

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

on the

CAP 1 and 2 MINERAL CLAIMS

Hedley Area
Similkameen Mining Division

92H-1E, 8E
(49° 14' 50" North Latitude, 120° 13' 15" West Longitude)

for

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by

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1.0 SUMMARY

The Cap property is located 15 kilometres southwest of Hedley BC in the Hedley Gold Camp (production 2.5 million ounces) of southern British Columbia. The property consists of two four-post mineral claims covering 40 units in the Similkameen Mining Division. Grant F. Crooker of Keremeos, BC is the owner and operator of the property.

Access to the claims is via Highway 3, turning west onto the Sterling Creek forest access road 8 kilometres west of Hedley and proceeding 18 kilometres to the property boundary. The Sterling Creek road is an all weather, two wheel drive road that passes along the eastern boundary of the property. A number of old roads and cat trails provide access to all areas of the property.

The Hedley Gold Camp has a long tradition of mining. Placer mining was first carried out in the Hedley area in the 1860's and 1870's. The interest in placer mining led to the discovery of gold on Nickel Plate Mountain in the 1890's, with the first claims being staked in 1896. The two major producers in the district were the Nickel Plate and Hedley Mascot mines. Production from the district up to 1986 was approximately 51 million grams (1.6 million ounces) of gold. Almost all of the production was from the period 1905 to 1955.

In the 1970's exploration renewed in the Hedley district. Most of the activity concentrated on properties on Nickel Plate Mountain, however exploration was carried out on the south side of the Similkameen River. The most important property in the camp is the Nickel Plate Mine (Homestake Mining). The gold mineralization is skarn hosted and ore reserves in 1987 were in the order of 9,900,000 tons grading 0.088 ounces gold per ton. The mine ceased production in July of 1986.

The Cap property is located on the south side of the Similkameen River. Historically, properties on the south side of the Similkameen River were related to carbonate vein systems and associated shear zones as opposed to skarn related mineralization at the Nickel Plate Mine. Recent geological data by Ray (1986/1987) have indicated that similar gold environments exist on the south side of the Similkameen River.

Golden Cadillac Resources Ltd. established a grid over the area of the Cap 2 claim during 1983 and 1984, and carried out soil geochemical sampling, magnetic surveying, prospecting and geological mapping over the grid. Nine multi-element soil geochemical anomalies (Ag, Pb, Zn, Cu, Au) and a number of north trending magnetic highs were delineated by the survey. The magnetic highs have been interpreted to be related to the Hedley intrusions, the most important mineralizing unit within the Hedley gold camp.

The work by Golden Cadillac also found one showing, named the Rodgers showing. Calc-silicate, "skarn" mineralization was found at two locations, with anomalous zinc (1.18%), lead (210 ppm), copper (1180 ppm) and silver (9.1 ppm) values. The highest gold value was 60 ppb.

The 1998 program consisted of extending grid lines south of the Golden Cadillac grid area, as well as reestablishing some grid lines on the Golden Cadillac grid area to confirm and relocate their geochemical and geophysical anomalies. Stream sediment sampling, soil geochemical sampling, magnetic and VLF-EM surveying, prospecting and geological mapping were carried out over the property.

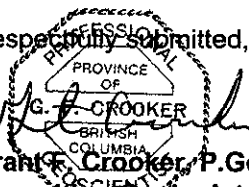
The 1998 work program demonstrated favourable rock units for skarn type mineralization exist on the Cap property. Multi-element soil geochemical anomalies (Ag, Zn, Pb, Cu, As) were delineated, occurring coincidentally with narrow magnetic highs that have been interpreted as Hedley intrusive dykes. Rock sampling at the Rodgers showing confirmed the anomalous zinc, lead, copper and zinc values, and extended the mineralization over a strike length of 100 metres.

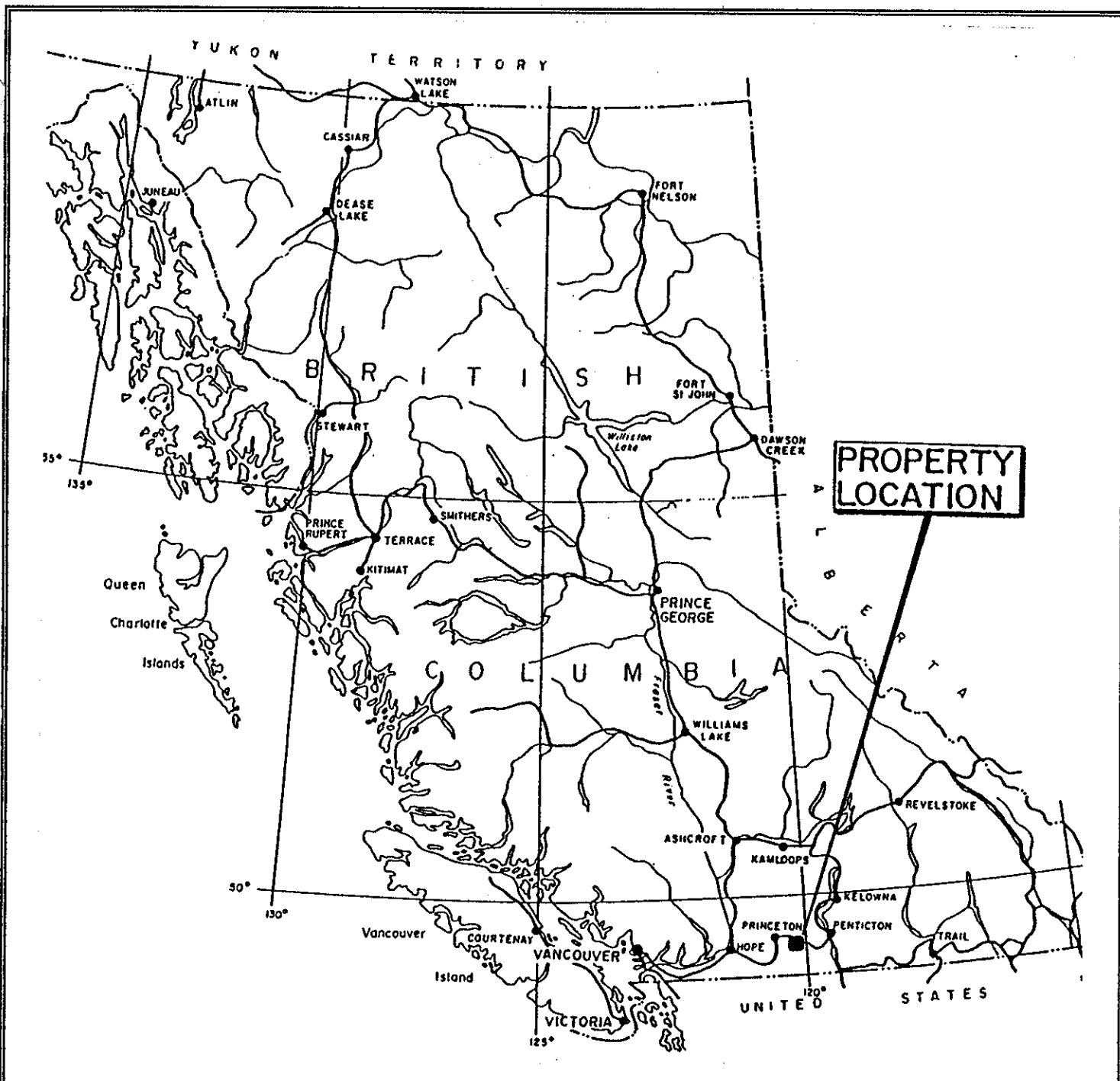
The skarn mineralization found on the Cap property to date is related to base metals with weakly anomalous silver. This is different than the gold found with the skarn mineralization at Nickel Plate Mountain, and the tungsten found with the skarn mineralization at Mount Riordan.

Four target areas (Targets 1 - 4, Figure 13.0) have been outlined on the Cap property, using a combination of geological, geochemical and geophysical parameters. Additional work is warranted on the property, with the following recommendations:

- complete the grid over the remainder of the property
- conduct geological mapping, prospecting, soil sampling and Mag/VLF surveying over the grid
- conduct an I.P. survey over the four target areas
- conduct trenching over target areas and I.P. anomalies

Respectfully Submitted,


G. F. Crooker, P. Geo.,
Consulting Geologist



GRANT F. CROOKER

CAP PROJECT (NTS 92H-1E, 8E)
SIMILKAMEEN M. D., B.C.

LOCATION MAP

DATE: August, 1998

FIGURE: 1.0

SCALE: 0 100 200 KILOMETRES

2.0 INTRODUCTION

2.1 GENERAL

Field work was carried out on the Cap claims from September of 1997 through August of 1998. Grant F. Crooker, P.Geo., conducted the exploration program.

The work program consisted of stream sediment sampling, establishing and reestablishing flagged grid lines, magnetic and VLF-EM geophysical surveying, soil geochemical sampling, prospecting, geological mapping and rock sampling.

A \$ 7,500.00 Prospectors Assistance Grant provided the funding for the work program.

2.2 LOCATION AND ACCESS

The property (Figure 1.0) is located 15 kilometres southwest of Hedley in southern British Columbia. It lies between 49° 13' 35" and 49° 15' 45" north latitude and 120° 12' 10" and 120° 14' 20" west longitude (NTS 92H-1E, 8E).

Access to the claims is via Highway 3, turning west onto the Sterling Creek forest access road 8 kilometres west of Hedley and proceeding 18 kilometres to the property boundary. The Sterling Creek road is an all weather, two wheel drive road that passes along the eastern boundary of the property. A number of old roads and cat trails provide access to all areas.

2.3 PHYSIOGRAPHY

The property is located along the eastern edge of the Cascade Mountains. Elevation varies from 1615 to 1920 metres above sea level and topography varies from flat to steep. Outcrop is sparse over much of the property with the best exposures in the creek bottoms, ridges and along road cuts. Pettigrew Creek flows easterly through the central portion of the claims and then flows northerly along the eastern boundary. Pettigrew Creek contains a substantial flow of water all year round.

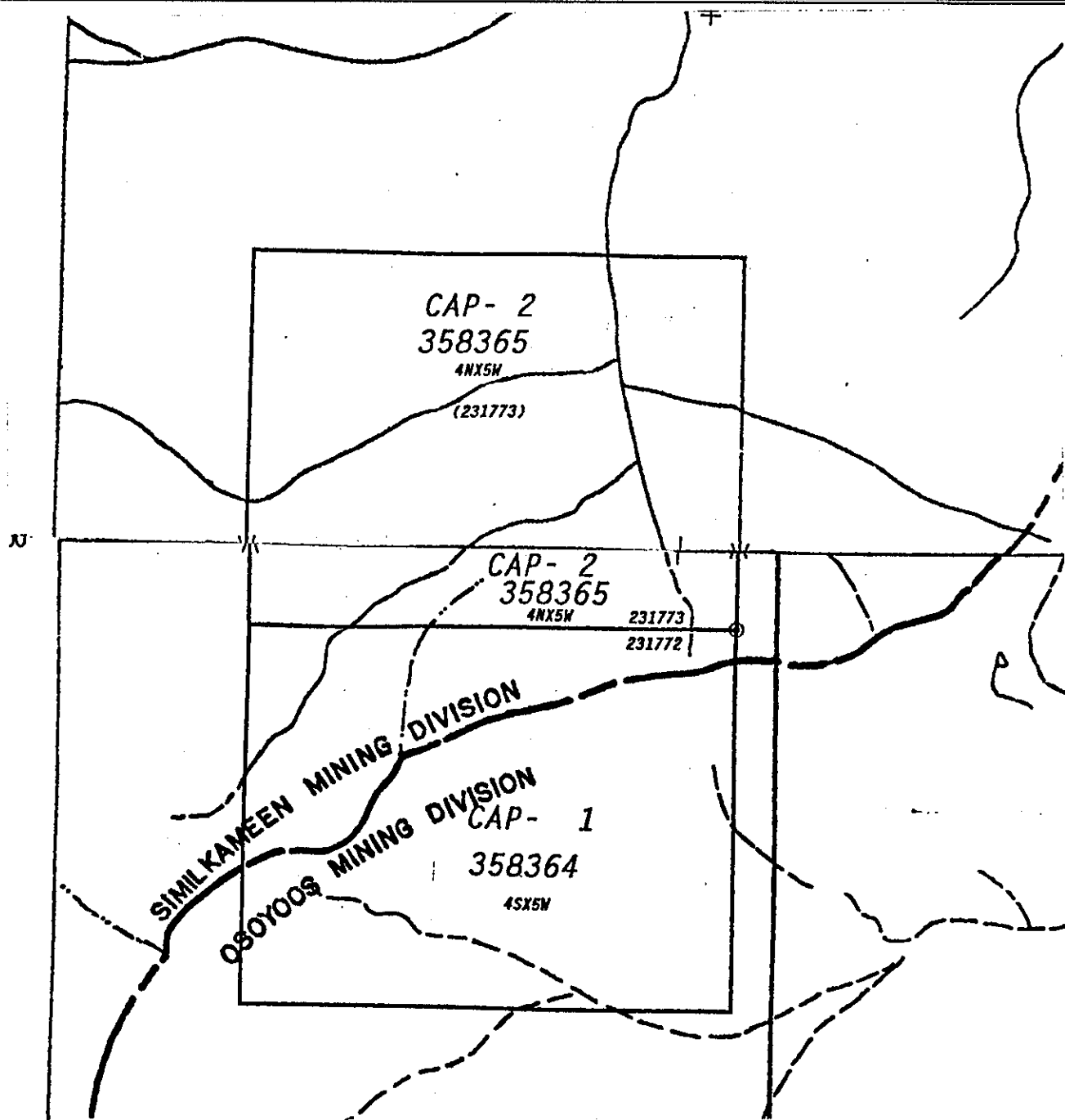
Vegetation consists of a forest cover of pine, fir, spruce and aspen trees. Large areas of the property were clear cut logged 20 or more years ago and many of these areas have been replanted, spaced and pruned. Some areas are covered by dead fall making traversing difficult and slow.

2.4 PROPERTY AND CLAIM STATUS

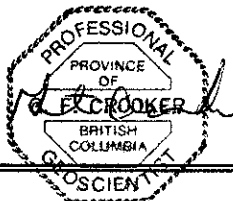
The Cap claims (Figure 2.0) are owned by Grant Crooker of Box 404, Keremeos, BC. The property consists of two four-post mineral claims covering 40 units in the Similkameen Mining Division.

| TABLE 1.0 - CLAIM DATA | | | | | |
|------------------------|-------|-----------------|---------------|-------------------|-------------------|
| Claim | Units | Mining Division | Tenure Number | Record Date m/d/y | Expiry Date m/d/y |
| Cap 1 | 20 | Similkameen | 358364 | 08/08/97 | 08/08/04* |
| Cap 2 | 20 | Similkameen | 358365 | 08/09/97 | 08/09/04* |

* Upon acceptance of this report



↑ N



GRANT F. CROOKER

CAP PROJECT (NTS 92H-1E, 8E)
SIMILKAMEEN M. D., B.C.

CLAIM MAP

DATE: August, 1998

FIGURE: 2.0

SCALE: 0 500 1000 METRES

2.5 AREA AND PROPERTY HISTORY

Placer mining was first carried out in the Hedley area in the 1860's and 1870's. The interest in placer mining led to the discovery of gold on Nickel Plate Mountain in the 1890's, with the first claims being staked in 1896. Many showings were found within the Hedley Gold Camp, both on Nickel Plate Mountain and the surrounding area. The two major producers in the district were the Nickel Plate and Hedley Mascot mines. Production from the district up to 1986 was approximately 51 million grams (1.6 million ounces). Almost all of this production occurred in the period from 1905 to 1955.

In the 1970's exploration renewed in the Hedley district. Most of the activity concentrated on properties on Nickel Plate Mountain, however exploration was carried out on the south side of the Similkameen River.

The most important property in the camp is the Nickel Plate Mine (Homestake Mining). The gold mineralization is skarn hosted and ore reserves in 1987 were in the order of 9,900,000 tons grading 0.088 ounces gold per ton. The property commenced production in August 1987 with a milling rate of 2,700 tons per day using open pit mining methods. The mine ceased production in July of 1996.

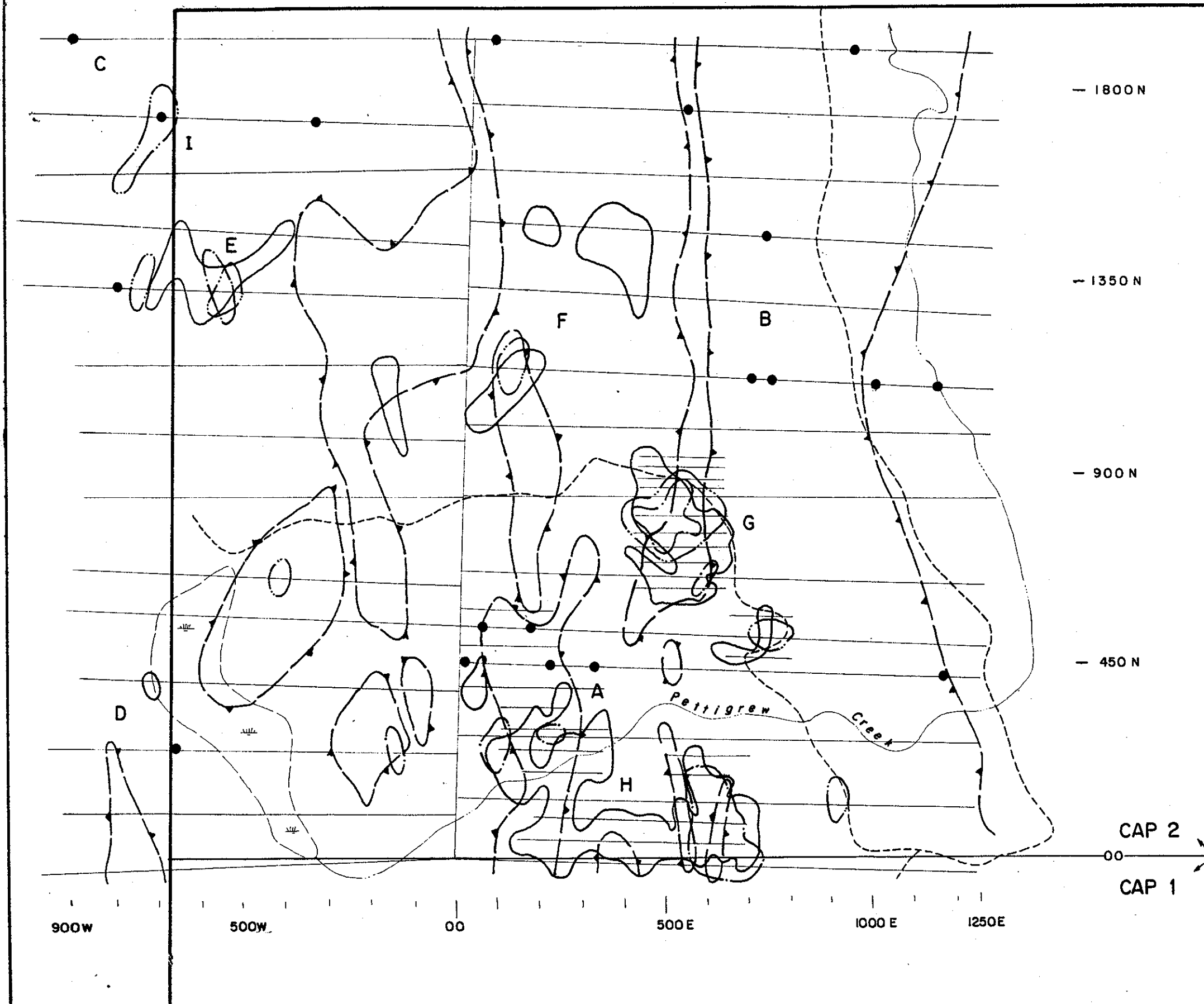
A number of gold properties are located on the south side of the Similkameen River, as is the Cap property. Properties on the south side of the Similkameen River have been traditionally thought of as related to quartz-carbonate vein systems and associated shear zones, as opposed to skarn-related mineralization at the Nickel Plate Mine. Recent geological data by Ray (1986/87) have indicated that similar gold environments exist on the south side of the Similkameen River.

The area covered by the Cap 2 mineral claim was formerly covered by the Rodgers 2 mineral claim (20 units). Golden Cadillac Resources Ltd. carried out exploration programs on the Rodgers 2 mineral claim in 1983 and 1984. A compilation of this work is presented on Figure 3.0. The 1983 work program consisted of establishing a north-south baseline through the centre of the claim and establishing cross lines at 150 metre intervals. Stations were established every 25 metres along the grid lines and magnetic surveying, soil geochemical sampling and geological mapping were carried out over the grid. Magnetic readings were taken every 25 metres (32.9 kilometres), with soil samples (636) collected every 50 metres. The soil samples were analysed for gold, lead, zinc, silver and copper.

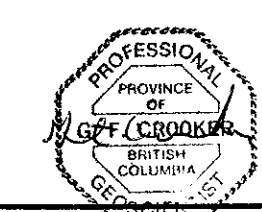
The magnetic survey (Figure 3.0) indicated three long, narrow magnetic highs striking northerly across the property. Golden Cadillac interpreted these magnetic highs to be caused by basalt or andesite flows within the Nicola volcanic rocks. The 1998 work program indicates these magnetic highs are related to dykes that have been interpreted to be related to the Hedley intrusive suite.

The background and anomalous soil geochemical values were determined by statistical methods and are shown in Table 2.0.

| TABLE 2.0 - 1983 ANOMALOUS SOIL GEOCHEMICAL VALUES | | | | |
|--|--------|------------|------------|-----------|
| ELEMENTS | VALUES | | | |
| | | RANGE | BACKGROUND | ANOMALOUS |
| Au | ppb | <5 - 90 | 5 | 13 |
| Ag | ppm | <0.1 - 1.0 | 0.1 | 0.4 |
| Cu | ppm | 3 - 78 | 16 | 41 |
| Pb | ppm | 1 - 337 | 7 | 14 |
| Zn | ppm | 9 - 780 | 66 | 184 |
| ppb - parts per billion, ppm - parts per million | | | | |



- Anomalous Au soil values
13-49, >50 ppb
- Anomalous Ag values >0.4 ppm
- - - Anomalous Zn values >184 ppm
- - - Anomalous Pb values >14 ppm
- Magnetic high (>56100 nT)
- Grid line
- Legal corner post
- - - Road
- Stream
- ≡ Swamp



| | |
|---|------------------------|
| GRANT F. CROOKER | |
| CAP PROPERTY COMPILATION OF PREVIOUS WORK | |
| N.T.S. 92H-1E, 8E | SIMILKAMEEN M.D., B.C. |
| 0 100 200 300 600 metres | |
| DATE: AUG. 1998 | SCALE 1:10,000 |
| DRAWN BY: G.F.C. | FIGURE NO. 3.0 |



Nine soil geochemical anomalies (labelled "A" through "I", Figure 3.0) were considered significant. The soil geochemical anomalies consisted of as few as one or two values. Gold values were generally low and sporadic, and did not correlate with the silver, lead, zinc or copper values. A brief description of each anomaly is given below. The anomalous values are arranged according to which element is most dominant and arranged in decreasing order of abundance.

A: Anomaly A covers an area 600 metres by 200 metres. The northern portion of the anomaly consists of five anomalous gold values ranging from 15 to 35 ppb with no other anomalous elements. The southern portion of the anomaly consists of scattered anomalous silver, lead and zinc values. The anomaly occurs over and adjacent to a north trending magnetic high within altered sedimentary rocks and is open to the south.

B: Anomaly B covers an area 100 metres by 350 metres and consists of three anomalous gold values ranging from 30 to 40 ppb. One silver value within the area of the anomaly gave a weakly anomalous value of 0.5 ppm. The anomaly occurs 100 to 150 metres down slope from a northerly trending magnetic high, in an area covered by glacial till.

C: Anomaly C consists of a single gold value of 90 ppb, and no other elements are anomalous. The anomaly occurs in an area of sedimentary rocks with thin glacial cover.

D: Anomaly D covers an area 150 metres by 100 metres and consists of a 20 ppb gold value on one line, and an anomalous silver value of 0.7 ppm on the next line to the north. The anomaly occurs on the west side of a swamp and is therefore open to the east. The anomaly is underlain by altered sedimentary rocks and glacial till.

E: Anomaly E covers an area 300 metres by 150 metres and consists of four anomalous silver values. Two lead values and one zinc value are also anomalous. The anomaly is underlain by altered sedimentary rocks.

F: Anomaly F covers an area 600 metres by 500 metres and consists of scattered, moderately anomalous silver values. Lead and zinc values are also weakly anomalous. The anomaly occurs over and adjacent to a northerly trending magnetic high and is underlain by glacial till.

G: Anomaly G covers an area 200 metres by 150 metres and consists of anomalous silver, lead and zinc values. The anomaly occurs over a northerly trending magnetic high and is underlain by altered sedimentary rocks.

H: Anomaly H covers an area approximately 400 metres by 200 metres and is open to the south. The anomaly consists of a large area of anomalous silver values, with a smaller area of anomalous lead and zinc values. This is the most interesting of the soil geochemical anomalies in terms of size and high values. It contains the highest silver (1.0 ppm), zinc (780 ppm) and copper (60 ppm) values. The anomaly is associated with two northerly trending magnetic highs and is underlain by altered sedimentary rocks.

I: Anomaly I covers an area 150 metres square and consists of anomalous lead values with one anomalous gold value of 15 ppb. The area is underlain by a porphyritic body.

During October of 1984 Golden Cadillac Resources conducted a follow-up exploration program on the Rodgers 2 mineral claim. This work consisted of establishing grid lines at 50 metre spacing on soil geochemical anomalies A and H, and 25 metre spacing on anomaly G. Soil samples were collected at 25 metre intervals on all lines, and the samples were analysed for gold, silver, lead, zinc, copper and arsenic.

Geological mapping and rock sampling were also carried out on anomaly G.

The results of the detailed soil geochemical sampling on anomalies A, G and H are discussed below using the same labelling system as the 1983 program.

A: The fill-in soil sampling did not yield any anomalous gold values. The southern portion of the anomaly consists of a broad silver anomaly with scattered zinc and copper values. The anomaly is open to the south.

G: The fill-in up soil sampling gave strongly anomalous lead, zinc and silver values, and minor copper and arsenic values. The prospecting located several small showings of calc-silicate rocks with weakly to moderately anomalous zinc, lead, copper and silver values. Zinc values ranged up to 1.18%. The skarn mineralization did not yield anomalous gold values, but two samples of argillite with pyrite gave 20 and 60 ppb gold. The skarn mineralization occurs adjacent to a mafic dyke.

H: The fill-in soil sampling gave moderately anomalous silver values over the entire anomaly, with strongly anomalous zinc values in the eastern portion. Copper and arsenic gave a few scattered anomalous values, while gold and lead gave no anomalous values. The anomaly is open to the south.

No additional documented work was found on the Golden Cadillac property. However the 1983 and 1984 work programs gave encouraging results. A number of single and multi-element soil geochemical anomalies were delineated. Silver, arsenic and lead gave the strongest geochemical responses, while gold and copper gave weak geochemical responses. Skarn mineralization was located at anomaly G, with weakly to moderately anomalous zinc, lead, silver and copper values. The skarn mineralisation appears to be related to mafic dykes that are related to the Hedley intrusive suite. These dykes are probably the cause of the northerly trending, relatively narrow magnetic highs.

The Rodgers 2 mineral claim is described under Minfile Number 092H-SE-173.

G.E. Ray et al of the Geological Survey Branch conducted geological mapping in the Hedley District during the period 1985 to 1987 (scale 1:20,000). This fieldwork included the area of the Cap mineral claims and showed this area to be partially underlain by the Stenwinder Formation and Copperfield breccia of the Whistle Formation. This is a unique package of rocks in the upper Pettigrew Creek area that is mainly underlain by Whistle Formation. While the lower portion of the Whistle Formation is considered to be favourable for skarn mineralization, the lower portion of the Stenwinder Formation is considered to be a more favourable host unit. Ray also noted scattered occurrences of skarn in the vicinity of the Cap mineral claims.

3.0 EXPLORATION PROCEDURE

The 1998 work program consisted of establishing grid lines, magnetic and VLF-EM geophysical surveying, soil geochemical sampling, prospecting, geological mapping and rock sampling. The grid established by Golden Cadillac Resources Ltd. in 1983 has been obliterated over the past 15 years and the grid must be reestablished.

3.1 GRID PARAMETERS

- baseline direction north-south
- survey lines perpendicular to baseline
- survey line separation 25, 100 and 200 metres
- survey station spacing 12.5 and 25 metres
- stations marked with flagging and metal tags with grid coordinates
- survey total - 13.65 kilometres flagged grid lines
- declination 21 degrees

3.2 GEOCHEMICAL SURVEY PARAMETERS

- survey line separation 25, 100 and 200 metres
- survey station spacing 25 metres
- survey totals
 - 351 soil samples
 - 69 rock samples
 - 34 silt samples
- 304 soil samples analysed by 32 element ICP and for gold (30 gram pulp)
- 34 silt samples analysed by 32 element ICP and for gold (30 gram pulp)
- 69 rock samples analysed by 32 element ICP and for gold (30 gram pulp)
- soil sample depth 10 to 25 centimetres
- soil sample taken from brown or orange B horizon
- silt samples collected from active portion of stream
- silt samples sieved to -20 mesh in the field

All samples were sent to Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver BC, V7J 2C1 for analysis. Laboratory technique for silt and soil samples consisted of preparing samples by drying at 95° C and sieving to minus 80 mesh. Rock samples were crushed and split, with one split ring ground to minus 150 mesh. Thirty-two element ICP and gold (fire assay, atomic adsorption finish) analyses were then carried out on all samples.

The silt geochemical data was plotted on Figure 7.0 and the soil geochemical data was plotted on Figures 8.0 (Au, Ag), 9.0 (Pb, Zn) and 10.0 (As, Cu). The rock geochemical data was plotted on Figures 5.0 and 6.0. All certificates of analysis are listed in appendix I.

3.3 GEOPHYSICAL SURVEY PARAMETERS

3.3.1 TOTAL FIELD MAGNETIC SURVEY

- survey line separation 25, 100 and 200 metres
- survey station spacing 12.5 and 25 metres
- survey total - 12.8 kilometres
- measured total magnetic field in nanoteslas
- instrument - Scintrex MP-2 magnetometer
- instrument accuracy ± 1 nanotesla
- operator faced north for all readings

Readings were taken along the baseline to obtain standard readings for all baseline stations. All loops ran off the baseline were then corrected to these standard values by the straight line method.

The total field magnetic contours were plotted on Figure 11.0 and the data listed in Appendix II.

3.3.2 VLF-EM SURVEY

- survey line separation 25, 100 and 200 metres
- survey station spacing 12.5 and 25 metres
- survey total - 11.5 kilometres
- transmitting station - Seattle - 24.8 KHz
- direction faced - southeasterly
- instrument - Geonics EM-16
- in-phase (dip angle) and-out-of-phase (quadrature) components measured in percent

The VLF-EM profiles are plotted on Figure 12.0 and the data listed in Appendix II.

4.0 GEOLOGY AND MINERALIZATION

4.1 REGIONAL GEOLOGY

The Hedley Gold Camp is located within the Intermontane Belt of the Canadian Cordillera. The oldest rocks in the area belong to the Apex Mountain Group and occur in the southeastern part of the camp. The Apex Mountain Group consists of a deformed package of cherts, argillites, greenstones, tuffaceous siltstones and minor limestones. The complex and supercrustal rocks further west are separated by either intrusive rocks or major faults. The area between Winters and Whistle creeks is largely underlain by sedimentary and volcanoclastic rocks of the Upper Triassic Nicola Group and the Lower Cretaceous Spences Bridge Group.

Mapping by Ray and Dawson divides the Nicola Group into three distinct stratigraphic packages. The oldest, the Peachland Creek Formation, comprises massive, mafic quartz-bearing andesitic to basaltic ash tuff and minor chert-pebble conglomerate. This previously unrecognized basal unit is poorly exposed in the Hedley district, but has been identified in several localities. The Peachland Creek Formation is stratigraphically overlain by a 100 to 700 metre thick sedimentary sequence in which a series of east-to-west facies changes are recognized. This sequence progressively thickens westward and the facies changes probably reflect deposition across the tectonically controlled margin of a northwesterly deepening Late Triassic marine basin.

The eastern most and most proximal facies, called the French Mine Formation has a maximum thickness of 150 metres and comprises massive to bedded limestone interlayered with thinner units of calcareous siltstone, chert-pebble conglomerate, tuff, limestone-boulder conglomerate and limestone breccia. This formation hosts the auriferous skarn mineralization at the French and Good Hope mines.

Further west, rocks stratigraphically equivalent to the French Mine Formation are represented by the Hedley Formation that hosts the gold-bearing skarn at the Nickel Plate mine. The Hedley Formation is 400 to 500 metres thick and characterized by thinly bedded, turbiditic calcareous siltstone and units of pure to gritty, massive to bedded limestone that reach 75 metres in thickness and several kilometres in strike length. The formation includes lesser amounts of argillite, conglomerate and bedded tuff; locally the lowermost portion includes minor chert-pebble conglomerate.

The western most, more distal facies is represented by the Stemwinder Formation that is at least 700 metres thick and characterized by a sequence of black, organic-rich, thinly bedded calcareous argillite and turbiditic siltstone, minor amounts of siliceous fine-grained tuff and impure limestone beds. The Stemwinder Formation hosts the gold occurrences at Banbury (vein) and Peggy (skarn).

The sedimentary rocks of the French Mine, Hedley and Stemwinder formations pass stratigraphically upward into the Whistle Formation that is probably Late Triassic in age. The formation is 700 to 1200 metres thick and distinguishable from the underlying rocks by a general lack of limestone and a predominance of andesitic volcanoclastic material. The Whistle Formation is host to the Canty (skarn and stock work) and Banbury/Gold Hill (vein) gold occurrences.

The base of the Whistle Formation is marked by the Copperfield breccia, a limestone-boulder conglomerate that forms the most distinctive and important stratigraphic marker horizon in the district. The breccia is well developed west of Hedley where it forms a northerly trending, steeply dipping unit that is traceable for over 15 kilometres along strike. The same breccia outcrops in small areas within up faulted slices along Pettigrew Creek to the south, and as outliers near Nickel Plate and Lookout Mountain to the east.

The Whistle Formation is overlain by volcanoclastic rocks that may belong to the Early Cretaceous Spences Bridge Group. These rocks are not recognized as being gold bearing in the district.

Three suites of plutonic rocks are recognized in the area. The oldest, the Hedley intrusions is probably Early Jurassic in age and is economically important. It forms major stocks up to 1.5 kilometres in diameter and swarms of thin sills and dykes up to 200 metres in thickness and over 1 kilometre in length. The sills and dykes are coarse-grained and massive diorites and quartz diorites with minor gabbro, while the stocks range from gabbro through granodiorite to quartz monzonite. When unaltered they are dark coloured, commonly contain minor disseminations of pyrite and pyrrhotite and are often rusty weathered. In contrast, the skarn-altered diorite intrusions are usually pale coloured and bleached.

The Hedley intrusive suite intrudes the Upper Triassic rocks over a broad area. Varying degrees of sulphide bearing calcic skarn alteration are developed within and adjacent to many of these intrusions, particularly the dykes and sills. This plutonic suite is genetically related to the skarn-hosted gold mineralization in the district including that at the Nickel Plate, Hedley Mascot, French and Good Hope mines, and gold occurrences at Banbury, Gold Hill, Peggy and Canty. The Hedley intrusive suite consists of four stocks known as Toronto, Stemwinder, Banbury and Pettigrew.

The second plutonic suite is the Early Jurassic? Similkameen intrusions that comprises coarse-grained, massive, biotite hornblende granodiorite to quartz monzodiorite. It generally forms large bodies, for example, the Bromley batholith, and Cahill Creek pluton that separates the Nicola Group rocks from the highly deformed Apex Mountain complex.

The third and youngest intrusive suite includes two rock types that are possibly coeval and related to the formation of the dacitic volcanoclastic rocks within the Spences Bridge Group. One of these, the Verde Creek stock comprises a fine to medium grained, massive leucocratic microgranite that contains minor biotite. The other type is represented by fine-grained, leucocratic, felsic quartz porphyry.

4.2 HEDLEY DISTRICT GOLD DEPOSITS

The gold occurrences and deposits within the Hedley area are spatially associated with dioritic bodies of the Hedley intrusions. The gold mineralization can be broadly divided into skarn-related and vein-related types.

The skarn-related mineralization is the most widespread and economically important, and is characterized by the gold being intimately associated with variable quantities of sulphide bearing garnet-pyroxene-carbonate skarn alteration. The gold tends to be associated with sulphides, particularly arsenopyrite, pyrrhotite and chalcopyrite, and in lesser amounts with pyrite, gersdorffite (NiAsS), sphalerite, magnetite and cobalt minerals. Trace minerals include galena, native bismuth, electrum, tetrahedrite and molybdenite. This type of mineralization is found at the Nickel Plate, French, Good Hope, Peggy and Canty deposits.

Geochemical studies by Ray (1987) based on analyses of over 300 samples from various ore zones in the Nickel Plate deposits, showed the following correlation coefficients:

| High | Medium | Low |
|------------|------------|------------|
| Au:Bi 0.84 | Au:Co 0.58 | Au:Cu 0.17 |
| Ag:Cu 0.84 | Au:As 0.46 | |
| Bi:Co 0.62 | Au:Ag 0.46 | |

Ray states that the strong positive correlation between gold and bismuth reflects the close association of native gold with hedleytite, while the moderate positive correlation between gold, cobalt and arsenic confirms observed association of gold, arsenopyrite and gersdorffite. The high positive correlation between silver and copper may indicate that some silver occurs as a lattice constituent in the chalcopyrite and/or in association with tetrahedrite (Cu-Sb sulphide often contains Zn, Pd, Hg, Co, Ni and Ag replacing Cu). The gold and silver values are relatively independent of each other despite the presence of electrum, and there is generally a low correlation between gold and copper.

TABLE 3.0
HEDLEY DISTRICT GEOLOGICAL HISTORY
 (After Ray et al)

1.0 BASIN GEOLOGICAL DEVELOPMENT

- 1.1 Deposition of Triassic mafic extrusive rocks of the Peachland Creek Formation.
- 1.2 Late Triassic deposition of the Hedley and French Mine and Stemwinder formations (sedimentary rocks with calcareous units).
- 1.3 Sudden collapse of the basin resulting in the widespread deposition of the Whistle Formation (volcanic rocks with tuffaceous units) and the deposition of the Copperfield limestone conglomerate and breccia along the sedimentary basin margins.

2.0 GOLD MINERALIZING EVENTS

- 2.1 Following lithification of the Nicola Group rocks, two distinct phases of folding took place that are related to mineralization.
- 2.2 Phase one resulted in a major, north-northeasterly striking, easterly overturned asymmetric anticline which is the dominant structure in the Hedley district. The largest of these is the Cahill Creek fracture zone and Bradshaw fault.
- 2.3 Phase two is economically important as it took place during the emplacement of the Hedley intrusions and partly controlled the late-magmatic auriferous skarn mineralization. It produced the small-scale northwesterly striking, gently plunging fold structures that are an ore control at the Nickel Plate mine. They also controlled the emplacement of the Hedley intrusive dykes and the Banbury, Stemwinder, Toronto and Pettigrew stocks.

3.0 POST MINERALIZING EVENTS

- 3.1 Emplacement of the Hedley intrusions was shortly followed by intrusion of the Cahill Creek pluton.
- 3.2 Deposition of the Early Cretaceous Spences Bridge Group and related quartz porphyries followed a period of uplift and erosion.
- 3.3 Post-Early Cretaceous phase of regional thrust faulting.
- 3.4 Re-activation of the Bradshaw fault and Cahill Creek fracture zone, as well as some faulting along Whistle and Pettigrew creeks occurred in more recent geological time.

The skarn-related mineralization is generally stratabound and follows calcareous tuffs, thinly-bedded limestones and limey argillites within the upper portions of the French Mine and Hedley formations and lower portions of the Stemwinder and Whistle formations. Swarms of diorite sills and dykes of the Hedley intrusions have intruded the favourable beds and altered them by contact hydrothermal contact to hornfels. Both the intrusions and sediments were subsequently overprinted with the skarn alteration.

The vein-related mineralization is characterized by gold and sulphides hosted in higher level, fracture-filled quartz-carbonate vein and stock work systems. This type of mineralization occurs at the Banbury and Gold Hill properties.

Table 3.0 after Ray et al summarizes the geological history of the Hedley District.

4.3 CLAIM GEOLOGY

The area of the Cap claims was mapped by Ray and Dawson of the Geological Survey Branch during the 1980's and the geology displayed in Bulletin 87, The Geology and Mineral Deposits of the Hedley Gold Skarn District, Southern British Columbia (January 1994). This geology is displayed on Figure 4.0. Geological mapping carried out during the 1998 field program is displayed on Figures 5.0 and 6.0. The rock units and nomenclature of Ray have been used to provide continuity of information.

The area mapped by the 1998 work program shows sedimentary rocks of the Stemwinder Formation to be the oldest on the property. This unit (Unit 5) occurs in the western portion of the grid area and consists of argillite (Unit 5a) and limestone (Unit 5c). The basal unit of the Whistle Formation, the Copperfield breccia (Unit 7a), lies to the east of the Stemwinder Formation. Numerous mafic dykes of the Hedley intrusions (Unit 9a) intrude the sedimentary rocks. A small stock of quartz diorite of the Cahill Creek Pluton (Unit 12a) intrudes the Whistle Formation along the eastern boundary of the claims. Dykes of feldspar porphyry (Unit 20f) intrude the older units. The structural relationships of the various sedimentary units are not known at this time. A brief description of each rock unit is given below.

Unit 5 (Stemwinder Formation): The oldest unit consists of sedimentary rocks of the Stemwinder Formation that have been divided into argillite (Unit 5a) and limestone (Unit 5c). The argillite is generally black, thinly bedded and fractured with pyrite occurring along the fractures. Weathered surfaces are usually rusty due to weathering of the pyrite. The limestone is generally light blue in colour and forms beds from a few metres to 100 metres in thickness. In many locations the argillite and limestone form narrow, alternating interbeds a few centimetres thick.

Unit 7 (Whistle Formation): The Copperfield breccia (Unit 7a) forms the basal unit of the Whistle Formation and marks the boundary of the Stemwinder and Whistle sequences. This unit varies from clast to matrix supported and is composed of rounded to angular limestone clasts up to 1 metre in width.

Unit 9 (Hedley Intrusions): The Hedley intrusions (Unit 9a) occur as dykes and/or sills in a number of areas of the property. They generally have a north-south strike, are within a few degrees of vertical and vary from less than 1 metre to 25 metres in width. In several locations the dykes occur as a swarm over 25 to 100 metres. They are generally fine grained, dark coloured and of dioritic or gabbroic composition. Fine grained, black hornblende laths occur within a light coloured feldspar matrix.

Unit 12 (Cahill Creek Pluton): The Cahill Creek Pluton (Unit 12a) is a medium grained biotite-hornblende granodiorite. Numerous narrow, irregular dykes and sills cut the country rock adjacent to the intrusion. The dykes and sills are generally less than 10 metres in width.

Unit 20 (Feldspar porphyry): The feldspar porphyry (Unit 20f) occurs as dykes over most of the property. Feldspar phenocrysts up to 1 centimetre in diameter occur in a fine grained, white or grey matrix with varying amounts of hornblende and quartz. The dykes generally strike north-south and vary from 1 metre to 25 metres in width.

4.4 MINERALIZATION

Sixty-nine rock samples were collected from various areas of the property during the 1998 work program. The most significant mineralization found to date is at the Rodgers showing (Figures 5.0 and 6.0), where two rubbly outcrops of calc-silicate skarn, limestone and calcite give strongly anomalous lead and zinc values, and weakly anomalous copper and silver values. The two largest outcrops are located at 900N and 510E and 865N and 470E, with scattered skarn float found as far south as 800N and 450E. To date the mineralization has been traced over a strike length of 100 metres, with the zone open to the north and south where it is covered by overburden. The Rogers showing is spatially related to a 25 metre wide dyke of Hedley intrusive that outcrops 25 to 50 metres east of the showing. Narrow dykes of Hedley intrusive also occur closer to the showing.

Varying concentrations of pyrite, sphalerite, galena, chalcopyrite and malachite occur as disseminations and along fractures with fine grained brown garnets in an indistinct grey and green, calc-silicate ground mass. A select sample of the material (sample 093) gave 1.57% zinc, 760 ppm lead, 879 ppm copper and 8.8 ppm silver. A number of other samples (088 - 091, 094, 095, 099-101) gave weakly to strongly anomalous zinc, lead, copper and silver values. Gold is not anomalous in any of the samples. The skarn mineralization at the Rodgers showing is anomalous in base metals, as opposed to that at Nickel Plate Mountain which is a gold skarn.

A number of rock samples of irregularly shaped, pyritic, silicified and/or hornfels altered zones in Copperfield breccia were collected. Three of the samples (109, 136, 138) gave weakly anomalous gold values ranging from 50 to 70 ppb, and weakly anomalous silver values ranging from 1.8 to 3.0 ppm. A number of other samples gave weakly anomalous silver values ranging from 1.0 to 2.2 ppm, and weakly anomalous zinc values ranging from 250 to 458 ppm. This mineralization is spatially related to the Cahill Creek Pluton that intrudes the Copperfield breccia from the east.

Four rock samples (102 - 105) were collected from the area of coincidental silver, zinc and copper soil geochemical anomalies between 050S and 150S at 650E. These samples of weakly silicified limestone and/or hornfelsed argillite gave weakly anomalous silver (1.2 - 1.4 ppm), copper (73 - 106 ppm) and zinc values (220 - 698 ppm). The soil geochemical anomaly is related to a magnetic high, interpreted to be a Hedley intrusive dyke, that intrudes narrow interbeds of argillite and limestone.

5.0 GEOCHEMISTRY

5.1 SILT GEOCHEMISTRY

Thirty-four stream sediment samples were collected from the major and minor drainages on the Cap property. The sample locations are shown on Figure 7.0, along with the geochemical results for gold, arsenic and zinc. Background and anomalous values are shown in Table 4.0.

| TABLE 4.0 - ANOMALOUS SILT GEOCHEMICAL VALUES | | | | |
|--|--------|------------|------------|-----------|
| ELEMENTS | VALUES | | | |
| | | RANGE | BACKGROUND | ANOMALOUS |
| Au | ppb | <5 - 100 | 5 | 15 |
| Ag | ppm | <0.2 - 0.2 | 0.2 | 0.4 |
| Cu | ppm | 4 - 25 | 11 | 17 |
| As | ppm | <2 - 26 | 8 | 12 |
| Pb | ppm | <2 - 50 | 5 | 8 |
| Zn | ppm | 24 - 106 | 59 | 88 |
| ppb - parts per billion, ppm - parts per million | | | | |

Three of the samples gave weakly to moderately anomalous gold values (06 - 90 ppb, 07 - 100 ppb and 62 - 15 ppb). The three samples were all collected from the central portion of the Cap 2 claim, although they are from separate drainages. Samples 06 and 62 were taken from minor drainages while 07 was taken from Pettigrew Creek. This area is covered by thick accumulations of overburden and no cause is evident for the anomalous samples.

Five of the samples (01, 05, 76 - 78) collected from the upper reaches of Pettigrew Creek gave weakly anomalous arsenic and zinc values. This anomaly appears to be caused by the known showing and soil geochemical anomalies on the property.

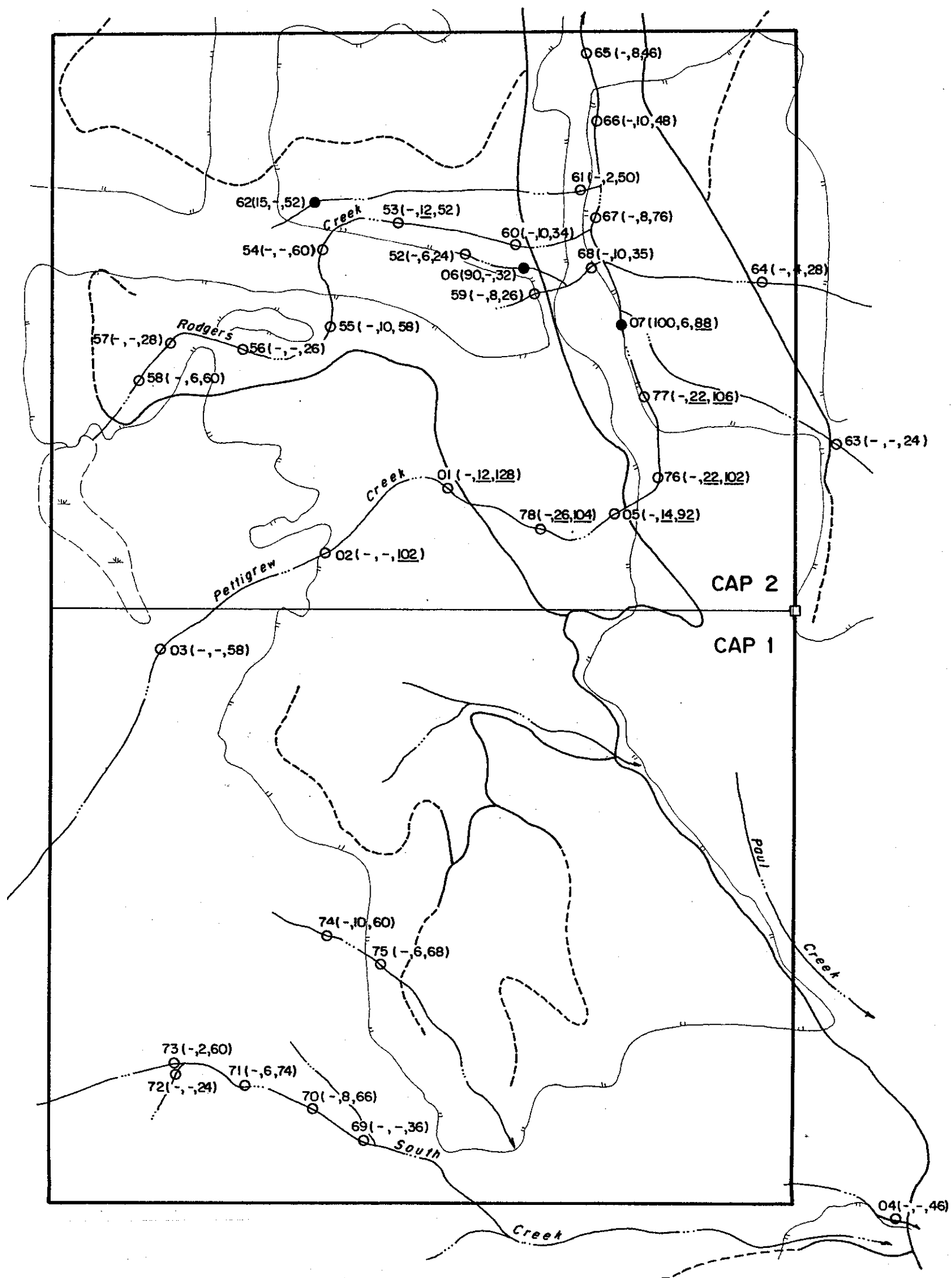
5.2 SOIL GEOCHEMISTRY

Background and anomalous values are given in Table 5.0.

| TABLE 5.0 - ANOMALOUS SOIL GEOCHEMICAL VALUES | | | | |
|--|--------|------------|------------|-----------|
| ELEMENTS | VALUES | | | |
| | | RANGE | BACKGROUND | ANOMALOUS |
| Au | ppb | <5 - 80 | 5 | 15 |
| Ag | ppm | <0.2 - 2.0 | 0.2 | 0.4 |
| Cu | ppm | 2 - 105 | 16 | 24 |
| As | ppm | <2 - 158 | 8 | 12 |
| Pb | ppm | <2 - 80 | 9.5 | 14 |
| Zn | ppm | 42 - 1225 | 163 | 243 |
| ppb - parts per billion, ppm - parts per million | | | | |

Gold

Gold values ranged from <5 to 80 ppb (Figure 8.0) with background established at 5 ppb and anomalous values 15 ppb and greater. No broad gold soil geochemical anomalies were outlined by the survey. The highest gold values were single station anomalies at line 200S and 1025E (80 ppb) and line 100N and 675E (55 ppb). Clustering of gold values in the 10 to 20 ppb range occur at several locations on the grid.



○ Silt sample location
 07(100,6,88) Sample No. (Au ppb, As ppm, Zn ppm)
 (Au 5, As 2, are shown as -)

Anomalous silt sample

● Au > 10 ppb

As > 12 ppm

Zn > 88 ppm

□ Legal corner post

Clearcut

Two wheel drive road

Cal trail, 4 wheel drive road

Stream

Swamp



| | |
|--------------------------|------------------------|
| GRANT F. CROOKER | |
| CAP PROPERTY | |
| STREAM SEDIMENT SAMPLING | |
| N.T.S. 92H-IE,8E | SIMILKAMÉEN M.D., B.C. |
| 0 200 400 800 metres | |
| DATE: AUG. 1998 | SCALE 1:15,000 |
| DRAWN BY: G.F.C. | FIGURE No. 7.0 |

Silver

Silver values ranged from <0.2 to 2.0 ppm (Figure 8.0) with background established at 0.2 ppm and anomalous values 0.4 ppm and greater. Four weak to moderate soil geochemical anomalies were outlined.

Anomaly Ag-1 is a strong, two sample anomaly occurring on line 900N at 475E and 500E. The value of 2.0 ppm was the highest value from the survey. The anomaly is located near the Rodgers showing and coincidental zinc and lead occur with the silver anomaly. A Hedley dyke (expressed magnetically by magnetic high E) occurs immediately east of the anomaly.

Anomaly Ag-2 consists of three small, weak to moderate anomalies occurring on line 100S between 950E and 1200E and line 200S between 950E and 1025E. Gold shows a clustering of 10 ppb values with one value of 80 ppb, but no other elements are anomalous.

Anomaly Ag-3 is a weak, five sample anomaly occurring on line 100S at 775E and line 200S between 750E and 825E. Gold shows a clustering on 10 to 15 ppb values, and arsenic is also weakly anomalous.

Anomaly Ag-4 is a weak to moderate anomaly extending from line 100S between 575E and 700E to line 400S at 625E. Zinc and copper are coincidentally anomalous with the silver. Northerly trending magnetic highs B and C that have been interpreted to be Hedley dykes occur coincidentally with the multi-element soil geochemical anomaly.

Lead

Lead values ranged from <2 to 50 ppm (Figure 9.0) with background established at 9.4 ppm and anomalous values 14 ppm and greater. Four weak to moderate soil geochemical anomalies were outlined.

Anomaly Pb-1 is a weak to moderate anomaly extending from line 900N and 500E to line 775N and 450E. The anomaly is the soil geochemical expression of the Rodgers showing and is associated with a Hedley dyke. Moderately anomalous silver and zinc occur coincidentally with the lead.

Anomaly Pb-2 is a moderate, three sample anomaly extending from line 100N between 950E and 975E to line 100S at 950E. Silver is coincidentally weakly to moderately anomalous at the south end of the anomaly.

Anomaly Pb-3 is a weak anomaly extending from line 300N at 525E to line 100N between 400E and 500E. No other elements are coincidentally anomalous with the lead, but three magnetic highs that have been interpreted to be Hedley dykes are associated with the anomaly.

Anomaly Pb-4 is a weak anomaly on line 300N between 000E and 225E. The anomaly is associated with a swarm of Hedley dykes that are expressed magnetically by magnetic high A. Silver, zinc, copper and arsenic are coincidentally anomalous with the lead.

Zinc

Zinc values ranged from 42 to 1225 ppm (Figure 9.0) with background established at 163 ppm and anomalous values 243 ppm and greater. Three, weak to moderate soil geochemical anomalies were outlined.

Anomaly Zn-1 is a moderate, three sample anomaly extending from line 900N at 500E to line 800N between 475E and 500E. The anomaly is the soil geochemical expression of the Rodgers showing and is associated with a Hedley dyke. Moderately anomalous silver and lead occur coincidentally with the zinc.

Anomaly Zn-2 is a weak to strong anomaly extending from line 100S between 575E and 675E to line 400S between 675E and 700E. The highest zinc value of 1225 ppm occurs within this anomaly. Silver and copper are coincidentally anomalous with zinc. Northerly trending magnetic highs B and C that have been interpreted to be Hedley dykes occur coincidentally with the multi-element soil geochemical anomaly.

Anomaly Zn-3 is a weak to moderate anomaly on line 300N between 000E and 225E. Silver, lead copper and arsenic are coincidentally anomalous with the zinc. The multi-element anomaly is associated with a swarm of Hedley dykes that are expressed magnetically by magnetic high A.

Arsenic

Arsenic values ranged from <2 to 158 ppm (Figure 10.0) with background established at 8 ppm and anomalous values 12 ppm and greater. Two weak to moderate soil geochemical values were outlined.

Anomaly As-1 is a weak, three sample anomaly extending from line 200S between 750E and 775E to line 300S at 800E. Gold shows a clustering of 10 to 15 ppb values, and silver is also weakly anomalous.

Anomaly As-2 is a weak to moderate anomaly extending from line 300N between 075E and 250E to line 100N between 075E and 175E. The anomaly is associated with a swarm of Hedley dykes that are expressed magnetically by magnetic high A. Silver, lead, zinc and copper are coincidentally anomalous with arsenic on line 300N, and copper is coincidentally anomalous with arsenic on line 100N.

Copper

Copper values ranged from 2 to 105 ppm (Figure 10.0) with background established at 16 ppm and anomalous values 24 ppm and greater. Two weak soil geochemical values were outlined.

Anomaly Cu-1 is a weak anomaly extending from line 100N between 550E and 650E to line 100S between 625E and 675E. Silver and zinc are coincidentally anomalous with the copper. Northerly trending magnetic highs B and C that have been interpreted to be Hedley dykes occur coincidentally with the multi-element soil geochemical anomaly.

Anomaly Cu-2 is a weak anomaly extending from line 300N between 050E and 250E to line 100N between 100E and 200E. Silver, lead, zinc and silver are coincidentally anomalous with copper on line 300N, and arsenic is coincidentally anomalous with copper on line 100N. The anomaly is associated with a swarm of Hedley dykes that are expressed magnetically by magnetic high A.

6.0 GEOPHYSICS

6.1 MAGNETIC SURVEY

A total of 12.8 kilometres of total field magnetic survey was carried out over the grid during 1998. Survey lines were spaced at 25, 100 and 200 metre intervals, with station spacing at 12.5 and 25 metre intervals. Total field magnetic contours are displayed on Figure 11.0, with significant magnetic features labelled on Figure 13.0.

The magnetic data can generally be divided into two zones of magnetism. The first is a zone of background magnetism with values ranging from 55,900 nT to 56,100 nT that covers the majority of the grid area. Rocks under laying these areas are believed to be intrusive rocks of the Cahill intrusion, as well as sedimentary rocks of the Stemwinder and Whistle formations.

The second zone of magnetism consists of magnetic highs with values ranging from 56,100 nT to 57,500 nT. The zones of high magnetism have two modes of occurrence, the first consists of a broad magnetic high labelled MH-E on Figure 13.0. The second consists of narrow, linear, northerly trending magnetic highs, the largest of which are labelled MH-A through MH-D on Figure 13.0.

The broad magnetic high labelled MH-E occurs in an area covered by a thick accumulation of glacial till cover and no cause is obvious for the magnetic high. It may be caused by volcanic rocks of the Skwel Peken Formation that have been mapped to the east of Pettigrew Creek. There is also a possibility that a small stock of Hedley intrusive rocks may be causing the magnetic high.

The four most prominent of the narrow, linear, northerly trending magnetic highs have been labelled MH-A through MH-D. Geological mapping has shown MH-A and MH-B to be caused by mafic dykes of the Hedley intrusive suite, and all of the magnetic highs have been interpreted to be caused by Hedley dykes.

Magnetic high MH-A has a strike length of 700 metres (from line 400S between 125E and 325E to line 300N between 100E and 200E) and varies in width from 100 to 200 metres. The same magnetic high probably extends to lines 800N and 900N, and is open to the north and south. It also occurs coincidentally with lead, zinc, copper and arsenic soil geochemical anomalies on lines 100N and 300N. A swarm of Hedley dykes have been mapped within the magnetic high and appear to be the causing the magnetic high.

Magnetic high MH-B has a strike length of 500 metres (from line 400S between 500E and 550E to line 100N at 525E) and varies in width from 25 metres to 75 metres. This magnetic high occurs along the east flank of coincidental silver, zinc and copper soil geochemical anomalies. Outcrop is sparse over the anomaly, but several narrow Hedley dykes were mapped within the magnetic high.

Magnetic high MH-C has a strike length of 450 metres (from line 200S between 625E and 650E to line 100N between 600E and 625E) and varies in width from 25 to 50 metres. Coincidental silver, zinc and copper soil geochemical anomalies occur over the magnetic high. Outcrop is sparse over the anomaly, but several narrow Hedley dykes were mapped within the magnetic high.

Magnetic high MH-D has a strike length of 150 metres (from line 800N between 525E and 550E to line 950E between 500E and 575E) and varies in width from 25 to 75 metres. The magnetic high is open to the north and south. Coincidental silver, lead and zinc soil geochemical anomalies occur along the western flank of the magnetic high, as does the Rodgers showing. A 25 metre wide Hedley dyke underlies the magnetic high and appears to be the cause of the anomaly.

6.2 VLF-EM SURVEY

A total of 11.5 kilometres of VLF-EM survey was carried out over the grid during 1998. Survey lines were spaced at 25, 100 and 200 metre intervals with station spacing at 12.5 and 25 metre intervals. VLF-EM profiles show a weak to strong response to conductivity as displayed on Figure 12.0. Topographic bias, due to up and down slope VLF instrument orientation is minimal on the survey grid. Topographic bias in rugged terrain can produce profile that resemble real conductors although they are usually broad and follow topographic contours.

A number of north to northeast trending conductors were delineated by the survey. The five most significant conductor systems have been labelled A through E on Figures 12.0 and 13.0.

Conductor system A is a moderate, northeast trending conductor system that extends from line 800N and 425E to 950N and 575E. No cause is apparent for the conductor, although it passes some 25 metres east of the Rodgers showing.

Conductor system B is a weak to moderate, northeast trending conductor system that extends from line 800N and 350E to line 925N at 400E. The conductor occurs coincidentally with a weak magnetic high and may be related to a Hedley dyke.

Conductor system C is a moderate to strong, northeast trending conductor system that extends from line 400S and 925E to line 100S and 1075E. The conductor approximates the mapped contact on the Cahill intrusion and Copperfield breccia, and may represent the change in rock type.

Conductor system D is a moderate to strong, north to northeasterly trending conductor system that extends from line 400S and 400E to line 300N and 675E. The conductor cuts across several magnetic highs and coincidental silver, zinc and copper soil geochemical anomalies occur along part of the conductor system. No cause is apparent for the conductor.

Conductor system E is a weak, north trending conductor system that extends from line 100N and 100E to line 300N and 100E. The conductor occurs along the western flank of magnetic high MH-E and occurs coincidentally with lead, zinc, copper and arsenic soil geochemical anomalies. The conductor appears to be delineating a swarm of Hedley dykes.

7.0 EXPLORATION TARGET AREAS

The development of the exploration target areas on the Cap property is an incorporation of geological, geochemical and geophysical data. Four exploration target areas have been developed (Figure 13.0) and classified in Table 6.0.

| TABLE 6.0 - EXPLORATION TARGET AREAS | | | | | | | | | |
|---|------------|--|-----------------------------|---|--|--|--------------------------------|--------------------------|----------|
| TARGETS | | EXPLORATION INDICATORS | | | | | EXPLORATION EVALUATION | | |
| ID | AREA (KM²) | GEOLOGY | GEOCHEMISTRY | | | GEOPHYSICS | PROGRAM STAGE I | RATING | PRIORITY |
| | | | SILTS | SOILS | ROCKS | RESPONSE | | | |
| T-1 | 0175 | Stemwinder Fm Hedley Intrusive | | Au: W Ag: M Pb, Zn: S | Au: N Ag: W - M Zn, Pb: S | MagH CS | G, GC, GP, IP, TR | High | First |
| T-2 | 0.385 | Copperfield Bx Stemwinder Fm Cahill Pluton | Au: N Ag: N As, Zn: W | Au: W Ag: W - M As: W | Au: W Ag: W Zn, As: W | MagLo CS | G, GC, GP, IP | Medium | First |
| T-3 | 0.21 | Copperfield Bx Stemwinder Fm Hedley Intrusive | Au: N Ag: N As, Zn: W | Au: W Ag: W - M Zn: S As: W | Au: N Ag: W Zn: W - M Cu, Pb: W | MagH Cs | G, GC, GP, IP, TR | High | Second |
| T-4 | 0.14 | Stemwinder Fm Hedley Intrusive | Au: N Ag: N As, Zn: W | Au: N Ag: W Zn: W - M As, Cu, Pb: W | Au: N Ag: N | MagH MagC MCS | G, GC, GP, IP | Medium | Second |
| GEOLOGY | | GEOCHEMISTRY | | GEOPHYSICS | | PROGRAM | RATING | PRIORITY | |
| Whistle Fm Copperfield breccia Stemwinder Fm Hedley Intrusive Cahill Pluton Skarn Silicification cpy - chalcopyrite ga - galena sp - sphalerite py - pyrite | | W - Weak M - Moderate S - Strong N - None Au - gold Ag - silver Pb - lead Zn - zinc Cu - copper As - arsenic P - Pathfinders | | MagH - Magnetic High MagLo - Magnetic Low MagC - Magnetic Conductor MCS - Multi Conductor Systems CS - Conductor System | | G - Geology GC - Geochemistry GP - Mag/VLF IP - IP Survey TR - Trenching RC - Rotary Drilling CR - Core Drilling | I-High II-Medium III-Low | First Second Third | |

8.0 CONCLUSIONS


- 8.1 A number of positive conclusions can be drawn from the past and present work programs on the Cap claims. The 1998 program was successful in delineating four target areas with coincidental multi-element soil geochemical anomalies, magnetic highs and favourable geological units for the formation of skarn mineralization.
- 8.2 The stream sediment sampling was successful with two areas yielding anomalous samples. The first area, in the central portion of the Cap 2 claim gave three samples (06 - 90 ppb, 07 - 100 ppb, 62 - 15 ppb) with weakly to moderately anomalous gold values. No other elements were anomalous with the gold. The area is covered by thick accumulations of overburden and no cause is evident for the anomaly. The second area, in the upper reaches of Pettigrew Creek gave five samples (01, 05, 76 - 78) with weakly anomalous arsenic and zinc values. This anomaly appears to be caused by the known showing and soil geochemical anomalies on the property.
- 8.3 The soil geochemical response was favourable with four areas (Targets 1 - 4) giving multi-element (Ag, Zn, Pb, Cu, As) soil geochemical anomalies. In all but one case (Target 2) the soil geochemical anomalies occur coincidentally with magnetic highs that have been interpreted to be Hedley intrusive dykes, or mapped as Hedley dykes. The small, weak to moderate multi-element soil geochemical anomaly at target 1 is related to the Rodgers showing.
- 8.4 The magnetic survey was successful in defining a number of significant magnetic features. A number of narrow, north trending magnetic highs occur over the property, and these have been interpreted to be dykes of the Hedley intrusive suite. Geological mapping has shown these magnetic highs to be individual Hedley dykes up to 25 metres in width, or swarms of Hedley dykes varying from 1 to 10 metres in width. Many of the magnetic highs occur coincidentally with multi-element soil geochemical anomalies, and one is spatially related to the Rodgers showing.
- 8.5 Geological mapping has shown the property to be underlain by rock units favourable for the formation of Hedley type gold deposits. The Stemwinder Formation is considered a favourable host unit, and the dykes of the Hedley intrusive suite are genetically and spatially related to the gold mineralization.
- 8.6 Prospecting has indicated the skarn mineralization at the Rodgers showing to be scattered over a strike length of 100 metres, and open to the north and south where it is covered by overburden. The mineralization consists of varying concentrations of pyrite, sphalerite, galena and chalcopyrite occurring along fractures and as disseminations in an indistinct, grey and green, calc-silicate ground mass.
- 8.7 Rock samples taken at the Rodgers showing yielded weakly to moderately anomalous zinc (1.57%), lead (5980 ppm), copper (679 ppm) and silver (8.8 ppm) values. None of the samples were anomalous for gold.
- 8.8 Three rock samples of pyritic, silicified and/or hornfelsed Copperfield breccia gave weakly anomalous gold (50 - 70 ppb) and silver (1.8 - 3.0 ppm) values. This type of mineralization may be similar to the uppermost alteration zone at the Nickel Plate Mine, referred to as the "upper siliceous beds". At the Nickel Plate, this type of alteration consists of mainly fine grained intergrowths of quartz and pyroxene, with lesser orthoclase, epidote, biotite and carbonate. Veins and vuggy masses of chalcedonic breccia are locally abundant, and many outcrops have a cherty appearance. This siliceous replacement alteration extends from the Hedley Formation up into the overlying Copperfield breccia. A somewhat similar situation may exist on the Cap claims, with the silicified Copperfield breccia representing a siliceous "cap" above the unexposed, main skarn envelope.

9.0 RECOMMENDATIONS

The 1998 exploration program yielded positive results and further work is warranted on the property. The exploration program should be conducted as follows:

- complete the grid over the remainder of the property
- conduct geological mapping, prospecting, soil sampling and Mag/VLF surveying over the grid
- conduct an I.P. survey over the four target areas
- conduct trenching over target areas and I.P. anomalies

Respectfully submitted,


Grant F. Crooker, P. Geo.,
Consulting Geologist
October 13, 1998

10.0 REFERENCES

Billingsley, P. and Hume, C.B. (1941): The Ore Deposits of Nickel Plate Mountain, Hedley, B.C., The Canadian Institute of Mining and Metallurgy, Transactions, Volume XLIV, 1941, pp.524-590.

Crooker, G.F. (1997): Geological, Geochemical, Geophysical, Trenching and Core Drilling Report on the WP 1A, 2, 3, 5A, 9A and W 1 and 2 Mineral Claims, Hedley Area, Similkameen Mining Division for Northpoint Resources Ltd. AR# 25,269

Dolmage, V. and Brown, C.E. (1945): Contact Metamorphism at Nickel Plate Mountain, Hedley B.C., Canadian Institute of Mining and Metallurgy, Transactions, Volume XLVIII, 1945, pp 27-67.

Little, H.W. (1961): Geology Kettle River (West Half), B.C., Geological Survey of Canada Map 15-1961.

Mark, D.G. (1983): Geochemical/Geophysical Report on Soil Geochemistry and Magnetometer Surveys Over the Rodgers 2 Claim, Hedley Area, Similkameen Mining Division for Golden Cadillac Resources Ltd. AR# 12,464

Mark, D.G. (1985): Geological and Geochemical Report on the Rodgers 2 Claim, Hedley Area, Similkameen Mining Division for Golden Cadillac Resources Ltd. AR # 13,819

Northern Miner, Corona Corporation: December 19, 1988.

Ray, G.E., Simpson, R., Wilkinson, W. and Thomas, P. (1986): Preliminary Report on the Hedley Mapping Project, B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1985, Paper 1986-1, Pages 101-105.

Ray, G.E., Dawson, G.L. and Simpson, R. (1986): The Geology and Controls of Skarn Mineralization in the Hedley Gold Camp, Southern British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, 1985, Paper 1987-1, pages 65-79.

Ray, G.E., Dawson, G.L. and Simpson, R. (1987): Geology, Geochemistry and Metallogenic Zoning in the Hedley Gold-Skarn Camp (92H/08, 82E/05).

Ray, G.E. and Dawson, G.L. (1987): Geology and Mineral Occurrences in the Hedley Gold Camp, Southern British Columbia (92H-8E), B.C. Ministry of Energy Mines and Petroleum Resources, Open File Maps 1987-10 a, b, c.

Ray, G.E. and Dawson, G.L. (1988): Geology and Mineral Occurrences in the Hedley Gold Camp, Southern British Columbia, B.C. Ministry of Energy, Mines and Petroleum Resources, Open File Map 1986-6.

Rice, H.M.A. (1947): Geology and Mineral Deposits of the Princeton Map-Area B.C., Geological Survey of Canada Memoir 243.

Saleken, L.W. and Crooker, G.F. (1989): Exploration Report Phase I on the WP Property, Hedley Area, Similkameen Mining Division for Cannelle Exploration Ltd.

Saleken, L.W. (1997): Summary Report Stage I Drilling Program, The WP Property, Hedley Gold District for Northpoint Resources Ltd.

Seraphim, R.H., (1984): Report on Banbury Gold Mines Ltd Hedley, B.C..

Vancouver Stock Watch, Banbury Gold Mines Ltd.: November 13, 1986, June 23, July 7, July 30, August 24 and September 29, 1987.

11.0 CERTIFICATE OF QUALIFICATIONS

I, Grant F. Crooker, of Upper Bench Road, PO Box 404, Keremeos, British Columbia, Canada, V0X 1N0 do certify that:

I am a Consulting Geologist registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (Registration No. 18961);

I am a Fellow of the Geological Association of Canada (Registration No. 3758) and I am a Member of the Canadian Institute of Mining and Metallurgy and Petroleum;

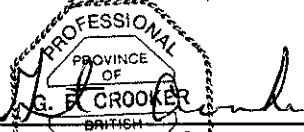
I am a graduate (1972) of the University of British Columbia with a Bachelor of Science degree (B.Sc.) from the Faculty of Science having completed the Major program in geology;

I have practised my profession as a geologist for over 20 years, and since 1980, I have been practising as a consulting geologist and, in this capacity, have examined and reported on numerous mineral properties in North and South America;

I have based this report on field examinations within the area of interest and on a review of the available technical and geological data;

I am the owner of the Cap 1 and 2 mineral claims;

Respectfully submitted,


Grant F. Crooker, P. Geo.,
GFC Consultants Inc.

APPENDIX I
CERTIFICATES OF ANALYSIS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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PHONE: 604-984-0221 FAX: 604-984-0218

A9821142

CERTIFICATE

A9821142

(LOY) -

Project: CAP
P.O. #: 23

Samples submitted to our lab in Vancouver, BC.
This report was printed on 15-JUN-98.

SAMPLE PREPARATION

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION |
|-------------|----------------|---------------------------|
| 201 | 102 | Dry, sieve to -80 mesh |
| 229 | 102 | ICP - AQ Digestion charge |

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|----------------------------------|---------|-----------------|-------------|
| 983 | 102 | Au ppb: Fuse 30 g sample | FA-AAS | 5 | 10000 |
| 2118 | 102 | Ag ppm: 32 element, soil & rock | ICP-AES | 0.2 | 100.0 |
| 2119 | 102 | Al %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2120 | 102 | As ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2121 | 102 | Ba ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2122 | 102 | Be ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| 2123 | 102 | Bi ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2124 | 102 | Ca %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2125 | 102 | Cd ppm: 32 element, soil & rock | ICP-AES | 0.5 | 500 |
| 2126 | 102 | Co ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2127 | 102 | Cr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2128 | 102 | Cu ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2150 | 102 | Fe %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2130 | 102 | Ga ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2131 | 102 | Hg ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2132 | 102 | K %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2151 | 102 | La ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2134 | 102 | Mg %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2135 | 102 | Mn ppm: 32 element, soil & rock | ICP-AES | 5 | 10000 |
| 2136 | 102 | Mo ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2137 | 102 | Na %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2138 | 102 | Ni ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2139 | 102 | P ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2140 | 102 | Pb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2141 | 102 | Sb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2142 | 102 | Sc ppm: 32 elements, soil & rock | ICP-AES | 1 | 10000 |
| 2143 | 102 | Sr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2144 | 102 | Ti %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2145 | 102 | Tl ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2146 | 102 | U ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2147 | 102 | V ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2148 | 102 | W ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2149 | 102 | Zn ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |



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Page Number : 1-A
Total Pages : 1
Certificate Date: 23-SEP-97
Invoice No. : 19742782
P.O. Number :
Account : LOY

Project : CAP
Comments : CC:GRANT CROOKER

CERTIFICATE OF ANALYSIS A9742782

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|------------------|-----------|-----------------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|--------|-----------|---------|-----------|
| 1230227058969001 | 201 229 | < 5 | < 0.2 | 2.56 | 12 | 100 | < 0.5 | < 2 | 1.26 | < 0.5 | 8 | 28 | 25 | 3.41 | < 10 | 2 | 0.06 | 10 | 0.53 | 1405 |
| 1230191858709002 | 201 229 | < 5 | < 0.2 | 1.70 | < 2 | 70 | < 0.5 | < 2 | 0.98 | < 0.5 | 7 | 21 | 24 | 2.72 | < 10 | < 1 | 0.04 | < 10 | 0.41 | 1080 |
| 1230149358471003 | 201 229 | < 5 | < 0.2 | 1.54 | < 2 | 60 | < 0.5 | < 2 | 0.57 | < 0.5 | 7 | 15 | 15 | 2.08 | < 10 | < 1 | 0.05 | 10 | 0.43 | 590 |
| 1230402556475004 | 201 229 | < 5 | < 0.2 | 1.29 | < 2 | 80 | < 0.5 | < 2 | 0.48 | < 0.5 | 4 | 12 | 7 | 1.50 | < 10 | < 1 | 0.03 | < 10 | 0.32 | 915 |
| 1230290058825005 | 201 229 | < 5 | < 0.2 | 1.50 | 14 | 60 | < 0.5 | < 2 | 0.74 | < 0.5 | 7 | 20 | 14 | 3.25 | < 10 | < 1 | 0.06 | < 10 | 0.49 | 555 |
| 1230271059650006 | 201 229 | 90 | < 0.2 | 0.54 | 10 | 30 | < 0.5 | < 2 | 0.32 | < 0.5 | 4 | 14 | 7 | 3.42 | < 10 | < 1 | 0.03 | < 10 | 0.19 | 615 |
| 1230295059510007 | 201 229 | 100 | 0.2 | 1.53 | 6 | 70 | < 0.5 | < 2 | 0.70 | < 0.5 | 8 | 16 | 15 | 2.61 | < 10 | < 1 | 0.07 | < 10 | 0.52 | 565 |

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##

Page Number : 1-B
Total Pages : 1
Certificate Date: 23-SEP-97
Invoice No. : 19742782
P.O. Number :
Account : LOY

Project : CAP
Comments : CC:GRANT CROOKER

CERTIFICATE OF ANALYSIS A9742782

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|------------------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| 1230227058969001 | 201 229 | 3 | 0.02 | 25 | 770 | 12 | < 2 | 4 | 168 | 0.09 | < 10 | < 10 | 75 | < 10 | 128 |
| 1230191858709002 | 201 229 | 2 | 0.02 | 22 | 640 | 8 | < 2 | 3 | 134 | 0.09 | < 10 | < 10 | 56 | < 10 | 102 |
| 1230149358471003 | 201 229 | < 1 | 0.02 | 12 | 530 | 10 | < 2 | 3 | 60 | 0.09 | < 10 | < 10 | 57 | < 10 | 58 |
| 1230402556475004 | 201 229 | 2 | 0.01 | 8 | 290 | 2 | < 2 | 2 | 39 | 0.07 | < 10 | < 10 | 32 | < 10 | 46 |
| 1230290058825005 | 201 229 | < 1 | < 0.01 | 13 | 620 | 0 | < 2 | 3 | 74 | 0.13 | < 10 | < 10 | 84 | < 10 | 92 |
| 1230271059650006 | 201 229 | < 1 | < 0.01 | 4 | 460 | 4 | < 2 | 1 | 19 | 0.08 | < 10 | < 10 | 89 | < 10 | 32 |
| 1230295059510007 | 201 229 | < 1 | 0.01 | 11 | 570 | 6 | < 2 | 4 | 71 | 0.10 | < 10 | < 10 | 60 | < 10 | 88 |

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Total Pages : 1
Certificate Date: 14-JUN-98
Invoice No. : 19821143
P.O. Number : 23
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CERTIFICATE OF ANALYSIS A9821143

| SAMPLE | PREP CODE | Au ppb Fl+Al | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
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| 123-052 | 201 229 | < 5 | < 0.2 | 0.76 | 6 | 50 | < 0.5 | < 2 | 0.30 | < 0.5 | 5 | 7 | 6 | 1.18 | < 10 | < 1 | 0.04 | < 10 | 0.21 | 520 |
| 123-053 | 201 229 | < 5 | < 0.2 | 1.53 | 12 | 80 | < 0.5 | < 2 | 0.45 | < 0.5 | 5 | 14 | 14 | 1.91 | < 10 | < 1 | 0.06 | < 10 | 0.49 | 415 |
| 123-054 | 201 229 | < 5 | < 0.2 | 1.78 | < 2 | 90 | < 0.5 | < 2 | 0.50 | < 0.5 | 7 | 15 | 20 | 2.20 | < 10 | < 1 | 0.07 | < 10 | 0.51 | 480 |
| 123-055 | 201 229 | < 5 | < 0.2 | 1.97 | 10 | 60 | < 0.5 | < 2 | 0.42 | < 0.5 | 8 | 14 | 14 | 3.02 | < 10 | < 1 | 0.05 | < 10 | 0.36 | 1085 |
| 123-056 | 201 229 | < 5 | < 0.2 | 1.04 | < 2 | 40 | < 0.5 | < 2 | 0.37 | < 0.5 | 3 | 7 | 7 | 1.27 | < 10 | < 1 | 0.03 | < 10 | 0.23 | 655 |
| 123-057 | 201 229 | < 5 | < 0.2 | 0.99 | < 2 | 40 | < 0.5 | < 2 | 0.34 | < 0.5 | 4 | 7 | 4 | 1.52 | < 10 | < 1 | 0.02 | < 10 | 0.23 | 815 |
| 123-058 | 201 229 | < 5 | < 0.2 | 1.41 | 6 | 40 | < 0.5 | < 2 | 0.31 | < 0.5 | 5 | 9 | 10 | 2.04 | < 10 | < 1 | 0.03 | < 10 | 0.26 | 855 |
| 123-059 | 201 229 | < 5 | < 0.2 | 0.75 | 8 | 30 | < 0.5 | < 2 | 0.40 | < 0.5 | 4 | 7 | 4 | 1.18 | < 10 | < 1 | 0.04 | < 10 | 0.23 | 210 |
| 123-060 | 201 229 | < 5 | < 0.2 | 1.04 | 10 | 60 | < 0.5 | < 2 | 0.35 | < 0.5 | 5 | 10 | 8 | 1.71 | < 10 | < 1 | 0.06 | < 10 | 0.33 | 690 |
| 123-061 | 201 229 | < 5 | < 0.2 | 0.82 | 2 | 50 | < 0.5 | < 2 | 0.27 | < 0.5 | 3 | 8 | 5 | 1.54 | < 10 | < 1 | 0.07 | < 10 | 0.26 | 345 |
| 123-062 | 201 229 | < 5 | < 0.2 | 0.94 | < 2 | 30 | < 0.5 | < 2 | 0.39 | < 0.5 | 5 | 11 | 8 | 1.49 | < 10 | < 1 | 0.04 | < 10 | 0.23 | 265 |
| 123-063 | 201 229 | < 5 | < 0.2 | 0.95 | < 2 | 40 | < 0.5 | < 2 | 0.36 | < 0.5 | 4 | 7 | 3 | 1.45 | < 10 | < 1 | 0.06 | < 10 | 0.31 | 585 |
| 123-064 | 201 229 | < 5 | < 0.2 | 1.26 | 4 | 50 | < 0.5 | < 2 | 0.47 | < 0.5 | 5 | 10 | 5 | 2.16 | < 10 | < 1 | 0.05 | < 10 | 0.30 | 340 |
| 123-065 | 201 229 | < 5 | < 0.2 | 1.17 | 8 | 50 | < 0.5 | < 2 | 0.60 | < 0.5 | 5 | 11 | 8 | 1.37 | < 10 | < 1 | 0.05 | < 10 | 0.37 | 215 |
| 123-066 | 201 229 | < 5 | < 0.2 | 1.12 | 10 | 50 | < 0.5 | < 2 | 0.59 | < 0.5 | 5 | 11 | 9 | 1.58 | < 10 | < 1 | 0.05 | < 10 | 0.38 | 360 |
| 123-067 | 201 229 | < 5 | < 0.2 | 1.49 | 8 | 70 | < 0.5 | < 2 | 0.69 | < 0.5 | 8 | 18 | 13 | 2.36 | < 10 | < 1 | 0.08 | < 10 | 0.49 | 610 |
| 123-068 | 201 229 | < 5 | < 0.2 | 0.98 | 10 | 60 | < 0.5 | < 2 | 0.44 | < 0.5 | 6 | 10 | 8 | 1.79 | < 10 | < 1 | 0.06 | < 10 | 0.31 | 585 |
| 123-069 | 201 229 | < 5 | < 0.2 | 1.15 | < 2 | 40 | < 0.5 | < 2 | 0.42 | < 0.5 | 3 | 13 | 7 | 1.20 | < 10 | < 1 | 0.03 | < 10 | 0.27 | 250 |
| 123-070 | 201 229 | < 5 | < 0.2 | 1.41 | 8 | 80 | < 0.5 | < 2 | 0.39 | < 0.5 | 4 | 19 | 6 | 1.33 | < 10 | < 1 | 0.03 | < 10 | 0.37 | 380 |
| 123-071 | 201 229 | < 5 | < 0.2 | 1.62 | 6 | 80 | < 0.5 | < 2 | 0.45 | < 0.5 | 6 | 34 | 12 | 1.76 | < 10 | < 1 | 0.04 | < 10 | 0.57 | 450 |
| 123-072 | 201 229 | < 5 | < 0.2 | 0.72 | < 2 | 40 | < 0.5 | < 2 | 0.25 | < 0.5 | 1 | 7 | 4 | 0.59 | < 10 | < 1 | 0.02 | < 10 | 0.19 | 135 |
| 123-073 | 201 229 | < 5 | < 0.2 | 1.23 | 2 | 90 | < 0.5 | < 2 | 0.33 | < 0.5 | 6 | 13 | 16 | 1.80 | < 10 | < 1 | 0.05 | < 10 | 0.34 | 475 |
| 123-074 | 201 229 | < 5 | < 0.2 | 1.44 | 10 | 50 | < 0.5 | < 2 | 0.78 | < 0.5 | 6 | 18 | 13 | 2.07 | < 10 | < 1 | 0.05 | < 10 | 0.35 | 385 |
| 123-075 | 201 229 | < 5 | < 0.2 | 1.91 | 6 | 70 | < 0.5 | < 2 | 0.84 | < 0.5 | 7 | 27 | 21 | 2.32 | < 10 | < 1 | 0.08 | < 10 | 0.52 | 340 |
| 123-076 | 201 229 | < 5 | < 0.2 | 1.75 | 22 | 70 | < 0.5 | < 2 | 0.85 | < 0.5 | 8 | 20 | 15 | 3.14 | < 10 | < 1 | 0.08 | < 10 | 0.55 | 615 |
| 123-077 | 201 229 | < 5 | < 0.2 | 1.98 | 22 | 80 | < 0.5 | < 2 | 0.90 | < 0.5 | 9 | 21 | 17 | 3.15 | < 10 | < 1 | 0.10 | < 10 | 0.63 | 730 |
| 123-078 | 201 229 | < 5 | < 0.2 | 1.69 | 26 | 80 | < 0.5 | < 2 | 0.85 | < 0.5 | 8 | 22 | 18 | 3.15 | < 10 | < 1 | 0.09 | < 10 | 0.58 | 795 |

CERTIFICATION: *Hart Biddle*



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Page Number : 1-B
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Certificate Date: 14-JUN-98
Invoice No. : 19821143
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9821143

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------|-----------|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 123-052 | 201 229 | 1 | 0.01 | 4 | 290 | 4 | 2 | 2 | 24 | 0.07 | < 10 | < 10 | 33 | < 10 | 24 |
| 123-053 | 201 229 | 2 | 0.01 | 9 | 280 | 2 | 2 | 4 | 45 | 0.12 | < 10 | < 10 | 51 | < 10 | 52 |
| 123-054 | 201 229 | < 1 | 0.01 | 10 | 370 | 4 | 2 | 4 | 45 | 0.13 | < 10 | < 10 | 54 | < 10 | 60 |
| 123-055 | 201 229 | 3 | 0.01 | 8 | 320 | 6 | 2 | 3 | 34 | 0.13 | < 10 | < 10 | 84 | < 10 | 58 |
| 123-056 | 201 229 | 1 | 0.01 | 4 | 230 | 2 | < 2 | 2 | 26 | 0.09 | < 10 | < 10 | 34 | < 10 | 26 |
| 123-057 | 201 229 | 2 | 0.01 | 4 | 190 | 2 | < 2 | 2 | 24 | 0.09 | < 10 | < 10 | 39 | < 10 | 28 |
| 123-058 | 201 229 | 1 | 0.01 | 6 | 280 | 4 | < 2 | 2 | 23 | 0.11 | < 10 | < 10 | 45 | < 10 | 60 |
| 123-059 | 201 229 | < 1 | 0.01 | 3 | 360 | 4 | < 2 | 2 | 27 | 0.08 | < 10 | < 10 | 27 | < 10 | 26 |
| 123-060 | 201 229 | 1 | 0.01 | 5 | 310 | 2 | < 2 | 3 | 28 | 0.10 | < 10 | < 10 | 41 | < 10 | 34 |
| 123-061 | 201 229 | < 1 | 0.01 | 5 | 300 | 2 | < 2 | 1 | 17 | 0.09 | < 10 | < 10 | 39 | < 10 | 50 |
| 123-062 | 201 229 | 1 | 0.01 | 6 | 360 | < 2 | < 2 | 3 | 26 | 0.10 | < 10 | < 10 | 46 | < 10 | 52 |
| 123-063 | 201 229 | < 1 | 0.03 | 3 | 90 | 4 | < 2 | 3 | 24 | 0.12 | < 10 | < 10 | 61 | < 10 | 24 |
| 123-064 | 201 229 | < 1 | 0.03 | 4 | 150 | 4 | < 2 | 3 | 31 | 0.13 | < 10 | < 10 | 54 | < 10 | 28 |
| 123-065 | 201 229 | < 1 | 0.03 | 6 | 460 | 4 | < 2 | 3 | 44 | 0.10 | < 10 | < 10 | 34 | < 10 | 46 |
| 123-066 | 201 229 | < 1 | 0.01 | 6 | 460 | 2 | < 2 | 3 | 45 | 0.10 | < 10 | < 10 | 29 | < 10 | 48 |
| 123-067 | 201 229 | 1 | 0.01 | 10 | 540 | 6 | < 2 | 4 | 48 | 0.11 | < 10 | < 10 | 54 | < 10 | 76 |
| 123-068 | 201 229 | < 1 | 0.01 | 5 | 420 | 6 | < 2 | 3 | 34 | 0.09 | < 10 | < 10 | 42 | < 10 | 36 |
| 123-069 | 201 229 | 1 | 0.02 | 7 | 120 | 4 | < 2 | 2 | 26 | 0.10 | < 10 | < 10 | 32 | < 10 | 50 |
| 123-070 | 201 229 | < 1 | 0.03 | 11 | 310 | 2 | < 2 | 3 | 26 | 0.08 | < 10 | < 10 | 35 | < 10 | 66 |
| 123-071 | 201 229 | 1 | 0.04 | 18 | 290 | 6 | < 2 | 3 | 25 | 0.09 | < 10 | < 10 | 47 | < 10 | 74 |
| 123-072 | 201 229 | < 1 | 0.01 | 5 | 240 | 2 | < 2 | 1 | 16 | 0.06 | < 10 | < 10 | 16 | < 10 | 24 |
| 123-073 | 201 229 | < 1 | < 0.01 | 10 | 250 | 6 | < 2 | 3 | 22 | 0.09 | < 10 | < 10 | 45 | < 10 | 60 |
| 123-074 | 201 229 | < 1 | 0.02 | 11 | 270 | 6 | < 2 | 3 | 61 | 0.14 | < 10 | < 10 | 57 | < 10 | 64 |
| 123-075 | 201 229 | 1 | 0.02 | 15 | 440 | 8 | < 2 | 4 | 73 | 0.14 | < 10 | < 10 | 60 | < 10 | 68 |
| 123-076 | 201 229 | < 1 | 0.01 | 13 | 640 | 6 | < 2 | 4 | 86 | 0.14 | < 10 | < 10 | 76 | < 10 | 102 |
| 123-077 | 201 229 | 1 | 0.01 | 13 | 700 | 8 | < 2 | 4 | 102 | 0.14 | < 10 | < 10 | 73 | < 10 | 106 |
| 123-078 | 201 229 | 1 | 0.01 | 16 | 680 | 10 | < 2 | 4 | 96 | 0.12 | < 10 | < 10 | 76 | < 10 | 104 |

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Total Pages :3
Certificate Date:15-JUN-98
Invoice No. :19821142
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS A9821142

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|-----------|-----------|-----------------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 100# 000E | 201 229 | 5 | 0.4 | 2.33 | < 2 | 80 | < 0.5 | < 2 | 0.27 | 1.5 | 6 | 16 | 11 | 1.87 | < 10 | < 1 | 0.04 | < 10 | 0.16 | 305 |
| 100# 025E | 201 229 | 5 | 0.4 | 2.61 | 6 | 120 | 0.5 | < 2 | 0.36 | 0.5 | 7 | 17 | 14 | 2.39 | < 10 | < 1 | 0.06 | < 10 | 0.33 | 370 |
| 100# 050E | 201 229 | < 5 | 0.2 | 3.23 | 6 | 110 | 0.5 | < 2 | 0.33 | < 0.5 | 7 | 18 | 18 | 2.37 | < 10 | < 1 | 0.05 | < 10 | 0.24 | 210 |
| 100# 075E | 201 229 | < 5 | 0.2 | 2.40 | 6 | 140 | < 0.5 | < 2 | 0.31 | 0.5 | 7 | 17 | 17 | 2.07 | < 10 | < 1 | 0.05 | < 10 | 0.25 | 430 |
| 100# 100E | 201 229 | < 5 | 0.4 | 2.35 | < 2 | 100 | < 0.5 | < 2 | 0.20 | 0.5 | 5 | 11 | 13 | 1.73 | < 10 | < 1 | 0.04 | < 10 | 0.14 | 765 |
| 100# 125E | 201 229 | < 5 | 0.2 | 2.64 | 6 | 100 | 0.5 | < 2 | 0.33 | 1.5 | 9 | 17 | 15 | 2.40 | < 10 | < 1 | 0.05 | < 10 | 0.28 | 770 |
| 100# 150E | 201 229 | 10 | 0.2 | 2.49 | 8 | 80 | 0.5 | < 2 | 0.37 | 1.5 | 9 | 16 | 16 | 2.52 | < 10 | < 1 | 0.04 | < 10 | 0.30 | 480 |
| 100# 175E | 201 229 | < 5 | 0.2 | 3.08 | 4 | 110 | 0.5 | < 2 | 0.24 | < 0.5 | 6 | 18 | 15 | 2.34 | < 10 | < 1 | 0.04 | < 10 | 0.29 | 305 |
| 100# 200E | 201 229 | 5 | < 0.2 | 2.79 | 8 | 90 | 0.5 | < 2 | 0.28 | < 0.5 | 8 | 18 | 16 | 2.39 | < 10 | < 1 | 0.04 | < 10 | 0.31 | 555 |
| 100# 225E | 201 229 | 5 | < 0.2 | 2.04 | 8 | 70 | < 0.5 | < 2 | 0.34 | < 0.5 | 7 | 17 | 12 | 2.36 | < 10 | < 1 | 0.04 | < 10 | 0.22 | 1000 |
| 100# 250E | 201 229 | 5 | 0.2 | 2.76 | 2 | 90 | 0.5 | < 2 | 0.25 | < 0.5 | 7 | 17 | 16 | 2.31 | < 10 | < 1 | 0.04 | < 10 | 0.22 | 310 |
| 100# 275E | 201 229 | 5 | 0.2 | 2.27 | < 2 | 90 | < 0.5 | < 2 | 0.15 | < 0.5 | 5 | 15 | 7 | 1.87 | < 10 | < 1 | 0.04 | < 10 | 0.14 | 195 |
| 100# 300E | 201 229 | < 5 | 0.4 | 3.25 | 10 | 60 | < 0.5 | < 2 | 0.52 | < 0.5 | 4 | 12 | 10 | 1.41 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 450 |
| 100# 325E | 201 229 | 10 | 0.2 | 3.10 | < 2 | 70 | 0.5 | < 2 | 0.12 | < 0.5 | 5 | 10 | 10 | 1.95 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 565 |
| 100# 350E | 201 229 | 5 | < 0.2 | 3.19 | 6 | 150 | 0.5 | < 2 | 0.38 | 0.5 | 12 | 15 | 24 | 3.19 | < 10 | < 1 | 0.04 | < 10 | 0.21 | 1255 |
| 100# 375E | 201 229 | 10 | 0.2 | 3.24 | 6 | 120 | 0.5 | < 2 | 0.37 | < 0.5 | 10 | 18 | 17 | 2.44 | < 10 | < 1 | 0.04 | < 10 | 0.26 | 740 |
| 100# 400E | 201 229 | < 5 | < 0.2 | 3.99 | 6 | 120 | 0.5 | < 2 | 0.33 | < 0.5 | 7 | 18 | 18 | 2.39 | < 10 | < 1 | 0.03 | < 10 | 0.33 | 520 |
| 100# 425E | 201 229 | < 5 | < 0.2 | 2.56 | 6 | 110 | < 0.5 | < 2 | 0.69 | 0.5 | 8 | 18 | 13 | 2.48 | < 10 | < 1 | 0.05 | < 10 | 0.44 | 925 |
| 100# 450E | 201 229 | 10 | < 0.2 | 2.70 | 6 | 150 | 0.5 | < 2 | 0.70 | < 0.5 | 7 | 15 | 14 | 2.21 | < 10 | < 1 | 0.06 | < 10 | 0.27 | 1260 |
| 100# 475E | 201 229 | < 5 | 0.2 | 2.80 | 8 | 110 | 0.5 | < 2 | 0.28 | < 0.5 | 8 | 16 | 15 | 2.29 | < 10 | < 1 | 0.03 | < 10 | 0.23 | 525 |
| 100# 500E | 201 229 | < 5 | 0.2 | 2.88 | 6 | 120 | 0.5 | < 2 | 0.27 | 0.5 | 8 | 15 | 13 | 2.31 | < 10 | < 1 | 0.04 | < 10 | 0.20 | 330 |
| 100# 525E | 201 229 | < 5 | 0.2 | 2.50 | < 2 | 110 | < 0.5 | < 2 | 0.21 | 0.5 | 6 | 13 | 10 | 1.84 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 460 |
| 100# 550E | 201 229 | 10 | 0.2 | 2.92 | 8 | 110 | 0.5 | < 2 | 0.26 | < 0.5 | 8 | 20 | 13 | 2.13 | < 10 | < 1 | 0.03 | < 10 | 0.21 | 110 |
| 100# 575E | 201 229 | < 5 | 0.4 | 3.06 | 8 | 80 | 0.5 | < 2 | 0.61 | 1.5 | 9 | 22 | 16 | 2.52 | < 10 | < 1 | 0.03 | < 10 | 0.26 | 160 |
| 100# 600E | 201 229 | < 5 | 0.8 | 3.48 | 16 | 100 | 0.5 | < 2 | 0.58 | 2.0 | 9 | 19 | 16 | 3.07 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 175 |
| 100# 625E | 201 229 | 15 | 1.0 | 2.55 | 6 | 80 | 0.5 | < 2 | 0.89 | 2.5 | 11 | 36 | 32 | 3.78 | < 10 | < 1 | 0.04 | < 10 | 0.07 | 255 |
| 100# 650E | 201 229 | < 5 | 1.0 | 3.83 | 6 | 210 | 0.5 | < 2 | 0.40 | 3.5 | 8 | 18 | 10 | 3.05 | < 10 | < 1 | 0.05 | < 10 | 0.18 | 145 |
| 100# 675E | 201 229 | < 5 | 1.4 | 3.21 | 22 | 140 | 0.5 | < 2 | 0.98 | 7.0 | 21 | 31 | 105 | 5.20 | < 10 | < 1 | 0.11 | < 10 | 0.19 | 785 |
| 100# 700E | 201 229 | < 5 | 0.8 | 3.39 | < 2 | 40 | 0.5 | < 2 | 0.10 | 0.5 | 4 | 8 | 7 | 1.92 | < 10 | < 1 | 0.03 | < 10 | 0.06 | 115 |
| 100# 725E | 201 229 | < 5 | 0.2 | 2.75 | < 2 | 40 | < 0.5 | < 2 | 0.10 | < 0.5 | 4 | 9 | 5 | 1.92 | < 10 | < 1 | 0.03 | < 10 | 0.09 | 210 |
| 100# 750E | 201 229 | < 5 | 0.2 | 3.97 | < 2 | 80 | 0.5 | < 2 | 0.06 | < 0.5 | 4 | 7 | 7 | 1.67 | < 10 | < 1 | 0.02 | < 10 | 0.08 | 315 |
| 100# 775E | 201 229 | < 5 | 0.2 | 2.67 | < 2 | 40 | < 0.5 | < 2 | 0.05 | < 0.5 | 4 | 6 | 5 | 1.69 | < 10 | < 1 | 0.01 | < 10 | 0.06 | 455 |
| 100# 800E | 201 229 | < 5 | < 0.2 | 1.48 | < 2 | 30 | < 0.5 | < 2 | 0.08 | < 0.5 | 1 | 6 | 2 | 1.29 | < 10 | < 1 | 0.03 | < 10 | 0.05 | 85 |
| 100# 825E | 201 229 | 10 | 0.4 | 3.80 | < 2 | 50 | 0.5 | < 2 | 0.11 | < 0.5 | 4 | 10 | 7 | 1.89 | < 10 | < 1 | 0.03 | < 10 | 0.09 | 75 |
| 100# 850E | 201 229 | < 5 | 0.8 | 1.39 | 2 | 60 | < 0.5 | < 2 | 0.20 | < 0.5 | 3 | 7 | 5 | 1.34 | < 10 | < 1 | 0.03 | < 10 | 0.08 | 260 |
| 100# 875E | 201 229 | < 5 | 0.8 | 3.82 | < 2 | 40 | 0.5 | < 2 | 0.14 | < 0.5 | 3 | 11 | 7 | 2.00 | < 10 | < 1 | 0.04 | < 10 | 0.10 | 100 |
| 100# 900E | 201 229 | < 5 | 0.2 | 2.51 | < 2 | 90 | < 0.5 | < 2 | 0.16 | < 0.5 | 4 | 10 | 7 | 1.67 | < 10 | < 1 | 0.04 | < 10 | 0.14 | 150 |
| 100# 925E | 201 229 | < 5 | 0.2 | 2.81 | 6 | 70 | < 0.5 | < 2 | 0.16 | < 0.5 | 4 | 11 | 6 | 2.04 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 130 |
| 100# 950E | 201 229 | 10 | 1.4 | 1.96 | 8 | 70 | < 0.5 | < 2 | 0.24 | < 0.5 | 10 | 18 | 17 | 2.31 | < 10 | < 1 | 0.03 | < 10 | 0.29 | 140 |
| 100# 975E | 201 229 | < 5 | 0.4 | 2.64 | 4 | 80 | 0.5 | < 2 | 0.15 | < 0.5 | 5 | 10 | 8 | 1.92 | < 10 | < 1 | 0.04 | < 10 | 0.12 | 150 |

CERTIFICATION:

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Page Number :1-B
Total Pages :3
Certificate Date:15-JUN-98
Invoice No. :19821142
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS A9821142

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Si ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| 100# 000E | 201 229 | 3 | 0.02 | 15 | 490 | 8 | < 2 | 2 | 51 | 0.12 | < 10 | < 10 | 54 | < 10 | 174 |
| 100# 025E | 201 229 | 3 | 0.03 | 22 | 540 | 6 | < 2 | 3 | 78 | 0.12 | < 10 | < 10 | 58 | < 10 | 178 |
| 100# 050E | 201 229 | 2 | 0.01 | 21 | 850 | 6 | < 2 | 3 | 56 | 0.12 | < 10 | < 10 | 53 | < 10 | 146 |
| 100# 075E | 201 229 | 2 | 0.01 | 17 | 790 | 6 | < 2 | 3 | 87 | 0.10 | < 10 | < 10 | 53 | < 10 | 136 |
| 100# 100E | 201 229 | 2 | 0.01 | 12 | 1180 | 6 | < 2 | 2 | 36 | 0.10 | < 10 | < 10 | 40 | < 10 | 118 |
| 100# 125E | 201 229 | 2 | 0.01 | 20 | 800 | 8 | < 2 | 3 | 61 | 0.12 | < 10 | < 10 | 57 | < 10 | 190 |
| 100# 150E | 201 229 | 2 | 0.01 | 22 | 610 | 6 | < 2 | 3 | 65 | 0.12 | < 10 | < 10 | 59 | < 10 | 212 |
| 100# 175E | 201 229 | 2 | 0.01 | 16 | 810 | 8 | < 2 | 3 | 37 | 0.14 | < 10 | < 10 | 59 | < 10 | 114 |
| 100# 200E | 201 229 | 2 | 0.01 | 17 | 1080 | 8 | < 2 | 3 | 64 | 0.13 | < 10 | < 10 | 54 | < 10 | 120 |
| 100# 225E | 201 229 | 1 | 0.01 | 18 | 430 | 8 | < 2 | 3 | 50 | 0.12 | < 10 | < 10 | 57 | < 10 | 106 |
| 100# 250E | 201 229 | 2 | 0.01 | 20 | 540 | 8 | < 2 | 3 | 44 | 0.14 | < 10 | < 10 | 57 | < 10 | 124 |
| 100# 275E | 201 229 | 1 | 0.01 | 9 | 920 | 8 | < 2 | 1 | 22 | 0.12 | < 10 | < 10 | 46 | < 10 | 128 |
| 100# 300E | 201 229 | 3 | 0.05 | 12 | 270 | 6 | < 2 | 2 | 80 | 0.10 | < 10 | < 10 | 35 | < 10 | 86 |
| 100# 325E | 201 229 | 1 | 0.01 | 8 | 930 | 8 | < 2 | 2 | 17 | 0.13 | < 10 | < 10 | 43 | < 10 | 80 |
| 100# 350E | 201 229 | 1 | 0.02 | 44 | 810 | 6 | < 2 | 3 | 101 | 0.12 | < 10 | < 10 | 53 | < 10 | 186 |
| 100# 375E | 201 229 | 1 | 0.03 | 24 | 680 | 8 | < 2 | 3 | 89 | 0.14 | < 10 | < 10 | 53 | < 10 | 124 |
| 100# 400E | 201 229 | 1 | 0.03 | 19 | 890 | 10 | < 2 | 3 | 98 | 0.12 | < 10 | < 10 | 50 | < 10 | 128 |
| 100# 425E | 201 229 | 1 | 0.03 | 17 | 910 | 10 | < 2 | 4 | 121 | 0.11 | < 10 | < 10 | 53 | < 10 | 110 |
| 100# 450E | 201 229 | 1 | 0.02 | 17 | 840 | 10 | < 2 | 3 | 131 | 0.11 | < 10 | < 10 | 43 | < 10 | 108 |
| 100# 475E | 201 229 | 1 | 0.01 | 23 | 660 | 8 | < 2 | 3 | 83 | 0.12 | < 10 | < 10 | 49 | < 10 | 104 |
| 100# 500E | 201 229 | 1 | 0.01 | 24 | 650 | 8 | < 2 | 2 | 87 | 0.12 | < 10 | < 10 | 46 | < 10 | 198 |
| 100# 525E | 201 229 | 1 | 0.02 | 14 | 900 | 6 | < 2 | 3 | 35 | 0.11 | < 10 | < 10 | 41 | < 10 | 148 |
| 100# 550E | 201 229 | 3 | 0.01 | 19 | 270 | 8 | < 2 | 3 | 54 | 0.13 | < 10 | < 10 | 50 | < 10 | 114 |
| 100# 575E | 201 229 | 3 | 0.01 | 29 | 740 | 8 | < 2 | 3 | 134 | 0.11 | < 10 | < 10 | 55 | < 10 | 314 |
| 100# 600E | 201 229 | 3 | 0.03 | 37 | 660 | 8 | < 2 | 3 | 165 | 0.11 | < 10 | < 10 | 56 | < 10 | 330 |
| 100# 625E | 201 229 | 6 | 0.02 | 62 | 520 | 6 | < 2 | 3 | 153 | 0.14 | < 10 | < 10 | 120 | < 10 | 658 |
| 100# 650E | 201 229 | 8 | 0.03 | 56 | 390 | 6 | < 2 | 3 | 122 | 0.13 | < 10 | < 10 | 96 | < 10 | 1225 |
| 100# 675E | 201 229 | 9 | 0.02 | 102 | 680 | 14 | < 2 | 4 | 405 | 0.14 | < 10 | < 10 | 129 | < 10 | 872 |
| 100# 700E | 201 229 | 3 | 0.01 | 7 | 830 | 6 | < 2 | 1 | 10 | 0.11 | < 10 | < 10 | 41 | < 10 | 130 |
| 100# 725E | 201 229 | 1 | 0.02 | 6 | 1350 | 6 | < 2 | 1 | 11 | 0.11 | < 10 | < 10 | 42 | < 10 | 124 |
| 100# 750E | 201 229 | 1 | 0.01 | 7 | 1300 | 8 | < 2 | 2 | 8 | 0.12 | < 10 | < 10 | 13 | < 10 | 110 |
| 100# 775E | 201 229 | 1 | 0.01 | 4 | 800 | 4 | < 2 | 1 | 4 | 0.10 | < 10 | < 10 | 39 | < 10 | 52 |
| 100# 800E | 201 229 | < 1 | 0.01 | 2 | 350 | 4 | < 2 | < 1 | 7 | 0.09 | < 10 | < 10 | 36 | < 10 | 42 |
| 100# 825E | 201 229 | 1 | 0.01 | 8 | 680 | 8 | < 2 | 1 | 11 | 0.11 | < 10 | < 10 | 40 | < 10 | 62 |
| 100# 850E | 201 229 | 1 | 0.01 | 5 | 360 | 6 | < 2 | 1 | 18 | 0.11 | < 10 | < 10 | 37 | < 10 | 64 |
| 100# 875E | 201 229 | 2 | 0.02 | 7 | 1260 | 8 | < 2 | 1 | 15 | 0.13 | < 10 | < 10 | 48 | < 10 | 70 |
| 100# 900E | 201 229 | 1 | 0.02 | 8 | 540 | 6 | < 2 | 1 | 36 | 0.11 | < 10 | < 10 | 41 | < 10 | 78 |
| 100# 925E | 201 229 | 1 | 0.02 | 6 | 860 | 6 | < 2 | 2 | 15 | 0.11 | < 10 | < 10 | 53 | < 10 | 64 |
| 100# 950E | 201 229 | 3 | 0.01 | 23 | 410 | 42 | < 2 | 3 | 19 | 0.15 | < 10 | < 10 | 62 | < 10 | 132 |
| 100# 975E | 201 229 | 1 | 0.02 | 9 | 710 | 8 | < 2 | 2 | 14 | 0.12 | < 10 | < 10 | 46 | < 10 | 66 |



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Total Pages :3
Certificate Date: 15-JUN-98
Invoice No. :19821142
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS

A9821142

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|------------|-----------|-----------------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 100# 1000E | 201 229 | < 5 | < 0.2 | 2.31 | 20 | 90 | < 0.5 | < 2 | 0.21 | < 0.5 | 6 | 15 | 10 | 2.18 | < 10 | < 1 | 0.04 | < 10 | 0.24 | 325 |
| 100# 1025E | 201 229 | 10 | 0.4 | 2.89 | 6 | 100 | 0.5 | < 2 | 0.24 | < 0.5 | 8 | 15 | 12 | 2.08 | < 10 | < 1 | 0.05 | < 10 | 0.24 | 365 |
| 100# 1050E | 201 229 | 10 | 0.6 | 2.35 | 6 | 70 | < 0.5 | < 2 | 0.13 | < 0.5 | 6 | 11 | 13 | 2.18 | < 10 | < 1 | 0.03 | < 10 | 0.15 | 225 |
| 100# 1075E | 201 229 | 10 | 0.2 | 2.27 | < 2 | 40 | < 0.5 | < 2 | 0.08 | < 0.5 | 4 | 7 | 5 | 1.58 | < 10 | < 1 | 0.02 | < 10 | 0.09 | 490 |
| 100# 1100E | 201 229 | < 5 | 0.2 | 2.21 | 2 | 50 | < 0.5 | < 2 | 0.15 | < 0.5 | 4 | 9 | 6 | 1.84 | < 10 | < 1 | 0.03 | < 10 | 0.12 | 135 |
| 100# 1125E | 201 229 | < 5 | 0.2 | 4.14 | 14 | 60 | 0.5 | < 2 | 0.20 | < 0.5 | 4 | 10 | 9 | 2.34 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 80 |
| 100# 1150E | 201 229 | < 5 | 0.6 | 3.93 | < 2 | 40 | 0.5 | < 2 | 0.05 | < 0.5 | 3 | 7 | 4 | 1.80 | < 10 | < 1 | 0.04 | < 10 | 0.05 | 90 |
| 100# 1175E | 201 229 | < 5 | 0.4 | 4.00 | < 2 | 80 | 0.5 | < 2 | 0.08 | < 0.5 | 5 | 8 | 7 | 1.85 | < 10 | < 1 | 0.03 | < 10 | 0.08 | 1130 |
| 100# 1200E | 201 229 | 8 | 0.2 | 2.80 | < 2 | 80 | < 0.5 | < 2 | 0.21 | < 0.5 | 5 | 11 | 10 | 1.77 | < 10 | < 1 | 0.06 | < 10 | 0.17 | 1070 |
| 100# 1225E | 201 229 | < 5 | 0.4 | 3.95 | < 2 | 90 | 0.5 | < 2 | 0.13 | < 0.5 | 6 | 10 | 10 | 1.94 | < 10 | < 1 | 0.04 | < 10 | 0.13 | 860 |
| 100# 1250E | 201 229 | < 5 | 0.2 | 2.47 | < 2 | 70 | < 0.5 | < 2 | 0.15 | < 0.5 | 5 | 13 | 7 | 2.11 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 615 |
| 200# 000E | 201 229 | < 5 | 0.4 | 2.69 | 6 | 120 | 0.5 | < 2 | 0.38 | 0.5 | 6 | 18 | 16 | 2.20 | < 10 | < 1 | 0.05 | < 10 | 0.22 | 310 |
| 200# 025E | 201 229 | < 5 | 0.2 | 2.29 | 4 | 80 | < 0.5 | < 2 | 0.20 | 0.5 | 6 | 15 | 13 | 1.89 | < 10 | < 1 | 0.04 | < 10 | 0.15 | 300 |
| 200# 050E | 201 229 | < 5 | 0.2 | 1.97 | 2 | 70 | < 0.5 | < 2 | 0.28 | 0.5 | 5 | 12 | 8 | 1.93 | < 10 | < 1 | 0.04 | < 10 | 0.14 | 180 |
| 200# 075E | 201 229 | < 5 | 0.2 | 3.00 | 6 | 210 | 0.5 | < 2 | 0.46 | 0.5 | 8 | 24 | 22 | 2.53 | < 10 | < 1 | 0.08 | < 10 | 0.37 | 345 |
| 200# 100E | 201 229 | 10 | 0.2 | 3.17 | 6 | 180 | 0.5 | < 2 | 1.11 | 1.0 | 12 | 42 | 42 | 3.21 | < 10 | < 1 | 0.08 | < 10 | 0.68 | 1170 |
| 200# 125E | 201 229 | < 5 | < 0.2 | 2.96 | 8 | 150 | 0.5 | < 2 | 0.45 | < 0.5 | 9 | 24 | 18 | 2.81 | < 10 | < 1 | 0.06 | < 10 | 0.39 | 375 |
| 200# 150E | 201 229 | 5 | 0.2 | 3.91 | 22 | 180 | 0.5 | < 2 | 0.84 | 0.5 | 16 | 43 | 65 | 4.62 | < 10 | < 1 | 0.06 | < 10 | 0.60 | 785 |
| 200# 175E | 201 229 | 5 | 0.2 | 1.97 | 2 | 70 | < 0.5 | < 2 | 0.63 | < 0.5 | 7 | 16 | 13 | 2.15 | < 10 | < 1 | 0.04 | < 10 | 0.22 | 875 |
| 200# 200E | 201 229 | 5 | 0.2 | 4.15 | 10 | 110 | 0.5 | < 2 | 0.43 | < 0.5 | 7 | 16 | 15 | 2.37 | < 10 | < 1 | 0.05 | < 10 | 0.40 | 340 |
| 200# 225E | 201 229 | 15 | 0.2 | 3.04 | 6 | 90 | 0.5 | < 2 | 0.27 | < 0.5 | 8 | 18 | 13 | 2.45 | < 10 | < 1 | 0.03 | < 10 | 0.32 | 615 |
| 200# 250E | 201 229 | 10 | < 0.2 | 2.49 | 14 | 70 | 0.5 | < 2 | 0.54 | < 0.5 | 8 | 24 | 22 | 2.61 | < 10 | < 1 | 0.04 | < 10 | 0.34 | 430 |
| 200# 275E | 201 229 | 5 | 0.2 | 1.89 | 6 | 40 | < 0.5 | < 2 | 0.22 | < 0.5 | 4 | 10 | 6 | 1.42 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 125 |
| 200# 300E | 201 229 | 10 | 0.2 | 1.97 | 12 | 50 | < 0.5 | < 2 | 0.96 | 0.5 | 7 | 14 | 11 | 1.92 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 410 |
| 200# 325E | 201 229 | < 5 | 0.2 | 2.37 | 4 | 60 | < 0.5 | < 2 | 0.25 | < 0.5 | 5 | 12 | 8 | 1.59 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 215 |
| 200# 350E | 201 229 | < 5 | 0.2 | 1.54 | 4 | 70 | < 0.5 | < 2 | 0.35 | 0.5 | 7 | 17 | 16 | 2.28 | < 10 | < 1 | 0.04 | < 10 | 0.23 | 270 |
| 200# 375E | 201 229 | 10 | 0.2 | 3.88 | 2 | 90 | 0.5 | < 2 | 0.31 | < 0.5 | 7 | 19 | 13 | 2.60 | < 10 | < 1 | 0.03 | < 10 | 0.28 | 140 |
| 200# 400E | 201 229 | < 5 | 0.2 | 2.56 | 6 | 70 | 0.5 | < 2 | 0.21 | < 0.5 | 6 | 14 | 10 | 2.13 | < 10 | < 1 | 0.03 | < 10 | 0.20 | 200 |
| 200# 425E | 201 229 | 10 | 0.2 | 2.78 | 8 | 100 | 0.5 | < 2 | 0.34 | < 0.5 | 9 | 21 | 15 | 2.46 | < 10 | < 1 | 0.04 | < 10 | 0.32 | 210 |
| 200# 450E | 201 229 | < 5 | 0.4 | 3.32 | 10 | 150 | 0.5 | < 2 | 0.56 | < 0.5 | 10 | 23 | 22 | 2.88 | < 10 | < 1 | 0.03 | < 10 | 0.36 | 280 |
| 200# 475E | 201 229 | < 5 | 0.2 | 2.60 | 8 | 90 | 0.5 | < 2 | 0.41 | < 0.5 | 8 | 17 | 16 | 2.44 | < 10 | < 1 | 0.04 | < 10 | 0.20 | 465 |
| 200# 500E | 201 229 | 5 | 0.2 | 2.93 | 8 | 130 | 0.5 | < 2 | 0.56 | 1.0 | 12 | 25 | 24 | 3.02 | < 10 | < 1 | 0.04 | < 10 | 0.35 | 370 |
| 200# 525E | 201 229 | 20 | 1.0 | 4.02 | 10 | 100 | 0.5 | < 2 | 0.36 | 0.5 | 11 | 24 | 26 | 3.25 | < 10 | < 1 | 0.03 | < 10 | 0.28 | 205 |
| 200# 550E | 201 229 | 5 | 0.4 | 3.68 | 12 | 110 | 0.5 | < 2 | 0.40 | 0.5 | 15 | 21 | 21 | 3.01 | < 10 | < 1 | 0.04 | < 10 | 0.26 | 495 |
| 200# 575E | 201 229 | < 5 | 0.4 | 3.11 | 8 | 130 | 0.5 | < 2 | 0.69 | 1.5 | 11 | 26 | 28 | 3.02 | < 10 | < 1 | 0.04 | < 10 | 0.33 | 300 |
| 200# 600E | 201 229 | < 5 | 0.2 | 2.70 | 2 | 90 | < 0.5 | < 2 | 0.36 | 1.5 | 10 | 21 | 15 | 2.63 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 350 |
| 200# 625E | 201 229 | < 5 | 0.2 | 1.87 | 2 | 40 | < 0.5 | < 2 | 0.27 | 0.5 | 4 | 10 | 6 | 1.68 | < 10 | < 1 | 0.04 | < 10 | 0.12 | 130 |
| 200# 650E | 201 229 | < 5 | 0.4 | 2.84 | 8 | 80 | < 0.5 | < 2 | 0.60 | 4.0 | 7 | 22 | 15 | 2.39 | < 10 | < 1 | 0.04 | < 10 | 0.20 | 685 |
| 200# 675E | 201 229 | < 5 | 0.4 | 1.88 | 4 | 80 | < 0.5 | < 2 | 0.17 | 0.5 | 3 | 9 | 6 | 1.63 | < 10 | < 1 | 0.02 | < 10 | 0.08 | 80 |
| 200# 700E | 201 229 | < 5 | 0.8 | 2.70 | 6 | 80 | 0.5 | < 2 | 0.25 | 2.0 | 5 | 13 | 11 | 2.15 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 235 |

CERTIFICATION:



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| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|------------|-----------|--------|------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 100# 1000E | 201 229 | 1 | 0.01 | 13 | 540 | 6 | < 2 | 3 | 15 | 0.14 | < 10 | < 10 | 60 | < 10 | 94 |
| 100# 1025E | 201 229 | 1 | 0.01 | 19 | 810 | 8 | < 2 | 3 | 13 | 0.12 | < 10 | < 10 | 48 | < 10 | 168 |
| 100# 1050E | 201 229 | 1 | 0.01 | 11 | 790 | 6 | < 2 | 2 | 11 | 0.11 | < 10 | < 10 | 47 | < 10 | 108 |
| 100# 1075E | 201 229 | 1 | 0.01 | 6 | 930 | 6 | < 2 | 1 | 7 | 0.09 | < 10 | < 10 | 37 | < 10 | 96 |
| 100# 1100E | 201 229 | 1 | 0.02 | 8 | 440 | 6 | < 2 | 1 | 12 | 0.10 | < 10 | < 10 | 45 | < 10 | 68 |
| 100# 1125E | 201 229 | 2 | 0.01 | 7 | 1290 | 6 | < 2 | 1 | 20 | 0.13 | < 10 | < 10 | 45 | < 10 | 64 |
| 100# 1150E | 201 229 | 2 | 0.01 | 4 | 1050 | 6 | < 2 | 1 | 4 | 0.11 | < 10 | < 10 | 37 | < 10 | 56 |
| 100# 1175E | 201 229 | 2 | 0.01 | 6 | 1430 | 8 | < 2 | 2 | 10 | 0.12 | < 10 | < 10 | 38 | < 10 | 86 |
| 100# 1200E | 201 229 | 1 | 0.01 | 10 | 920 | 6 | < 2 | 2 | 22 | 0.12 | < 10 | < 10 | 40 | < 10 | 105 |
| 100# 1225E | 201 229 | 2 | 0.03 | 10 | 1020 | 6 | < 2 | 3 | 15 | 0.14 | < 10 | < 10 | 41 | < 10 | 108 |
| 100# 1250E | 201 229 | 1 | 0.01 | 11 | 770 | 8 | < 2 | 2 | 14 | 0.13 | < 10 | < 10 | 54 | < 10 | 114 |
| 200# 000E | 201 229 | 2 | 0.01 | 20 | 520 | 8 | < 2 | 2 | 73 | 0.13 | < 10 | < 10 | 53 | < 10 | 166 |
| 200# 025E | 201 229 | 2 | 0.01 | 19 | 780 | 8 | < 2 | 2 | 40 | 0.11 | < 10 | < 10 | 44 | < 10 | 116 |
| 200# 050E | 201 229 | 2 | 0.01 | 11 | 420 | 8 | < 2 | 2 | 39 | 0.12 | < 10 | < 10 | 50 | < 10 | 116 |
| 200# 075E | 201 229 | 3 | 0.01 | 28 | 370 | 8 | < 2 | 4 | 95 | 0.14 | < 10 | < 10 | 68 | < 10 | 126 |
| 200# 100E | 201 229 | 3 | 0.02 | 42 | 360 | 12 | < 2 | 7 | 185 | 0.15 | < 10 | < 10 | 84 | < 10 | 162 |
| 200# 125E | 201 229 | 1 | 0.01 | 28 | 360 | 8 | < 2 | 4 | 99 | 0.14 | < 10 | < 10 | 69 | < 10 | 156 |
| 200# 150E | 201 229 | 3 | 0.06 | 65 | 350 | 10 | < 2 | 14 | 364 | 0.16 | < 10 | < 10 | 94 | < 10 | 166 |
| 200# 175E | 201 229 | 2 | 0.01 | 14 | 1040 | 6 | < 2 | 2 | 83 | 0.10 | < 10 | < 10 | 47 | < 10 | 132 |
| 200# 200E | 201 229 | 2 | 0.01 | 17 | 950 | 10 | < 2 | 4 | 75 | 0.13 | < 10 | < 10 | 42 | < 10 | 76 |
| 200# 225E | 201 229 | 1 | 0.01 | 18 | 1180 | 10 | < 2 | 3 | 59 | 0.12 | < 10 | < 10 | 49 | < 10 | 104 |
| 200# 250E | 201 229 | 2 | 0.03 | 26 | 480 | 6 | < 2 | 4 | 116 | 0.12 | < 10 | < 10 | 52 | < 10 | 104 |
| 200# 275E | 201 229 | 3 | 0.03 | 8 | 260 | 6 | < 2 | 1 | 35 | 0.09 | < 10 | < 10 | 31 | < 10 | 98 |
| 200# 300E | 201 229 | 2 | 0.05 | 21 | 500 | 6 | < 2 | 3 | 164 | 0.08 | < 10 | < 10 | 36 | < 10 | 168 |
| 200# 325E | 201 229 | 2 | 0.01 | 11 | 640 | 4 | < 2 | 2 | 40 | 0.10 | < 10 | < 10 | 39 | < 10 | 116 |
| 200# 350E | 201 229 | 1 | 0.01 | 22 | 560 | 6 | < 2 | 3 | 65 | 0.12 | < 10 | < 10 | 56 | < 10 | 126 |
| 200# 375E | 201 229 | 2 | 0.02 | 22 | 590 | 8 | < 2 | 3 | 104 | 0.14 | < 10 | < 10 | 53 | < 10 | 98 |
| 200# 400E | 201 229 | 1 | 0.02 | 13 | 680 | 8 | < 2 | 2 | 48 | 0.12 | < 10 | < 10 | 49 | < 10 | 90 |
| 200# 425E | 201 229 | 1 | 0.01 | 24 | 750 | 8 | < 2 | 3 | 85 | 0.13 | < 10 | < 10 | 58 | < 10 | 126 |
| 200# 450E | 201 229 | 2 | 0.03 | 35 | 450 | 8 | < 2 | 5 | 200 | 0.14 | < 10 | < 10 | 60 | < 10 | 96 |
| 200# 475E | 201 229 | 1 | 0.03 | 24 | 680 | 8 | < 2 | 3 | 160 | 0.12 | < 10 | < 10 | 50 | < 10 | 100 |
| 200# 500E | 201 229 | 2 | 0.02 | 41 | 480 | 10 | < 2 | 5 | 221 | 0.13 | < 10 | < 10 | 68 | < 10 | 174 |
| 200# 525E | 201 229 | 3 | 0.02 | 40 | 790 | 8 | < 2 | 4 | 116 | 0.14 | < 10 | < 10 | 69 | < 10 | 174 |
| 200# 550E | 201 229 | 2 | 0.02 | 35 | 770 | 8 | < 2 | 3 | 116 | 0.15 | < 10 | < 10 | 73 | < 10 | 152 |
| 200# 575E | 201 229 | 3 | 0.04 | 41 | 470 | 8 | < 2 | 4 | 173 | 0.16 | < 10 | < 10 | 74 | < 10 | 234 |
| 200# 600E | 201 229 | 2 | 0.02 | 30 | 530 | 8 | < 2 | 3 | 84 | 0.14 | < 10 | < 10 | 68 | < 10 | 290 |
| 200# 625E | 201 229 | 1 | 0.02 | 8 | 480 | 6 | < 2 | 1 | 28 | 0.12 | < 10 | < 10 | 48 | < 10 | 200 |
| 200# 650E | 201 229 | 2 | 0.03 | 40 | 240 | 8 | < 2 | 4 | 96 | 0.13 | < 10 | < 10 | 66 | < 10 | 540 |
| 200# 675E | 201 229 | 1 | 0.02 | 8 | 180 | 2 | < 2 | 1 | 28 | 0.10 | < 10 | < 10 | 49 | < 10 | 216 |
| 200# 700E | 201 229 | 2 | 0.01 | 17 | 1110 | 12 | < 2 | 2 | 39 | 0.10 | < 10 | < 10 | 45 | < 10 | 210 |



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#

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Total Pages : 3
Certificate Date: 15-JUN-98
Invoice No. : 19821142
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9821142

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|------------|-----------|-----------------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 200# 725# | 201 229 | < 5 | 0.2 | 2.98 | 6 | 60 | < 0.5 | < 2 | 0.39 | 0.5 | 4 | 9 | 5 | 2.03 | < 10 | < 1 | 0.02 | < 10 | 0.12 | 170 |
| 200# 750# | 201 229 | 15 | 0.4 | 4.24 | 12 | 190 | 0.5 | < 2 | 0.99 | 2.0 | 19 | 13 | 23 | 3.30 | < 10 | < 1 | 0.04 | < 10 | 0.23 | 135 |
| 200# 775# | 201 229 | 5 | 0.6 | 3.36 | 14 | 50 | < 0.5 | < 2 | 0.28 | 3.0 | 6 | 15 | 13 | 2.99 | < 10 | < 1 | 0.03 | < 10 | 0.32 | 80 |
| 200# 800# | 201 229 | 10 | 0.6 | 3.19 | < 2 | 50 | < 0.5 | < 2 | 0.13 | < 0.5 | 4 | 10 | 6 | 1.65 | < 10 | < 1 | 0.03 | < 10 | 0.11 | 80 |
| 200# 825# | 201 229 | 20 | 0.4 | 2.85 | 12 | 150 | 0.5 | < 2 | 1.54 | 1.0 | 7 | 16 | 22 | 3.52 | < 10 | < 1 | 0.03 | 10 | 0.28 | 225 |
| 200# 850# | 201 229 | 5 | < 0.2 | 2.75 | 8 | 80 | 0.5 | < 2 | 0.70 | < 0.5 | 7 | 17 | 9 | 2.41 | < 10 | < 1 | 0.02 | < 10 | 0.29 | 160 |
| 200# 875# | 201 229 | < 5 | 0.2 | 1.71 | < 2 | 40 | 0.5 | < 2 | 0.07 | < 0.5 | 4 | 8 | 8 | 1.83 | < 10 | < 1 | 0.02 | < 10 | 0.10 | 120 |
| 200# 900# | 201 229 | < 5 | 0.2 | 3.27 | < 2 | 60 | < 0.5 | < 2 | 0.08 | < 0.5 | 5 | 8 | 8 | 1.73 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 355 |
| 200# 925# | 201 229 | < 5 | 0.2 | 3.64 | < 2 | 50 | 0.5 | < 2 | 0.07 | < 0.5 | 4 | 8 | 8 | 1.70 | < 10 | < 1 | 0.01 | < 10 | 0.11 | 360 |
| 200# 950# | 201 229 | < 5 | 0.2 | 2.74 | 6 | 140 | < 0.5 | < 2 | 0.26 | < 0.5 | 7 | 14 | 11 | 1.94 | < 10 | < 1 | 0.04 | < 10 | 0.24 | 140 |
| 200# 975# | 201 229 | < 5 | 0.4 | 3.08 | 8 | 110 | < 0.5 | < 2 | 0.19 | < 0.5 | 7 | 13 | 11 | 2.14 | < 10 | < 1 | 0.04 | < 10 | 0.24 | 225 |
| 200# 1000# | 201 229 | 10 | < 0.2 | 2.09 | 14 | 120 | < 0.5 | < 2 | 0.56 | < 0.5 | 6 | 29 | 22 | 2.29 | < 10 | < 1 | 0.04 | < 10 | 0.59 | 170 |
| 200# 1025# | 201 229 | 80 | 0.6 | 2.81 | 8 | 90 | < 0.5 | < 2 | 0.27 | < 0.5 | 8 | 13 | 14 | 2.01 | < 10 | < 1 | 0.04 | < 10 | 0.26 | 250 |
| 200# 1050# | 201 229 | 10 | 0.2 | 1.94 | 6 | 60 | < 0.5 | < 2 | 0.46 | < 0.5 | 5 | 9 | 7 | 1.68 | < 10 | < 1 | 0.04 | < 10 | 0.12 | 455 |
| 200# 1075# | 201 229 | < 5 | 0.2 | 2.20 | 8 | 60 | < 0.5 | < 2 | 0.17 | < 0.5 | 8 | 11 | 7 | 1.66 | < 10 | < 1 | 0.03 | < 10 | 0.16 | 305 |
| 200# 1100# | 201 229 | 20 | 0.2 | 3.12 | 8 | 70 | < 0.5 | < 2 | 0.21 | < 0.5 | 6 | 11 | 9 | 1.71 | < 10 | < 1 | 0.05 | < 10 | 0.18 | 240 |
| 200# 1125# | 201 229 | < 5 | 0.2 | 2.87 | < 2 | 40 | < 0.5 | < 2 | 0.06 | < 0.5 | 4 | 9 | 5 | 1.64 | < 10 | < 1 | 0.02 | < 10 | 0.08 | 125 |
| 200# 1150# | 201 229 | < 5 | < 0.2 | 3.02 | 12 | 30 | < 0.5 | < 2 | 0.07 | < 0.5 | 3 | 8 | 5 | 1.77 | < 10 | < 1 | 0.02 | < 10 | 0.08 | 60 |
| 200# 1175# | 201 229 | 20 | < 0.2 | 2.06 | < 2 | 30 | < 0.5 | < 2 | 0.05 | < 0.5 | 3 | 6 | 4 | 1.80 | < 10 | < 1 | 0.01 | < 10 | 0.06 | 90 |
| 200# 1200# | 201 229 | 10 | < 0.2 | 2.73 | < 2 | 50 | < 0.5 | < 2 | 0.06 | < 0.5 | 3 | 6 | 5 | 1.53 | < 10 | < 1 | 0.02 | < 10 | 0.06 | 545 |
| 200# 1225# | 201 229 | < 5 | < 0.2 | 3.35 | 4 | 40 | < 0.5 | < 2 | 0.08 | < 0.5 | 3 | 7 | 5 | 1.86 | < 10 | < 1 | 0.01 | < 10 | 0.07 | 60 |
| 200# 1250# | 201 229 | < 5 | 0.2 | 4.09 | 14 | 50 | 0.5 | < 2 | 0.09 | < 0.5 | 4 | 10 | 8 | 2.27 | < 10 | < 1 | 0.01 | < 10 | 0.09 | 105 |

CERTIFICATION:



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Page Number : 3-B
Total Pages : 3
Certificate Date: 15-JUN-98
Invoice No. : 19821142
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9821142

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|------------|-----------|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 200# 725# | 201 229 | 1 | 0.02 | 7 | 1330 | 10 | < 2 | 1 | 40 | 0.10 | < 10 | < 10 | 36 | < 10 | 192 |
| 200# 750# | 201 229 | 1 | 0.02 | 46 | 220 | 14 | < 2 | 1 | 527 | 0.13 | < 10 | < 10 | 30 | < 10 | 198 |
| 200# 775# | 201 229 | 6 | 0.01 | 35 | 1270 | 8 | < 2 | 1 | 57 | 0.09 | < 10 | < 10 | 88 | < 10 | 1035 |
| 200# 800# | 201 229 | < 1 | 0.02 | 8 | 1470 | 8 | < 2 | 1 | 16 | 0.09 | < 10 | < 10 | 32 | < 10 | 158 |
| 200# 825# | 201 229 | 5 | 0.02 | 27 | 3960 | 8 | < 2 | 4 | 57 | 0.07 | < 10 | < 10 | 37 | < 10 | 68 |
| 200# 850# | 201 229 | 1 | 0.01 | 18 | 1040 | 6 | < 2 | 3 | 30 | 0.10 | < 10 | < 10 | 44 | < 10 | 82 |
| 200# 875# | 201 229 | 2 | 0.01 | 6 | 1390 | 8 | < 2 | 1 | 7 | 0.11 | < 10 | < 10 | 33 | < 10 | 114 |
| 200# 900# | 201 229 | < 1 | 0.02 | 6 | 1070 | 6 | < 2 | 1 | 9 | 0.12 | < 10 | < 10 | 34 | < 10 | 88 |
| 200# 925# | 201 229 | < 1 | 0.02 | 6 | 990 | 4 | < 2 | 2 | 10 | 0.11 | < 10 | < 10 | 34 | < 10 | 88 |
| 200# 950# | 201 229 | 1 | 0.01 | 14 | 450 | 6 | < 2 | 3 | 26 | 0.12 | < 10 | < 10 | 42 | < 10 | 96 |
| 200# 975# | 201 229 | 2 | 0.01 | 12 | 1120 | 10 | < 2 | 3 | 17 | 0.13 | < 10 | < 10 | 45 | < 10 | 116 |
| 200# 1000# | 201 229 | < 1 | < 0.01 | 14 | 240 | 8 | < 2 | 6 | 60 | 0.15 | < 10 | < 10 | 70 | < 10 | 66 |
| 200# 1025# | 201 229 | < 1 | 0.01 | 18 | 910 | 8 | < 2 | 3 | 23 | 0.11 | < 10 | < 10 | 43 | < 10 | 158 |
| 200# 1050# | 201 229 | < 1 | 0.01 | 9 | 2120 | 4 | < 2 | 1 | 46 | 0.09 | < 10 | < 10 | 35 | < 10 | 114 |
| 200# 1075# | 201 229 | < 1 | 0.01 | 9 | 910 | 6 | < 2 | 1 | 35 | 0.09 | < 10 | < 10 | 38 | < 10 | 102 |
| 200# 1100# | 201 229 | < 1 | 0.01 | 9 | 690 | 4 | < 2 | 2 | 18 | 0.09 | < 10 | < 10 | 37 | < 10 | 90 |
| 200# 1125# | 201 229 | 2 | 0.01 | 4 | 920 | 6 | < 2 | 1 | 7 | 0.09 | < 10 | < 10 | 32 | < 10 | 92 |
| 200# 1150# | 201 229 | 1 | 0.02 | 5 | 710 | 8 | < 2 | 1 | 9 | 0.10 | < 10 | < 10 | 37 | < 10 | 46 |
| 200# 1175# | 201 229 | 1 | 0.01 | 3 | 710 | 4 | < 2 | 1 | 5 | 0.09 | < 10 | < 10 | 41 | < 10 | 56 |
| 200# 1200# | 201 229 | 1 | 0.01 | 3 | 1190 | 6 | < 2 | 1 | 8 | 0.09 | < 10 | < 10 | 33 | < 10 | 88 |
| 200# 1225# | 201 229 | 1 | 0.01 | 4 | 950 | 6 | < 2 | 1 | 8 | 0.10 | < 10 | < 10 | 37 | < 10 | 48 |
| 200# 1250# | 201 229 | 3 | 0.01 | 8 | 990 | 6 | < 2 | 1 | 11 | 0.11 | < 10 | < 10 | 38 | < 10 | 54 |

CERTIFICATION:



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Page Number :1-A
Total Pages :2
Certificate Date: 14-JUL-98
Invoice No. :19823853
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS A9823853

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|-----------|-----------|-----------------|--------|------|--------|-----------|--------|--------|-------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 3008 550E | 201 229 | < 5 | 0.2 | 3.23 | 22 | 60 < 0.5 | < 2 | 0.61 | < 0.5 | 10 | 25 | 15 | 3.31 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 195 | |
| 3008 575E | 201 229 | < 5 | 0.4 | 2.27 | 10 | 60 < 0.5 | < 2 | 0.25 | 1.8 | 6 | 12 | 10 | 2.03 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 195 | |
| 3008 600E | 201 229 | < 5 | 0.6 | 2.45 | 24 | 60 < 0.5 | < 2 | 0.55 | 4.5 | 7 | 13 | 22 | 1.95 | < 10 | < 1 | 0.03 | < 10 | 0.16 | 780 | |
| 3008 625E | 201 229 | < 5 | < 0.2 | 2.25 | 16 | 60 < 0.5 | < 2 | 0.48 | 1.5 | 9 | 17 | 13 | 2.07 | < 10 | < 1 | 0.03 | < 10 | 0.22 | 230 | |
| 3008 650E | 201 229 | 10 | 0.6 | 3.68 | 14 | 230 < 0.5 | < 2 | 0.58 | 2.5 | 15 | 25 | 39 | 3.28 | < 10 | < 1 | 0.07 | < 10 | 1.38 | 390 | |
| 3008 675E | 201 229 | < 5 | < 0.2 | 1.69 | 6 | 50 < 0.5 | < 2 | 0.20 | 0.5 | 4 | 7 | 7 | 1.70 | < 10 | < 1 | 0.04 | < 10 | 0.15 | 170 | |
| 3008 700E | 201 229 | < 5 | 0.6 | 2.06 | 18 | 60 < 0.5 | < 2 | 0.37 | 1.0 | 4 | 7 | 14 | 1.53 | < 10 | < 1 | 0.04 | < 10 | 0.12 | 405 | |
| 3008 725E | 201 229 | < 5 | 0.2 | 2.14 | 10 | 70 < 0.5 | < 2 | 0.63 | 0.5 | 5 | 11 | 14 | 1.60 | < 10 | < 1 | 0.07 | < 10 | 0.16 | 385 | |
| 3008 750E | 201 229 | < 5 | 0.2 | 2.32 | 8 | 50 < 0.5 | < 2 | 0.25 | 0.5 | 5 | 9 | 8 | 1.65 | < 10 | < 1 | 0.04 | < 10 | 0.11 | 235 | |
| 3008 775E | 201 229 | < 5 | < 0.2 | 1.42 | 10 | 50 < 0.5 | < 2 | 0.73 | 1.0 | 5 | 14 | 14 | 1.47 | < 10 | < 1 | 0.05 | < 10 | 0.20 | 365 | |
| 3008 800E | 201 229 | < 5 | 0.2 | 2.10 | 12 | 50 < 0.5 | < 2 | 0.43 | 1.0 | 4 | 10 | 10 | 1.43 | < 10 | < 1 | 0.05 | < 10 | 0.13 | 375 | |
| 3008 825E | 201 229 | < 5 | < 0.2 | 2.16 | 6 | 60 < 0.5 | < 2 | 0.54 | < 0.5 | 3 | 10 | 5 | 1.59 | < 10 | < 1 | 0.05 | < 10 | 0.36 | 130 | |
| 3008 850E | 201 229 | < 5 | 0.2 | 4.02 | 10 | 70 < 0.5 | < 2 | 0.27 | 0.5 | 11 | 19 | 28 | 2.94 | < 10 | < 1 | 0.03 | < 10 | 0.75 | 185 | |
| 3008 850E | 201 229 | < 5 | < 0.2 | 2.31 | 10 | 120 < 0.5 | < 2 | 0.36 | < 0.5 | 7 | 22 | 17 | 2.03 | < 10 | < 1 | 0.04 | < 10 | 0.29 | 265 | |
| 3008 875E | 201 229 | < 5 | < 0.2 | 1.36 | 10 | 50 < 0.5 | < 2 | 0.17 | < 0.5 | 3 | 13 | 6 | 1.55 | < 10 | < 1 | 0.03 | < 10 | 0.21 | 120 | |
| 3008 900E | 201 229 | < 5 | 0.2 | 2.48 | 10 | 40 < 0.5 | < 2 | 0.19 | < 0.5 | 8 | 9 | 7 | 1.77 | < 10 | < 1 | 0.04 | < 10 | 0.13 | 220 | |
| 3008 925E | 201 229 | 35 | 0.4 | 2.72 | 8 | 110 < 0.5 | < 2 | 0.23 | < 0.5 | 7 | 16 | 11 | 1.87 | < 10 | < 1 | 0.03 | < 10 | 0.24 | 235 | |
| 3008 950E | 201 229 | < 5 | < 0.2 | 2.44 | 10 | 70 < 0.5 | < 2 | 0.24 | 0.5 | 8 | 15 | 11 | 2.05 | < 10 | < 1 | 0.04 | < 10 | 0.21 | 240 | |
| 3008 975E | 201 229 | 10 | < 0.2 | 2.49 | 10 | 90 < 0.5 | < 2 | 0.37 | 1.0 | 8 | 19 | 15 | 2.10 | < 10 | < 1 | 0.03 | < 10 | 0.22 | 240 | |
| 3008 700E | 201 229 | < 5 | < 0.2 | 2.41 | 10 | 80 < 0.5 | < 2 | 0.50 | 0.5 | 9 | 20 | 15 | 2.27 | < 10 | < 1 | 0.05 | < 10 | 0.27 | 395 | |
| 3008 725E | 201 229 | < 5 | 0.2 | 2.59 | 10 | 100 < 0.5 | < 2 | 0.92 | 0.5 | 9 | 16 | 21 | 2.46 | < 10 | < 1 | 0.04 | < 10 | 0.53 | 400 | |
| 3008 750E | 201 229 | < 5 | < 0.2 | 2.46 | 8 | 70 < 0.5 | < 2 | 0.31 | < 0.5 | 6 | 12 | 12 | 2.00 | < 10 | < 1 | 0.04 | < 10 | 0.23 | 340 | |
| 3008 775E | 201 229 | < 5 | 0.2 | 2.86 | 10 | 70 < 0.5 | < 2 | 0.25 | 1.5 | 7 | 11 | 9 | 1.97 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 245 | |
| 3008 800E | 201 229 | < 5 | 0.2 | 2.97 | 10 | 70 < 0.5 | < 2 | 0.16 | 0.5 | 6 | 9 | 10 | 1.73 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 275 | |
| 3008 825E | 201 229 | < 5 | 0.2 | 2.17 | 8 | 50 < 0.5 | < 2 | 0.22 | 0.5 | 5 | 7 | 7 | 1.60 | < 10 | < 1 | 0.02 | < 10 | 0.09 | 180 | |
| 3008 850E | 201 229 | < 5 | 0.2 | 2.88 | 10 | 80 < 0.5 | < 2 | 0.14 | < 0.5 | 6 | 13 | 9 | 1.96 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 105 | |
| 3008 300E | 201 229 | < 5 | < 0.2 | 2.02 | 6 | 60 < 0.5 | < 2 | 0.19 | < 0.5 | 4 | 5 | 6 | 1.51 | < 10 | < 1 | 0.03 | < 10 | 0.11 | 390 | |
| 3008 325E | 201 229 | 10 | 0.2 | 2.56 | 8 | 80 < 0.5 | < 2 | 0.31 | < 0.5 | 8 | 12 | 16 | 2.29 | < 10 | < 1 | 0.04 | < 10 | 0.19 | 210 | |
| 3008 350E | 201 229 | < 5 | < 0.2 | 2.43 | 8 | 90 < 0.5 | < 2 | 0.23 | < 0.5 | 5 | 7 | 10 | 1.81 | < 10 | < 1 | 0.04 | < 10 | 0.15 | 405 | |
| 3008 375E | 201 229 | < 5 | < 0.2 | 2.90 | 6 | 110 < 0.5 | < 2 | 0.23 | 0.5 | 5 | 9 | 14 | 1.97 | < 10 | < 1 | 0.04 | < 10 | 0.19 | 370 | |
| 3008 400E | 201 229 | < 5 | 0.2 | 2.54 | 8 | 130 < 0.5 | < 2 | 0.35 | 0.5 | 7 | 14 | 18 | 1.99 | < 10 | < 1 | 0.07 | < 10 | 0.31 | 200 | |
| 3008 425E | 201 229 | < 5 | < 0.2 | 2.12 | 6 | 80 < 0.5 | < 2 | 0.21 | < 0.5 | 6 | 10 | 11 | 1.69 | < 10 | < 1 | 0.05 | < 10 | 0.18 | 355 | |
| 3008 450E | 201 229 | < 5 | < 0.2 | 2.03 | 6 | 100 < 0.5 | < 2 | 0.30 | < 0.5 | 6 | 14 | 12 | 1.67 | < 10 | < 1 | 0.05 | < 10 | 0.26 | 255 | |
| 3008 475E | 201 229 | < 5 | < 0.2 | 3.86 | 10 | 60 < 0.5 | < 2 | 0.32 | 2.0 | 9 | 8 | 10 | 2.16 | < 10 | < 1 | 0.04 | < 10 | 0.15 | 610 | |
| 3008 500E | 201 229 | < 5 | < 0.2 | 3.27 | 10 | 90 < 0.5 | < 2 | 0.27 | 1.5 | 10 | 10 | 14 | 2.11 | < 10 | < 1 | 0.05 | < 10 | 0.23 | 495 | |
| 3008 525E | 201 229 | < 5 | < 0.2 | 3.43 | 14 | 150 < 0.5 | < 2 | 0.61 | < 0.5 | 10 | 13 | 16 | 2.65 | < 10 | < 1 | 0.06 | < 10 | 0.36 | 330 | |
| 3008 550E | 201 229 | < 5 | < 0.2 | 3.10 | 8 | 120 < 0.5 | < 2 | 0.31 | < 0.5 | 7 | 22 | 16 | 2.31 | < 10 | < 1 | 0.04 | < 10 | 0.48 | 520 | |
| 3008 575E | 201 229 | < 5 | < 0.2 | 2.37 | 10 | 90 < 0.5 | < 2 | 0.47 | < 0.5 | 7 | 8 | 9 | 1.99 | < 10 | < 1 | 0.06 | < 10 | 0.15 | 680 | |
| 3008 600E | 201 229 | < 5 | < 0.2 | 2.14 | 10 | 80 < 0.5 | < 2 | 0.20 | < 0.5 | 7 | 7 | 8 | 2.20 | < 10 | < 1 | 0.02 | < 10 | 0.11 | 590 | |
| 3008 300E | 201 229 | < 5 | < 0.2 | 2.52 | 6 | 50 < 0.5 | < 2 | 0.10 | < 0.5 | 6 | 5 | 7 | 1.59 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 290 | |

CERTIFICATION: Just Biddle



Chemex Labs Ltd.

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Page Number :1-B
Total Pages :2
Certificate Date: 14-JUL-98
Invoice No. :19823853
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS A9823853

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|-----------|-----------|--------|------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 3008 550E | 201 229 | 2 | 0.01 | 31 | 790 | 6 | < 2 | 3 | 133 | 0.13 | < 10 | < 10 | 63 | < 10 | 214 |
| 3008 575E | 201 229 | 1 | 0.02 | 16 | 530 | 8 | < 2 | 1 | 52 | 0.11 | < 10 | < 10 | 49 | < 10 | 258 |
| 3008 600E | 201 229 | 3 | 0.04 | 47 | 380 | 10 | < 2 | 2 | 98 | 0.10 | < 10 | < 10 | 47 | < 10 | 422 |
| 3008 625E | 201 229 | 3 | 0.02 | 23 | 730 | 8 | < 2 | 3 | 82 | 0.11 | < 10 | < 10 | 48 | < 10 | 210 |
| 3008 650E | 201 229 | 6 | 0.03 | 36 | 810 | 10 | < 2 | 11 | 131 | 0.18 | < 10 | < 10 | 103 | < 10 | 694 |
| 3008 675E | 201 229 | 3 | 0.02 | 5 | 720 | 2 | < 2 | 1 | 20 | 0.10 | < 10 | < 10 | 40 | < 10 | 122 |
| 3008 700E | 201 229 | 2 | 0.03 | 14 | 610 | 10 | < 2 | 1 | 45 | 0.08 | < 10 | < 10 | 31 | < 10 | 206 |
| 3008 725E | 201 229 | 3 | 0.02 | 11 | 840 | 6 | < 2 | 2 | 87 | 0.09 | < 10 | < 10 | 38 | < 10 | 152 |
| 3008 750E | 201 229 | 2 | 0.02 | 8 | 930 | 8 | < 2 | 1 | 38 | 0.09 | < 10 | < 10 | 38 | < 10 | 118 |
| 3008 775E | 201 229 | 1 | 0.04 | 9 | 210 | 6 | < 2 | 3 | 88 | 0.08 | < 10 | < 10 | 31 | < 10 | 86 |
| 3008 800E | 201 229 | 1 | 0.04 | 9 | 490 | 2 | < 2 | 1 | 54 | 0.08 | < 10 | < 10 | 30 | < 10 | 106 |
| 3008 825E | 201 229 | 1 | 0.01 | 5 | 900 | 2 | < 2 | 1 | 45 | 0.10 | < 10 | < 10 | 27 | < 10 | 62 |
| 3008 850E | 201 229 | 1 | 0.03 | 24 | 800 | 10 | < 2 | 4 | 39 | 0.12 | < 10 | < 10 | 50 | < 10 | 128 |
| 3008 850E | 201 229 | 2 | 0.01 | 16 | 440 | 10 | < 2 | 4 | 72 | 0.12 | < 10 | < 10 | 48 | < 10 | 86 |
| 3008 875E | 201 229 | 1 | 0.01 | 7 | 360 | 6 | < 2 | 2 | 22 | 0.11 | < 10 | < 10 | 46 | < 10 | 92 |
| 3008 900E | 201 229 | 3 | 0.01 | 7 | 970 | 8 | < 2 | 1 | 29 | 0.11 | < 10 | < 10 | 42 | < 10 | 100 |
| 3008 925E | 201 229 | 2 | 0.02 | 21 | 680 | 8 | < 2 | 2 | 37 | 0.12 | < 10 | < 10 | 47 | < 10 | 140 |
| 3008 950E | 201 229 | 2 | 0.03 | 17 | 670 | 6 | < 2 | 2 | 49 | 0.11 | < 10 | < 10 | 53 | < 10 | 132 |
| 3008 975E | 201 229 | 3 | 0.02 | 24 | 770 | 8 | < 2 | 3 | 68 | 0.12 | < 10 | < 10 | 55 | < 10 | 244 |
| 3008 700E | 201 229 | 2 | 0.01 | 28 | 610 | 6 | < 2 | 3 | 67 | 0.13 | < 10 | < 10 | 68 | < 10 | 266 |
| 3008 725E | 201 229 | 1 | 0.04 | 20 | 460 | 10 | < 2 | 4 | 102 | 0.13 | < 10 | < 10 | 47 | < 10 | 84 |
| 3008 750E | 201 229 | 1 | 0.02 | 13 | 640 | 6 | < 2 | 2 | 43 | 0.11 | < 10 | < 10 | 42 | < 10 | 130 |
| 3008 775E | 201 229 | 3 | 0.03 | 19 | 910 | 10 | < 2 | 1 | 39 | 0.11 | < 10 | < 10 | 43 | < 10 | 222 |
| 3008 800E | 201 229 | 2 | 0.03 | 13 | 800 | 6 | < 2 | 3 | 32 | 0.11 | < 10 | < 10 | 39 | < 10 | 166 |
| 3008 825E | 201 229 | 1 | 0.03 | 8 | 810 | 2 | < 2 | 1 | 31 | 0.10 | < 10 | < 10 | 38 | < 10 | 120 |
| 3008 850E | 201 229 | 2 | 0.01 | 14 | 740 | 8 | < 2 | 2 | 21 | 0.11 | < 10 | < 10 | 43 | < 10 | 130 |
| 3008 300E | 201 229 | 1 | 0.01 | 4 | 640 | 8 | < 2 | 2 | 18 | 0.09 | < 10 | < 10 | 32 | < 10 | 62 |
| 3008 325E | 201 229 | 1 | 0.01 | 23 | 340 | 8 | < 2 | 2 | 43 | 0.11 | < 10 | < 10 | 43 | < 10 | 70 |
| 3008 350E | 201 229 | 1 | 0.03 | 8 | 360 | 14 | < 2 | 1 | 29 | 0.12 | < 10 | < 10 | 37 | < 10 | 90 |
| 3008 375E | 201 229 | 2 | 0.03 | 9 | 420 | 8 | < 2 | 2 | 24 | 0.12 | < 10 | < 10 | 36 | < 10 | 198 |
| 3008 400E | 201 229 | 2 | 0.01 | 13 | 520 | 6 | < 2 | 4 | 28 | 0.14 | < 10 | < 10 | 44 | < 10 | 194 |
| 3008 425E | 201 229 | 1 | 0.03 | 7 | 830 | 6 | < 2 | 3 | 20 | 0.11 | < 10 | < 10 | 37 | < 10 | 88 |
| 3008 450E | 201 229 | 1 | 0.01 | 11 | 380 | 6 | < 2 | 3 | 27 | 0.13 | < 10 | < 10 | 40 | < 10 | 112 |
| 3008 475E | 201 229 | 2 | 0.03 | 13 | 1310 | 80 | < 2 | 3 | 20 | 0.12 | < 10 | < 10 | 36 | < 10 | 360 |
| 3008 500E | 201 229 | 2 | 0.02 | 14 | 670 | 46 | < 2 | 3 | 22 | 0.12 | < 10 | < 10 | 39 | < 10 | 312 |
| 3008 525E | 201 229 | 1 | 0.02 | 21 | 500 | 16 | < 2 | 3 | 102 | 0.12 | < 10 | < 10 | 36 | < 10 | 110 |
| 3008 550E | 201 229 | 1 | 0.03 | 13 | 860 | 10 | < 2 | 4 | 38 | 0.13 | < 10 | < 10 | 35 | < 10 | 91 |
| 3008 575E | 201 229 | 1 | 0.03 | 11 | 850 | 6 | < 2 | 1 | 45 | 0.11 | < 10 | < 10 | 37 | < 10 | 90 |
| 3008 600E | 201 229 | 1 | 0.02 | 7 | 650 | 4 | < 2 | 1 | 19 | 0.11 | < 10 | < 10 | 40 | < 10 | 106 |
| 3008 300E | 201 229 | 1 | 0.02 | 3 | 740 | 6 | < 2 | 1 | 10 | 0.11 | < 10 | < 10 | 36 | < 10 | 46 |



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Page Number :2-A
Total Pages :2
Certificate Date: 14-JUL-98
Invoice No. :19823853
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS A9823853

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|-----------|-----------|-----------------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 900N 325E | 201 229 | < 8 | 0.2 | 2.53 | 8 | 90 | < 0.5 | < 2 | 0.15 | < 0.5 | 8 | 9 | 12 | 1.75 | < 10 | < 1 | 0.03 | < 10 | 0.16 | 120 |
| 900N 350E | 201 229 | < 8 | < 0.2 | 3.54 | 10 | 40 | < 0.5 | < 2 | 0.05 | < 0.5 | 5 | 7 | 7 | 1.85 | < 10 | < 1 | 0.03 | < 10 | 0.09 | 100 |
| 900N 375E | 201 229 | < 8 | < 0.2 | 1.36 | 4 | 60 | < 0.5 | < 2 | 0.22 | < 0.5 | 4 | 8 | 5 | 1.30 | < 10 | < 1 | 0.05 | < 10 | 0.11 | 135 |
| 900N 400E | 201 229 | < 8 | 0.2 | 2.64 | 8 | 70 | < 0.5 | < 2 | 0.16 | < 0.5 | 9 | 10 | 15 | 2.08 | < 10 | < 1 | 0.05 | < 10 | 0.20 | 230 |
| 900N 425E | 201 229 | 10 | 0.2 | 2.56 | 8 | 100 | < 0.5 | < 2 | 0.23 | < 0.5 | 7 | 9 | 17 | 1.91 | < 10 | < 1 | 0.04 | < 10 | 0.29 | 395 |
| 900N 450E | 201 229 | < 8 | < 0.2 | 1.66 | 4 | 50 | < 0.5 | < 2 | 0.10 | < 0.5 | 7 | 7 | 7 | 2.01 | < 10 | < 1 | 0.02 | < 10 | 0.10 | 730 |
| 900N 475E | 201 229 | < 8 | 0.4 | 2.69 | 8 | 60 | < 0.5 | < 2 | 0.13 | < 0.5 | 6 | 7 | 8 | 1.89 | < 10 | < 1 | 0.03 | < 10 | 0.11 | 840 |
| 900N 500E | 201 229 | < 8 | 2.0 | 3.26 | 8 | 80 | < 0.5 | < 2 | 0.20 | < 0.5 | 6 | 7 | 17 | 1.75 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 560 |
| 900N 525E | 201 229 | < 8 | < 0.2 | 2.84 | 6 | 80 | < 0.5 | < 2 | 0.30 | < 0.5 | 6 | 9 | 7 | 2.16 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 260 |
| 575E 725N | 201 229 | < 8 | < 0.2 | 1.95 | 20 | 70 | < 0.5 | < 2 | 1.71 | < 0.5 | 20 | 10 | 29 | 6.87 | < 10 | < 1 | 0.04 | < 10 | 0.28 | 780 |
| 575E 738N | 201 229 | < 8 | 0.4 | 3.81 | 34 | 190 | < 0.5 | < 2 | 0.45 | < 0.5 | 13 | 15 | 31 | 3.75 | < 10 | < 1 | 0.07 | < 10 | 0.57 | 310 |
| 575E 750N | 201 229 | < 8 | 0.2 | 2.23 | 10 | 80 | < 0.5 | < 2 | 0.12 | < 0.5 | 6 | 7 | 8 | 2.07 | < 10 | < 1 | 0.04 | < 10 | 0.18 | 210 |
| 575E 763N | 201 229 | < 8 | 0.2 | 1.62 | 12 | 90 | < 0.5 | < 2 | 0.13 | < 0.5 | 7 | 11 | 20 | 2.01 | < 10 | < 1 | 0.04 | < 10 | 0.15 | 970 |
| 575E 775N | 201 229 | < 8 | 0.4 | 2.83 | 12 | 170 | < 0.5 | < 2 | 0.32 | < 0.5 | 11 | 16 | 29 | 2.98 | < 10 | < 1 | 0.09 | < 10 | 0.65 | 470 |

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Page Number :2-B
Total Pages :2
Certificate Date: 14-JUL-98
Invoice No. :19823853
P.O. Number :23
Account :LOY

CERTIFICATE OF ANALYSIS A9823853

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|-----------|-----------|--------|------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 900N 325E | 201 229 | 1 | 0.01 | 9 | 530 | 4 | < 2 | 2 | 16 | 0.10 | < 10 | < 10 | 38 | < 10 | 66 |
| 900N 350E | 201 229 | 1 | 0.01 | 8 | 1460 | 6 | < 2 | 1 | 7 | 0.10 | < 10 | < 10 | 34 | < 10 | 52 |
| 900N 375E | 201 229 | 1 | 0.01 | 6 | 550 | 4 | < 2 | 1 | 15 | 0.09 | < 10 | < 10 | 32 | < 10 | 46 |
| 900N 400E | 201 229 | 3 | 0.01 | 21 | 560 | 4 | < 2 | 3 | 25 | 0.11 | < 10 | < 10 | 39 | < 10 | 160 |
| 900N 425E | 201 229 | 1 | 0.01 | 18 | 470 | 12 | < 2 | 3 | 53 | 0.11 | < 10 | < 10 | 38 | < 10 | 138 |
| 900N 450E | 201 229 | 1 | 0.02 | 10 | 380 | 6 | < 2 | 1 | 9 | 0.12 | < 10 | < 10 | 48 | < 10 | 98 |
| 900N 475E | 201 229 | 4 | 0.03 | 8 | 590 | 6 | < 2 | 1 | 15 | 0.10 | < 10 | < 10 | 39 | < 10 | 134 |
| 900N 500E | 201 229 | 3 | 0.03 | 9 | 530 | 76 | < 2 | 3 | 19 | 0.11 | < 10 | < 10 | 32 | < 10 | 778 |
| 900N 525E | 201 229 | 2 | 0.02 | 10 | 430 | 12 | < 2 | 1 | 21 | 0.13 | < 10 | < 10 | 44 | < 10 | 92 |
| 575E 725N | 201 229 | 3 | 0.01 | 17 | 390 | < 2 | < 2 | 6 | 110 | 0.15 | < 10 | < 10 | 61 | < 10 | 112 |
| 575E 738N | 201 229 | 3 | 0.01 | 29 | 320 | 12 | < 2 | 4 | 77 | 0.11 | < 10 | < 10 | 52 | < 10 | 182 |
| 575E 750N | 201 229 | 4 | 0.02 | 12 | 270 | 10 | < 2 | 1 | 27 | 0.10 | < 10 | < 10 | 39 | < 10 | 128 |
| 575E 763N | 201 229 | 1 | 0.01 | 19 | 350 | 6 | < 2 | 1 | 44 | 0.09 | < 10 | < 10 | 40 | < 10 | 126 |
| 575E 775N | 201 229 | 1 | 0.02 | 27 | 460 | 4 | < 2 | 7 | 97 | 0.15 | < 10 | < 10 | 77 | < 10 | 186 |

CERTIFICATION: _____

Handwritten signature: Hart Biella



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#

Page Number : 1-A
Total Pages : 2
Certificate Date: 03-AUG-98
Invoice No. : 19826084
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS

A9826084

| SAMPLE | PREP CODE | As ppb 24.11 | Ag ppm | Al % | Ar ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|-----------|-----------|--------------------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|--------|-----------|---------|-----------|
| 100N 000 | 201 229 | 5 < 0.2 | 2.57 | 16 | 70 | 0.5 | < 2 | 1.44 | 0.5 | 12 | 22 | 29 | 3.70 | < 10 | < 1 | 0.03 | < 10 | 0.32 | 895 | |
| 100N 025E | 201 229 | < 5 < 0.2 | 3.06 | 4 | 70 | 0.5 | < 2 | 0.38 | 0.5 | 10 | 21 | 19 | 3.20 | < 10 | < 1 | 0.03 | < 10 | 0.32 | 345 | |
| 100N 050E | 201 229 | < 5 < 0.2 | 2.57 | 8 | 90 | 0.5 | < 2 | 0.31 | 0.5 | 8 | 18 | 18 | 2.63 | < 10 | < 1 | 0.03 | < 10 | 0.25 | 555 | |
| 100N 075E | 201 229 | < 5 < 0.2 | 2.38 | 10 | 90 | < 0.5 | < 2 | 0.39 | < 0.5 | 8 | 17 | 19 | 2.51 | < 10 | < 1 | 0.03 | < 10 | 0.26 | 720 | |
| 100N 100E | 201 229 | < 5 < 0.2 | 3.21 | 20 | 140 | 0.5 | < 2 | 0.47 | 0.5 | 12 | 21 | 32 | 3.46 | < 10 | < 1 | 0.04 | < 10 | 0.49 | 555 | |
| 100N 125E | 201 229 | < 5 < 0.2 | 2.88 | 14 | 100 | 0.5 | < 2 | 0.61 | 0.5 | 8 | 21 | 19 | 2.62 | < 10 | < 1 | 0.04 | < 10 | 0.29 | 455 | |
| 100N 150E | 201 229 | < 5 < 0.2 | 2.56 | 22 | 90 | 0.5 | < 2 | 0.38 | < 0.5 | 9 | 19 | 20 | 2.76 | < 10 | < 1 | 0.03 | < 10 | 0.26 | 575 | |
| 100N 175E | 201 229 | < 5 < 0.2 | 2.63 | 28 | 70 | 0.5 | < 2 | 0.30 | 0.5 | 10 | 24 | 24 | 3.11 | < 10 | < 1 | 0.03 | < 10 | 0.26 | 645 | |
| 100N 200E | 201 229 | < 5 < 0.2 | 2.60 | 8 | 110 | 0.5 | < 2 | 0.43 | 0.5 | 13 | 20 | 28 | 3.79 | < 10 | < 1 | 0.04 | < 10 | 0.22 | 1480 | |
| 100N 225E | 201 229 | < 5 < 0.2 | 2.17 | 8 | 90 | < 0.5 | < 2 | 0.28 | 0.5 | 7 | 16 | 19 | 2.15 | < 10 | < 1 | 0.03 | < 10 | 0.21 | 820 | |
| 100N 250E | 201 229 | < 5 < 0.2 | 2.13 | 6 | 70 | < 0.5 | < 2 | 0.23 | < 0.5 | 7 | 19 | 18 | 2.25 | < 10 | < 1 | 0.04 | < 10 | 0.25 | 545 | |
| 100N 275E | 201 229 | < 5 < 0.2 | 2.48 | 6 | 40 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 9 | 8 | 1.76 | < 10 | < 1 | 0.02 | < 10 | 0.09 | 285 | |
| 100N 300E | 201 229 | < 5 < 0.2 | 2.16 | 8 | 70 | < 0.5 | < 2 | 0.29 | 0.5 | 7 | 16 | 13 | 2.34 | < 10 | < 1 | 0.02 | < 10 | 0.24 | 190 | |
| 100N 325E | 201 229 | < 5 < 0.2 | 2.28 | 8 | 60 | < 0.5 | < 2 | 0.26 | 0.5 | 9 | 20 | 14 | 2.69 | < 10 | < 1 | 0.02 | < 10 | 0.11 | 150 | |
| 100N 350E | 201 229 | < 5 < 0.2 | 2.35 | 8 | 150 | < 0.5 | < 2 | 0.76 | 1.0 | 8 | 18 | 16 | 2.11 | < 10 | < 1 | 0.05 | < 10 | 0.21 | 740 | |
| 100N 375E | 201 229 | < 5 < 0.2 | 2.91 | 8 | 120 | 0.5 | < 2 | 0.86 | 0.5 | 14 | 16 | 31 | 3.48 | < 10 | < 1 | 0.03 | < 10 | 0.18 | 1165 | |
| 100N 400E | 201 229 | < 5 < 0.6 | 2.54 | 6 | 80 | < 0.5 | < 2 | 0.64 | 0.5 | 6 | 9 | 11 | 2.11 | < 10 | < 1 | 0.03 | < 10 | 0.16 | 680 | |
| 100N 425E | 201 229 | 10 < 0.6 | 3.45 | 14 | 130 | 0.5 | < 2 | 1.04 | < 0.5 | 15 | 16 | 44 | 3.24 | < 10 | < 1 | 0.05 | < 10 | 0.33 | 885 | |
| 100N 450E | 201 229 | < 5 < 0.2 | 3.14 | 8 | 120 | 0.5 | < 2 | 0.60 | < 0.5 | 7 | 9 | 17 | 2.39 | < 10 | < 1 | 0.04 | < 10 | 0.24 | 540 | |
| 100N 475E | 201 229 | 10 < 0.2 | 3.95 | 8 | 140 | 0.5 | < 2 | 0.66 | 0.5 | 10 | 13 | 25 | 3.35 | < 10 | < 1 | 0.03 | < 10 | 0.19 | 800 | |
| 100N 500E | 201 229 | 5 < 1.2 | 4.25 | 8 | 140 | 0.5 | < 2 | 0.71 | 0.5 | 15 | 17 | 49 | 4.01 | < 10 | < 1 | 0.06 | < 10 | 0.21 | 555 | |
| 100N 525E | 201 229 | 10 < 0.2 | 2.91 | 8 | 50 | 0.5 | < 2 | 0.22 | < 0.5 | 6 | 11 | 10 | 2.25 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 300 | |
| 100N 550E | 201 229 | 10 < 0.2 | 3.34 | 8 | 90 | 0.5 | < 2 | 0.75 | 0.5 | 19 | 12 | 10 | 4.55 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 480 | |
| 100N 575E | 201 229 | 15 < 0.4 | 2.81 | 14 | 70 | 0.5 | < 2 | 0.48 | 1.5 | 19 | 16 | 32 | 3.75 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 375 | |
| 100N 600E | 201 229 | < 5 < 0.2 | 1.53 | 6 | 40 | < 0.5 | < 2 | 0.17 | 1.0 | 5 | 8 | 6 | 1.70 | < 10 | < 1 | 0.01 | < 10 | 0.07 | 515 | |
| 100N 625E | 201 229 | < 5 < 0.4 | 3.65 | 22 | 100 | 0.5 | < 2 | 0.98 | 6.0 | 24 | 36 | 68 | 4.84 | < 10 | < 1 | 0.04 | < 10 | 2.21 | 540 | |
| 100N 650E | 201 229 | < 5 < 0.2 | 2.88 | 8 | 90 | 0.5 | < 2 | 0.54 | 5.0 | 18 | 19 | 38 | 4.26 | < 10 | < 1 | 0.04 | < 10 | 0.19 | 900 | |
| 100N 675E | 201 229 | < 5 < 0.2 | 2.78 | 12 | 120 | < 0.5 | < 2 | 0.32 | 1.0 | 8 | 19 | 15 | 2.46 | < 10 | < 1 | 0.05 | < 10 | 0.28 | 220 | |
| 100N 700E | 201 229 | < 5 < 1.2 | 2.80 | 8 | 120 | < 0.5 | < 2 | 0.30 | < 0.5 | 5 | 15 | 11 | 2.04 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 160 | |
| 100N 725E | 201 229 | < 5 < 0.2 | 2.68 | 8 | 130 | < 0.5 | < 2 | 0.31 | < 0.5 | 6 | 17 | 11 | 2.04 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 250 | |
| 100N 750E | 201 229 | < 5 < 0.2 | 3.40 | 8 | 100 | 0.5 | < 2 | 0.18 | < 0.5 | 6 | 14 | 10 | 2.10 | < 10 | < 1 | 0.04 | < 10 | 0.20 | 335 | |
| 100N 775E | 201 229 | < 5 < 0.2 | 3.58 | 8 | 80 | 0.5 | < 2 | 0.34 | 0.5 | 7 | 12 | 8 | 2.10 | < 10 | < 1 | 0.04 | < 10 | 0.20 | 770 | |
| 100N 800E | 201 229 | 5 < 0.2 | 2.16 | 14 | 200 | < 0.5 | < 2 | 0.19 | < 0.5 | 9 | 14 | 17 | 2.59 | < 10 | < 1 | 0.04 | < 10 | 0.42 | 195 | |
| 100N 825E | 201 229 | < 5 < 0.2 | 3.55 | 16 | 160 | 0.5 | < 2 | 0.24 | 1.5 | 25 | 38 | 58 | 3.88 | < 10 | < 1 | 0.09 | < 10 | 0.65 | 340 | |
| 100N 850E | 201 229 | < 5 < 0.2 | 2.11 | 4 | 60 | < 0.5 | < 2 | 0.13 | 0.5 | 6 | 9 | 7 | 1.78 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 655 | |
| 100N 875E | 201 229 | < 5 < 0.2 | 3.52 | 10 | 70 | 0.5 | < 2 | 0.10 | 0.5 | 6 | 8 | 6 | 1.75 | < 10 | < 1 | 0.03 | < 10 | 0.09 | 220 | |
| 100N 900E | 201 229 | < 5 < 0.2 | 3.04 | 20 | 350 | < 0.5 | < 2 | 0.36 | 0.5 | 25 | 10 | 55 | 3.88 | < 10 | < 1 | 0.12 | < 10 | 1.14 | 365 | |
| 100N 925E | 201 229 | < 5 < 0.2 | 1.59 | 8 | 60 | < 0.5 | < 2 | 0.24 | < 0.5 | 5 | 9 | 5 | 1.67 | < 10 | < 1 | 0.03 | < 10 | 0.12 | 130 | |
| 100N 950E | 201 229 | < 5 < 0.2 | 2.20 | 12 | 60 | < 0.5 | < 2 | 0.20 | 0.5 | 7 | 10 | 9 | 1.94 | < 10 | < 1 | 0.03 | < 10 | 0.16 | 130 | |
| 100N 975E | 201 229 | 15 < 0.2 | 2.57 | 14 | 140 | 0.5 | < 2 | 0.57 | 0.5 | 8 | 20 | 29 | 2.40 | < 10 | < 1 | 0.08 | < 10 | 0.52 | 395 | |

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Page Number : 1-B
Total Pages : 2
Certificate Date: 03-AUG-98
Invoice No. : 19826084
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS

A9826084

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| 100N 000 | 201 229 | 2 | 0.15 | 55 | 890 | 12 | < 2 | 3 | 451 | 0.09 | < 10 | < 10 | 50 | < 10 | 150 |
| 100N 025E | 201 229 | 1 | 0.04 | 35 | 470 | 12 | < 2 | 3 | 89 | 0.13 | < 10 | < 10 | 61 | < 10 | 146 |
| 100N 050E | 201 229 | 1 | 0.03 | 24 | 690 | 10 | < 2 | 3 | 80 | 0.11 | < 10 | < 10 | 52 | < 10 | 138 |
| 100N 075E | 201 229 | 1 | 0.03 | 20 | 690 | 10 | < 2 | 3 | 117 | 0.12 | < 10 | < 10 | 52 | < 10 | 112 |
| 100N 100E | 201 229 | 3 | 0.04 | 40 | 690 | 12 | < 2 | 6 | 201 | 0.14 | < 10 | < 10 | 70 | < 10 | 144 |
| 100N 125E | 201 229 | 2 | 0.02 | 21 | 820 | 12 | < 2 | 3 | 104 | 0.14 | < 10 | < 10 | 59 | < 10 | 138 |
| 100N 150E | 201 229 | 2 | 0.01 | 26 | 620 | 10 | < 2 | 3 | 81 | 0.12 | < 10 | < 10 | 55 | < 10 | 124 |
| 100N 175E | 201 229 | 2 | 0.02 | 30 | 830 | 12 | < 2 | 3 | 95 | 0.13 | < 10 | < 10 | 61 | < 10 | 144 |
| 100N 200E | 201 229 | 3 | 0.01 | 44 | 870 | 10 | < 2 | 3 | 109 | 0.12 | < 10 | < 10 | 63 | < 10 | 206 |
| 100N 225E | 201 229 | 2 | 0.01 | 19 | 630 | 8 | < 2 | 3 | 46 | 0.11 | < 10 | < 10 | 49 | < 10 | 142 |
| 100N 250E | 201 229 | 3 | < 0.01 | 21 | 910 | 10 | < 2 | 3 | 39 | 0.09 | < 10 | < 10 | 49 | < 10 | 108 |
| 100N 275E | 201 229 | 1 | 0.01 | 10 | 980 | 8 | < 2 | 1 | 16 | 0.11 | < 10 | < 10 | 38 | < 10 | 92 |
| 100N 300E | 201 229 | 1 | < 0.01 | 21 | 640 | 8 | < 2 | 2 | 56 | 0.11 | < 10 | < 10 | 52 | < 10 | 206 |
| 100N 325E | 201 229 | 3 | 0.01 | 23 | 500 | 8 | < 2 | 2 | 64 | 0.12 | < 10 | < 10 | 64 | < 10 | 200 |
| 100N 350E | 201 229 | 1 | 0.01 | 22 | 1120 | 8 | < 2 | 3 | 129 | 0.11 | < 10 | < 10 | 48 | < 10 | 174 |
| 100N 375E | 201 229 | 2 | 0.02 | 47 | 900 | 10 | < 2 | 4 | 173 | 0.12 | < 10 | < 10 | 51 | < 10 | 176 |
| 100N 400E | 201 229 | 1 | 0.03 | 16 | 850 | 14 | < 2 | 1 | 129 | 0.11 | < 10 | < 10 | 37 | < 10 | 142 |
| 100N 425E | 201 229 | 2 | 0.05 | 53 | 1270 | 20 | < 2 | 4 | 379 | 0.08 | < 10 | < 10 | 29 | < 10 | 124 |
| 100N 450E | 201 229 | 1 | 0.04 | 23 | 870 | 16 | < 2 | 2 | 183 | 0.11 | < 10 | < 10 | 31 | < 10 | 90 |
| 100N 475E | 201 229 | 2 | 0.05 | 38 | 1170 | 20 | < 2 | 3 | 295 | 0.11 | < 10 | < 10 | 34 | < 10 | 118 |
| 100N 500E | 201 229 | 3 | 0.02 | 60 | 1190 | 18 | < 2 | 4 | 487 | 0.11 | < 10 | < 10 | 38 | < 10 | 178 |
| 100N 525E | 201 229 | 1 | 0.01 | 12 | 820 | 10 | < 2 | 1 | 68 | 0.11 | < 10 | < 10 | 41 | < 10 | 94 |
| 100N 550E | 201 229 | 3 | 0.02 | 50 | 960 | 12 | < 2 | 2 | 539 | 0.11 | < 10 | < 10 | 62 | < 10 | 148 |
| 100N 575E | 201 229 | 3 | 0.01 | 59 | 830 | 10 | < 2 | 3 | 115 | 0.11 | < 10 | < 10 | 54 | < 10 | 258 |



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Certificate Date: 03-AUG-98
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P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9826084

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Ba ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|-----------|-----------|-----------------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|--------|-----------|---------|-----------|
| 000N 000 | 201 229 | < 5 | 0.2 | 3.67 | 44 | 100 | 0.5 | < 2 | 0.43 | 2.0 | 8 | 32 | 33 | 3.96 | < 10 | < 1 | 0.06 | < 10 | 0.40 | 295 |
| 000N 025K | 201 229 | < 5 | < 0.2 | 3.34 | 22 | 130 | 0.5 | < 2 | 0.49 | 2.5 | 7 | 21 | 22 | 2.60 | < 10 | < 1 | 0.04 | < 10 | 0.38 | 465 |
| 000N 050K | 201 229 | < 5 | 1.0 | 3.82 | 8 | 250 | 0.5 | < 2 | 0.37 | 3.0 | 8 | 18 | 35 | 2.50 | < 10 | < 1 | 0.07 | < 10 | 0.36 | 340 |
| 000N 075K | 201 229 | < 5 | < 0.2 | 2.75 | 18 | 170 | 0.5 | < 2 | 0.82 | 33.5 | 13 | 23 | 50 | 3.40 | < 10 | < 1 | 0.17 | < 10 | 0.49 | 1430 |
| 000N 100K | 201 229 | < 5 | < 0.2 | 2.57 | 8 | 110 | 0.5 | < 2 | 1.83 | 2.0 | 15 | 25 | 66 | 3.76 | < 10 | < 1 | 0.27 | < 10 | 0.40 | 1845 |
| 000N 125K | 201 229 | < 5 | 0.6 | 1.99 | 20 | 80 | 0.5 | < 2 | 6.51 | 2.5 | 28 | 20 | 105 | 4.91 | < 10 | < 1 | 0.19 | < 10 | 0.47 | 2320 |
| 000N 150K | 201 229 | < 5 | 0.6 | 2.26 | 24 | 80 | 0.5 | < 2 | 7.50 | 2.0 | 29 | 20 | 87 | 5.00 | < 10 | < 1 | 0.11 | < 10 | 0.58 | 1960 |
| 000N 175K | 201 229 | < 5 | < 0.2 | 2.46 | 14 | 160 | 0.5 | < 2 | 1.59 | 1.5 | 37 | 24 | 70 | 3.93 | < 10 | < 1 | 0.14 | < 10 | 0.43 | 2010 |
| 000N 200K | 201 229 | < 5 | < 0.2 | 2.54 | 16 | 100 | 0.5 | < 2 | 1.59 | 1.5 | 23 | 29 | 102 | 4.24 | < 10 | < 1 | 0.19 | < 10 | 0.67 | 1890 |
| 000N 225K | 201 229 | < 5 | < 0.2 | 2.56 | 16 | 130 | 0.5 | < 2 | 1.14 | 1.5 | 19 | 27 | 65 | 4.03 | < 10 | < 1 | 0.20 | < 10 | 0.36 | 2430 |
| 000N 250K | 201 229 | < 5 | < 0.2 | 2.24 | 14 | 100 | < 0.5 | < 2 | 0.56 | 0.5 | 13 | 14 | 34 | 2.71 | < 10 | < 1 | 0.08 | < 10 | 0.38 | 1160 |
| 000N 275K | 201 229 | < 5 | < 0.2 | 2.73 | 8 | 110 | 0.5 | < 2 | 0.35 | 0.5 | 8 | 18 | 22 | 2.21 | < 10 | < 1 | 0.04 | < 10 | 0.30 | 700 |
| 000N 300K | 201 229 | < 5 | < 0.2 | 2.01 | 6 | 50 | < 0.5 | < 2 | 0.25 | < 0.5 | 6 | 12 | 11 | 2.00 | < 10 | < 1 | 0.03 | < 10 | 0.16 | 520 |
| 000N 325K | 201 229 | < 5 | < 0.2 | 2.38 | 8 | 80 | < 0.5 | < 2 | 0.40 | 0.5 | 9 | 18 | 20 | 2.74 | < 10 | < 1 | 0.05 | < 10 | 0.25 | 980 |
| 000N 350K | 201 229 | < 5 | < 0.2 | 2.86 | 8 | 70 | < 0.5 | < 2 | 0.29 | 0.5 | 11 | 17 | 16 | 2.94 | < 10 | < 1 | 0.03 | < 10 | 0.22 | 535 |
| 000N 375K | 201 229 | < 5 | < 0.2 | 2.35 | 8 | 60 | < 0.5 | < 2 | 0.39 | 0.5 | 7 | 11 | 13 | 2.14 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 235 |
| 000N 400K | 201 229 | < 5 | < 0.2 | 2.53 | 8 | 130 | < 0.5 | < 2 | 1.19 | 0.5 | 13 | 17 | 33 | 3.55 | < 10 | < 1 | 0.04 | < 10 | 0.30 | 1640 |
| 000N 425K | 201 229 | < 5 | < 0.2 | 2.79 | 8 | 70 | 0.5 | < 2 | 0.40 | < 0.5 | 11 | 11 | 13 | 2.45 | < 10 | < 1 | 0.02 | < 10 | 0.09 | 360 |
| 000N 450K | 201 229 | < 5 | < 0.2 | 3.24 | 6 | 160 | 0.5 | < 2 | 0.84 | 0.5 | 13 | 25 | 30 | 4.00 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 1770 |
| 000N 475K | 201 229 | < 5 | < 0.2 | 3.52 | 8 | 80 | 0.5 | < 2 | 0.37 | 0.5 | 12 | 12 | 23 | 3.18 | < 10 | < 1 | 0.05 | < 10 | 0.13 | 475 |
| 000N 500K | 201 229 | < 5 | < 0.2 | 2.43 | 6 | 80 | < 0.5 | < 2 | 0.14 | < 0.5 | 4 | 7 | 9 | 1.69 | < 10 | < 1 | 0.03 | < 10 | 0.09 | 890 |
| 000N 525K | 201 229 | < 5 | < 0.2 | 3.26 | 8 | 100 | 0.5 | < 2 | 1.21 | 0.5 | 20 | 7 | 19 | 3.30 | < 10 | < 1 | 0.03 | < 10 | 0.30 | 470 |
| 000N 550K | 201 229 | < 5 | < 0.2 | 2.64 | 6 | 80 | < 0.5 | < 2 | 0.30 | < 0.5 | 8 | 7 | 6 | 2.11 | < 10 | < 1 | 0.04 | < 10 | 0.10 | 600 |
| 000N 575K | 201 229 | < 5 | < 0.2 | 3.05 | 6 | 60 | 0.5 | < 2 | 0.09 | < 0.5 | 4 | 7 | 8 | 1.67 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 210 |
| 000N 600K | 201 229 | < 5 | < 0.2 | 2.97 | 8 | 80 | < 0.5 | < 2 | 0.11 | < 0.5 | 4 | 9 | 8 | 1.71 | < 10 | < 1 | 0.04 | < 10 | 0.18 | 425 |
| 000N 625K | 201 229 | < 5 | < 0.2 | 2.22 | < 2 | 50 | < 0.5 | < 2 | 0.07 | < 0.5 | 5 | 7 | 6 | 1.59 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 280 |
| 000N 650K | 201 229 | < 5 | < 0.2 | 2.39 | 4 | 60 | < 0.5 | < 2 | 0.13 | < 0.5 | 4 | 7 | 6 | 1.80 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 180 |
| 000N 675K | 201 229 | < 5 | < 0.2 | 3.70 | 6 | 70 | 0.5 | < 2 | 0.09 | < 0.5 | 4 | 9 | 10 | 1.82 | < 10 | < 1 | 0.03 | < 10 | 0.12 | 130 |
| 000N 700K | 201 229 | < 5 | < 0.2 | 4.07 | 6 | 50 | 0.5 | < 2 | 0.09 | < 0.5 | 5 | 8 | 5 | 1.97 | < 10 | < 1 | 0.02 | < 10 | 0.08 | 225 |
| 000N 725K | 201 229 | < 5 | < 0.2 | 1.96 | 6 | 100 | < 0.5 | < 2 | 0.13 | < 0.5 | 5 | 11 | 9 | 1.68 | < 10 | < 1 | 0.03 | < 10 | 0.17 | 120 |
| 000N 750K | 201 229 | < 5 | < 0.2 | 3.04 | 6 | 50 | 0.5 | < 2 | 0.06 | < 0.5 | 3 | 6 | 4 | 1.62 | < 10 | < 1 | 0.02 | < 10 | 0.06 | 210 |
| 000N 775K | 201 229 | < 5 | < 0.2 | 2.56 | 8 | 80 | < 0.5 | < 2 | 0.21 | < 0.5 | 4 | 9 | 10 | 1.80 | < 10 | < 1 | 0.03 | < 10 | 0.14 | 300 |
| 000N 800K | 201 229 | < 5 | < 0.2 | 2.42 | 6 | 60 | < 0.5 | < 2 | 0.15 | < 0.5 | 4 | 10 | 8 | 1.60 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 245 |
| 000N 825K | 201 229 | < 5 | < 0.2 | 1.78 | 8 | 110 | < 0.5 | < 2 | 0.33 | < 0.5 | 5 | 16 | 10 | 1.59 | < 10 | < 1 | 0.03 | < 10 | 0.24 | 140 |

CERTIFICATION:

Barbara



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Page Number : 2-B
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Certificate Date: 03-AUG-98
Invoice No. : 19826084
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9826084

| SAMPLE | PREP CODE | Mo ppm | Mn % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| 000N 000 | 201 229 | 7 | 0.01 | 16 | 660 | 14 | < 2 | 3 | 70 | 0.13 | < 10 | < 10 | 100 | < 10 | 456 |
| 000N 025K | 201 229 | 4 | < 0.01 | 31 | 420 | 16 | < 2 | 4 | 52 | 0.14 | < 10 | < 10 | 96 | < 10 | 640 |
| 000N 050K | 201 229 | 6 | 0.01 | 33 | 390 | 14 | < 2 | 3 | 45 | 0.15 | < 10 | < 10 | 71 | < 10 | 510 |
| 000N 075K | 201 229 | 11 | < 0.01 | 59 | 540 | 22 | < 2 | 6 | 130 | 0.12 | < 10 | < 10 | 161 | < 10 | 1860 |
| 000N 100K | 201 229 | 2 | 0.03 | 65 | 930 | 12 | < 2 | 5 | 343 | 0.09 | < 10 | < 10 | 58 | < 10 | 268 |
| 000N 125K | 201 229 | 2 | 0.01 | 110 | 1260 | 20 | < 2 | 4 | 821 | 0.06 | < 10 | < 10 | 48 | < 10 | 356 |
| 000N 150K | 201 229 | 2 | 0.04 | 101 | 1160 | 18 | < 2 | 4 | 977 | 0.07 | < 10 | < 10 | 55 | < 10 | 334 |
| 000N 175K | 201 229 | 2 | 0.05 | 65 | 1400 | 14 | < 2 | 4 | 301 | 0.07 | < 10 | < 10 | 56 | < 10 | 238 |
| 000N 200K | 201 229 | 2 | 0.02 | 72 | 1520 | 14 | < 2 | 5 | 210 | 0.08 | < 10 | < 10 | 55 | < 10 | 242 |
| 000N 225K | 201 229 | 2 | 0.03 | 68 | 1310 | 14 | < 2 | 5 | 209 | 0.08 | < 10 | < 10 | 54 | < 10 | 278 |
| 000N 250K | 201 229 | 2 | 0.03 | 32 | 710 | 10 | < 2 | 4 | 110 | 0.08 | < 10 | < 10 | 47 | < 10 | 160 |
| 000N 275K | 201 229 | 1 | 0.01 | 23 | 1280 | 10 | < 2 | 3 | 56 | 0.09 | < 10 | < 10 | 35 | < 10 | 194 |
| 000N 300K | 201 229 | 1 | 0.02 | 17 | 1510 | 8 | < 2 | 1 | 41 | 0.08 | < 10 | < 10 | 36 | < 10 | 150 |
| 000N 325K | 201 229 | 1 | 0.02 | 32 | 1850 | 10 | < 2 | 3 | 77 | 0.08 | < 10 | < 10 | 42 | < 10 | 254 |
| 000N 350K | 201 229 | 1 | 0.02 | 20 | 870 | 8 | < 2 | 3 | 108 | 0.11 | < 10 | < 10 | 49 | < 10 | 174 |
| 000N 375K | 201 229 | 1 | 0.03 | 20 | 500 | 6 | < 2 | 1 | 78 | 0.10 | < 10 | < 10 | 38 | < 10 | 130 |
| 000N 400K | 201 229 | 2 | 0.03 | 45 | 720 | 10 | < 2 | 3 | 383 | 0.09 | < 10 | < 10 | 44 | < 10 | 126 |
| 000N 425K | 201 229 | 1 | 0.03 | 34 | 650 | 10 | < 2 | 1 | 146 | 0.11 | < 10 | < 10 | 38 | < 10 | 126 |
| 000N 450K | 201 229 | 2 | 0.03 | 60 | 800 | 12 | < 2 | 4 | 416 | 0.12 | < 10 | < 10 | 61 | < 10 | 172 |
| 000N 475K | 201 229 | 2 | 0.01 | 54 | 980 | 12 | < 2 | 1 | 111 | 0.11 | < 10 | < 10 | 38 | < 10 | 218 |
| 000N 500K | 201 229 | 1 | 0.03 | 9 | 1290 | 8 | < 2 | 1 | 19 | 0.10 | < 10 | < 10 | 35 | < 10 | 78 |
| 000N 525K | 201 229 | 1 | 0.03 | 24 | 610 | 14 | < 2 | 4 | 214 | 0.11 | < 10 | < 10 | 30 | < 10 | 66 |
| 000N 550K | 201 229 | 1 | 0.03 | 17 | 440 | 12 | < 2 | 1 | 208 | 0.10 | < 10 | < 10 | 32 | < 10 | 10 |
| 000N 575K | 201 229 | 1 | 0.02 | 8 | 780 | 8 | < 2 | 1 | 12 | 0.12 | < 10 | < 10 | 34 | < 10 | 88 |
| 000N 600K | 201 229 | 1 | 0.01 | 8 | 640 | 8 | < 2 | 1 | 12 | 0.12 | < 10 | < 10 | 35 | < 10 | 86 |
| 000N 625K | 201 229 | 1 | 0.01 | 7 | 840 | 8 | < 2 | 1 | 9 | 0.11 | < 10 | < 10 | 32 | < 10 | 96 |
| 000N 650K | 201 229 | 1 | 0.02 | 5 | 650 | 6 | < 2 | 1 | 10 | 0.11 | < 10 | < 10 | 41 | < 10 | 62 |
| 000N 675K | 201 229 | 1 | 0.03 | 7 | 820 | 8 | < 2 | 2 | 12 | 0.12 | < 10 | < 10 | 35 | < 10 | 68 |
| 000N 700K | 201 229 | 1 | 0.02 | 5 | 1610 | 10 | < 2 | 2 | 8 | 0.11 | < 10 | < 10 | 36 | < 10 | 96 |
| 000N 725K | 201 229 | 1 | 0.02 | 10 | 330 | 8 | < 2 | 1 | 17 | 0.11 | < 10 | < 10 | 40 | < 10 | 88 |
| 000N 750K | 201 229 | 1 | 0.03 | 4 | 1090 | 8 | < 2 | 1 | 6 | 0.10 | < 10 | < 10 | 34 | < 10 | 66 |
| 000N 775K | 201 229 | 1 | 0.02 | 8 | 950 | 8 | < 2 | 1 | 22 | 0.11 | < 10 | < 10 | 35 | < 10 | 72 |
| 000N 800K | 201 229 | 1 | 0.02 | 7 | 1190 | 6 | < 2 | 1 | 15 | 0.10 | < 10 | < 10 | 36 | < 10 | 98 |
| 000N 825K | 201 229 | 1 | 0.01 | 10 | 280 | 8 | < 2 | 3 | 43 | 0.12 | < 10 | < 10 | 42 | < 10 | 76 |



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Certificate Date: 15-AUG-98
Invoice No. :19827423
P.O. Number :
Account :LOY

CERTIFICATE OF ANALYSIS A9827423

| SAMPLE | PREP CODE | Au ppb FA-AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|------------|-----------|-----------------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 300S 000K | 201 229 | < 5 | < 0.2 | 2.96 | < 2 | 100 | < 0.5 | < 2 | 0.32 | 0.5 | 6 | 16 | 13 | 2.00 | < 10 | < 1 | 0.06 | < 10 | 0.19 | 265 |
| 300S 025K | 201 229 | < 5 | < 0.2 | 2.69 | < 2 | 90 | < 0.5 | < 2 | 0.36 | < 0.5 | 7 | 18 | 17 | 2.08 | < 10 | < 1 | 0.05 | < 10 | 0.22 | 260 |
| 300S 050K | 201 229 | < 5 | < 0.2 | 2.49 | < 2 | 70 | < 0.5 | < 2 | 0.26 | < 0.5 | 5 | 11 | 7 | 1.76 | < 10 | < 1 | 0.03 | < 10 | 0.12 | 335 |
| 300S 075K | 201 229 | < 5 | < 0.2 | 3.13 | < 2 | 110 | < 0.5 | < 2 | 0.34 | < 0.5 | 9 | 24 | 24 | 2.76 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 315 |
| 300S 100K | 201 229 | < 5 | < 0.2 | 2.52 | < 2 | 90 | < 0.5 | < 2 | 0.35 | < 0.5 | 7 | 15 | 11 | 1.85 | < 10 | < 1 | 0.05 | < 10 | 0.19 | 480 |
| 300S 125K | 201 229 | < 5 | < 0.2 | 2.96 | < 2 | 150 | < 0.5 | < 2 | 0.40 | < 0.5 | 9 | 21 | 18 | 2.28 | < 10 | < 1 | 0.04 | < 10 | 0.34 | 455 |
| 300S 150K | 201 229 | < 5 | < 0.2 | 2.30 | < 2 | 70 | < 0.5 | < 2 | 0.35 | < 0.5 | 7 | 19 | 14 | 2.32 | < 10 | < 1 | 0.04 | < 10 | 0.30 | 630 |
| 300S 175K | 201 229 | < 5 | < 0.2 | 3.21 | < 2 | 70 | < 0.5 | < 2 | 0.33 | < 0.5 | 12 | 15 | 19 | 2.61 | < 10 | < 1 | 0.03 | < 10 | 0.18 | 795 |
| 300S 200K | 201 229 | < 5 | < 0.2 | 2.72 | < 2 | 80 | < 0.5 | < 2 | 0.34 | < 0.5 | 9 | 17 | 17 | 2.62 | < 10 | < 1 | 0.03 | < 10 | 0.27 | 605 |
| 300S 225K | 201 229 | < 5 | < 0.2 | 2.63 | < 2 | 80 | < 0.5 | < 2 | 0.18 | < 0.5 | 8 | 14 | 10 | 2.20 | < 10 | < 1 | 0.03 | < 10 | 0.21 | 500 |
| 300S 250K | 201 229 | < 5 | < 0.2 | 3.20 | < 2 | 100 | < 0.5 | < 2 | 0.27 | < 0.5 | 9 | 24 | 17 | 2.52 | < 10 | < 1 | 0.04 | < 10 | 0.27 | 395 |
| 300S 275K | 201 229 | < 5 | < 0.2 | 2.73 | < 2 | 80 | < 0.5 | < 2 | 0.49 | < 0.5 | 9 | 25 | 23 | 2.65 | < 10 | < 1 | 0.02 | < 10 | 0.45 | 380 |
| 300S 300K | 201 229 | < 5 | < 0.2 | 2.28 | < 2 | 80 | < 0.5 | < 2 | 0.31 | 0.5 | 7 | 18 | 15 | 2.09 | < 10 | < 1 | 0.03 | < 10 | 0.26 | 260 |
| 300S 325K | 201 229 | < 5 | < 0.2 | 2.58 | < 2 | 70 | < 0.5 | < 2 | 0.19 | < 0.5 | 6 | 16 | 9 | 2.27 | < 10 | < 1 | 0.03 | < 10 | 0.27 | 120 |
| 300S 350K | 201 229 | < 5 | < 0.2 | 3.04 | < 2 | 50 | < 0.5 | < 2 | 0.26 | < 0.5 | 7 | 17 | 9 | 2.46 | < 10 | < 1 | 0.03 | < 10 | 0.25 | 255 |
| 300S 375K | 201 229 | < 5 | < 0.2 | 3.50 | < 2 | 70 | < 0.5 | < 2 | 0.38 | 0.5 | 7 | 16 | 14 | 2.21 | < 10 | < 1 | 0.03 | < 10 | 0.82 | 410 |
| 300S 400K | 201 229 | < 5 | < 0.2 | 2.85 | < 2 | 80 | < 0.5 | < 2 | 0.28 | < 0.5 | 8 | 19 | 19 | 2.39 | < 10 | < 1 | 0.03 | < 10 | 0.39 | 480 |
| 300S 425K | 201 229 | < 5 | < 0.2 | 2.43 | < 2 | 80 | < 0.5 | < 2 | 0.24 | < 0.5 | 7 | 18 | 10 | 1.98 | < 10 | < 1 | 0.04 | < 10 | 0.22 | 635 |
| 300S 450K | 201 229 | < 5 | < 0.2 | 2.74 | < 2 | 90 | < 0.5 | < 2 | 0.37 | < 0.5 | 8 | 18 | 19 | 2.36 | < 10 | < 1 | 0.04 | < 10 | 0.18 | 505 |
| 300S 475K | 201 229 | < 5 | < 0.2 | 3.05 | < 2 | 70 | < 0.5 | < 2 | 0.22 | < 0.5 | 8 | 14 | 10 | 2.15 | < 10 | < 1 | 0.03 | < 10 | 0.22 | 230 |
| 300S 500K | 201 229 | < 5 | < 0.2 | 3.66 | < 2 | 120 | < 0.5 | < 2 | 0.63 | < 0.5 | 10 | 28 | 21 | 2.72 | < 10 | < 1 | 0.05 | < 10 | 0.33 | 195 |
| 300S 525K | 201 229 | < 5 | < 0.2 | 3.20 | < 2 | 50 | < 0.5 | < 2 | 0.21 | < 0.5 | 7 | 12 | 8 | 2.15 | < 10 | < 1 | 0.04 | < 10 | 0.13 | 465 |
| 300S 575K | 201 229 | < 5 | < 0.2 | 3.79 | < 2 | 130 | < 0.5 | < 2 | 1.02 | 0.5 | 19 | 16 | 41 | 4.12 | < 10 | < 1 | 0.05 | < 10 | 0.60 | 675 |
| 300S 900K | 201 229 | < 5 | < 0.2 | 1.84 | < 2 | 60 | < 0.5 | < 2 | 0.35 | 0.5 | 5 | 8 | 12 | 1.71 | < 10 | < 1 | 0.03 | < 10 | 0.12 | 110 |
| 300S 925K | 201 229 | < 5 | < 0.2 | 2.64 | < 2 | 100 | < 0.5 | < 2 | 2.66 | 3.5 | 11 | 15 | 25 | 2.80 | < 10 | < 1 | 0.12 | < 10 | 1.38 | 885 |
| 300S 950K | 201 229 | < 5 | < 0.2 | 2.16 | < 2 | 160 | < 0.5 | < 2 | 0.40 | 0.5 | 7 | 10 | 13 | 1.88 | < 10 | < 1 | 0.04 | < 10 | 0.29 | 1015 |
| 300S 975K | 201 229 | < 5 | < 0.2 | 2.06 | < 2 | 130 | < 0.5 | < 2 | 0.45 | 0.5 | 6 | 14 | 13 | 1.92 | < 10 | < 1 | 0.07 | < 10 | 0.57 | 380 |
| 300S 1000K | 201 229 | < 5 | < 0.2 | 1.83 | < 2 | 110 | < 0.5 | < 2 | 0.14 | < 0.5 | 6 | 10 | 7 | 1.57 | < 10 | < 1 | 0.03 | < 10 | 0.15 | 415 |
| 300S 1025K | 201 229 | < 5 | < 0.2 | 2.19 | < 2 | 50 | < 0.5 | < 2 | 0.18 | < 0.5 | 6 | 8 | 5 | 1.76 | < 10 | < 1 | 0.03 | < 10 | 0.18 | 105 |
| 300S 1050K | 201 229 | < 5 | < 0.2 | 1.57 | < 2 | 80 | < 0.5 | < 2 | 0.45 | < 0.5 | 6 | 9 | 7 | 1.26 | < 10 | < 1 | 0.03 | < 10 | 0.11 | 150 |
| 300S 1075K | 201 229 | < 5 | < 0.2 | 2.66 | < 2 | 70 | < 0.5 | < 2 | 0.18 | 0.5 | 7 | 17 | 10 | 2.03 | < 10 | < 1 | 0.03 | < 10 | 0.20 | 140 |
| 300S 1100K | 201 229 | < 5 | < 0.2 | 2.36 | < 2 | 70 | < 0.5 | < 2 | 0.22 | < 0.5 | 5 | 9 | 7 | 1.68 | < 10 | < 1 | 0.06 | < 10 | 0.12 | 230 |
| 300S 1125K | 201 229 | < 5 | < 0.2 | 2.48 | < 2 | 40 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 8 | 6 | 1.75 | < 10 | < 1 | 0.05 | < 10 | 0.12 | 465 |
| 300S 1150K | 201 229 | < 5 | < 0.2 | 1.96 | < 2 | 30 | < 0.5 | < 2 | 0.06 | < 0.5 | 3 | 5 | 6 | 1.27 | < 10 | < 1 | 0.03 | < 10 | 0.17 | 100 |
| 300S 1175K | 201 229 | < 5 | < 0.2 | 2.37 | < 2 | 60 | < 0.5 | < 2 | 0.15 | < 0.5 | 6 | 10 | 9 | 1.64 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 100 |
| 300S 1200K | 201 229 | < 5 | < 0.2 | 1.37 | < 2 | 50 | < 0.5 | < 2 | 0.15 | < 0.5 | 4 | 7 | 4 | 1.59 | < 10 | < 1 | 0.03 | < 10 | 0.11 | 810 |
| 300S 1225K | 201 229 | < 5 | < 0.2 | 1.26 | < 2 | 140 | < 0.5 | < 2 | 0.22 | < 0.5 | 5 | 12 | 10 | 2.46 | < 10 | < 1 | 0.04 | < 10 | 0.13 | 445 |
| 300S 1250K | 201 229 | < 5 | < 0.2 | 3.85 | < 2 | 60 | < 0.5 | < 2 | 0.06 | < 0.5 | 5 | 6 | 4 | 1.92 | < 10 | < 1 | 0.03 | < 10 | 0.06 | 690 |
| 300S 200K | 201 229 | < 5 | < 0.2 | 2.34 | < 2 | 80 | < 0.5 | < 2 | 0.30 | < 0.5 | 7 | 17 | 17 | 2.19 | < 10 | < 1 | 0.03 | < 10 | 0.29 | 545 |
| 300S 225K | 201 229 | < 5 | < 0.2 | 2.12 | < 2 | 60 | < 0.5 | < 2 | 0.25 | < 0.5 | 7 | 14 | 13 | 1.82 | < 10 | < 1 | 0.04 | < 10 | 0.22 | 360 |

CERTIFICATION:

Walt Biddle



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Page Number :1-B
Total Pages :2
Certificate Date: 15-AUG-98
Invoice No. :19827423
P.O. Number :
Account :LOY

CERTIFICATE OF ANALYSIS A9827423

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|------------|-----------|--------|------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 300S 000K | 201 229 | 1 | 0.02 | 15 | 1080 | 10 | < 2 | 3 | 53 | 0.11 | < 10 | < 10 | 43 | < 10 | 126 |
| 300S 025K | 201 229 | 2 | 0.01 | 18 | 960 | 8 | < 2 | 3 | 61 | 0.11 | < 10 | < 10 | 51 | < 10 | 108 |
| 300S 050K | 201 229 | 1 | 0.02 | 12 | 920 | 8 | < 2 | 1 | 42 | 0.10 | < 10 | < 10 | 40 | < 10 | 118 |
| 300S 075K | 201 229 | < 1 | 0.03 | 29 | 400 | 8 | < 2 | 4 | 104 | 0.14 | < 10 | < 10 | 61 | < 10 | 114 |
| 300S 100K | 201 229 | 1 | 0.02 | 16 | 1270 | 8 | < 2 | 3 | 56 | 0.10 | < 10 | < 10 | 40 | < 10 | 128 |
| 300S 125K | 201 229 | 1 | 0.03 | 22 | 750 | 8 | < 2 | 4 | 91 | 0.12 | < 10 | < 10 | 50 | < 10 | 126 |
| 300S 150K | 201 229 | < 1 | 0.02 | 17 | 1050 | 8 | < 2 | 3 | 72 | 0.11 | < 10 | < 10 | 50 | < 10 | 104 |
| 300S 175K | 201 229 | 1 | 0.03 | 28 | 880 | 8 | < 2 | 3 | 86 | 0.11 | < 10 | < 10 | 45 | < 10 | 124 |
| 300S 200K | 201 229 | 1 | 0.02 | 25 | 930 | 8 | < 2 | 3 | 69 | 0.11 | < 10 | < 10 | 47 | < 10 | 112 |
| 300S 225K | 201 229 | < 1 | 0.01 | 14 | 820 | 10 | < 2 | 2 | 33 | 0.11 | < 10 | < 10 | 45 | < 10 | 94 |
| 300S 250K | 201 229 | < 1 | 0.02 | 21 | 970 | 10 | < 2 | 3 | 60 | 0.12 | < 10 | < 10 | 49 | < 10 | 94 |
| 300S 275K | 201 229 | 1 | 0.03 | 26 | 630 | 8 | < 2 | 4 | 109 | 0.13 | < 10 | < 10 | 58 | < 10 | 120 |
| 300S 300K | 201 229 | 1 | 0.02 | 19 | 480 | 8 | < 2 | 3 | 58 | 0.11 | < 10 | < 10 | 48 | < 10 | 110 |
| 300S 325K | 201 229 | 2 | 0.01 | 14 | 650 | 8 | < 2 | 2 | 24 | 0.13 | < 10 | < 10 | 87 | < 10 | 108 |
| 300S 350K | 201 229 | 1 | 0.02 | 19 | 790 | 10 | < 2 | 1 | 92 | 0.11 | < 10 | < 10 | 49 | < 10 | 186 |
| 300S 375K | 201 229 | < 1 | 0.04 | 15 | 990 | 6 | < 2 | 3 | 82 | 0.13 | < 10 | < 10 | 43 | < 10 | 124 |
| 300S 400K | 201 229 | 1 | 0.03 | 25 | 1000 | 8 | < 2 | 3 | 70 | 0.12 | < 10 | < 10 | 51 | < 10 | 124 |
| 300S 425K | 201 229 | < 1 | 0.02 | 16 | 1040 | 8 | < 2 | 2 | 50 | 0.11 | < 10 | < 10 | 44 | < 10 | 122 |
| 300S 450K | 201 229 | 1 | 0.03 | 21 | 690 | 8 | < 2 | 4 | 132 | 0.12 | < 10 | < 10 | 50 | < 10 | 116 |
| 300S 475K | 201 229 | 1 | 0.03 | 18 | 590 | 8 | < 2 | 2 | 43 | 0.12 | < 10 | < 10 | 49 | < 10 | 128 |
| 300S 500K | 201 229 | 1 | 0.01 | 34 | 250 | 8 | < 2 | 4 | 180 | 0.15 | < 10 | < 10 | 71 | < 10 | 100 |
| 300S 525K | 201 229 | < 1 | 0.03 | 13 | 890 | 4 | < 2 | 1 | 36 | 0.11 | < 10 | < 10 | 46 | < 10 | 116 |
| 300S 575K | 201 229 | 1 | 0.03 | 26 | 1200 | 12 | < 2 | 8 | 175 | 0.12 | < 10 | < 10 | 74 | < 10 | 160 |
| 300S 900K | 201 229 | < 1 | 0.03 | 10 | 350 | 6 | < 2 | 1 | 39 | 0.08 | < 10 | < 10 | 36 | < 10 | 130 |
| 300S 925K | 201 229 | < 1 | 0.01 | 11 | 1390 | 24 | < 2 | 5 | 236 | 0.01 | < 10 | < 10 | 34 | < 10 | 196 |
| 300S 950K | 201 229 | < 1 | 0.02 | 13 | 1000 | 8 | < 2 | 3 | 68 | 0.06 | < 10 | < 10 | 37 | < 10 | 164 |
| 300S 975K | 201 229 | 1 | 0.01 | 14 | 350 | 10 | < 2 | 3 | 60 | 0.09 | < 10 | < 10 | 43 | < 10 | 128 |
| 300S 1000K | 201 229 | 1 | 0.02 | 8 | 490 | 6 | < 2 | 1 | 16 | 0.10 | < 10 | < 10 | 37 | < 10 | 102 |
| 300S 1025K | 201 229 | 1 | 0.01 | 11 | 530 | 8 | < 2 | 1 | 17 | 0.10 | < 10 | < 10 | 42 | < 10 | 120 |
| 300S 1050K | 201 229 | 1 | 0.01 | 15 | 660 | 6 | < 2 | 1 | 25 | 0.07 | < 10 | < 10 | 26 | < 10 | 92 |
| 300S 1075K | 201 229 | 1 | 0.01 | 19 | 300 | 8 | < 2 | 2 | 27 | 0.11 | < 10 | < 10 | 57 | < 10 | 142 |
| 300S 1100K | 201 229 | 1 | 0.02 | 9 | 1040 | 4 | < 2 | 1 | 17 | 0.10 | < 10 | < 10 | 38 | < 10 | 126 |
| 300S 1125K | 201 229 | < 1 | 0.02 | 7 | 1060 | 6 | < 2 | 1 | 12 | 0.09 | < 10 | < 10 | 38 | < 10 | 116 |
| 300S 1150K | 201 229 | 1 | 0.02 | 3 | 790 | 6 | < 2 | 1 | 5 | 0.08 | < 10 | < 10 | 31 | < 10 | 58 |
| 300S 1175K | 201 229 | < 1 | 0.01 | 11 | 490 | 2 | < 2 | 1 | 18 | 0.09 | < 10 | < 10 | 26 | < 10 | 92 |
| 300S 1200K | 201 229 | 1 | 0.01 | 5 | 830 | 6 | < 2 | 1 | 12 | 0.09 | < 10 | < 10 | 43 | < 10 | 84 |
| 300S 1225K | 201 229 | 2 | 0.02 | 10 | 290 | 8 | < 2 | 2 | 38 | 0.08 | < 10 | < 10 | 48 | < 10 | 100 |
| 300S 1250K | 201 229 | 1 | 0.01 | 4 | 1020 | 6 | < 2 | 2 | 6 | 0.10 | < 10 | < 10 | 33 | < 10 | 70 |
| 300S 200K | 201 229 | < 1 | 0.01 | 17 | 950 | 6 | < 2 | 3 | 52 | 0.09 | < 10 | < 10 | 44 | < 10 | 88 |
| 300S 225K | 201 229 | < 1 | 0.01 | 14 | 910 | 12 | < 2 | 2 | 40 | 0.08 | < 10 | < 10 | 38 | < 10 | 80 |



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Account :LOY

CERTIFICATE OF ANALYSIS A9827423

| SAMPLE | PREP CODE | As ppb FA-AA | Ag ppm | Al % | Ar ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|-----------|-----------|--------------------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|--------|-----------|---------|-----------|
| 400S 250E | 201 229 | < 5 | < 0.2 | 2.92 | < 2 | 80 | 0.5 | < 2 | 0.20 | < 0.5 | 7 | 17 | 11 | 2.12 | < 10 | < 1 | 0.02 | < 10 | 0.31 | 235 |
| 400S 275E | 201 229 | < 5 | < 0.2 | 2.34 | 8 | 80 | < 0.5 | < 2 | 0.18 | 0.5 | 6 | 14 | 11 | 1.87 | < 10 | 3 | 0.03 | < 10 | 0.20 | 320 |
| 400S 300E | 201 229 | < 5 | < 0.2 | 2.94 | 12 | 100 | < 0.5 | < 2 | 0.29 | 0.5 | 7 | 18 | 10 | 1.87 | < 10 | < 1 | 0.03 | < 10 | 0.21 | 450 |
| 400S 325E | 201 229 | < 5 | < 0.2 | 2.49 | < 2 | 80 | < 0.5 | < 2 | 0.21 | 0.5 | 7 | 16 | 9 | 1.90 | < 10 | < 1 | 0.03 | < 10 | 0.22 | 460 |
| 400S 350E | 201 229 | < 5 | 0.2 | 2.65 | < 2 | 40 | < 0.5 | < 2 | 0.11 | < 0.5 | 5 | 9 | 5 | 1.70 | < 10 | < 1 | 0.03 | < 10 | 0.10 | 245 |
| 400S 375E | 201 229 | < 5 | 0.2 | 3.28 | < 2 | 80 | 0.5 | < 2 | 0.20 | 0.5 | 6 | 13 | 18 | 1.89 | < 10 | < 1 | 0.04 | < 10 | 0.18 | 220 |
| 400S 400E | 201 229 | < 5 | < 0.2 | 1.93 | < 2 | 40 | < 0.5 | < 2 | 0.11 | < 0.5 | 4 | 9 | 5 | 1.57 | < 10 | < 1 | 0.02 | < 10 | 0.10 | 125 |
| 400S 425E | 201 229 | < 5 | < 0.2 | 1.24 | < 2 | 60 | < 0.5 | < 2 | 0.33 | < 0.5 | 3 | 13 | 10 | 1.32 | < 10 | < 1 | 0.03 | < 10 | 0.18 | 145 |
| 400S 450E | 201 229 | < 5 | 0.2 | 2.34 | < 2 | 80 | < 0.5 | < 2 | 0.16 | < 0.5 | 6 | 12 | 9 | 1.73 | < 10 | < 1 | 0.04 | < 10 | 0.16 | 320 |
| 400S 475E | 201 229 | 10 | 0.6 | 2.45 | < 2 | 40 | < 0.5 | < 2 | 0.18 | 0.5 | 8 | 14 | 16 | 2.23 | < 10 | < 1 | 0.03 | < 10 | 0.15 | 235 |
| 400S 500E | 201 229 | 10 | 0.2 | 2.61 | 10 | 100 | 0.5 | < 2 | 0.16 | < 0.5 | 12 | 29 | 27 | 2.91 | < 10 | < 1 | 0.03 | < 10 | 0.34 | 250 |
| 400S 525E | 201 229 | 15 | < 0.2 | 2.04 | < 2 | 80 | < 0.5 | < 2 | 0.21 | < 0.5 | 6 | 18 | 14 | 1.93 | < 10 | < 1 | 0.03 | < 10 | 0.23 | 215 |
| 725S 400E | 201 229 | < 5 | < 0.2 | 3.35 | 6 | 80 | 0.5 | < 2 | 0.14 | < 0.5 | 8 | 11 | 11 | 1.77 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 180 |
| 725S 425E | 201 229 | 15 | < 0.2 | 2.03 | 24 | 70 | < 0.5 | < 2 | 0.10 | < 0.5 | 8 | 14 | 15 | 2.88 | < 10 | < 1 | 0.04 | < 10 | 0.24 | 545 |
| 725S 450E | 201 229 | < 5 | < 0.2 | 2.11 | 2 | 60 | < 0.5 | < 2 | 0.18 | < 0.5 | 14 | 9 | 12 | 2.25 | < 10 | < 1 | 0.03 | < 10 | 0.15 | 720 |
| 725S 475E | 201 229 | < 5 | < 0.2 | 2.30 | < 2 | 170 | < 0.5 | < 2 | 0.29 | < 0.5 | 7 | 15 | 17 | 2.19 | < 10 | < 1 | 0.06 | < 10 | 0.29 | 290 |
| 725S 500E | 201 229 | 5 | < 0.2 | 2.12 | < 2 | 70 | < 0.5 | < 2 | 0.22 | < 0.5 | 7 | 9 | 8 | 2.17 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 505 |
| 725S 525E | 201 229 | < 5 | 0.2 | 1.31 | < 2 | 60 | < 0.5 | < 2 | 0.24 | < 0.5 | 7 | 8 | 6 | 1.76 | < 10 | < 1 | 0.05 | < 10 | 0.10 | 1375 |
| 750S 400E | 201 229 | < 5 | 0.2 | 2.96 | < 2 | 130 | < 0.5 | < 2 | 0.36 | < 0.5 | 10 | 28 | 16 | 2.45 | < 10 | < 1 | 0.05 | < 10 | 0.53 | 595 |
| 750S 425E | 201 229 | 5 | 0.2 | 2.51 | < 2 | 100 | < 0.5 | < 2 | 0.29 | < 0.5 | 6 | 10 | 13 | 1.72 | < 10 | < 1 | 0.05 | < 10 | 0.22 | 555 |
| 750S 450E | 201 229 | 5 | < 0.2 | 2.45 | < 2 | 100 | < 0.5 | < 2 | 0.27 | 0.5 | 6 | 10 | 11 | 1.87 | < 10 | < 1 | 0.05 | < 10 | 0.20 | 650 |
| 750S 475E | 201 229 | < 5 | < 0.2 | 2.17 | < 2 | 60 | < 0.5 | < 2 | 0.19 | < 0.5 | 6 | 9 | 6 | 1.73 | < 10 | < 1 | 0.04 | < 10 | 0.14 | 750 |
| 750S 500E | 201 229 | 5 | < 0.2 | 2.86 | < 2 | 90 | 0.5 | < 2 | 0.19 | < 0.5 | 12 | 17 | 18 | 2.41 | < 10 | < 1 | 0.03 | < 10 | 0.29 | 390 |
| 750S 525E | 201 229 | < 5 | < 0.2 | 2.16 | 4 | 90 | < 0.5 | < 2 | 0.25 | < 0.5 | 9 | 12 | 15 | 2.34 | < 10 | < 1 | 0.06 | < 10 | 0.23 | 860 |
| 750S 550E | 201 229 | 5 | < 0.2 | 2.83 | < 2 | 80 | 0.5 | < 2 | 0.19 | < 0.5 | 7 | 11 | 11 | 2.10 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 410 |
| 750S 575E | 201 229 | 10 | < 0.2 | 2.57 | < 2 | 90 | < 0.5 | < 2 | 0.29 | < 0.5 | 14 | 29 | 21 | 2.99 | < 10 | < 1 | 0.05 | < 10 | 0.50 | 345 |
| 775S 400E | 201 229 | 5 | < 0.2 | 2.28 | < 2 | 80 | < 0.5 | < 2 | 0.13 | < 0.5 | 5 | 8 | 10 | 1.44 | < 10 | < 1 | 0.04 | < 10 | 0.14 | 195 |
| 775S 425E | 201 229 | 10 | < 0.2 | 2.82 | < 2 | 70 | < 0.5 | < 2 | 0.20 | 0.5 | 7 | 12 | 12 | 1.90 | < 10 | < 1 | 0.04 | < 10 | 0.21 | 345 |
| 775S 450E | 201 229 | 10 | < 0.2 | 2.91 | < 2 | 210 | < 0.5 | < 2 | 0.34 | < 0.5 | 5 | 8 | 12 | 1.69 | < 10 | < 1 | 0.05 | < 10 | 0.41 | 695 |
| 775S 475E | 201 229 | 5 | < 0.2 | 2.50 | < 2 | 40 | < 0.5 | < 2 | 0.15 | < 0.5 | 9 | 9 | 11 | 2.44 | < 10 | < 1 | 0.03 | < 10 | 0.15 | 680 |
| 775S 500E | 201 229 | < 5 | < 0.2 | 2.74 | < 2 | 90 | 0.5 | < 2 | 0.49 | 0.5 | 15 | 14 | 20 | 3.03 | < 10 | < 1 | 0.05 | < 10 | 0.23 | 1075 |
| 775S 525E | 201 229 | < 5 | < 0.2 | 2.98 | < 2 | 140 | 0.5 | < 2 | 0.98 | < 0.5 | 12 | 23 | 39 | 3.93 | < 10 | < 1 | 0.08 | < 10 | 0.37 | 940 |
| 775S 550E | 201 229 | < 5 | < 0.2 | 2.16 | < 2 | 110 | < 0.5 | < 2 | 0.24 | < 0.5 | 8 | 16 | 18 | 2.39 | < 10 | < 1 | 0.05 | < 10 | 0.30 | 235 |
| 775S 575E | 201 229 | < 5 | < 0.2 | 2.17 | 6 | 90 | < 0.5 | < 2 | 0.12 | < 0.5 | 6 | 9 | 6 | 1.87 | < 10 | < 1 | 0.03 | < 10 | 0.13 | 670 |

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| CENTRAL STATE OF ANALYSIS | | | | | | | | | | | | | | | | A5027423 | |
|---------------------------|-----------|-----|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|----------|--|
| SAMPLE | PREP CODE | | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Ti ppm | U ppm | V ppm | W ppm | Zn ppm | |
| 400S 250E | 201 | 229 | < 1 | 0.03 | 14 | 540 | 6 | < 2 | 3 | 36 | 0.12 | < 10 | < 10 | 47 | < 10 | 76 | |
| 400S 275E | 201 | 229 | < 1 | 0.02 | 16 | 820 | 8 | < 2 | 2 | 33 | 0.11 | < 10 | < 10 | 43 | < 10 | 116 | |
| 400S 300E | 201 | 229 | 2 | 0.03 | 18 | 470 | 4 | < 2 | 2 | 49 | 0.10 | < 10 | < 10 | 46 | < 10 | 142 | |
| 400S 325E | 201 | 229 | 1 | 0.02 | 17 | 900 | 6 | < 2 | 2 | 33 | 0.11 | < 10 | < 10 | 46 | < 10 | 156 | |
| 400S 350E | 201 | 229 | < 1 | 0.02 | 8 | 1490 | 8 | < 2 | 1 | 16 | 0.10 | < 10 | < 10 | 36 | < 10 | 106 | |
| 400S 375E | 201 | 229 | < 1 | 0.02 | 14 | 1220 | 8 | < 2 | 3 | 29 | 0.10 | < 10 | < 10 | 40 | < 10 | 168 | |
| 400S 400E | 201 | 229 | 1 | 0.01 | 7 | 980 | 6 | < 2 | 1 | 16 | 0.09 | < 10 | < 10 | 37 | < 10 | 92 | |
| 400S 425E | 201 | 229 | 1 | 0.01 | 7 | 120 | 6 | < 2 | 3 | 43 | 0.09 | < 10 | < 10 | 33 | < 10 | 46 | |
| 400S 450E | 201 | 229 | 1 | 0.01 | 12 | 770 | 4 | < 2 | 2 | 22 | 0.09 | < 10 | < 10 | 39 | < 10 | 102 | |
| 400S 475E | 201 | 229 | 1 | 0.02 | 20 | 860 | 8 | < 2 | 2 | 38 | 0.11 | < 10 | < 10 | 50 | < 10 | 164 | |
| 400S 500E | 201 | 229 | 1 | 0.01 | 30 | 910 | 10 | < 2 | 4 | 52 | 0.12 | < 10 | < 10 | 44 | < 10 | 136 | |
| 400S 525E | 201 | 229 | 1 | 0.01 | 16 | 480 | 6 | < 2 | 3 | 39 | 0.08 | < 10 | < 10 | 45 | < 10 | 94 | |
| 725S 400E | 201 | 229 | 1 | 0.01 | 10 | 590 | 10 | < 2 | 2 | 17 | 0.11 | < 10 | < 10 | 30 | < 10 | 74 | |
| 725S 425E | 201 | 229 | 1 | < 0.01 | 15 | 680 | 8 | < 2 | 3 | 14 | 0.10 | < 10 | < 10 | 61 | < 10 | 146 | |
| 725S 450E | 201 | 229 | 1 | 0.01 | 12 | 890 | 20 | < 2 | 2 | 14 | 0.11 | < 10 | < 10 | 55 | < 10 | 158 | |
| 725S 475E | 201 | 229 | 1 | 0.01 | 15 | 280 | 6 | < 2 | 4 | 41 | 0.12 | < 10 | < 10 | 47 | < 10 | 100 | |
| 725S 500E | 201 | 229 | 1 | 0.03 | 15 | 410 | 6 | < 2 | 1 | 26 | 0.11 | < 10 | < 10 | 42 | < 10 | 146 | |
| 725S 525E | 201 | 229 | < 1 | 0.03 | 12 | 410 | 12 | < 2 | 1 | 26 | 0.09 | < 10 | < 10 | 37 | < 10 | 130 | |
| 725S 550E | 201 | 229 | < 1 | 0.01 | 21 | 1290 | 10 | < 2 | 4 | 47 | 0.13 | < 10 | < 10 | 57 | < 10 | 168 | |
| 750S 400E | 201 | 229 | 1 | 0.01 | 13 | 620 | 20 | < 2 | 3 | 30 | 0.10 | < 10 | < 10 | 36 | < 10 | 132 | |
| 750S 425E | 201 | 229 | < 1 | 0.01 | 9 | 710 | 10 | < 2 | 2 | 24 | 0.11 | < 10 | < 10 | 43 | < 10 | 114 | |
| 750S 450E | 201 | 229 | < 1 | 0.01 | 10 | 750 | 8 | < 2 | 1 | 14 | 0.10 | < 10 | < 10 | 40 | < 10 | 110 | |
| 750S 475E | 201 | 229 | 1 | 0.01 | 26 | 410 | 10 | < 2 | 3 | 24 | 0.13 | < 10 | < 10 | 49 | < 10 | 114 | |
| 750S 500E | 201 | 229 | 1 | 0.02 | 16 | 570 | 6 | < 2 | 3 | 24 | 0.10 | < 10 | < 10 | 45 | < 10 | 134 | |
| 750S 525E | 201 | 229 | < 1 | 0.03 | 16 | 850 | 6 | < 2 | 2 | 23 | 0.10 | < 10 | < 10 | 36 | < 10 | 110 | |
| 750S 550E | 201 | 229 | 1 | 0.01 | 30 | 550 | 8 | < 2 | 4 | 70 | 0.14 | < 10 | < 10 | 47 | < 10 | 114 | |
| 775S 400E | 201 | 229 | < 1 | 0.02 | 8 | 830 | 4 | < 2 | 2 | 12 | 0.09 | < 10 | < 10 | 29 | < 10 | 82 | |
| 775S 425E | 201 | 229 | 1 | 0.01 | 11 | 930 | 12 | < 2 | 2 | 18 | 0.10 | < 10 | < 10 | 43 | < 10 | 122 | |
| 775S 450E | 201 | 229 | 1 | 0.01 | 9 | 450 | 8 | < 2 | 2 | 31 | 0.10 | < 10 | < 10 | 29 | < 10 | 98 | |
| 775S 475E | 201 | 229 | 1 | 0.01 | 11 | 630 | 6 | < 2 | 1 | 13 | 0.11 | < 10 | < 10 | 45 | < 10 | 184 | |
| 775S 500E | 201 | 229 | 1 | 0.02 | 27 | 730 | 8 | < 2 | 4 | 33 | 0.11 | < 10 | < 10 | 54 | < 10 | 198 | |
| 775S 525E | 201 | 229 | 1 | 0.03 | 45 | 590 | 14 | < 2 | 6 | 140 | 0.11 | < 10 | < 10 | 49 | < 10 | 148 | |
| 775S 550E | 201 | 229 | < 1 | 0.01 | 19 | 480 | 12 | < 2 | 3 | 38 | 0.09 | < 10 | < 10 | 45 | < 10 | 104 | |
| 775S 575E | 201 | 229 | 1 | 0.01 | 13 | 520 | 10 | < 2 | 1 | 25 | 0.09 | < 10 | < 10 | 38 | < 10 | 132 | |



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A9823855

CERTIFICATE

A9823855

Project: CAP
P.O. #: 23

Samples submitted to our lab in Vancouver, BC.
This report was printed on 14-JUL-98.

| SAMPLE PREPARATION | | |
|--------------------|----------------|---------------------------------|
| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION |
| 205 | 32 | Geochem ring to approx 150 mesh |
| 226 | 32 | 0-3 Kg crush and split |
| 3202 | 32 | Rock - save entire reject |
| 229 | 32 | ICP - AQ Digestion charge |
| NOTE 1. | | |

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|---------------------------------|---------|-----------------|-------------|
| 983 | 32 | Au ppb: Fuse 30 g sample | FA-AAS | 5 | 10000 |
| 2118 | 32 | Ag ppm: 32 element, soil & rock | ICP-AES | 0.2 | 100.0 |
| 2119 | 32 | Al %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2120 | 32 | As ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2121 | 32 | Ba ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2122 | 32 | Be ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| 2123 | 32 | Bi ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2124 | 32 | Ca %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2125 | 32 | Cd ppm: 32 element, soil & rock | ICP-AES | 0.5 | 500 |
| 2126 | 32 | Co ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2127 | 32 | Cr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2128 | 32 | Cu ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2150 | 32 | Fe %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2130 | 32 | Ga ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2131 | 32 | Hg ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2132 | 32 | K %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2151 | 32 | La ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2134 | 32 | Mg %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2135 | 32 | Mn ppm: 32 element, soil & rock | ICP-AES | 5 | 10000 |
| 2136 | 32 | Mo ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2137 | 32 | Na %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2138 | 32 | Ni ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2139 | 32 | P ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2140 | 32 | Pb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2141 | 32 | Sb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2142 | 32 | Sc ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2143 | 32 | Sr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2144 | 32 | Ti %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2145 | 32 | Tl ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2146 | 32 | U ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2147 | 32 | V ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2148 | 32 | W ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2149 | 32 | Zn ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |



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Page Number : 1-A
Total Pages : 1
Certificate Date: 14-JUL-98
Invoice No. : 19823855
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9823855

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|--------|-----------|-----------------|--------|------|--------|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 123079 | 205 226 | < 5 | 0.4 | 2.59 | 26 | 140 | < 0.5 | < 2 | 1.31 | < 0.5 | 17 | 63 | 34 | 3.49 | < 10 | < 1 | 0.40 | < 10 | 1.00 | 270 |
| 123080 | 205 226 | < 5 | 0.2 | 3.33 | < 2 | 230 | < 0.5 | < 2 | 2.09 | < 0.5 | 13 | 46 | 19 | 2.68 | < 10 | < 1 | 0.20 | < 10 | 0.45 | 205 |
| 123081 | 205 226 | < 5 | 0.6 | 2.76 | < 2 | 300 | < 0.5 | < 2 | 4.09 | < 0.5 | 8 | 50 | 44 | 2.17 | < 10 | < 1 | 0.34 | < 10 | 1.50 | 115 |
| 123082 | 205 226 | < 5 | 0.2 | 3.92 | < 2 | 120 | < 0.5 | < 2 | 5.14 | < 0.5 | 24 | 46 | 35 | 6.26 | < 10 | < 1 | 0.43 | < 10 | 0.66 | 490 |
| 123083 | 205 226 | < 5 | < 0.2 | 1.34 | 12 | 60 | < 0.5 | < 2 | 5.05 | < 0.5 | 16 | 30 | 24 | 3.83 | < 10 | < 1 | 0.11 | < 10 | 0.37 | 415 |
| 123084 | 205 226 | < 5 | < 0.2 | 2.19 | < 2 | 60 | < 0.5 | < 2 | 6.06 | < 0.5 | 9 | 49 | 25 | 2.28 | < 10 | < 1 | 0.09 | < 10 | 0.21 | 350 |
| 123085 | 205 226 | < 5 | 0.2 | 2.72 | < 2 | 50 | < 0.5 | < 2 | 12.85 | < 0.5 | 6 | 14 | 15 | 1.96 | < 10 | < 1 | 0.09 | < 10 | 0.21 | 500 |
| 123086 | 205 226 | < 5 | < 0.2 | 0.95 | < 2 | 80 | < 0.5 | < 2 | 2.85 | < 0.5 | 3 | 66 | 9 | 0.98 | < 10 | < 1 | 0.04 | < 10 | 0.39 | 205 |
| 123087 | 205 226 | < 5 | 0.2 | 1.73 | < 2 | 10 | < 0.5 | < 2 | 11.20 | 0.5 | 2 | 42 | 8 | 2.41 | < 10 | < 1 | 0.01 | < 10 | 0.71 | 3590 |
| 123088 | 205 226 | < 5 | 2.6 | 0.91 | < 2 | 20 | < 0.5 | < 2 | 7.35 | 53.5 | 5 | 21 | 205 | 4.39 | < 10 | < 1 | 0.02 | < 10 | 0.37 | 5970 |
| 123089 | 205 226 | < 5 | 4.0 | 0.62 | < 2 | 10 | < 0.5 | < 2 | 10.30 | 34.5 | 3 | 25 | 205 | 5.94 | < 10 | < 1 | 0.01 | < 10 | 0.39 | 6780 |
| 123090 | 205 226 | < 5 | 1.4 | 1.58 | < 2 | 70 | < 0.5 | < 2 | 5.49 | 33.5 | 1 | 18 | 49 | 3.48 | < 10 | < 1 | 0.03 | < 10 | 0.73 | 9230 |
| 123091 | 205 226 | < 5 | 0.6 | 2.83 | < 2 | 30 | 0.5 | < 2 | 7.20 | 116.0 | 9 | 33 | 12 | 5.40 | < 10 | < 1 | 0.04 | < 10 | 1.40 | >10000 |
| 123092 | 205 226 | < 5 | < 0.2 | 2.42 | < 2 | 10 | 0.5 | < 2 | 6.38 | < 0.5 | 1 | 19 | < 1 | 4.09 | < 10 | < 1 | 0.05 | < 10 | 1.83 | 9540 |
| 123093 | 205 226 | < 5 | 0.8 | 2.51 | < 2 | 30 | 0.5 | < 2 | 7.92 | 20.5 | 14 | 27 | 679 | 4.54 | < 10 | < 1 | 0.11 | < 10 | 0.97 | 7090 |
| 123094 | 205 226 | < 5 | 3.6 | 1.93 | < 2 | 10 | 0.5 | < 2 | 7.24 | 5.5 | 11 | 19 | 450 | 5.62 | < 10 | < 1 | 0.04 | < 10 | 1.07 | 7290 |
| 123095 | 205 226 | < 5 | < 0.2 | 1.49 | < 2 | 50 | < 0.5 | < 2 | 1.83 | 3.8 | < 1 | 68 | 7 | 1.87 | < 10 | < 1 | 0.19 | < 10 | 0.96 | 2550 |
| 123096 | 205 226 | < 5 | 0.6 | 2.30 | < 2 | 30 | < 0.5 | < 2 | 2.94 | 1.0 | 17 | 42 | 23 | 3.76 | < 10 | < 1 | 0.11 | < 10 | 0.58 | 265 |
| 123097 | 205 226 | < 5 | 0.2 | 2.80 | < 2 | 110 | < 0.5 | < 2 | 0.59 | < 0.5 | 16 | 71 | 102 | 3.73 | < 10 | < 1 | 0.66 | < 10 | 2.38 | 375 |
| 123098 | 205 226 | < 5 | < 0.2 | 1.42 | < 2 | 30 | < 0.5 | < 2 | 0.82 | < 0.5 | 17 | 14 | 33 | 6.98 | < 10 | < 1 | 0.07 | < 10 | 0.92 | 365 |
| 123099 | 205 226 | < 5 | 0.6 | 2.35 | < 2 | 20 | 0.5 | < 2 | 4.05 | 11.0 | 10 | 55 | 102 | 4.61 | < 10 | < 1 | 0.01 | < 10 | 0.51 | 1030 |
| 123100 | 205 226 | < 5 | 4.4 | 2.82 | < 2 | 40 | 0.5 | < 2 | 5.44 | 43.5 | 4 | 33 | 1 | 3.12 | < 10 | < 1 | 0.18 | < 10 | 1.03 | 4420 |
| 123101 | 205 226 | < 5 | 1.4 | 2.20 | < 2 | 10 | 0.5 | < 2 | 9.89 | 58.5 | 10 | 36 | 38 | 3.64 | < 10 | < 1 | 0.01 | < 10 | 0.96 | 5870 |
| 123102 | 205 226 | 10 | 1.2 | 2.00 | < 2 | 60 | < 0.5 | < 2 | 2.58 | 3.5 | 6 | 88 | 73 | 2.05 | < 10 | < 1 | 0.12 | < 10 | 0.28 | 135 |
| 123103 | 205 226 | 10 | 1.4 | 2.09 | < 2 | 120 | < 0.5 | < 2 | 2.88 | 15.5 | 9 | 103 | 96 | 2.25 | < 10 | < 1 | 0.10 | < 10 | 0.14 | 90 |
| 123104 | 205 226 | 10 | 0.8 | 2.32 | < 2 | 60 | < 0.5 | < 2 | 7.74 | 9.0 | 5 | 30 | 47 | 1.17 | < 10 | < 1 | 0.06 | < 10 | 0.66 | 255 |
| 123105 | 205 226 | 10 | 1.4 | 1.22 | < 2 | 30 | < 0.5 | < 2 | 9.16 | 16.0 | 10 | 50 | 106 | 1.99 | < 10 | < 1 | 0.03 | < 10 | 0.03 | 205 |
| 123106 | 205 226 | 10 | 1.2 | 2.33 | < 2 | 60 | < 0.5 | < 2 | 3.84 | 4.5 | 9 | 125 | 60 | 2.59 | < 10 | < 1 | 0.13 | < 10 | 0.20 | 80 |
| 123107 | 205 226 | < 5 | 0.8 | 1.78 | < 2 | 90 | < 0.5 | < 2 | 5.87 | 1.0 | 10 | 96 | 81 | 1.81 | < 10 | < 1 | 0.26 | < 10 | 0.47 | 115 |
| 123108 | 205 226 | < 5 | 1.0 | 1.68 | < 2 | 90 | < 0.5 | < 2 | 1.94 | 0.5 | 14 | 154 | 80 | 3.92 | < 10 | < 1 | 0.13 | < 10 | 0.66 | 125 |
| 123109 | 205 226 | 70 | 1.8 | 1.76 | < 2 | 50 | < 0.5 | < 2 | 6.28 | 9.0 | 10 | 79 | 81 | 2.59 | < 10 | < 1 | 0.04 | < 10 | 0.12 | 260 |
| 123110 | 205 226 | 5 | 1.0 | 2.47 | < 2 | 110 | < 0.5 | < 2 | 6.44 | 11.5 | 7 | 72 | 63 | 1.75 | < 10 | < 1 | 0.06 | < 10 | 0.34 | 315 |

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Page Number : 1-B
Total Pages : 1
Certificate Date: 14-JUL-98
Invoice No. : 19823855
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9823855

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|--------|-----------|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|-------|-------|-------|--------|
| 123079 | 205 226 | 1 | 0.22 | 13 | 900 | < 2 | < 2 | 4 | 125 | 0.26 | < 10 | < 10 | 108 | < 10 | 52 |
| 123080 | 205 226 | < 1 | 0.30 | 12 | 950 | < 2 | < 2 | 1 | 191 | 0.23 | < 10 | < 10 | 56 | < 10 | 64 |
| 123081 | 205 226 | 3 | 0.19 | 30 | 630 | < 2 | < 2 | 1 | 981 | 0.15 | < 10 | < 10 | 27 | < 10 | 28 |
| 123082 | 205 226 | 4 | 0.10 | 23 | 1010 | 6 | 2 | 7 | 351 | 0.31 | < 10 | < 10 | 117 | < 10 | 143 |
| 123083 | 205 226 | 1 | 0.07 | 8 | 760 | < 2 | < 2 | 7 | 257 | 0.21 | < 10 | < 10 | 101 | < 10 | 56 |
| 123084 | 205 226 | < 1 | 0.12 | 9 | 1000 | < 2 | < 2 | 2 | 180 | 0.12 | < 10 | < 10 | 30 | < 10 | 40 |
| 123085 | 205 226 | < 1 | 0.27 | 6 | 780 | < 2 | < 2 | < 1 | 780 | 0.09 | < 10 | < 10 | 12 | < 10 | 28 |
| 123086 | 205 226 | 1 | 0.11 | 6 | 210 | 6 | 2 | 1 | 125 | 0.07 | < 10 | < 10 | 12 | < 10 | 62 |
| 123087 | 205 226 | < 1 | < 0.01 | 10 | 390 | 126 | 3 | 2 | 502 | 0.08 | < 10 | < 10 | 23 | < 10 | 133 |
| 123088 | 205 226 | < 1 | < 0.01 | 6 | 140 | 376 | 2 | 1 | 105 | 0.06 | < 10 | < 10 | 15 | < 10 | 4220 |
| 123089 | 205 226 | < 1 | < 0.01 | 1 | 90 | 568 | 2 | 1 | 123 | 0.03 | < 10 | < 10 | 12 | < 10 | 2510 |
| 123090 | 205 226 | < 1 | < 0.01 | 3 | 180 | 230 | < 2 | 1 | 111 | 0.07 | < 10 | < 10 | 8 | < 10 | 2070 |
| 123091 | 205 226 | 18 | < 0.01 | 42 | 280 | 44 | 2 | 4 | 297 | 0.09 | < 10 | < 10 | 116 | < 10 | 7530 |
| 123092 | 205 226 | 1 | < 0.01 | 5 | 210 | < 2 | 2 | 4 | 196 | 0.10 | < 10 | < 10 | 22 | < 10 | 150 |
| 123093 | 205 226 | 2 | < 0.01 | 17 | 500 | 760 | < 2 | 4 | 420 | 0.14 | < 10 | < 10 | 37 | < 10 | >10000 |
| 123094 | 205 226 | < 1 | < 0.01 | 14 | 870 | 76 | 2 | 1 | 111 | 0.17 | < 10 | < 10 | 63 | < 10 | 468 |
| 123095 | 205 226 | 1 | 0.08 | 3 | 150 | 4 | 2 | 1 | 111 | 0.03 | < 10 | < 10 | 10 | < 10 | 388 |
| 123096 | 205 226 | 4 | 0.04 | 12 | 930 | 6 | 2 | 5 | 62 | 0.23 | < 10 | < 10 | 85 | < 10 | 94 |
| 123097 | 205 226 | < 1 | 0.06 | 11 | 550 | < 2 | < 2 | 22 | 118 | 0.21 | < 10 | < 10 | 190 | < 10 | 40 |
| 123098 | 205 226 | 1 | 0.04 | 1 | 830 | 2 | < 2 | 4 | 47 | 0.34 | < 10 | < 10 | 111 | < 10 | 48 |
| 123099 | 205 226 | 2 | 0.01 | 9 | 630 | 444 | < 2 | 9 | 121 | 0.20 | < 10 | < 10 | 110 | < 10 | 706 |
| 123100 | 205 226 | < 1 | < 0.01 | 6 | 240 | 8710 | < 2 | 2 | 164 | 0.08 | < 10 | < 10 | 29 | < 10 | 5960 |
| 123101 | 205 226 | < 1 | < 0.01 | 17 | 3130 | 2000 | < 2 | 6 | 348 | 0.06 | < 10 | < 10 | 84 | < 10 | 3720 |
| 123102 | 205 226 | 19 | 0.13 | 44 | 670 | 20 | 2 | 3 | 910 | 0.13 | < 10 | < 10 | 109 | < 10 | 220 |
| 123103 | 205 226 | 28 | 0.07 | 56 | 730 | 6 | 2 | 3 | 328 | 0.14 | < 10 | < 10 | 177 | < 10 | 698 |
| 123104 | 205 226 | 11 | 0.29 | 34 | 620 | 18 | < 2 | 1 | 886 | 0.09 | < 10 | < 10 | 43 | < 10 | 344 |
| 123105 | 205 226 | 34 | 0.14 | 90 | 1110 | < 2 | < 2 | 2 | 432 | 0.06 | < 10 | < 10 | 94 | < 10 | 580 |
| 123106 | 205 226 | 16 | 0.05 | 58 | 1620 | 12 | < 2 | 3 | 321 | 0.14 | < 10 | < 10 | 122 | < 10 | 238 |
| 123107 | 205 226 | 5 | 0.09 | 41 | 1520 | < 2 | < 2 | 1 | 161 | 0.18 | < 10 | < 10 | 78 | < 10 | 42 |
| 123108 | 205 226 | 1 | 0.05 | 47 | 780 | 2 | < 2 | 5 | 87 | 0.25 | < 10 | < 10 | 76 | < 10 | 118 |
| 123109 | 205 226 | 17 | 0.09 | 66 | 1130 | 2 | < 2 | 1 | 336 | 0.13 | < 10 | < 10 | 70 | < 10 | 416 |
| 123110 | 205 226 | 13 | 0.11 | 47 | 950 | 6 | < 2 | 1 | 401 | 0.12 | < 10 | < 10 | 77 | < 10 | 458 |

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Page Number : 1-A
Total Pages : 1
Certificate Date: 03-AUG-98
Invoice No. : 19826086
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9826086

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---------|-----------|-----------------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|--------|-----------|---------|-----------|
| 123 111 | 205 226 | < 5 | 0.4 | 1.72 | 18 | 30 | < 0.5 | < 2 | 4.70 | 2.0 | 8 | 82 | 58 | 3.02 | < 10 | < 1 | 0.03 | < 10 | 0.08 | 150 |
| 123 112 | 205 226 | < 5 | 0.4 | 0.61 | 2 | 20 | < 0.5 | < 2 | >15.00 | < 0.5 | 3 | 19 | 12 | 0.86 | < 10 | 1 | 0.03 | < 10 | 0.12 | 375 |
| 123 113 | 205 226 | < 5 | < 0.2 | 3.88 | 92 | 180 | < 0.5 | < 2 | 1.41 | < 0.5 | 13 | 55 | 15 | 3.71 | < 10 | 1 | 0.32 | < 10 | 1.94 | 495 |
| 123 114 | 205 226 | < 5 | 0.8 | 2.53 | 6 | 90 | < 0.5 | < 2 | 11.35 | 5.5 | 5 | 60 | 54 | 1.79 | < 10 | < 1 | 0.05 | < 10 | 0.07 | 370 |
| 123 115 | 205 226 | < 5 | 2.0 | 3.47 | 26 | 30 | < 0.5 | < 2 | 8.81 | < 0.5 | 9 | 50 | 56 | 2.40 | < 10 | 1 | 0.05 | < 10 | 0.08 | 365 |
| 123 116 | 205 226 | < 5 | 0.2 | 0.16 | < 2 | 10 | < 0.5 | < 2 | >15.00 | < 0.5 | 1 | 10 | 7 | 1.20 | < 10 | 1 | < 0.01 | < 10 | 0.26 | 885 |
| 123 117 | 205 226 | 15 | 2.2 | 2.06 | 16 | 60 | < 0.5 | < 2 | 5.02 | 5.5 | 9 | 70 | 89 | 2.42 | < 10 | < 1 | 0.04 | < 10 | 0.05 | 215 |
| 123 118 | 205 226 | < 5 | 1.2 | 1.07 | 8 | 100 | < 0.5 | < 2 | 2.27 | 0.5 | 3 | 93 | 39 | 1.32 | < 10 | < 1 | 0.13 | < 10 | 0.18 | 115 |
| 123 119 | 205 226 | 10 | 1.0 | 1.84 | 16 | 120 | < 0.5 | < 2 | 2.74 | < 0.5 | 3 | 85 | 61 | 1.29 | < 10 | < 1 | 0.25 | 10 | 0.47 | 140 |
| 123 120 | 205 226 | < 5 | 0.4 | 1.81 | 24 | 80 | < 0.5 | < 2 | 1.27 | 1.5 | 8 | 109 | 55 | 2.59 | < 10 | < 1 | 0.16 | < 10 | 0.65 | 180 |
| 123 121 | 205 226 | 10 | 0.8 | 2.30 | 26 | 50 | < 0.5 | < 2 | 1.03 | 1.5 | 11 | 163 | 93 | 4.11 | < 10 | < 1 | 0.17 | < 10 | 0.76 | 370 |

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##

Page Number : 1-B
Total Pages : 1
Certificate Date: 03-AUG-98
Invoice No. : 19826086
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS A9826086

| SAMPLE | PREP CODE | Mo ppm | Nb % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| 123 111 | 205 226 | 20 | 0.04 | 31 | 980 | 10 | < 2 | 4 | 493 | 0.13 | < 10 | < 10 | 112 | < 10 | 162 |
| 123 112 | 205 226 | < 1 | 0.03 | 13 | 570 | 10 | < 2 | < 1 | 2680 | 0.03 | < 10 | < 10 | 11 | < 10 | 42 |
| 123 113 | 205 226 | 2 | 0.24 | 8 | 620 | 6 | < 2 | 8 | 210 | 0.15 | < 10 | < 10 | 86 | < 10 | 48 |
| 123 114 | 205 226 | 8 | 0.12 | 36 | 930 | 16 | < 2 | 1 | 1010 | 0.10 | < 10 | < 10 | 56 | < 10 | 250 |
| 123 115 | 205 226 | 4 | 0.25 | 42 | 640 | 16 | < 2 | 1 | 2260 | 0.10 | < 10 | < 10 | 30 | < 10 | 40 |
| 123 116 | 205 226 | < 1 | < 0.01 | 5 | 270 | 10 | < 2 | < 1 | 4180 | 0.01 | < 10 | < 10 | 7 | < 10 | 6 |
| 123 117 | 205 226 | 17 | 0.25 | 85 | 1050 | 16 | < 2 | 1 | 559 | 0.10 | < 10 | < 10 | 48 | < 10 | 286 |
| 123 118 | 205 226 | 6 | 0.08 | 17 | 720 | 8 | < 2 | 3 | 220 | 0.12 | < 10 | < 10 | 37 | < 10 | 44 |
| 123 119 | 205 226 | 3 | 0.04 | 13 | 1200 | 10 | < 2 | 3 | 140 | 0.12 | < 10 | < 10 | 42 | < 10 | 30 |
| 123 120 | 205 226 | 44 | 0.21 | 49 | 600 | 12 | < 2 | 4 | 43 | 0.18 | < 10 | < 10 | 178 | < 10 | 113 |
| 123 121 | 205 226 | 6 | 0.10 | 43 | 410 | 6 | < 2 | 5 | 40 | 0.15 | < 10 | < 10 | 130 | < 10 | 124 |

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Page Number : 1-A
Total Pages : 1
Certificate Date: 15-AUG-98
Invoice No. : A9827422
P.O. Number :
Account : LOY

CERTIFICATE OF ANALYSIS A9827422

| SAMPLE | PREP CODE | Au ppb FA-AA | Ag ppm | Al % | As ppm | Ba ppm | Ba ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---------|-----------|-----------------|--------|------|--------|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| 123 122 | 205 226 | < 5 | < 0.2 | 1.99 | < 2 | 150 | < 0.5 | < 2 | 6.32 | 1.0 | 11 | 36 | 16 | 2.03 | < 10 | < 1 | 0.05 | < 10 | 0.65 | 1565 |
| 123 123 | 205 226 | < 5 | < 0.2 | 2.55 | < 2 | 130 | < 0.5 | < 2 | 3.52 | 1.8 | 21 | 56 | 23 | 2.99 | < 10 | < 1 | 0.07 | < 10 | 0.71 | 1855 |
| 123 124 | 205 226 | < 5 | < 0.2 | 4.59 | < 2 | 30 | < 0.5 | < 2 | 7.29 | 4.0 | 18 | 28 | 26 | 3.11 | < 10 | < 1 | 0.01 | < 10 | 0.20 | 810 |
| 123 125 | 205 226 | < 5 | 0.2 | 5.06 | < 2 | 20 | < 0.5 | < 2 | 7.94 | 2.0 | 16 | 36 | 25 | 2.71 | < 10 | < 1 | 0.01 | < 10 | 0.14 | 680 |
| 123 126 | 205 226 | < 5 | < 0.2 | 0.55 | < 2 | 10 | < 0.5 | < 2 | 0.14 | < 0.5 | 2 | 129 | 4 | 0.67 | < 10 | < 1 | 0.03 | < 10 | 0.24 | 135 |
| 123 127 | 205 226 | < 5 | < 0.2 | 3.56 | < 2 | 40 | < 0.5 | < 2 | 6.64 | 2.5 | 10 | 54 | 19 | 1.61 | < 10 | < 1 | 0.06 | < 10 | 0.38 | 615 |
| 123 128 | 205 226 | < 5 | 0.4 | 2.99 | < 2 | 10 | < 0.5 | < 2 | 1.96 | < 0.5 | 12 | 93 | 63 | 3.12 | < 10 | < 1 | 0.21 | < 10 | 0.63 | 190 |
| 123 129 | 205 226 | < 5 | < 0.2 | 2.35 | < 2 | 70 | < 0.5 | < 2 | 1.88 | < 0.5 | 24 | 109 | 26 | 3.36 | < 10 | < 1 | 0.09 | < 10 | 2.28 | 400 |
| 123 130 | 205 226 | < 5 | 0.2 | 2.62 | < 2 | 60 | < 0.5 | < 2 | 5.66 | < 0.5 | 6 | 95 | 46 | 2.14 | < 10 | < 1 | 0.23 | < 10 | 0.37 | 245 |
| 123 131 | 205 226 | < 5 | 0.6 | 2.31 | < 2 | 130 | < 0.5 | < 2 | 1.70 | 0.5 | 7 | 129 | 61 | 3.21 | < 10 | < 1 | 0.29 | < 10 | 0.46 | 170 |
| 123 132 | 205 226 | 10 | 0.8 | 3.98 | < 2 | 10 | 0.5 | < 2 | 12.90 | < 0.5 | 17 | 45 | 85 | 2.41 | < 10 | < 1 | 0.01 | < 10 | 0.05 | 750 |
| 123 133 | 205 226 | 5 | 0.2 | 2.25 | < 2 | 10 | < 0.5 | < 2 | 15.00 | 0.5 | 7 | 19 | 36 | 1.73 | < 10 | < 1 | 0.05 | < 10 | 0.04 | 1265 |
| 123 134 | 205 226 | 5 | 0.4 | 3.65 | < 2 | 110 | 0.5 | < 2 | 8.71 | 2.5 | 8 | 53 | 46 | 1.71 | < 10 | < 1 | 0.14 | < 10 | 0.17 | 255 |
| 123 135 | 205 226 | 10 | 0.6 | 2.36 | < 2 | 360 | < 0.5 | < 2 | 2.60 | 0.5 | 6 | 95 | 80 | 2.17 | < 10 | < 1 | 0.53 | < 10 | 0.76 | 105 |
| 123 136 | 205 226 | 60 | 2.4 | 2.12 | < 2 | 66 | < 0.5 | < 2 | 1.40 | 0.5 | 12 | 137 | 56 | 3.10 | < 10 | < 1 | 0.43 | < 10 | 0.95 | 160 |
| 123 137 | 205 226 | 10 | 1.2 | 2.68 | < 2 | 150 | 0.5 | < 2 | 7.48 | < 0.5 | 8 | 54 | 86 | 1.76 | < 10 | < 1 | 0.14 | < 10 | 0.20 | 160 |
| 123 138 | 205 226 | 50 | 3.0 | 4.42 | < 2 | 80 | < 0.5 | < 2 | 3.20 | < 0.5 | 23 | 45 | 128 | 4.04 | < 10 | < 1 | 0.29 | < 10 | 0.63 | 275 |
| 123 139 | 205 226 | 20 | 0.8 | 1.21 | < 2 | 40 | < 0.5 | < 2 | 1.98 | 0.5 | 7 | 110 | 71 | 1.59 | < 10 | < 1 | 0.08 | < 10 | 0.06 | 30 |
| 123 140 | 205 226 | < 5 | 0.8 | 2.52 | < 2 | 80 | < 0.5 | < 2 | 5.06 | 5.5 | 8 | 54 | 45 | 1.17 | < 10 | < 1 | 0.07 | < 10 | 0.24 | 470 |
| 123 141 | 205 226 | < 5 | 0.6 | 1.70 | < 2 | 70 | < 0.5 | < 2 | 1.60 | 0.5 | 7 | 108 | 78 | 1.94 | < 10 | < 1 | 0.13 | < 10 | 0.45 | 95 |
| 123 142 | 205 226 | 10 | 0.8 | 1.94 | < 2 | 230 | < 0.5 | < 2 | 1.54 | < 0.5 | 6 | 118 | 44 | 1.84 | < 10 | < 1 | 0.21 | < 10 | 0.70 | 120 |
| 123 143 | 205 226 | < 5 | 0.6 | 1.85 | < 2 | 40 | < 0.5 | < 2 | 8.35 | < 0.5 | 4 | 49 | 35 | 0.85 | < 10 | < 1 | 0.06 | < 10 | 0.16 | 190 |
| 123 144 | 205 226 | < 5 | < 0.2 | 2.18 | < 2 | 70 | < 0.5 | < 2 | 0.75 | < 0.5 | 1 | 36 | 10 | 0.40 | < 10 | < 1 | 0.09 | < 10 | 0.10 | 225 |
| 123 145 | 205 226 | < 5 | 0.6 | 2.71 | < 2 | 60 | < 0.5 | < 2 | 10.80 | < 0.5 | 8 | 43 | 57 | 1.54 | < 10 | < 1 | 0.13 | < 10 | 0.16 | 490 |
| 123 146 | 205 226 | 5 | 1.0 | 1.65 | < 2 | 40 | < 0.5 | < 2 | 2.03 | 0.5 | 3 | 69 | 43 | 1.25 | < 10 | < 1 | 0.11 | < 10 | 0.26 | 95 |
| 123 147 | 205 226 | < 5 | 0.8 | 2.45 | < 2 | 40 | < 0.5 | < 2 | 12.60 | 0.5 | 2 | 35 | 17 | 0.26 | < 10 | < 1 | 0.03 | < 10 | 0.04 | 645 |

CERTIFICATION: Hart Biddle



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Page Number : 1-B
Total Pages : 1
Certificate Date: 15-AUG-98
Invoice No. : A9827422
P.O. Number :
Account : LOY

CERTIFICATE OF ANALYSIS A9827422

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Se ppm | Sr ppm | Ti % | Ti ppm | U ppm | V ppm | W ppm | Zn ppm |
|---------|-----------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| 123 122 | 205 226 | < 1 | < 0.01 | 7 | 780 | 154 | < 2 | 4 | 331 | 0.18 | < 10 | < 10 | 52 | < 10 | 158 |
| 123 123 | 205 226 | 2 | < 0.01 | 11 | 990 | 22 | < 2 | 9 | 97 | 0.19 | < 10 | < 10 | 92 | < 10 | 136 |
| 123 124 | 205 226 | < 1 | < 0.01 | 10 | 1010 | 14 | < 2 | 4 | 158 | 0.20 | < 10 | < 10 | 50 | < 10 | 250 |
| 123 125 | 205 226 | 2 | 0.01 | 10 | 830 | 6 | < 2 | 3 | 135 | 0.21 | < 10 | < 10 | 48 | < 10 | 176 |
| 123 126 | 205 226 | < 1 | 0.06 | 3 | 120 | 4 | < 2 | 1 | 22 | < 0.01 | < 10 | < 10 | 8 | < 10 | 18 |
| 123 127 | 205 226 | < 1 | 0.03 | 11 | 1060 | 10 | < 2 | 4 | 227 | 0.18 | < 10 | < 10 | 46 | < 10 | 198 |
| 123 128 | 205 226 | 2 | 0.27 | 31 | 620 | 6 | < 2 | 4 | 229 | 0.22 | < 10 | < 10 | 56 | < 10 | 76 |
| 123 129 | 205 226 | 2 | 0.20 | 105 | 1230 | < 2 | < 2 | 6 | 192 | 0.25 | < 10 | < 10 | 83 | < 10 | 54 |
| 123 130 | 205 226 | 3 | 0.25 | 35 | 420 | 10 | < 2 | 4 | 758 | 0.17 | < 10 | < 10 | 47 | < 10 | 136 |
| 123 131 | 205 226 | 4 | 0.19 | 30 | 430 | 12 | < 2 | 8 | 527 | 0.21 | < 10 | < 10 | 118 | < 10 | 100 |
| 123 132 | 205 226 | 1 | 0.04 | 45 | 1270 | 8 | < 2 | 1 | 126 | 0.11 | < 10 | < 10 | 20 | < 10 | 50 |
| 123 133 | 205 226 | < 1 | 0.23 | 38 | 1030 | 6 | < 2 | < 1 | 252 | 0.08 | < 10 | < 10 | 14 | < 10 | 40 |
| 123 134 | 205 226 | 17 | 0.11 | 46 | 2690 | < 2 | < 2 | < 1 | 670 | 0.13 | < 10 | < 10 | 89 | < 10 | 64 |
| 123 135 | 205 226 | 6 | 0.11 | 20 | 1190 | 6 | < 2 | 7 | 158 | 0.15 | < 10 | < 10 | 69 | < 10 | 42 |
| 123 136 | 205 226 | 3 | 0.10 | 33 | 760 | 12 | < 2 | 7 | 124 | 0.26 | < 10 | < 10 | 96 | < 10 | 52 |
| 123 137 | 205 226 | 8 | 0.21 | 34 | 1760 | 2 | < 2 | 1 | 577 | 0.15 | < 10 | < 10 | 44 | < 10 | 36 |
| 123 138 | 205 226 | 2 | 0.24 | 9 | 470 | 18 | < 2 | 7 | 184 | 0.20 | < 10 | < 10 | 114 | < 10 | 38 |
| 123 139 | 205 226 | 9 | 0.03 | 33 | 890 | 6 | < 2 | 1 | 39 | 0.18 | < 10 | < 10 | 57 | < 10 | 26 |
| 123 140 | 205 226 | 7 | 0.13 | 49 | 1310 | 6 | < 2 | 1 | 389 | 0.10 | < 10 | < 10 | 32 | < 10 | 250 |
| 123 141 | 205 226 | 5 | 0.11 | 41 | 690 | 6 | < 2 | 4 | 110 | 0.15 | < 10 | < 10 | 31 | < 10 | 64 |
| 123 142 | 205 226 | 1 | 0.06 | 17 | 560 | 2 | < 2 | 7 | 44 | 0.11 | < 10 | < 10 | 48 | < 10 | 42 |
| 123 143 | 205 226 | 1 | 0.07 | 20 | 1360 | 6 | < 2 | 1 | 617 | 0.07 | < 10 | < 10 | 19 | < 10 | 32 |
| 123 144 | 205 226 | 1 | 0.31 | 11 | 1500 | 6 | < 2 | < 1 | 1555 | 0.06 | < 10 | < 10 | 9 | < 10 | 26 |
| 123 145 | 205 226 | < 1 | 0.16 | 29 | 930 | 2 | < 2 | 1 | 1130 | 0.11 | < 10 | < 10 | 28 | < 10 | 28 |
| 123 146 | 205 226 | 3 | 0.09 | 20 | 1050 | 8 | < 2 | 1 | 137 | 0.10 | < 10 | < 10 | 21 | < 10 | 28 |
| 123 147 | 205 226 | < 1 | 0.05 | 18 | 1700 | < 2 | < 2 | < 1 | 478 | 0.05 | < 10 | < 10 | 7 | < 10 | 16 |

CERTIFICATION: Hart Biddle



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A9824603

CERTIFICATE

A9824603

Project: CAP
P.O. #: 23

Samples submitted to our lab in Vancouver, BC.
This report was printed on 15-JUL-98.

SAMPLE PREPARATION

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION |
|-------------|----------------|--------------------------------|
| 244 | 1 | Pulp; prev. prepared at Chemex |

ANALYTICAL PROCEDURES

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|------------------------------|--------|-----------------|-------------|
| 316 | 1 | Zn %; Conc. Nitric-MCL dig'n | AAS | 0.01 | 100.0 |



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Page Number : 1
Total Pages : 1
Certificate Date: 15-JUL-98
Invoice No.: 19824603
P.O. Number : 23
Account : LOY

CERTIFICATE OF ANALYSIS

A9824603

| SAMPLE | PREP CODE | Zn % | | | | | | | | | |
|--------|-----------|------|--|--|--|--|--|--|--|--|--|
| 123093 | 244 -- | 1.57 | | | | | | | | | |

APPENDIX II
MAGNETIC AND VLF-EM DATA

Grant F. Crooker

Area: Cap Claims

Grid: Cap

Date: July 1998

Instrument Type:

Scintrex MP-2:

Geonics EM-16:

Station:

Data Types: #1

#2

#3

Line and Station: +=Northing/Easting
--=Southing/Westing

File Name: CPMavi01

Details:

Corrected Total Field Magnetic Values

In-Phase and Quadrature Values

Seattle, Facing Easterly

Corrected Total Field Magnetic Values

VLF-EM In Phase Values (percent)

VLF-EM Quadrature Values (percent)

| N/S | EW | #1 | #2 | #3 |
|----------|-------|-------|----|----|
| line 950 | | | | |
| 950 | 300 | 55983 | 7 | -7 |
| 950 | 312.5 | 55984 | 8 | -5 |
| 950 | 325 | 55989 | 13 | -5 |
| 950 | 337.5 | 56005 | 13 | -1 |
| 950 | 350 | 56010 | 18 | 1 |
| 950 | 362.5 | 56076 | 17 | -1 |
| 950 | 375 | 56084 | 16 | -6 |
| 950 | 387.5 | 56058 | 11 | -4 |
| 950 | 400 | 56257 | 9 | -4 |
| 950 | 412.5 | 56093 | 8 | -4 |
| 950 | 425 | 56142 | 7 | -6 |
| 950 | 437.5 | 56113 | 6 | -4 |
| 950 | 450 | 56158 | 10 | -8 |
| 950 | 462.5 | 56128 | 10 | -6 |
| 950 | 475 | 56077 | 13 | -7 |
| 950 | 487.5 | 56130 | 10 | -6 |
| 950 | 500 | 56226 | 10 | -6 |
| 950 | 512.5 | 56262 | 7 | -6 |
| 950 | 525 | 56438 | 10 | -6 |
| 950 | 537.5 | 56388 | 11 | -5 |
| 950 | 550 | 56372 | 11 | -3 |
| 950 | 562.5 | 56332 | 12 | -4 |
| 950 | 575 | 56209 | 7 | -5 |
| 950 | 587.5 | 56081 | 7 | -7 |
| 950 | 600 | 56028 | 5 | -7 |
| line 925 | | | | |
| 925 | 300 | 56080 | 14 | -5 |
| 925 | 312.5 | 56062 | 16 | -3 |
| 925 | 325 | 55995 | 17 | -2 |
| 925 | 337.5 | 55983 | 19 | 1 |
| 925 | 350 | 56011 | 22 | 2 |
| 925 | 362.5 | 56009 | 17 | -2 |
| 925 | 375 | 56036 | 12 | -1 |
| 925 | 387.5 | 56030 | 13 | -3 |
| 925 | 400 | 56155 | 9 | -5 |
| 925 | 412.5 | 56089 | 5 | 1 |
| 925 | 425 | 56083 | 6 | -8 |
| 925 | 437.5 | 56263 | 5 | -6 |
| 925 | 450 | 56079 | 8 | -8 |
| 925 | 462.5 | 56008 | 7 | -8 |
| 925 | 475 | 56037 | 12 | -8 |
| 925 | 487.5 | 56075 | 12 | -7 |
| 925 | 500 | 56276 | 13 | -6 |
| 925 | 512.5 | 56571 | 17 | -8 |
| 925 | 525 | 56824 | 19 | -4 |
| 925 | 537.5 | 56451 | 17 | -4 |
| 925 | 550 | 56367 | 9 | -7 |
| 925 | 562.5 | 56311 | 7 | -7 |
| 925 | 575 | 56057 | 7 | -8 |

| | | | | |
|----------|-------|-------|----|-----|
| 925 | 587.5 | 56147 | 7 | -7 |
| 925 | 600 | 56019 | 6 | -7 |
| line 900 | | | | |
| 900 | 000 | 56051 | 3 | 4 |
| 900 | 025 | 56042 | 3 | 4 |
| 900 | 050 | 56058 | 5 | 6 |
| 900 | 075 | 56123 | 3 | 2 |
| 900 | 100 | 56193 | 3 | -2 |
| 900 | 125 | 56208 | 5 | -3 |
| 900 | 150 | 56383 | 6 | -2 |
| 900 | 175 | 56623 | 8 | -6 |
| 900 | 200 | 56694 | 13 | -5 |
| 900 | 225 | 56193 | 11 | -6 |
| 900 | 250 | 56058 | 12 | -7 |
| 900 | 275 | 56001 | 17 | -4 |
| 900 | 300 | 56023 | 20 | -1 |
| 900 | 312.5 | 56027 | | |
| 900 | 325 | 56010 | 21 | 1 |
| 900 | 337.5 | 56069 | | |
| 900 | 350 | 56043 | 18 | -2 |
| 900 | 362.5 | 56036 | | |
| 900 | 375 | 56047 | 14 | -5 |
| 900 | 387.5 | 55995 | | |
| 900 | 400 | 56123 | 7 | -9 |
| 900 | 412.5 | 55979 | 7 | -8 |
| 900 | 425 | 56007 | 10 | -8 |
| 900 | 437.5 | 56105 | 14 | -8 |
| 900 | 450 | 56092 | 11 | -7 |
| 900 | 462.5 | 55984 | 15 | -4 |
| 900 | 475 | 56027 | 16 | -3 |
| 900 | 487.5 | 56105 | 15 | -4 |
| 900 | 500 | 56283 | 16 | -1 |
| 900 | 512.5 | 56284 | 14 | -3 |
| 900 | 525 | 56233 | 0 | -8 |
| 900 | 537.5 | 56171 | 0 | -9 |
| 900 | 550 | 56220 | 3 | -9 |
| 900 | 562.5 | 56178 | 6 | -8 |
| 900 | 575 | 56007 | 6 | -7 |
| 900 | 587.5 | 55991 | 7 | 0 |
| 900 | 600 | 55984 | 7 | -12 |
| 900 | 625 | 56057 | 6 | -8 |
| 900 | 650 | 55940 | 8 | -8 |
| 900 | 675 | 55947 | 12 | -5 |
| 900 | 700 | 55976 | 12 | -4 |
| 900 | 725 | 55972 | 6 | 0 |
| 900 | 750 | 56083 | -2 | -3 |
| 900 | 775 | 56057 | -1 | -2 |
| 900 | 800 | 56048 | 0 | -2 |
| 900 | 825 | 56019 | 6 | -2 |
| 900 | 850 | 56031 | 4 | -2 |
| 900 | 875 | 56063 | 3 | -3 |
| 900 | 900 | 56116 | 7 | -2 |
| 900 | 925 | 56123 | 12 | 2 |
| 900 | 950 | 56123 | -1 | -2 |
| 900 | 975 | 56145 | 1 | 0 |
| 900 | 1000 | 56221 | 5 | 1 |
| 900 | 1025 | 56254 | 6 | 6 |
| 900 | 1050 | 56383 | 1 | 4 |
| 900 | 1075 | 56395 | -4 | 2 |
| 900 | 1100 | 56485 | 0 | 0 |
| 900 | 1125 | 56594 | 0 | -2 |
| 900 | 1150 | 56740 | 7 | -2 |
| 900 | 1175 | 56900 | 7 | 2 |
| 900 | 1200 | 57046 | 8 | -1 |
| 900 | 1225 | 57369 | 10 | 1 |
| 900 | 1250 | 57552 | 9 | 4 |
| line 875 | | | | |
| 875 | 300 | 56034 | 22 | 1 |
| 875 | 312.5 | 56055 | 20 | 2 |
| 875 | 325 | 56077 | 18 | 0 |

| | | | | |
|----------|-------|-------|----|-----|
| 875 | 337.5 | 56101 | 15 | -2 |
| 875 | 350 | 56150 | 15 | -1 |
| 875 | 362.5 | 56092 | 13 | -4 |
| 875 | 375 | 56044 | 11 | -6 |
| 875 | 387.5 | 56107 | 11 | -8 |
| 875 | 400 | 56091 | 14 | -9 |
| 875 | 412.5 | 56020 | 12 | -7 |
| 875 | 425 | 56027 | 15 | -8 |
| 875 | 437.5 | 56028 | 15 | -6 |
| 875 | 450 | 56015 | 18 | -6 |
| 875 | 462.5 | 55993 | 20 | -3 |
| 875 | 475 | 56016 | 19 | 0 |
| 875 | 487.5 | 56043 | 13 | -4 |
| 875 | 500 | 56066 | 8 | -6 |
| 875 | 512.5 | 56069 | 6 | -8 |
| 875 | 525 | 56233 | 3 | -8 |
| 875 | 537.5 | 56214 | 3 | -7 |
| 875 | 550 | 56436 | 5 | -8 |
| 875 | 562.5 | 55979 | 7 | -8 |
| 875 | 575 | 55955 | 5 | -7 |
| 875 | 587.5 | 55960 | 5 | -10 |
| 875 | 600 | 56010 | 7 | -10 |
| line 850 | | | | |
| 850 | 300 | 56019 | 27 | 1 |
| 850 | 312.5 | 56063 | 23 | 0 |
| 850 | 325 | 56074 | 20 | -1 |
| 850 | 337.5 | 56149 | 20 | -1 |
| 850 | 350 | 56179 | 15 | -2 |
| 850 | 362.5 | 56203 | 17 | -3 |
| 850 | 375 | 56133 | 12 | -5 |
| 850 | 387.5 | 56380 | 12 | -7 |
| 850 | 400 | 56143 | 16 | -7 |
| 850 | 412.5 | 55951 | 20 | -6 |
| 850 | 425 | 56016 | 22 | -5 |
| 850 | 437.5 | 56009 | 19 | -7 |
| 850 | 450 | 55984 | 18 | -4 |
| 850 | 462.5 | 55971 | 17 | -2 |
| 850 | 475 | 55987 | 7 | -5 |
| 850 | 487.5 | 55984 | 4 | -5 |
| 850 | 500 | 56012 | 4 | -5 |
| 850 | 512.5 | 56053 | 3 | -4 |
| 850 | 525 | 56106 | 3 | -4 |
| 850 | 537.5 | 56441 | 7 | -4 |
| 850 | 550 | 56445 | 10 | -4 |
| 850 | 562.5 | 55870 | 10 | -6 |
| 850 | 575 | 55938 | 5 | -12 |
| 850 | 587.5 | 56027 | 12 | -13 |
| 850 | 600 | 56032 | 12 | -10 |
| line 825 | | | | |
| 825 | 300 | 56013 | 21 | -1 |
| 825 | 312.5 | 56015 | 19 | 0 |
| 825 | 325 | 56148 | 20 | -3 |
| 825 | 337.5 | 56638 | 18 | -3 |
| 825 | 350 | 56338 | 19 | -3 |
| 825 | 362.5 | 56201 | 15 | -4 |
| 825 | 375 | 56101 | 18 | -3 |
| 825 | 387.5 | 56076 | 19 | 0 |
| 825 | 400 | 56034 | 18 | -6 |
| 825 | 412.5 | 56005 | 19 | -2 |
| 825 | 425 | 55995 | 17 | -1 |
| 825 | 437.5 | 55960 | 17 | 0 |
| 825 | 450 | 55945 | 11 | -2 |
| 825 | 462.5 | 55944 | 7 | -2 |
| 825 | 475 | 55952 | 3 | -4 |
| 825 | 487.5 | 55977 | 5 | -3 |
| 825 | 500 | 56009 | 2 | -3 |
| 825 | 512.5 | 56098 | 3 | -2 |
| 825 | 525 | 56098 | 3 | 0 |
| 825 | 537.5 | 56377 | 11 | -2 |
| 825 | 550 | 56271 | 8 | -4 |

| | | | | |
|----------|-------|-------|-----|-----|
| 825 | 562.5 | 55957 | 6 | -11 |
| 825 | 575 | 55987 | 14 | -12 |
| 825 | 587.5 | 56023 | 21 | -11 |
| 825 | 600 | 56003 | 17 | -9 |
| line 800 | | | | |
| 800 | 000 | 56001 | 10 | -5 |
| 800 | 025 | 56153 | 12 | 0 |
| 800 | 050 | 56156 | 17 | -6 |
| 800 | 075 | 56146 | 18 | -4 |
| 800 | 100 | 56040 | 22 | -3 |
| 800 | 125 | 55782 | 27 | -2 |
| 800 | 150 | 56071 | 22 | -2 |
| 800 | 175 | 56066 | 21 | -10 |
| 800 | 200 | 56090 | 35 | -8 |
| 800 | 225 | 56598 | 24 | -3 |
| 800 | 250 | 56165 | 24 | -3 |
| 800 | 275 | 56212 | 23 | -7 |
| 800 | 300 | 56037 | 22 | -1 |
| 800 | 325 | 56197 | 24 | -7 |
| 800 | 350 | 56020 | 22 | -4 |
| 800 | 375 | 56006 | 20 | -4 |
| 800 | 400 | 55971 | 20 | -3 |
| 800 | 412.5 | 55837 | 20 | -2 |
| 800 | 425 | 55970 | 13 | -5 |
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| 800 | 450 | 55883 | 4 | -6 |
| 800 | 462.5 | 55897 | 5 | -6 |
| 800 | 475 | 55901 | 8 | -5 |
| 800 | 487.5 | 55839 | 6 | 3 |
| 800 | 500 | 55967 | 15 | -3 |
| 800 | 512.5 | 56045 | 2 | -3 |
| 800 | 525 | 56109 | 7 | -4 |
| 800 | 537.5 | 56058 | 4 | -9 |
| 800 | 550 | 56197 | 13 | -17 |
| 800 | 562.5 | 55931 | 16 | -18 |
| 800 | 575 | 56047 | 24 | -12 |
| 800 | 587.5 | 55961 | 30 | -8 |
| 800 | 600 | 56020 | 32 | -8 |
| 800 | 625 | 55918 | 34 | -7 |
| 800 | 650 | 55962 | 17 | -7 |
| 800 | 675 | 55955 | 15 | -6 |
| 800 | 700 | 55968 | 9 | -3 |
| 800 | 725 | 56014 | 3 | -2 |
| 800 | 750 | 55963 | -1 | -5 |
| 800 | 775 | 56031 | 8 | -2 |
| 800 | 800 | 56031 | 14 | -3 |
| 800 | 825 | 56054 | 14 | -3 |
| 800 | 850 | 56034 | 6 | 0 |
| 800 | 875 | 56057 | 8 | 1 |
| 800 | 900 | 56115 | 0 | 2 |
| 800 | 925 | 56113 | -3 | 1 |
| 800 | 950 | 56079 | -5 | 0 |
| 800 | 975 | 56102 | -6 | -2 |
| 800 | 1000 | 56163 | -1 | 1 |
| 800 | 1025 | 56184 | -1 | 4 |
| 800 | 1050 | 56200 | -1 | 2 |
| 800 | 1075 | 56295 | -3 | -1 |
| 800 | 1100 | 56390 | -3 | -2 |
| 800 | 1125 | 56149 | 1 | -1 |
| 800 | 1150 | 56482 | 9 | 0 |
| 800 | 1175 | 56532 | 14 | 0 |
| 800 | 1200 | 56649 | 13 | -2 |
| 800 | 1225 | 56771 | 12 | -3 |
| 800 | 1250 | 56981 | 12 | -3 |
| line 300 | | | | |
| 300 | 000 | 55983 | -12 | -6 |
| 300 | 025 | 55987 | -19 | -12 |
| 300 | 050 | 55984 | -15 | -5 |
| 300 | 075 | 56081 | -22 | -11 |
| 300 | 100 | 56155 | -24 | -10 |

| | | | | |
|----------|------|-------|-----|-----|
| 300 | 125 | 56506 | -39 | -19 |
| 300 | 150 | 56152 | -29 | -19 |
| 300 | 175 | 56307 | -21 | -19 |
| 300 | 200 | 56016 | -18 | -20 |
| 300 | 225 | 55823 | -8 | -19 |
| 300 | 250 | 56045 | 1 | -10 |
| 300 | 275 | 56008 | -30 | -7 |
| 300 | 300 | 55978 | -29 | -2 |
| 300 | 325 | 55840 | -11 | 10 |
| 300 | 350 | 55830 | 4 | 32 |
| 300 | 375 | 55861 | 9 | 26 |
| 300 | 400 | 55858 | 15 | 28 |
| 300 | 425 | 56133 | 9 | 17 |
| 300 | 450 | 56205 | -7 | 5 |
| 300 | 475 | 56215 | -19 | -1 |
| 300 | 500 | 55891 | -10 | -3 |
| 300 | 525 | 55951 | 6 | -3 |
| 300 | 550 | 55954 | 11 | 1 |
| 300 | 575 | 55959 | 13 | 0 |
| 300 | 600 | 55868 | 10 | 1 |
| 300 | 625 | 55787 | 12 | 2 |
| 300 | 650 | 55817 | -1 | 8 |
| 300 | 675 | 55868 | -23 | 12 |
| 300 | 700 | 56049 | -37 | 15 |
| 300 | 725 | 55963 | -31 | 18 |
| 300 | 750 | 55945 | -36 | 13 |
| 300 | 775 | 55896 | -40 | 8 |
| 300 | 800 | 55972 | -40 | 14 |
| 300 | 825 | 55966 | -31 | 16 |
| 300 | 850 | 55937 | -28 | 10 |
| 300 | 875 | 56004 | -28 | 14 |
| 300 | 900 | 55999 | -24 | 24 |
| 300 | 925 | 55968 | -9 | 13 |
| 300 | 950 | 55935 | -7 | 10 |
| 300 | 975 | 55930 | -2 | 7 |
| 300 | 1000 | 55863 | 2 | 6 |
| 300 | 1025 | 55914 | 5 | 4 |
| 300 | 1050 | 55834 | 15 | 3 |
| 300 | 1075 | 55966 | 22 | 7 |
| 300 | 1100 | 55879 | 15 | 5 |
| 300 | 1125 | 55942 | 15 | 4 |
| 300 | 1150 | 55956 | 11 | 2 |
| 300 | 1175 | 56019 | 8 | 1 |
| 300 | 1200 | 56086 | 6 | 0 |
| 300 | 1225 | 56055 | 9 | 4 |
| 300 | 1250 | 56128 | 9 | 4 |
| line 100 | | | | |
| 100 | 000 | 55999 | 50 | 8 |
| 100 | 025 | 55907 | 41 | 8 |
| 100 | 050 | 56058 | 46 | 8 |
| 100 | 075 | 56006 | 32 | 4 |
| 100 | 100 | 56032 | 39 | 12 |
| 100 | 125 | 56248 | 20 | 5 |
| 100 | 150 | 56300 | 19 | 8 |
| 100 | 175 | 56297 | 19 | 8 |
| 100 | 200 | 56412 | 16 | 2 |
| 100 | 225 | 56067 | 14 | 0 |
| 100 | 250 | 56114 | 9 | 0 |
| 100 | 275 | 56168 | 14 | -2 |
| 100 | 300 | 56184 | 15 | 2 |
| 100 | 325 | 56064 | 24 | 8 |
| 100 | 350 | 55978 | 7 | 3 |
| 100 | 375 | 56066 | -5 | -3 |
| 100 | 400 | 55907 | -10 | -8 |
| 100 | 425 | 55000 | -1 | -6 |
| 100 | 450 | 56023 | 0 | -5 |
| 100 | 475 | 55987 | 1 | -4 |
| 100 | 500 | 55960 | 2 | -6 |
| 100 | 525 | 56207 | 7 | -3 |
| 100 | 550 | 55911 | 5 | 0 |

| | | | | |
|-----------|------|-------|-----|-----|
| 100 | 575 | 56066 | -2 | -2 |
| 100 | 600 | 56404 | -13 | -2 |
| 100 | 625 | 56056 | -19 | -2 |
| 100 | 650 | 55587 | -25 | -3 |
| 100 | 675 | 55793 | -21 | 1 |
| 100 | 700 | 55812 | -13 | 1 |
| 100 | 725 | 55927 | -10 | 2 |
| 100 | 750 | 56024 | -8 | -2 |
| 100 | 775 | 56061 | -4 | -3 |
| 100 | 800 | 55934 | -2 | -2 |
| 100 | 825 | 55814 | 0 | -3 |
| 100 | 850 | 55967 | 5 | -4 |
| 100 | 875 | 55976 | -9 | -4 |
| 100 | 900 | 56141 | 8 | 3 |
| 100 | 925 | 56064 | 11 | -8 |
| 100 | 950 | 56112 | 20 | -2 |
| 100 | 975 | 55981 | 20 | -3 |
| 100 | 1000 | 56065 | 21 | -6 |
| 100 | 1025 | 56055 | 19 | -3 |
| 100 | 1050 | 55938 | 18 | -8 |
| 100 | 1075 | 55979 | 19 | -5 |
| 100 | 1100 | 55930 | 17 | -1 |
| 100 | 1125 | 56925 | 12 | -1 |
| 100 | 1150 | 55982 | 12 | 1 |
| 100 | 1175 | 55985 | 3 | 4 |
| 100 | 1200 | 55983 | -10 | 6 |
| 100 | 1225 | 56064 | -17 | 8 |
| 100 | 1250 | 56128 | -8 | -10 |
| line -100 | | | | |
| -100 | 000 | 55952 | 17 | 6 |
| -100 | 025 | 56009 | 15 | 6 |
| -100 | 050 | 56022 | 14 | -3 |
| -100 | 075 | 56107 | 11 | -2 |
| -100 | 100 | 56206 | 6 | 4 |
| -100 | 125 | 56232 | -2 | 1 |
| -100 | 150 | 56279 | -10 | -5 |
| -100 | 175 | 56362 | -11 | -7 |
| -100 | 200 | 56270 | -10 | -3 |
| -100 | 225 | 55395 | -13 | -9 |
| -100 | 250 | 56002 | -12 | -8 |
| -100 | 275 | 56064 | -5 | -4 |
| -100 | 300 | 55986 | 3 | -1 |
| -100 | 325 | 56118 | 1 | 0 |
| -100 | 350 | 55973 | -6 | -7 |
| -100 | 375 | 57146 | -8 | -9 |
| -100 | 400 | 55892 | -9 | -15 |
| -100 | 425 | 56058 | -4 | -12 |
| -100 | 450 | 55869 | -5 | -10 |
| -100 | 475 | 56008 | -8 | -9 |
| -100 | 500 | 56133 | -7 | -8 |
| -100 | 525 | 56452 | -4 | -5 |
| -100 | 550 | 56187 | -1 | 2 |
| -100 | 575 | 56102 | -15 | 4 |
| -100 | 600 | 56235 | -22 | -2 |
| -100 | 625 | 56062 | -21 | -8 |
| -100 | 650 | 55869 | -8 | -9 |
| -100 | 675 | 56090 | -2 | -10 |
| -100 | 700 | 56129 | 6 | -12 |
| -100 | 725 | 56139 | 08 | -13 |
| -100 | 750 | 55696 | 15 | -13 |
| -100 | 775 | 55776 | 21 | -10 |
| -100 | 800 | 55813 | 24 | -6 |
| -100 | 825 | 55819 | 27 | -4 |
| -100 | 850 | 55805 | 35 | -2 |
| -100 | 875 | 55884 | 42 | 1 |
| -100 | 900 | 55936 | 30 | -7 |
| -100 | 925 | 55925 | 18 | -12 |
| -100 | 950 | 55987 | 19 | -13 |
| -100 | 975 | 55988 | 19 | -10 |
| -100 | 1000 | 55946 | 19 | -9 |

| | | | | |
|-----------|------|-------|-----|-----|
| -100 | 1025 | 58009 | 22 | -7 |
| -100 | 1050 | 58185 | 27 | -8 |
| -100 | 1075 | 55874 | 22 | -5 |
| -100 | 1100 | 55827 | 12 | -9 |
| -100 | 1125 | 55856 | 15 | -5 |
| -100 | 1150 | 55924 | 14 | 3 |
| -100 | 1175 | 55902 | -3 | 4 |
| -100 | 1200 | 55946 | -9 | 2 |
| -100 | 1225 | 55982 | -7 | 1 |
| -100 | 1250 | 56041 | -4 | 2 |
| line -200 | | | | |
| -200 | 000 | 55956 | 13 | 2 |
| -200 | 025 | 55977 | 8 | -1 |
| -200 | 050 | 56002 | 8 | 2 |
| -200 | 075 | 56042 | -3 | -2 |
| -200 | 100 | 56251 | -5 | -2 |
| -200 | 125 | 56233 | -9 | -3 |
| -200 | 150 | 56281 | -16 | -5 |
| -200 | 175 | 56549 | -19 | -8 |
| -200 | 200 | 56280 | -15 | -8 |
| -200 | 225 | 56055 | -9 | -6 |
| -200 | 250 | 55908 | -5 | -5 |
| -200 | 275 | 56103 | -3 | -7 |
| -200 | 300 | 56062 | -3 | -4 |
| -200 | 325 | 56291 | 5 | -6 |
| -200 | 350 | 55775 | -11 | -6 |
| -200 | 375 | 56022 | -4 | -12 |
| -200 | 400 | 55905 | -3 | -15 |
| -200 | 425 | 55830 | -1 | -10 |
| -200 | 450 | 56020 | -5 | -10 |
| -200 | 475 | 56290 | -3 | -5 |
| -200 | 500 | 57073 | -6 | -3 |
| -200 | 525 | 56622 | -3 | -1 |
| -200 | 550 | 56091 | -5 | 2 |
| -200 | 575 | 55712 | -11 | -6 |
| -200 | 600 | 56052 | -10 | -7 |
| -200 | 625 | 56205 | -4 | -3 |
| -200 | 650 | 56112 | -4 | -5 |
| -200 | 675 | 55894 | -2 | -3 |
| -200 | 700 | 56129 | 22 | -16 |
| -200 | 725 | 55964 | 29 | -9 |
| -200 | 750 | 55887 | 24 | -12 |
| -200 | 775 | 55920 | 18 | -14 |
| -200 | 800 | 55858 | 0 | -17 |
| -200 | 825 | 55963 | 9 | -16 |
| -200 | 850 | 55892 | 20 | -9 |
| -200 | 875 | 55943 | 23 | -4 |
| -200 | 900 | 55909 | 22 | -5 |
| -200 | 925 | 55881 | 7 | -17 |
| -200 | 950 | 55981 | 14 | -14 |
| -200 | 975 | 56048 | 17 | -8 |
| -200 | 1000 | 56034 | 17 | -4 |
| -200 | 1025 | 55912 | 18 | -2 |
| -200 | 1050 | 55961 | 11 | -2 |
| -200 | 1075 | 55846 | 8 | -3 |
| -200 | 1100 | 55873 | 11 | 3 |
| -200 | 1125 | 55886 | 5 | 5 |
| -200 | 1150 | 55891 | -10 | 2 |
| -200 | 1175 | 55903 | -12 | 3 |
| -200 | 1200 | 55927 | -12 | 4 |
| -200 | 1225 | 55925 | -12 | 3 |
| -200 | 1250 | 55956 | -9 | 2 |
| line -300 | | | | |
| -300 | 000 | 55939 | 10 | 0 |
| -300 | 025 | 55930 | 5 | 0 |
| -300 | 050 | 56051 | 1 | 3 |
| -300 | 075 | 55789 | -4 | -2 |
| -300 | 100 | 56052 | -1 | -3 |
| -300 | 125 | 56177 | -4 | -2 |
| -300 | 150 | 56170 | -5 | -2 |

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|-----------|------|-------|-----|-----|
| -300 | 175 | 56364 | -22 | -10 |
| -300 | 200 | 56287 | -12 | -14 |
| -300 | 225 | 56302 | -5 | -4 |
| -300 | 250 | 56035 | 0 | -11 |
| -300 | 275 | 55961 | -2 | -17 |
| -300 | 300 | 55931 | 4 | -4 |
| -300 | 325 | 56203 | 8 | -11 |
| -300 | 350 | 56012 | 10 | -2 |
| -300 | 375 | 55855 | 10 | -8 |
| -300 | 400 | 55972 | 10 | -3 |
| -300 | 425 | 55962 | 5 | -4 |
| -300 | 450 | 56007 | -1 | -3 |
| -300 | 475 | 56121 | -9 | 0 |
| -300 | 500 | 56321 | -15 | 0 |
| -300 | 525 | 56467 | -19 | -1 |
| -300 | 550 | 56627 | -13 | 5 |
| -300 | 575 | 55893 | -13 | -6 |
| -300 | 600 | 56018 | -15 | -3 |
| -300 | 625 | 55960 | -14 | -4 |
| -300 | 650 | 55912 | -10 | -5 |
| -300 | 675 | 55836 | -1 | -3 |
| -300 | 700 | 55784 | 9 | 11 |
| -300 | 725 | 55801 | 8 | -4 |
| -300 | 750 | 55842 | 1 | -5 |
| -300 | 775 | 55833 | -10 | -5 |
| -300 | 800 | 55963 | -25 | -16 |
| -300 | 825 | 55917 | -19 | -22 |
| -300 | 850 | 55963 | -8 | -16 |
| -300 | 875 | 55954 | -2 | -12 |
| -300 | 900 | 55999 | 6 | -14 |
| -300 | 925 | 55821 | 15 | -12 |
| -300 | 950 | 55842 | 19 | -5 |
| -300 | 975 | 55931 | 15 | -2 |
| -300 | 1000 | 55954 | 6 | -3 |
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| -300 | 1050 | 55928 | 3 | -3 |
| -300 | 1075 | 55893 | 3 | -1 |
| -300 | 1100 | 55894 | 1 | 0 |
| -300 | 1125 | 55888 | -4 | 2 |
| -300 | 1150 | 55892 | -6 | 3 |
| -300 | 1175 | 55939 | -4 | 3 |
| -300 | 1200 | 55923 | -4 | 2 |
| -300 | 1225 | 55930 | -2 | 2 |
| -300 | 1250 | 55928 | -7 | 2 |
| line -400 | | | | |
| -400 | 000 | 55939 | -2 | 4 |
| -400 | 025 | 55947 | -9 | -2 |
| -400 | 050 | 55993 | -8 | -2 |
| -400 | 075 | 56005 | -1 | -2 |
| -400 | 100 | 55759 | -7 | -6 |
| -400 | 125 | 56149 | -3 | -7 |
| -400 | 150 | 56103 | 0 | -6 |
| -400 | 175 | 56180 | 1 | -3 |
| -400 | 200 | 56323 | 3 | -5 |
| -400 | 225 | 56118 | 1 | -6 |
| -400 | 250 | 56280 | 0 | -8 |
| -400 | 275 | 56130 | 4 | -5 |
| -400 | 300 | 56354 | 6 | 0 |
| -400 | 325 | 56118 | 10 | 2 |
| -400 | 350 | 56034 | 9 | 2 |
| -400 | 375 | 56089 | -2 | 4 |
| -400 | 400 | 56000 | -9 | 2 |
| -400 | 425 | 56019 | -25 | 2 |
| -400 | 450 | 56063 | -26 | 2 |
| -400 | 475 | 56059 | -23 | 3 |
| -400 | 500 | 56257 | -19 | 3 |
| -400 | 525 | 56321 | 0 | 3 |
| -400 | 550 | 56396 | -14 | 0 |
| -400 | 575 | 55949 | 7 | 0 |
| -400 | 600 | 55941 | 8 | -2 |

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|------|------|-------|-----|-----|
| -400 | 625 | 55905 | 4 | -2 |
| -400 | 650 | 55862 | 3 | -3 |
| -400 | 675 | 55894 | -1 | -8 |
| -400 | 700 | 55919 | -9 | -11 |
| -400 | 725 | 55881 | -3 | -13 |
| -400 | 750 | 55897 | 4 | -10 |
| -400 | 775 | 55888 | 12 | -10 |
| -400 | 800 | 55867 | 14 | -16 |
| -400 | 825 | 55970 | 26 | -15 |
| -400 | 850 | 56039 | 26 | -13 |
| -400 | 875 | 55927 | 33 | -10 |
| -400 | 900 | 55878 | 22 | -8 |
| -400 | 925 | 55873 | 10 | -2 |
| -400 | 950 | 55849 | -11 | -1 |
| -400 | 975 | 55891 | -15 | 1 |
| -400 | 1000 | 55911 | -11 | -2 |
| -400 | 1025 | 55897 | -8 | -2 |
| -400 | 1050 | 55922 | -1 | 2 |
| -400 | 1075 | 55906 | 0 | 3 |
| -400 | 1100 | 55883 | -5 | 2 |
| -400 | 1125 | 55884 | -10 | 1 |
| -400 | 1150 | 55888 | -2 | 4 |
| -400 | 1175 | 55876 | -5 | 3 |
| -400 | 1200 | 55881 | -12 | 1 |
| -400 | 1225 | 55909 | -14 | -1 |
| -400 | 1250 | 55912 | -12 | -1 |

baseline 1250

| | | |
|------|------|-------|
| 1250 | 1000 | 57305 |
| 1250 | 975 | 57264 |
| 1250 | 950 | 57500 |
| 1250 | 925 | 57601 |
| 1250 | 900 | 57552 |
| 1250 | 875 | 57099 |
| 1250 | 850 | 57109 |
| 1250 | 825 | 57048 |
| 1250 | 800 | 56981 |
| 1250 | 775 | 56799 |
| 1250 | 750 | 56798 |
| 1250 | 725 | 56657 |
| 1250 | 700 | 56527 |
| 1250 | 675 | 56483 |
| 1250 | 650 | 56403 |
| 1250 | 625 | 56313 |
| 1250 | 600 | 56321 |
| 1250 | 575 | 56391 |
| 1250 | 550 | 56316 |
| 1250 | 525 | 56253 |
| 1250 | 500 | 56230 |
| 1250 | 475 | 56209 |
| 1250 | 450 | 56098 |
| 1250 | 425 | 55964 |
| 1250 | 400 | 56061 |
| 1250 | 375 | 56134 |
| 1250 | 350 | 56104 |
| 1250 | 325 | 56144 |
| 1250 | 300 | 56128 |
| 1250 | 275 | 56075 |
| 1250 | 250 | 56077 |
| 1250 | 225 | 56090 |
| 1250 | 200 | 56069 |
| 1250 | 175 | 56141 |
| 1250 | 150 | 56135 |
| 1250 | 125 | 56117 |
| 1250 | 100 | 56084 |
| 1250 | 075 | 56121 |
| 1250 | 050 | 56102 |
| 1250 | 025 | 56067 |
| 1250 | 000 | 56076 |
| 1250 | -025 | 56093 |
| 1250 | -050 | 56057 |

| | | |
|------|------|-------|
| 1250 | -075 | 56024 |
| 1250 | -100 | 56041 |
| 1250 | -125 | 56050 |
| 1250 | -150 | 56017 |
| 1250 | -175 | 55975 |
| 1250 | -200 | 55956 |
| 1250 | -225 | 55955 |
| 1250 | -250 | 55934 |
| 1250 | -275 | 55921 |
| 1250 | -300 | 55928 |
| 1250 | -325 | 55929 |
| 1250 | -350 | 55925 |
| 1250 | -375 | 55929 |
| 1250 | -400 | 55912 |

APPENDIX III
GEOPHYSICAL EQUIPMENT SPECIFICATIONS

MP-2 PROTON PRECESSION MAGNETOMETER

Resolution: 1 gamma

Total Field Accuracy: \pm gamma over full operating range

Range: 20,000 to 100,000 gammas in 25 overlapping steps.

Internal Measuring Program: A reading appears 1.5 seconds after depression of Operate Switch & remains displayed for 2.2 secs. Recycling feature permits automatic repetitive readings at 3.7 sec. intervals.

External Trigger: External trigger input permits use of sampling intervals longer than 3.7 seconds.

Display: 5 digit LED readout displaying total magnetic field in gammas or normalized battery voltage.

Data Output: Multiplied precession frequency and gate time outputs for base station recording using interfacing optionally available from Scintrex.

Gradient Tolerance: Up to 5,000 gammas/meter.

Power Source: 8 size D cells \approx 25,000 readings at 25° C under reasonable conditions.

Sensor: Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.

Harness: Complete for operation with staff or back pack sensor.

Operating Temperature Range: -35 to +60° C.

Size: Console, 8 x 16 x 25 cm; Sensor, 8 x 15 cm; Staff 30 x 66 cm;

Weights: Console, 1.8 kg; Sensor, 1.3 kg; Staff, 0.6 kg;

Manufacturer: Scintrex
222 Snidercroft Road
Concord, Ontario

GEONICS LIMITED
VLF EM 16

Source of Primary Field VLF transmitting stations

Transmitting Stations Used: Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.

Operating Frequency Range: About 15-25 Hz.

Parameters Measured: 1- The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid).
 2- The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).

Method of Reading: In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone

Scale Range: In-phase $\pm 150\%$; quadrature $\pm 40\%$

Readability: $\pm 1\%$

Operating Temperature Range: -40 to 50° C.

Operating Controls: ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature dial $\pm 40\%$, inclinometer $\pm 150\%$

Power Supply: 6 size AA alkaline cells ≈ 200 hrs.

Dimensions: 42 x 14 x 9 cm (16 x 5.5 x 3.5 in)

Weight: 1.6 kg. (3.5 lbs)

Instrument Supplied With: Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional) set of batteries.

Manufacturer: Geonics Limited
 1745 Meyerside Drive/Unit 8
 Mississauga, Ontario
 L5T 1C5

APPENDIX IV
ROCK SAMPLE DESCRIPTIONS

| Sample No. | Width cm | Au ppb | Ag ppm | As ppm | Cu ppm | Pb ppm | Zn ppm | Description |
|------------|----------|--------|--------|--------|--------|--------|--------|--|
| 079 | grab | <5 | 0.4 | 26 | 34 | <2 | 52 | grey-black, feldspar porphyry dyke? 1-5% pyrite |
| 080 | grab | <5 | 0.2 | <2 | 38 | <2 | 64 | light grey-black siliceous dyke? Locally to 20% pyrite |
| 081 | grab | 5 | 0.6 | <2 | 44 | <2 | 28 | dark grey-green sugary textured dyke, 1% pyrite along margin |
| 082 | grab | 5 | 0.2 | <2 | 35 | 6 | 142 | grey siliceous dyke, 1-5% pyrite |
| 083 | grab | <5 | <0.2 | 12 | 24 | <2 | 56 | dark grey-green limestone, sugary textured, 5% pyrite, altered? |
| 084 | grab | <5 | <0.2 | <2 | 25 | <2 | 40 | grey siliceous dyke, 1-5% pyrite |
| 085 | grab | <5 | 0.2 | <2 | 15 | <2 | 28 | reddish altered limestone, 1 mm fractures with calcite, near dyke |
| 086 | grab | <5 | <0.2 | <2 | 9 | 6 | 62 | grey-white hornfelsed argillite, silicified, 1% fine grained sulphides |
| 087 | float | <5 | 0.2 | <2 | 8 | 126 | 132 | white, grey, green skarn, minor white calcite, limestone |
| 088 | grab | <5 | 2.6 | <2 | 205 | 376 | 4220 | pale green, grey skarn, white calcite, black 1% sphalerite, pyrite, |
| 089 | grab | <5 | 4.0 | <2 | 206 | 568 | 2510 | grey, green skarn, calcite, ½% sphalerite, trace galena, pyrite |
| 090 | grab | <5 | 1.4 | <2 | 49 | 230 | 2070 | green skarn, brown garnet, white calcite, ½% sphalerite, limonite |
| 091 | float | <5 | 0.6 | <2 | 12 | 44 | 7530 | green skarn, brown garnet, white calcite, limonite along fractures |
| 092 | float | <5 | <0.2 | <2 | <1 | <2 | 160 | green skarn, minor white calcite, no sulphides |
| 093 | select | <5 | 8.8 | <2 | 679 | 760 | 1.57% | grey, white skarn, 1% sphalerite, trace chalcopryite, limonite |
| 094 | grab | <5 | 3.6 | <2 | 450 | 76 | 468 | boulders, grey, green skarn, 1% pyrite, trace chalcopryite, limonite |
| 095 | grab | <5 | <0.2 | <2 | 7 | 4 | 388 | grey, bleached, hornfelsed argillite, rusty fractures |
| 096 | grab | <5 | 0.6 | <2 | 23 | 6 | 94 | grey siliceous dyke? 1-10% pyrite, minor, orange limestone |
| 097 | grab | <5 | 0.2 | 8 | 102 | <2 | 40 | grey, hornfelsed argillite, 1-5% pyrite on fractures, minor calcite |
| 098 | grab | <5 | <0.2 | <2 | 33 | 2 | 48 | grey, green, fine grained dyke, 3-5% magnetite, Hedley dyke |
| 099 | float | <5 | 0.6 | 2 | 102 | 444 | 706 | weak skarn, white calcite, limonite, trace sphalerite on fractures |
| 100 | select | <5 | 4.4 | <2 | 1 | 5710 | 5960 | light grey skarn, white calcite, orange limonite |
| 101 | float | <5 | 1.4 | <2 | 38 | 2000 | 3720 | dark grey, weak skarn, white calcite |
| 102 | grab | 10 | 1.2 | 2 | 73 | 20 | 220 | rusty, glassy, hornfelsed argillite, 1-2% pyrite |
| 103 | grab | 10 | 1.4 | <2 | 96 | 6 | 698 | rusty, weakly hornfelsed argillite, calcite on fractures, trace pyrite |
| 104 | float | 10 | 0.8 | <2 | 47 | 18 | 344 | silicified limestone, to 5% pyrite locally |
| 105 | float | 10 | 1.4 | <2 | 106 | <2 | 580 | silicified limestone, minor argillite, trace to 5% pyrite locally |
| 106 | grab | 10 | 1.2 | 24 | 60 | 12 | 238 | rusty argillite, 2% pyrite |
| 107 | grab | <5 | 0.8 | <2 | 81 | <2 | 42 | silicified Copperfield breccia, minor argillite, 1% pyrite |
| 108 | grab | <5 | 1.0 | 10 | 80 | 2 | 118 | grey-black, hornfelsed argillite, silicified, to 5% pyrite locally |
| 109 | grab | 70 | 1.8 | 16 | 81 | 2 | 416 | white, dark grey, rusty, Copperfield breccia, silicified, 2% pyrite |
| 110 | grab | 5 | 1.0 | 12 | 63 | 6 | 458 | grey, white, rusty, Copperfield breccia, silicified, 2% pyrite |
| 111 | grab | <5 | 0.4 | 18 | 58 | 10 | 162 | black limestone, rusty argillite, 2-4 mm calcite veinlets, 2% pyrite |
| 112 | grab | <5 | 0.4 | 2 | 12 | 10 | 42 | grey-black limestone, 1-5 mm white calcite veinlets, rusty fractures |
| 113 | grab | <5 | <0.2 | 92 | 15 | 6 | 48 | green, grey hornblende dyke, 1-2% pyrite, Hedley dyke? |
| 114 | grab | <5 | 0.8 | 6 | 54 | 16 | 250 | rusty argillite, silicified limestone, 1-10% pyrite |
| 115 | float | <5 | 2.0 | 26 | 56 | 16 | 40 | silicified limestone, glassy argillite, fractures with calcite, pyrite |
| 116 | float | <5 | 0.2 | <2 | 7 | 10 | 6 | limestone cut by veinlets of black calcite |
| 117 | float | 15 | 2.2 | 16 | 89 | 16 | 286 | hornfelsed argillite, limestone, calcite veinlets, 2-4% pyrite |
| 118 | grab | <5 | 1.2 | 8 | 39 | 8 | 44 | light-dark grey silicified? Copperfield breccia, trace pyrite |
| 119 | grab | 10 | 1.0 | 16 | 61 | 10 | 30 | light grey silicified? Copperfield breccia, rusty |

| | | | | | | | | |
|-----|-------|----|------|----|-----|-----|-----|--|
| 120 | grab | <5 | 0.4 | 24 | 55 | 12 | 112 | glassy, hornfelsed argillite, rusty, 1-3% pyrite |
| 121 | grab | 10 | 0.8 | 26 | 93 | 6 | 114 | glassy, hornfelsed argillite, rusty, 1-3% pyrite |
| 122 | grab | <5 | <0.2 | <2 | 16 | 154 | 158 | weak skarn, stronger on fractures, 1-4% pyrite black sulphide? |
| 123 | grab | <5 | <0.2 | <2 | 23 | 22 | 136 | grey, green skarn, rusty fractures, brown garnet |
| 124 | grab | <5 | <0.2 | <2 | 26 | 14 | 250 | minor grey skarn, 5-10% pyrite, |
| 125 | grab | <5 | 0.2 | <2 | 25 | 6 | 176 | grey skarn, silicification, 2-5% pyrite, weak green alteration |
| 126 | float | <5 | <0.2 | <2 | 4 | 4 | 18 | argillite with quartz veinlets, rusty fractures |
| 127 | grab | <5 | <0.2 | <2 | 19 | 10 | 198 | minor green skarn, white calcite, to 5% pyrite |
| 128 | grab | <5 | 0.4 | <2 | 63 | 6 | 76 | hornfelsed argillite, some silicification, to 5% pyrite |
| 129 | grab | <5 | <0.2 | <2 | 26 | <2 | 54 | bleached, Hedley dyke, rusty on weathered surface |
| 130 | grab | <5 | 0.2 | 8 | 46 | 10 | 126 | rusty argillite, 1-2% pyrite, minor unaltered limestone |
| 131 | grab | <5 | 0.6 | 10 | 61 | 12 | 100 | rusty argillite, 1-3% pyrite, minor unaltered limestone |
| 132 | grab | 10 | 0.8 | <2 | 85 | 8 | 50 | silicified limestone, trace to 5% pyrrhotite, trace of chalcopyrite? |
| 133 | grab | 5 | 0.2 | <2 | 36 | 6 | 40 | selective silicification of limestone, 2-5% pyrrhotite on fractures |
| 134 | grab | 5 | 0.4 | 12 | 46 | <2 | 64 | white, silicified Copperfield breccia, irregular, 1% pyrrhotite |
| 135 | grab | 10 | 0.6 | 10 | 80 | 6 | 42 | dark grey silicified Copperfield breccia, rusty |
| 136 | grab | 60 | 2.4 | 66 | 56 | 12 | 52 | dark grey silicified Copperfield breccia, 1-4% pyrite, irregular |
| 137 | float | 10 | 1.2 | 16 | 85 | 2 | 36 | grey silicified skarn? minor green, 1-4% pyrite, white calcite |
| 138 | grab | 50 | 3.0 | 74 | 128 | 18 | 38 | grey silicified skarn? 2-4% pyrite, trace pale pink alteration |
| 139 | grab | 20 | 0.8 | 10 | 71 | 6 | 26 | grey-black silicified skarn? White calcite, 1-4% pyrite |
| 140 | grab | <5 | 0.8 | 8 | 45 | 6 | 250 | grey silicified Copperfield breccia, calcite, trace pyrite, pyrrhotite |
| 141 | grab | <5 | 0.6 | <2 | 78 | 6 | 64 | grey-black silicified skarn? Copperfield breccia, 1-4% pyrrhotite |
| 142 | grab | 10 | 0.8 | 2 | 44 | 2 | 42 | grey silicified skarn, Copperfield breccia, 10% pyrrhotite |
| 143 | grab | <5 | 0.6 | <2 | 35 | 6 | 32 | grey skarn? Narrow argillite beds, 1/2% pyrite |
| 144 | grab | <5 | <0.2 | <2 | 10 | 6 | 26 | white calcite, grey silicified zones, trace sulphides |
| 145 | grab | <5 | 0.6 | <2 | 57 | 2 | 28 | minor argillite and white marble, grey silicification, trace sulphides |
| 146 | grab | 5 | 1.0 | <2 | 43 | 8 | 28 | grey silicified skarn, Copperfield breccia, pyrite on fractures |
| 147 | grab | <5 | 0.8 | <2 | 17 | <2 | 16 | grey silicified skarn, Copperfield breccia, pyrite on fractures |

APPENDIX V
COST STATEMENT

COST STATEMENT

SALARIES

Grant Crooker, Geologist
September 5, 1997 - August 5, 1998
39 days @ \$ 400.00/day \$ 15,600.00

MEALS AND ACCOMMODATION

Grant Crooker - 32 days @ \$ 60.00/day 1,920.00

TRANSPORTATION

Vehicle Rental (Blazer 4 x 4)
September 5, 1997 - August 5, 1998
32 days @ \$ 60.00/day 1,920.00

Gasoline 350.00

EQUIPMENT RENTAL

Magnetometer (Scintrex MP-2)
July 1998
3 days @ \$ 25.00/day 75.00

VLF-EM (Geonics EM-16)
July 1998
4 days @ \$ 25.00/day 100.00

GEOCHEMICAL ANALYSIS

34 silt samples - 32 element ICP, Au (30 gram) @ \$ 19.26 654.84
304 soil samples - 32 element ICP, Au (30 gram) @ \$ 19.26 5,855.04
69 rock samples - 32 element ICP, Au (30 gram) @ \$ 23.38 1,613.22
1 rock sample - zinc assay @ \$ 8.56 8.56

SUPPLIES 243.75

FREIGHT 137.78

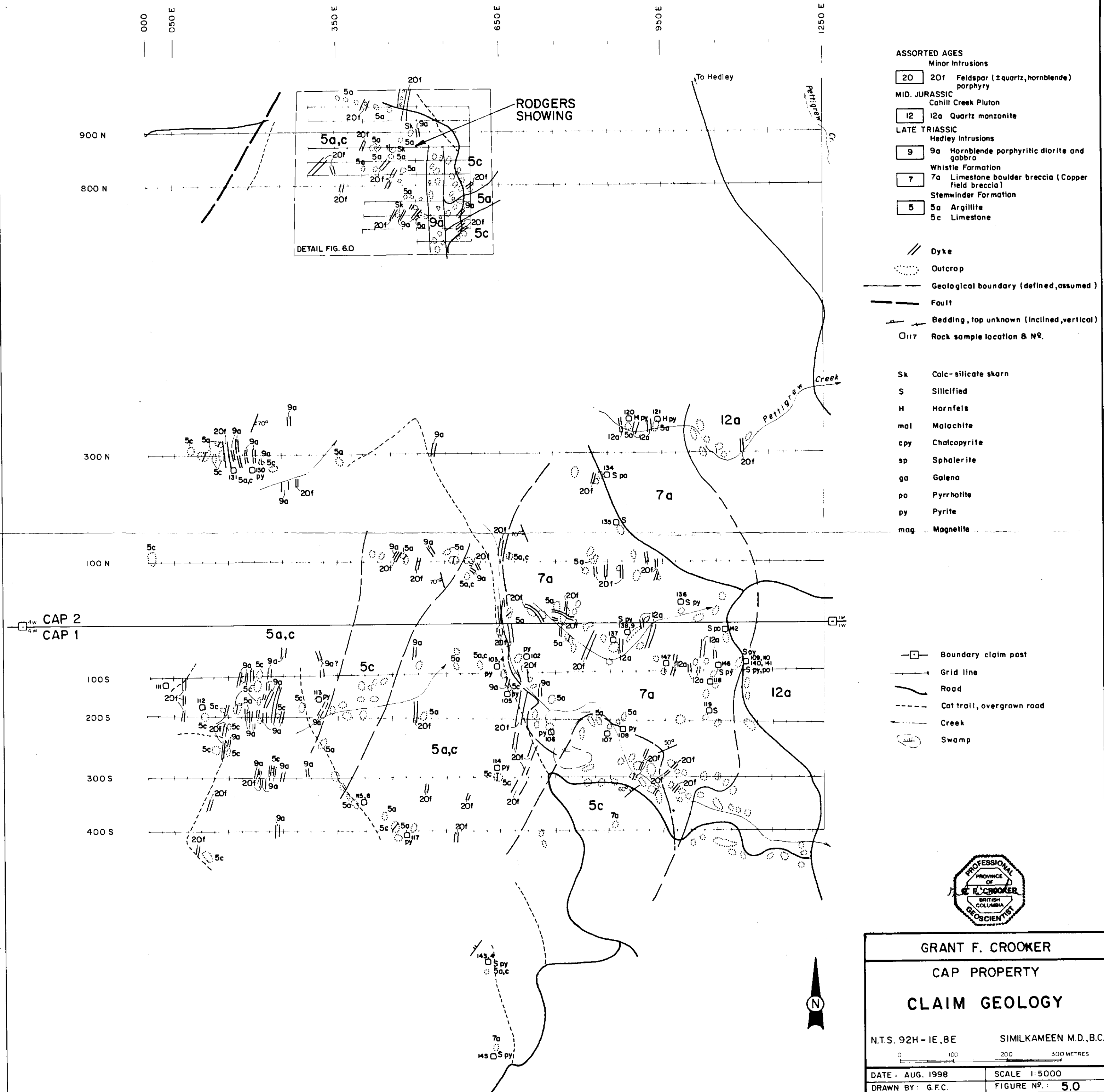
DRAFTING 500.00

PREPARATION OF REPORT

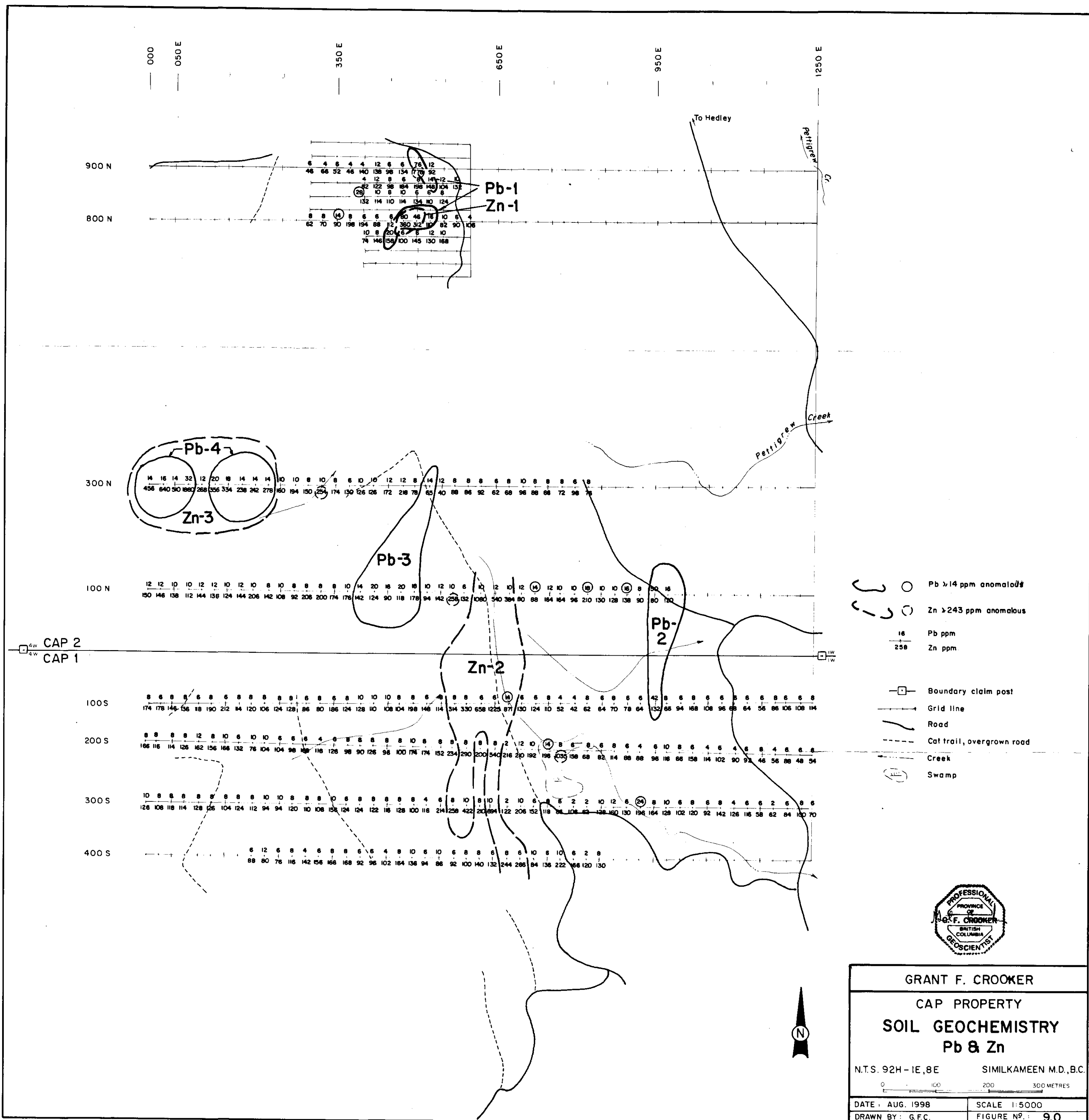
(Reproduction, copying, telephone, overhead) 250.00

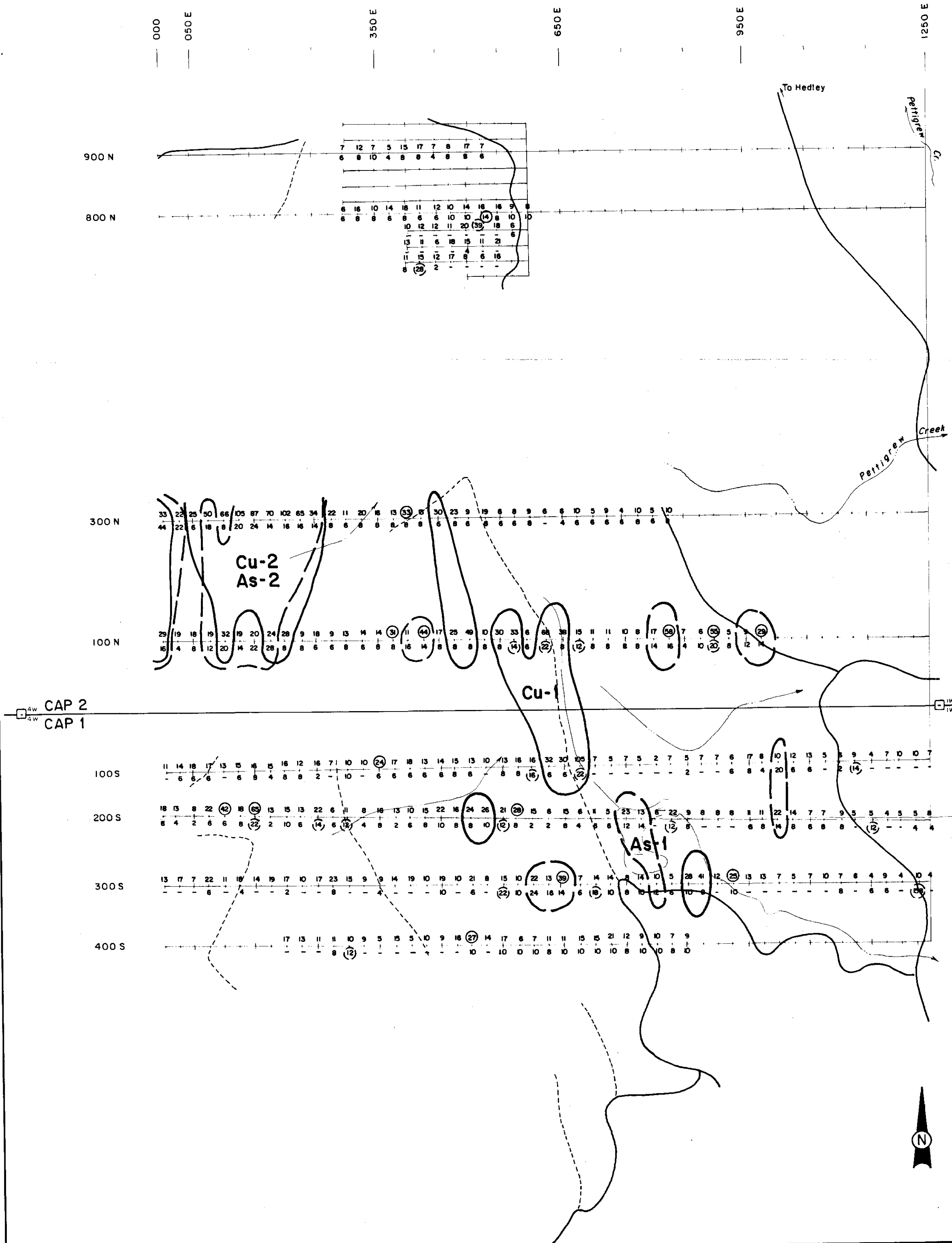
TOTAL \$ 29,228.19

| Sample No. | Width cm | Au g/g | Ag ppm | As ppm | Cu ppm | Pb ppm | Zn ppm | Description |
|------------|----------|--------|--------|--------|--------|--------|--------|--|
| 079 | grab | <5 | 0.4 | 26 | 34 | <2 | 52 | grey-black, feldspar porphyry dyke? 1-5% pyrite |
| 080 | grab | <5 | 0.2 | <2 | 38 | <2 | 64 | light grey-black siliceous dyke? Locally to 20% pyrite |
| 081 | grab | 5 | 0.6 | <2 | 44 | <2 | 28 | dark grey-green sugary textured dyke, 1% pyrite along margin |
| 082 | grab | 5 | 0.2 | <2 | 35 | 6 | 142 | grey siliceous dyke, 1-5% pyrite |
| 083 | grab | <5 | <0.2 | 12 | 24 | <2 | 56 | dark grey-green limestone, sugary textured, 5% pyrite, altered? |
| 084 | grab | <5 | <0.2 | <2 | 25 | <2 | 40 | grey siliceous dyke, 1-5% pyrite |
| 085 | grab | <5 | 0.2 | <2 | 15 | <2 | 28 | reddish altered limestone, 1 mm fractures with calcite, near dyke |
| 086 | grab | <5 | <0.2 | <2 | 9 | 6 | 62 | grey-white hornfelsed argillite, silicified, 1% fine grained sulphides |
| 087 | float | <5 | 0.2 | <2 | 8 | 126 | 132 | white, grey, green skarn, minor white calcite, limestone |
| 088 | grab | <5 | 2.6 | <2 | 205 | 376 | 4220 | pale green, grey skarn, white calcite, black 1% sphalerite, pyrite, |
| 089 | grab | <5 | 4.0 | <2 | 206 | 568 | 2510 | grey, green skarn, calcite, 1/2% sphalerite, trace galena, pyrite |
| 090 | grab | <5 | 1.4 | <2 | 49 | 230 | 2070 | green skarn, brown garnet, white calcite, 1/2% sphalerite, limonite |
| 091 | float | <5 | 0.6 | <2 | 12 | 44 | 7530 | green skarn, brown garnet, white calcite, limonite along fractures |
| 092 | float | <5 | <0.2 | <2 | <1 | <2 | 160 | green skarn, minor white calcite, no sulphides |
| 093 | select | <5 | 8.8 | <2 | 679 | 760 | 1.57% | grey, white skarn, 1% sphalerite, trace chalcopyrite, limonite |
| 094 | grab | <5 | 3.6 | <2 | 450 | 76 | 468 | boulders, grey, green skarn, 1% pyrite, trace chalcopyrite, limonite |
| 095 | grab | <5 | <0.2 | <2 | 7 | 4 | 368 | grey, bleached, hornfelsed argillite, rusty fractures |
| 096 | grab | <5 | 0.6 | <2 | 23 | 6 | 94 | grey siliceous dyke? 1-10% pyrite, minor, orange limestone |
| 097 | grab | <5 | 0.2 | 8 | 102 | <2 | 40 | grey, hornfelsed argillite, 1-5% pyrite on fractures, minor calcite |
| 098 | grab | <5 | <0.2 | <2 | 33 | 2 | 48 | grey, green, fine grained dyke, 3-5% magnetite, Hedley dyke |
| 099 | float | <5 | 0.6 | 2 | 102 | 444 | 706 | weak skarn, white calcite, limonite, trace sphalerite on fractures |
| 100 | select | <5 | 4.4 | <2 | 1 | 5710 | 5960 | light grey skarn, white calcite, orange limonite |
| 101 | float | <5 | 1.4 | <2 | 38 | 2000 | 3720 | dark grey, weak skarn, white calcite |
| 102 | grab | 10 | 1.2 | 2 | 73 | 20 | 220 | rusty, glassy, hornfelsed argillite, 1-2% pyrite |
| 103 | grab | 10 | 1.4 | <2 | 96 | 6 | 698 | rusty, weakly hornfelsed argillite, calcite on fractures, trace pyrite |
| 104 | float | 10 | 0.8 | <2 | 47 | 18 | 344 | silicified limestone, to 5% pyrite locally |
| 105 | float | 10 | 1.4 | <2 | 106 | <2 | 580 | silicified limestone, minor argillite, trace to 5% pyrite locally |
| 106 | grab | 10 | 1.2 | 24 | 60 | 12 | 238 | rusty argillite, 2% pyrite |
| 107 | grab | <5 | 0.8 | <2 | 81 | <2 | 42 | silicified Copperfield breccia, minor argillite, 1% pyrite |
| 108 | grab | <5 | 1.0 | 10 | 80 | 2 | 118 | grey-black, hornfelsed argillite, silicified, to 5% pyrite locally |
| 109 | grab | 70 | 1.8 | 16 | 81 | 2 | 416 | white, dark grey, rusty, Copperfield breccia, silicified, 2% pyrite |
| 110 | grab | 5 | 1.0 | 12 | 63 | 6 | 458 | grey, white, rusty, Copperfield breccia, silicified, 2% pyrite |
| 111 | grab | <5 | 0.4 | 18 | 58 | 10 | 162 | black limestone, rusty argillite, 2-4 mm calcite veinlets, 2% pyrite |
| 112 | grab | <5 | 0.4 | 2 | 12 | 10 | 42 | grey-black limestone, 1.5 mm white calcite veinlets, rusty fractures |
| 113 | grab | <5 | <0.2 | 92 | 15 | 6 | 48 | green, grey hornblende dyke, 1-2% pyrite, Hedley dyke? |
| 114 | grab | <5 | 0.8 | 6 | 54 | 16 | 250 | rusty argillite, silicified limestone, 1-10% pyrite |
| 115 | float | <5 | 2.0 | 26 | 56 | 16 | 40 | silicified limestone, glassy argillite, fractures with calcite, pyrite |
| 116 | float | <5 | 0.2 | <2 | 7 | 10 | 6 | limestone cut by veinlets of black calcite |
| 117 | float | 15 | 2.2 | 16 | 89 | 16 | 286 | hornfelsed argillite, limestone, calcite veinlets, 2-4% pyrite |
| 118 | grab | <5 | 1.2 | 8 | 39 | 8 | 44 | light-dark grey silicified? Copperfield breccia, trace pyrite |
| 119 | grab | 10 | 1.0 | 16 | 61 | 10 | 30 | light grey silicified? Copperfield breccia, rusty |
| 120 | grab | <5 | 0.4 | 24 | 55 | 12 | 112 | glassy, hornfelsed argillite, rusty, 1-3% pyrite |
| 121 | grab | 10 | 0.8 | 26 | 93 | 6 | 114 | glassy, hornfelsed argillite, rusty, 1-3% pyrite |
| 122 | grab | <5 | <0.2 | <2 | 16 | 154 | 158 | weak skarn, stronger on fractures, 1-4% pyrite black sulphide? |
| 123 | grab | <5 | <0.2 | <2 | 23 | 22 | 136 | grey, green skarn, rusty fractures, brown garnet |
| 124 | grab | <5 | <0.2 | <2 | 26 | 14 | 250 | minor grey skarn, 5-10% pyrite, |
| 125 | grab | <5 | 0.2 | <2 | 25 | 6 | 176 | grey skarn, silicification, 2-5% pyrite, weak green alteration |
| 126 | float | <5 | <0.2 | <2 | 4 | 4 | 18 | argillite with quartz veinlets, rusty fractures |
| 127 | grab | <5 | <0.2 | <2 | 19 | 10 | 198 | minor green skarn, white calcite, to 5% pyrite |
| 128 | grab | <5 | 0.4 | <2 | 63 | 6 | 76 | hornfelsed argillite, some silicification, to 5% pyrite |
| 129 | grab | <5 | <0.2 | <2 | 26 | <2 | 54 | bleached, Hedley dyke, rusty on weathered surface |
| 130 | grab | <5 | 0.2 | 8 | 46 | 10 | 126 | rusty argillite, 1-2% pyrite, minor unaltered limestone |
| 131 | grab | <5 | 0.6 | 10 | 61 | 12 | 100 | rusty argillite, 1-3% pyrite, minor unaltered limestone |
| 132 | grab | 10 | 0.8 | <2 | 85 | 8 | 50 | silicified limestone, trace to 5% pyrrhotite, trace of chalcopyrite? |
| 133 | grab | 5 | 0.2 | <2 | 36 | 6 | 40 | selective silicification of limestone, 2-5% pyrrhotite on fractures |
| 134 | grab | 5 | 0.4 | 12 | 46 | <2 | 64 | white, silicified Copperfield breccia, irregular, 1% pyrrhotite |
| 135 | grab | 10 | 0.6 | 10 | 60 | 6 | 42 | dark grey silicified Copperfield breccia, rusty |
| 136 | grab | 60 | 2.4 | 66 | 56 | 12 | 52 | dark grey silicified Copperfield breccia, 1-4% pyrite, irregular |
| 137 | float | 10 | 1.2 | 16 | 85 | 2 | 36 | grey silicified skarn? minor green, 1-4% pyrite, white calcite |
| 138 | grab | 50 | 3.0 | 74 | 128 | 18 | 38 | grey silicified skarn? 2-4% pyrite, trace pale pink alteration |
| 139 | grab | 20 | 0.8 | 10 | 71 | 6 | 26 | grey-black silicified skarn? White calcite, 1-4% pyrite |
| 140 | grab | <5 | 0.8 | 8 | 45 | 6 | 250 | grey silicified Copperfield breccia, calcite, trace pyrite, pyrrhotite |
| 141 | grab | <5 | 0.6 | <2 | 78 | 6 | 64 | grey-black silicified skarn? Copperfield breccia, 1-4% pyrrhotite |
| 142 | grab | 10 | 0.8 | 2 | 44 | 2 | 42 | grey silicified skarn, Copperfield breccia, 10% pyrrhotite |
| 143 | grab | <5 | 0.6 | <2 | 35 | 6 | 32 | grey skarn? Narrow argillite beds, 1/2% pyrite |
| 144 | grab | <5 | <0.2 | <2 | 10 | 6 | 26 | white calcite, grey silicified zones, trace sulphides |
| 145 | grab | <5 | 0.6 | <2 | 57 | 2 | 28 | minor argillite and white marble, grey silicification, trace sulphides |
| 146 | grab | 5 | 1.0 | <2 | 43 | 8 | 28 | grey silicified skarn, Copperfield breccia, pyrite on fractures |
| 147 | grab | <5 | 0.8 | <2 | 17 | <2 | 16 | grey silicified skarn, Copperfield breccia, pyrite on fractures |





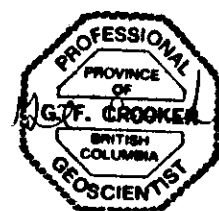
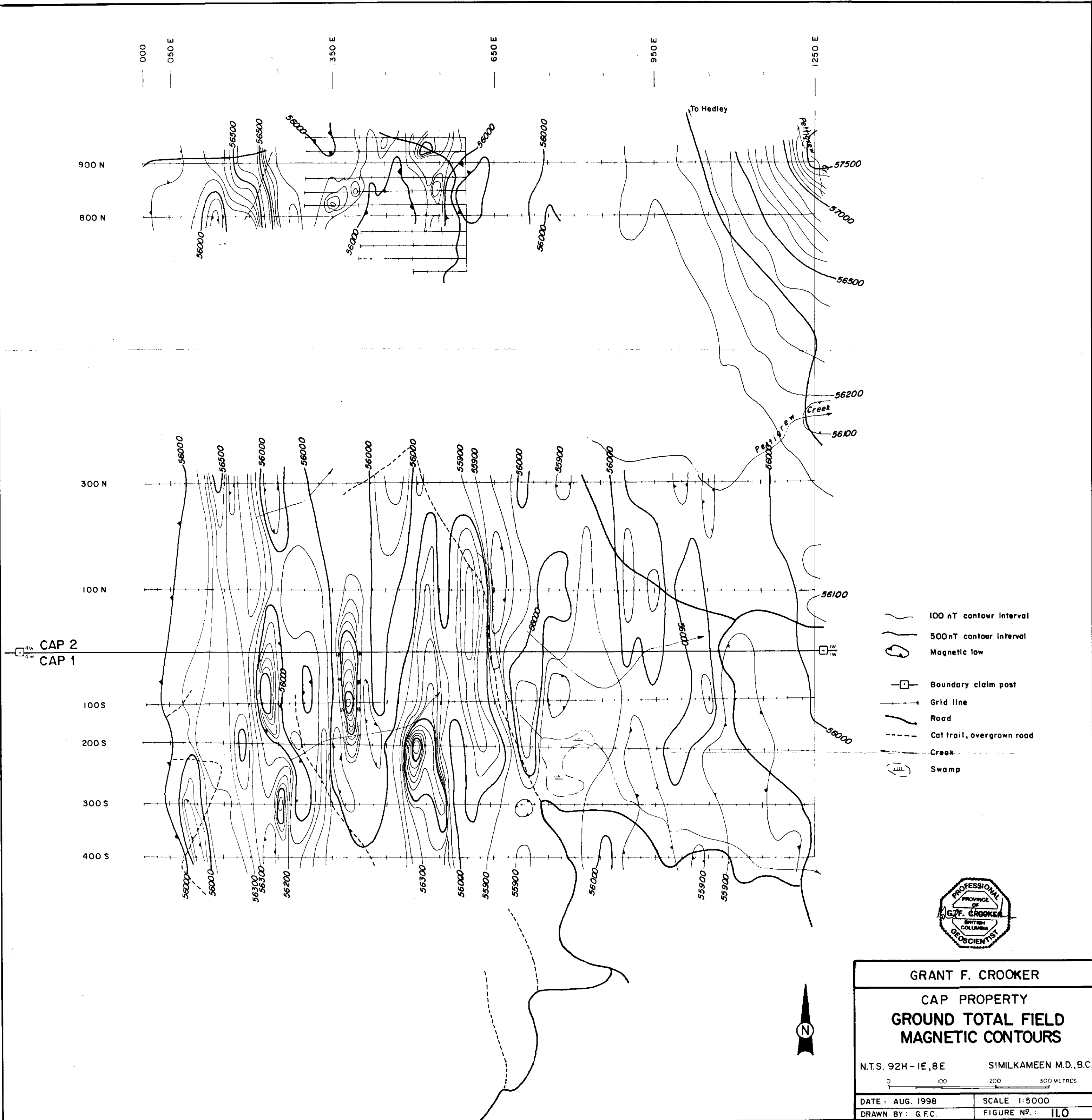




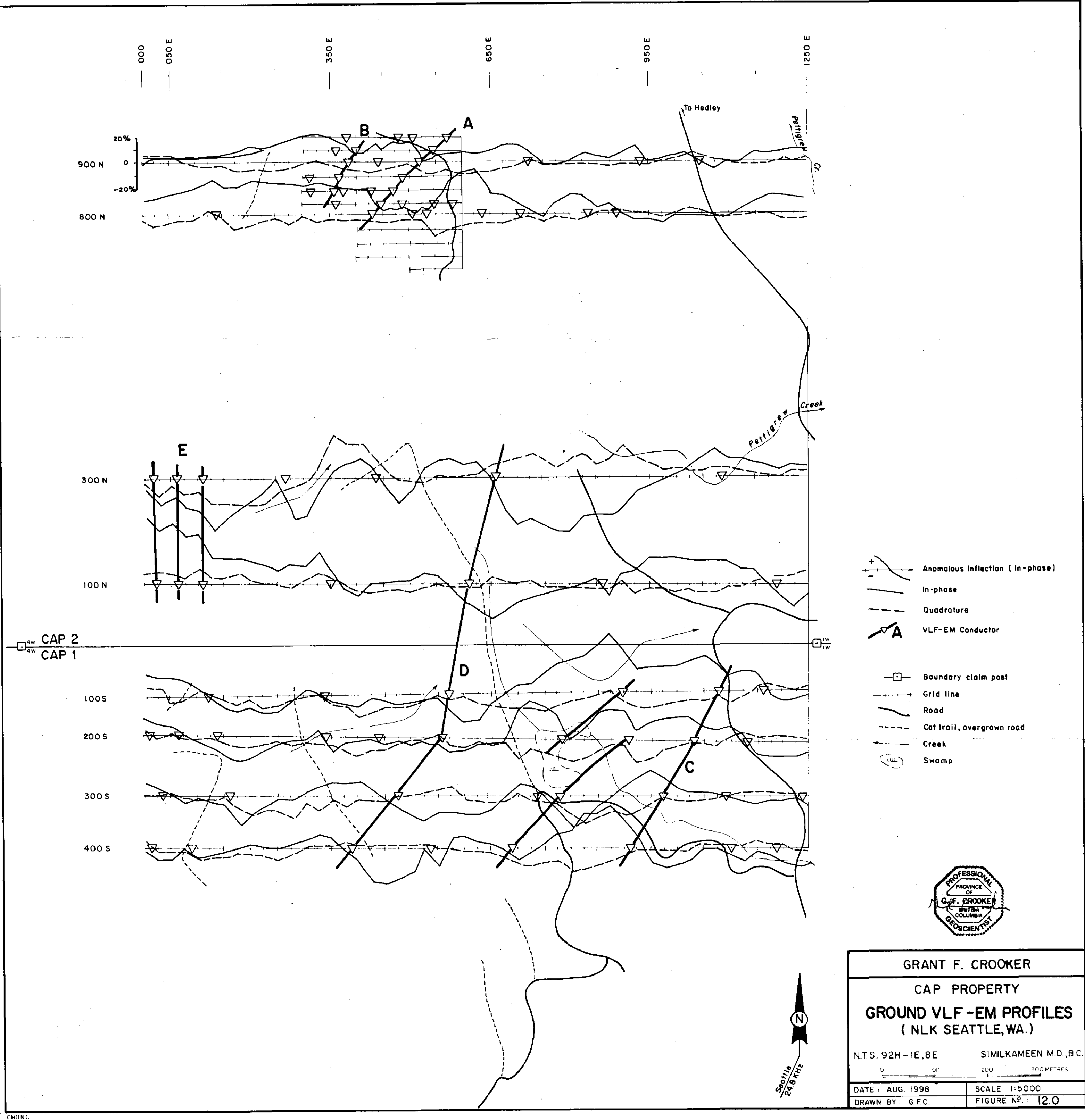
- Cu >24 ppm anomalous
- As >12 ppm anomalous
- Cu ppm (As (2 ppm is shown as -) As ppm)
- Boundary claim post
- Grid line
- Road
- Cat trail, overgrown road
- Creek
- Swamp

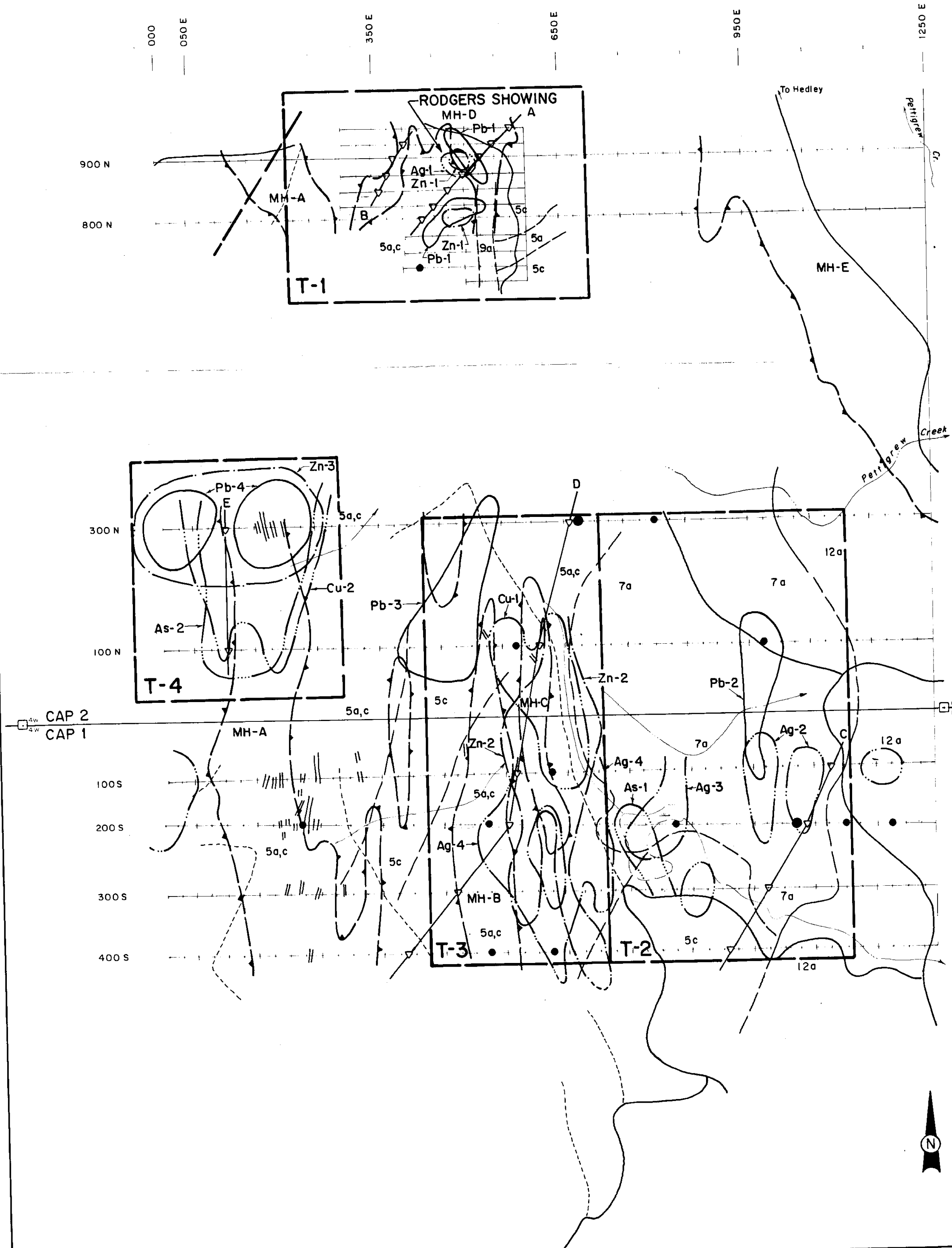


| | |
|----------------------|------------------------|
| GRANT F. CROOKER | |
| CAP PROPERTY | |
| SOIL GEOCHEMISTRY | |
| Cu & As | |
| N.T.S. 92H-1E,8E | SIMILKAMEEN M.D., B.C. |
| 0 100 200 300 METRES | |
| DATE: AUG. 1998 | SCALE 1:5000 |
| DRAWN BY: G.F.C. | FIGURE NO.: 10.0 |



| | |
|----------------------|------------------------|
| GRANT F. CROOKER | |
| CAP PROPERTY | |
| GROUND TOTAL FIELD | |
| MAGNETIC CONTOURS | |
| N.T.S. 92H-1E,8E | SIMILKAMEEN M.D., B.C. |
| 0 100 200 300 METRES | |
| DATE: AUG. 1998 | SCALE 1:5000 |
| DRAWN BY: G.F.C. | FIGURE NO.: 11.0 |





- GEOLOGY**
- 12 Cahill Creek Pluton
 - 12a Quartz monzonite
 - 9 Hedley Intrusions
 - 9a Hornblende porphyritic diorite & gabbro
 - 7 Whistle Formation
 - 7a Limestone boulder breccia (Copperfield breccia)
 - 5 Stemwinder Formation
 - 5a Argillite
 - 5b Limestone
- Geological contact (defined, assumed)
- Fault
- == Hedley dyke

- GEOCHEMISTRY**
- Anomalous Au soil values 15-49, >50 ppb
 - Lead anomaly
 - - - Zinc anomaly
 - ... Silver anomaly
 - . - . Copper anomaly
 - - - - Arsenic anomaly

- GEOPHYSIC**
- A — Conductor system
 - (MH-A) Magnetic high (>56100 nT)

T-1 Target area

- Boundary claim post
- Grid line
- Road
- - - Cat trail, overgrown road
- Creek
- Swamp



| | |
|--------------------------|------------------------|
| GRANT F. CROOKER | |
| CAP PROPERTY | |
| COMPILATION OF 1998 WORK | |
| N.T.S. 92H-1E,8E | SIMILKAMEEN M.D., B.C. |
| DATE: AUG. 1998 | SCALE 1:5000 |
| DRAWN BY: G.F.C. | FIGURE NO. 13.0 |