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 6182 | -.9 | -.9 | -.9 | 155.00 | -.9 |
| 6277 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 6367 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6368 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 6369 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6370 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6371 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6372 | -.9 | -.9 | -.9 | 95.00 | -.9 |
| 6373 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6374 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 6375 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6411 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 6412 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6413 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 6414 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 6415 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 6416 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6417 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 6418 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 6419 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6420 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6421 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6422 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 6423 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6424 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 6425 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6426 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6427 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 6428 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 6429 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 6500 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6501 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 6502 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6503 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6504 | -.9 | -.9 | -.9 | 125.00 | -.9 |
| 6506 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6507 | -.9 | -.9 | -.9 | 85.00 | -.9 |
| 6508 | -.9 | -.9 | -.9 | 105.00 | -.9 |
| 6539 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 6541 | -.9 | -.9 | -.9 | 150.00 | -.9 |
| 6542 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 6543 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 6544 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 6567 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 6568 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 6569 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 6570 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6571 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6572 | -.9 | -.9 | -.9 | 70.00 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | X | Y | IV | AG | B | BA | BE | CA | CO | CR | CU | FE | MG | MN | MO | NI | PB | SC | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6644 | 586225.2 | 3351287.3 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 39.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 40.0 | -.9 | -.9 |
| 6645 | 587474.7 | 3350309.3 | 20 | 2.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 166.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 40.0 | -.9 | -.9 |
| 6646 | 587910.8 | 3349808.6 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 6677 | 578442.2 | 3366615.3 | 20 | 2.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 108.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 6678 | 579258.6 | 3367646.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | -.9 | -.9 | -.9 |
| 6680 | 582603.9 | 3379072.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 24.0 | -.9 | -.9 |
| 6681 | 587416.1 | 3357553.6 | 20 | -.90 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 172.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 6682 | 587862.0 | 3356497.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6683 | 587755.0 | 3355242.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 4.0 | -.9 | 25.0 | -.9 | -.9 |
| 6684 | 588387.6 | 3354312.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6685 | 588773.6 | 3353273.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 34.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 40.0 | -.9 | -.9 |
| 6687 | 589770.2 | 3352544.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 1.0 | -.9 | 30.0 | -.9 | -.9 |
| 6688 | 590315.6 | 3351482.3 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 44.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6689 | 590660.7 | 3350511.9 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 56.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 30.0 | -.9 | -.9 |
| 6690 | 590864.6 | 3349655.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 36.0 | -.9 | -.9 | -.9 | 5.0 | -.9 | 30.0 | -.9 | -.9 |
| 6691 | 591350.9 | 3349126.8 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 26.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 25.0 | -.9 | -.9 |
| 6692 | 590440.2 | 3357919.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 58.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 6693 | 591414.5 | 3357328.4 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 42.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 30.0 | -.9 | -.9 |
| 6694 | 592106.6 | 3356400.1 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 48.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6695 | 592618.2 | 3355564.6 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 106.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6821 | 593881.5 | 3354924.5 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6822 | 594633.2 | 3353998.3 | 20 | 1.00 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 24.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 25.0 | -.9 | -.9 |
| 6823 | 595765.5 | 3353462.8 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 60.0 | -.9 | -.9 | -.9 | 2.0 | -.9 | 20.0 | -.9 | -.9 |
| 6825 | 596810.6 | 3352239.2 | 20 | 1.50 | -.9 | -.9 | -.9 | -.9 | -.9 | -.9 | 38.0 | -.9 | -.9 | -.9 | 3.0 | -.9 | 20.0 | -.9 | -.9 |

TABLE AD-27



DUNKLE AREA - SNOOPY PROJECT RAA 1971
* UNKNOWN ANALYTICAL TECHNIQUE

SOIL GEOCHEM DATA
RESULTS SHOWN IN PPM
-.9 VALUE REPRESENTS NOT ASSAYED OR BELOW DETECTION LIMIT

| ID | TI | V | Y | ZN | ZR |
|---|---|---|---|---|---|
| 6644 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6645 | -.9 | -.9 | -.9 | 180.00 | -.9 |
| 6646 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 6677 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6678 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6680 | -.9 | -.9 | -.9 | 130.00 | -.9 |
| 6781 | -.9 | -.9 | -.9 | 250.00 | -.9 |
| 6782 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 6783 | -.9 | -.9 | -.9 | 110.00 | -.9 |
| 6784 | -.9 | -.9 | -.9 | 90.00 | -.9 |
| 6785 | -.9 | -.9 | -.9 | 160.00 | -.9 |
| 6787 | -.9 | -.9 | -.9 | 80.00 | -.9 |
| 6788 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6789 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 6790 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 6791 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6792 | -.9 | -.9 | -.9 | 120.00 | -.9 |
| 6793 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 6794 | -.9 | -.9 | -.9 | 100.00 | -.9 |
| 6795 | -.9 | -.9 | -.9 | 140.00 | -.9 |
| 6821 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 6822 | -.9 | -.9 | -.9 | 70.00 | -.9 |
| 6823 | -.9 | -.9 | -.9 | -.90 | -.9 |
| 6825 | -.9 | -.9 | -.9 | 90.00 | -.9 |

# APPENDIX E

# GEOPHYSICS

By David A. Smith, Consulting Geophysicist

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# GEOPHYSICS

## INTRODUCTION AND SUMMARY

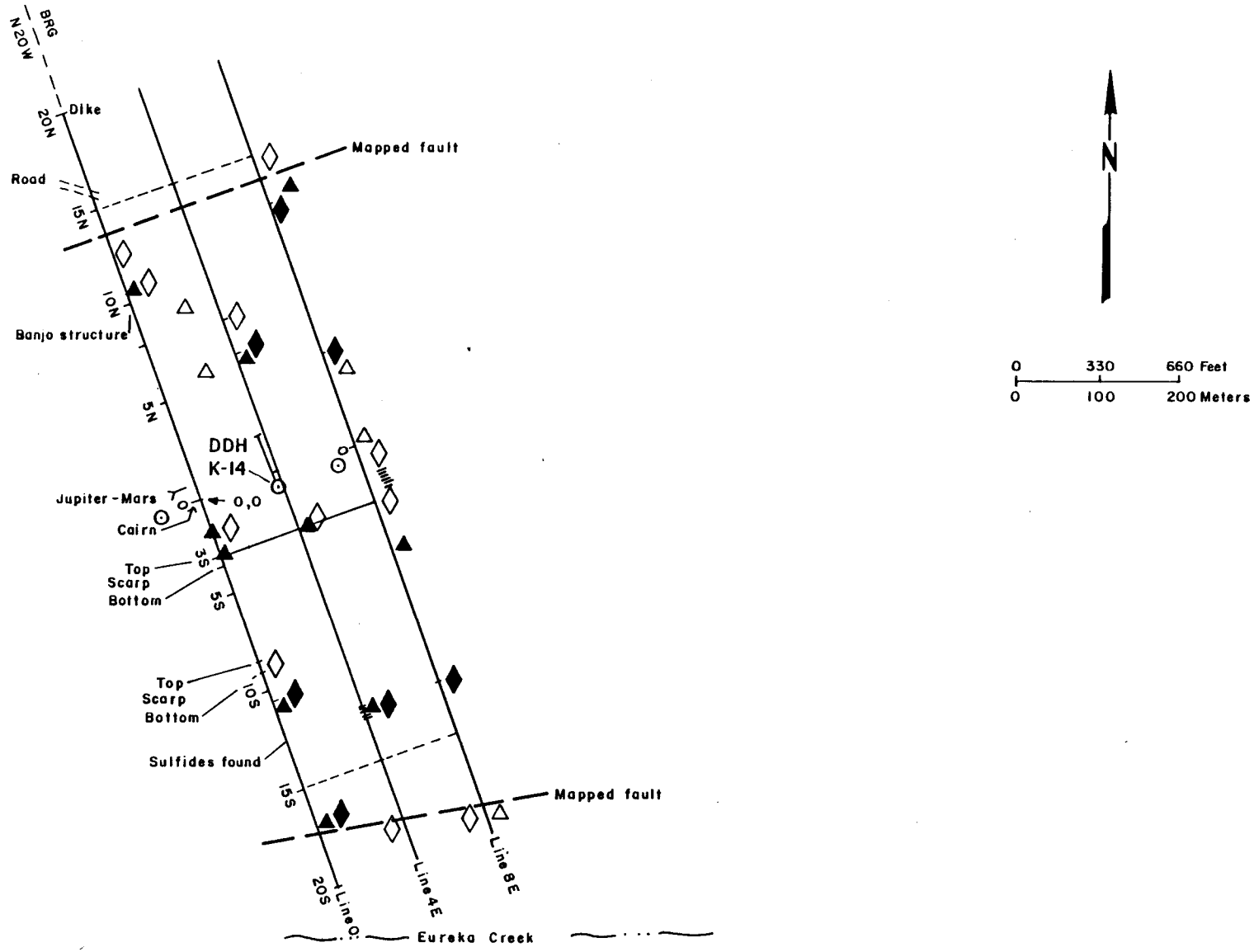
The geophysical program was conducted in two phases. The first phase tested for characteristic signatures over known deposits and their extensions, and the second phase tested anomalous reconnaissance targets selected during the course of the study.

Geophysical surveys consisted of very low frequency electro-magnetics (VLFEM), horizontal loop electro-magnetics (HLEM), magnetics, induced polarization (IP), resistivity, and controlled source audio-magneto-tellurics (CSAMT). A total of 28.7 line miles of data was acquired.

VLFEM, HLEM, IP, and magnetics did not detect the known gold and silver veins in the test areas. Electro-magnetic anomalies were found that could indicate sulfide occurrences of other types. CSAMT may have detected a deep anomaly below a mineralized drill hole intercept on the Jupiter-Mars vein. Electro-magnetics, IP, and magnetics indicated sulfide anomalies are present in three reconnaissance areas tested during the 1983 study.

Test sites were selected for gold-bearing quartz veins, silver-base metal sulfide quartz veins, and quartz-antimony veins. Test surveys were conducted on patented claims, so that any resulting anomalies could be drilled and their sources identified. Antimony deposits within reasonable distance of Kantishna area are all on unpatented claims, and were not tested.

The test program was begun on the Jupiter-Mars grid (fig. E-1). Definitive anomalies were not developed over either the Jupiter-Mars or Banjo Mine structures. Anomalies were revealed approximately 1,000 ft south of the Jupiter-Mars structural zone in an area covered by alluvium. Previously unmapped sulfide float was found in the vicinity of the anomalies during subsequent detailed mapping along the grid lines.




Explanation

- MaxMin Anomaly
- Possible Anomaly
- Conductive Zone
- VLF Anomaly
- Possible Anomaly

Figure E-1 - Jupiter-Mars Grid, Geophysical Anomalies

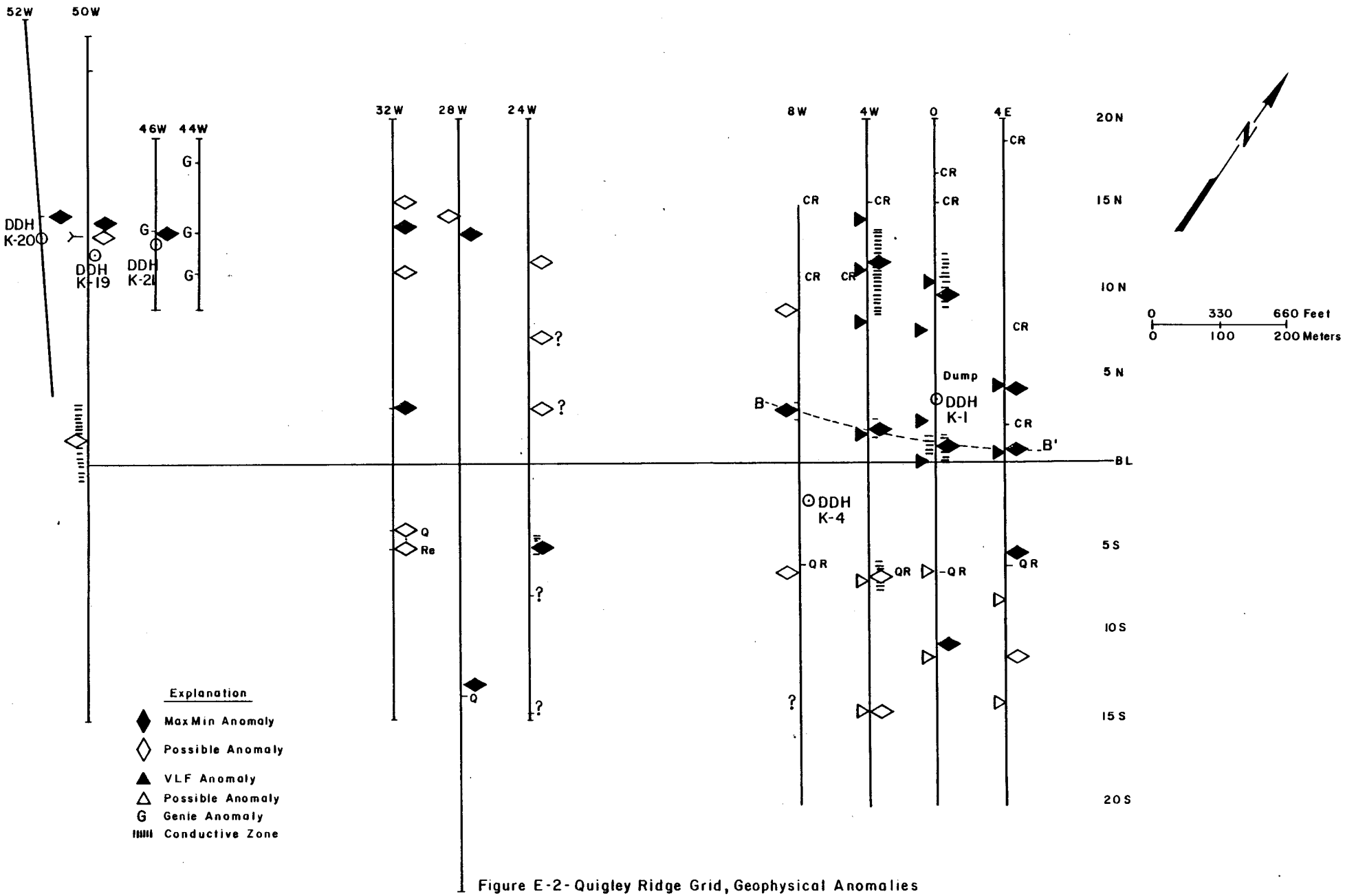



Figure E-2- Quigley Ridge Grid, Geophysical Anomalies

Table E-1 - Amount of Geophysical Survey Coverage in Line Feet

| Sites | Line Survey | VLF(1) | HL(2) | | MAG | IP(3) | CSAMT(4) |
|---|---|---|---|---|---|---|---|
| | | | MM | Genie | | | |
| Test | | | | | | | |
| Jupiter-Mars | 12,000 | 14,000 | 12,000 | 1,600 | 12,000 | 0 | 4,000 |
| Quigley Ridge | 34,000 | 12,000 | 32,000 | 6,900 | 16,000 | 800 | 0 |
| Reconnaissance | | | | | | | |
| Red Dirt | 10,500 | 0 | 7,000 | 10,500 | 10,500 | 0 | 0 |
| Canyon Creek | 4,000 | 0 | 0 | 4,000 | 4,000 | 0 | 0 |
| Alpha Ridge | 3,000 | 0 | 0 | 3,000 | 0 | 0 | 0 |
| Lloyd Prospect | 1,200 | 0 | 0 | 0 | 0 | 1,200 | 0 |
| PROGRAM TOTAL | 64,700 | 26,000 | 51,000 | 26,000 | 42,500 | 2,000 | 4,000 |
| Line Miles | 12.3 | 4.92 | 9.66 | 4.92 | 8.05 | 0.38 | 0.76 |

Total exclusive of line survey: 28.7 line miles.

(1) VLF: very low frequency EM
(2) HL: horizontal loop MM: max-min
(3) IP: induced polarization/resistivity
(4) CSMAT: controlled source audio/magneto tellurics

The test phase was continued on the Quigley Ridge area. Again, correlative geophysical response was not obtained over known mineralization. Numerous weak anomalies were found, and some structural information was gained from the surveys. A conductive structure was delineated parallel to and approximately 50 ft north of the Red Top vein.

During geophysical testing, reconnaissance geologic mapping was completed along the trend of the Spruce Creek Sequence and potential massive sulfide terrain in the Birch Creek Schist. Mapping revealed several prospective sulfide targets amenable to testing by geophysical methods. Subsequent geophysical traverses over these areas produced significant anomalies.

MaxMin and Genie electro-magnetic methods produced valid anomalies at acceptable rates of progress and were chosen for reconnaissance traverses. CSAMT, although clearly useful on the Jupiter-Mars grid, was too slow to justify cost.

An induced polarization/resistivity anomaly on Quigley Ridge Line 4W (fig. E-2), was tested by drilling with inconclusive results. One reconnaissance line was run on the Lloyd Prospect and results indicate a sulfide anomaly.

The amount of line coverage by each geophysical method is shown in table E-1.

## DISCUSSION OF RESULTS

### Banjo-Jupiter/Mars Area

The Jupiter-Mars grid consisted of three lines, as shown on figure E-1. Traverses were made over all three lines by very low frequency electromagnetics (VLFEM), horizontal loop electro-magnetics (HLEM), and magnetometer. In addition, CSAMT was run on line 4E. Fill-in lines 2E and 6E were run on Topofil controlled VLFEM traverses.

VLFEM and HLEM anomalies, shown on figure E-1, are somewhat erratically distributed north of the base line. There is little, if any, correlation with the geology of Banjo Mine workings, and none with the Jupiter-Mars adit and brecciated structure.

South of the base line, there are two, and possibly three, HLEM anomalies that could be significant. The conductivity thicknesses are approximately 5 mhos, sufficiently high to indicate a sulfide source. The two anomalies at 12+00S on Lines 4E and 8E suggests a short strike length feature (short strike dimensions are freqently indicative of non-graphite sources). Geochemical samples along the grid lines near the geophysical anomalies were anomalous in silver, copper, lead, and zinc.

CSAMT resistivity readings shown in figure E-3 provide support for the HLEM anomalies and resolve some HLEM ambiguity. CSAMT indicates the presence of the Jupiter-Mars breccia zone not detected by HLEM. The HLEM interpretation at Station 12S on Line 4E could be interpreted as an edge effect of conductive flatlying alluvium or as a vertical bedrock conductor. CSAMT resistivity indicates that the anomaly is caused by a near surface vertical resistivity low that thickens with depth. This is a more valid and significant anomaly than the HLEM interpretation. The area is covered by alluvium and the anomaly correlates with the projection of the Spruce Creek Sequence-Birch Creek Schist contact.

There is a moderate resistivity low in the CSAMT pseudo-sections near Station 0, that may correlate with the Jupiter-Mars breccia zone or associated mineralization. The material causing the low resistivity values is interpreted to extend downward, starting 200 to 300 ft below the surface. Drill hole K-14 may have overdrilled the conductive part of the zone, but would have penetrated the more resistive (leached?) upper portion.

Erratic magnetic readings, figures E-4, E-5, and E-6, are somewhat similar to VLFEM and HLEM responses in the north half of the grid. A strong magnetic high at 19N on Line 0, is associated with a basalt dike. Many of the anomalies indicate small, near-surface sources and may be caused by isolated mafic rocks, or cultural responses from rails and pipes in

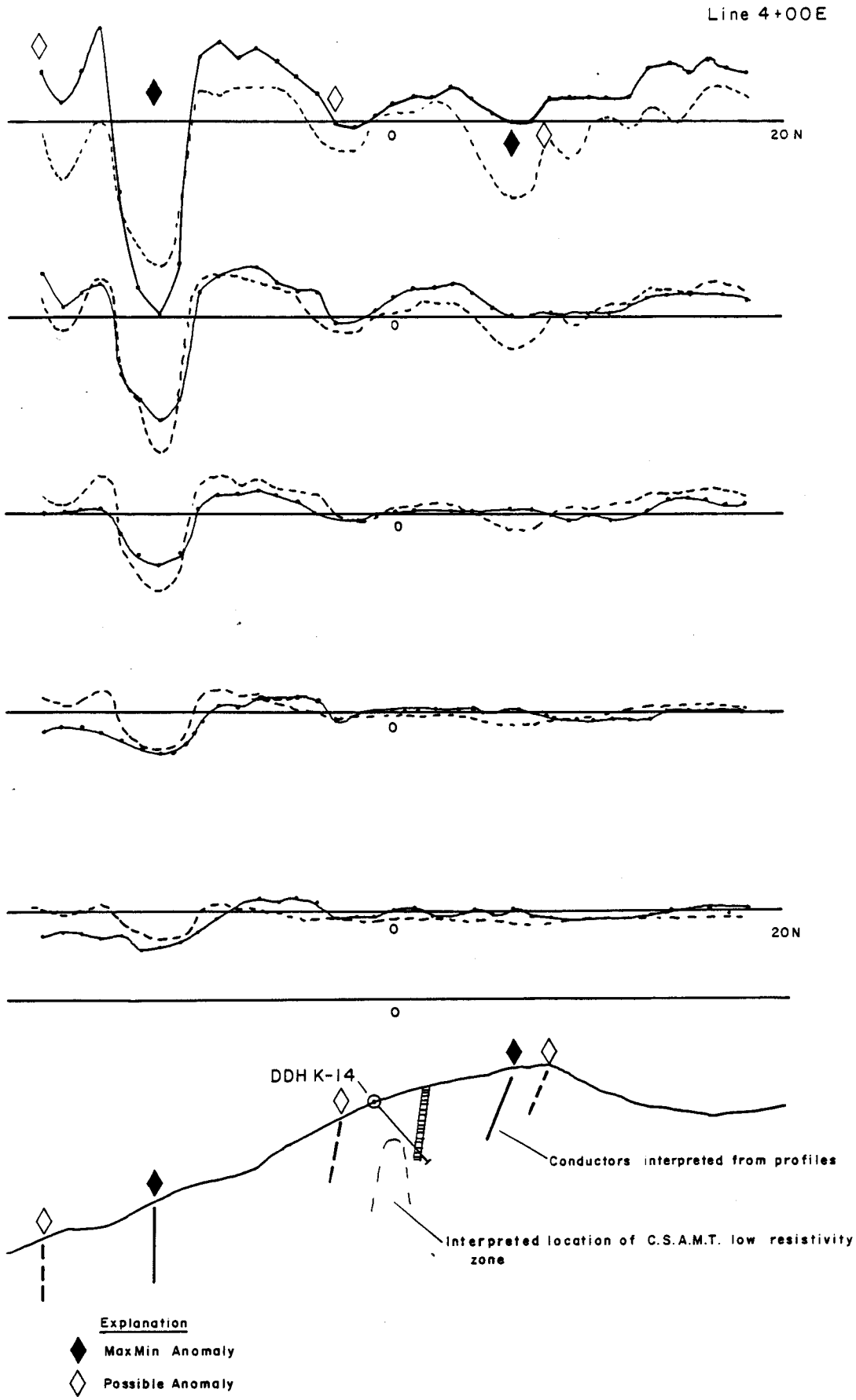



Figure E-3-Jupiter-Mars Grid, Line 4+00E

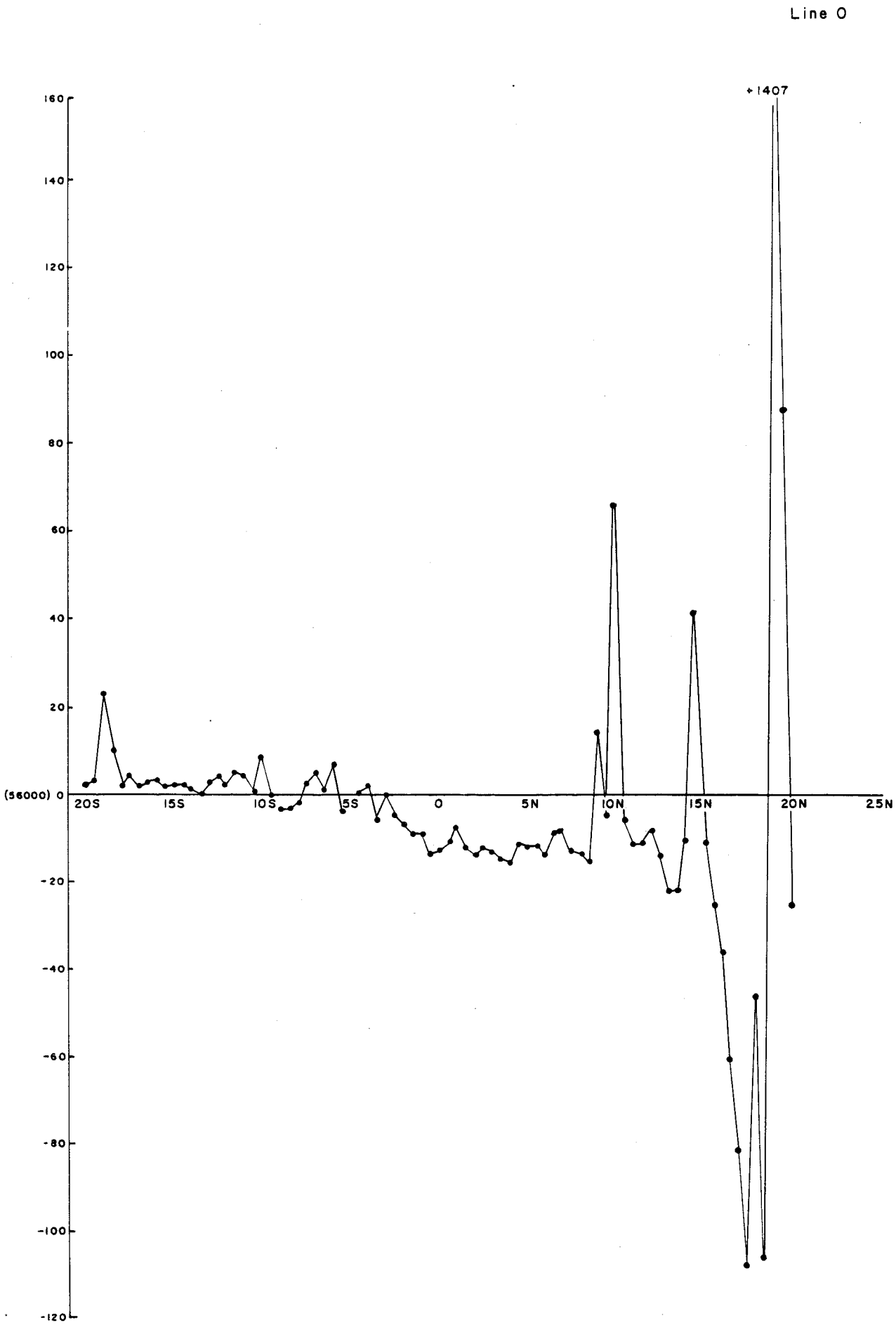



Figure E-4-Jupiter-Mars Grid, Magnetometer Profile, Line O

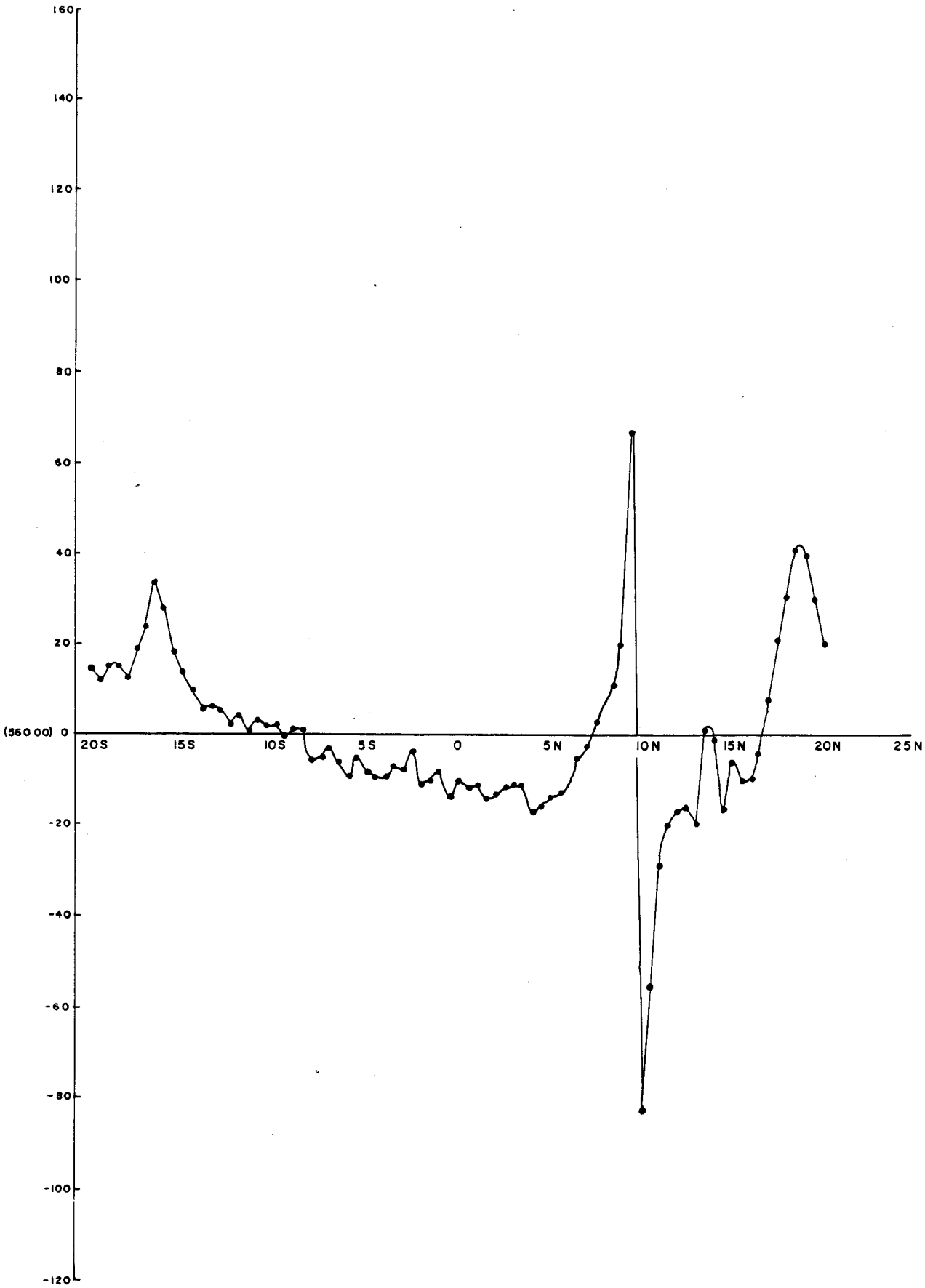



Figure 5-Jupiter-Mars Grid, Magnetometer Profile, Line 4E

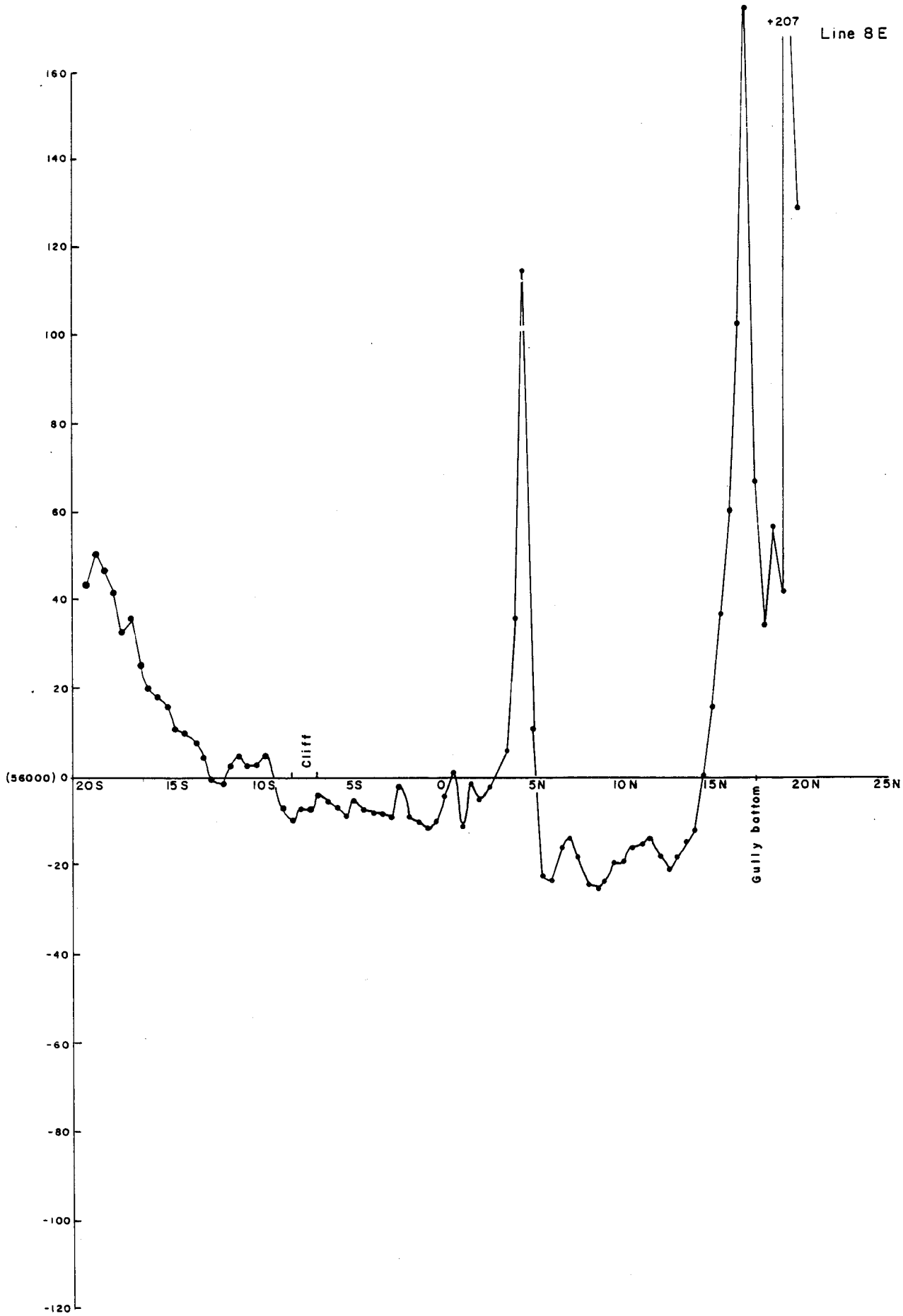



Figure E-6-Jupiter-Mars Grid, Magnetometer Profile, Line 8 E

the Banjo Mine workings. Strong magnetic features, on the south end of the line suggest that closer line spacing might assist in deciphering structural interpretation. Magnetic and EM anomalies show little correlation.

**Quigley Ridge**

The initial set of lines, 4W through 8W, produced HLEM and VLFEM conductors that indicates known graphitic lithology. One conductor, labeled B-B' on figure E-2, appears to be a relatively strong, continuous zone lying between the Little Annie and Gold Dollar veins. Numerous conductors caused mutual interference along each line, and prevented determinations of conductor attitude. Conductor B-B' could be interpreted as a near vertical vein, or the edge of a conductive layer dipping gently northwestward.

IP was run on Line 4W for comparison with HLEM. The IP results are moderately supportive of the horizontal loop anomaly. A high chargeability/low resistivity zone was found at the same point on the line. An interpretation could be made that a gently dipping (relative to the sloping surface) graphitic bed is the correct explanation, rather than a mineralized near-vertical structure.

Drill hole K-4 encountered a shear zone that could terminate the graphitic schist unit and cause an edge effect anomaly. The shear zone could also enhance the edge effect.

The remainder of the HLEM anomalies on the Quigley Ridge grid are of minor interest except for those on lines 44W through 52W.

The anomalies on lines 44W to 52W are shown in plan view on figure E-7. During the field phase it was thought that these anomalies were located over the top of the Red Top workings, and that their source was Red Top mineralization. Re-plotting of the anomalies relative to the mine shows that the anomalies occur about 50 ft north of the mineralization. Before this relationship was known, holes K-19 through K-21 were drilled. The results and associated anomalies for K-19 and K-20 are shown on figures E-8 and E-9, respectively. Drill hole K-19 was collared about 200 ft back

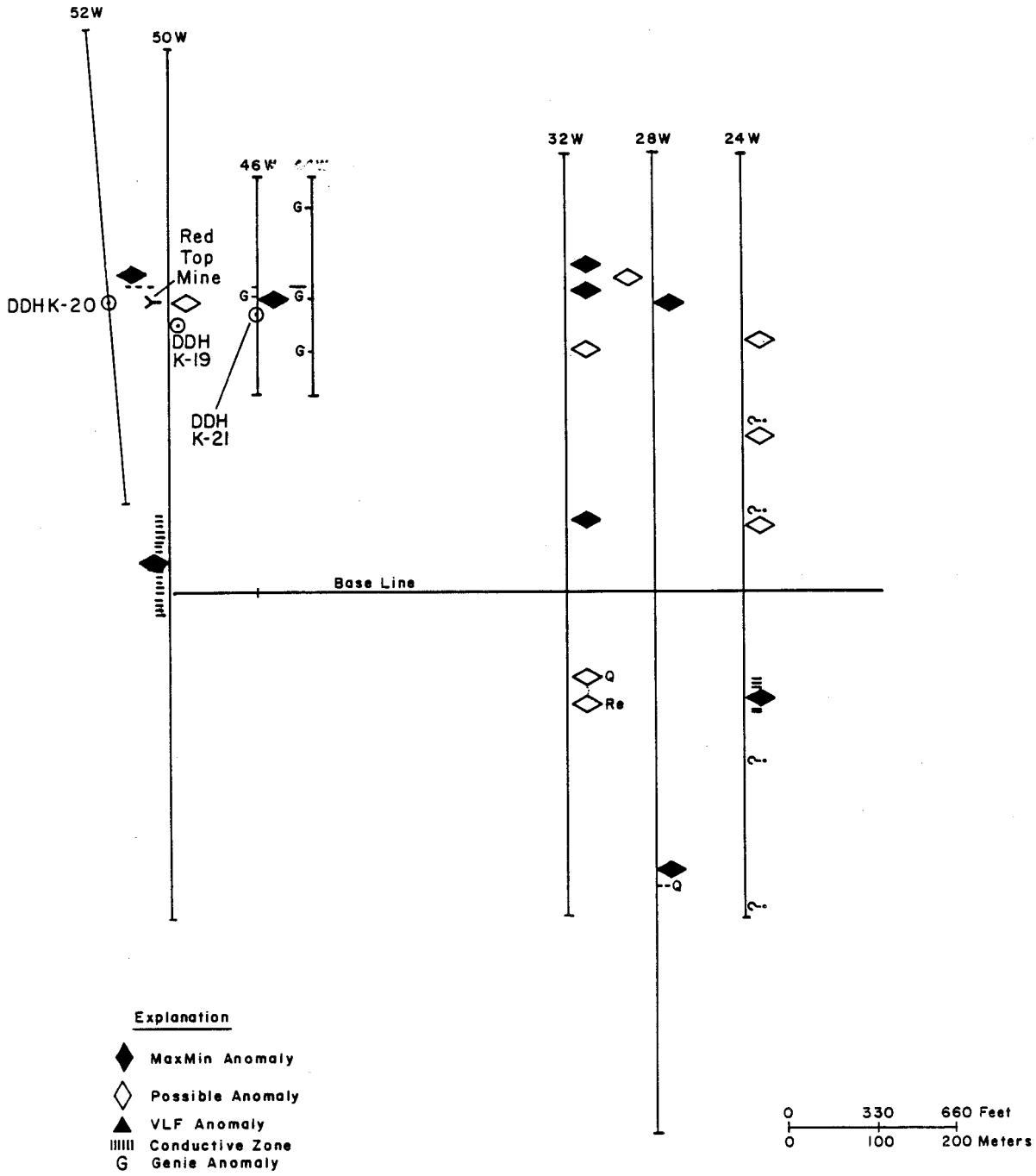
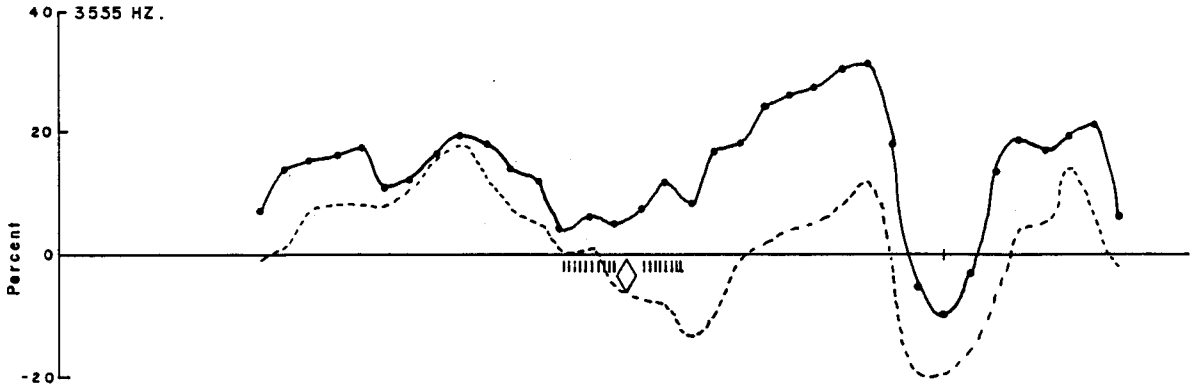



Figure E-7-Quigley Ridge Grid, Red Top Anomalies




Topography and
Interpretation

Explanation

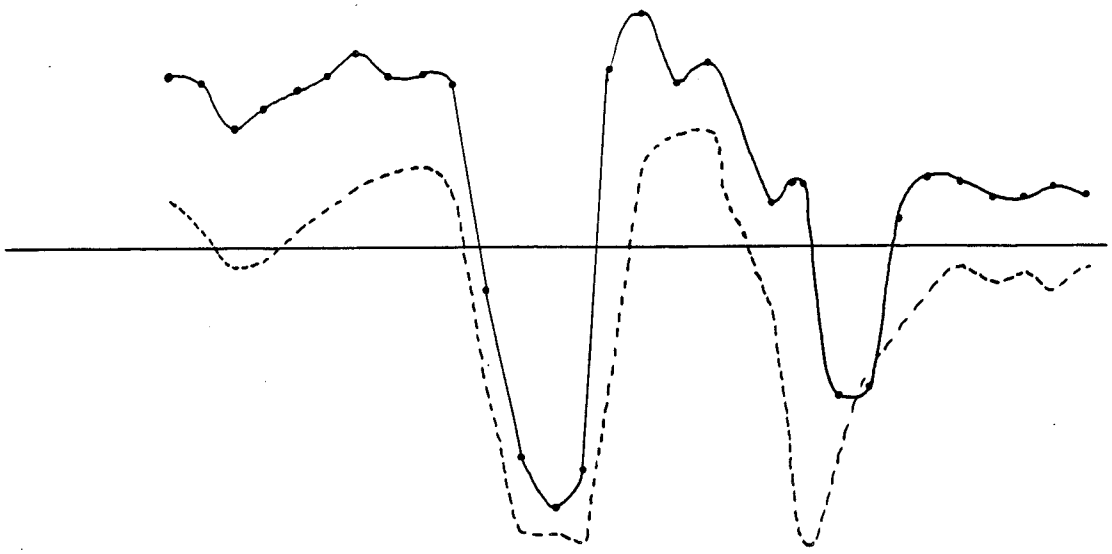
In Phase

Out of Phase

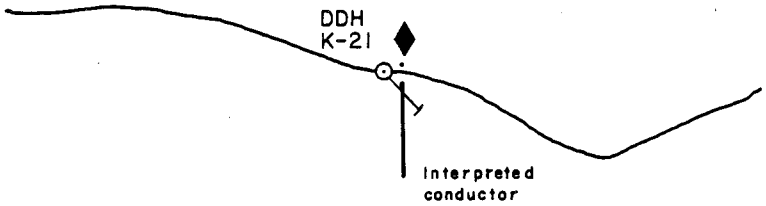
Possible Anomaly

Conductive Zone

Figure E-8 - Quigley Ridge Area, Max Min II E.M., Line 50 W.



Topography and
Interpretation




Explanation

In Phase

Out of Phase

Max Min Anomaly

Figure E-9- Quigley Ridge Area, Max Min II E.M., Line 46 W.

from the surface projection of the HLEM anomaly. The drill hole intercepted the Red Top vein and was stopped short of the conductor.

Drill hole K-21 was spotted to intercept the source of the anomaly near surface, and may have overdrilled the vein, as the vein was not intersected. It is probable that the vein is offset to the south and could be intersected by drilling an additional hole 100 to 200 ft south of K-21.

Drill hole K-20 intersected a weakly mineralized structure that may not have been the Red Top vein. It also was collared to intersect the anomaly and may have overdrilled the vein.

If the association of the mineralized vein and the conductor is proved by subsequent drilling, the anomalies located about 50 ft north of the Red Top vein can be used to guide further exploration along strike.

Mineralogy of the Red Top Deposit suggests that IP/resistivity should detect the vein. However, IP lateral resolution is inadequate to distinguish the vein from graphite because the two sources are one a-spacing (50 ft) apart. An a-spacing of 50 ft might be useful in a reconnaissance mode array for some of the area, but probably would not be practical for the entire Quigley Ridge area.

## RECONNAISSANCE

### Red Dirt

Three lines at 800 ft line separation were surveyed across the strike of the oxidized structural trend of the Red Dirt Prospect. MaxMin (HLEM) survey was run over Line 0 as shown on figure E-10 and all three lines were traversed with Genie (HLEM) and magnetics.

Electro-magnetic and magnetic profiles indicate source bodies of widths less than 20 ft. The tops of most sources are within 20 ft of surface. There appears to be little, if any correlation of anomalies from line to line, which implies limited or variable continuity along strike. A line separation of 200

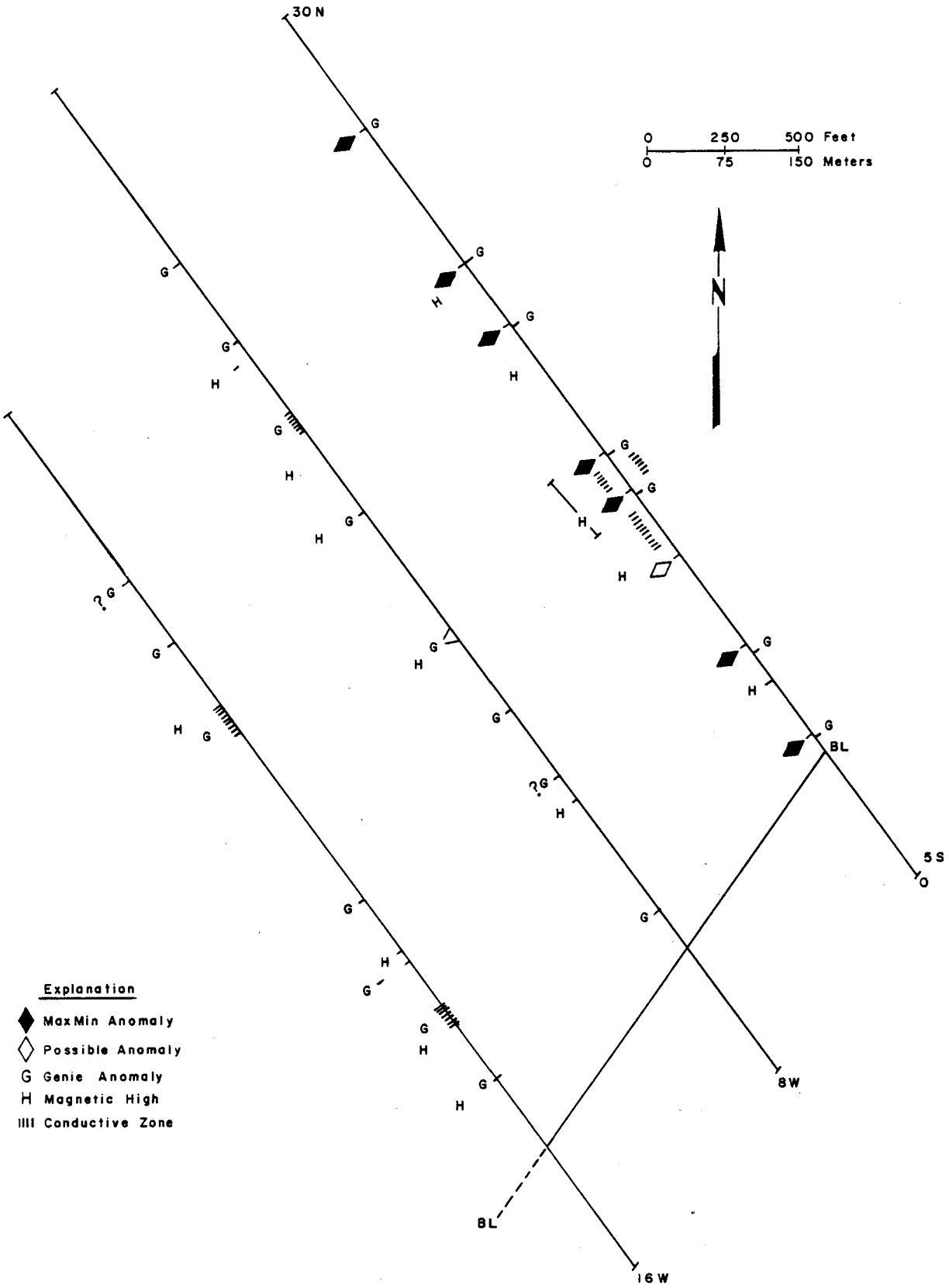



Figure E-10-Red Dirt Grid

Line O

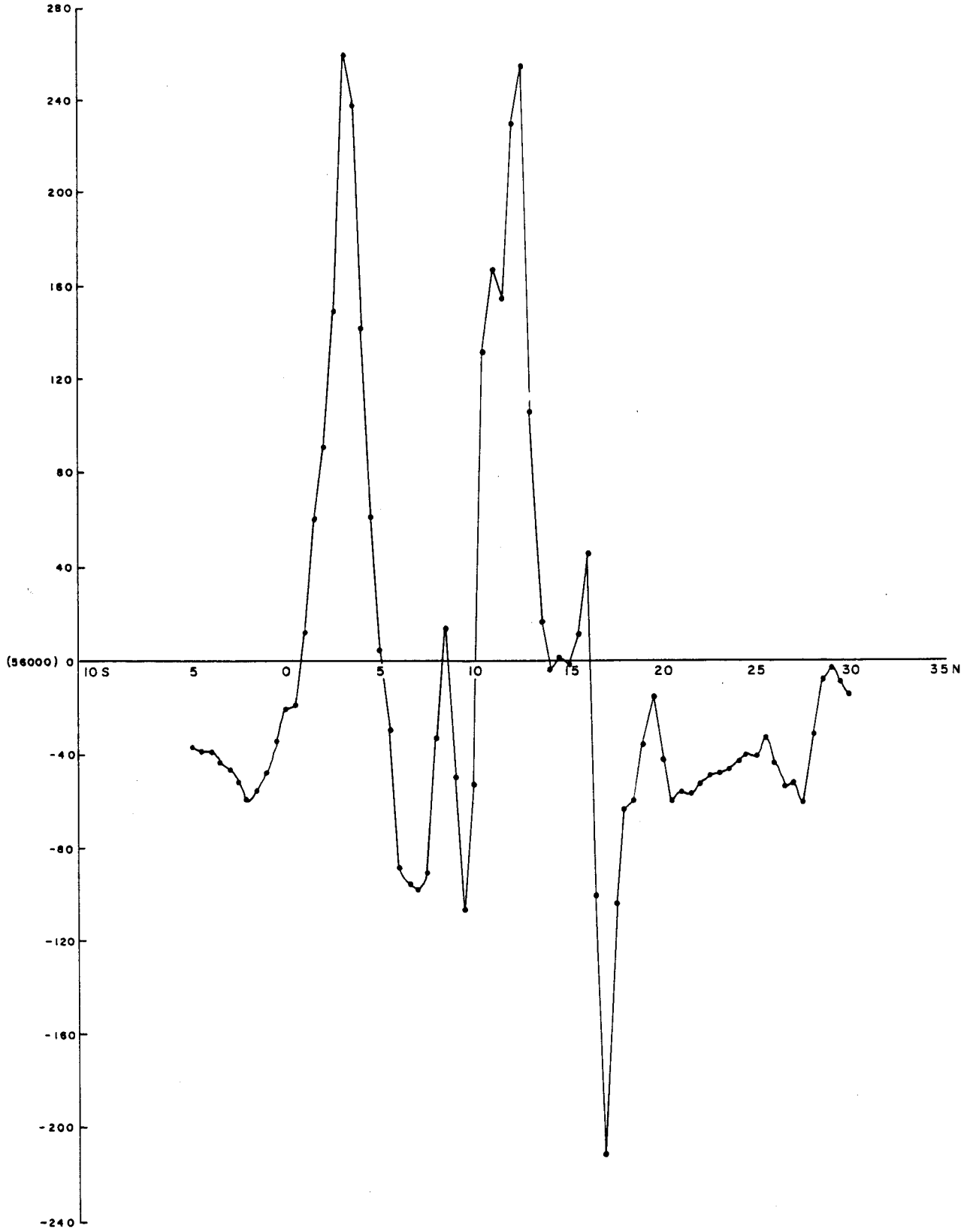



Figure E-11-Red Dirt Area, Magnetometer Profile, Line O

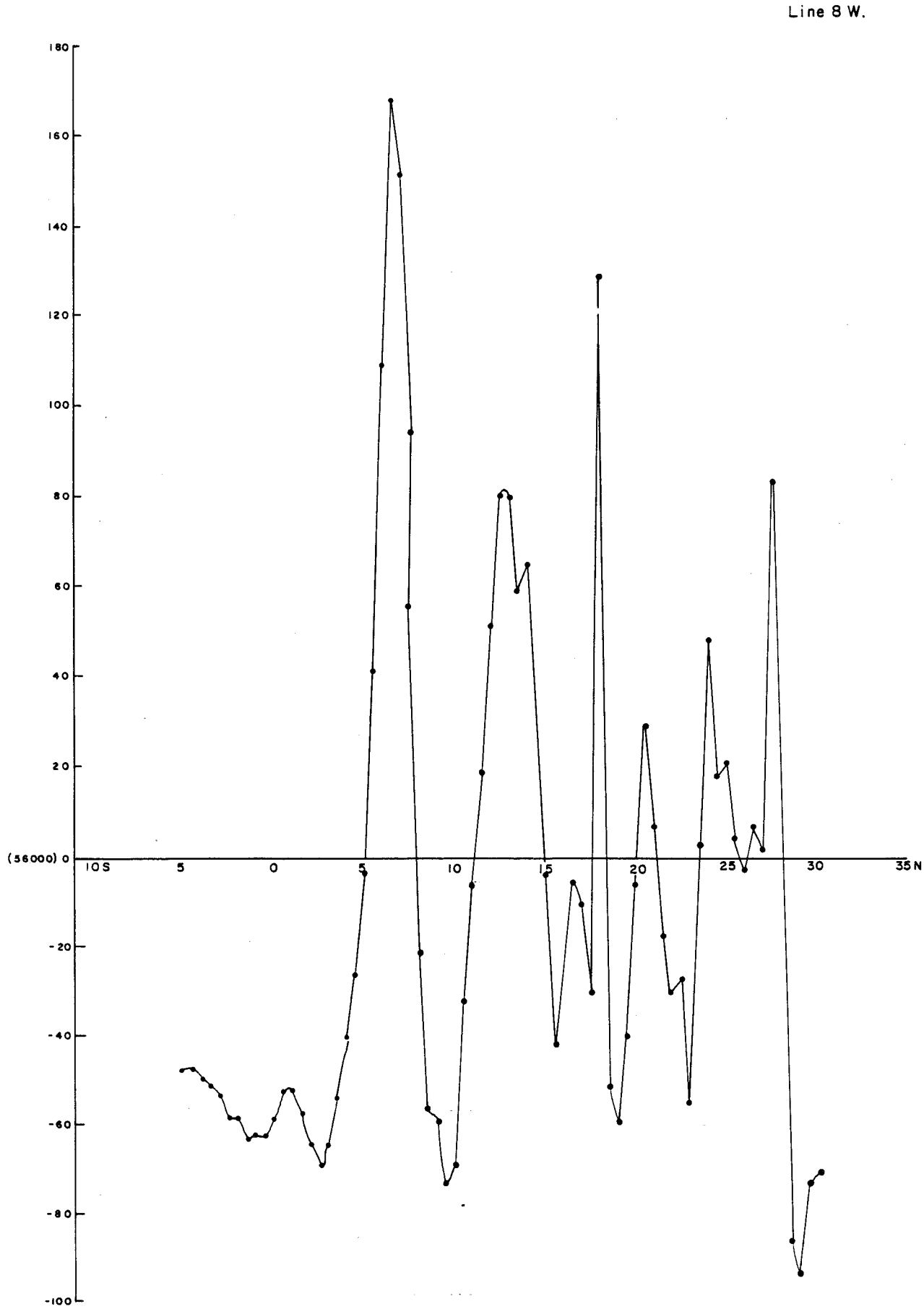



Figure E-12- Red Dirt Area, Magnetometer Profile, Line 8 W.

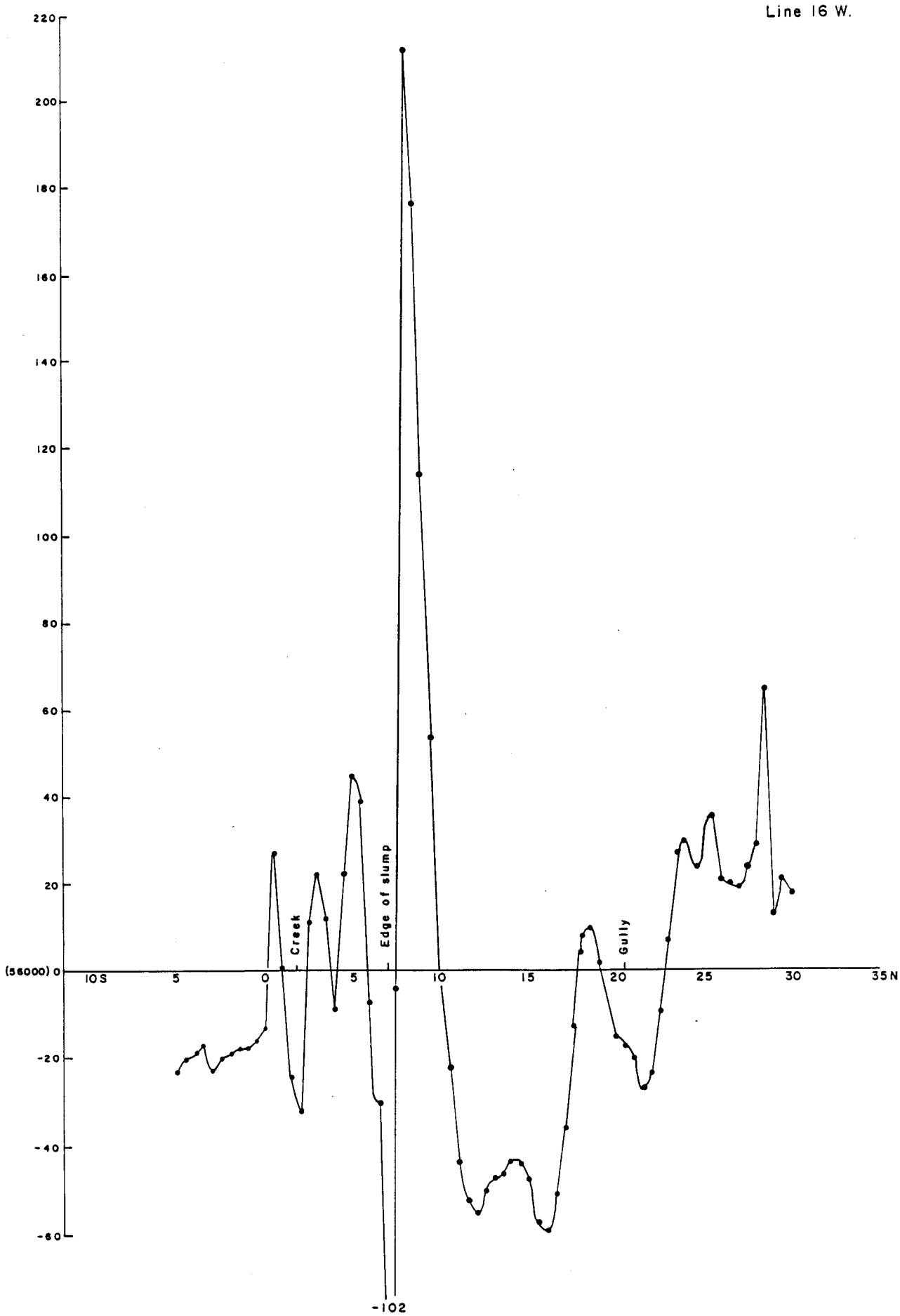



Figure E-13-Red Dirt Area, Magnetometer Profile, Line 16 W.

ft or less would be necessary to define the conductors along strike, and a-spacings of 100 ft or less would be necessary for anomaly resolution. The north and south ends of the profiles seem to have reached background values. The anomalous area is open along strike. Most of the conductors have magnetic response.

Conductivity values of the anomalies are in the range of massive sulfides and graphitic zones. The abundant magnetic response indicates sulfide sources. Profiles are shown on figures E-11, E-12, and E-13.

**Canyon Creek**

Two lines were surveyed with the Genie horizontal loop system and magnetics. Strongly anomalous response was obtained on both lines with each method. The traverse lines are too widely separated for correlation, of the anomalies. The electro-magnetic anomalies are typical of massive sulfide sources, and the magnetic response precludes graphite as being the conductor.

**Lloyd Prospect**

A time domain IP/resistivity line was run across the outcropping mineralized zone. Results show a distinct zone of high chargeability in the vicinity of station 2+00W in resistive rocks. Based on 13 data points it can be inferred that the responsive mineralization diminishes or dips to the west, and persists or becomes more near-surface to the east. Low resistivity values at station 1+00E suggest possible fault control below the creek.

The association of the visible sulfides with the IP response established this zone as a valid anomaly.

**Alpha Prospect**

Three grid lines were surveyed over the Alpha Prospect (fig. E-14). All three lines were run with the Genie (HLEM) system at an a-spacing of 200 ft. No response was obtained. Line 0 was re-run with MaxMin (HLEM) at an a-spacing of 400 ft, again with no response.

DESCRIPTION OF SURVEY

A Zonge GDP-12 system was selected to run induced polarization/resistivity, as well as fixed source/ground loop electro-magnetics (in the CSAMT model). MaxMin II and Genie systems, capable of horizontal and vertical loop operation, were used for electro-magnetic surveys. GeoMetrics G856 proton precession magnetometers were selected because their accuracy exceeds that of fluxgate systems. In addition, this system has computerized diurnal filtering capabilities.

**Instrumentation**

Zonge General Data Processor (GDP) - 12

The GDP is field programmable to handle IP as well as electro-magnetic surveys. IP can be determined with any of a number of systems in frequency, time, or phase mode configurations. The requirement of fixed source/ground loop electro-magnetics, strictly interpreted, would imply the use of a Turam-type system. In a practical sense, for the closely-spaced, near-surface geophysical targets anticipated (and subsequently found) in the study area, a Turam-type system has no advantage over a moving coil HLEM system. A technique which is eminently suitable for the purpose of obtaining high lateral resolution, needed in the Kantishna area, is audio magnetotellurics (AMT). AMT lateral resolution versus depth is much greater than that provided by Turam or HLEM systems. For mineral exploration, AMT using a fixed, controlled transmitting source (CSAMT), seems the most practical. Thus, the use of CSAMT in place of a Turam provided more interpretation and modelling capabilities.

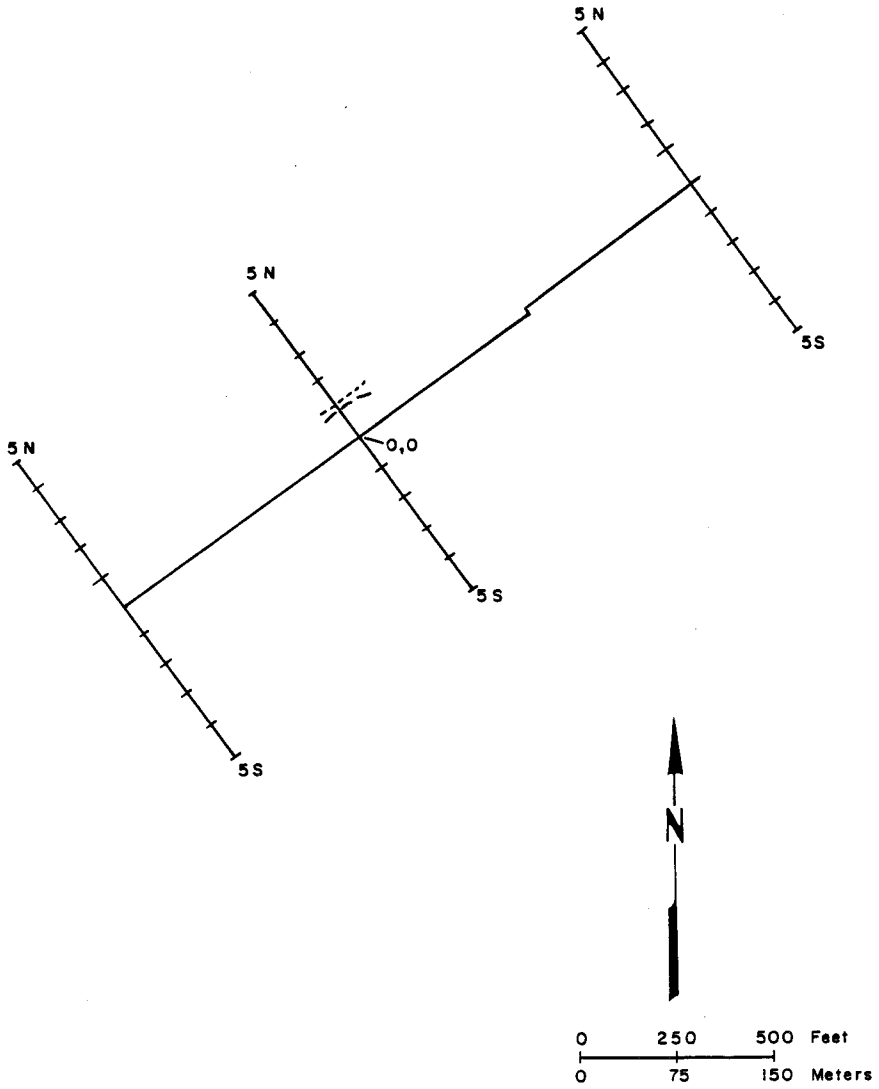



Figure E-14- Alpha Mine Grid

The GDP is capable of operating as an IP and a CSAMT system. This advantage seemed to outweigh the disadvantages of system complexity and reduced portability (compared to simpler IP systems). Although only one CSAMT line was run, the information obtained compared to HLEM data alone showed that the GDP in the CSAMT mode could be very useful for defining the narrow, low conductivity, deep or closely spaced targets in the area.

## Horizontal and Vertical Loop Systems

### MaxMin II

The MaxMin II electro-magnetic system has generally been considered to be the leading horizontal loop instrument since its introduction about 1974. It generates five frequencies of high quality data at coil spacings of 100 ft to 1,000 ft. Reliable data at multiple frequencies and coil spacings enables more definitive interpretation to be made over a given target than with any other horizontal loop system generally available. The system is also capable of operating in the vertical loop mode. Vertical loop operation was not required.

The main disadvantage of the MaxMin system, or of any conventional horizontal loop instrument, is the rigorous line surveying required to extract the maximum value from the data. The Genie system, recently developed by Esso Canada and Scintrex, Inc., was first available for U. S. rental in July, 1983. The principle of operation is to measure the ratio of responses simultaneously at two frequencies, a procedure which reduces measurement noise. A low frequency reference signal allows operator adjustment of the coil positions along line, obviating the rigorous surveying required in other HL methods.

The main disadvantage of the system is its susceptibility to atmospheric electrical noise, and a limited coil separation (maximum 200 ft at Kantishna) because of weak signal. The former limitation prevented operations during one day of mild thunderstorm activity on Quigley Ridge, and the latter could be a problem when looking for deeply buried targets.

Magnetics

A pair of GeoMetrics G856 magnetometers were used for magnetic measurements. The G856 has the capability of storing the field readings for later data reduction on a micro-computer. Accuracy is approximately plus or minus 1 gamma. There are no disadvantages to the proton magnetometers compared to fluxgate systems for Kantishna-type operations.

Very Low Frequency Electro-Magnetics (VLFEM)

Very low frequency (VLF) radio transmissions originate from U. S. and foreign government stations in various parts of the world. The frequencies used lie between 15 and 25 kHz, which are very high frequencies for geophysical electro-magnetic surveys. Frequencies of this range have limited penetration into the earth, but respond to low-order conductors such as faults, shear zones, or lithologic contacts. Thus they often provide a means to map near surface covered structural zones as a guide to follow-up by more definitive techniques.

A Phoenix VLF-2 unit was used for all VLFEM readings. This instrument measures the tilt angle and the amplitude, or field strength, of the magnetic component of the transmitted signal. Although a number of VLFEM systems are available, the VLF-2 is the most practical because any transmitting station within reach may be tuned in by the use of a binary coded digital tuning circuit. Other systems require insertion of individual crystals for each station, or have other operating and interpretive drawbacks.

The VLFEM method of surveying is inexpensive, and often so useful for structural mapping that it is normally used as a first-pass technique in comprehensive geophysical programs.

The main disadvantages of VLFEM, in addition to the near-surface limitation, are that the transmitting stations must be oriented more or less along the strike of the structure to be detected, and operations are subject to the transmitting schedule of the station. The stations shut down for maintenance on a published schedule which may be worked into the daily planning of a survey, but the strength of the signal transmitted is often

lowered unpredictably below a useful level, and is also degraded at times by naturally occurring solar flares. The strength of the signal is also a function of the distance from the transmitter, and the Kantishna Mining District is at nearly the limit for stations along strike: Cutler, Maine; Annapolis, Maryland; Yosamai, Japan; or Moscow, Russia. Consequently the VLF work progressed more slowly than usual, and was not continued after the initial Jupiter-Mars and Quigley Ridge lines were surveyed.

**Field Procedures**

The test lines on the Jupiter-Mars grid were slope chained at 50 ft station intervals. The survey notes include actual distances and slope in percent grade between stations. To facilitate computer plotting of the survey grids, the Quigley Ridge lines were slope chained at 50 ft intervals. Percent grade and actual slope distances were still noted to facilitate horizontal loop operation and data reduction. Reconnaissance lines were also slope chained at 50 ft intervals. The resulting maps were corrected to true horizontal distances.

Distance was surveyed with chain and plumb bob and slope percent grade with Suunto S-PC inclinometers. Initial line direction was established by compass; continuation of the line was done by back sighting on survey stakes.

VLF

VLF readings were taken at 50 ft station intervals. All transmitting stations in the appropriate direction were used at various times of the surveys; only Yosamai, Japan, produced consistently useful signals.

Magnetics

One of the magnetometer pairs was used in a fixed position as a base station, the second unit was used along line at 50 ft station intervals. The two sets of data were merged in a computer program, which filters line data for diurnal fluctuations in magnetic background.

## CSAMT

The controlled source transmitter for AMT measurements was located on Spruce Peak, about 5 miles northeast of Jupiter-Mars line 4 East, where the only CSAMT measurements of the program were made. The transmitting dipole was about 6,000 ft in length; the readings were taken at 100 ft station intervals with the AMT coil and a 100 ft receiver dipole. Frequencies of 128, 256, 512, 1028, and 2048 Hz were read.

## IP

One line, Quigley Ridge line 4 West, was surveyed with IP/resistivity instrumentation. The line was first tested with the GDP-12 system, in the resistivity/phase mode. The equipment malfunctioned and an Elliot R10A time domain receiver was used to complete the survey. Valid IP chargeabilities were obtained, and the resistivity readings repeated those of the GDP survey to normal field accuracy.

The IP configuration used for both sets of readings was identical, the electrodes were left in place between surveys. A 7-electrode dipole-dipole array was used with an a-spacing of 100 feet, to an n of 6.

TABLE E-2

Figures E15-E85

LINE PROFILES

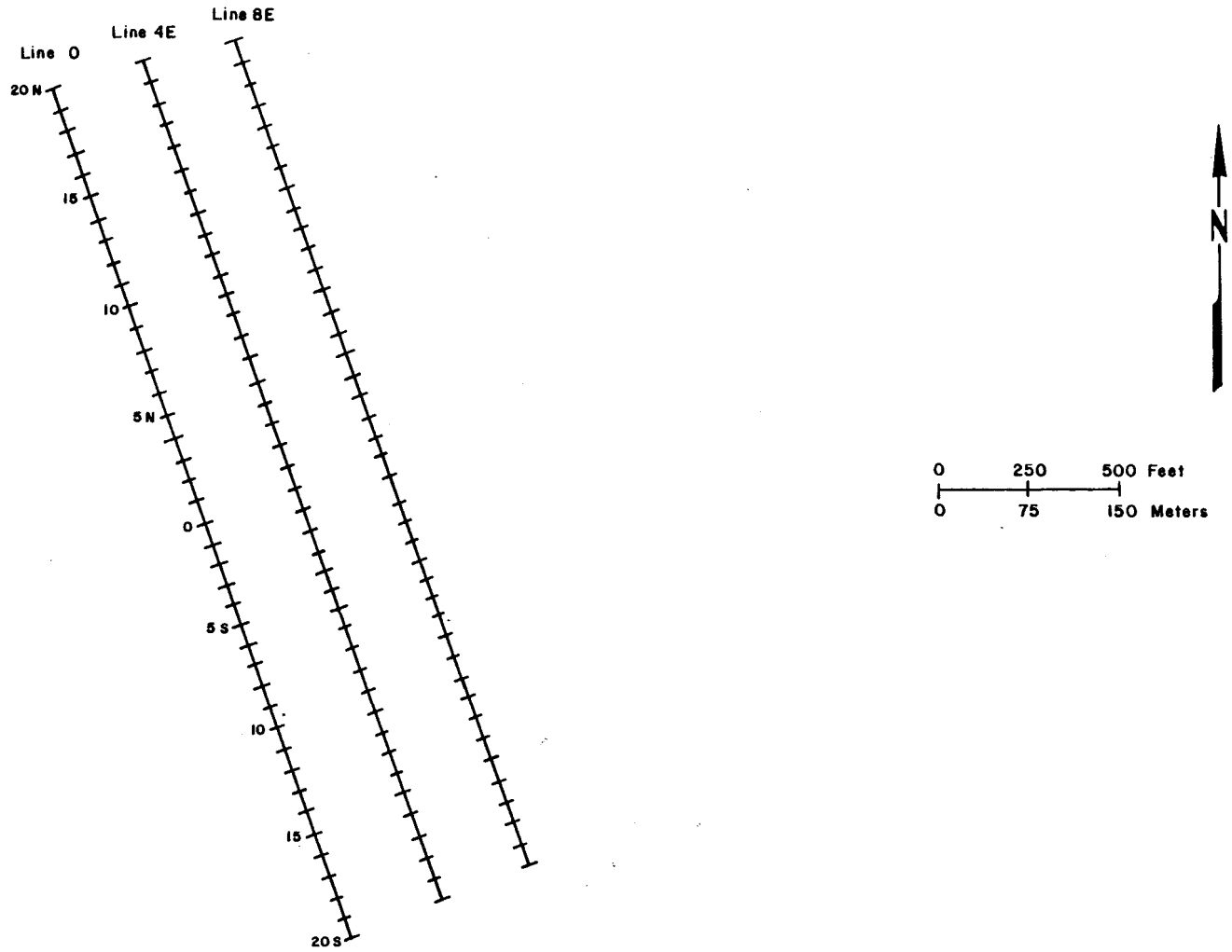



Figure E-15 Jupiter - Mars Grid

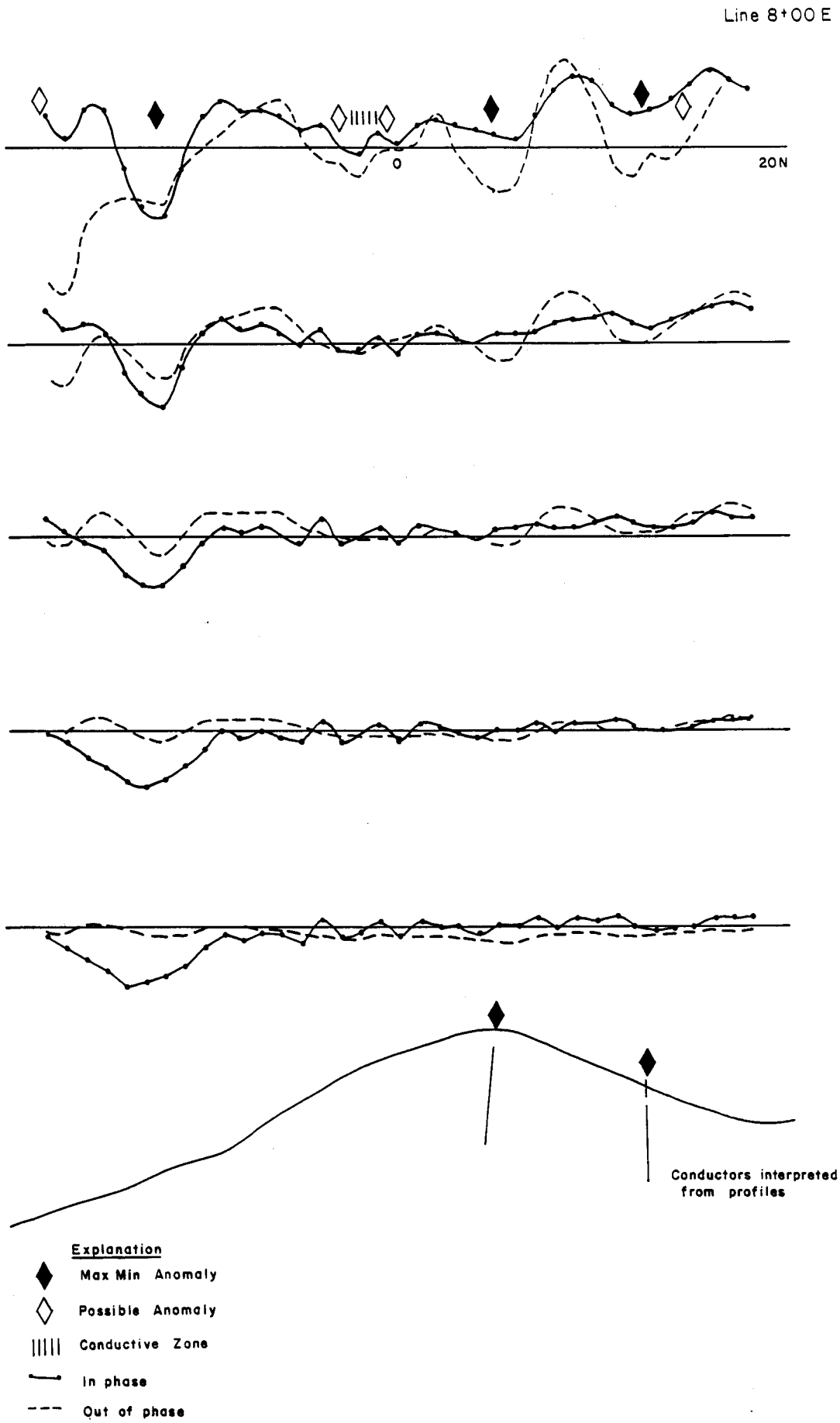



Figure E-16 Jupiter-Mars Grid, Line 8+00 E

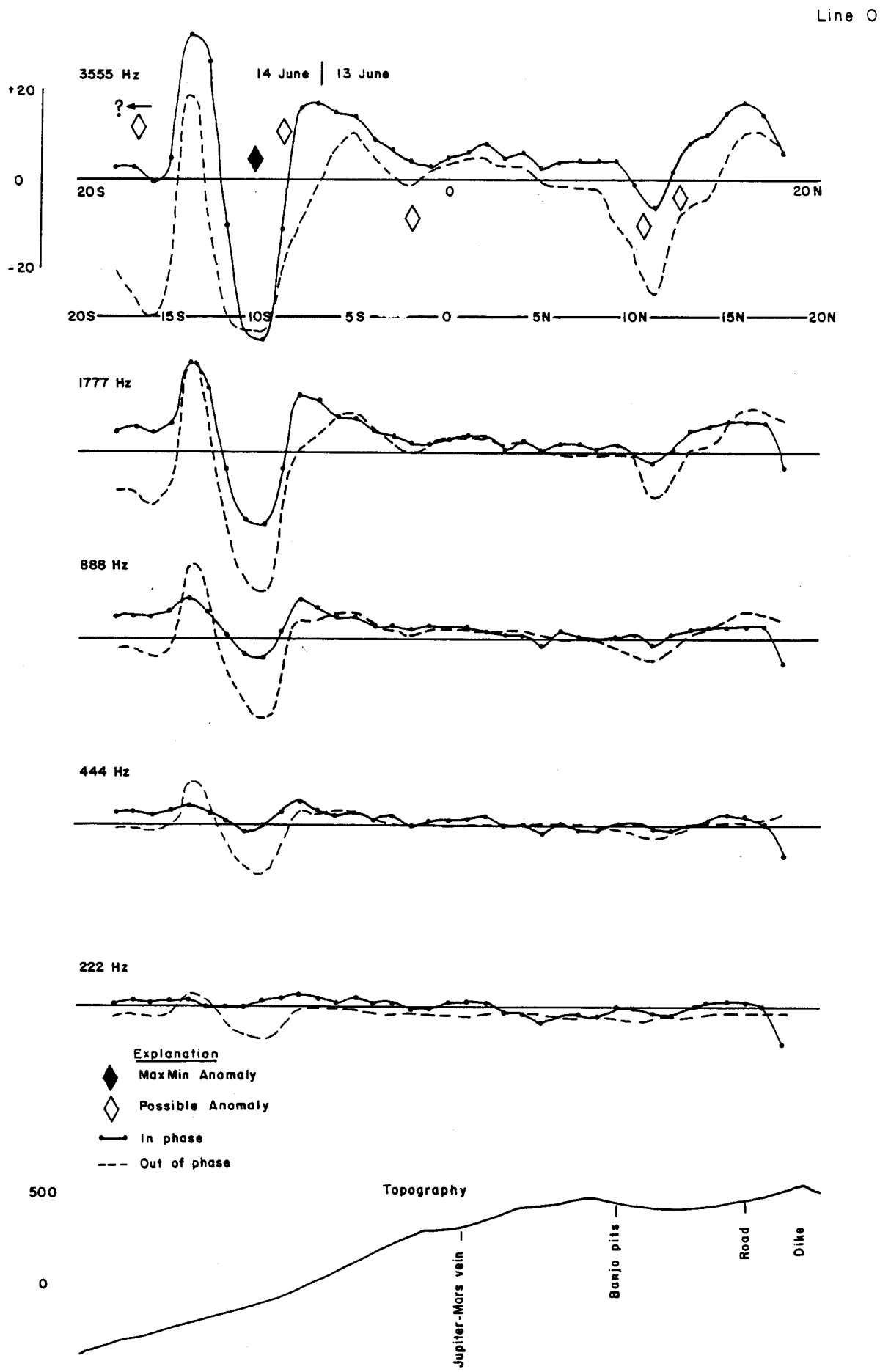
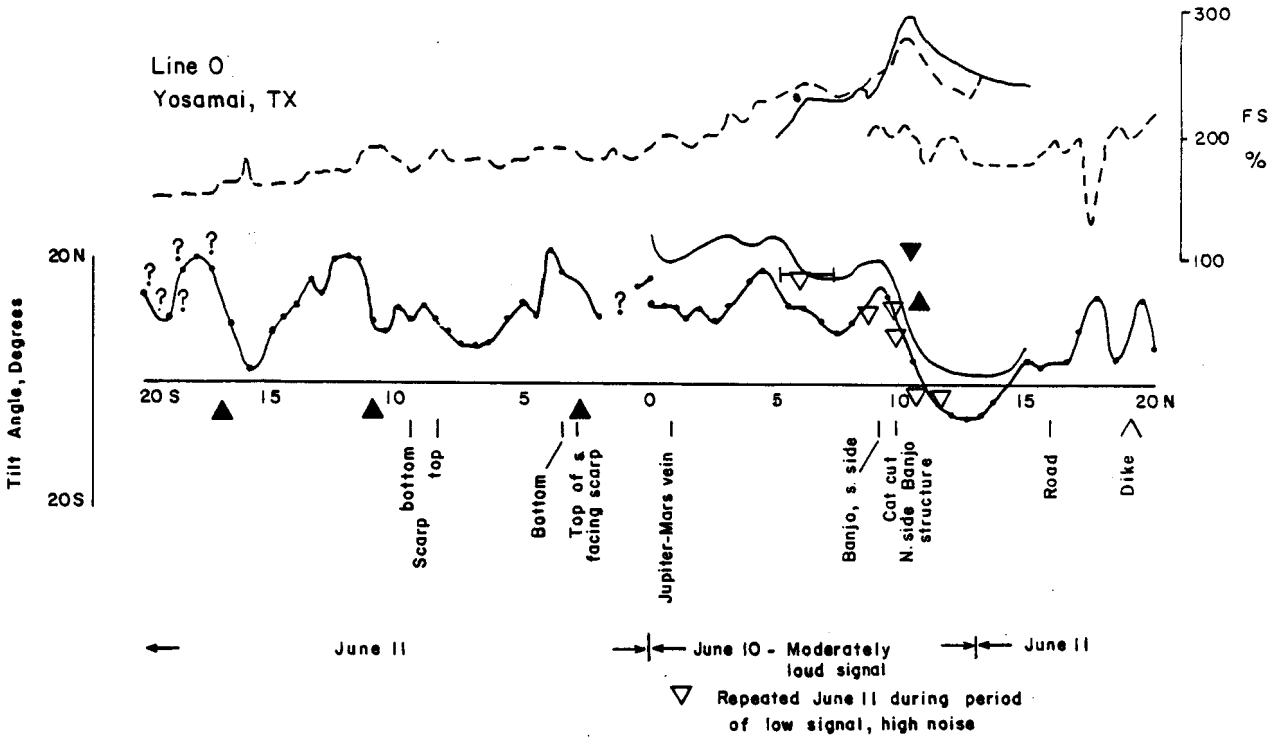



Figure E-17 Jupiter-Mars Grid, MaxMin EM, Line O



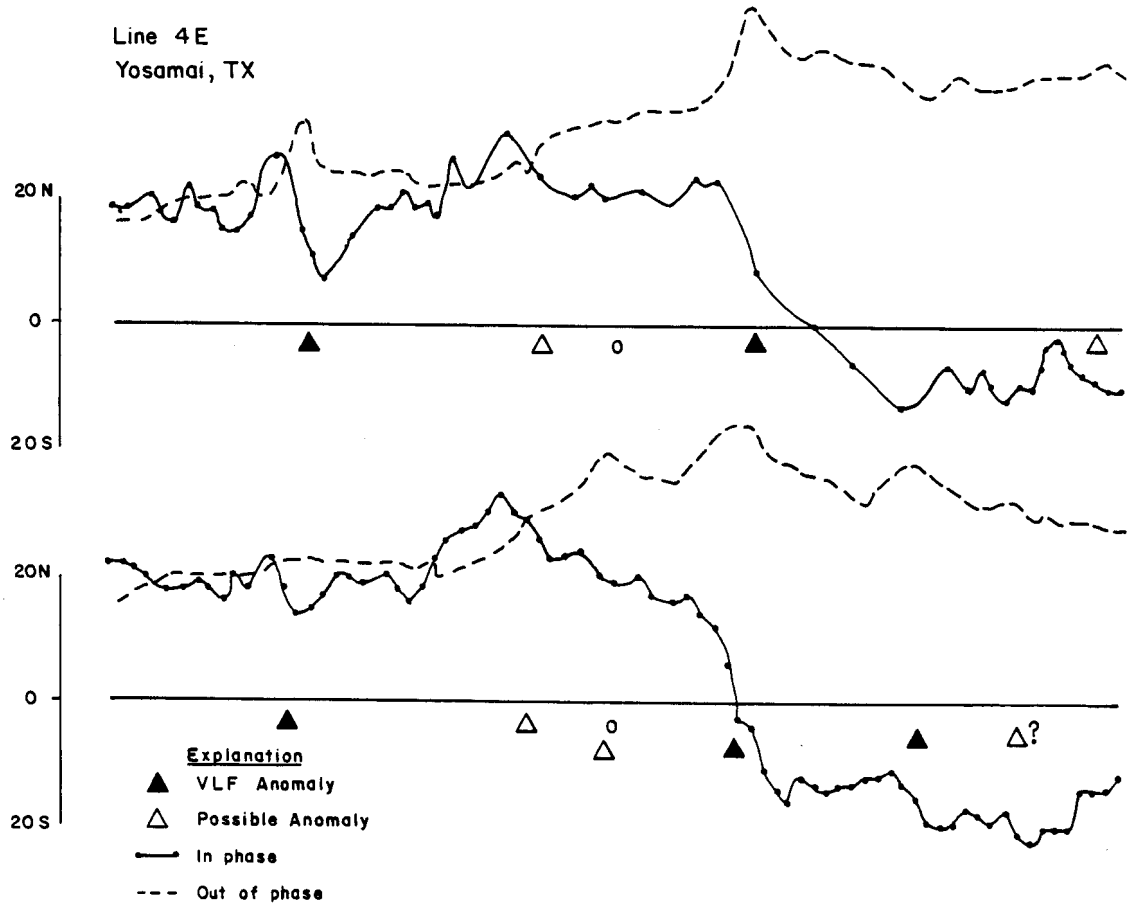
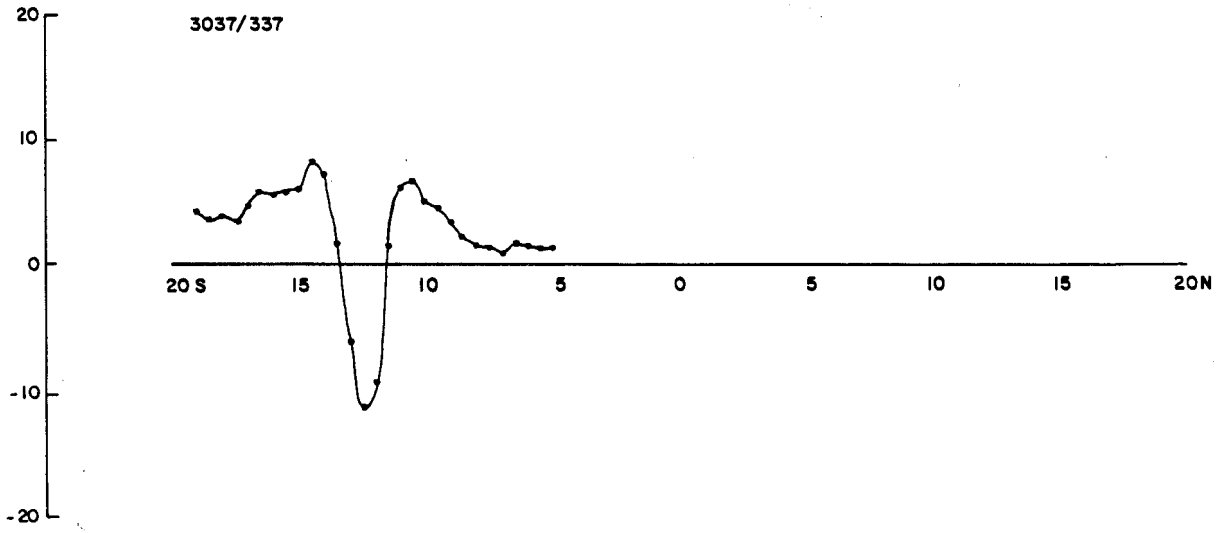




Figure E-18 Jupiter-Mars Profiles, Lines O and 4E



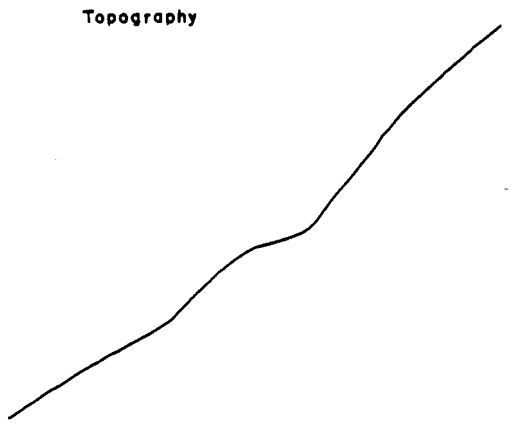




Figure E-19 Jupiter-Mars Grid, Genie EM System, Line 4+00 E

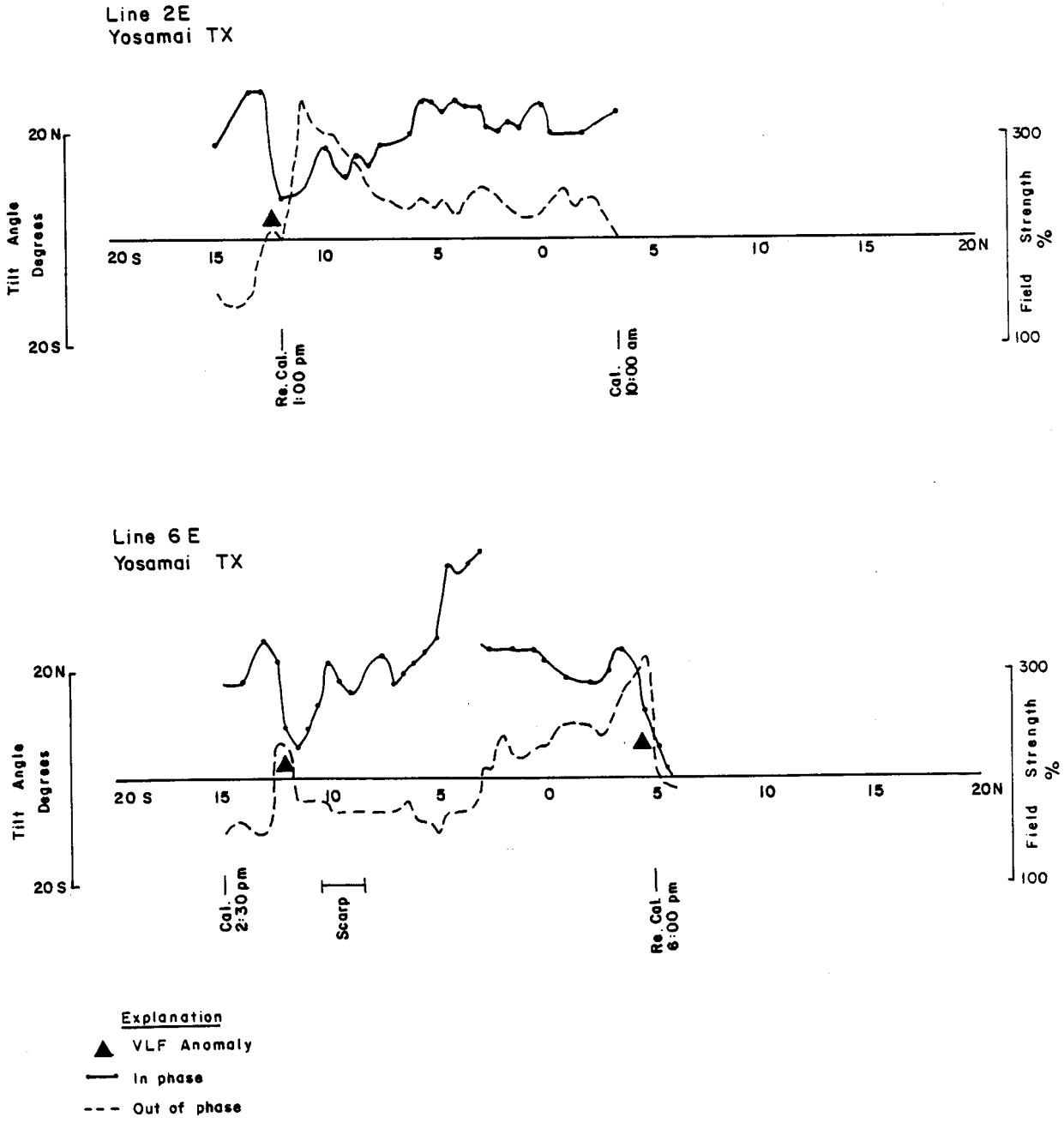
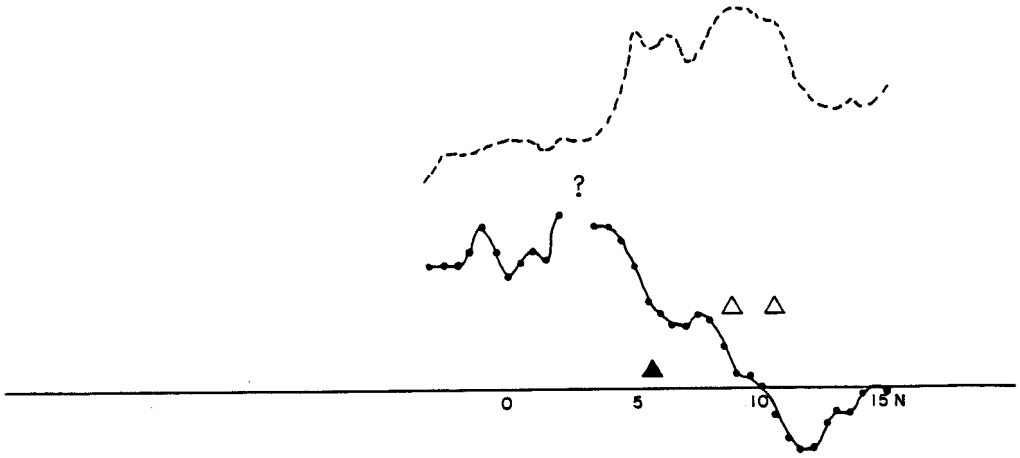



Figure E-20 Jupiter-Mars Grid, VLF, Lines 2E and 6E

Line 2 E.




Explanation

In Phase

Out of Phase

VLF Anomaly

Possible Anomaly

Figure E-21 - Jupiter-Mars Area, V.L.F. Topofil, Line 2 E.

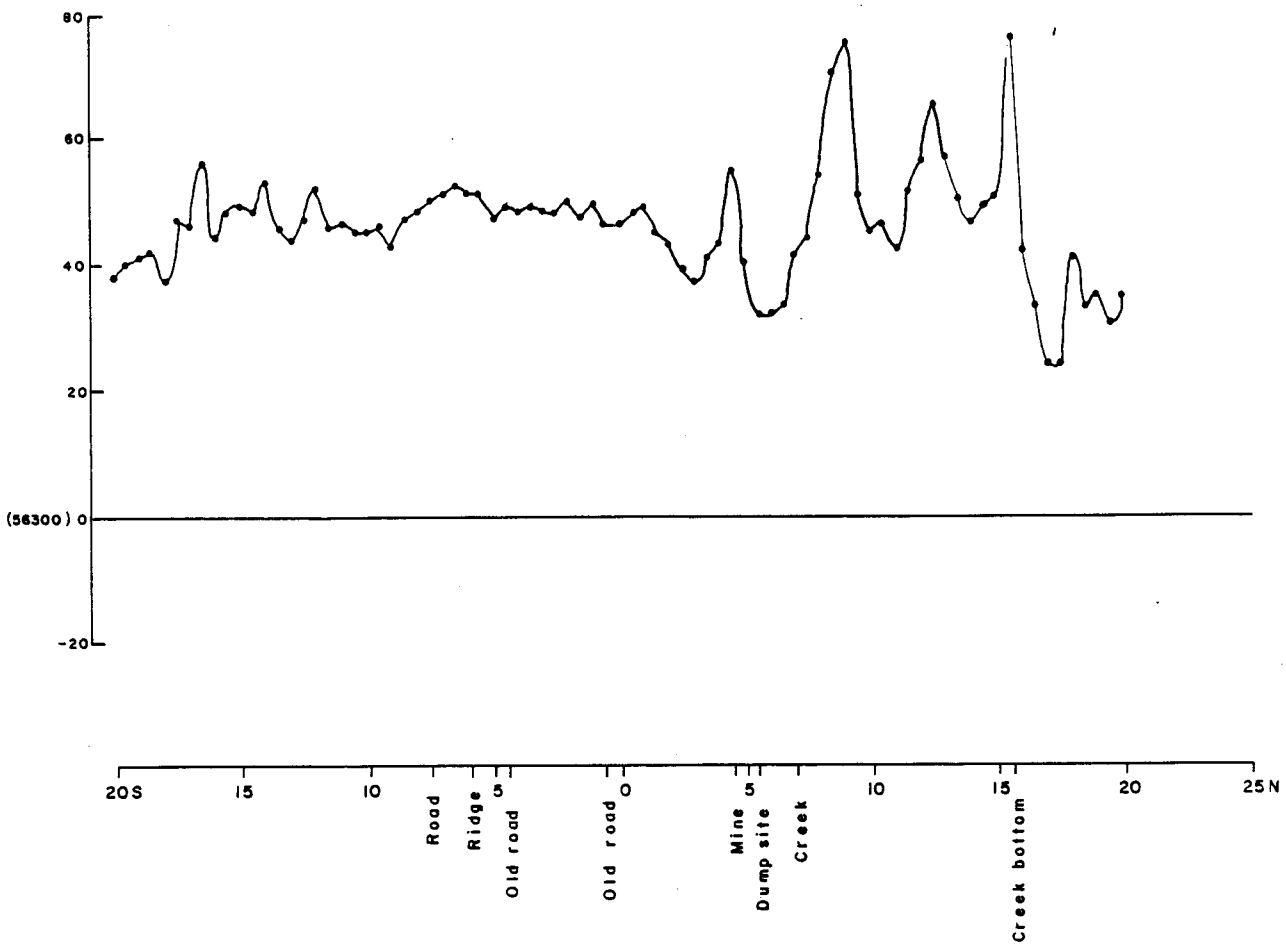



Figure E-22-Quigley Ridge Area, Magnetometer Profile, Line O

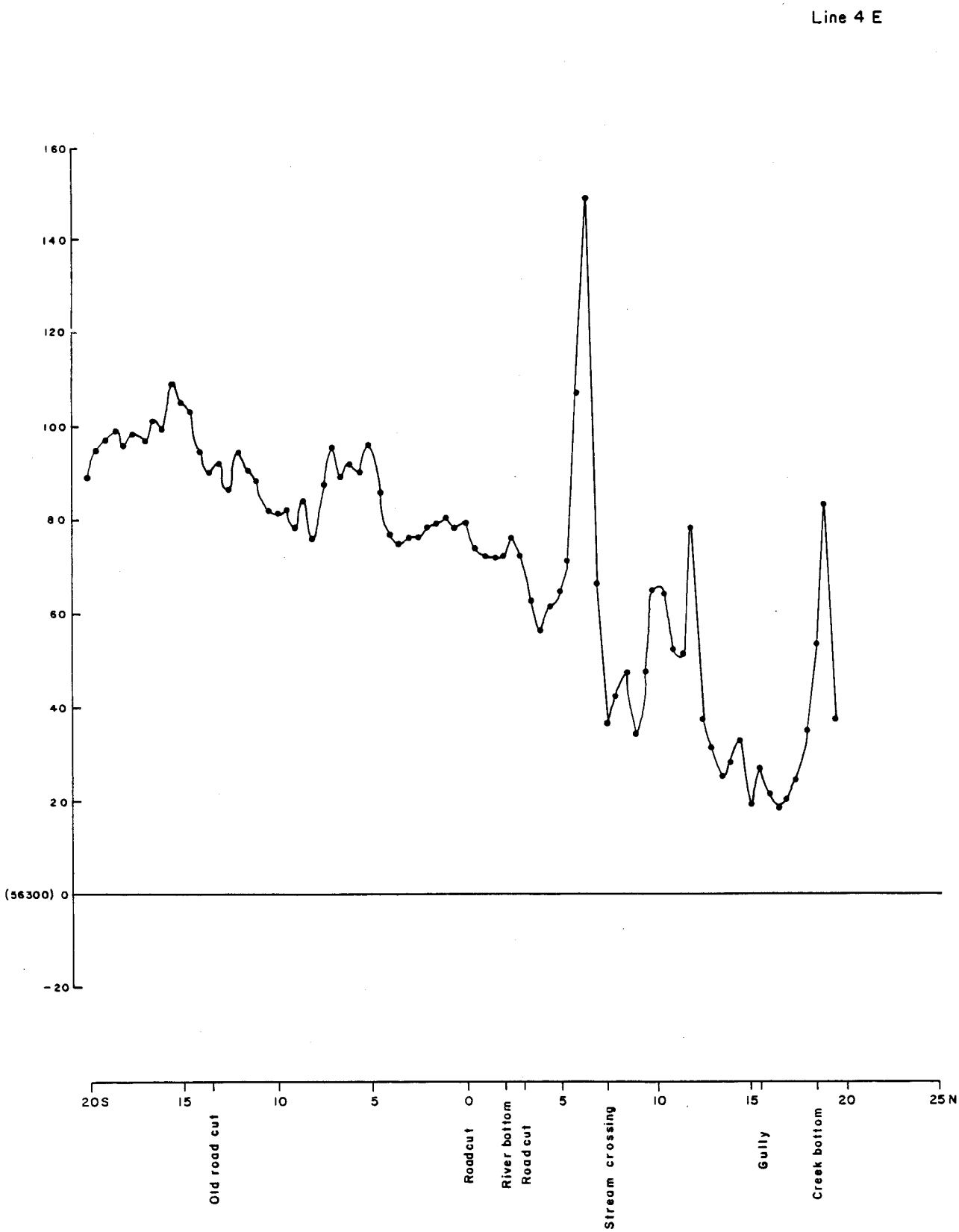



Figure E-23-Quigley Ridge Area, Magnetometer Profile, Line 4 E.

Line 4 W.

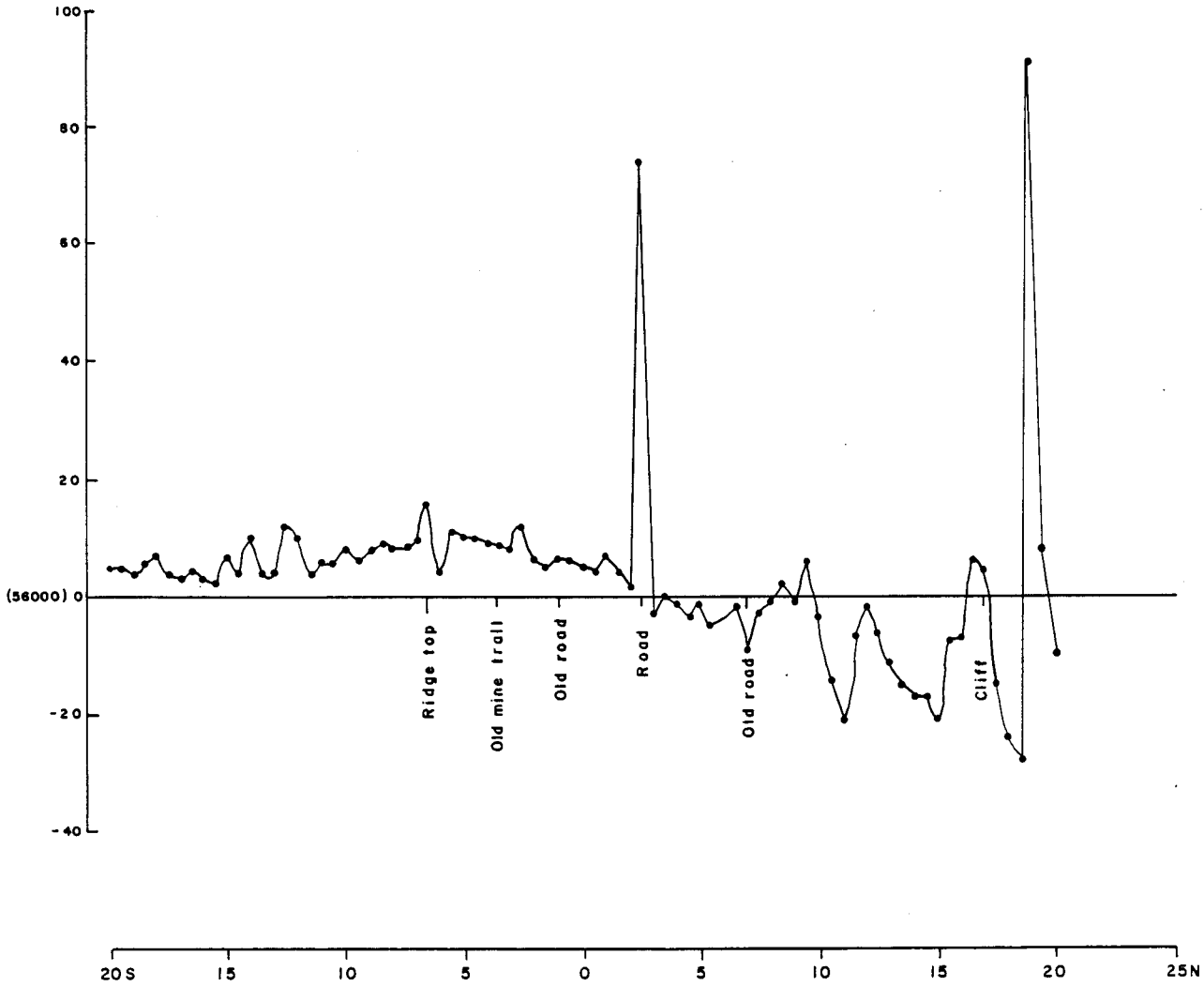



Figure E-24-Quigley Ridge Area, Magnetometer Profile, Line 4 W.

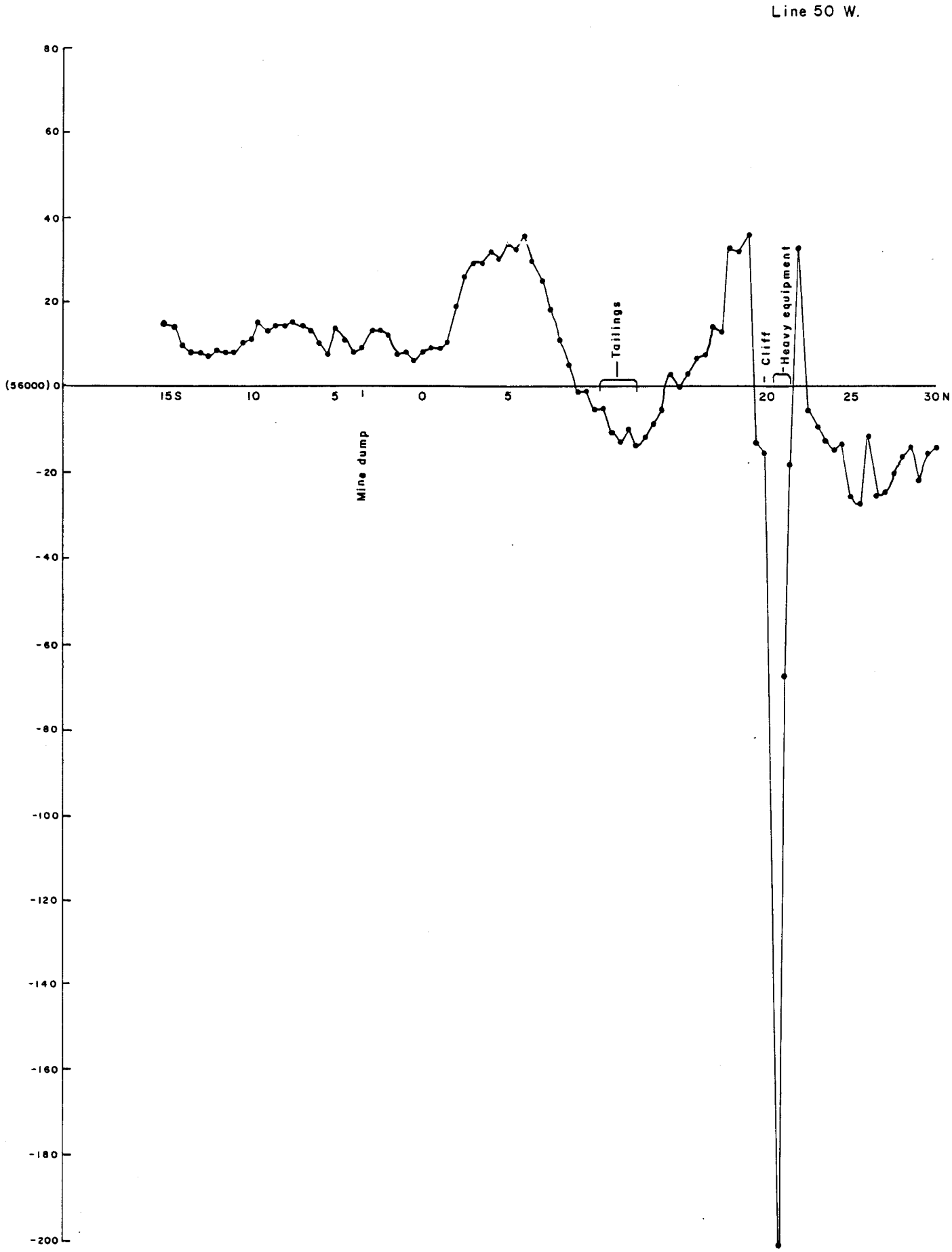



Figure E-25- Quigley Ridge Area, Magnetometer Profile, Line 50 W.

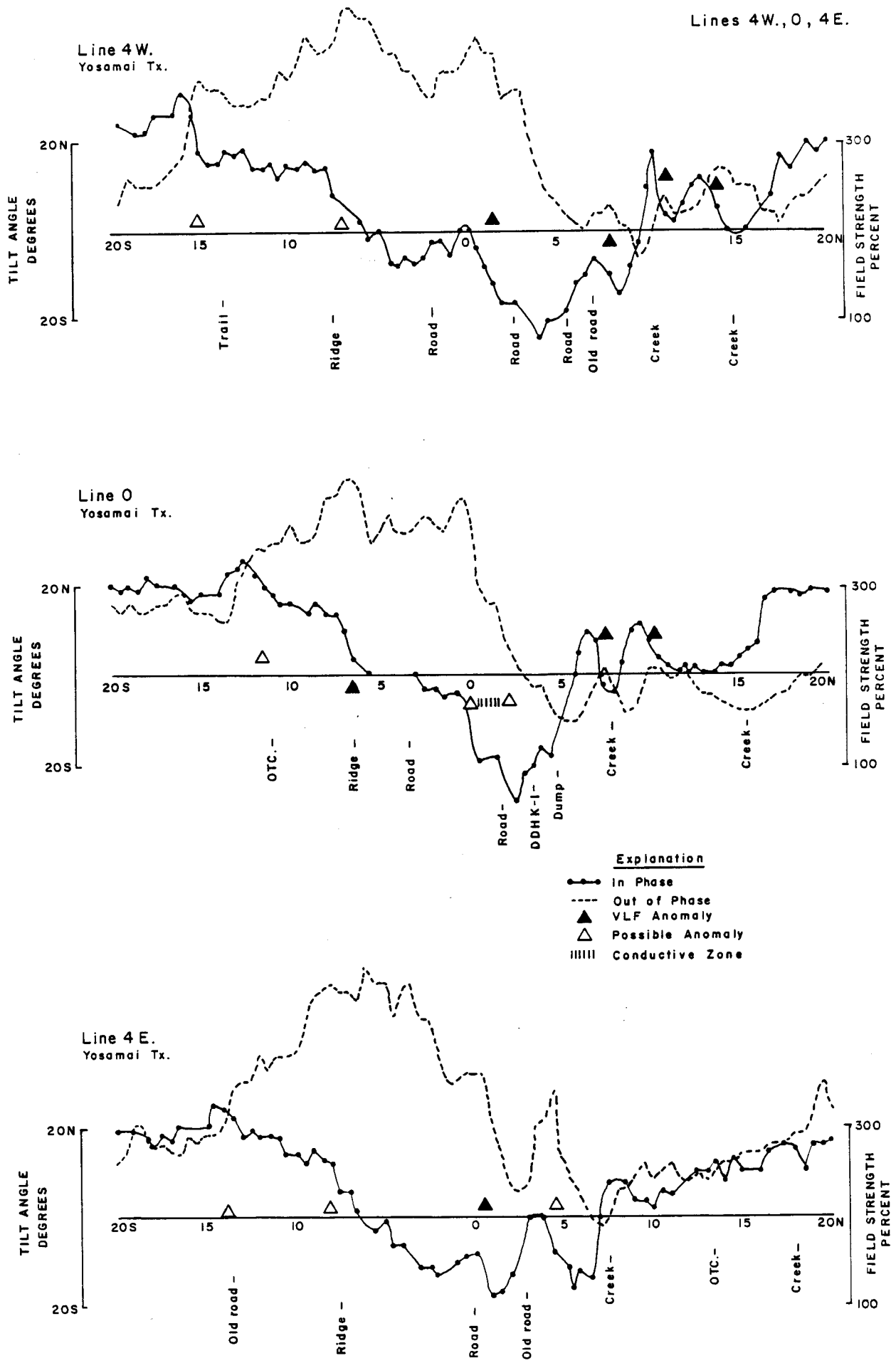
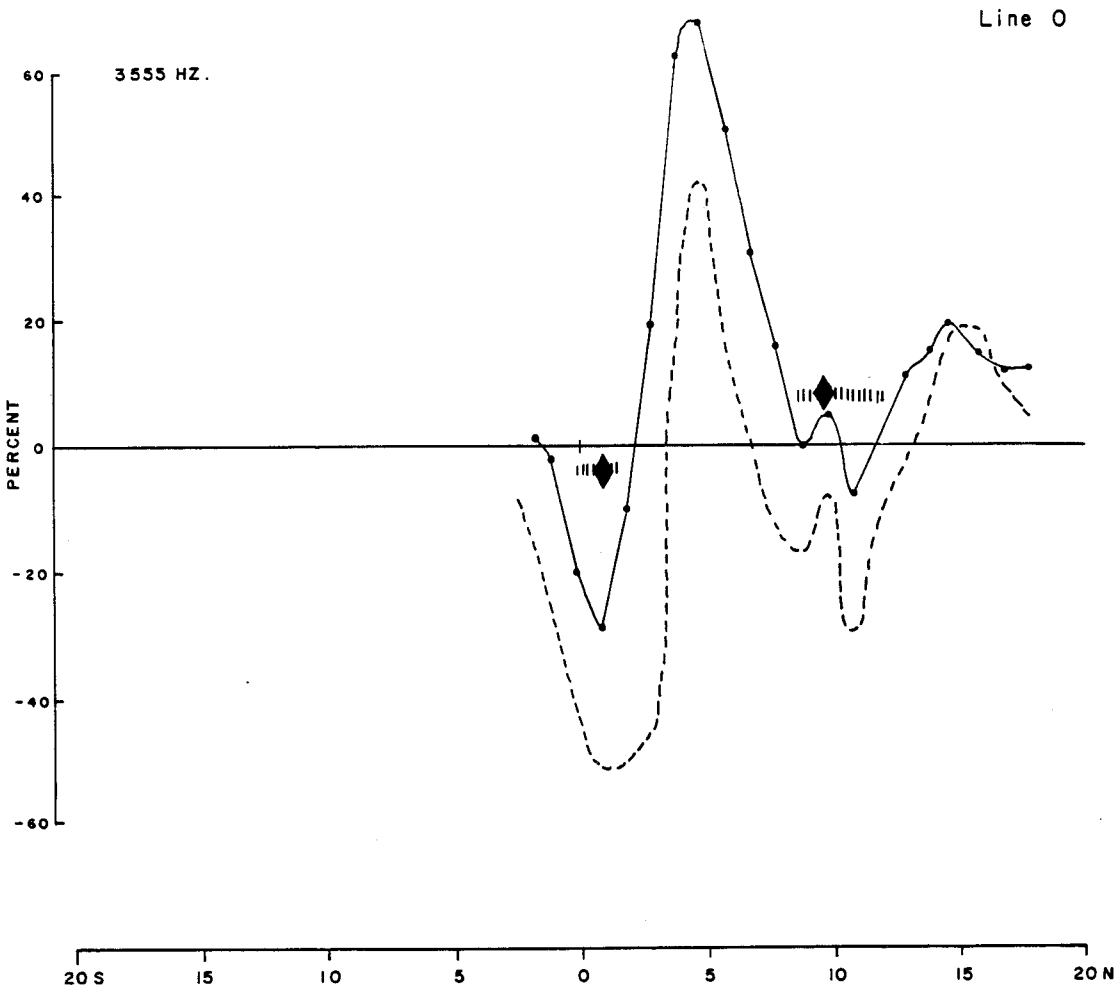



Figure E-26-Quigley Ridge Area, V.L.F., Lines 4W., 0, 4E.



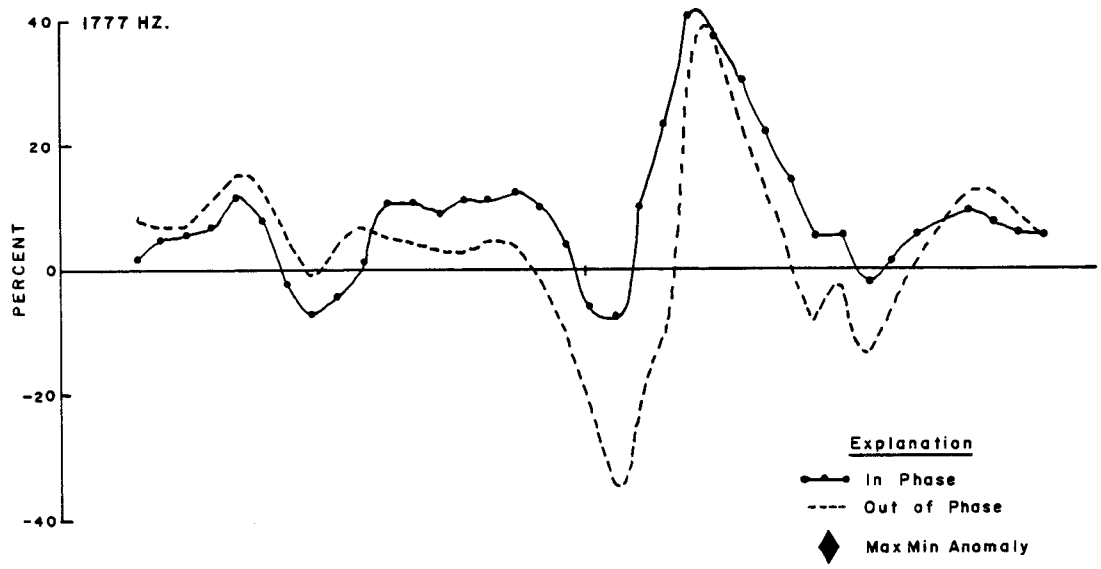




Figure E-27-Quigley Ridge Area, Max Min II E.M., Line O

Line O

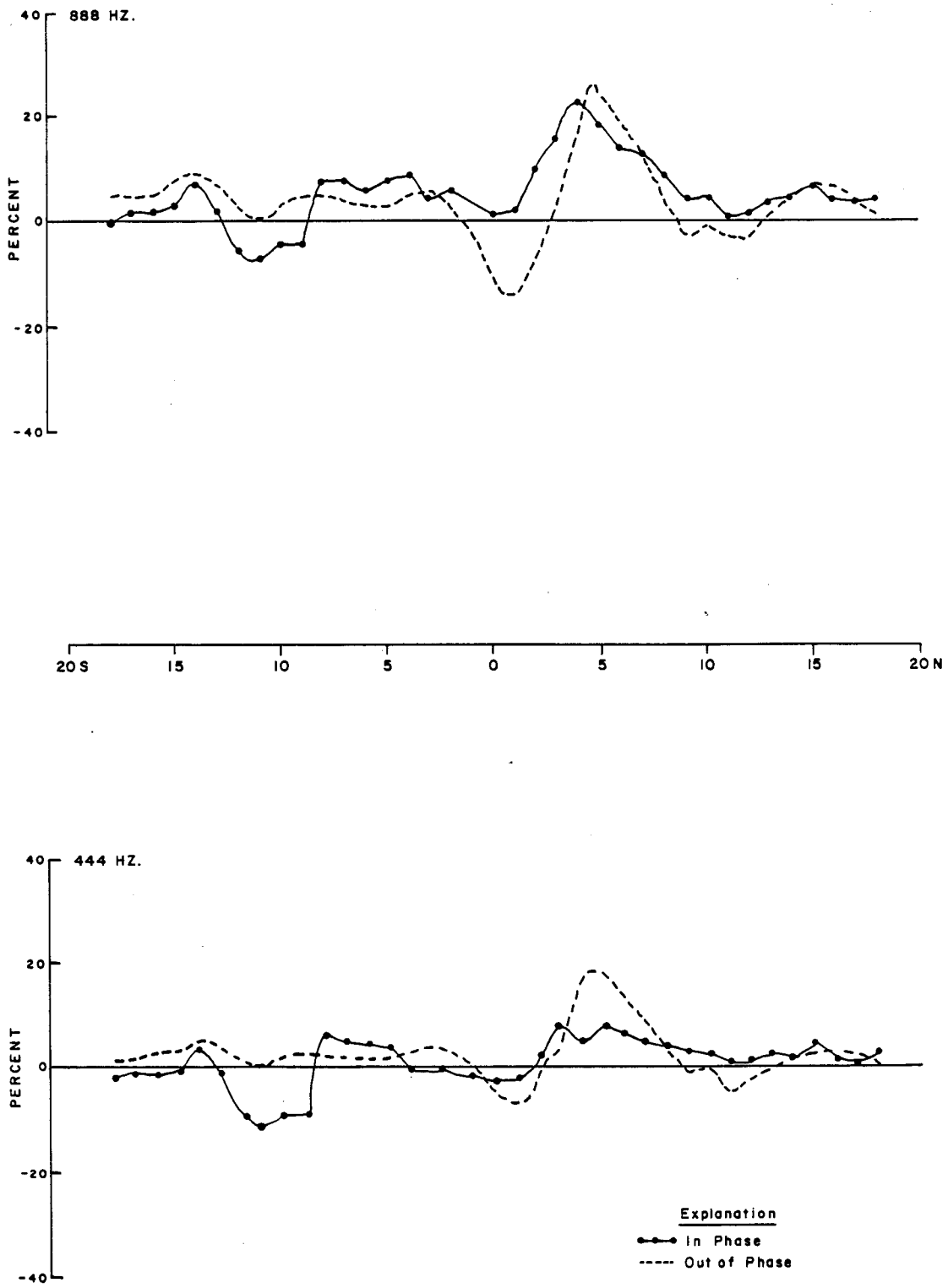



Figure E-28- Quigley Ridge Area, Max Min II E.M., Line O

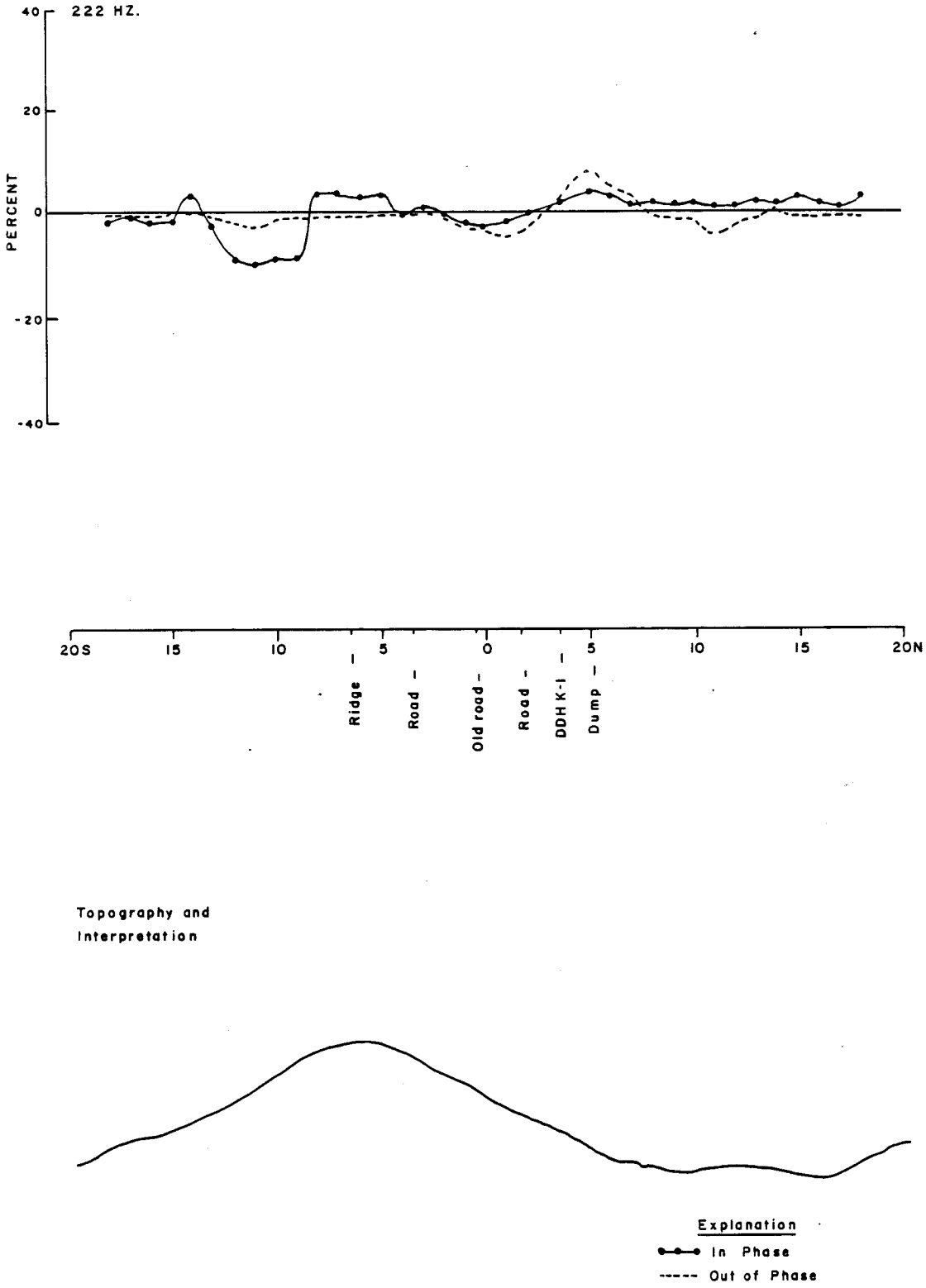



Figure E-29-Quigley Ridge Area, Max Min II E.M., Line 0

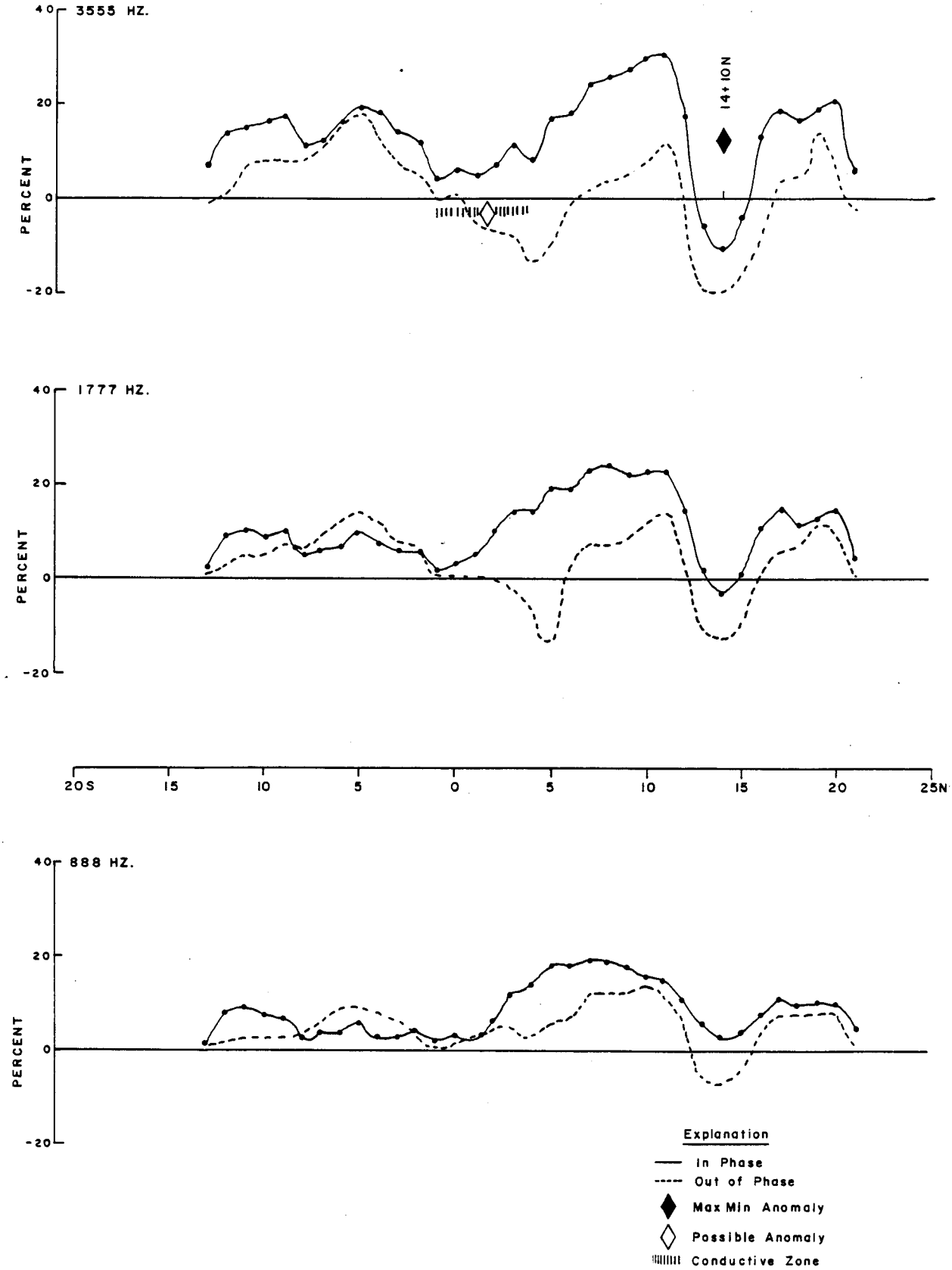



Figure E-30-Quigley Ridge Area, Max Min II E.M., Line 50 W.

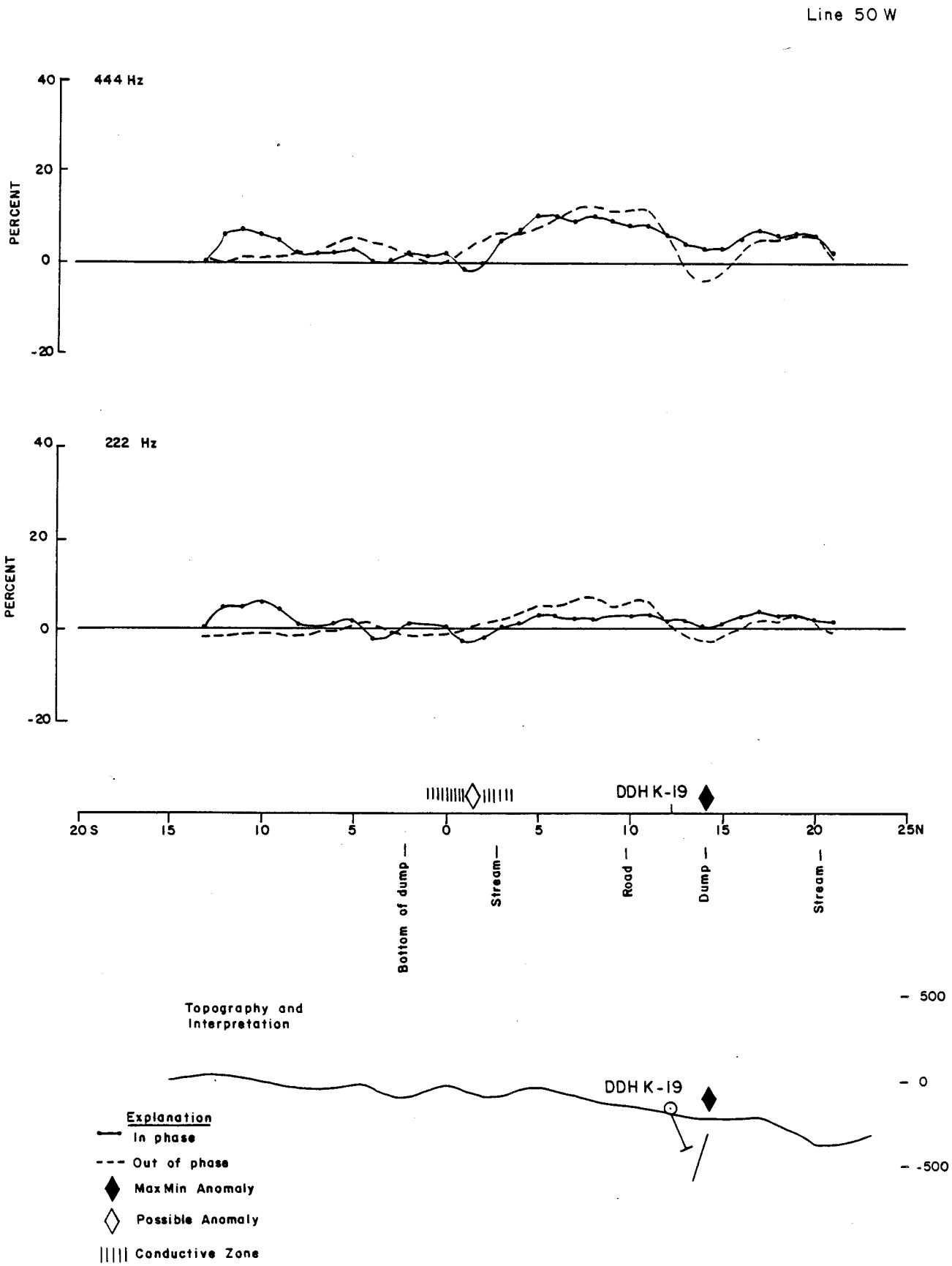



Figure E-31 Quigley Ridge Area, Max Min II EM, Line 50W

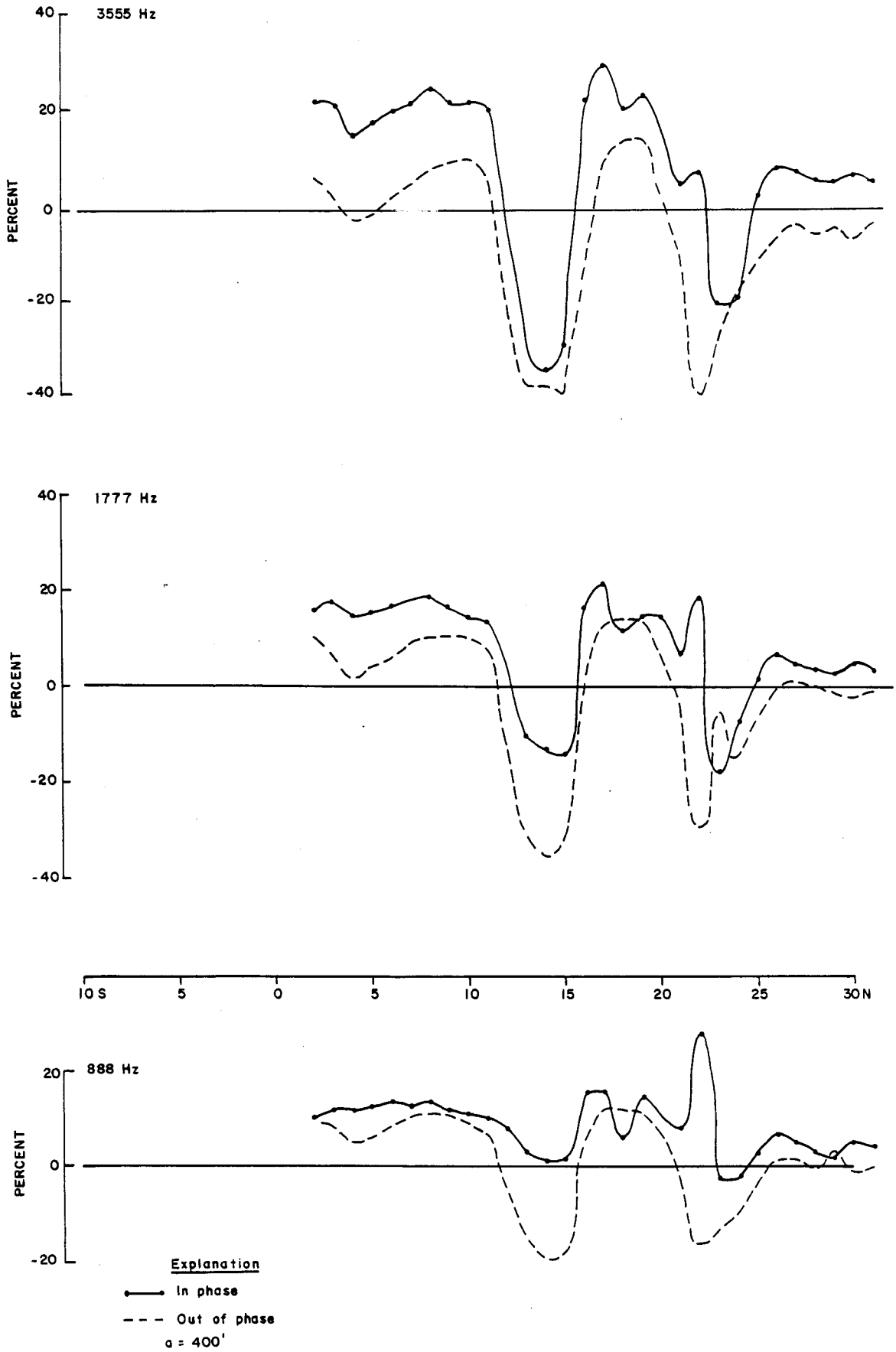



Figure E-32 Quigley Ridge Area, MaxMin II EM, Line 46W

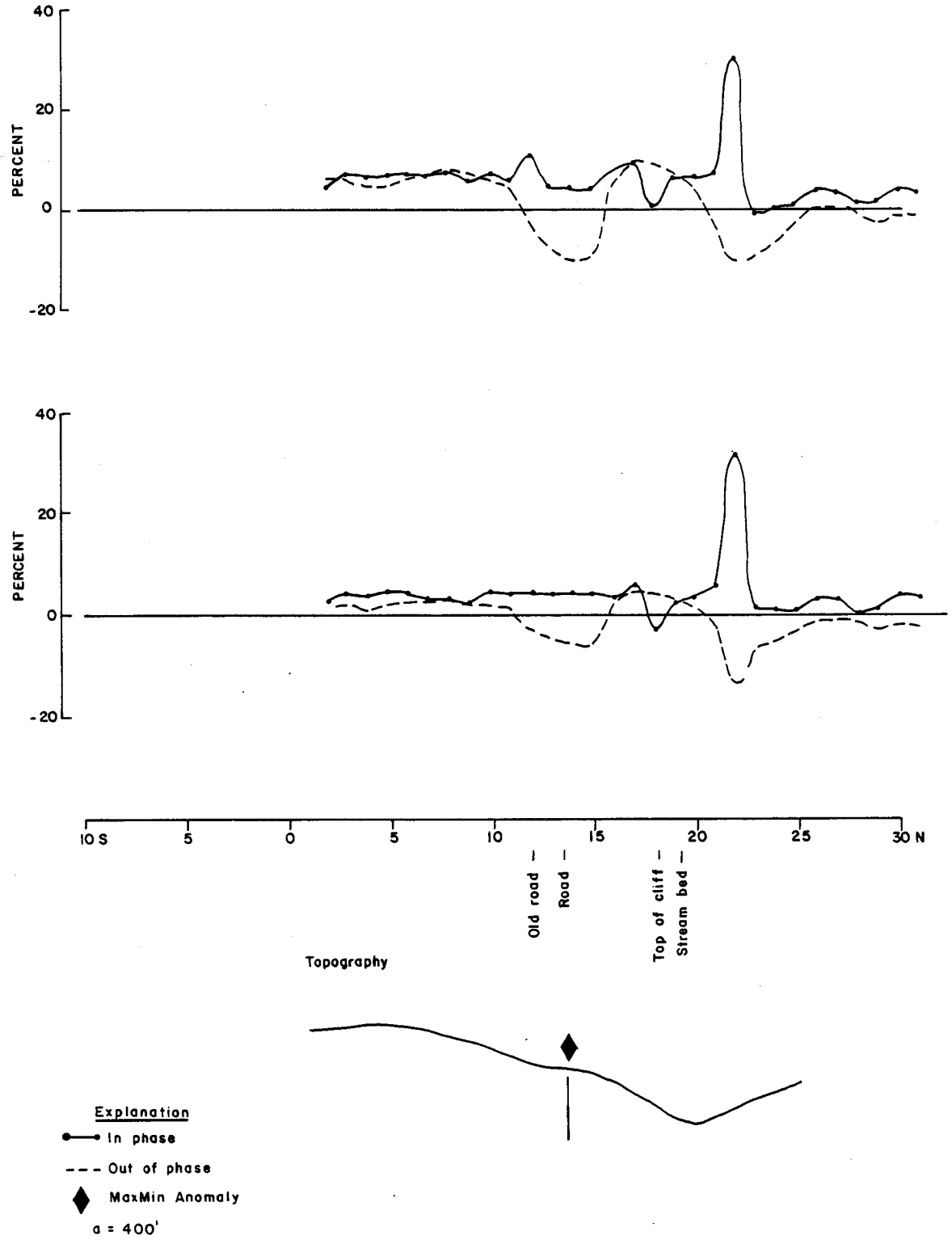



Figure E-33 Quigley Ridge Area, MaxMin II EM, Line 46 W

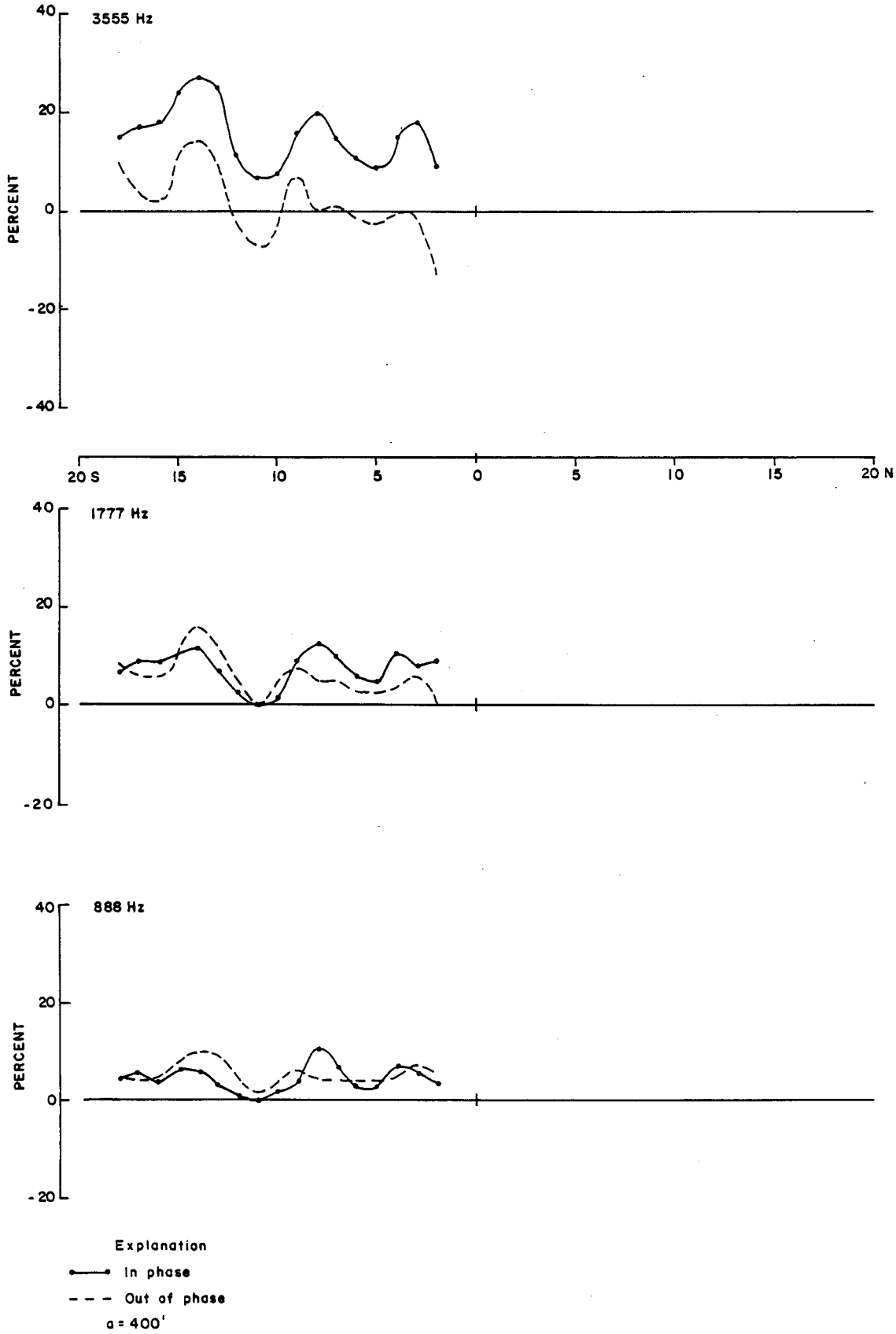
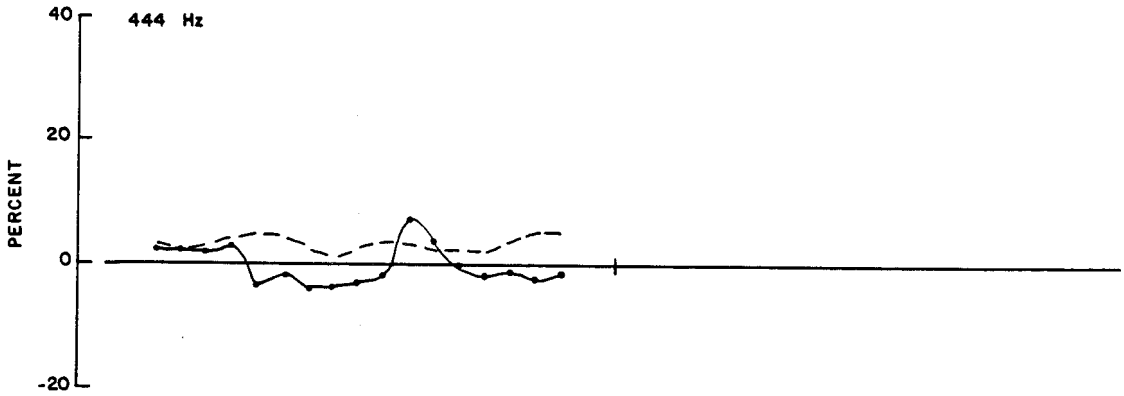
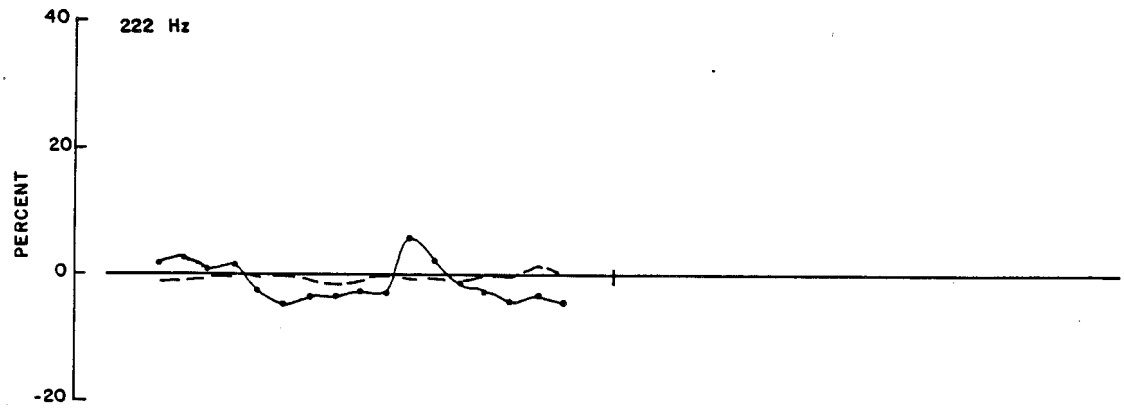



Figure E-34 Quigley Ridge Area, MaxMin II EM, Line O




Explanation

In phase

Out of phase

Figure E-35 Quigley Ridge Area, MaxMin II EM, Line O

Line 4+00 E

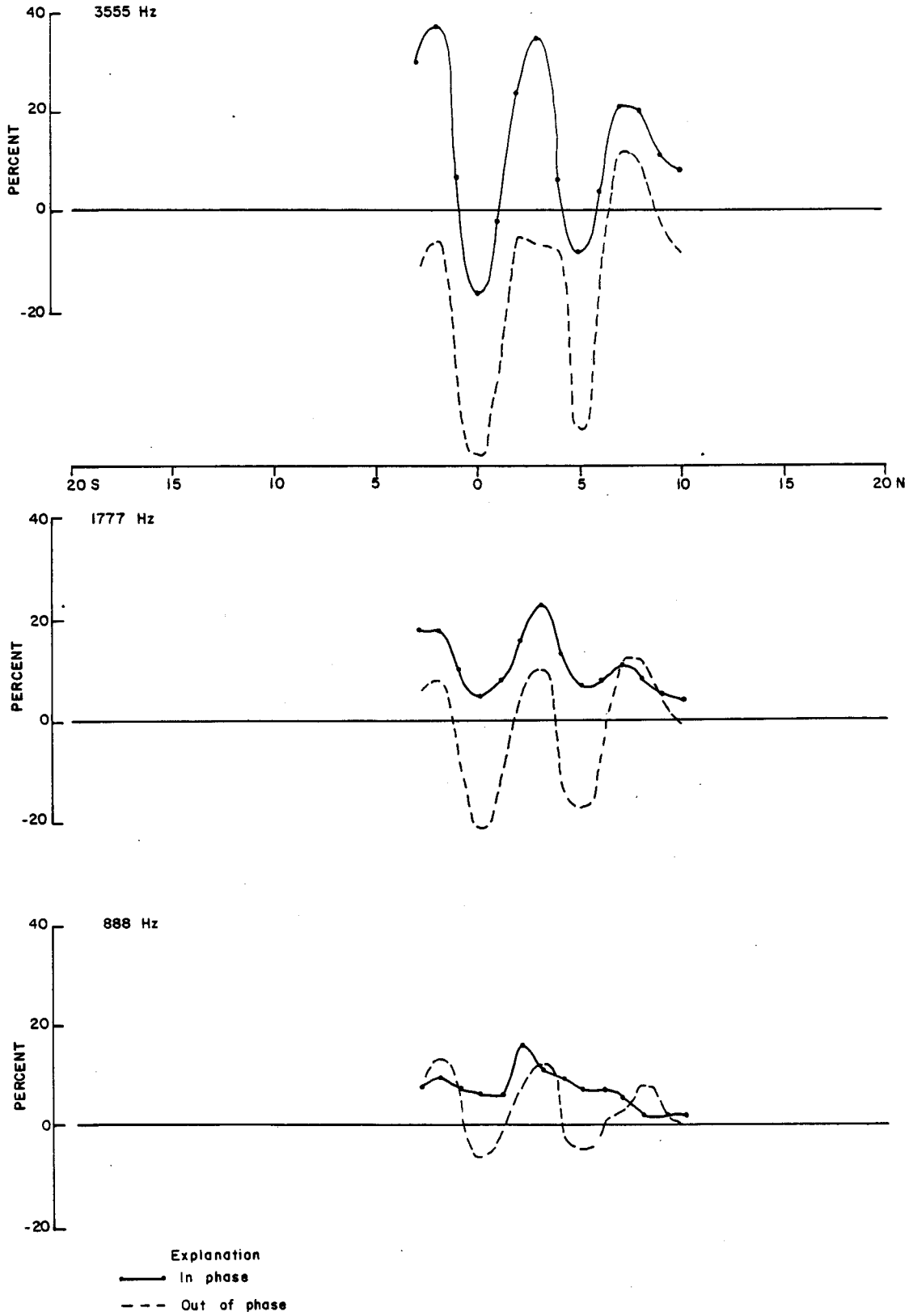



Figure E-36 Quigley Ridge Area, MaxMin II EM, Line 4+00 E

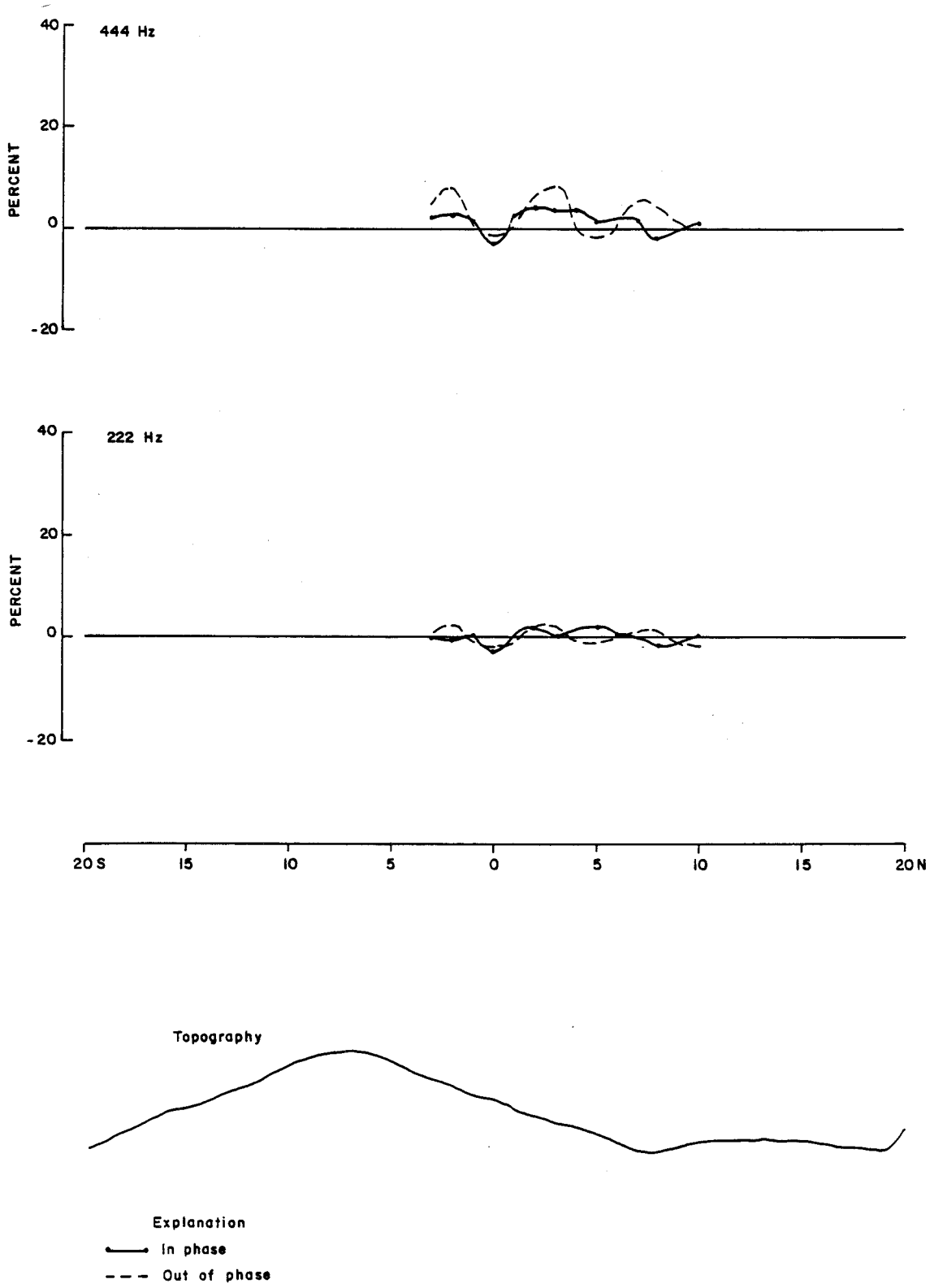



Figure E-37 Quigley Ridge Area, MaxMin II EM, Line 4+00E

Line 4+00 E

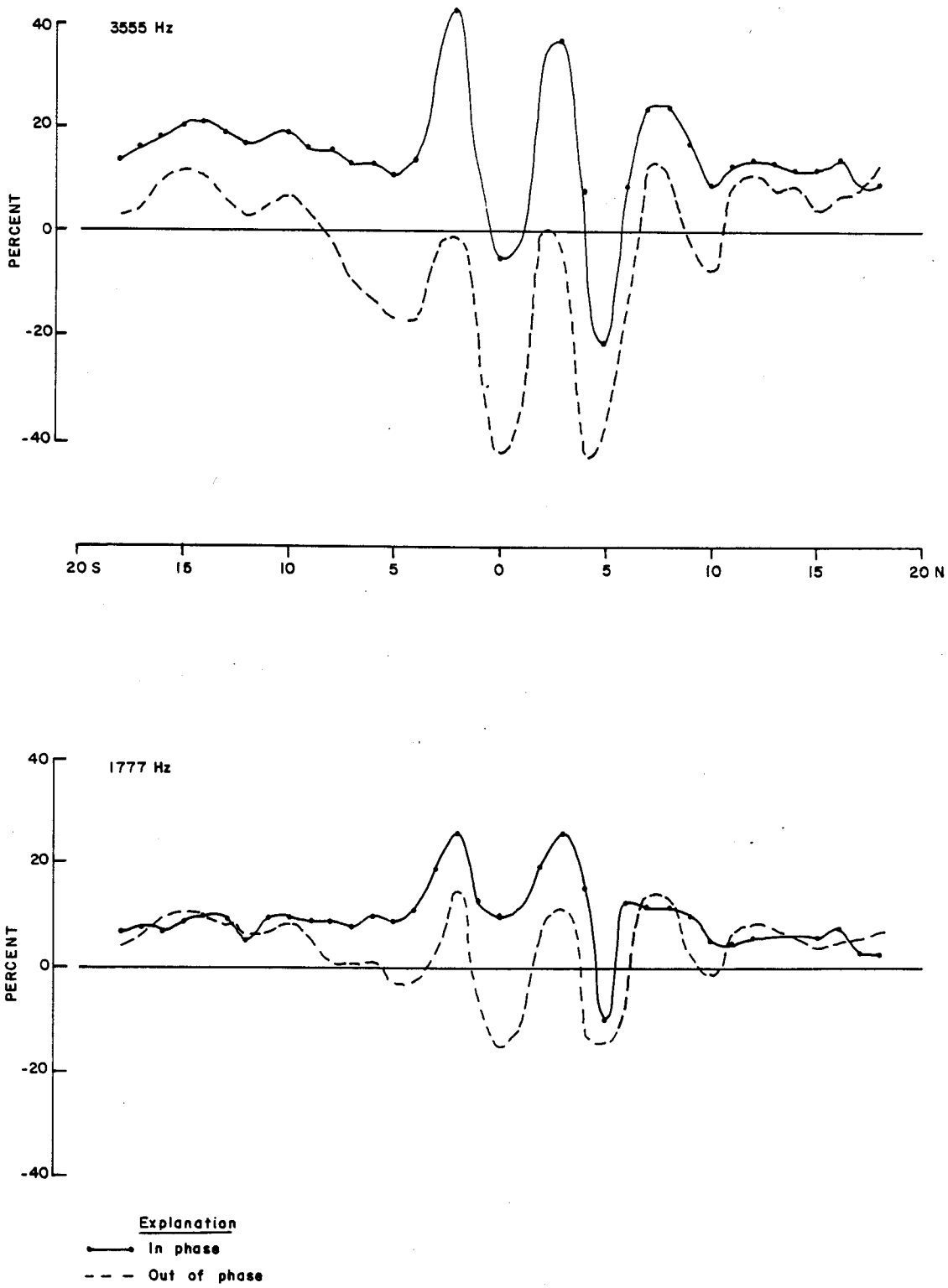
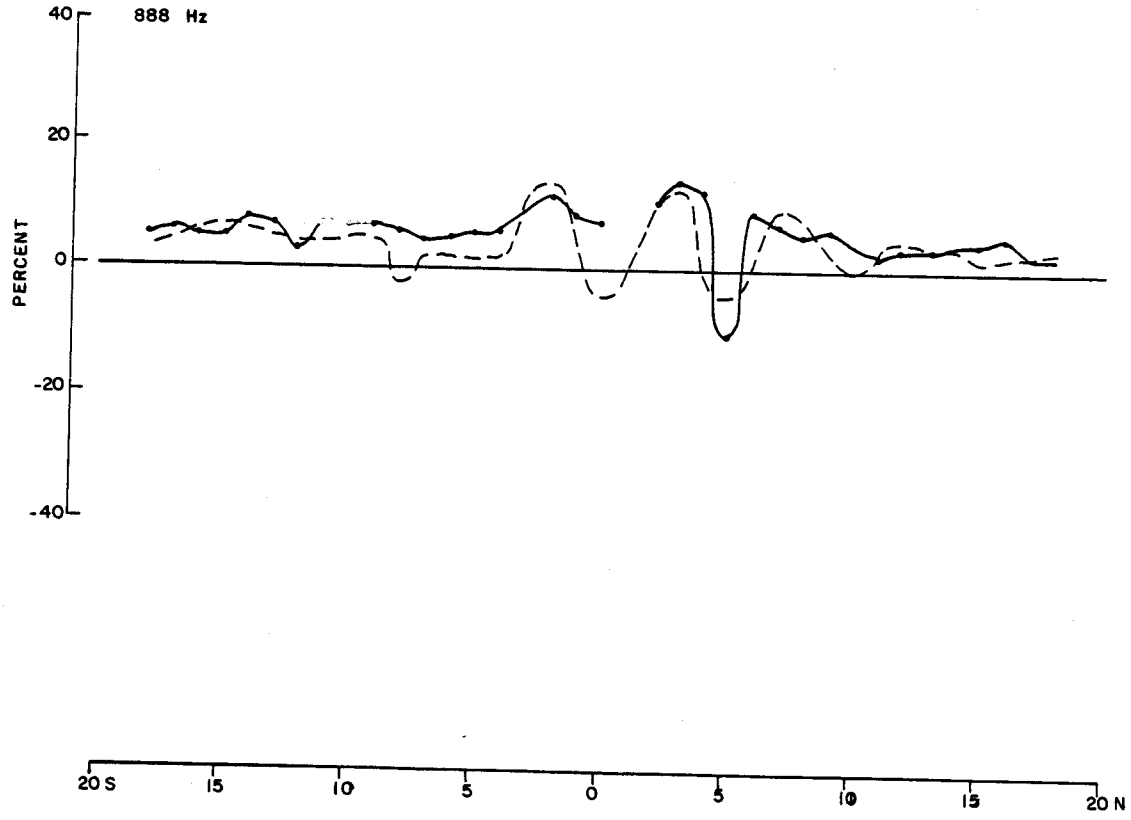



Figure E-38 Quigley Ridge Area, MaxMin II EM, Line 4+00 E

Line 4+00 E



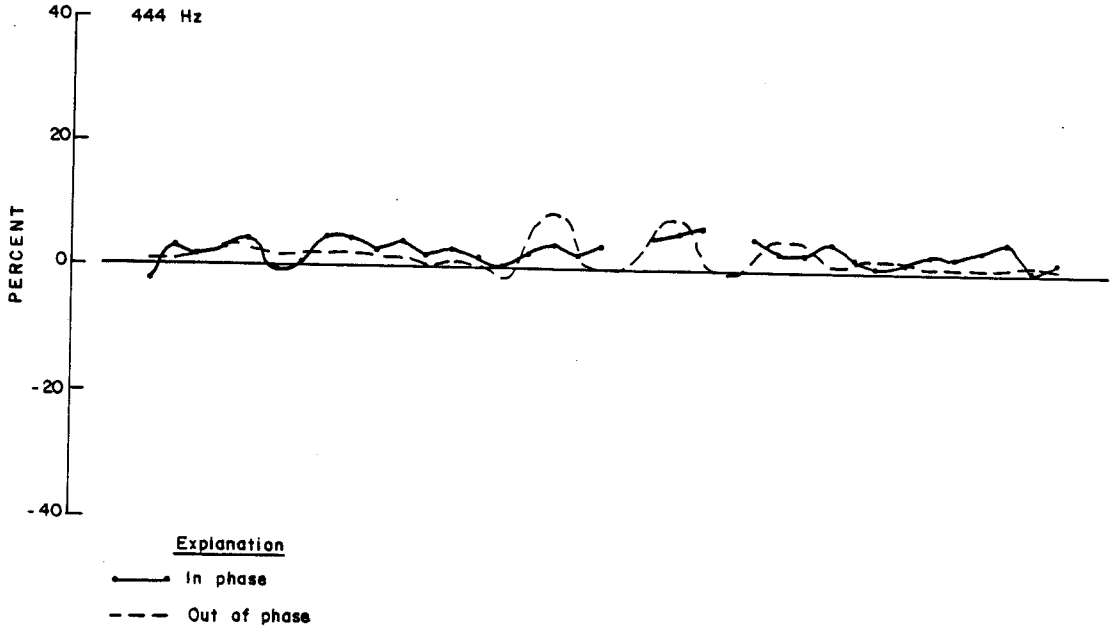




Figure E-39 Quigley Ridge Area, MaxMin II EM, Line 4+00 E

Line 4+00 E

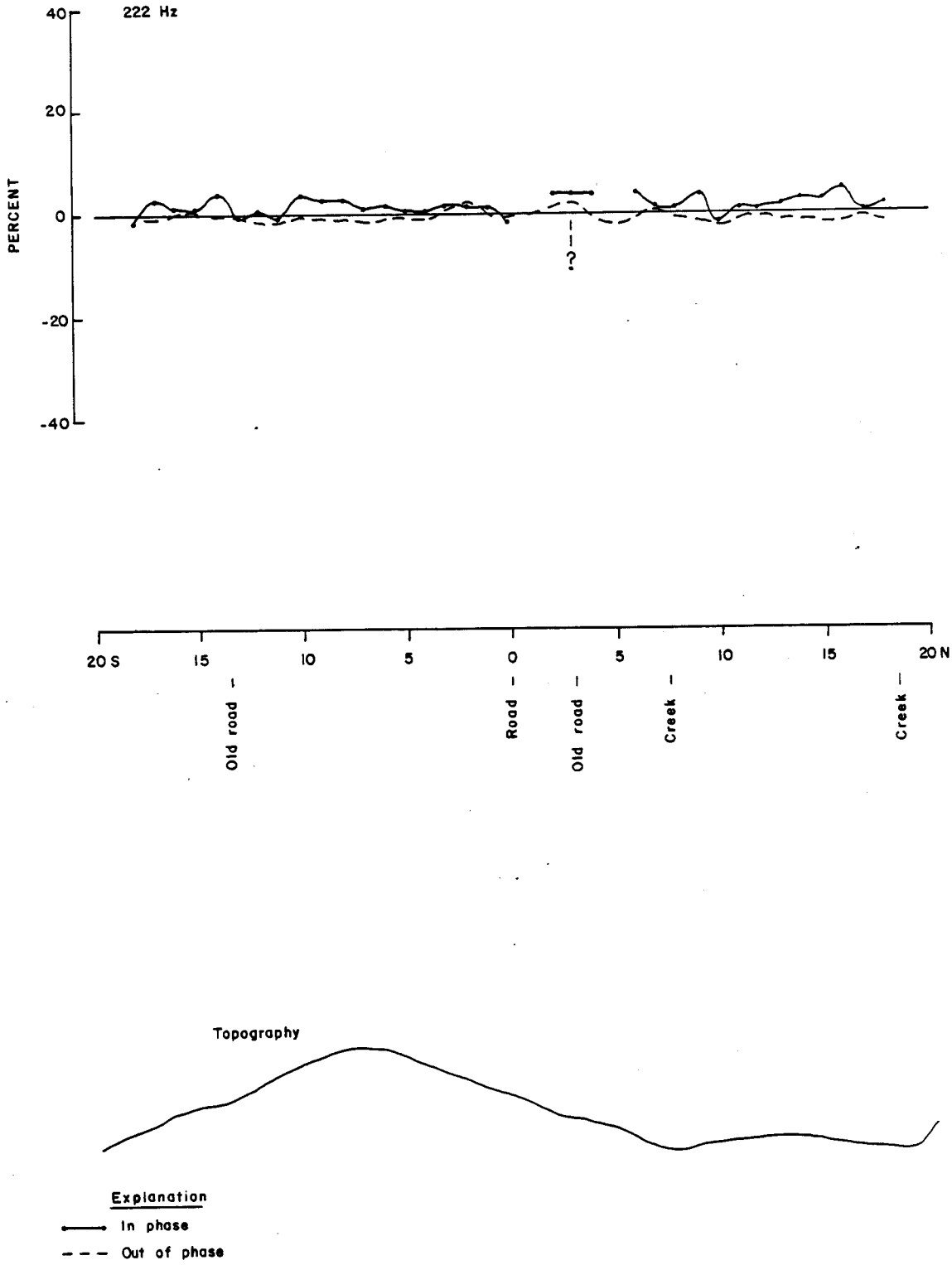



Figure E-40 Quigley Ridge Area, MaxMin II EM, Line 4+00 E

Line 4+00 W.

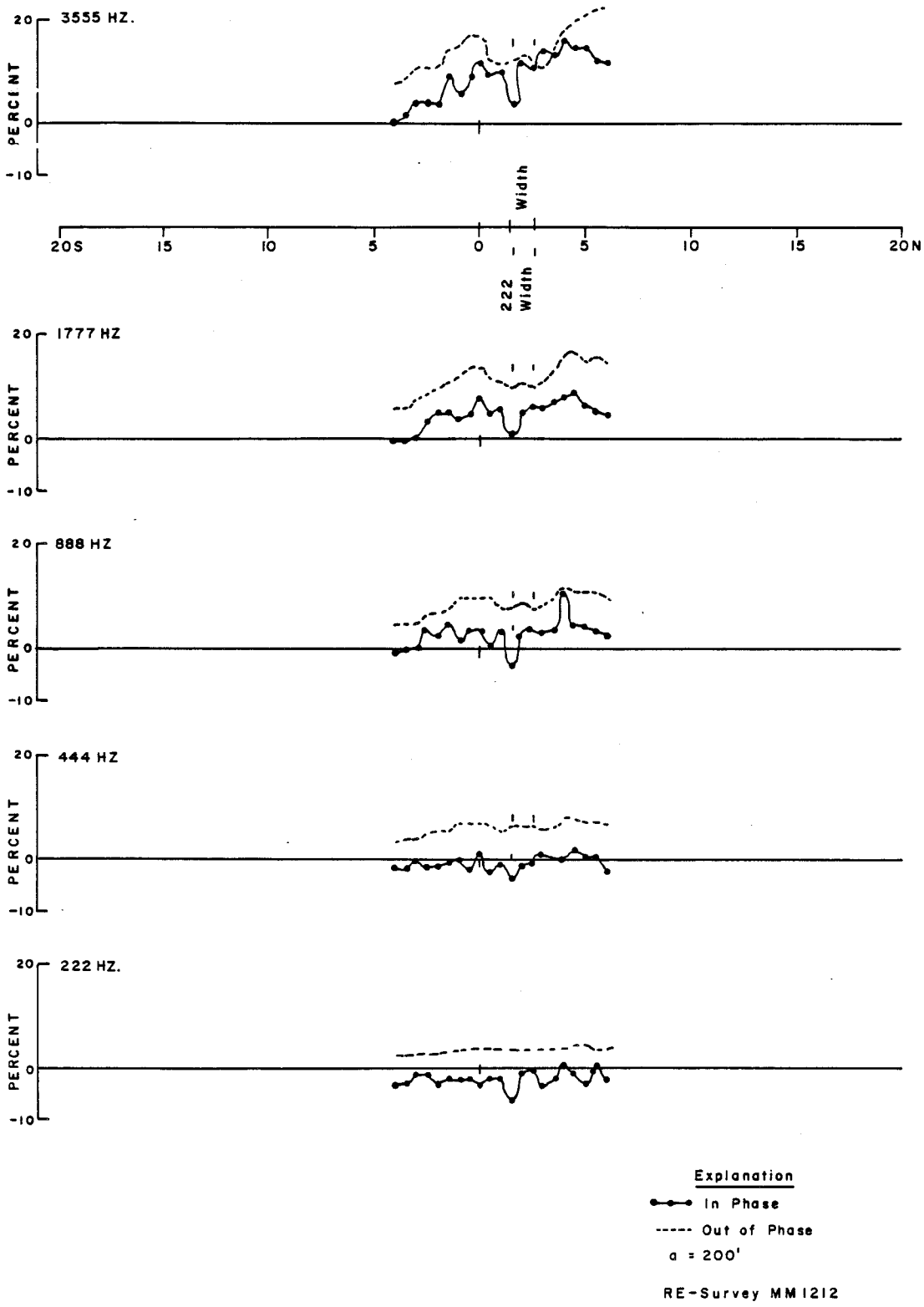



Figure E-41- Quigley Ridge Area, Max Min II E.M., Line 4+00 W.

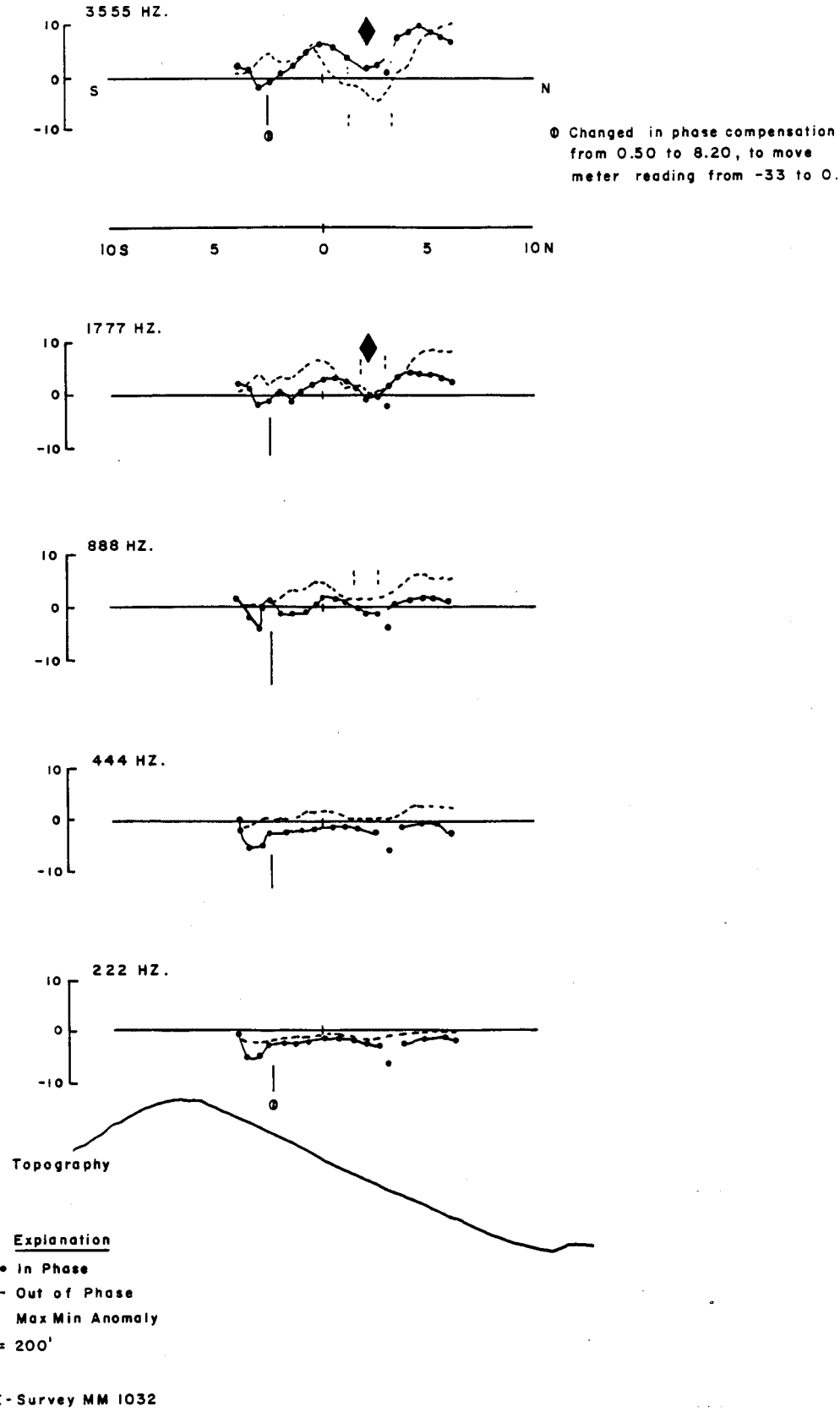



Figure E-42-Quigley Ridge Area, Max Min II E.M., Line 4+00 W.

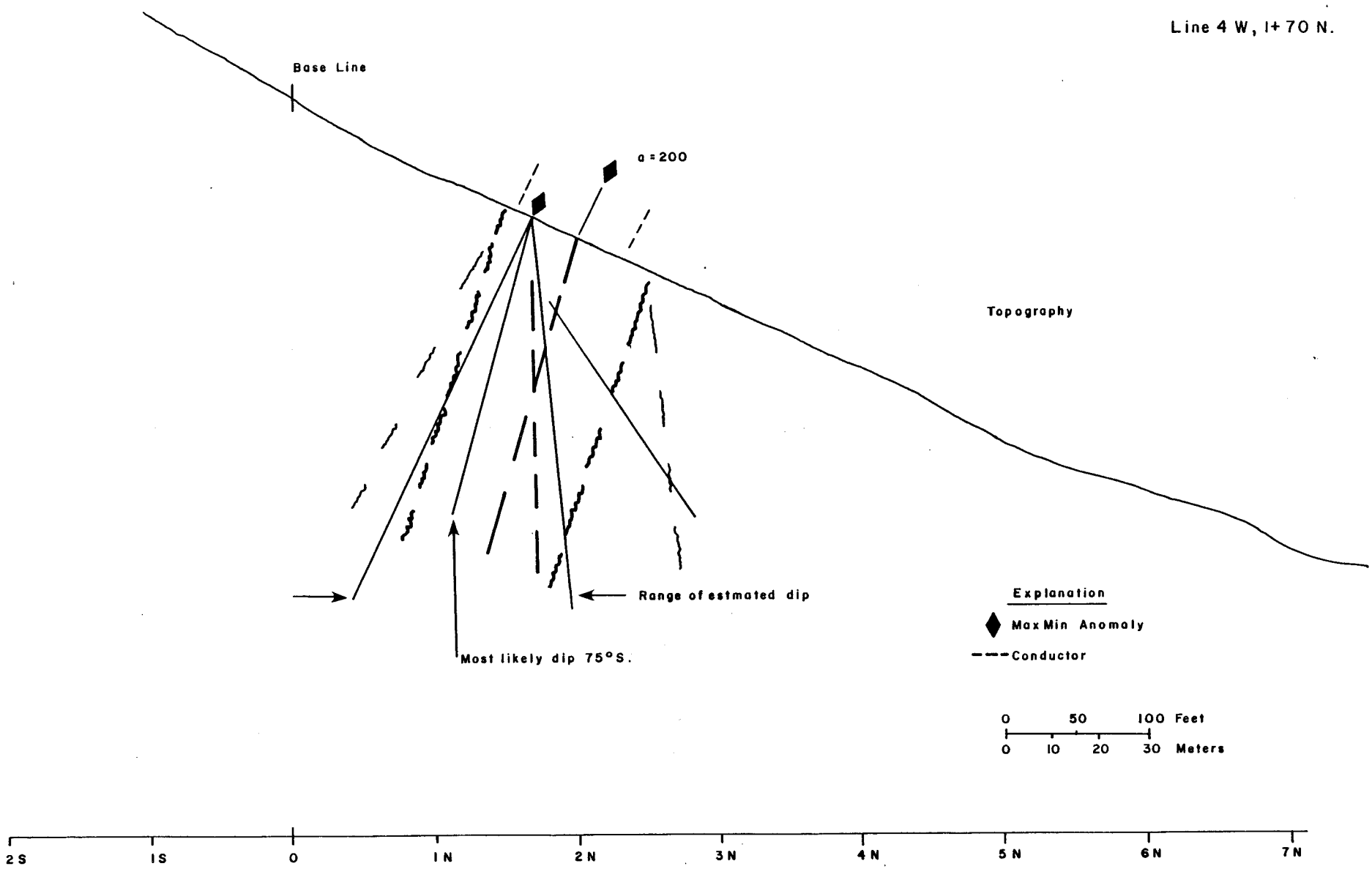



Figure E-43 - Quigley Ridge Area, Anomaly Interpretation, Line 4 W., 1+70 N.

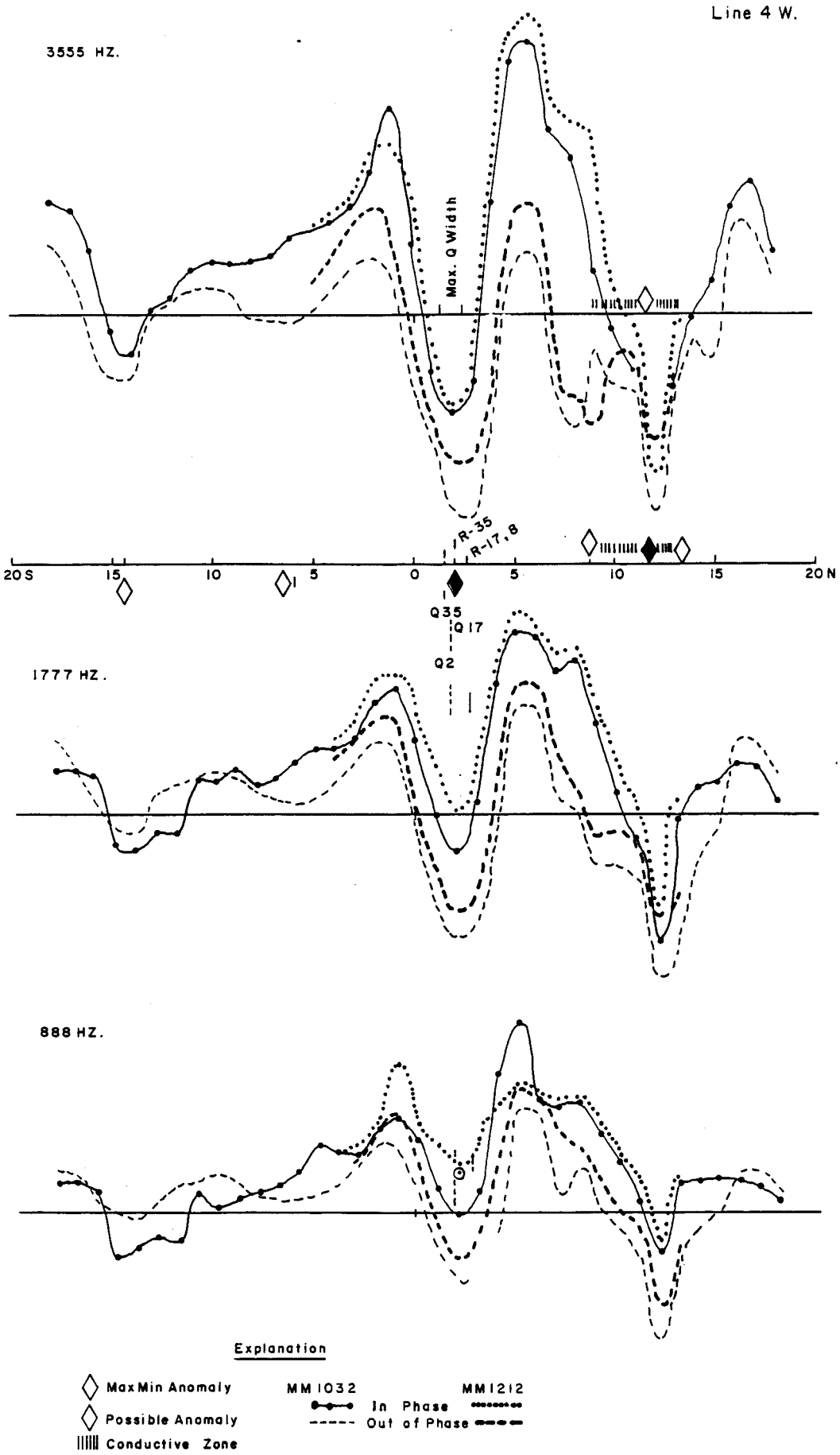



Figure E-44-Quigley Ridge Area, Max Min II E.M. Profile, Line 4 W.

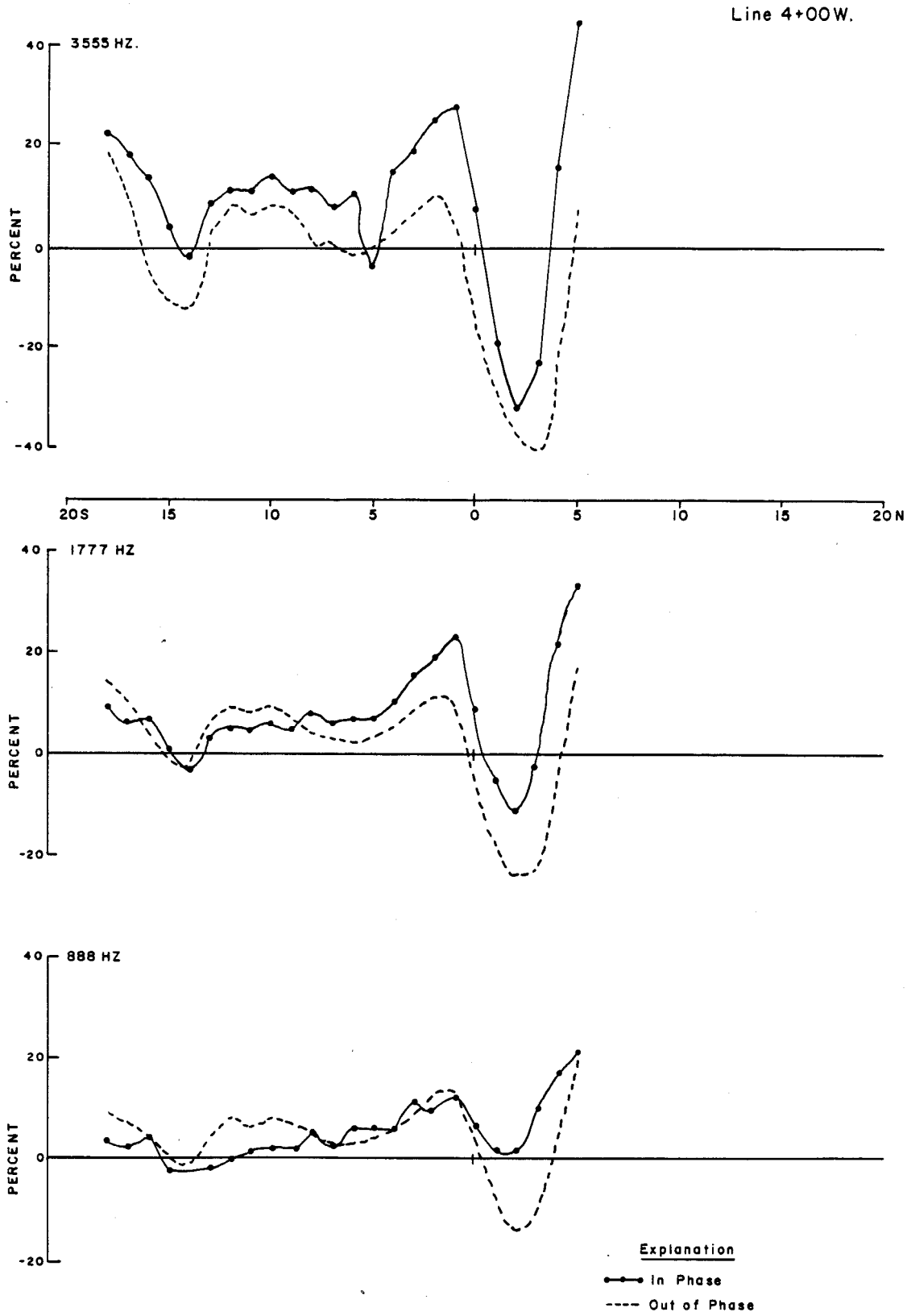



Figure E-45-Quigley Ridge Area, MaxMin II E.M., Line 4+00 W.

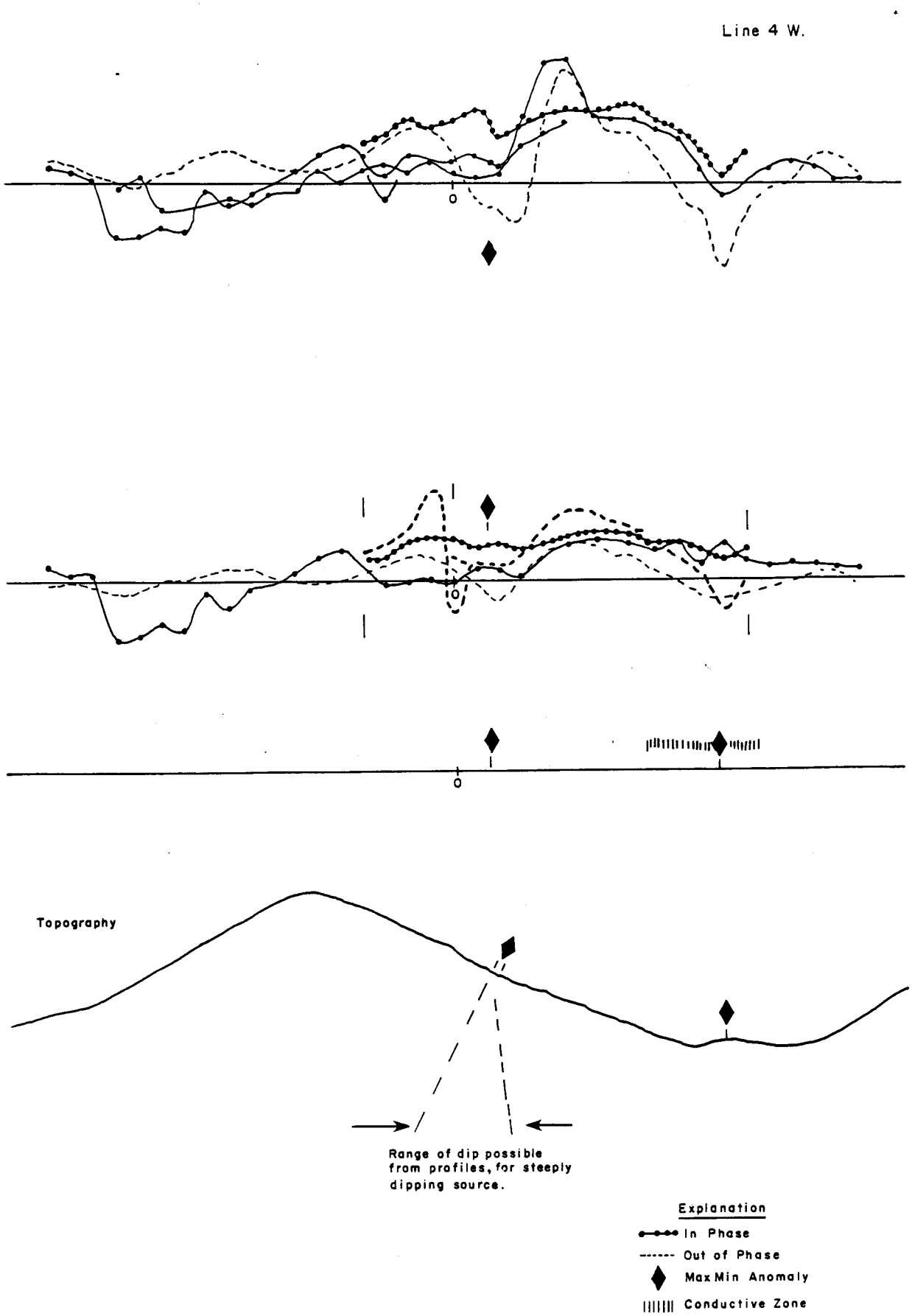
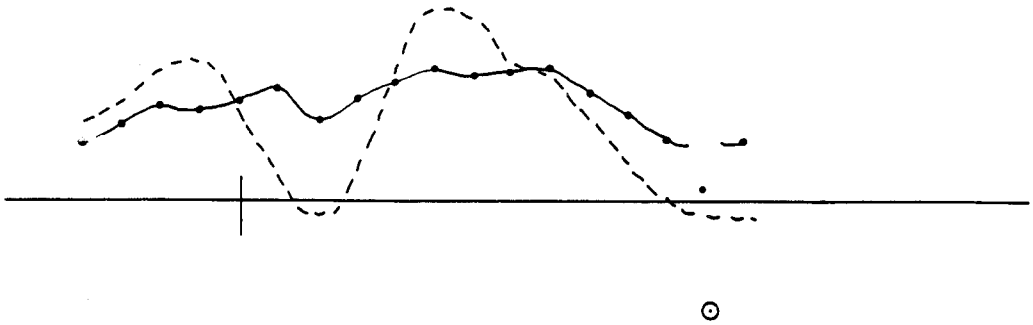
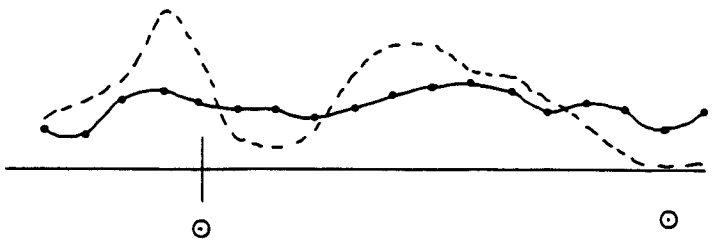



Figure E-46-Quigley Ridge Area, Max Min II E.M., Line 4 W.

Line 4 W.





Explanation

In Phase

Out of Phase

Figure E-47-Quigley Ridge Area, Max Min II E.M., Line 4 W.

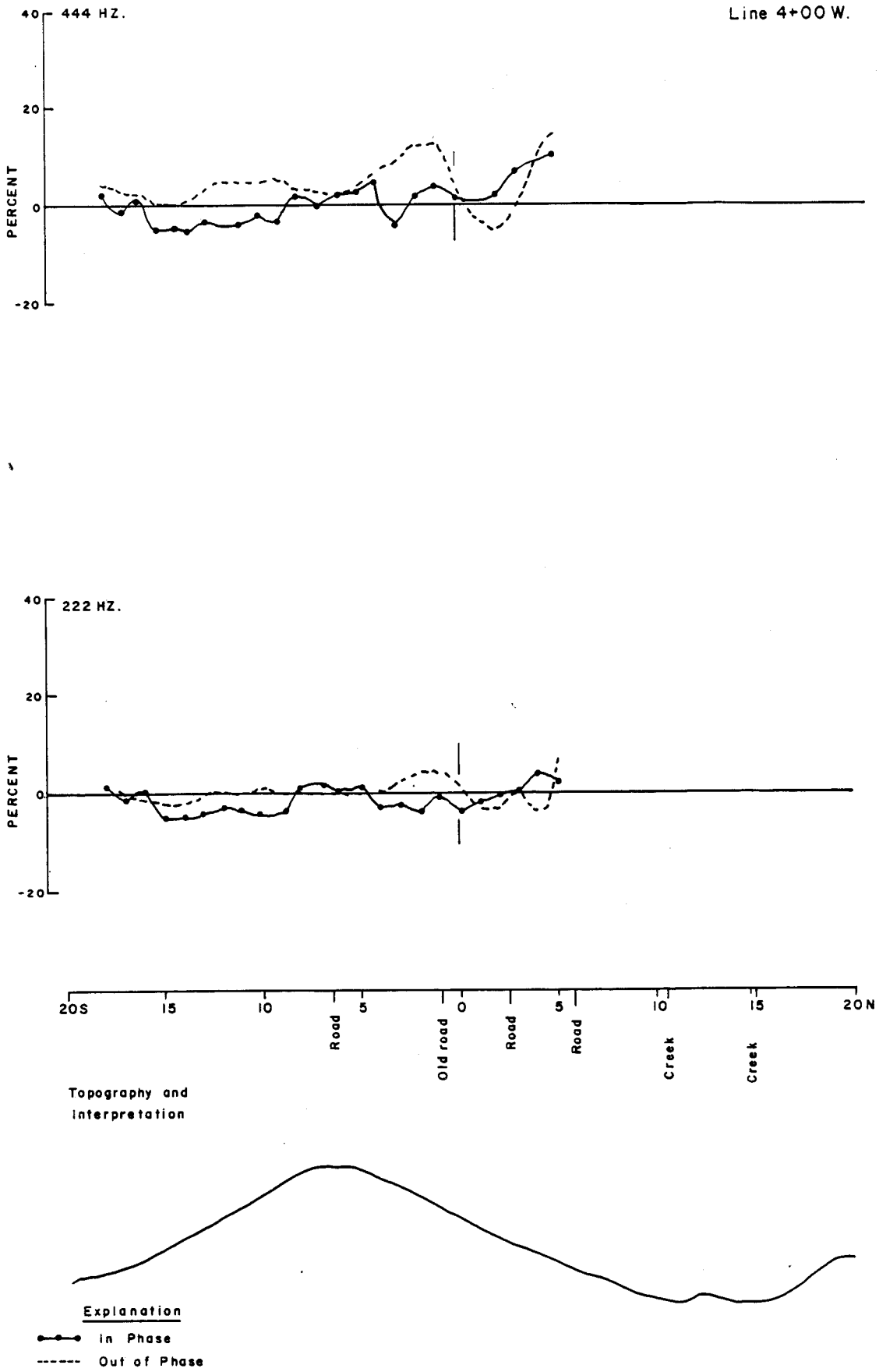



Figure E-48-Quigley Ridge Area, MaxMin II E.M., Line 4+00 W.

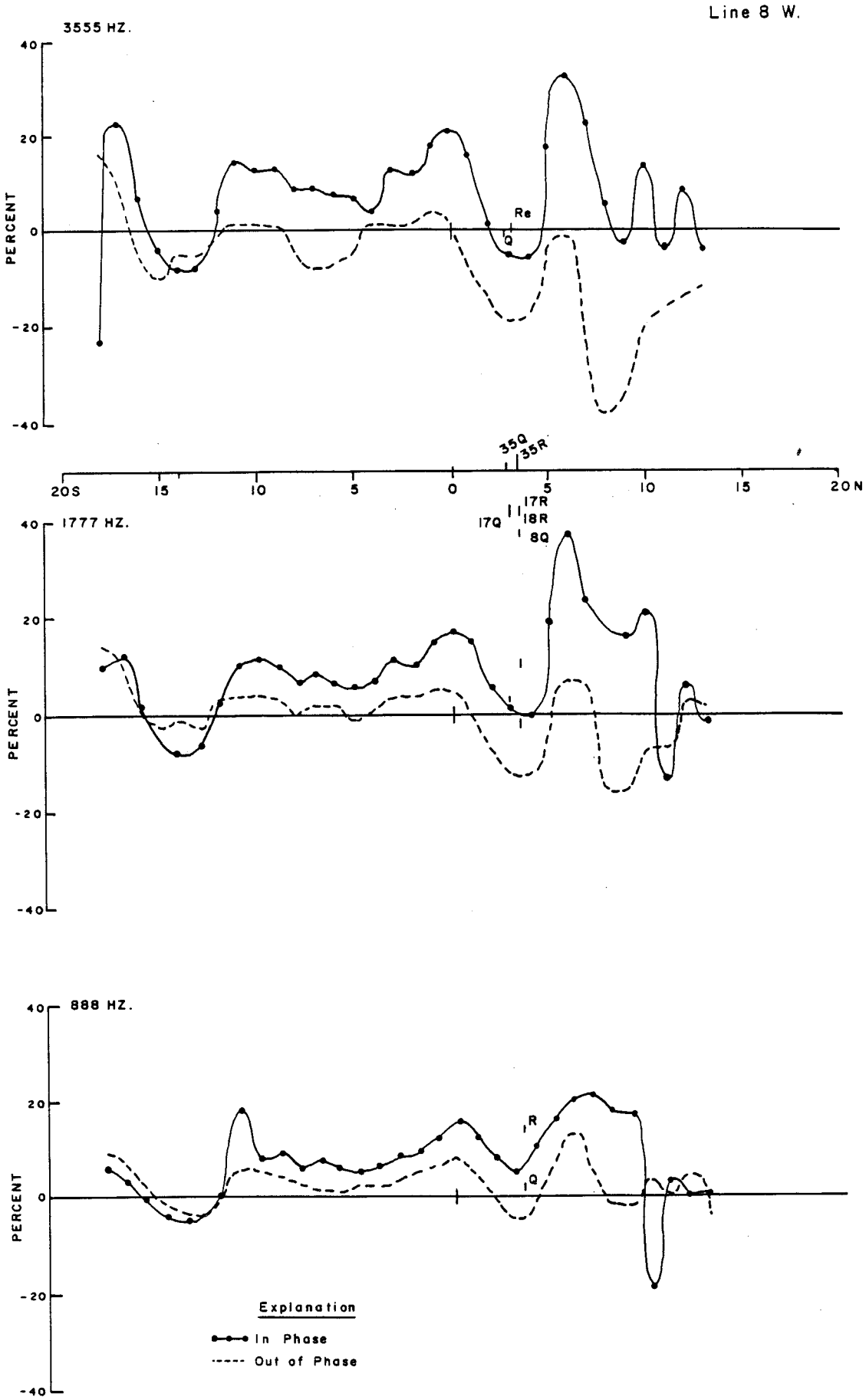



Figure E-49-Quigley Ridge Area, MaxMin II E.M., Line 8 W.

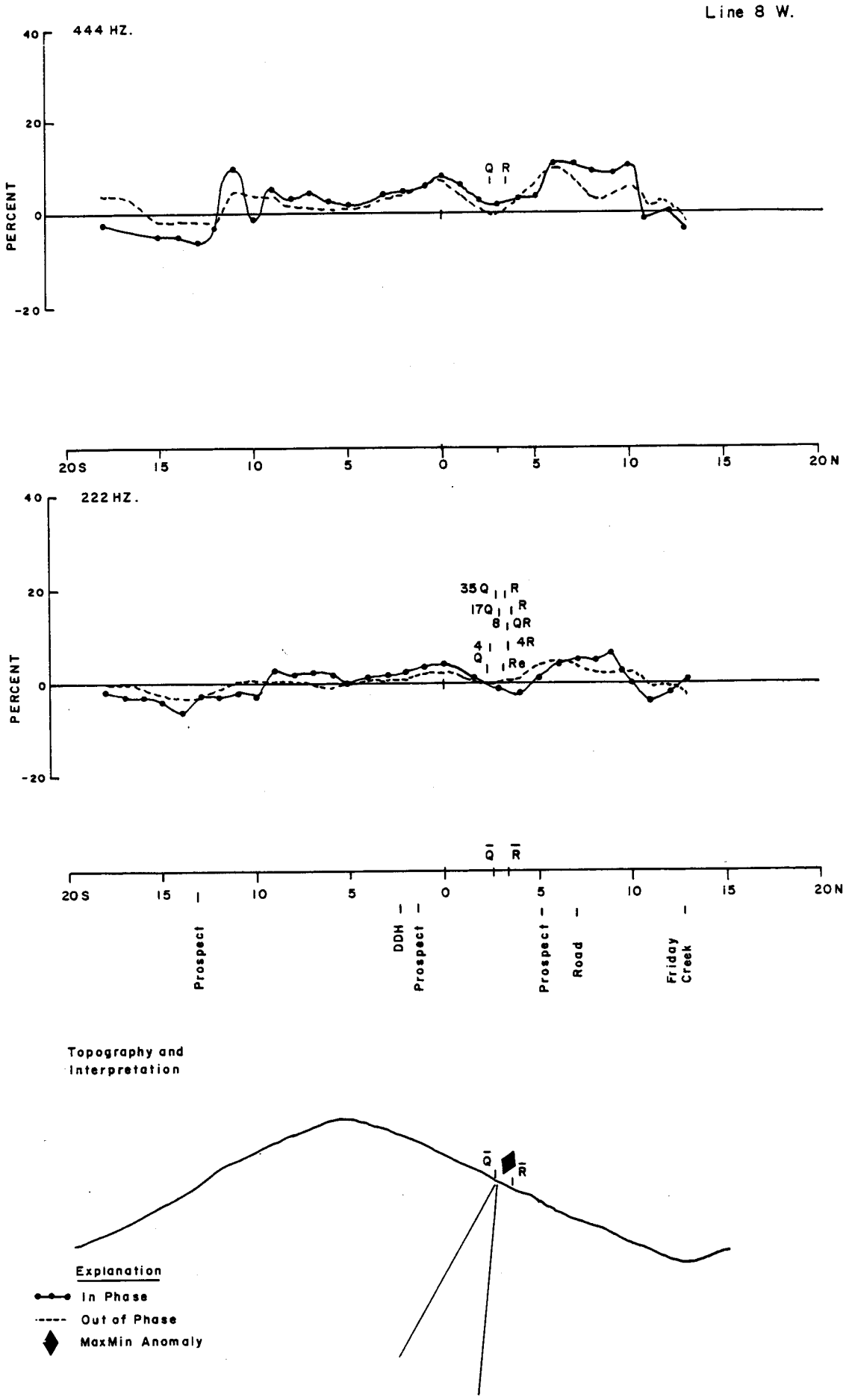



Figure E-50-Quigley Ridge Area, MaxMin II E.M., Line 8 W.

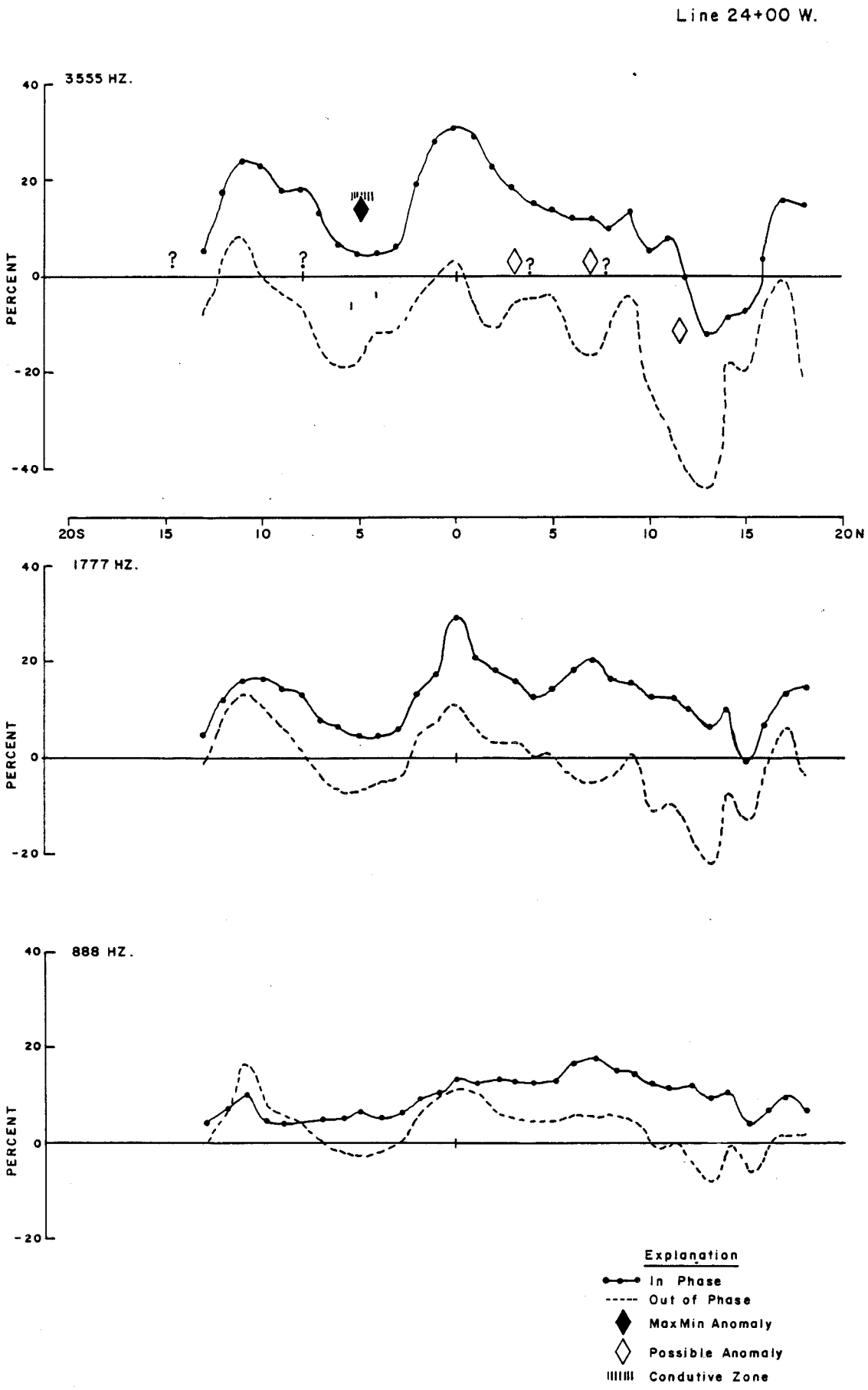



Figure E-51-Quigley Ridge Area, MaxMin II E.M., Line 24+00 W.

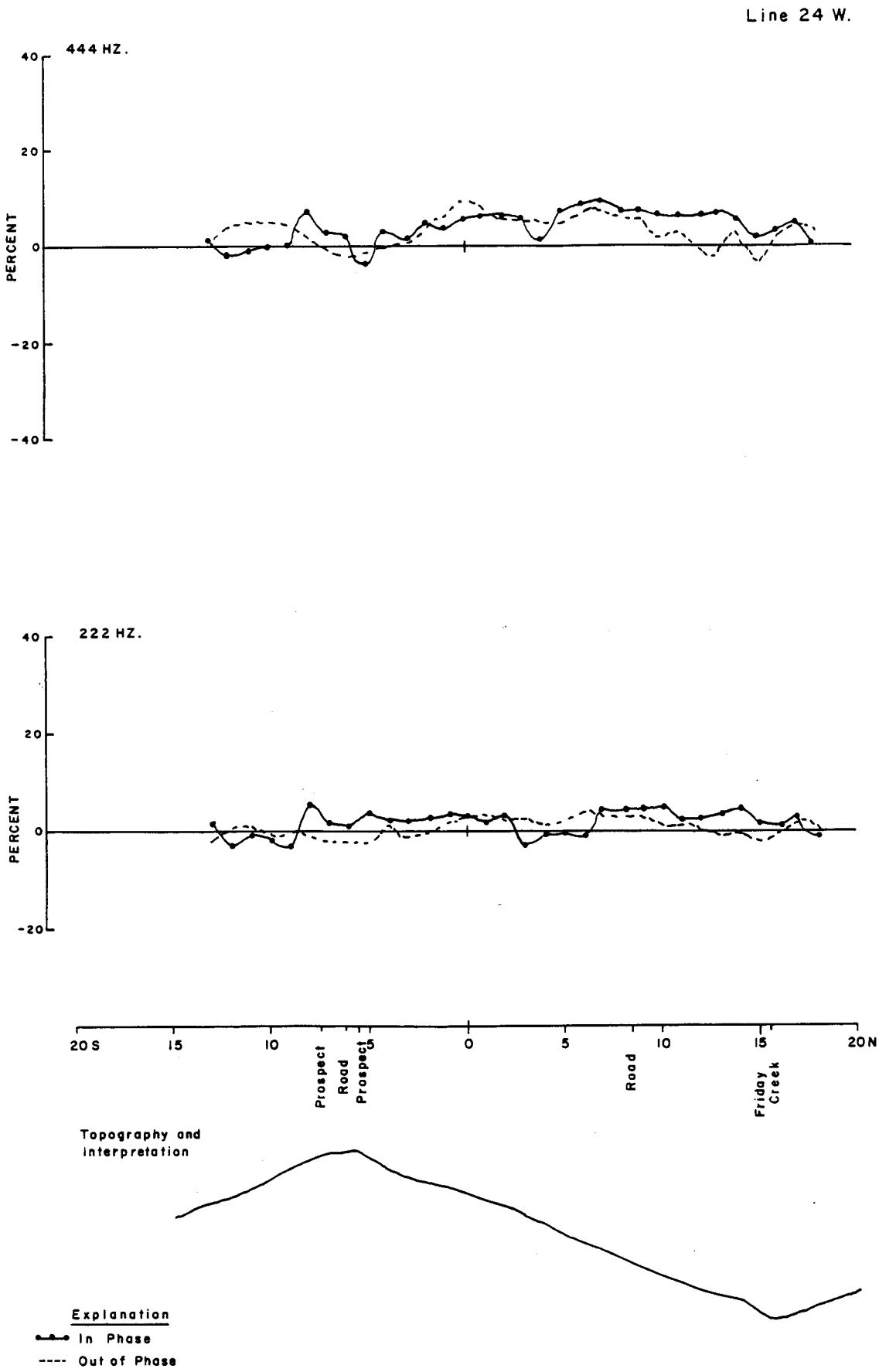



Figure E-52-Quigley Ridge Area, Max Min II E.M., Line 24 W.

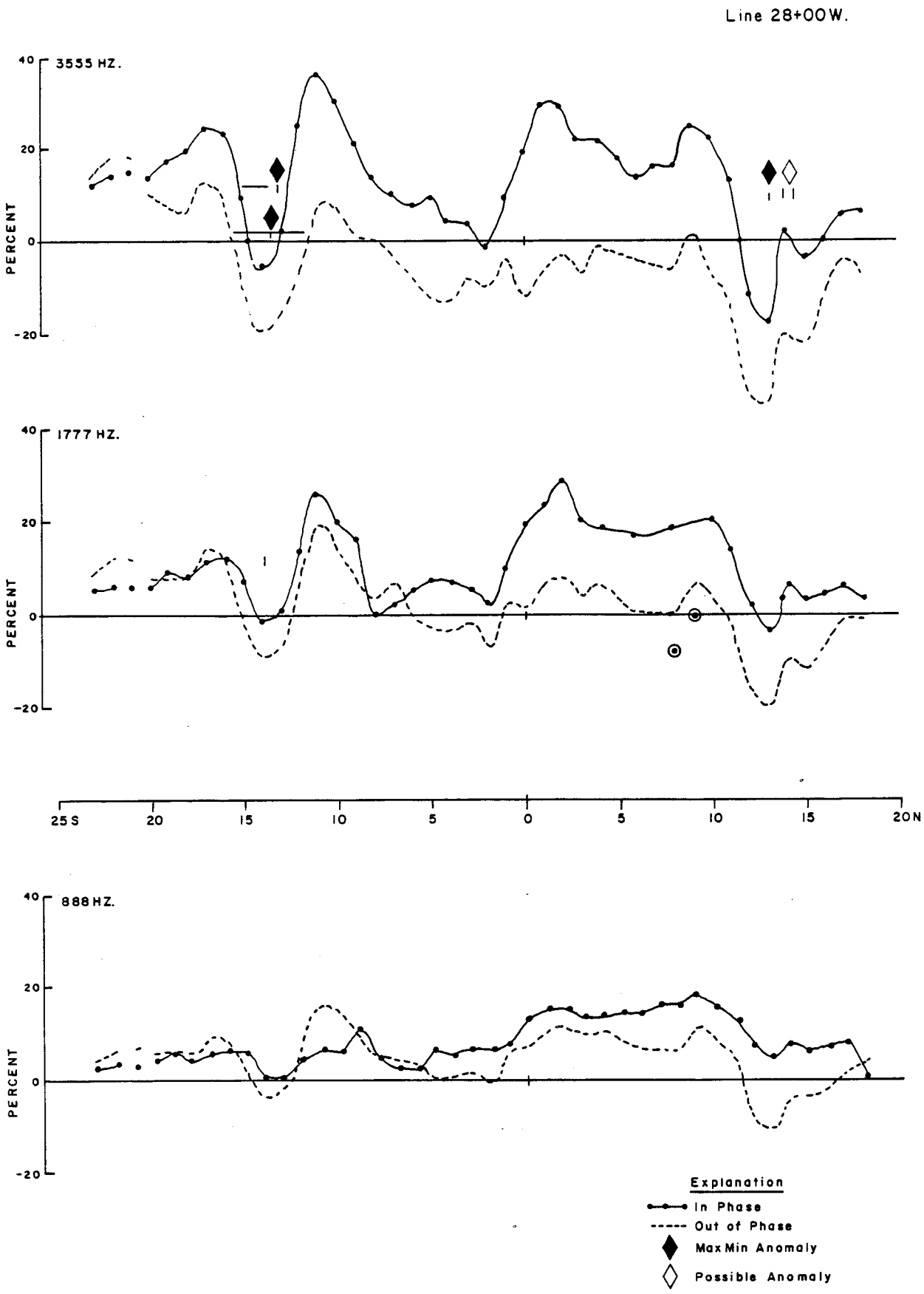
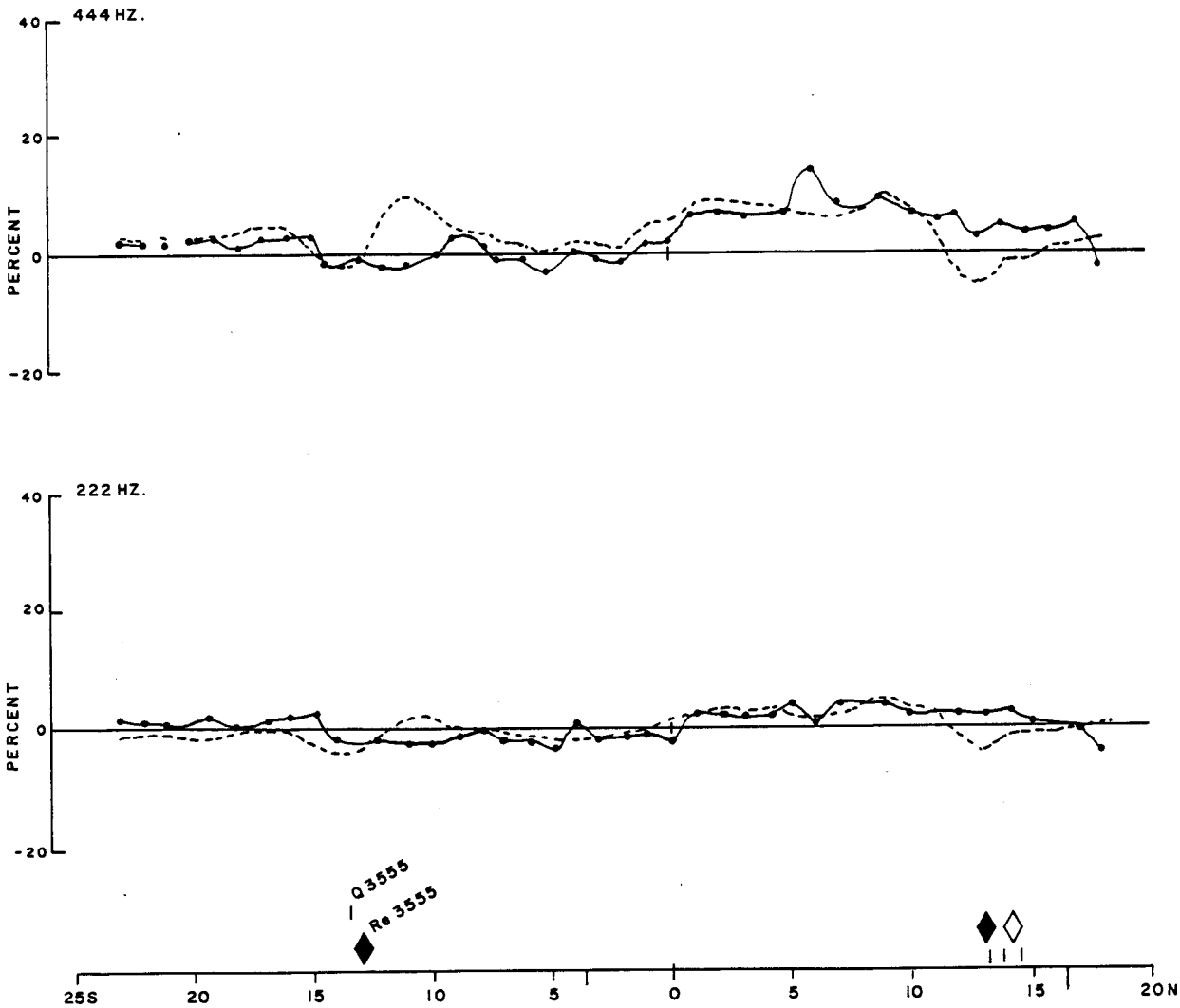
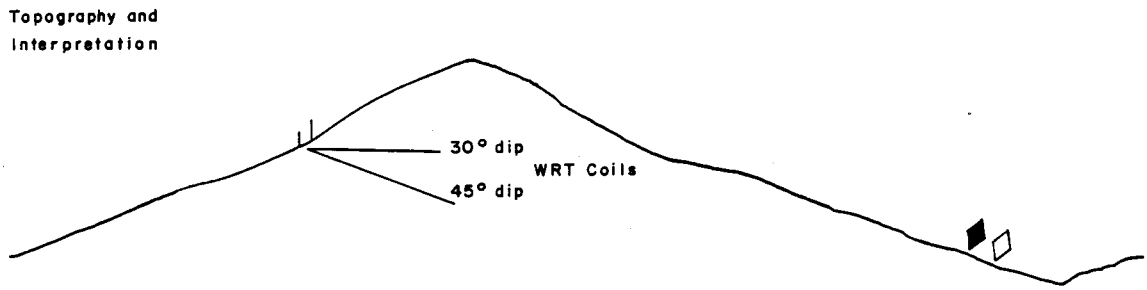



Figure E-53-Quigley Ridge Area, MaxMin II E.M., Line 28+00W.

Line 28+00 W.




**Explanation**

- In Phase
- Out of Phase
- MagMin Anomaly
- Possible Anomaly

a = 200

Figure E-54-Quigley Ridge Area, MaxMin II E.M., Line 28+00W.

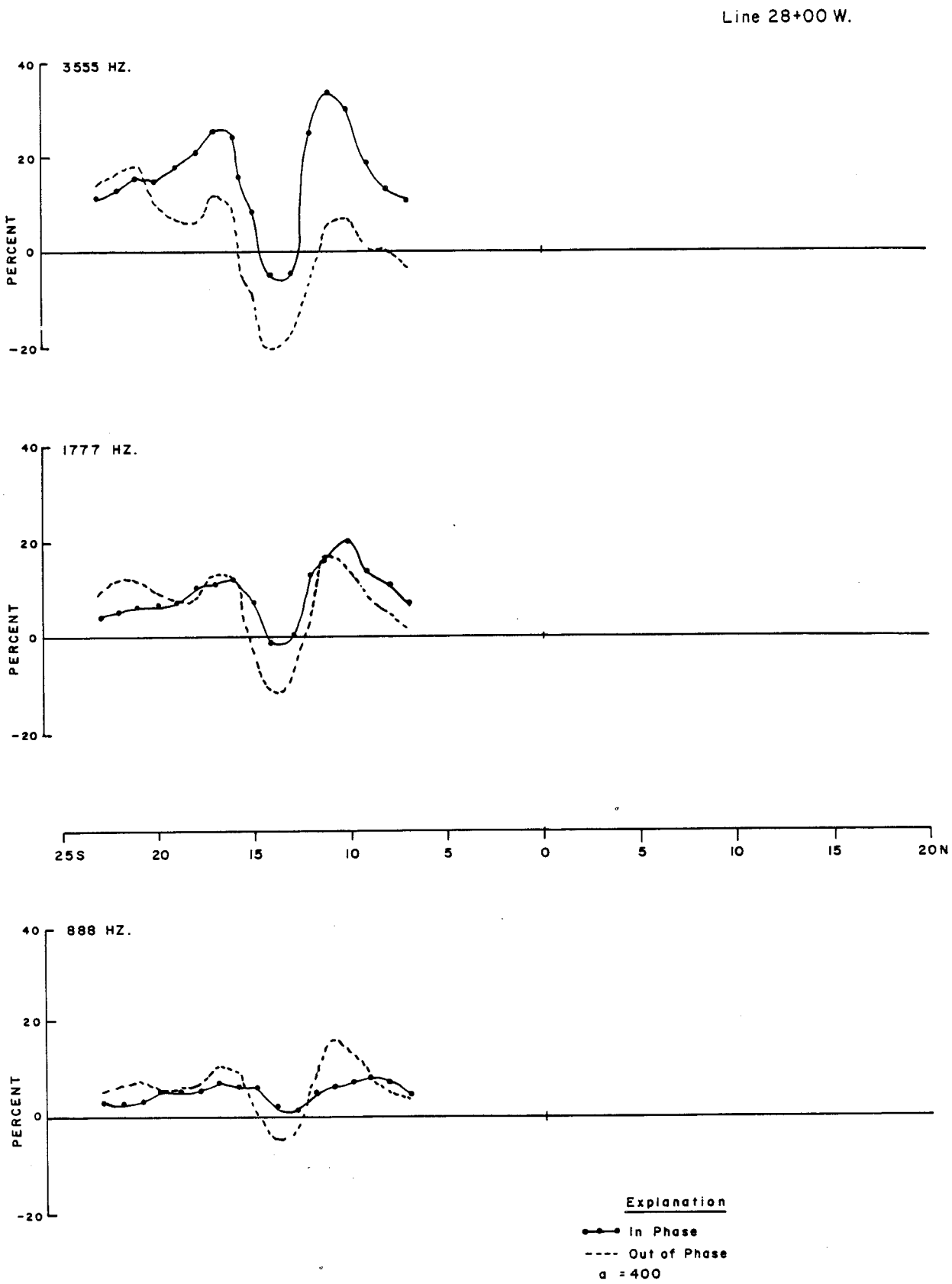



Figure E-55-Quigley Ridge Area, MaxMin II E.M., Line 28+00W.

Line 28 W.

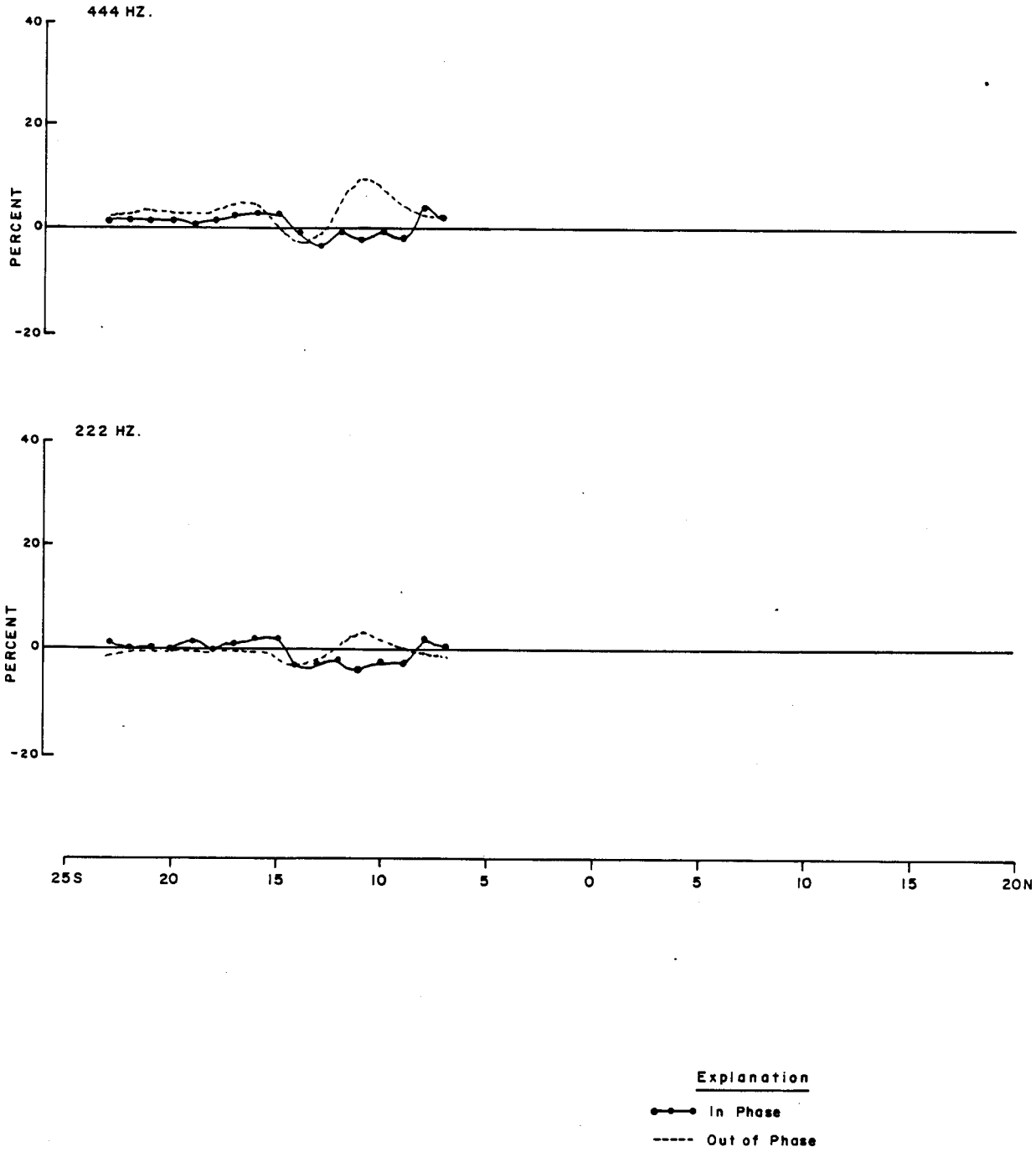



Figure E-56 -Quigley Ridge Area, MaxMin II E.M., Line 28 W.

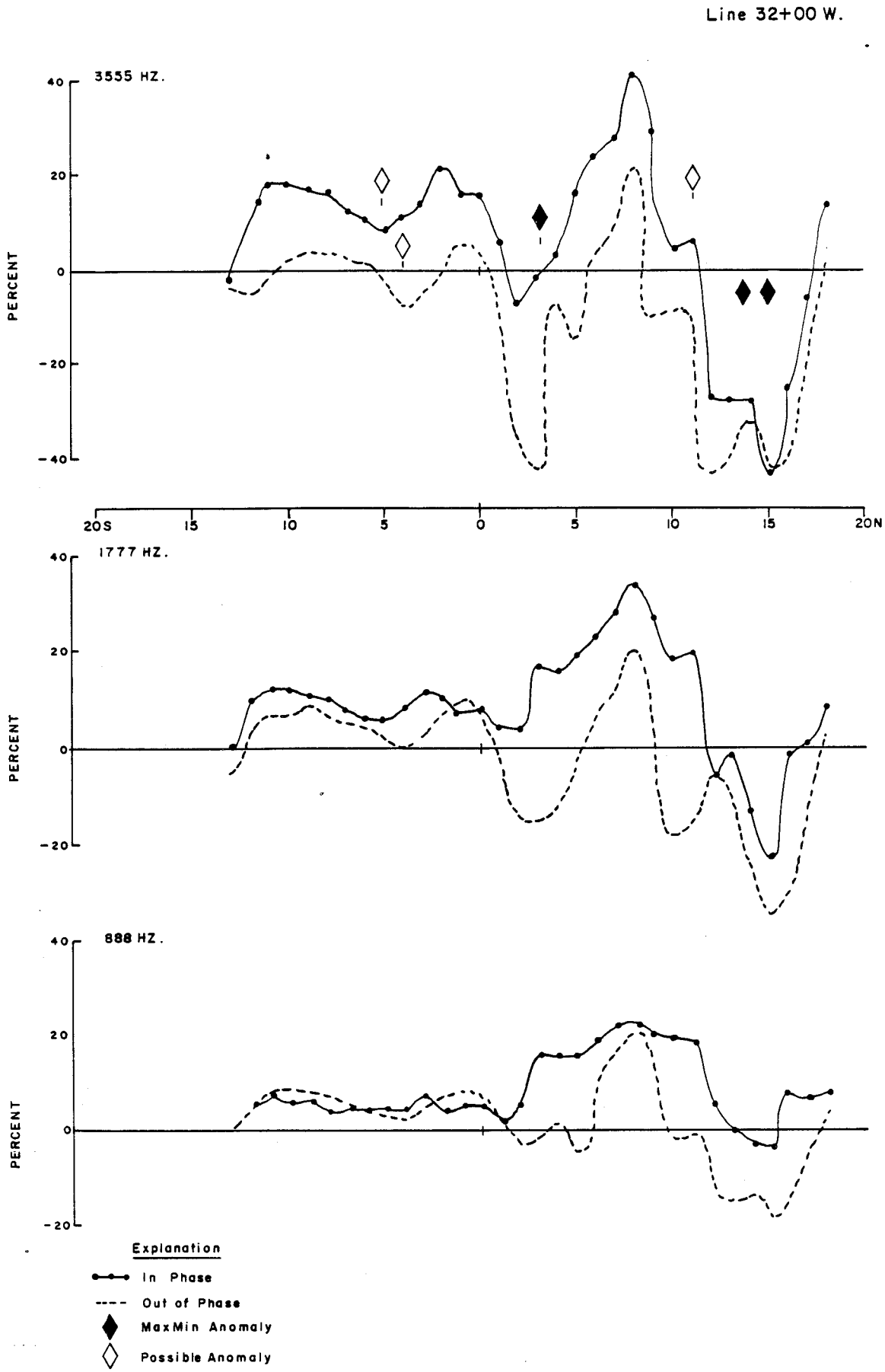



Figure E-57-Quigley Ridge Area, Max Min II E.M., Line 32+00W.

Line 32+00 W.

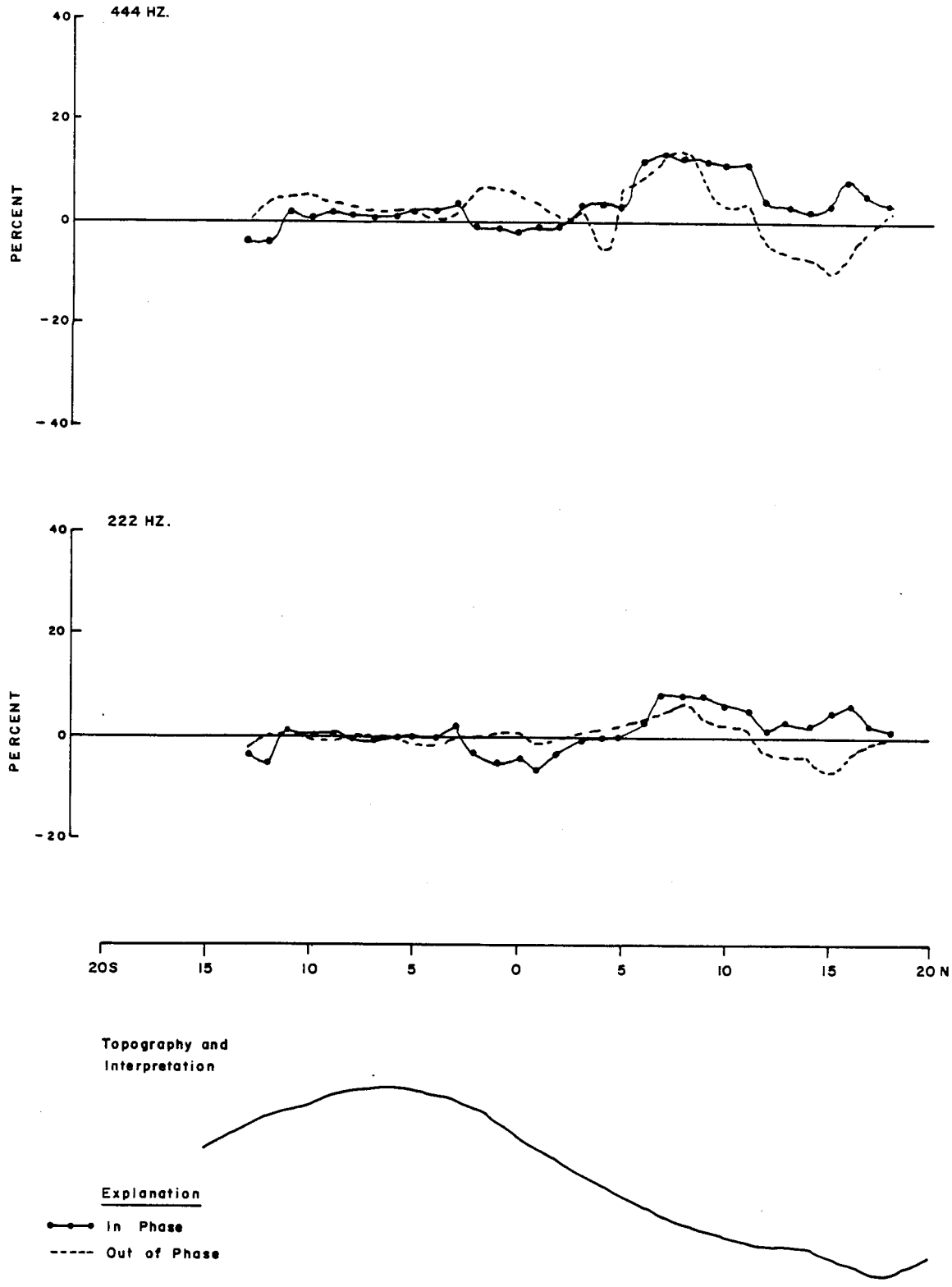



Figure E-58-Quigley Ridge Area, Max Min II E.M., Line 32+00 W.

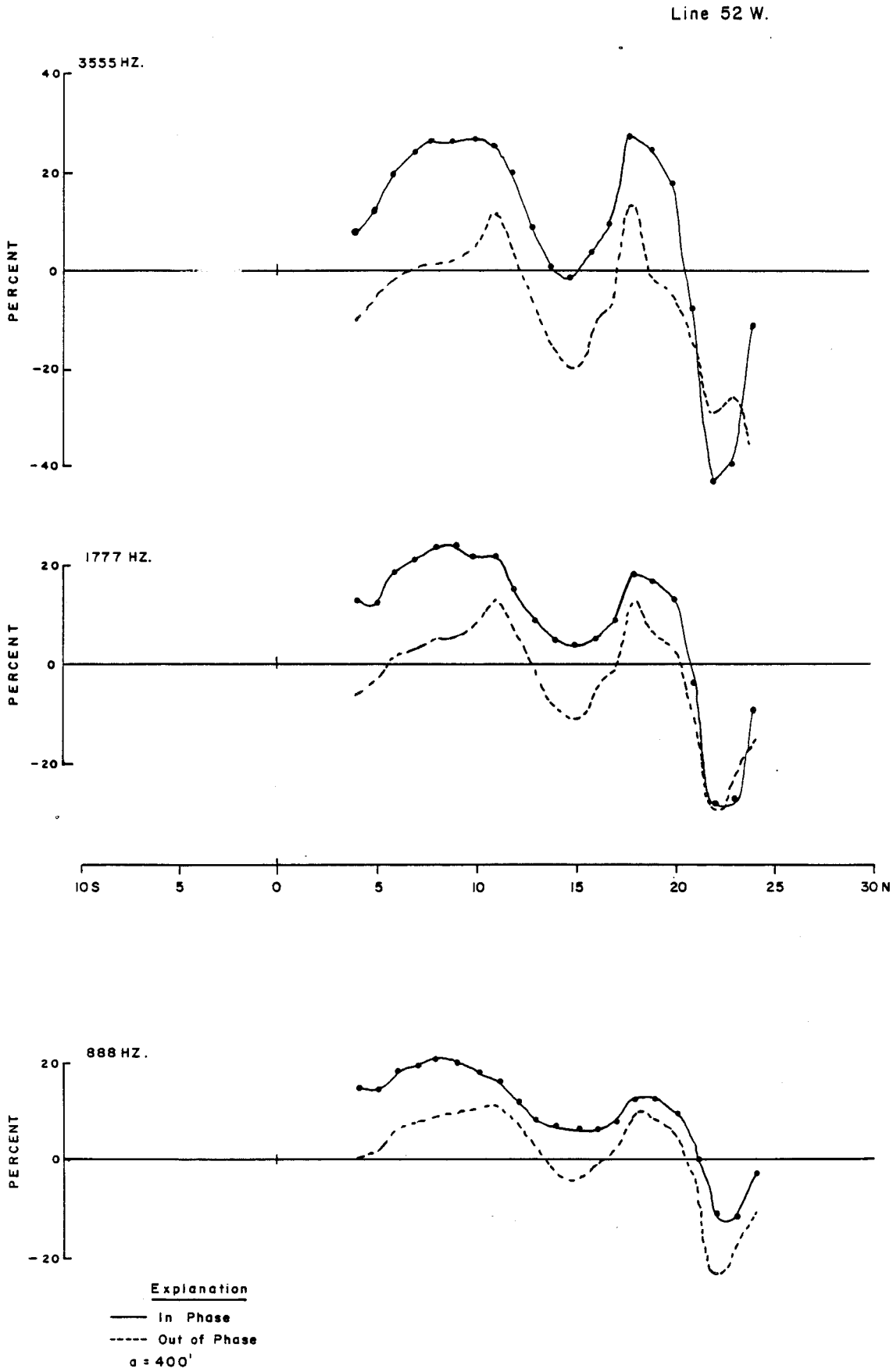



Figure E-59-Quigley Ridge Area, Max Min II E.M., Line 52 W.

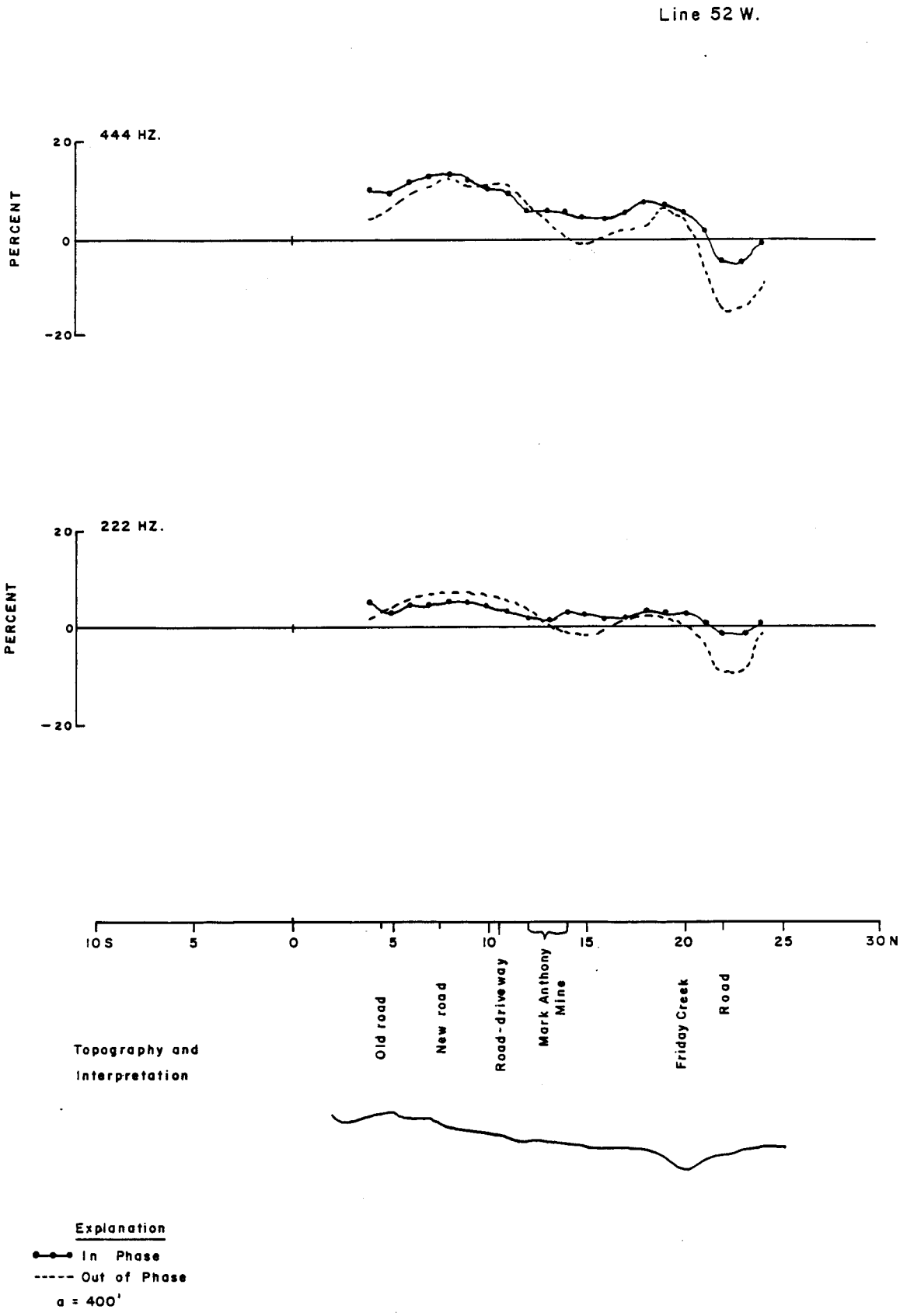



Figure E-60-Quigley Ridge Area, MaxMin II E.M., Line 52 W.

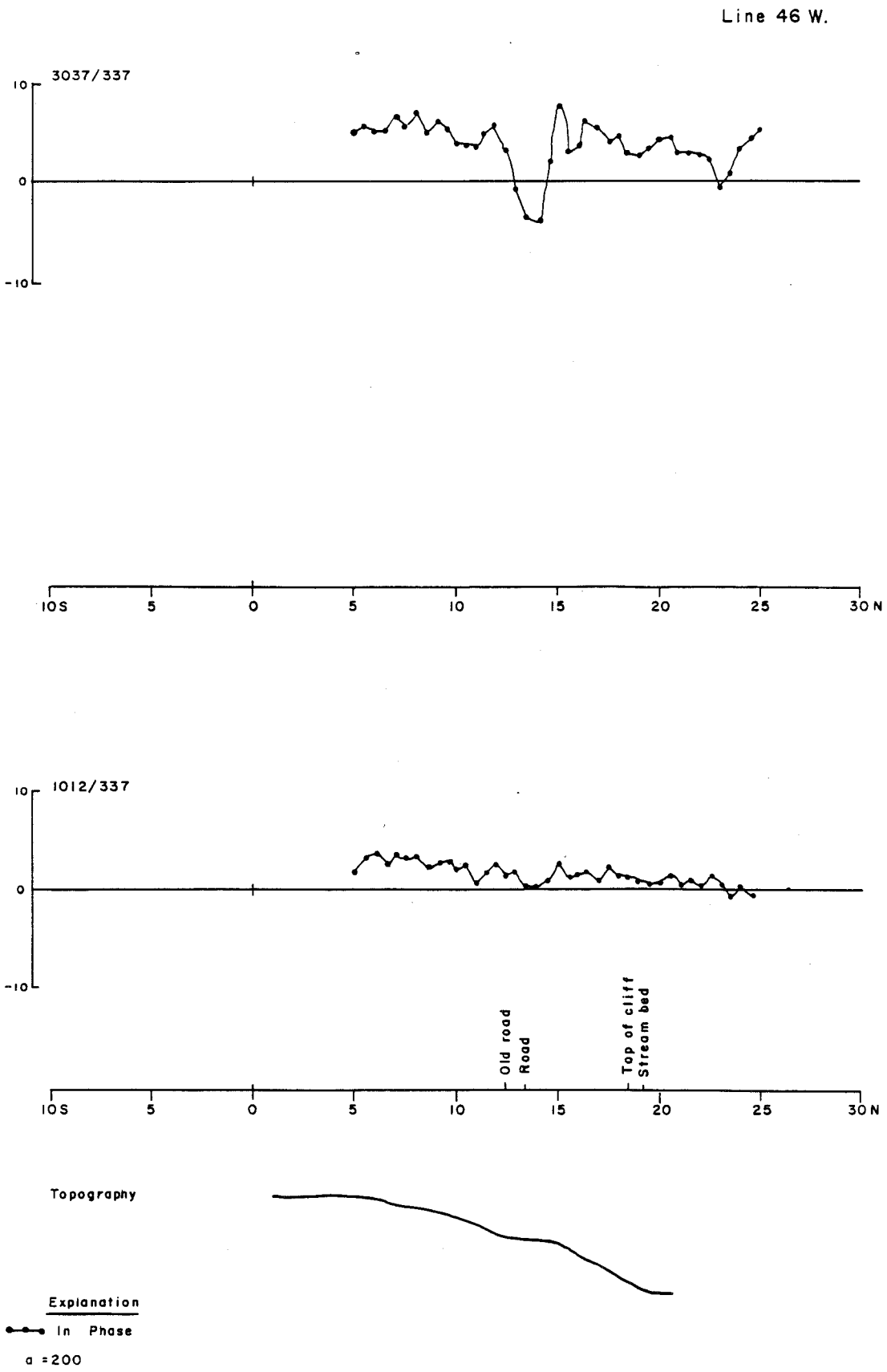



Figure E-61-Quigley Ridge Grid, Genie E.M., Line 46 W.

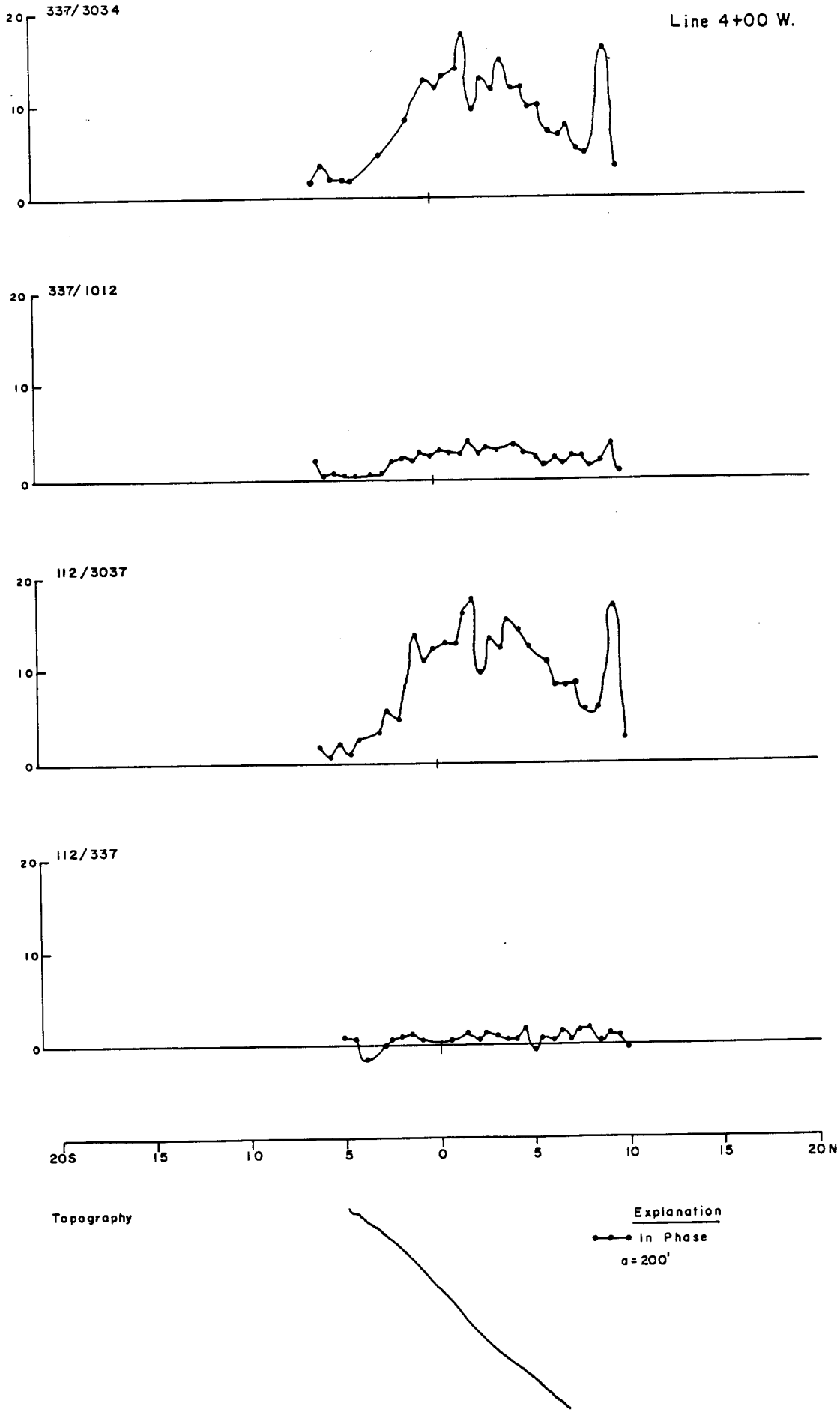



Figure E-62- Quigley Ridge Area, Genie E. M., Line 4+00 W.

Line 4 W.

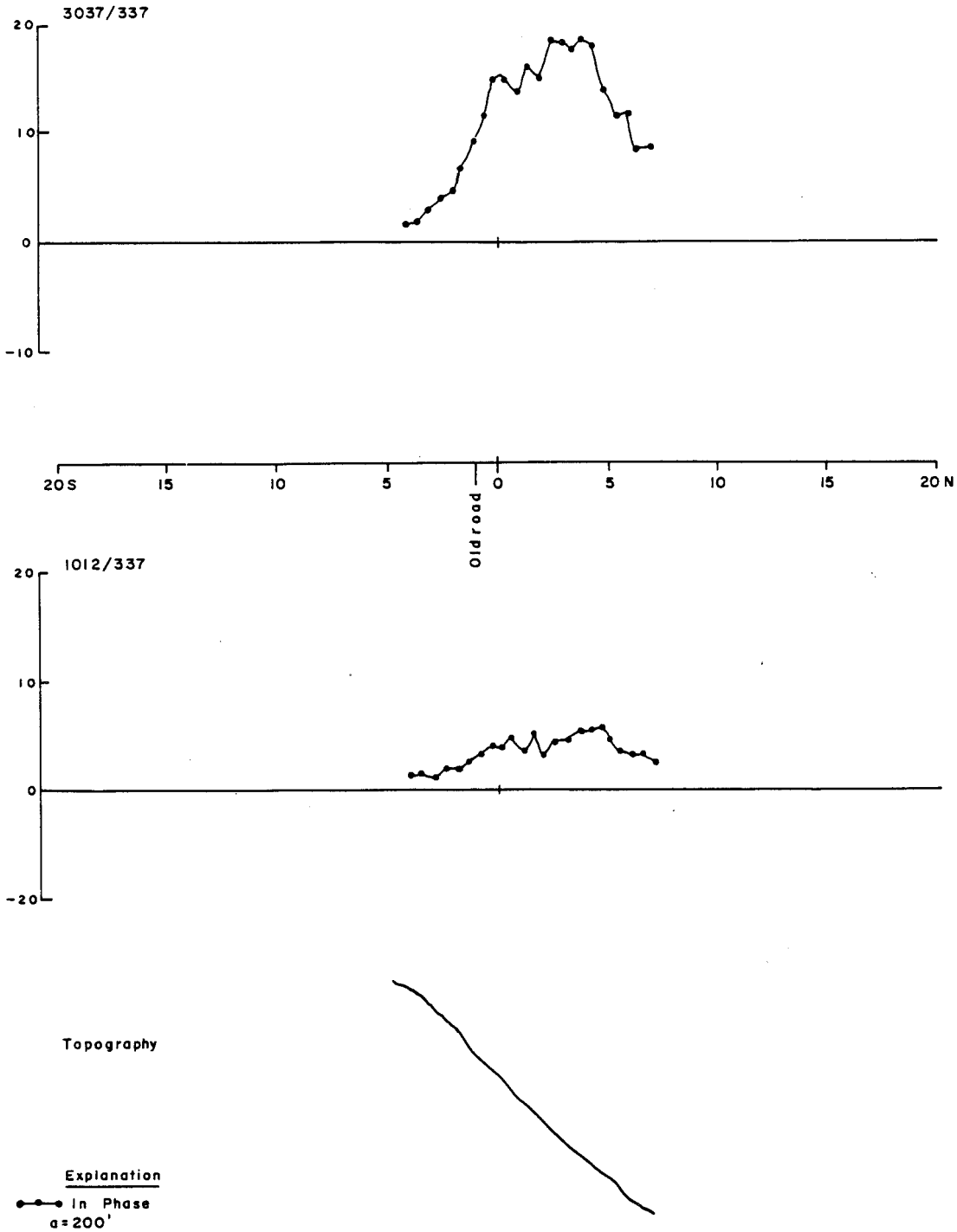



Figure E-63-Quigley Ridge Grid, Genie E.M., Line 4 W.

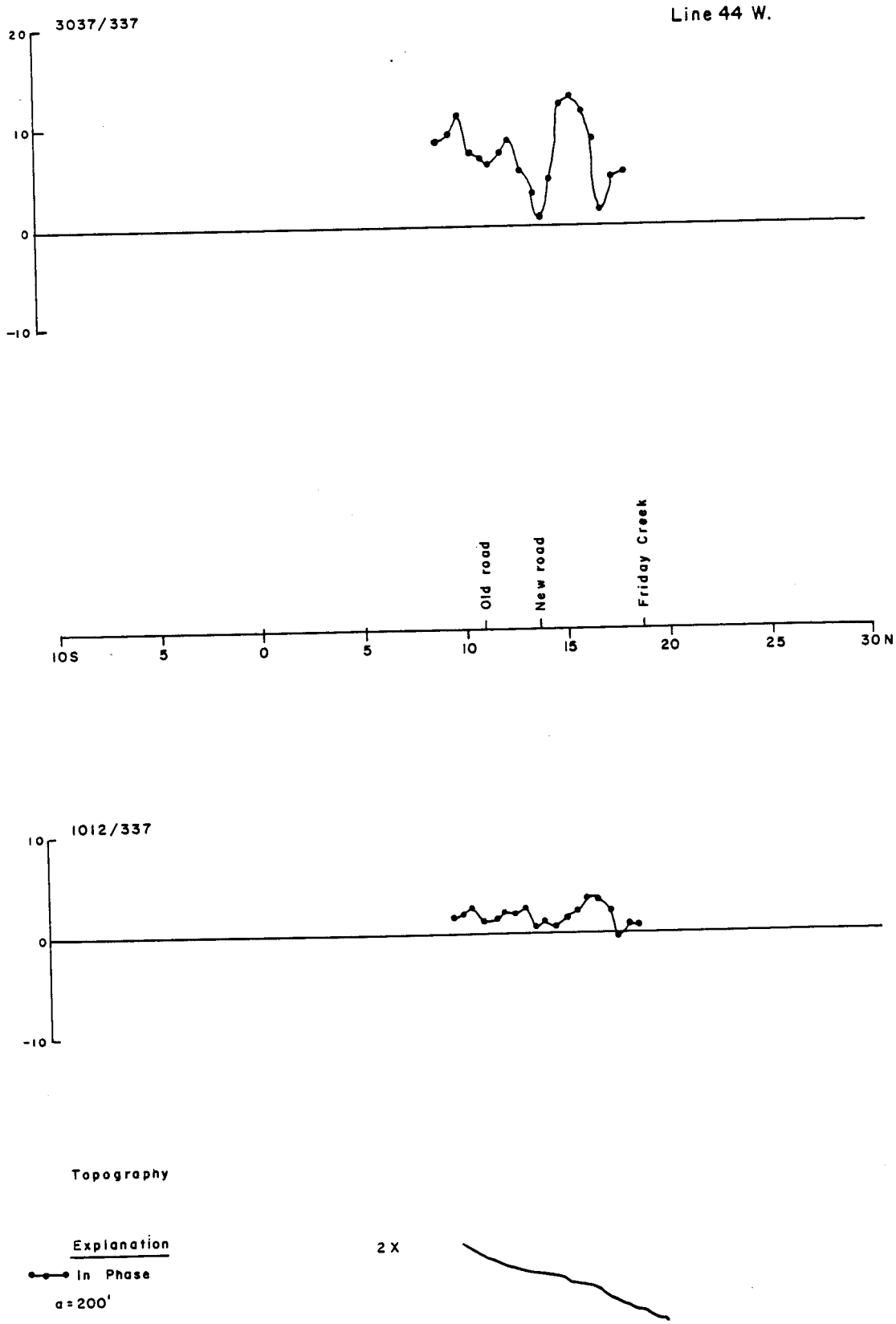
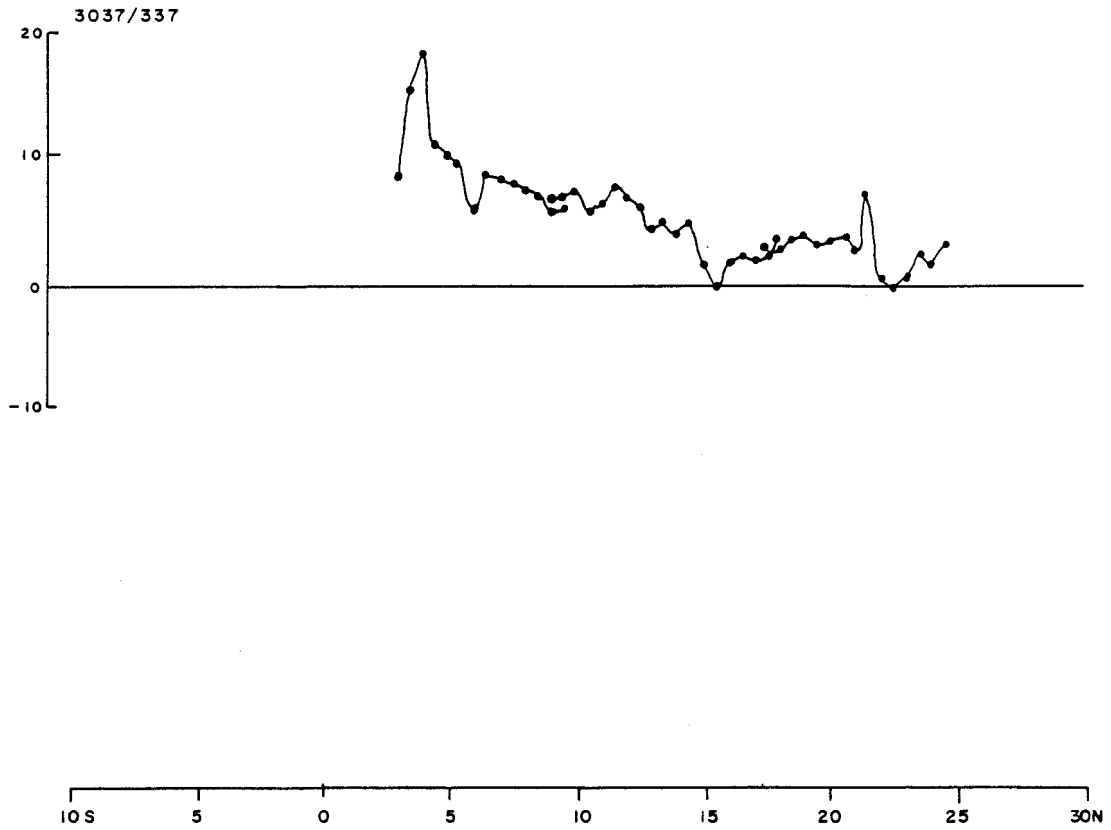
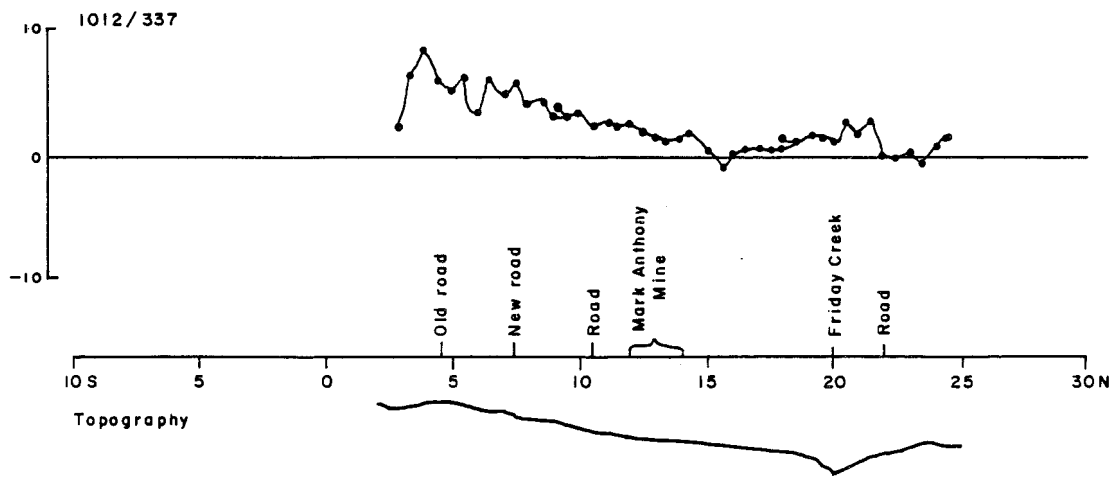



Figure E-64-Quigley Ridge Grid, Genie E. M., Line 44 W.

Line 52 W.




Explanation

In Phase

a=200'

Figure E-65-Quigley Ridge Grid, Genie E.M., Line 52 W.

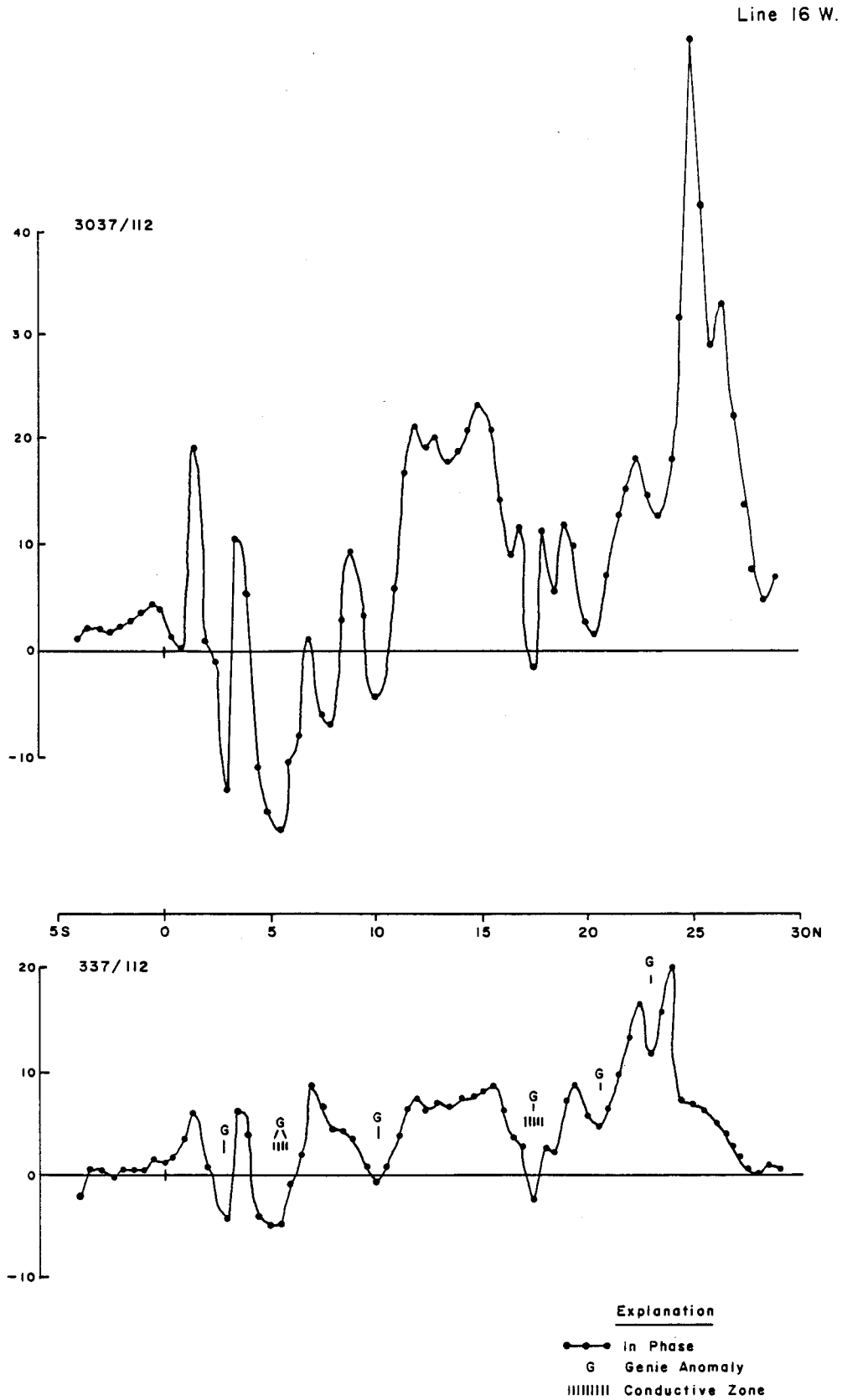



Figure E-66- Red Dirt Grid, Genie E.M., Line 16 W.

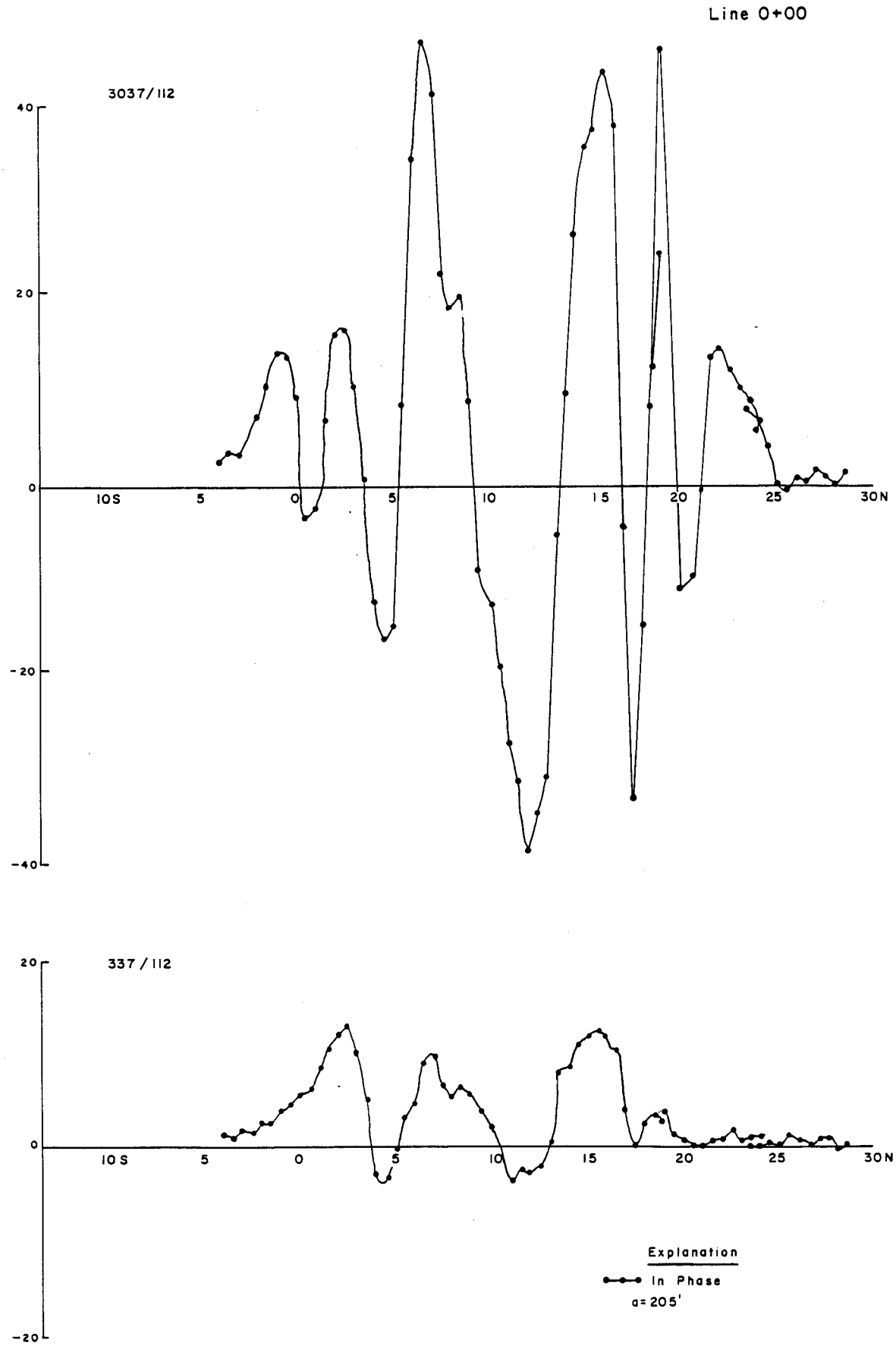



Figure E-67-Red Dirt Area, Genie E.M., Line 0+00

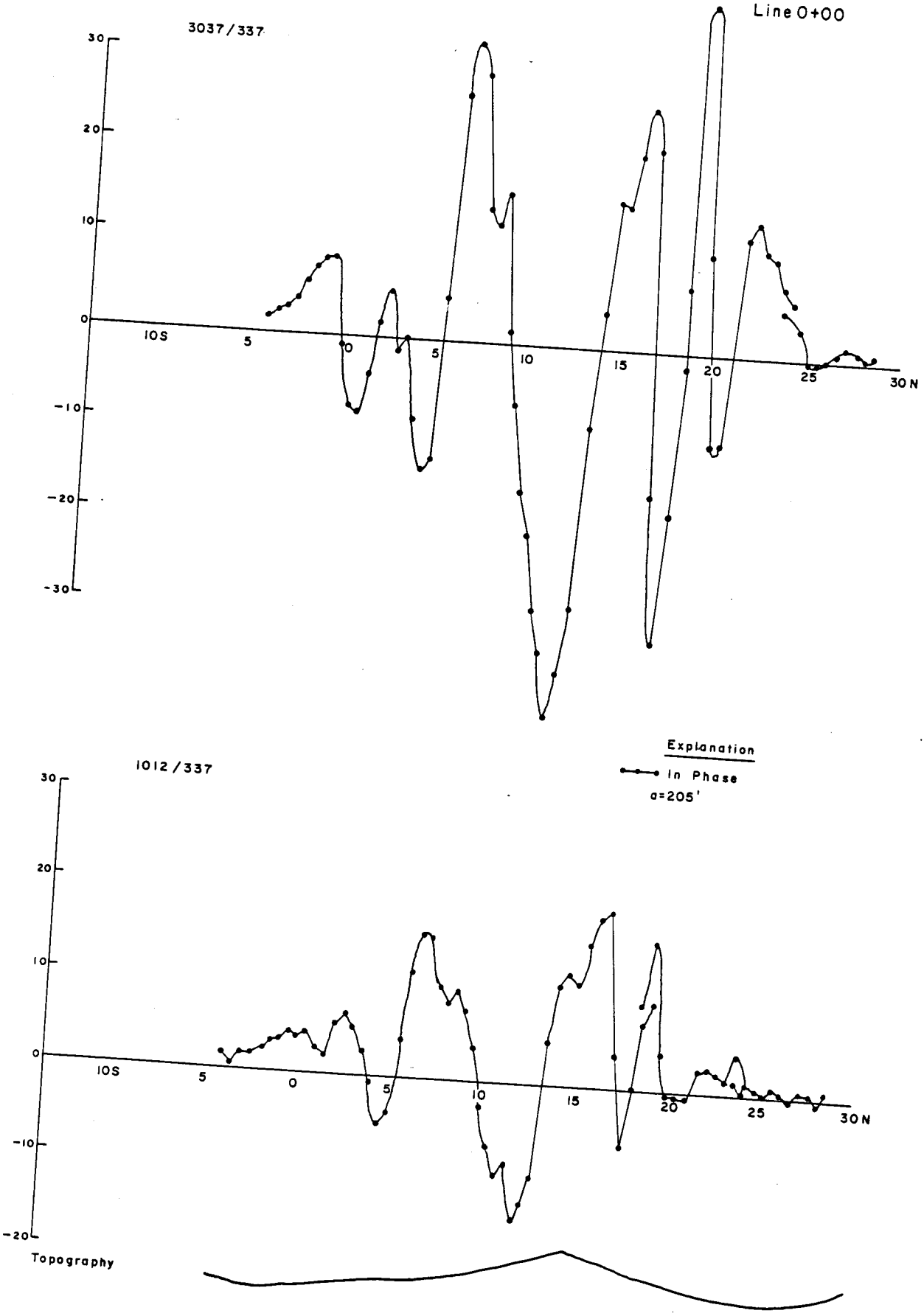



Figure E-68- Red Dirt Area, Genie E.M., Line 0+00

Line 8+00 W.

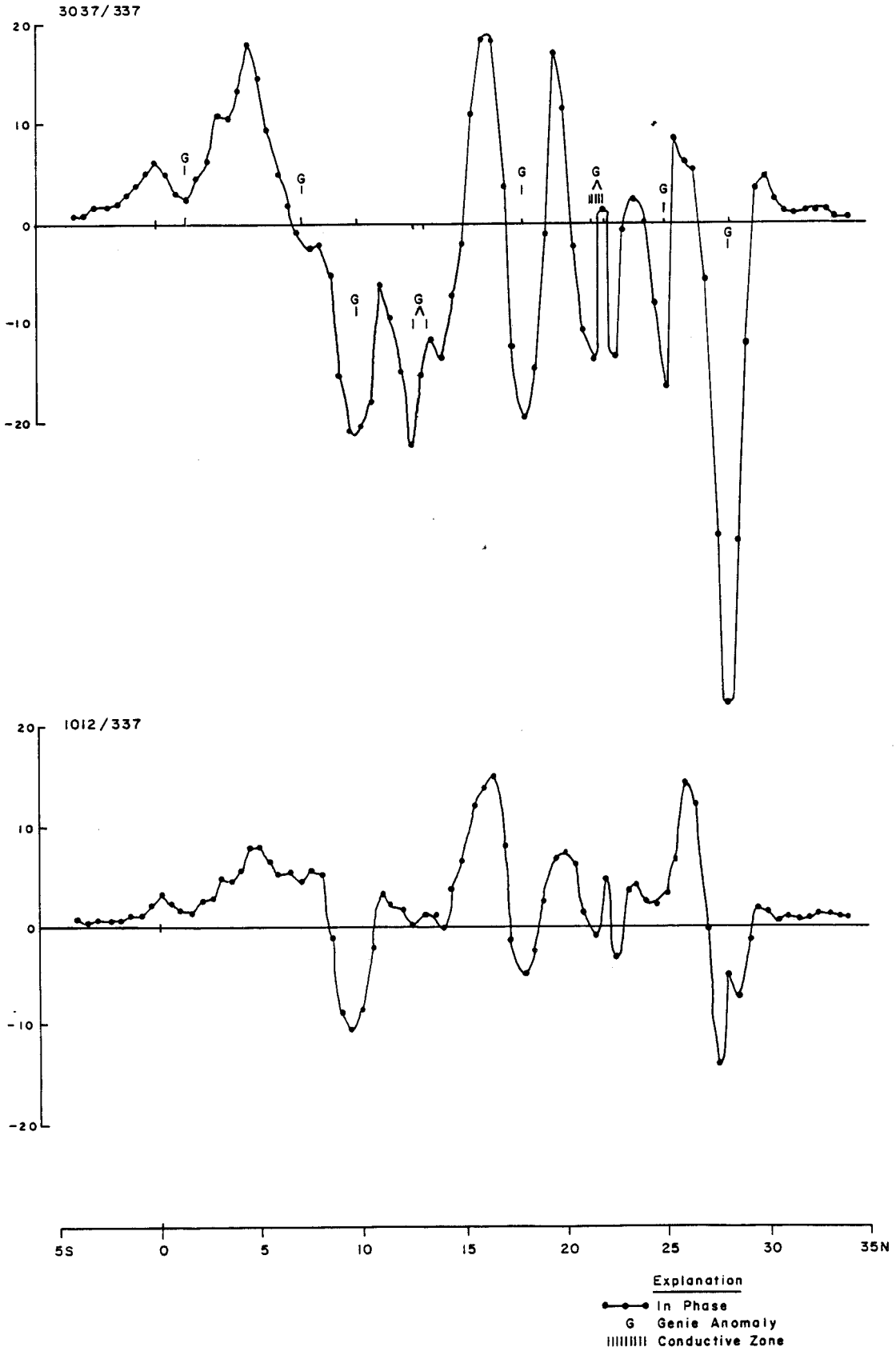



Figure E-69-Red Dirt Area, Genie E.M., Line 8+00 W.

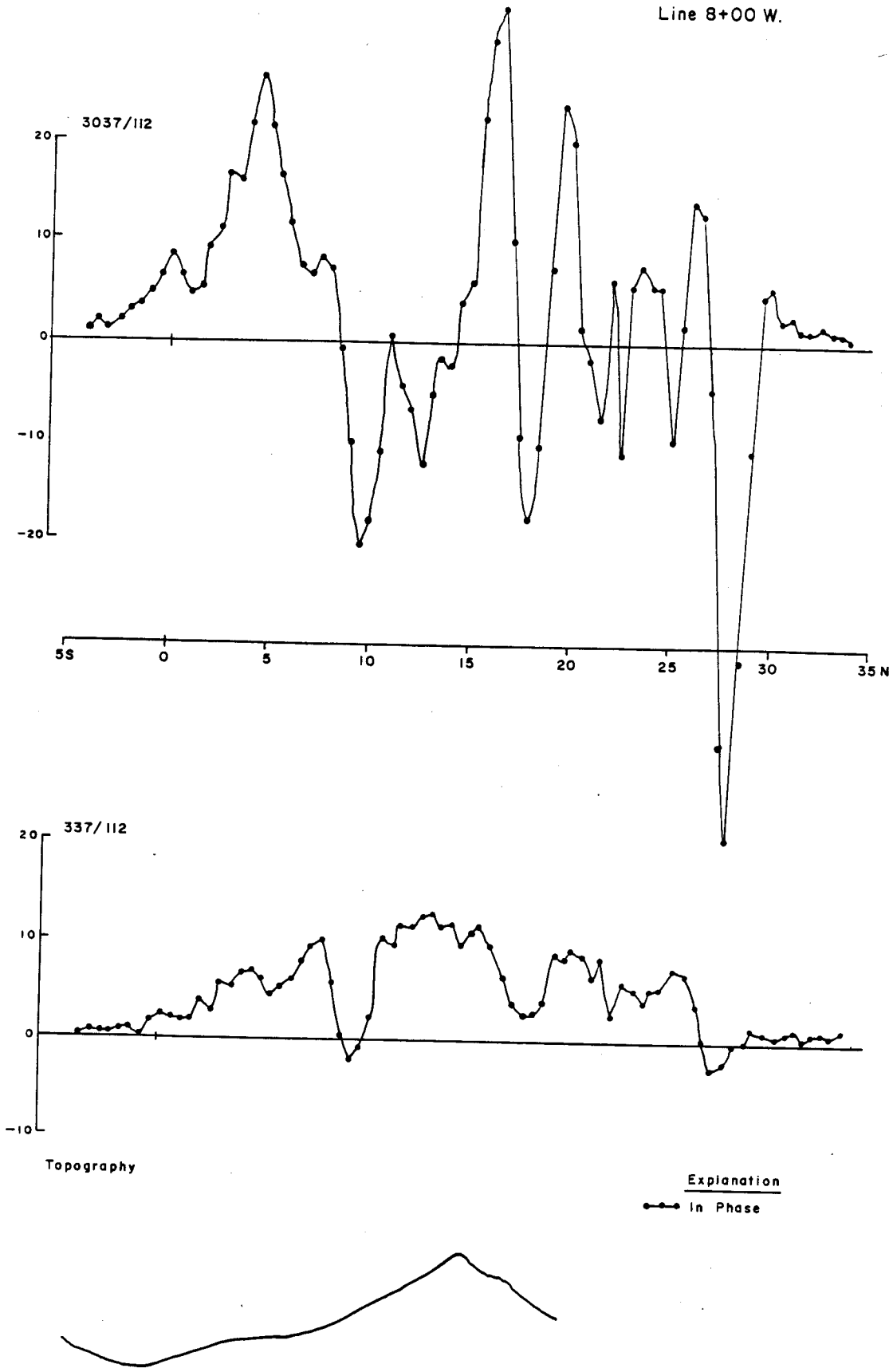



Figure E-70-Red Dirt Grid, Genie E.M., Line 8+00 W.

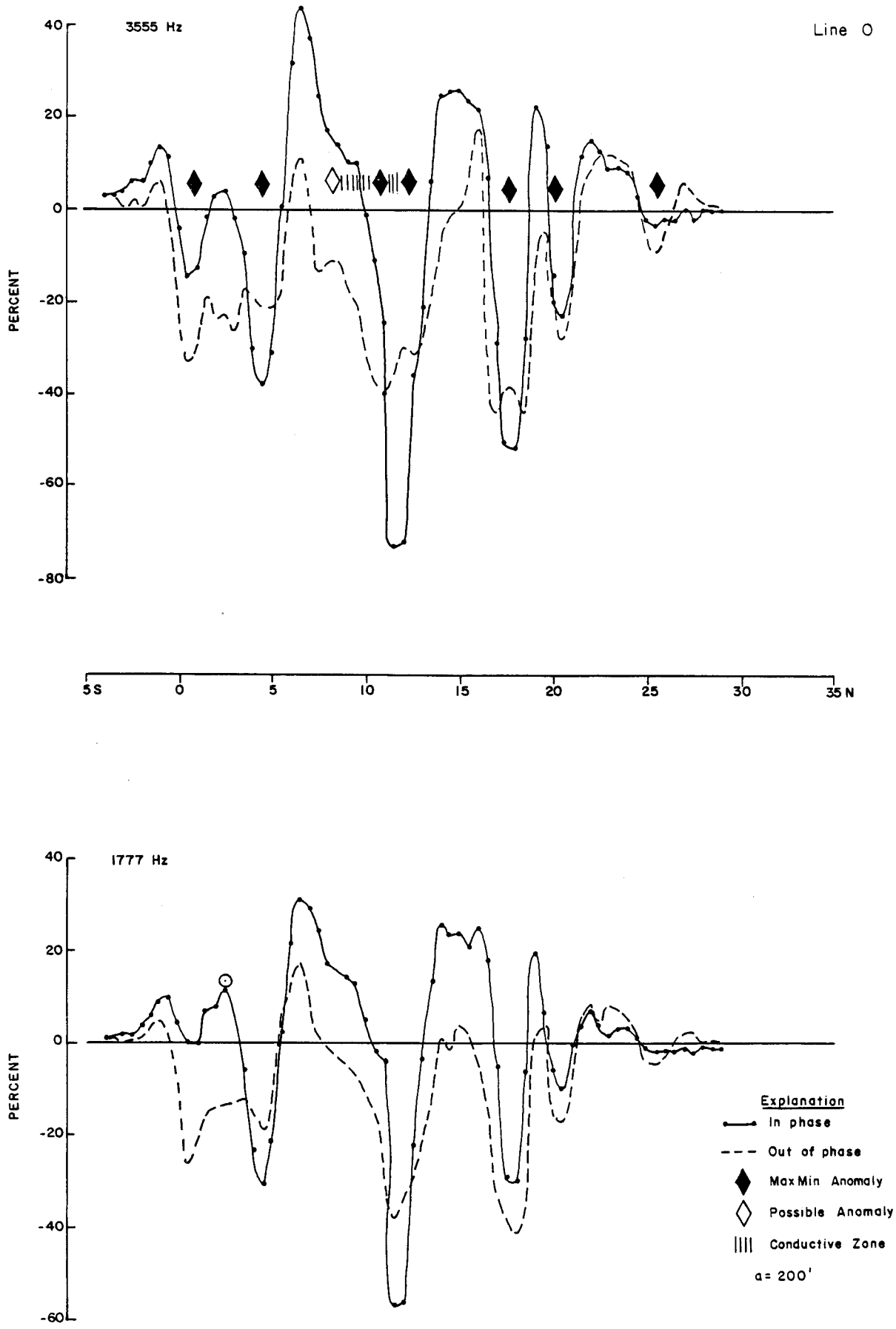



Figure E-71 Red Dirt Grid, MaxMin II EM, Line O

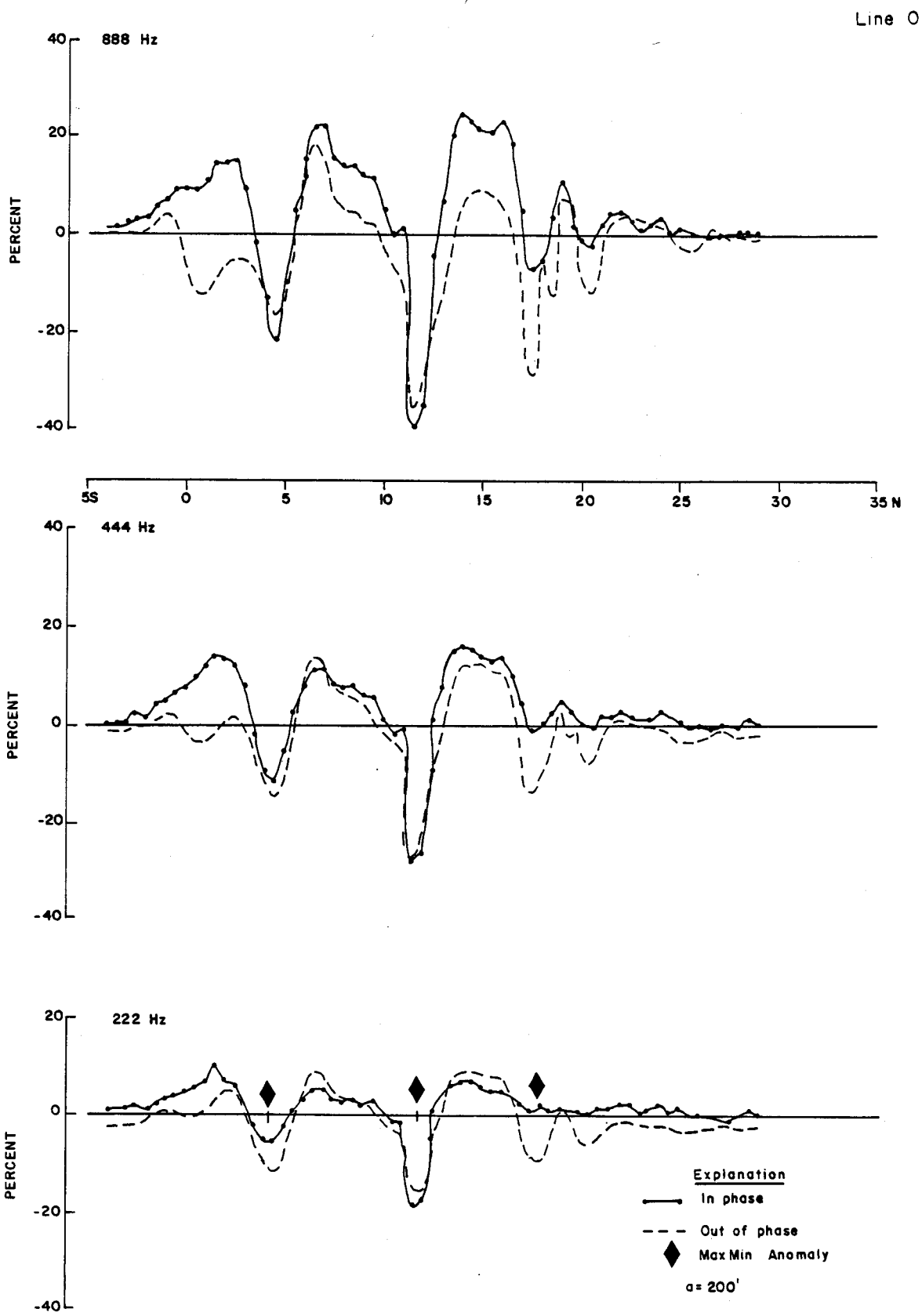
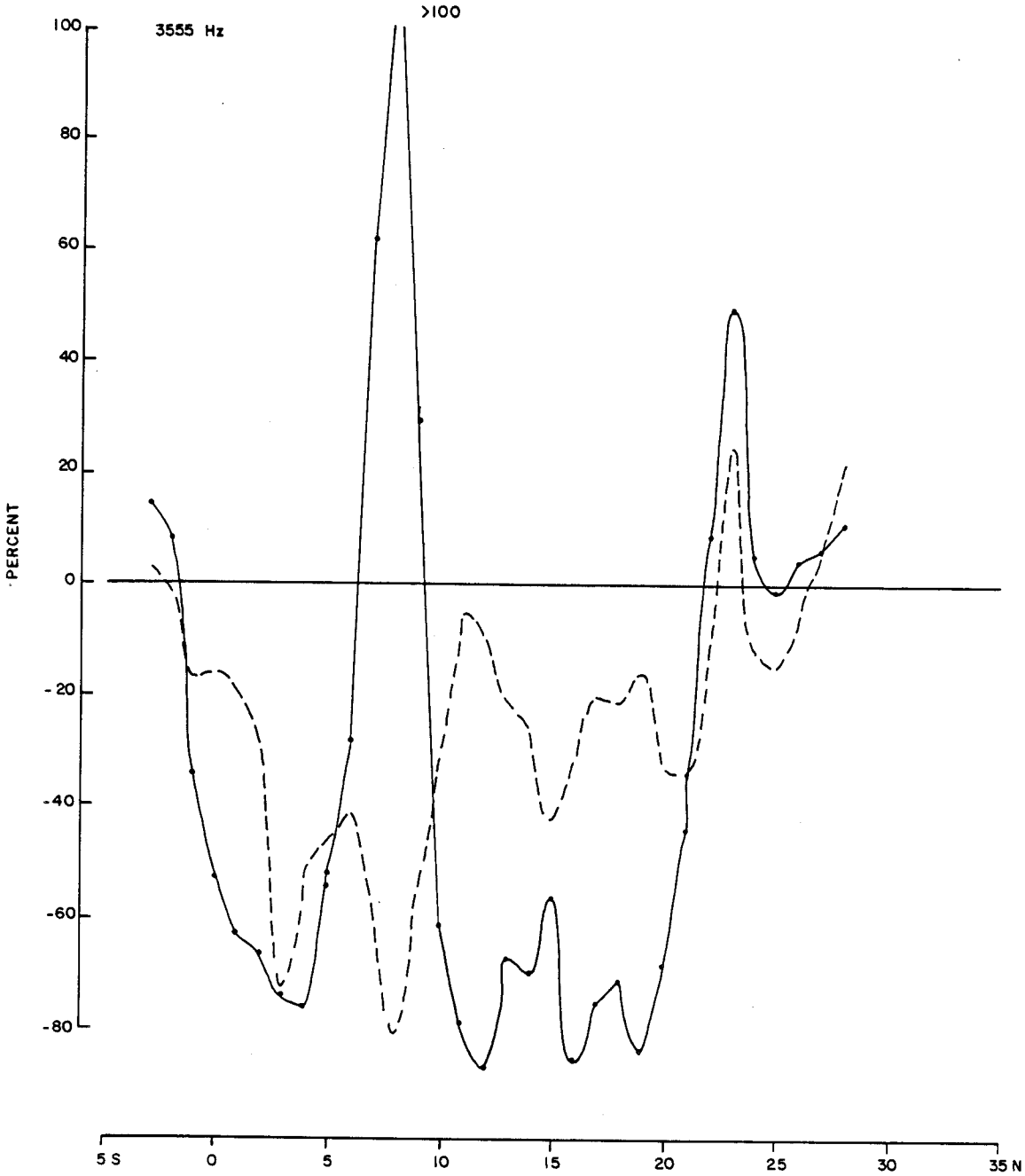



Figure E-72 Red Dirt Grid, MaxMin II EM, Line O




Explanation

In phase

Out of phase

a = 400'

Figure E-73 Red Dirt Grid, MaxMin II EM, Line O

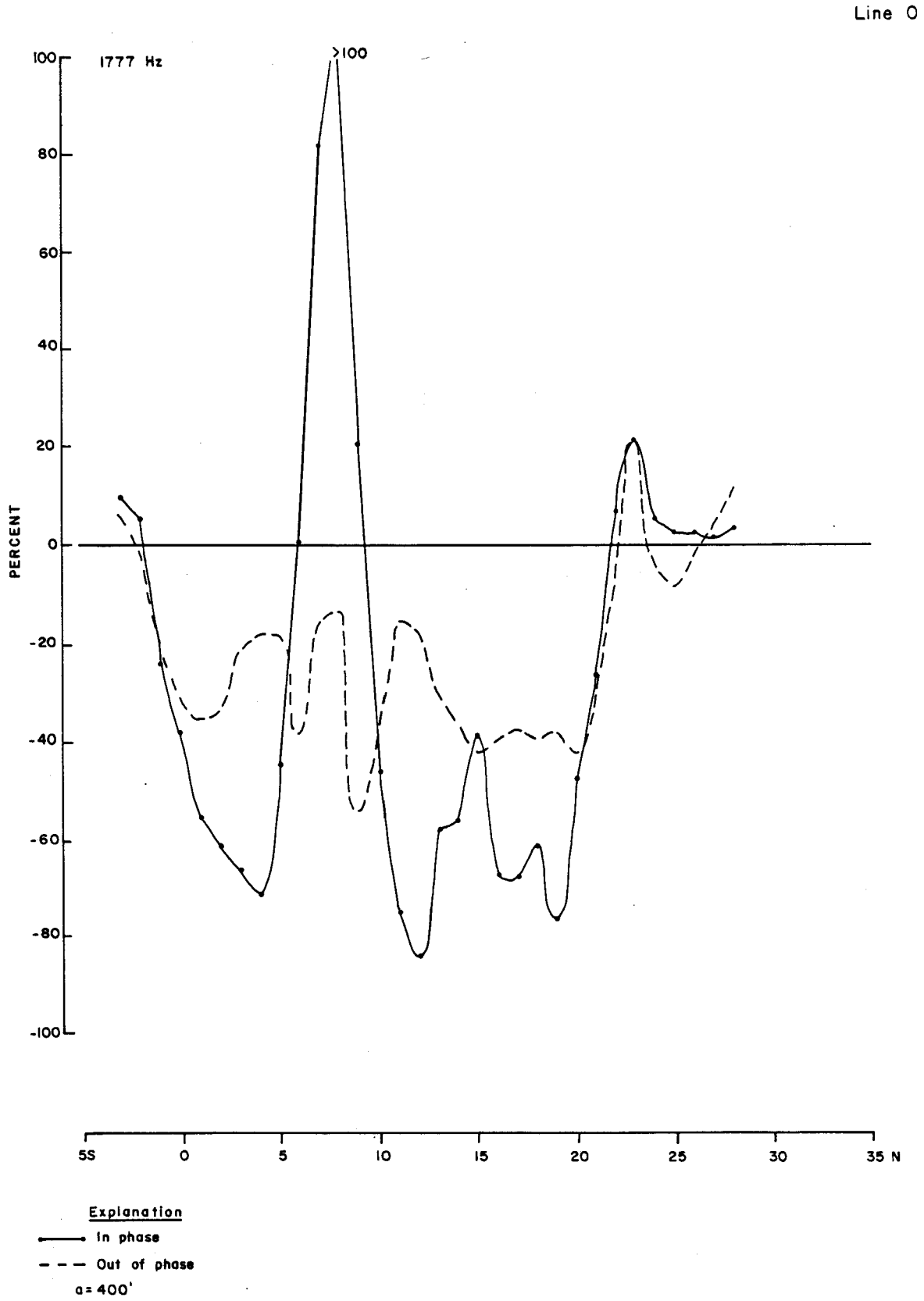



Figure E-74 Red Dirt Grid, MaxMin II EM, Line O

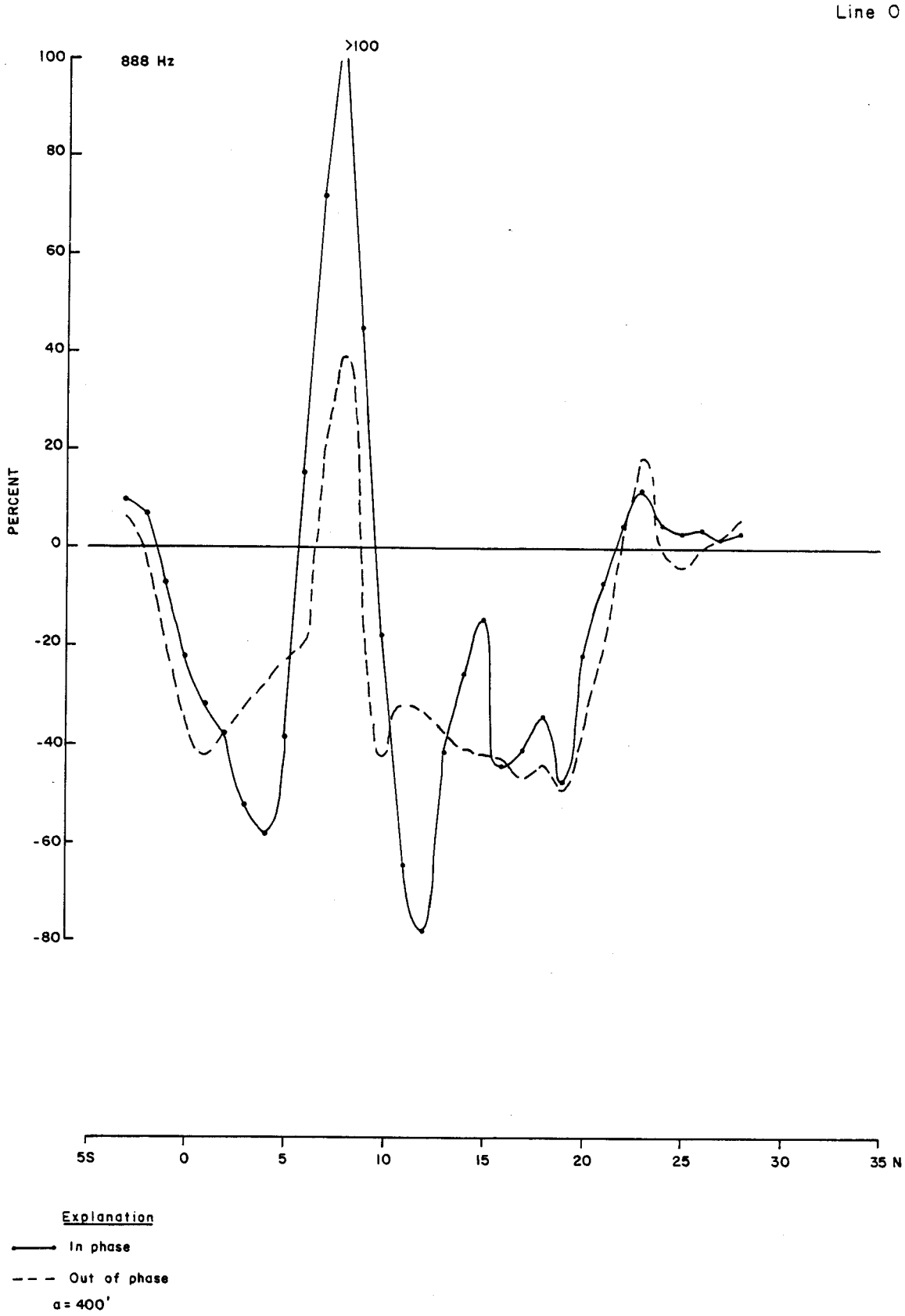



Figure E-75 Red Dirt Grid, MaxMin II EM, Line O

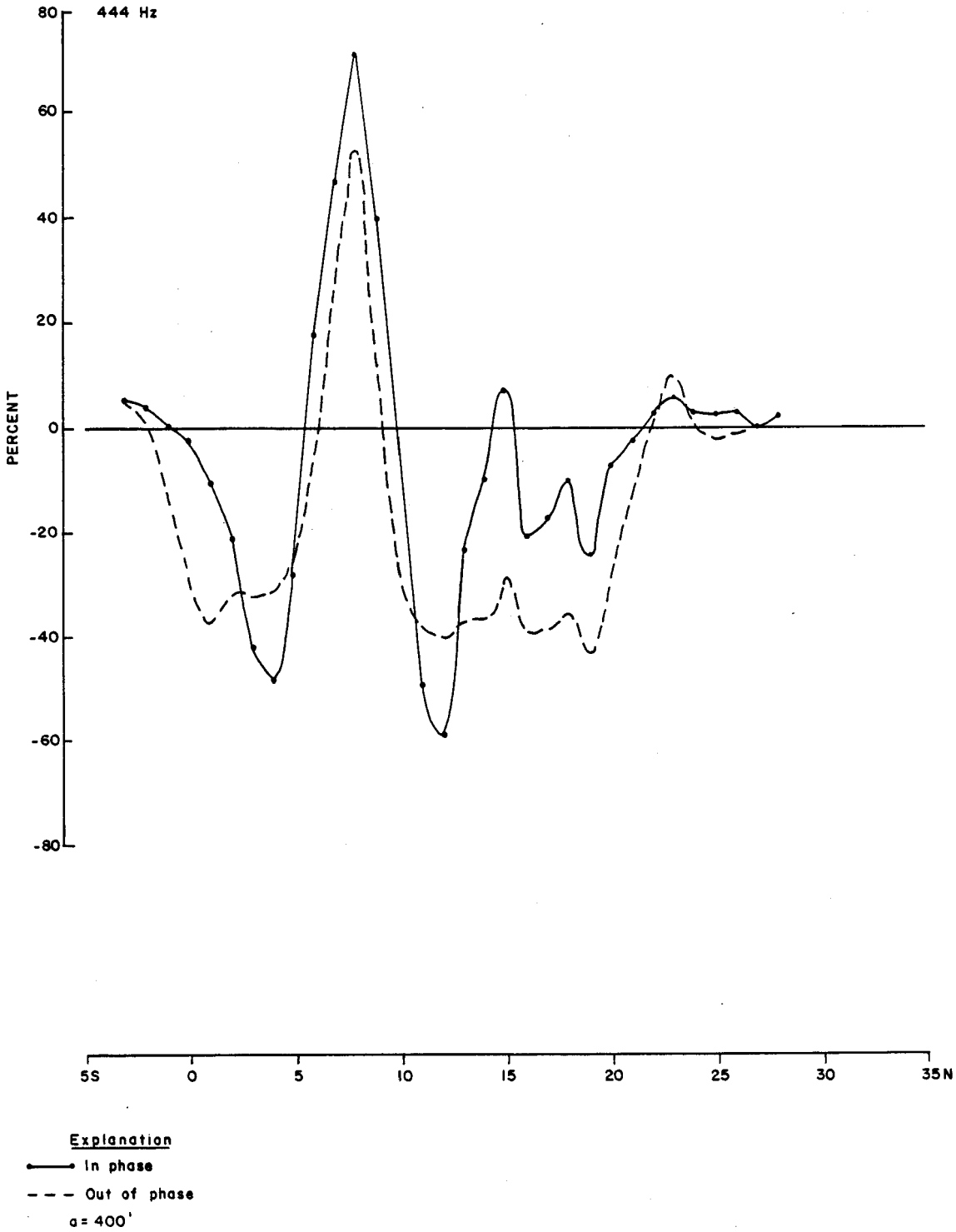



Figure E-76 Red Dirt Grid, MaxMin II EM, Line O

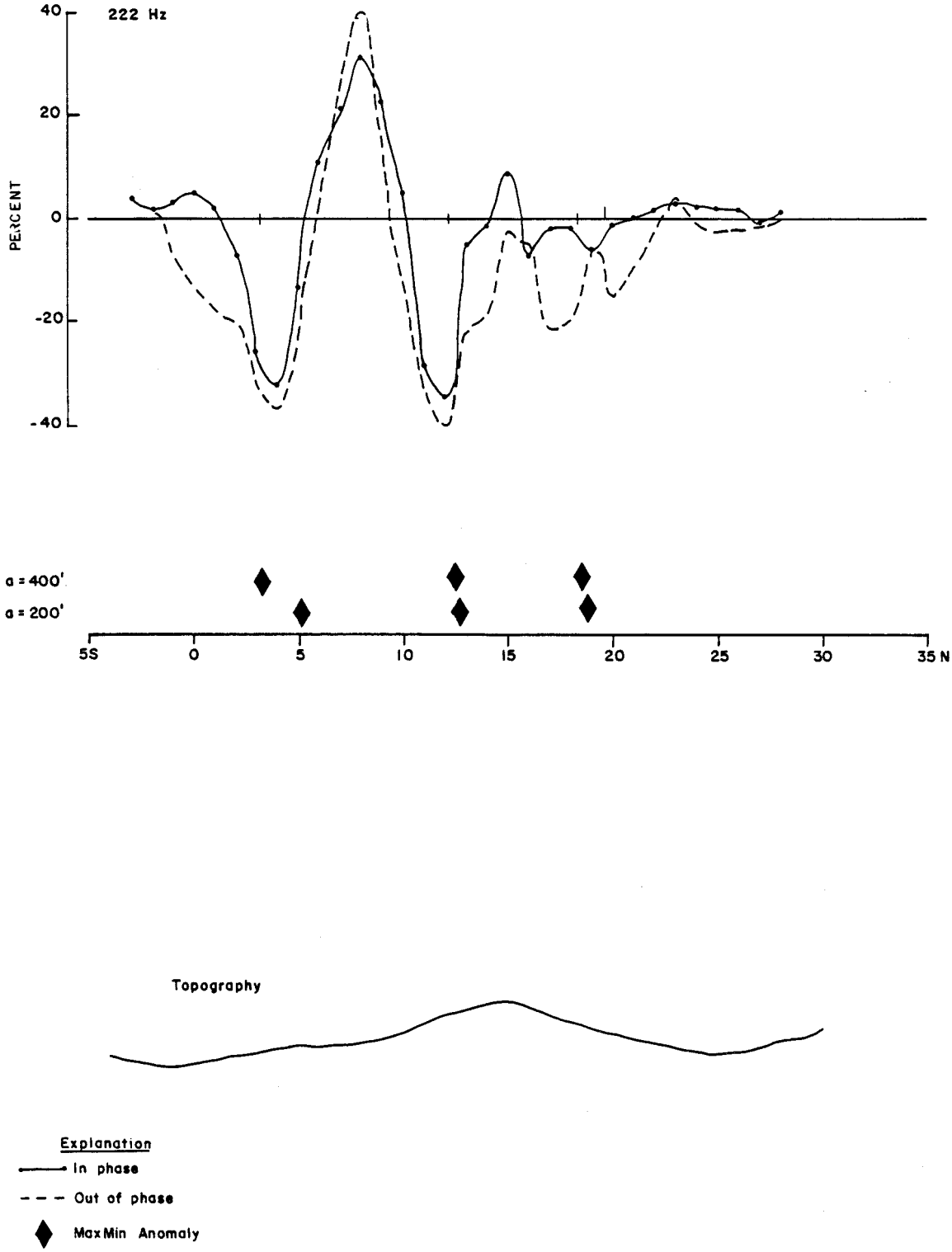



Figure E-77 Red Dirt Grid, MaxMin II EM, Line O

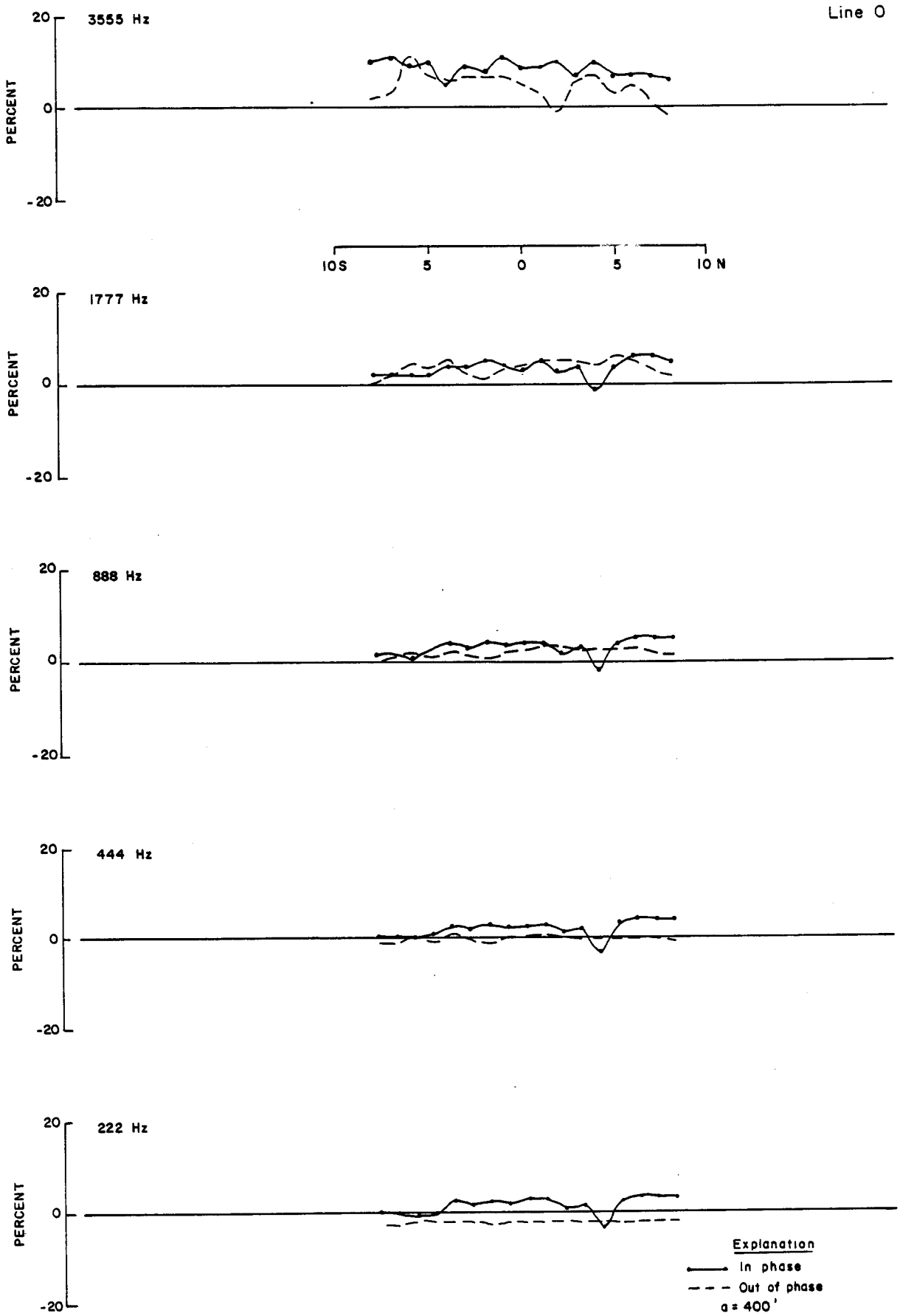



Figure E-78 Alpha Ridge Grid, MaxMin II EM, Line O

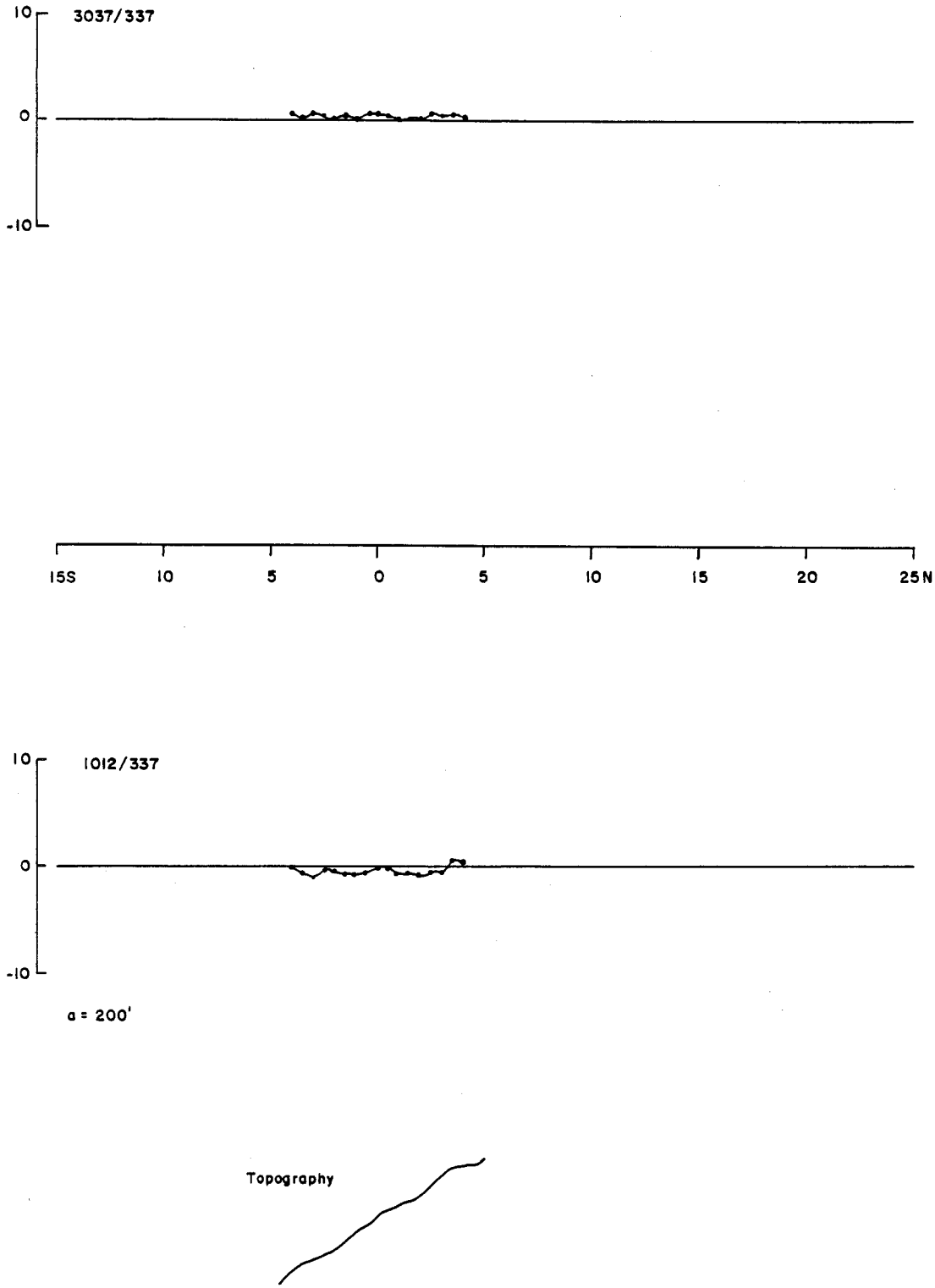
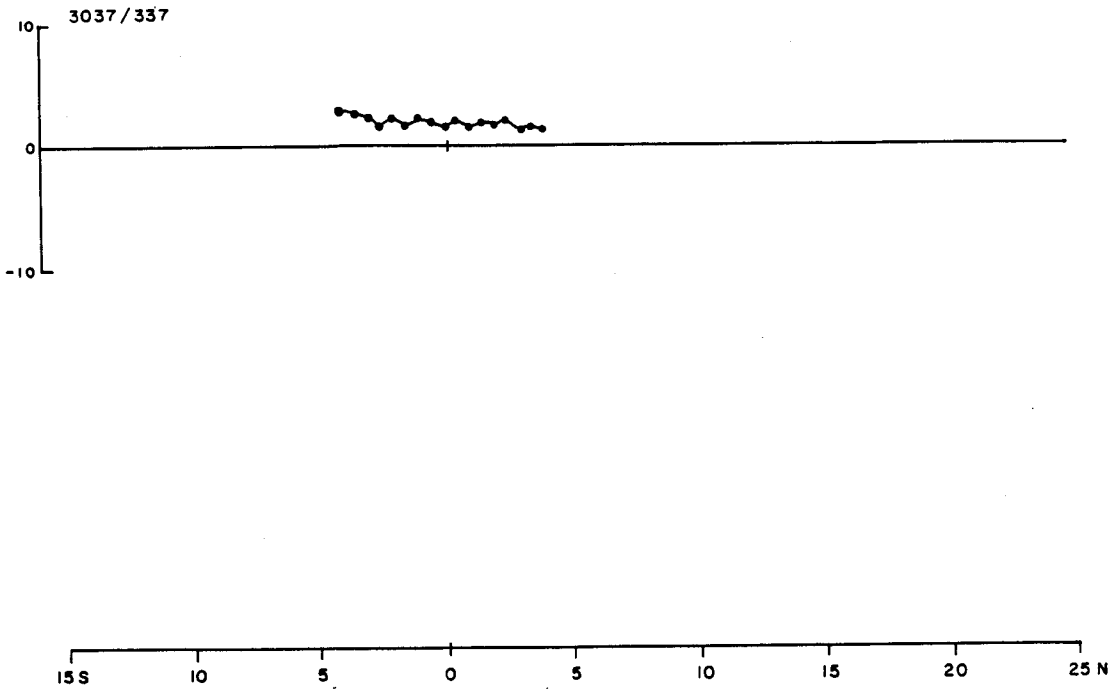
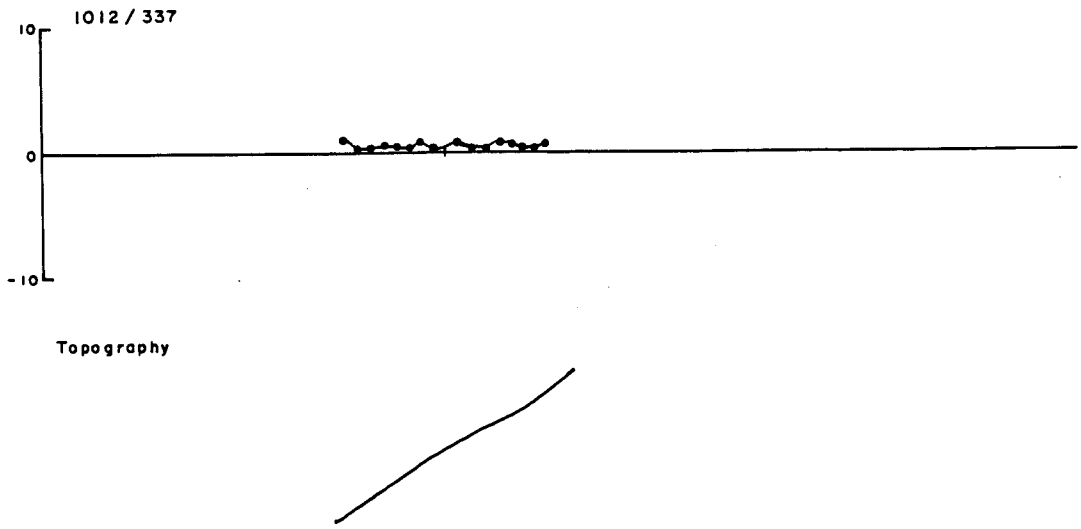



Figure E-79 Alpha Ridge Grid, Genie EM, Line O

Line 10+81 E.




Explanation

—— In Phase

a=200'

Figure E-80-Alpha Ridge Grid, Genie E.M., Line 10+81 E.

Line 7+50 W.

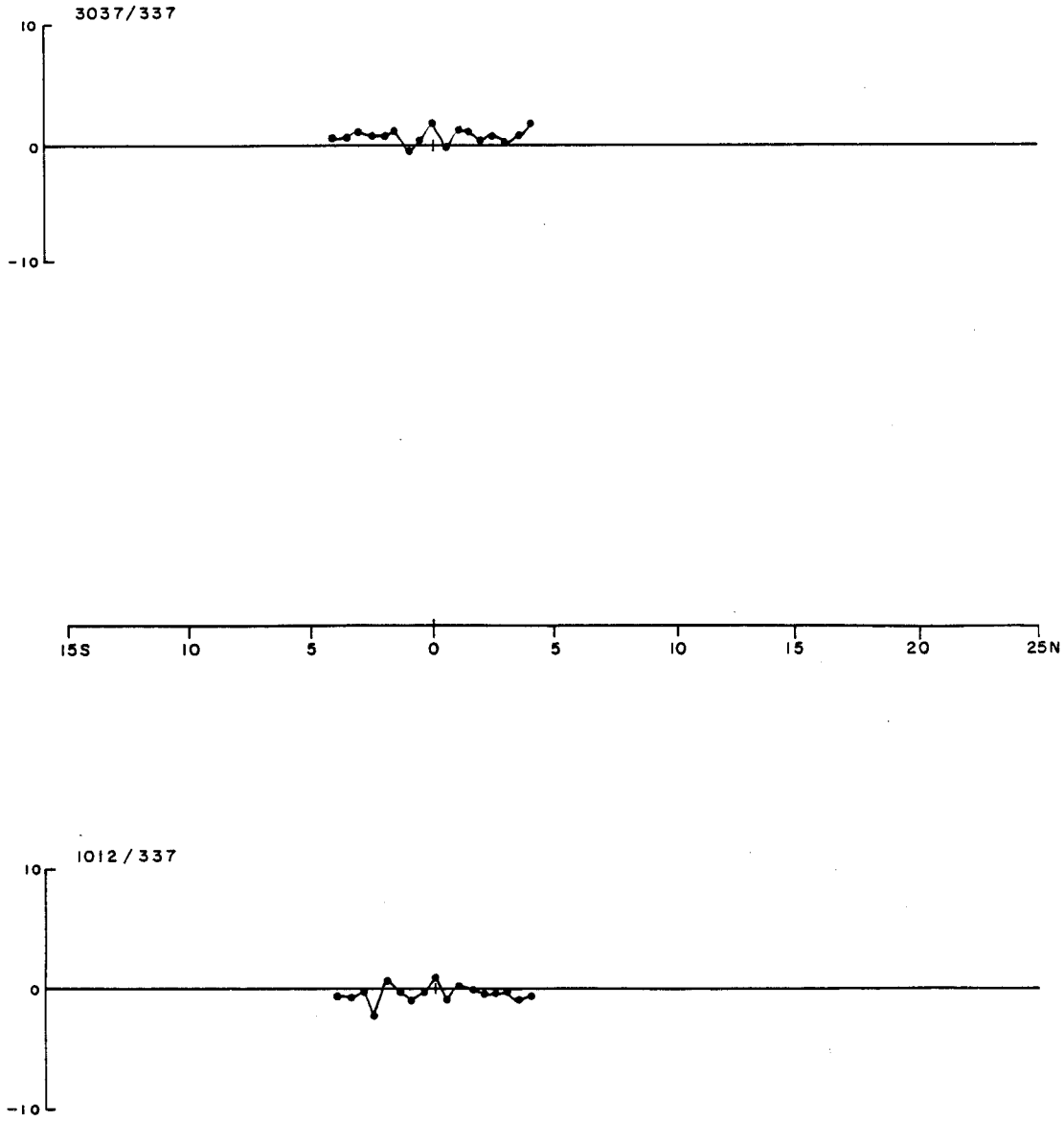



Figure E-81- Alpha Ridge Grid, Genie E.M., Line 7+50 W.

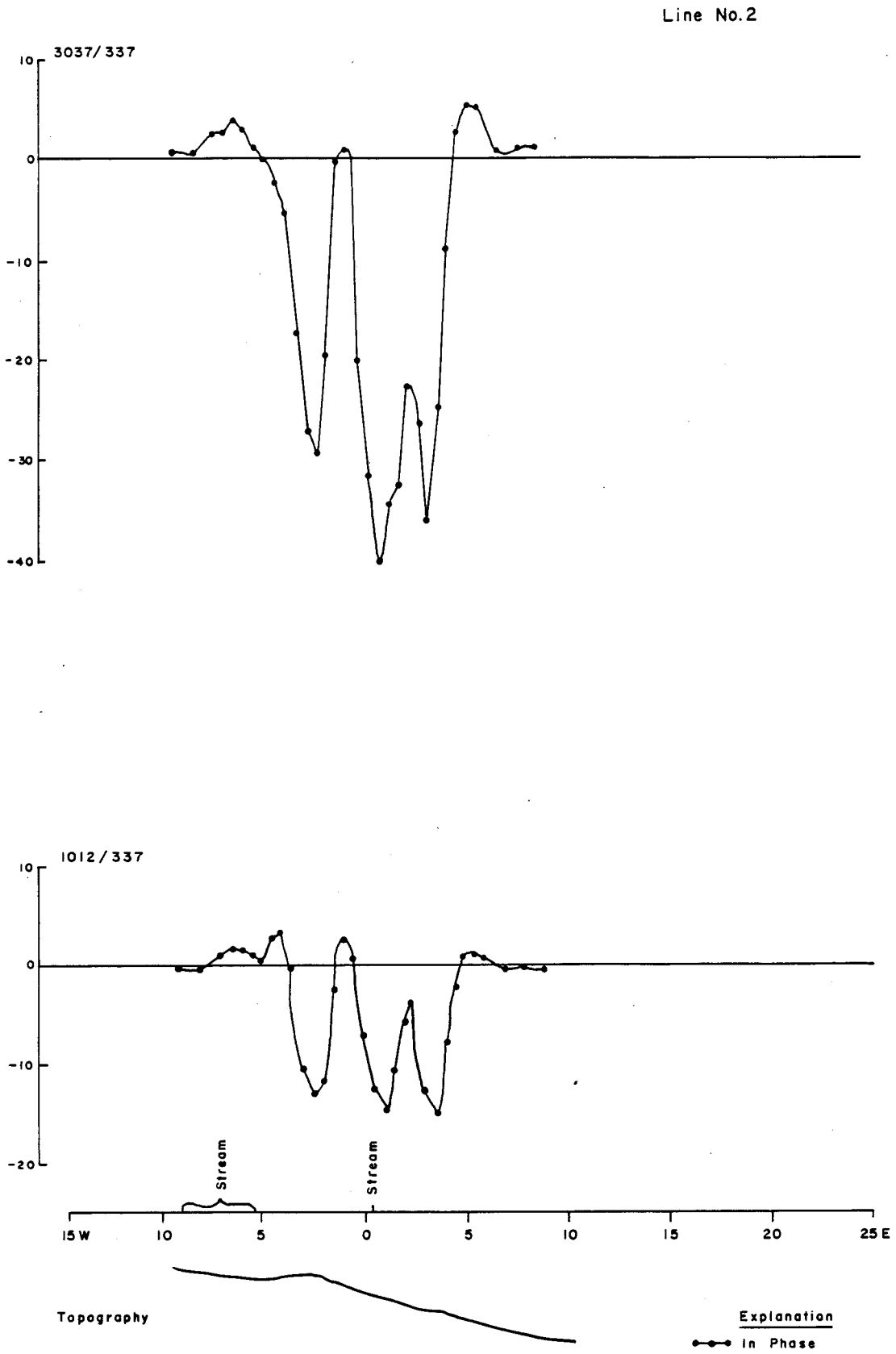



Figure E-82- Canyon Creek, Genie E. M., Line No. 2

Line No. 2

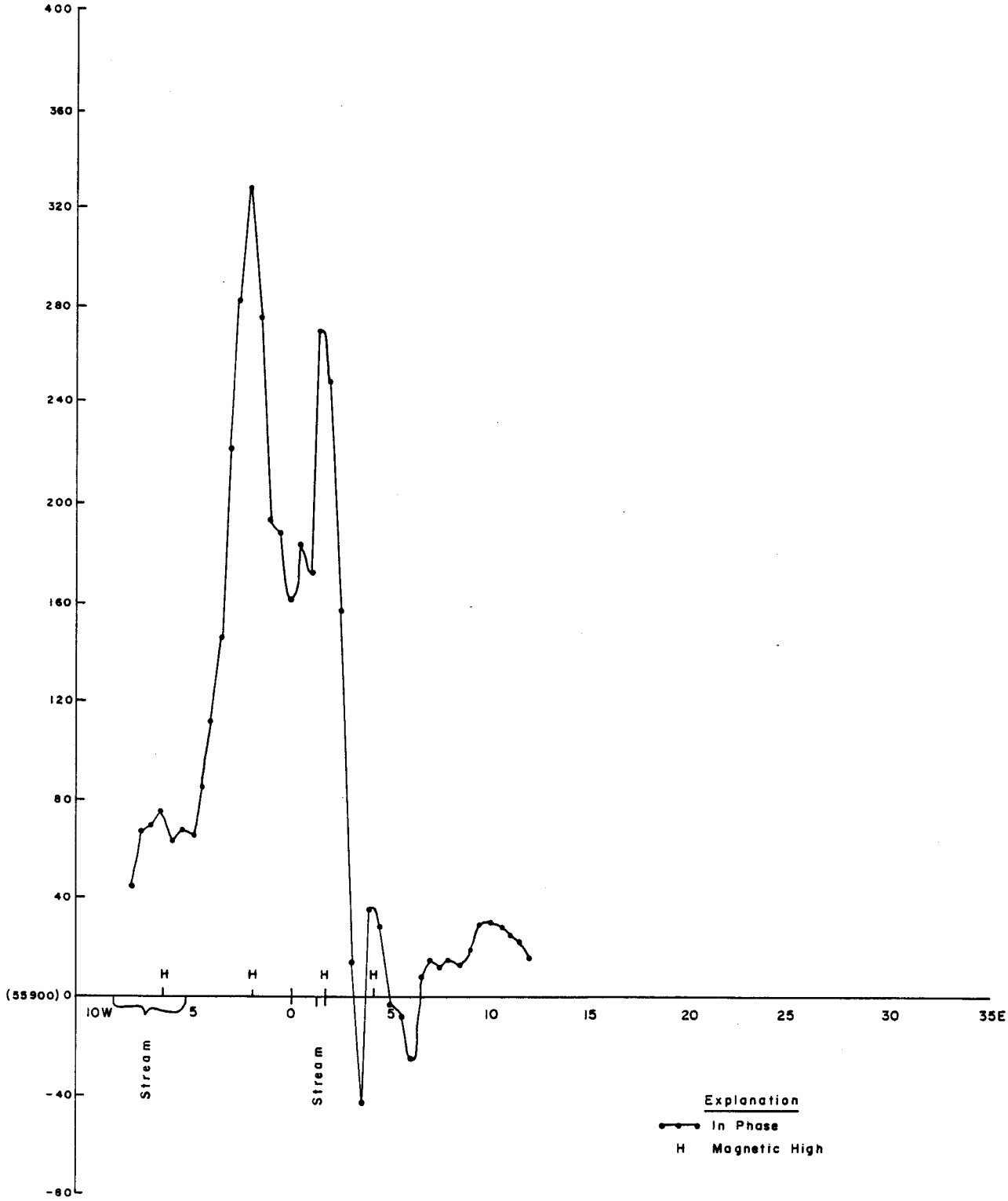



Figure E-83-Canyon Creek Area, Magnetometer Profile, Line No. 2

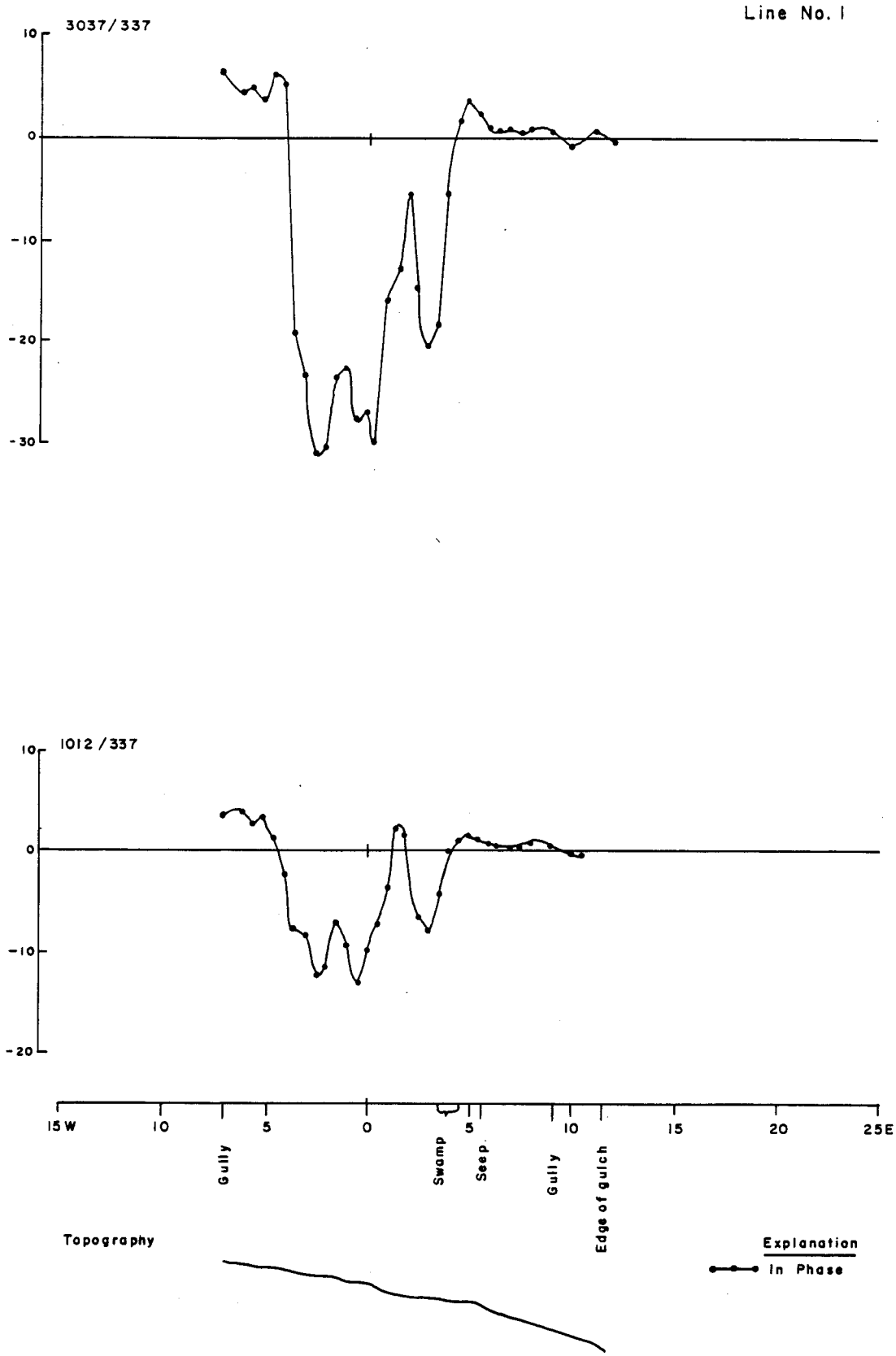



Figure E-84- Canyon Creek Grid, Genie E. M., Line No. 1

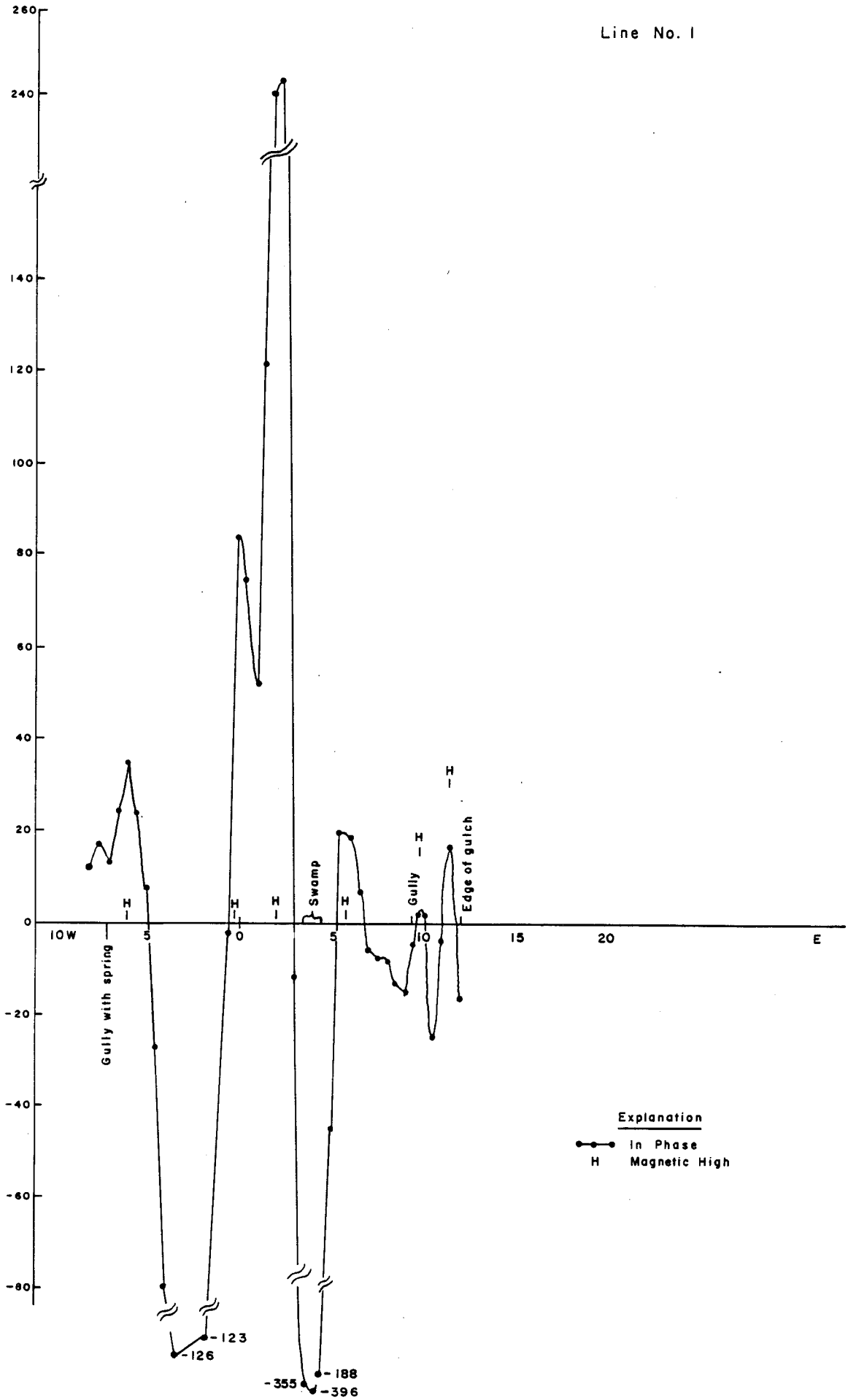



Figure E-85- Canyon Creek Area, Magnetometer Profile, Line No. 1

# APPENDIX F

## SURVEYING

## TABLE OF CONTENTS

SURVEYING ..... 1

SURVEY CONTROL TABLES ..... 2

## SURVEYING

Surveying during the project was performed to locate patented claim corners, diamond drill holes, cable tool sampling sites, placer test pits, establish grids for mapping and geochemical/geophysical surveys, and tie in various monuments and sample locations. Plates K-17 and D-2 show the location of various surveyed points, and list the corresponding state coordinates.

Surveys of patented claim corners were not intended to establish legal boundaries of the claims. In some cases the original corners could not be found. There is also some uncertainty in the actual coordinates of some of the corners surveyed because of an apparent discrepancy in the original survey of one of the U.S. mineral monuments.

PRIMARY SURVEY CONTROL KANTISHNA PROJECT

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| VABM Bound | 3 473 293. 55 | 358 140. 69 | | Vertical angle Elevation bench mark |
| VABM Elorado | 3 474 776. 77 | 341 866. 30 | 3246 | Vertical angle Elevation bench mark |
| VABM Moon | 3 515 119. 17 | 409 299. 55 | | Vertical Angle Elevation bench mark |
| VABM Antim | 3 553 883. 35 | 407 097. 27 | 4649 | Vertical angle Elevation bench mark |
| USLM-1700 | 3 488 052. 85 | 340 198. 18 | 1823.77 | United States location monument |
| USLM-2196 | 3 559 183. 52 | 439 251. 16 | 2410.2 | United States location monument |
| USMM-360 | 3 488 768. 38 | 354 238. 16 | 2389.57 | Control point |
| CP-3 | 3 489 026. 30 | 347 225. 05 | 3099.38 | Control point |
| CP-4 | 3 484 368. 55 | 340 632. 42 | 1622.21 | Control point |
| CP-5 | 3 490 958. 70 | 343 523. 78 | 2833.42 | Control point |
| CP-6 | 3 485 278. 55 | 349 128. 84 | 2667.63 | Control point |
| CP-7 | 3,497 056. 48 | 359 028. 55 | 3619.63 | Control point |
| CP-8 | 3 494 618. 97 | 359 132. 76 | 3778.21 | Control point |
| CP-9 | 3 497 002.72 | 372 381. 81 | 4329.02 | Control point Glacier Peak |
| CP-10 | 3 508 065. 66 | 372 276. 79 | 3161.59 | Control point |
| CP-11 | 3 487 083. 47 | 388 061. 23 | 2688.54 | Control point at Spruce Creek |
| CP-11A | 3 486 983. 03 | 387 963. 62 | 2695.8 | Control point |
| CP-11B | 3 483 463. 54 | 384 272. 45 | 2257.8 | Control point |
| CP-12 | 3 502 221. 77 | 385 751. 12 | | Control point Spruce Peak |
| CP-13 | 3 543 087. 71 | 412 945. 21 | 3624.03 | Control point |
| CP-14 | 3 560 974. 53 | 431 548. 18 | 3601.75 | Control point |
| CP-16 | 3 513 405. 50 | 355 235. 01 | 1897.16 | Control point |
| CP-17 | 3 512 179. 91 | 351 328. 98 | 1889.36 | Control point |
| T.P. 17-A | 3 506 929. 08 | 353 867. 45 | 2436.51 | Turning point |

PRIMARY SURVEY CONTROL JUPITER-MARS AREA

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| JM-1 | 3 491 092. 49 | 355 713. 13 | 3121.83 | 4+00E 3+00S |
| JM-2 | 3 490 947. 22 | 355 340. 40 | 2988.28 | 0+00E 3+00S |
| JM-3 | 3 491 210. 16 | 355 287. 26 | 3072.20 | 0+00E 0+00N |
| JM-4 | 3 491 982. 81 | 354 936. 30 | 3234.77 | 0+00E 0+50N |
| JM-5 | 3 493 032. 56 | 354 527. 20 | 3287.4 | 0+00E 20+00N |
| JM-6 | 3 493 156. 78 | 354 903. 46 | 3191.7 | 4+00E 20+00N |
| JM-7 | 3 493 275. 14 | 355 333. 58 | 3027.3 | 8+00E 20+00N |
| JM-8 | 3 489 448. 31 | 355 912. 07 | 2450.3 | 0+00E 20+00S |
| JM-9 | 3 489 602. 53 | 356 296. 95 | 2530.3 | 4+00E 20+00S |
| JM-10 | 3 489 758. 37 | 356 655. 29 | 2567.2 | 8+00E 20+00S |
| B-31 | 3 492 036. 70 | 354 897. 95 | 3208.6 | 4x4 post in rock cairn |
| B-32 | 3 491 898. 44 | 354 715. 77 | 3131.5 | Near adit |
| B-33 | 3 491 664. 38 | 354 653. 22 | 3036.8 | Adit |
| B-34 | 3 491 456. 02 | 354 471. 90 | 2905.7 | Adit near mill |

PRIMARY SURVEY CONTROL LITTLE ANNIE AREA

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| K-1 | 3 489 339. 70 | 345 820. 76 | 2541.9 | Drill Hole |
| K-2 | 3 488 420. 65 | 345 546. 68 | 2872.8 | Drill Hole |
| K-3 | 3 488 556. 97 | 345 435. 05 | 2798.4 | Drill Hole |
| K-4 | 3 488 892. 88 | 345 639. 34 | 2652.6 | Drill Hole |
| K-5 | 3 487 263. 87 | 344 073. 46 | 2786.75 | Drill Hole |
| K-6 | 3 487 331. 23 | 344 042. 58 | 2736.44 | Drill Hole |
| K-7 | 3 486 978. 96 | 344 227. 96 | 2909.0 | Drill Hole |
| K-8 | 3 488 364. 41 | 348 963. 49 | 2464.6 | Drill Hole |
| K-9 and K-10 | 3 488 739. 69 | 349 331. 71 | 2567.6 | Drill Hole |
| K-11 | 3 489 167. 62 | 348 035. 49 | 2900.7 | Drill Hole |
| K-12 | 3 491 390. 19 | 355 923. 59 | 3299.2 | Drill Hole |
| K-13 | 3 485 886. 91 | 345 560. 02 | 2212.5 | Drill Hole |
| K-14 | 3 491 259. 12 | 355 633. 98 | 3204.3 | Drill Hole |
| K-15 | 3 487 126. 01 | 342 389. 34 | 2473.4 | Drill Hole |
| K-16 | 3 491 086. 21 | 355 097. 45 | 2990.8 | Drill Hole |
| K-17 | 3 485 802. 11 | 342 101. 13 | 2158.9 | Drill Hole |
| K-18 | 3 489 174. 02 | 353 010. 30 | 2432.9 | Drill Hole |
| K-19 | 3 487 247. 33 | 341 198. 97 | 1954.3 | Drill Hole |
| K-20 | 3 487 183. 27 | 340 924. 36 | 1837.5 | Drill Hole |
| K-21 | 3 487 521. 19 | 341 481. 98 | 2063.9 | Drill Hole |
| K-22-22B | 3 489 398. 79 | 345 992. 37 | 2555.4 | Drill Hole |

KANTISHNA PROJECT PLACER TESTS

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| P-1 | 3 481 589. 84 | 343 339. 85 | 1653.4 | Test Pit #1 |
| P-2 | 3 482 639. 07 | 341 962. 80 | 1639.3 | Test Pit #2 |
| P-3 | 3 482 937. 80 | 341 668. 55 | 1634.9 | Test Pit #3 |
| P-4 | 3 488 309. 43 | 337 844. 62 | 1562.6 | Test Pit #4 |
| P-5 | 3 487 477. 10 | 338 613. 96 | 1560.3 | Test Pit #5 |
| P-6 | 3 489 031. 58 | 354 843. 76 | 2360.0 | Test Pit #6 |
| P-7 | 3 489 153. 48 | 354 685. 54 | 2395.4 | Test Pit #7 |
| P-8 | 3 489 311. 33 | 354 442. 12 | 2466.5 | Test Pit #8 |
| P-9 | 3 488 530. 21 | 353 067. 75 | 2281.5 | Test Pit #9 |
| P-10 | 3 487 560. | 340 120. | | Test Pit #10 |
| P-11 | 3 487 880. | 340 350. | | Test Pit #11 |
| P-12 | 3 484 233. 34 | 340 806. 85 | 1623.4 | Test Pit #12 |
| P-13 | 3 489 583. 28 | 391 063. 90 | 2476.2 | Test Pit #13 |
| P-14 | 3 489 634. 92 | 391 245. 52 | 2486.1 | Test Pit #14 |
| P-15 | 3 488 359. 41 | 389 976. 07 | 2461.8 | Test Pit #15 |
| P-16 | 3 487 998. 72 | 389 786. 80 | 2457.2 | Test Pit #16 |
| P-17 | 3 485 662. 57 | 390 289. 79 | 2316.5 | Test Pit #17 |
| P-18 | 3 493 526. 29 | 377 233. 12 | 2805.9 | Test Pit #18 |
| P-19 | 3 493 593. 02 | 377 242. 73 | 2808.5 | Test Pit #19 |
| P-20 | 2 494 508. 75 | 377 211. 94 | 2810.0 | Test Pit #20 |
| P-21 | 3 492 905. 72 | 379 023. 92 | 2755.8 | Test Pit #21 |
| P-22 | 3 492 866. 19 | 379 167. 69 | 2738.8 | Test Pit #22 |
| P-23 | 3 483 178. 38 | 384 520. 40 | 2197.5 | Test Pit #23 |
| P-24 | 3 483 461. 87 | 384 617. 44 | 2197.7 | Test Pit #24 |

KANTISHNA PROJECT PLACER TESTS

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| P-25 | 3 478 301. 51 | 368 748. 35 | 1944.7 | Test Pit #25 |
| P-26 | 3 480 841. 56 | 371 028. 97 | 2093.1 | Test Pit #26 |
| P-27 | 3 481 589. 84 | 343 339. 85 | 1748.5 | Test Pit #27 |
| P-28 | 3 483 463. 54 | 384 272. 45 | 2257.8 | Test Pit #28 |

KANTISHNA PATENT CLAIM SEARCH

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| 5 | 3 487 847. 88 | 842 025. 97 | 2092.9 | Unmarked rough cut 4 x 4 |
| 6 | 3 988 096. 37 | 342 061. 90 | 2024.5 | Rotten 6 x 6 (Red Top #?) Spike and lath |
| 7 | 3 487 716. 71 | 343 145. 12 | 2321.4 | Pipe with 4 x 4 wired to it (Star Lode 3?) |
| 8 | 3 438 039. 50 | 343 502. 55 | 2389.0 | 2" pipe 2' above ground |
| 9 | 3 488 146. 43 | 343 653. 98 | 2403.8 | Spike and lath |
| 10 | 3 488 666. 11 | 344 259. 45 | 2395.9 | Martha Q #2 Cor pipe with 4x4 wired to it (Friday #3)? |
| 12 | 3 487 190. 92 | 341 663. 75 | 2176.5 | 1½" pipe w/ 4x4 post Star Lode Cor #4 |
| 13 | 3 486 997. 08 | 341 104. 02 | 1859.5 | 4x4 post (#4 Red Top)? set spike |
| 14 | 3 487 480. 48 | 340 702. 42 | 1803.2 | 4x4 post (#1 Red Top)? set spike |
| 15 | 3 487 606. 70 | 342 123. 02 | 2176.1 | Pipe 2' above ground |
| 16 | 3 486 687. 56 | 340 456. 86 | 1701.8 | 3" round stake |
| 17 | 3 486 071. 40 | 342 702. 25 | 2364.9 | 4x5 Post scribed S1702-1? |
| 18 | 3 489 499. 22 | 347 497. 42 | 2972.6 | 4x4 post in cairn |
| 19 | 3 489 362. 40 | 346 476. 31 | 2740.4 | 4x4 post in ground |
| 11 | 3 487 704. 50 | 341 415. 52 | 2053.1 | Set spike and lath |
| 20 | 3 489 147. 71 | 346 601. 13 | 2818.4 | 4x4 post |
| 21 | 3 488 595. 63 | 346 592. 26 | 2979.6 | Rock cairn 3'x3'x2½' |
| 22 | 3 486 983. 51 | 343 852. 87 | 2847.1 | 4x4 in rock cairn |
| 23 | 3 486 780. 02 | 343 588. 86 | 2811.4 | Rock cairn 3'x3'x1' |
| 24 | 3 487 122. 61 | 342 487. 48 | 2488.8 | 4x4 post wired to 1½" pipe |
| 25 | 3 489 942. 42 | 347 734. 83 | 2966.2 | 4x4 post |
| 26 | 3 489 633. 26 | 346 213. 57 | 2617.5 | 2" diameter post |

KANTISHNA PATENT CLAIM SEARCH

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| B-1 | 3 489 229. 23 | 354 594. 59 | 2451.27 | Lath at SE Cor Silver King |
| B-2 | 3 489 391. 65 | 352 986. 90 | 2552.64 | Lath at NW Cor Silver King |
| B-3 | 3 489 222. 86 | 352 780. 53 | 2507.61 | 4x4, NW Cor Eureka Lode |
| B-4 | 3 489 164. 24 | 352 215. 82 | 2506.75 | 4x4 post |
| B-5 | 3 488 401. 01 | 351 710. 66 | 2264.91 | Lath, SW Cor Merry Widow |
| B-6 | 3 488 814. 88 | 353 152. 45 | 2317.8 | Lath, SE Cor Merry Widow |
| B-7 | 3 491 801. 67 | 355 121. 93 | 3262.6 | 4x4 post |
| 27 | 3 488 416. 93 | 344 898. 66 | 2618.5 | Polly Wonder Cor #3, lath |
| 28 | 3 487 494. 96 | 343 716. 45 | 2560.6 | Polly Wonder Cor #4, lath |
| 29 | 3 487 193. 17 | 343 329. 33 | 2637.7 | Francis Cor #2, lath |
| 30 | 3 488 020. 73 | 343 246. 09 | 2295.2 | Rock cairn |
| 31 | 3 488 115. 70 | 394 511. 90 | 2670.2 | Cor #2 Little Maud, lath |
| B-7 | 3 491 801. 67 | 355 121. 93 | 3262.6 | 4x4 post |
| B-8 | 3 491 919. 70 | 355 293. 51 | 3356.4 | 4x4 in rock cairn |
| B-9 | 3 491 357. 97 | 355 423. 39 | 3188.4 | Rock 2x6x30 in rock cairn |
| B-10 | 3 491 210. 16 | 355 237. 26 | 3072.2 | Rock cairn |
| B-11 | 3 491 250. 31 | 355 177. 50 | 3050.1 | 4x4 in rock cairn |
| B-12 | 3 491 609. 67 | 353 915. 38 | 3055.7 | 4x4 post near road |
| B-13 | 3 491 215. 05 | 353 822. 82 | 2873.6 | 4x4 post |
| B-14 | 3 490 794. 36 | 353 928. 19 | 2752.5 | 4x4 post |
| B-15 | 3 490 994. 46 | 353 678, 42 | 2858.4 | Cor #2 NW of Jupiter-Mars, lath |
| B-16 | 3 491 056. 90 | 355 375. 15 | 3055.1 | Cor #4-SE Cor Jupiter-Mars Cor #1 SW of Chloride, lath |

KANTISHNA PATENT CLAIM SEARCH

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| B-17 | 3 491 569. 40 | 355 062. 56 | 3150.3 | Cor #3-NE of Jupiter-Mars Cor #2-NW of Chloride |
| B-18 | 3 491 631. 77 | 356 587. 44 | 3432.8 | 4x4 in rock cairn near open cut |
| B-19 | 3 491 355. 66 | 356 527. 17 | 3303.1 | 4x4 post in rock cairn |
| B-20 | 3 489 633. 49 | 354 369. 33 | 2515.5 | Rock cairn |
| B-21 | 3 491 588. 98 | 356 759. 65 | 3427.7 | Chloride Cor #4, lath |
| B-22 | 3 492 072. 72 | 358 853. 40 | 3550.7 | Chorine Cor #1, lath |
| B-23 | 3 492 104. 90 | 356 446. 05 | 3415.7 | Waterloo Cor #2, lath |
| B-24 | 3 491 986. 99 | 356 326. 13 | 3478.5 | 4x4 in rock cairn |
| B-25 | 3 492 649. 20 | 358 686. 37 | 3349.8 | Chlorine Cor #2, lath |
| B-26 | 3 493 073. 89 | 360 125. 76 | 2640.8 | Chlorine Cor #3, lath |
| B-27 | 3 493 217. 44 | 360 160. 27 | 2650.6 | 4x4 in rock cairn 26x6x16 stone |
| B-28 | 3 492 248. 91 | 357 939. 15 | 3281.7 | Waterloo Cor #3, lath |
| B-29 | 3 492 206. 04 | 357 915. 56 | 3299.0 | Post in cairn |
| B-30 | 3 491 735. 49 | 358 249. 68 | 3364.9 | Waterloo Cor #4, lath |
| TP-1 | 3 491 955. 33 | 358 783. 12 | 3521.5 | Turning point |
| TP-2 | 3 492 136. 06 | 358 578. 04 | 3503.9 | Turning point |
| TP-3 | 3 492 141. 22 | 359 119. 93 | 2624.9 | Turning point |
| B-35 | 3 491 116. 07 | 352 018. 38 | 3289.5 | 4x4 post in rock cairn |
| B-36 | 3 491 124. 13 | 351 644. 91 | 3268.1 | Doherty Cor #4, lath |
| B-37 | 3 490 756. 26 | 352 114. 71 | 3109.4 | 5x5 post in rock cairn scribed Cor #1 Doherty |
| B-38 | 3 489 565. 18 | 351 221. 10 | 2688.2 | Doherty Cor #2, Lath |
| B-39 | 3 489 450. 87 | 351 090. 75 | 2663.4 | Post in rock cairn w/ old post at base |

KANTISHNA PATENT CLAIM SEARCH

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| B-40 | 3 490 029. 49 | 350 860. 87 | 2870.5 | Pittsburg Cor #4, lath |
| B-41 | 3 489 372. 02 | 349 868. 02 | 2777.3 | Pennsylvania Cor #4. Old 4x4 w/ iron pipe. |
| B-42 | 3 486 474. 95 | 344 216. 96 | 2707.5 | Cor #4 Silver Pick, new 3x3 in cairn |
| B-43 | 3 486 701. 02 | 345 187. 37 | 2543.4 | lath |
| B-44 | 3 487 836. 51 | 345 125. 05 | 2892.4 | Cor #2 Silver Pick, lath |
| B-45 | 3 487 633. 41 | 344 866. 33 | 2872.9 | Cor #3 Little Maud, lath |
| B-46 | 3 487 363. 62 | 345 595. 48 | 2661.9 | Cor #3 Silver Pick, lath |
| B-47 | 3 488 136. 51 | 346 825. 71 | 2763.1 | 3x3 post (old) |
| B-48 | 3 488 286. 66 | 346 677. 09 | 2868.2 | Cor #3 Darling Lode, lath |
| B-49 | 3 488 367. 54 | 346 621. 74 | 2921.4 | 4x4 in rock cairn, Cor #4 Gold King |
| B-50 | 3 488 585. 91 | 348 100. 33 | 2746.1 | Post in large rock cairn, Gold King #1 |
| B-51 | 3 489 344. 36 | 347 903. 05 | 2956.15 | East Gold King Cor #3,lath |
| B-52 | 3 486 549. 54 | 348 627. 28 | 2122.37 | Sulphide Cor #1, lath |
| B-53 | 3 485 815. 59 | 347 315. 95 | 2148.0 | Sulphide Cor #2, lath |
| B-54 | 3 486 058. 20 | 347 198. 59 | 2097.9 | Water Level Cor #1, lath |
| B-55 | 3 486 818. 29 | 349 038. 53 | 2164.4 | Round post in cairn on bench above creek |
| B-56 | 3 486 623. 56 | 348 993. 70 | 2118.8 | Lath |
| B-57 | 3 487 082. 02 | 348 772. 17 | 2275.8 | Lath |
| B-58 | 3 487 227. 62 | 347 726. 30 | 2363.8 | Keystone Cor #2 Broken 4x4 w/ spike-lath |
| B-59 | 3 489 965. 46 | 349 463. 86 | 2939.7 | Post in cairn Old post beside it. |
| B-60 | 3 490 349. 71 | 349 169. 04 | 3002.1 | Blue Bell Cor #2, lath |

KANTISHNA PATENT CLAIM SEARCH

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| B-61 | 3 490 134. 22 | 349 135. 36 | 2910.2 | 4x4 in ground |
| B-62 | 3 489 774. 83 | 349 341. 45 | 2832.8 | Blue Bell Cor #2, lath |
| B-63 | 3 489 506. 37 | 349 505. 35 | 2809.7 | Pittsburgh Cor #3 5/8" rebar, lath |
| B-64 | 3 489 924. 74 | 350 735. 91 | 2839.9 | Doherty Cor #3, cairn w/new post and old post |
| B-65 | 3 488 944. 08 | 349 723. 04 | 2646.5 | Pittsburgh Cor #2 5/8" rebar, lath |
| B-66 | 3 488 856. 51 | 350 216. 10 | 2571.2 | Pennsylvania Cor #1 4x4 in ground, lath |
| B-67 | 3 488 019. 08 | 348 961. 37 | 2431.6 | Pennsylvania Cor #2 lath |
| B-68 | 3 488 518. 40 | 348 628. 62 | 2630.0 | Pennsylvania Cor #3 lath |
| B-69 | 3 487 735. 16 | 347 391. 99 | 2558.5 | Keystone Cor #3, rebar w/4x4 lath |
| B-70 | 3 487 228. 68 | 347 726. 37 | 2362.2 | Keystone Cor #2, lath B-58 |
| B-71 | 3 487 026. 89 | 348 424. 58 | 2238.3 | Sulphide Cor #4, old post |
| B-72 | 3 488 975. 90 | 351 596. 11 | 2497.7 | Merry Widow Cor #3, lath |
| B-73 | 3 490 478. 69 | 353 990. 74 | 2666.5 | Jupiter-Mars Cor #1, lath |
| B-74 | 3 485 658. 34 | 345 013. 20 | 2250.1 | cairn-Cor #3 Water Level |
| 32 | 3 486 525. 54 | 342 573. 88 | 2463.0 | Martha Q Cor #5 lath |
| 33 | 3 486 314. 27 | 342 333. 97 | 2319.6 | Francis Lode Cor #1 lath |
| 34 | 3 486 708. 67 | 342 055. 86 | 2272.1 | Star Lode Cor #4 lath |
| 35 | 3 486 071. 71 | 342 702. 30 | 2360.2 | Old post scribed S1702, Silver Pick N° 2 Cor #1 |
| 36 | 3 485 831. 11 | 342 689. 61 | 2317.0 | Francis Cor #4, lath |
| 37 | 3 485 517. 79 | 343 131. 11 | 2402.7 | Silver Pick N° 2 Cor #4, lath |
| 38 | 3 483 956. 45 | 341 937. 96 | 1636.3 | Lucky Strike Cor #1, lath |
| 39 | 3 483 642. 46 | 342 490. 76 | 1762.9 | Lucky Strike Wit. Cor to Cor #4, lath |
| 40 | 3 485 199. 12 | 341 423. 76 | 1764.6 | Galena Cor #3, lath |

KANTISHNA PATENT CLAIM SEARCH

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| 41 | 3 485 681. 94 | 341 068. 25 | 1704.2 | Galena Cor #2, lath |
| 42 | 3 485 154.61 | 335 621. 58 | 3049.7 | Whistler Cor #1 Bright Cor #2 Stone S1708 or S1706 |
| 43 | 3 485 699. 83 | 335 391. 24 | 2885.9 | Whistler Cor #4 Schist stone scribed S1706 |
| 44 | 3 486 855. 45 | 366 322. 64 | 2097.8 | Bright Light Lode Cor #4, lath |
| 45 | 3 486 360. 73 | 336 646. 59 | 2272.4 | Bright Light Cor #1 Schist stone scribed S1706 |
| 46 | 3 484 960. 89 | 343 161. 49 | 2230.3 | Lucky Strike Cor #2, lath |
| 47 | 3 484 509. 21 | 343 556. 37 | 2104.0 | Lucky Strike Cor #3, lath |
| TCP #1 | 3 481 447. 92 | 341 811. 27 | 1692.33 | |
| USLM 2196 | 3 559 183.52 | 439 251. 16 | 2410.2 | United States location monument |
| 1-2196-SL | 3 558 868. 19 | 439 609. 06 | 2401.9 | Cor #1 Stampede Lode |
| 1-2196-SP | 3 559 818. 53 | 439 565. 55 | 2155.2 | Cor #1 Stampede Placer |

QUIGLEY RIDGE GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| QG-1 | 3 488 591. 56 | 345 363. 85 | 2774.6 | 8W 0+00 |
| QG-2 | 3 488 367. 65 | 345 032. 26 | 2688.6 | 12W 0+00 |
| QG-3 | 3 488 143. 55 | 344 700. 94 | | 16W 0+00 |
| QG-4 | 3 488 087. 53 | 344 618. 10 | 2679.1 | 17W 0+00 |
| QG-5 | 3 487 919. 49 | 344 369. 58 | 2726.2 | 20W 0+00 |
| QG-6 | 3 487 695. 40 | 344 038. 06 | 2659.4 | 24W 0+00 |
| QG-7 | 3 487 471. 51 | 343 707. 10 | 2567.1 | 28W 0+00 |
| QG-8 | 3 487 247. 34 | 343 375. 04 | 2606.1 | 32W 0+00 |
| QG-9 | 3 487 022. 99 | 343 044. 17 | 2665.2 | 36W 0+00 |
| QG-10 | 3 489 005. 47 | 345 083. 55 | 2515.3 | 8W 5+00N |
| QG-11 | 3 488 781. 54 | 344 752. 30 | 2485.2 | 12W 5+00N |
| QG-12 | 3 488 557. 47 | 344 420. 82 | 2463.0 | 16W 5+00N |
| QG-13 | 3 488 501. 85 | 344 337. 84 | 2489.7 | 17W 5+00N |
| QG-14 | 3 488 333. 81 | 344 089. 44 | 3583.1 | 20W 5+00N |
| QG-15 | 4 588 168. 03 | 344 201. 48 | 2578.5 | 20W 5+00N |
| QG-16 | 3 487 437. 38 | 342 764. 03 | | 36W 5+00N |
| QG-17 | 3 487 661. 39 | 343 095. 40 | | 32W 5+00N |
| QG-18 | 3 487 885. 67 | 343 426. 74 | | 28W 5+00N |
| QG-19 | 3 488 109. 81 | 343 757. 96 | | 24W 5+00N |
| QG-20 | 3 487 199. 31 | 344 373. 08 | 2897.7 | 24W 6+00S |
| QG-21 | 3 486 892. 63 | 344 098. 64 | 2892.8 | 28W 7+00S |
| QG-22 | 3 486 585. 58 | 343 822. 35 | 2838.0 | 32W 8+00S |
| QG-23 | 3 486 195. 76 | 343 603. 06 | 2684.9 | 36W 10+00S |
| QG-24 | 3 489 832. 61 | 344 518. 83 | 2260.5 | 8W 15+00N |

QUIGLEY RIDGE GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| QG-24 | 3 489 832. 61 | 344 518. 83 | 2260.5 | 8W 15+00N |
| QG-25 | 3 489 160. 03 | 342 635. 47 | 2071.7 | 27+50W 20+00N |
| QG-33b | 3 488 482. 68 | 342 539. 63 | 2058.2 | 32W 15+00N |
| QG-26 | 2 487 746. 02 | 347 406. 97 | 2562.9 | 4E 18+50S |
| QG-27 | 3 487 380. 47 | 347 150. 87 | 2423.4 | 0+00 20+00S |
| QG-28 | 3 487 164. 45 | 346 809. 60 | 2374.9 | 4W 20+00S |
| QG-29 | 3 486 935. 85 | 346 489. 85 | 2287.4 | 8W 20+00S |
| QG-30 | 3 485 677. 13 | 344 981. 75 | 2266.8 | 27+50W 22+00S |
| QG-31 | 3 489 353. 82 | 342 902. 57 | 2157.1 | 24W 20+00N |
| QG-32 | 3 489 117. 25 | 342 662. 35 | 2071.0 | 28W 19+50N |
| QG-33a | 3 488 891. 34 | 342 254. 70 | 2000.1 | 32W 20+00N |
| QG-34 | 3 486 457. 16 | 344 882. 58 | 2545.58 | 24W 15+00S |
| QG-35 | 3 486 020. 46 | 344 238. 40 | 2552. 63 | 32W 15+00S |
| QG-36 | 3 487 963. 37 | 341 451. 40 | 1942.2 | 44W 16+50N |
| QG-37 | 3 488 830. 15 | 340 578. 71 | 2150.8 | 46W 29+00N |
| QG-38 | 3 488 623. 76 | 340 220. 98 | 2019.0 | 50W 29+00N |
| QG-39 | 3 488 189. 21 | 340 133. 18 | 1812.5 | 52W 26+00N |
| QG-40 | 3 487 248. 99 | 341 917. 41 | 2284.1 | 44W 8+00N |
| QG-41 | 3 486 454. 95 | 342 195. 78 | 2311.5 | 46W 0+00N |
| QG-42 | 3 486 223. 31 | 341 869. 33 | 2124.2 | 50W 0+00N |
| QG-43 | 3 485 259. 33 | 342 612. 52 | 2174.7 | 52W 15+00S |
| QG-44 | 3 486 465. 90 | 341 500. 19 | 1980.6 | 52W 4+00N |
| QG-45 | 3 487 695. 28 | 348 884. 04 | 2393.6 | 16E 27+50S |

QUIGLEY RIDGE GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| QG-46 | 3 487 914. 46 | 349 258. 64 | 2293.5 | 20E 27+50S |
| QG-47 | 3 488 135. 92 | 349 644. 91 | 2393.8 | 24E 27+50S |
| QG-48 | 3 488 329. 54 | 350 014. 72 | 2491.3 | 28E 27+50S |
| QG-49 | 3 488 584. 65 | 348 310. 41 | 2701.2 | 16E 15+50S |
| QG-50 | 3 488 841. 36 | 348 592. 17 | 2655.8 | 20E 15+50S |
| QG-51 | 3 489 111. 38 | 348 961. 16 | 2534.0 | 24E 15+50S |
| QG-52 | 3 489 372. 37 | 349 338. 81 | 2758.5 | 28E 15+50S |
| QG-53 | 3 489 308. 68 | 346 423. 98 | 2732.5 | 480.06 0+00 (Base line) |
| QG-54 | 3 489 263. 87 | 346 357. 71 | | 4+00E 0+00 |
| QG-55 | 3 489 039. 81 | 346 026. 35 | | 0+00 0+00 |
| QG-56 | 3 488 815. 52 | 345 694. 67 | | 4+00W 0+00 |
| QG-57 | 3 490 884. 43 | 345 251. 78 | 2467.4 | 4+00E 20+00N |
| QG-58 | 3 490 667. 22 | 344 857. 26 | 2390.1 | 0+00 20+00N |
| QG-59 | 3 490 442. 96 | 344 519. 62 | 2519.3 | 4+00W 20+00N |
| QG-60 | 3 488 178. 51 | 345 652. 57 | 2959.1 | 8+00W 5+00S |
| QG-61 | 3 487 954. 82 | 345 311. 18 | 2889. 6 | 12W 5+00S |
| QG-62 | 3 487 506. 50 | 344 648. 74 | 2885. 8 | 20W 5+00S |

QUIGLEY RIDGE SURVEY CONTROL LITTLE ANNIE AREA

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| A-1 | 3 458 818. 49 | 345 549. 25 | 2636.5 | Miscellaneous control points |
| A-2 | 3 488 634. 92 | 345 631. 98 | 2797.4 | Miscellaneous control points |
| A-3 | 3 488 577. 91 | 345 574. 70 | 2829.5 | Miscellaneous control points |
| A-4 | 3 488 470. 09 | 345 534. 33 | 2842.4 | Miscellaneous control points |
| A-5 | 3 488 457. 72 | 345 399. 49 | 2821.6 | Miscellaneous control points |
| A-6 | 3 488 561. 26 | 345 374. 97 | 2788.4 | Miscellaneous control points |
| A-7 | 3 488 570. 65 | 345 313. 49 | 2779.9 | Miscellaneous control points |
| A-8 | 3 488 568. 09 | 345 221. 72 | 2754.0 | Miscellaneous control points |
| A-9 | 3 488 514. 56 | 345 154. 81 | 2734.9 | Miscellaneous control points |
| A-10 | 3 488 512. 58 | 345 681. 06 | 2860.0 | Miscellaneous control points |
| A-11 | 3 488 341. 05 | 345 579. 50 | 2899.6 | Miscellaneous control points |
| A-12 | 3 487 965. 80 | 345 395. 87 | 2899.9 | Miscellaneous control points |
| A-13 | 3 488 502. 62 | 345 971. 73 | 2919.7 | Miscellaneous control points |
| A-14 | 3 488 264. 29 | 345 737. 71 | 2961.9 | Miscellaneous control points |
| A-15 | 3 488 697. 84 | 345 885. 07 | 2820.0 | Miscellaneous control points |
| A-16 | 3 488 753. 14 | 346 027. 60 | 2365.4 | Miscellaneous control points |
| A-17 | 3 488 912. 19 | 345 929. 77 | 2793.1 | Miscellaneous control points |
| A-18 | 3 488 733. 10 | 345 791. 73 | 2770.6 | Miscellaneous control points |
| A-19 | 3 488 897. 26 | 345 897. 33 | 2739.1 | Miscellaneous control points |
| A-20 | 3 488 899. 82 | 345 771. 36 | 2695.5 | Miscellaneous control points |
| A-21 | 3 439 356. 72 | 345 743. 19 | 2512.8 | Miscellaneous control points |
| A-22 | 3 489 404. 57 | 345 758. 80 | 2493.4 | Miscellaneous control points |
| A-23 | 3 439 136. 88 | 345 926. 36 | 2530.5 | Miscellaneous control points |
| A-24 | 3 489 408. 08 | 345 814. 23 | 2505.6 | Miscellaneous control points |

QUIGLEY RIDGE SURVEY CONTROL LITTLE ANNIE AREA

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| A-25 | 3 489 435. 32 | 345 920. 46 | 2491.9 | Miscellaneous control points |
| A-26 | 3 489 119. 40 | 345 621. 40 | 2568.5 | Miscellaneous control points |
| A-27 | 3 489 521. 40 | 346 009. 53 | 2512.7 | Miscellaneous control points |
| A-28 | 3 489 528. 60 | 346 067. 59 | 2555.6 | Miscellaneous control points |
| A-29 | 3 489 600. 39 | 346 103. 98 | 2581.4 | Miscellaneous control points |
| A-30 | 3 489 489. 85 | 346 155. 78 | 2603.1 | Miscellaneous control points |
| A-31 | 3 489 570. 69 | 346 315. 97 | 2659.1 | Miscellaneous control points |

RED DIRT GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| RD-1 | 3 559 977. 63 | 417 714. 12 | 3587.2 | 0<br>30+00N |
| RD-2 | 3 557 083. 83 | 419 637. 00 | 3503.7 | 0<br>5+00S |
| RD-3 | 3 559 529. 16 | 416 954. 32 | 3635.9 | 8W<br>34+00N |
| RD-4 | 3 556 441. 14 | 419 193. 87 | 3355.2 | 8W<br>5+00S |
| RD-5 | 3 558 426. 81 | 416 949. 27 | 3682.9 | 16W<br>28+00N |
| RD-6 | 3 555 762. 89 | 418 738. 35 | 3064.4 | 16W<br>5+00S |

CANYON CREEK GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| CY-1 | 3 541 332. 73 | 399 794. 75 | 3588.1 | #1 Line 8+00W |
| CY-2 | 3 542 285. 35 | 401 520. 52 | 3310.8 | #1 Line 12+00E |
| CY-3 | 3 538 913. 22 | 399 050. 50 | 3424.0 | #2 Line 10+00W |
| CY-4 | 3 539 374. 49 | 400 979. 91 | 3217.6 | #2 Line 10+00E |

ALPHA RIDGE GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| AR-1 | 3 481 008. 07 | 333 994. 40 | 3201.2 | 7+50W 5+00N |
| AR-2 | 3 481 859. 14 | 334 322. 73 | 3301.1 | 0+00E 10+00N |
| AR-3 | 3 482 089. 22 | 335 501. 34 | 3067.4 | 10+81E 5+00N |
| A-4 | 3 480 223. 16 | 334 523. 29 | 2887.5 | 7+50W 5+00S |
| A-6 | 3 480 266. 24 | 335 387. 92 | 2765.1 | 0+00E 10+00S |
| AR-6 | 3 481 271. 01 | 335 987. 26 | 2770.1 | 10+81E 5+00S |
| AR-8 | 3 481 145. 85 | 334 841. 44 | 3067.7 | Adit |

GLEN CREEK GEOCHEM AND GEOPHYSICS SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| GC-1 | 3 493 242. 72 | 379 283. 24 | 2772.5 | IP Line 0+00 |
| GC-2 | 3 493 746. 51 | 378 725. 50 | 2867.1 | 0+0 7_50N |
| GC-3 | 3 492 568. 45 | 379 885. 24 | 2832.9 | 0+0 9+50S |
| GC-4 | 3 493 838. 32 | 382 089. 10 | 3715.6 | 1N South/East |
| GC-5 | 3 494 961. 34 | 330 576. 02 | 2846.6 | 1N North/West |
| GC-6 | 3 495 601. 98 | 383 614. 33 | 3586.2 | 2N South/East |
| GC-7 | 3 496 687. 77 | 382 008. 48 | 3182.1 | 2N North/West |

CARIBOU CREEK SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| CC-1 | 3 515 567. 40 | 392 777. 19 | 2564.8 | |
| CC-2 | 3 514 673. 33 | 390 605. 75 | 2488.1 | |
| CC-3 | 3 513 887. 57 | 388 889. 43 | 2410.9 | First stream into Caribou Cr. |
| CC-4 | 3 514 231. 01 | 387 894. 69 | 2351.7 | |
| CC-5 | 3 514 055. 70 | 386 084. 41 | 2331.3 | Rock cairn (camp) |
| CC-6 | 3 513 546. 92 | 385 273. 50 | 2263.3 | |
| CC-7 | 3 512 921. 75 | 384 048. 01 | 2249.4 | Post in Cairn |
| CC-8 | 3 512 691. 46 | 383 044. 34 | 2192.1 | |
| CC-9 | 3 512 124. 33 | 379 799. 78 | 2088.0 | North of creek |
| CC-10 | 3 511 841. 58 | 376 764, 68 | 2034.8 | North of creek |
| CC-11 | 3 511 858. 02 | 373 875. 17 | 1884.3 | N30°W 350' to confluence of Last Chance Creek and Caribou Creek |
| CC-12 | 3 512 224. 54 | 372 106. 50 | 2113.4 | North of creek (high on slope) |
| CC-13 | 3 512 089. 99 | 369 698. 36 | 1932.5 | North of creek |
| CC-14 | 3 511 597. 52 | 367 667. 87 | 1859.0 | S65°W 350' to confluence of Snow-shoe Creek and Caribou Creek |
| CC-15 | 3 511 866. 60 | 365 044. 39 | 1732.3 | |
| CC-16 | 3 511 171. 56 | 362 855. 61 | 1677.64 | |
| CC-17 | 3 512 373. 68 | 362 269. 79 | 1615.11 | 30' north of creek in sharp bend |
| CC-18 | 3 511 734. 95 | 358 816. 31 | 1646.2 | |
| CC-19 | 3 511 718. 31 | 356 992. 63 | 1592.3 | Claim post |
| CC-20 | 3 511 881. 12 | 356 173. 73 | 1545.9 | |
| CC-21 | 3 512 365. 52 | 353 884. 41 | 1576.7 | |
| CC-22 | 3 513 496. 58 | 352 031. 18 | 1444.7 | |

CARIBOU CREEK SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| CC-23 | 3 515 540. 06 | 350 415. 21 | 1540.4 | |
| CC-24 | 3 518 178. 34 | 348 976. 68 | 1455.9 | |
| CC-25 | 3 520 655. 74 | 348 638. 75 | 1308.3 | |
| CC-26 | 3 522 682. 40 | 348 053. 80 | 1287.9 | |

GLACIER CREEK SURVEY CONTROL

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| GC #1 | 3 511 879. 98 | 346 711. 95 | 1579.6 | GL-1 |
| GC #2 | 3 513 858. 85 | 345 933. 26 | 1522.2 | GL-2 |
| GC #3 | 3 515 906. 31 | 344 919. 42 | 1467.2 | GL-3 |

PRIMARY SURVEY CONTROL DUNKLE PROJECT AREA

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| T-10(A) | 3 368 820. 70 | 561 183. 47 | 3345.17 | |
| VABM Bull | 3 379 524. 83 | 584 166. 12 | 3498.5 | Vertical angle elevation bench mark |
| TP-1 | 3 383 563. 85 | 574 094. 33 | 2826.82 | Turning point |
| TP-2 | 3 386 849. 75 | 577 205. 40 | 2725.7 | Turning point |
| CP-1 | 3 387 118. 18 | 593 702. 20 | 3347.74 | Control point |
| CP-2 | 3 390 447. 25 | 593 039. 10 | 3196.14 | Control point |
| CP-3 | 3 387 986. 55 | 589 953. 17 | 3311.99 | Control point |

PRIMARY SURVEY CONTROL DUNKLE PROJECT AREA

| STATION | STATE PLANAR COORDINATES NORTHING | EASTING | ELEVATION | REMARKS |
|---|---|---|---|---|
| D-1 | 3 393 821. 54 | 594 825. 59 | 2874.6 | 5S 1200W |
| D-2 | 3 393 501. 12 | 594 458. 11 | 2894.5 | 10S 1200W |
| D-3 | 3 388 435. 67 | 591 826. 93 | 3171.8 | 65S 200E |
| D-4 | 3 388 949. 07 | 592 010. 57 | 3144.8 | 60S Base Ln |
| D-5 | 3 389 182. 33 | 593 645. 19 | 3172.3 | DDH ? |
| D-6 | 3 395 097. 40 | 589 082. 75 | 2947.0 | Mag Ln #2 North |
| D-7 | 3 395 015. 26 | 590 125. 09 | 2927.3 | Mag Ln #1 North |
| D-8 | 3 390 002. 52 | 589 087. 72 | 3096.63 | Mag Ln #2 South |
| D-9 | 3 390 019. 75 | 590 094. 01 | 3107.03 | Mag Ln #1 South |
| D-10 | 3 387 071. 25 | 596 005. 91 | 3342.6 | Soil Ln #1 East |
| D-11 | 3 389 760. 64 | 593 503. 65 | 3147.2 | Soil Ln #3 North |
| D-12 | 3 387 133. 48 | 593 435. 84 | 3305.5 | Intersection Soil Lns #3, #1 |
| D-13 | 3 393 849. 63 | 595 579. 96 | 2855.8 | Soil Ln #2 North |
| D-14 | 3 388 301. 50 | 595 405. 60 | 3168.64 | Soil Ln #2 South |
| D-15 | 3 383 563. 85 | 574 094. 33 | 2826.82 | Silver King |
| D-16 | 3 385 280. 14 | 575 775. 99 | 2718.7 | Liberty |
| D-17 | 3 386 335. 15 | 577 438. 50 | 2652.8 | Lacrota |
| D-18 | 3 386 223. 61 | 577 898. 31 | 2589.3 | Eagle |
| D-19 | 3 388 521. 52 | 579 307. 63 | 2815.2 | Dunkle |
| D-20 | 3 395 959. 48 | 582 679. 93 | 3079.2 | Nimrod |
| D-21 | 3 392 969. 04 | 585 120. 01 | 2848.3 | Nimbus |