| | SUB RECORDER | | | | | |
|---|--------------|--|--|--|--|--|
| | APR 1 6 1998 | | | | | |
| Ì | M.R. # | | | | | |

GEOCHEMICAL REPORT

on the

STAR CLAIMS

OMENICA MINING DIVISION

N.T.S. 94-C-5E and 94-C-12E

Lat.: 56°29'N Long.: 125°40'W

by

U. MOWAT, P. GEO.

APRIL, 1998

GEOLOGICAL SURVEY BRANCH



TABLE OF CONTENTS

| 1.0 | Introduction | 1 |
|------|-----------------------------|----|
| 2.0 | Location and Access | 1 |
| 3.0 | Claim Data | 1 |
| 4.0 | History | 4 |
| 5.0 | Regional Geology | 4 |
| 6.0 | Property Geology | 5 |
| 7.0 | Mineralization | 6 |
| 8.0 | Alteration | 7 |
| 9.0 | Work Program | 7 |
| 10.0 | Sample Descriptions | 8 |
| 11.0 | Results | 10 |
| 12.0 | Conclusions | 20 |
| 13.0 | References | 21 |
| 14.0 | Statement of Costs | 23 |
| 15.0 | Statement of Qualifications | 25 |

.

FIGURES

| Figure 1: | Location Map | 2 |
|-----------|--------------|---|
| Figure 2: | Claim Map | 3 |

TABLES

2

| Table 1: | Copper in ppm | 11 |
|----------|----------------------|-----------|
| Table 2: | Nickel in ppm | 12 |
| Table 3: | Cobalt in ppm | 13 |
| Table 4: | Iron in per cent | 14 |
| Table 5: | Chromite in ppm | 15 |
| Table 6: | Titanium in per cent | 16 |
| Table 7: | Gold in ppb | 17 |
| Table 8: | Platinum in ppb | 18 |
| Table 9: | Palladium in ppb | 19 |

Appendix: Analytical Results in pocket

Maps: Sample Location Map

PAGE

1.0 INTRODUCTION

On September 6, 1997 two men collected 27 rock samples and 2 silt samples from various locations on the Star claims that previous sampling had indicated anomalous geochemical results. A variety of different lithologies were sampled in order to attempt to determine if there was a geochemical preference of certain metals for a specific rock type. All samples were analysed for 30 elements by ICP and Au, Pt, Pd by fire assay/ICP.

Thirteen of the original samples were re-analysed to determine if there was any nugget effects from awaruite, gold, platinum or palladium as coarsegrained awaruite and a yellow metallic tentatively identified as gold were noted in hand specimen. All samples were analysed for 30 elements by ICP and Au, Pt, Pd by fire assay/ICP.

Five samples were selected for concentrating using a Knelsen concentrator. The samples were analysed for 30 elements by ICP and Au, Pt, Pd by fire assay and ICP.

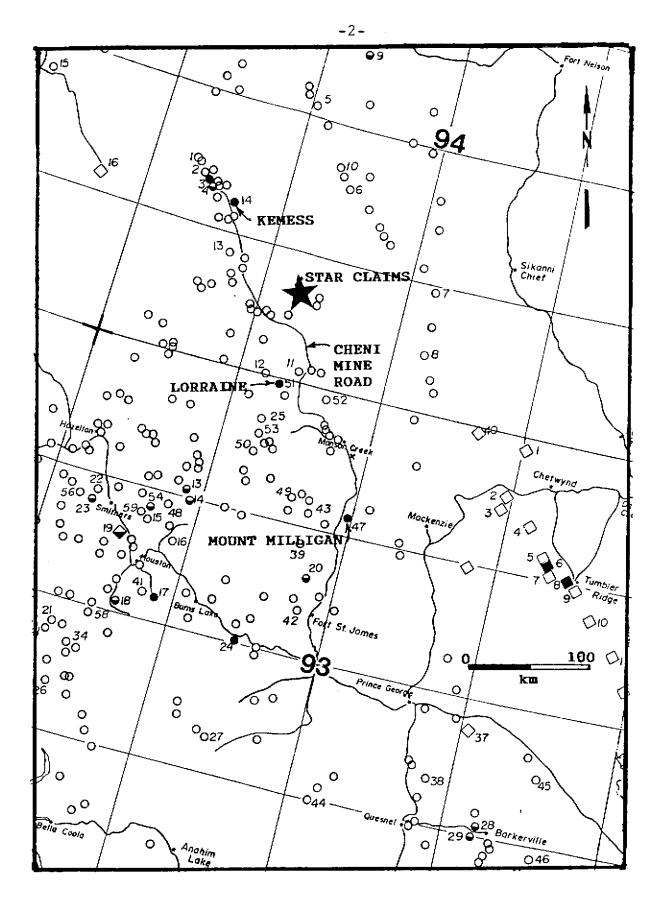
2.0 LOCATION AND ACCESS

The Star 1 - 5 claims, which are located on map sheets 94-C-5E and 94-C-12E, are 13 km northeast of Aiken Lake and 100 km almost due north of Germansen Landing.

Access to the property is by helicopter from Fort St. James. The Cheni Mine Road (Omineca Forestry Road) and the Kemess power line pass within 8 km of the property. Logging roads reach the outer boundary of the property.

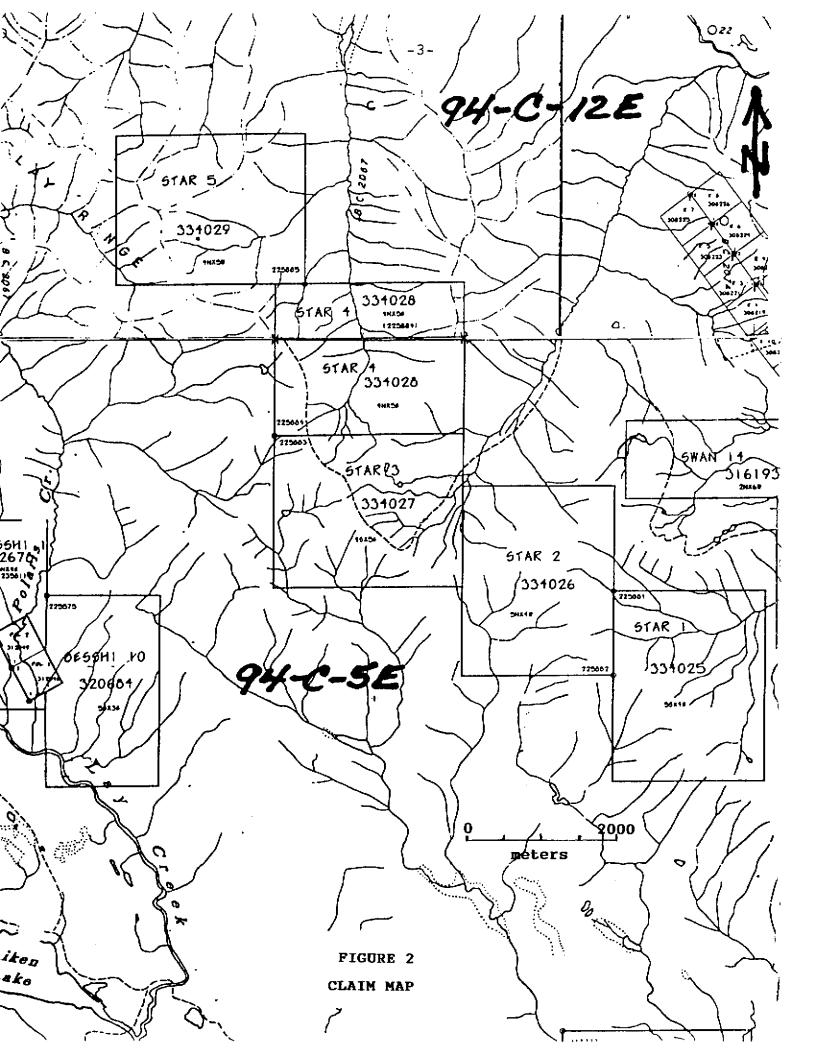
3.0 CLAIM DATA

| Claim Name | Record Number | No. of Units |
|------------|---------------|--------------|
| Star 1 | 334025 | 20 |
| Star 2 | 334026 | 20 |
| Star 3 | 334027 | 20 |
| Star 4 | 334028 | 20 |
| Star 5 | 334029 | 20 |



LOCATION MAP : STAR CLAIMS

FIGURE 1



4.0 HISTORY

The area of the Polaris Complex has been examined by R. G. McConnell in 1894, V. Dolmage in 1927, D. Lay in 1939 and J. E. Armstrong in 1945. The first mapping of the Polaris Complex was done by E. F. Roots in 1946, 1947 and 1948.

No geological activity is recorded until 1968 when T. N. Irvine made petrologic studies of the Polaris Complex. The area remained idle until 1974 when T. N. Irvine and F. H. Foster mapped the Polaris Complex in some detail.

In 1986, a small portion of the Polaris Complex was staked by Equinoz Resources who conducted an extensive silt and rock sampling program over their ground in a search for Pt group metals. In 1987, Lacana Mining Corporation and Esso Minerals also staked portions of the Polaris Complex for the same reason. In 1988 and 1989, the Polaris Complex was mapped and petrologically studied by the BCDM as part of a Pt-chromite study.

The Star 1 - 5 claims were staked in February, 1995 to cover a unit of the Polaris Complex lithologically similar to the Voisey's Bay nickel-cobalt discovery.

5.0 REGIONAL GEOLOGY

The Polaris Complex is located in the Omineca Crystalline Belt which is bounded on the west by Triassic Takla volcanics and sediments. The eastern side of the Omineca Crystalline Belt is separated from the Upper Proterozoic Ingenika Group and the Wolverine Metamorphic Complex, which both consist of sediments and metasediments including gneisses and schists, by the Swannell Fault.

The area immediately west of the Polaris Complex is underlain by the Lay Range Assemblage which has also been called the Slide Mountain Group and the Harper Ranch Groups by various authors. The lithologies consist of mafic tuffs, argillites, metavolcanics, metasediments and limestones and are of Middle Pennsylvanian to Permian in age. The area to the east of the Polaris Complex is underlain by shale, argillite and limestone of either Upper Devonian to Lower Permian Big Creek Group, Cooper Ridge Group of the Slide Mountain Group. The Polaris Complex, a crudely zoned ultramafic massif, is approximately 15 km long and 3 to 4 km wide. The core of the complex is olivine-rich lithologies of dunite, peridotite and wehrlite. The outer phases become more pyroxenitic and range from olivine clinopyroxenite to pyroxenite to hornblende-magnetite pyroxenite and finally to hornblendite and metamorphosed, metasomatized volcanics and sediments. The Polaris complex exhibits a thermal halo up to 2500 meters in width. In certain areas, the metasomatism has been so intense that hornblende crystals up to 1 meter in length have been observed.

The Polaris Complex and the surrounding area have been intruded by Late Triassic to Cretaceous syenites and diorites which are probably related to the Hogem Intrusive Complex. Potassium-argon dating of biotite forming a potassic halo around one intrusive in the Polaris Complex yielded ages of 167 + 9 Ma and 156 + 15 Ma.

Mineral deposits in the vicinity of the Polaris Complex include several high grade but small gold-bearing quartz veins associated with intrusive dykes in argillites, amphibolite containing coarsely crystalline pyrrhotite, pyrite, chalcopyrite and arsenopyrite as seams and as massive sulphide bodies up to 8 meters wide and 150 meters long and also shale-hosted zinc-lead sedex-type mineralization.

6.0 PROPERTY GEOLOGY

The Star claims are dominantly underlain by a pyroxenitic suite of rocks including olivine clinopyroxenite, pyroxenite and hornblende clinopyroxenite. The southern claims and lower elevations are dominantly underlain by more olivinerich lithologies of dunite and peridotite. The northern claims and some of the ridges are underlain by sedimentary lithologies including limestone and siltstone which have been locally metamorphosed to biotite hornfels and marble.

Several intrusives have been observed intruding the ultramafics and the sedimentary package. The intrusives range in composition from gabbro, diorite, syenite, monzonite to alaskite and occur as dykes and plugs. Locally some of the intrusives have produced skarn-like metamorphic effects from Ca-rich ultramafics or Ca-rich volcanics or sediments. Zones of massive coarse-grained pyroxene (hedenbergite? diopside?) and coarsegrained hornblendite-amphibolite with quartz stockworks have been found in close proximity to the intrusives.

7.0 MINERALIZATION

Three types of potentially economic mineralization occur on the Star claims and they are Ni-Co-PGE in the olivine-rich lithologies, magmatic Cu-Co-Ni-PGE +/- Au in the pyroxenitic units and pyritechalcopyrite +/- bornite within dioritic intrusives and contact rocks with the intrusives.

Awaruite, pentlandite and heazlewoodite have been found disseminated relatively uniformly throughout the olivine-rich phases of the Polaris Complex. In addition, gold, although sporadic in nature, also occurs in the olivine-rich lithologies. The gold does not appear to be related to sulphide mineralization and it is believed that it occurs as a discrete native metal.

The olivine-clinopyroxenite and pyroxenite units are host to pyrite, chalcopyrite mineralization which occurs as coarse-grained disseminations forming up to 40% of a specimen. Previous sampling indicates the sulphide mineralization carries Pt, Pd +/- Au. The PGE's although dominantly associated with chalcopyrite has also been found to occur in the olivine-clinopyroxenite without any sulphides being noted suggesting that Pt and Pd, just like the Au in the olivine-rich lithologies, occurs as discrete entities or possibly tied up with magnetite.

Pyrite, chalcopyrite and bornite occur as coarsegrained disseminations within dioritic intrusives and as haloes around the intrusives. The sulphide content of the intrusives and the haloes range from 10 to 50%. Sulphides within the intrusive appear to carry virtually no precious metals while the haloes, some of which are "skarn" and amphibolite have variable PGE values. The highest Pt and Pd values (1114 and 990 ppb respectively) came from a sample of amphibolite.

Other mineralization noted on the Star claims consists of 5 to 10% disseminated pyrite in siltstone and listwanite and quartz boulders with pyrite and arsenopyrite.

8.0 ALTERATION

The most obvious alteration seen on the Star claims is listwanite composed dominantly of carbonate with lesser amounts of quartz and mariposite. The listwanite weathers to a bright orange. Extensive listwanite development occurs on the Star 3 claim. The largest body forms a linear feature 50 meters wide and at least 200 meters long. Numerous shear and fault zones in this area also contain listwanite development.

The olivine pyroxenites and to a lesser extent the dunites have undergone serpentinization of variable intensity. Specimens range from waxy green with no primary features remaining to fresh-looking. The degree of serpentinization does not appear to be related to sulphide mineralization or awaruite mineralization.

Alteration of the intrusives varies in intensity from relatively non-altered to intensely bleached or occasionally completely replaced by pervasive finegrained epidote. The metamorphic/metasomatic alteration generated by the intrusives also varies from non-existant to potassic haloes with biotite flakes reaching up to 2.5 cm in diameter as well as intense "skarn" and amphibolite development. The amphibolite occasionally exhibits intense quartz stockworking in close proximity to the intrusives. The intrusives have also produced biotite hornfels in the siltstones and also minor amounts of marble.

9.0 WORK PROGRAM

On September 6, 1997 two men collected 27 rock samples for general analytical work and for further examination of possible nugget effects from native gold, native platinum and awaruite. Thirteen samples of the original 27 that were collected were re-analysed. Five selected samples were concentrated using a Knelsen concentrator. All samples were analysed for 30 elements by ICP and Au, Pt, and Pd by fire assay/ICP.

10.0 <u>SAMPLE DESCRIPTIONS</u>

| Sample Number | Sample Description |
|------------------|---|
| 11981 | Black c.g. pyroxenite; no visible sulphides; strongly magnetic |
| 11982 | Black vfg gabbro; no visible sulphides; strongly magnetic |
| 11983 | Black vvfg gabbro?; no visible sulphides; strongly magnetic |
| 11984 | Black dense vfg siltstone?; cut by minor carbonate stringers; no visible sulphides; non-magnetic |
| 11985 | Pale grey limestone |
| 11986 | Black phlogopite-rich olivine pyroxenite; no visible sulphides; strongly magnetic |
| 11987 | Black olivine pyroxenite; no visible sulphides; moderately magnetic |
| 11988 | Greyish green serpentinized? dunite?; no visible sulphides; very strongly magnetic |
| 11989 | Black c.g. olivine pyroxenite; no visible sulphides; very magnetic; trace awaruite |
| 11990 | Very rusty, black brecciated olivine pyroxenite; no visible sulphides; trace awaruite; very magnetic |
| 11991 | Very rusty black dunite; trace - 0.5% awaruite; moderately magnetic |
| 11992 | Extremely rusty deep red brown ??? with much box- work weathering; trace awaruite and yellow sulphide; non-magnetic |
| 11993 | Black vfg dunite; 0.5% fairly coarse awaruite; no visible sulphides; very magnetic |
| 11994 | Very rusty red brown dunite?; o.5% fairly coarse awaruite; strongly magnetic |
| 11995 | Black massive chromite |
| 11996 | Black f.g. olivine pyroxenite; magnetite and green celadonite on fractures; non-magnetic elsewhere; trace yellow sulphide and awaruite |
| 11997 | C.g. black olivine pyroxenite; non-magnetic; no visible sulphides |
| 11998 | Black sand; dominantly olivine, lesser pyroxene and minor magnetite |
| 11999 | Black c.g. pyroxenite; very rusty; 3% white sulphide (pyrite?); minor chloritic alteration; very magnetic |
| 12000 | Monzonite; c.g. black hornblende in white feldspar matrix; malachite and limonite stained; black magnetite on fractures; 0.5% diss'd pyrite; trace white metallic |
| 142308 | White quartz vein 10 cm wide with c.g. fragment of hornblende and hornblende-magnetite; very magnetic on fractures; VG? and minor diss'd pyrite? in black material |

Sample Number

| 142309 | C.g. quartz monzonite? white feldspar matrix with |
|---------|---|
| | c.g. black hornblende; tr. sulphide; most sulphides |
| | at contact in black hornblende-tremolite-actinolite |
| | material; very magnetic; very rusty on fractures |
| 142310 | Black biotite-hornblende rock; slightly chloritic; |
| 112010 | extremely magnetic; cut by minor white quartz |
| | veinlets; 3% sulphide (pyrite?) and speck of a |
| | very yellow metallic (VG?) |
| 1 40011 | |
| 142311 | V.c.g. to porphyritic hornblendite; very magnetic; |
| | slightly chloritized; interstitial epidote; trace |
| | pyrite, chalcopyrite, pyrrhotite |
| 142312 | M.g. diorite; 60% feldspar, 40% hornblende; 10% |
| | disseminated pyrite; trace chalcopyrite; non- |
| | magnetic; intensely altered by pervasive epidote |
| 142313 | Black porphyritic hornblendite; patchily magnetic |
| | from non to very; interstitial white quartz and/or |
| | carbonate with minor epidote; trace very bright |
| | white metallic; no visible sulphides |
| 142314 | M.g. pinkish grey equigranular granite; 30% |
| | hornblende phenocrysts altered to biotite and/or |
| | magnetite, 30% quartz and 40% pinkish feldspar; |
| | non-magnetic; no visible sulphides |
| 142315 | Composite sample of 142312 and 142313 |
| 142315 | Black sand composed of olivine, epidote, hornblende |
| 147210 | and minor magnetite; one silvery white speck; one |
| | |
| | gold speck |
| | |

11.0 <u>RESULTS</u>

Sampling in areas of previous sampling that had returned anomalous values resulted in the discovery of an area of intense quartz stockwork in amphibolite and "skarn" apparently related to a large diorite intrusive. In addition, talus boulders of intensely leached boxwork weathered material (sample 11992) returned values of 2180 ppm Ni and 145 ppm Co suggesting that the voids may have been filled with sulphides possibly pyrrhotite or pentlandite.

The analytical results strongly suggest a nugget effect for nickel and to a lesser degree for iron suggesting Ni:Fe alloy or awaruite. While precious metals are not of economic significance the nugget effect is seen to occur. Results of the concentrator tests are generally negative except for sample 11986 where gold was slightly enhanced and sample 142315 where iron due to coarse grained pyrite was enhanced. The negative results suggest that the fine-grained nature of the mineralization may not be conducive to enhancement by concentration.

| Sample No. | Rock Type | 3:1 Cu | Cu Rerun | Cu Conc. |
|----------------|--------------------|--------|----------|-------------|
| 11981 | C.g. pyroxenite | 137 | 137 | 126 |
| 11982 | V.f.g. gabbro | 135 | | |
| 11983 | V.f.g. gabbro | 196 | | 206 |
| 11984 | Siltstone? | 106 | | |
| 11985 | Limestone | 7 | | |
| 11986 | Phlogo. ol. cpx | 11 | 5 | 9 |
| 11987 | 01. cpx | 7 | 2 | |
| 11988 | Serp'd dunite | 4 | | |
| 1 19 89 | 01. cpx | 4 | 3 | |
| 11990 | Bx'd ol. cpx | 19 | | |
| 11991 | Dunite | 3 7 | 2 | |
| 11992 | Boxwork ?? | 7 | | |
| 11993 | Dunite | 6 | 2 | |
| 11994 | Dunite | 5 | 2 | |
| 11995 | Chromite | 4 | | |
| 11996 | 01. cpx | 6 | | |
| 11997 | 01. cpx | 5 | | |
| 11998 | Silt | 99 | | |
| 11999 | C.g. pyroxenite | 767 | | |
| 12000 | Monzonite | 1355 | 1437 | |
| 142308 | Quartz vein | 179 | 151 | |
| 142309 | C.g. monzonite | 202 | | |
| 142310 | Biot. hornblendite | 479 | 471 | |
| 142311 | Porph. hnbdite | 175 | 164 | 151 |
| 142312 | M.g. diorite | 322 | | |
| 142313 | Porph. hnbdite | 115 | 121 | |
| 142314 | M.g. granite | 9 | | |
| 142315 | Comp. 312/313 | 784 | 761 | 79 7 |
| 142316 | Silt | 707 | | |
| | | | | |

TABLE 1: COPPER IN PPM

| 3:1 | HC1-HNO3 digestion |
|-------|---------------------------------------|
| cpx | clinopyroxenite |
| conc. | concentrate from Knelson concentrator |

Comments: The highest value 1355 ppm Cu (1437 in the repeat analyses came from the area of intense quartz stockworking. Concentration did not generally enhance copper values.

| Sample No. | Rock Type | 3:1 Ni | Ni Rerun | Ni Conc. |
|------------|-----------------|--------|----------|----------|
| 11981 | C.g. pyroxenite | 25 | 22 | 25 |
| 11982 | V.f.g. gabbro | 6 | | |
| 11983 | V.f.g. gabbro | 8 | | 10 |
| 11984 | Siltstone? | 22 | | |
| 11985 | Limestone | 4 | | |
| 11986 | Phlogo. ol. cpx | 1586 | 1445 | 1358 |
| 11987 | 01. cpx | 2451 | 1813 | |
| 11988 | Serp'd dunite | 1904 | | |
| 11989 | 01. cpx | 1250 | 1162 | |
| 11990 | Bx'd 01. cpx | 1955 | | |
| 11991 | Dunite | 2378 | 1950 | |
| 11992 | Boxwork?? | 2180 | | |
| 11993 | Dunite | 1628 | 1302 | |
| 11994 | Dunite | 2108 | 1724 | |
| 11995 | Chromite | 2292 | | |
| 11996 | 01. cpx | 2243 | | |
| 11997 | 01. cpx | 278 | | |
| 11998 | Silt | 1156 | | |
| 11999 | C.g. pyx | 63 | | |
| 12000 | Monzonite | 40 | 52 | |
| 142308 | Quartz vein | 23 | 21 | |
| 142309 | C.g. monzonite | 18 | | |
| 142310 | Biot. hbdite | 105 | 97 | |
| 142311 | Porph. hbdite | 41 | 36 | 48 |
| 142312 | M.g. diorite | 18 | | |
| 142313 | Porph. hbdite | 23 | 23 | |
| 142314 | M.g. granite | 4 | | |
| 142315 | Comp. 312/313 | 43 | 38 | 52 |
| 142316 | Silt | 72 | | |

TABLE 2: NICKEL IN PPM

3:1 HC1-HNO3 digestion

cpx clinopyroxenite

conc. concentrate from Knelsen concentrator

Comments: All rerun analyses are substantially lower than the original analyses implying that nickel is metallic and not uniformly present throughout the sample. Concentration did not improve nickel values.

| Sample No. | Rock Type | 3:1 Co | Co Rerun | Co Conc. |
|------------|-----------------|--------|----------|----------|
| 11981 | C.g. pyroxenite | 42 | 45 | 46 |
| 11982 | V.f.g. gabbro | 13 | | |
| 11983 | V.f.g. gabbro | 25 | | 25 |
| 11984 | Siltstone? | 13 | | |
| 11985 | Limestone | 1 | | |
| 11986 | Phlogo. ol. cpx | 113 | 102 | 97 |
| 11987 | 01. cpx | 147 | 114 | |
| 11988 | Serp'd dunite | 139 | | • |
| 11989 | 01. cpx | 97 | 90 | |
| 11990 | Bx'd ol. cpx | 157 | | |
| 11991 | Dunite | 153 | 119 | |
| 11992 | Boxwork ?? | 145 | | |
| 11993 | Dunite | 172 | 135 | |
| 11994 | Dunite | 163 | 131 | |
| 11995 | Chromite | 176 | | |
| 11996 | 01. cpx | 152 | | |
| 11997 | 01. cpx | 28 | | |
| 11998 | Silt | 96 | | |
| 11999 | C.g. pyx | 53 | | |
| 12000 | Monzonite | 89 | 96 | |
| 142308 | Quartz vein | 23 | 21 | |
| 142309 | C.g. monzonite | 22 | | |
| 142310 | Biot. hbdite | 43 | 42 | |
| 142311 | Porph. hbdite | 33 | 32 | 44 |
| 142312 | M.g. diorite | 19 | | |
| 142313 | Porph. hbdite | 19 | 23 | |
| 142314 | M.g. granite | 3 | | |
| 142315 | Comp. 312/313 | 59 | 56 | 100 |
| 142316 | Silt | 31 | | |

TABLE 3: COBALT IN PPM

3:1 HC1-HNO₃ digestion

cpx clinopyroxenite

conc. concentrate from Knelsen concentrator

Comments: Generally repeat analyses are lower than the original analyses. Sample 142315 shows a considerable enhancement possibly because of coarse-grained pyrite.

TABLE 4: IRON IN PER CENT

| 11981 | C.g. pyroxenite | 10.28 | 11.56 | 13.74 |
|--------|-------------------|-------|-------|-------|
| 11982 | V.f.g. gabbro | 4.35 | | |
| 11983 | V.f.g. gabbro | 5.62 | | 6.47 |
| 11984 | Siltstone? | 2.72 | | |
| 11985 | Limestone | 0.25 | | |
| 11986 | Phlogo. ol. cpx | 8.57 | 7.10 | 6.89 |
| 11987 | 01. cpx | 6.74 | 4.73 | |
| 11988 | Serp'd dunite | 6.46 | | |
| 11989 | 01. cpx | 5.82 | 5.21 | |
| 11990 | Bx'd ol. cpx | 9.07 | | |
| 11991 | Dunite | 7.50 | 5.31 | |
| 11992 | Boxwork ?? | 7.37 | | |
| 11993 | Dunite | 10.33 | 7.84 | |
| 11994 | Dunite | 8.28 | 6.00 | |
| 11995 | Chromite | 3.69 | | |
| 11996 | 01. cpx | 7.60 | | |
| 11997 | 01. cpx | 1.73 | | |
| 11998 | Silt | 7.89 | | |
| 11999 | C.g. pyx | 8.42 | | |
| 12000 | Monzonite | 6.07 | 6.50 | |
| 142308 | Quartz vein | 5.32 | 4.54 | |
| 142309 | C.g. monzonite | 4.16 | | |
| 142310 | Biot. hbdite | 6.77 | 6.71 | |
| 142311 | Porph. hbdite | 5.64 | 5.22 | 7.78 |
| 142312 | M.g. diorite | 4.66 | | |
| 142313 | Porph. hbdite | 4.34 | 4.57 | |
| 142314 | M.g. granite | 1.49 | | |
| 142315 | Comp. 312/313 | 6.91 | 7.35 | 10.06 |
| 142316 | Silt | 5.41 | | |
| 3:1 | HC1-HNO3 digestic | n | | |

| 3:1 | HC1-HNO3 digestion |
|-------|---------------------------------------|
| cpx | clinopyroxenite |
| conc. | concentrate from Knelsen concentrator |

Comments: The rerun values for iron are generally lower than the original analyses just as in the case of the nickel values suggesting that part of the iron is possibly tied up in Ni-Fe alloy (awaruite). Iron values are generally enhanced by concentration.

| Sample No. | Rock Type | 3:1 Cr | Cr Rerun | Cr conc. |
|----------------|-----------------|--------|----------|----------|
| 11981 | C.g. pyroxenite | 39 | 32 | 46 |
| 11982 | V.f.g. gabbro | 10 | | |
| 11983 | V.f.g. gabbro | 11 | | 14 |
| 11984 | Siltstone? | 33 | | |
| 11985 | Limestone | 6 | | |
| 1 1 986 | Phlogo- ol. cpx | 555 | 436 | 581 |
| 11987 | 01. cpx | 74 | 42 | |
| 11988 | Serp'd dunite | 173 | | |
| 11989 | 01. cpx | 141 | 125 | |
| 11990 | Bx'd ol. cpx | 134 | | |
| 1 1991 | Dunite | 75 | 41 | |
| 11992 | Boxwork ?? | 104 | | |
| 11993 | Dunite | 121 | 84 | |
| 11994 | Dunite | 80 | 46 | |
| 11995 | Chromite | 109 | | |
| 11996 | 01. pyx | 89 | | |
| 11997 | 01. pyx | 298 | | |
| 11998 | Silt | 418 | | |
| 11999 | C.g. pyx | 77 | | |
| 12000 | Monzonite | 44 | 48 | |
| 142308 | Quartz vein | 17 | 11 | |
| 142309 | C.g. Monzonite | 5 | | |
| 142310 | Biot. hbdite | 81 | 77 | |
| 142311 | Porph. hbdite | 43 | 41 | 66 |
| 1423 12 | M.g. diorite | 23 | | |
| 142313 | Porph. hbdite | 16 | 16 | |
| 142314 | M.g. granite | 10 | | |
| 142315 | Comp. 312/313 | 51 | 52 | 72 |
| 142316 | Silt | 117 | | |

TABLE 5: CHROMITE IN PPM

| 3:1 | HC1-HNO3 digestion |
|-------|---------------------------------------|
| срх | clinopyroxenite |
| conc. | concentrate from Knelsen concentrator |

Comments: Generally chromium rerun values are lower than the original analyses. Chromium shows increased values by concentration.

| Sample No. | Rock Type | 3:1 Ti | Ti Rerun | Ti conc. |
|----------------|-----------------|--------|----------|----------|
| 11981 | C.g. pyx | 0.26 | 0.19 | 0.21 |
| 11982 | V.f.g. gabbro | 0.17 | | |
| 11983 | V.f.g. gabbro | 0.29 | | 0.27 |
| 1 1 984 | Siltstone? | 0.22 | | |
| 1 1 985 | Limestone | nil | | |
| 11986 | Phlogo. ol. cpx | 0.05 | 0.04 | 0.05 |
| 11987 | 01. pyx | nil | | |
| 11988 | Serp'd dunite | nil | | |
| 11989 | 01. cpx | 0.01 | 0.01 | |
| 11990 | Bx'd ol. cpx | nil | | |
| 11991 | Dunite | nil | nil | |
| 11992 | Boxwork ?? | nil | | |
| 11993 | Dunite | nil | nil | |
| 11994 | Dunite | nil | nil | |
| 11995 | Chromite | nil | | |
| 11996 | 01. cpx | nil | | |
| 11997 | 01. cpx | 0.01 | | |
| 11998 | Silt | 0.07 | | |
| 11999 | C.g. pyx | 0.39 | | |
| 12000 | Monzonite | 0.20 | 0.19 | |
| 142308 | Quartz vein | 0.29 | 0.24 | |
| 142309 | C.g. monzonite | 0.15 | | |
| 142310 | Biot. hbdite | 0.34 | 0.28 | |
| 142311 | Porph. hbdite | 0.39 | 0.32 | 0.40 |
| 142312 | M.g. diorite | 0.22 | | |
| 142313 | Porph. hbdite | 0.32 | 0.32 | |
| 142314 | M.g. granite | 0.08 | | |
| 1 42315 | Comp. 312/313 | 0.22 | 0.20 | 0.27 |
| 142316 | Silt | 0.22 | | |
| | | | | |

TABLE 6: TITANIUM IN PER CENT

| 3:1 | HC1-HNO3 digestion |
|-------|---------------------------------------|
| cpx | clinopyroxenite |
| conc. | concentrate from Knelsen concentrator |

| TABLE 7: GO |)LD | IN | PPB |
|-------------|-----|----|-----|
|-------------|-----|----|-----|

| Sample No. | Rock Type | 3:1 Au | Au Rerun | Au conc. |
|----------------|---|-------------|--------------|--------------|
| 11981 | C.g. pyx | nil | 1 | 2 |
| 11982 | V.f.g. gabbro | 6 | | |
| 11983 | V.f.g. gabbro | 11 | | 10 |
| 11984 | Siltstone? | 2 | | |
| 1 1 985 | Limestone | 3 | | |
| 11986 | Phlogo. ol. cpx | 2 | 45 | 155 |
| 11987 | 01. cpx | nil | 3 | |
| 11988 | Serp'd dunite | ni1 | | |
| 11989 | 01. cpx | 70 | 9 | |
| 11990 | Bx'd ol. cpx | nil | | |
| 11991 | Dunite | nil | nil | |
| 11992 | Boxwork ?? | nil | | |
| 11993 | Dunite | ni1 | 2 | |
| 11994 | Dunite | 2 | 2 | |
| 11995 | Chromite | nil | | |
| 11996 | 01. cpx | nil | | |
| 11997 | 01. cpx | 6 | | |
| 11998 | Silt | l | | |
| 11999 | C.g. pyx | 3 | | |
| 12000 | Monzonite | 4 | nil | |
| 142308 | Quartz vein | 2 | nil | |
| 142309 | C.g. monzonite | nil | | |
| 142310 | Biot. hbdite | 3 | 1 | |
| 142311 | Porph. hbdite | 2 | 10 | 3 |
| 142312 | M.g. diorite | 2 | | |
| 142313 | Porph. hbdite | nil | ni1 | |
| 142314 | M.g. granite | nil | | |
| 142315 | Comp. 312/313 | 5 | | 3 |
| 142316 | Silt | 2 | 3 | |
| 3:1 | HC1-HNO3 digestic | 17 1 | | |
| cpx | clinopyroxene | **1 | | |
| conc. | concentrate from | Knolson c | oncont rator | - |
| COLC. | | METSEN C | oncentra du | |
| Comments: | Two samples (1) sporadic nature effective in or | e of gol | d. Conce | ntration was |

•

| Sample No. | Rock Type | 3:1 Pt | Pt Rerun | Pt conc. | |
|----------------|---|-----------|--------------|----------|--|
| 11981 | C.g. pyx | 15 | 12 | 13 | |
| 11982 | V.f.g. gabbro | 8 | | ~ | |
| 11983 | V.f.g. gabbro | 9 | | 9 | |
| 11984 | Siltstone? | 3 | | | |
| 11985 | Limestone Dalage al gue | 1 | 22 | 25 | |
| 11986 | Phiogo. ol. cpx | 54 | 22 | 25 | |
| 11987 | 01. cpx | 3 17 | 1 | | |
| 11988 | Serp'd dunite | 4 | mi 1 | | |
| 11989 | 01. cpx | | nil | | |
| 11990 | Bx'd ol. cpx | 11 | c | | |
| 11991 11992 | Dunite Deurscele 22 | 1 8 | 6 | | |
| | Boxwork ?? | 0 | 4 | | |
| 11993 | Dunite | nil | 6 | | |
| 11994 | Dunite Chromite | 3 | 0 | | |
| 11995 11996 | 01. cpx | 3 | | | |
| 11997 | - | 1 | | | |
| | 01. cpx Silt | 1 7 | | | |
| 11998 | _ | 9 | | | |
| 11999 12000 | C.g. pyx Monzonite | 9 7 | 11 | | |
| 142308 | Quartz vein | 1 | 4 | | |
| 142309 | C.g. monzonite | 1 | 7 | | |
| 142310 | Biot. hbdite | 4 | 5 | | |
| 142311 | Porph. hbdite | 27 | 37 | 30 | |
| 142312 | M.g. diorite | l L | 37 | 50 | |
| 142313 | Porph. hbdite | 5 | 9 | | |
| 142314 | M.g. granite | nil | 2 | | |
| 142315 | Comp. 312/313 | 18 | | 20 | |
| 142316 | Silt | 12 | 22 | 20 | |
| 142310 | 5110 | 12 | | | |
| 3:1 | HC1-HNO3 digestic | m | | | |
| cpx | clinopyroxenite | | | | |
| conc. | concentrate from | Kneisen c | concentrator | | |
| | | | | | |
| Comments: | Platinum shows sporadic as go enhance the val | ld. Con | | | |

TABLE 8: PLATINUM IN PPB

| Sample No. | Rock Type | 3:1 Pd | Pd Rerun | Pd conc. | |
|------------|--|--------------------------------------|---|---|--|
| 11981 | C.g. pyx | 23 | 26 | 15 | |
| 11982 | V.f.g. gabbro | 7 | | | |
| 11983 | V.f.g. gabbro | 10 | | 8 | |
| 11984 | Siltstone? | 5 | | | |
| 11985 | Limestone | 2 | | | |
| 11986 | Phlogo. ol. cpx | 13 | 4 | 1 | |
| 11987 | 01. cpx | 2 | 2 | | |
| 11988 | Serp'd dunite | 2 | | - | |
| 11989 | 01. cpx | 8 | 2 | | |
| 11990 | Bx'd ol. cpx | 5 | | | |
| 11991 | Dunite | 2 | 5 | | |
| 11992 | Boxwork ?? | 3 | | | |
| 11993 | Dunite | 2 | 1 | | |
| 11994 | Dunite | 2 | 5 | | |
| 11995 | Chromite | 1 | | | |
| 11996 | 01. cpx | 2 | | | |
| 11997 | 01. cpx | 5 | | | |
| 11998 | Silt | 11 | | | |
| 11999 | C.g. pyx | 14 | | | |
| 12000 | Monzonite | 15 | 21 | | |
| 142308 | Quartz vein | 7 | 8 | | |
| 142309 | C.g. monzonite | 3 | | | |
| 142310 | Biot, hbdite | 10 | 14 | | |
| 142311 | Porph. hbdite | 32 | 40 | 27 | |
| 142312 | M.g. diorite | 4 | | | |
| 142313 | Porph. hbdite | 17 | 24 | | |
| 142314 | M.g. granite | 2 | | | |
| 142315 | Comp. 312/313 | 32 | | 25 | |
| 142316 | Silt | 23 | 37 | | |
| 3:1 | HC1-HNO3 digestic | רזו | | | |
| cpx | clinopyroxenite | | | | |
| conc. | concentrate from | Knelsen o | oncentrator | | |
| Conce | | | ••••• | | |
| Comments: | Concentration did seems to prefer t units. Palladium as gold and plati have a good corre | he pyroxe 1 does not .num. Ele | nite and ho appear to wated palla | rnblendite be as sporadic dium values | |

.

TABLE 9: PALLADIUM IN PPB

12.0 CONCLUSIONS

Although analytical results were generally low, zones of intense quartz stockworks, the development of "skarns" and the extensive areas of sulphide mineralization need to be examined and sampled in more detail.

The failure to concentrate economic values by the use of the Knelsen concentrator strongly suggests that this method of concentration is probably not effective. It is thought that the poor results may be due to the fine-grained nature of the mineralization.

13.0 <u>REFERENCES</u>

- Assessment Report 15955, Report on a Geochemical Survey of the Polaris Property Consisting of the Polaris Claim, Pole 1 and Pole 2 Claim, by Jay W. Page, 1986.
- Assessment Report 16236, Report on Geological and Geochemical Work, "Lay" Claims, Aiken Lake, by D. Johnson, 1987.
- Assessment Report 16628, Report on Prospecting and Sampling Work, Lay Property, Aiken Lake, by R. J. Johnston, 1987.
- GSC Paper 46-11, Aiken Lake (South Half) British Columbia, by J. E. Armstrong, 1946.
- GSC Paper 48-5, Geology and Mineral Deposits of Aiken Lake Map Area, British Columbia, by J. E. Armstrong and E. F. Roots, 1948.
- GSC Paper 68-1, Part A, Petrologic Studies of Ultramafic Rocks in the Aiken Lake Area, British Columbia (94-C West-Half), by T. N. Irvine, p. 110, 1968.
- GSC Paper 74-1A, Ultramafic and Gabbroic Rocks in the Aiken Lake and McConnell Creek Map Areas, British Columbia, by T. N. Irvine, pp. 149 -152, 1974.
- GSC Paper 76-1A, Alaskan-type Ultramafic-Gabbroic Bodies in the Aiken Lake, McConnell Creek and Toodoggone Map-Areas, by T. N. Irvine, pp. 76 - 81, 1976.
- BCMEMPR Bulletin 1, Aiken Lake Area, North-central British Columbia, by R. Lay, 1932.
- Open File 1989-17, Preliminary Geology and Noble Metal Geochemistry of the Polaris Mafic-Ultramafic Complex, by G. Nixon et al., 1989.
- Open File 1990-13, Geology of the Polaris Ultramafic Complex, by G. Nixon et al, 1990.
- GSC Memoir 274, Geology and Mineral Deposits of Aiken Lake Map Area, British Columbia, by E. F. Roots, 1954.

- B. Sc. Thesis, U.B.C., History and Origin of the Polaris Ultramafic Complex in the Aiken Lake Area of Northcentral British Columbia, by F. H. Foster, 1974.
- Assessment Report 24300, Geologic Report on the Star Claims, by U. Mowat, P.Geo., February 1996.
- Assessment Report 25002, Geochemical and Petrographic Report on the Star Claims, by U. Mowat, P. Geo., February 1997.

14.0 STATEMENT OF COSTS

Analytical Work

| 29 samples analysed for 30 elements by ICP and geochem Au, Pt, Pd by Ultra/ICP at \$17.30/sample 27 rock preps at \$4.25/sample 2 silt preps at \$1.35/sample GST | \$ 501.70 114.75 2.70 <u>43.34</u> \$ 662.49 |
|--|--|
| 13 rock samples analysed for 30 elements by ICP and geochem Au, Pt, Pd by Ultra/ICP at \$17.30/ sample | \$ 224.90 |
| 13 rock preps at \$2.20/sample GST | 28.60 <u>17.75</u> \$ 271.25 |
| 5 rock samples analysed for 30 elements by ICP and geochem Au, Pt, Pd by Ultra/ICP at \$17.30/ sample | \$ 86.50 |
| 5 rock preps at \$2.20/sample 3 hours Knelsen concentrating at \$25.00/hour | 11.00 75.00 |
| GST ST | $\frac{12.08}{184.58}$ |
| Helicopter | |

| 4.3 hours at | \$630.00/hour | \$2709.00 |
|--------------|-----------------|-----------|
| 371.6 liters | at \$0.70/liter | 260.12 |
| 130.0 liters | at \$1.10/liter | 143.00 |
| GST | | 217.85 |
| | | \$3329.97 |

Labour

•

| 1 man for 1 day at \$200.00/day | \$ 200.00 |
|----------------------------------|-----------|
| 1 man for 7 days at \$400.00/day | 2800.00 |
| | \$3000.00 |

Accommodation

| 1 room for 3 nights at \$52.90/night | \$ 158.70 |
|--------------------------------------|--------------|
| Meals | \$ 46.72 |
| Airfare | \$ 125.35 |

| Bus | \$ 13.18 |
|--------------|--------------|
| Taxi | \$ 25.50 |
| Freight | \$ 110.70 |
| Photos | \$ 11.18 |
| Telephone | \$ 1.22 |
| Reproduction | \$ 50.00 |
| Equipment | \$ 6.55 |
| | |

| TOTAL \$7997 |
|--------------|
|--------------|

15.0 STATEMENT OF QUALIFICATIONS

- I am a graduate of the University of British Columbia having graduated in 1969 with a Bachelor of Science in Geology.
- I have practiced my profession since 1969 in mineral exploration, oil and gas exploration and coal exploration.
- 3. I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.
- 4. I have a direct interest in the Star Claims.

Ursula A. monat Ursula G. Mowat, P. Geo.



Dated this 15th day of april, 1998 at Vancouver, B. C.

APPENDIX

I

| ACME ANA | ICAL LABORATORIES LTD. 852 B. HASTINGS ST. V OUVER BC V6A 1R6 PHONE(604)253-3158 FAY 34)253-1716 |
|--|--|
| AA | GEOCHEMICAL ANALYSIS CERTIFICATE <u>Mowat, Ursula</u> File # 97-5238 1405 - 1933 Robson St., Vancouver BC V6G 1E7 Submitted by: Ursula Nowat |
| SAMPLE# | Mo Cu Pb Zn Ag Ni Co Mn. Fe As U Au Th Sr. Cd Sb Bi V Ca. P La Cr. Mg Ba Ti B. Al Na K. W Au** Pt** Pd** ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm |
| C 11981 C 11982 C 11983 C 11984 C 11985 | <1 137 19 63 <.3 25 42 810 10.28 <2 <8 <2 <2 144 .6 <3 <3 512 3.84 .446 4 39 2.66 99 .26 4 2.36 .49 .19 <2 <2 15 23 1 135 6 33 <.3 6 13 394 4.35 <2 <8 <2 <2 23 <.2 <3 <3 240 1.16 .068 3 10 .68 45 .17 5 1.09 .11 .14 <2 6 8 7 1 196 16 64 <.3 8 25 583 5.62 <2 <8 <2 <2 60 <.2 <3 <3 280 1.99 .061 3 11 1.47 59 .29 6 2.71 .18 .15 <2 11 9 10 1 106 17 60 <.3 22 13 290 2.72 <2 <8 <2 5 47 .3 <3 <3 100 2.98 .072 21 33 .86 21 .22 6 2.57 .09 .12 <2 2 3 5 1 7 8 4 <.3 4 1 39 .25 2 <8 <2 7 5 <.2 <3 <5 .06 .007 6 6 .03 19<.01 3 .16 .11 .01 <2 3 1 2 |
| C 11986 C 11987 C 11988 C 11989 C 11989 C 11990 | 1 11 15 61 .3 1586 113 1524 8.57 <2 |
| C 11991 C 11992 C 11993 C 11994 C 11995 | 1 3 10 35 <.3 |
| C 11996 C 11997 C 11999 C 12000 RE C 12000 | <1 |
| E 142308 E 142309 E 142310 E 142311 E 142311 E 142312 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| E 142313 E 142314 E 142315 Standard C3/4 | <1 115 12 48 <.3 23 19 660 4.34 <2 <8 <2 <2 110 .3 <3 <3 209 2.23 .095 5 16 2.19 80 .32 <3 2.11 .55 .23 <2 <2 5 17 <1 9 5 15 <.3 4 3 167 1.49 <2 <8 <2 5 73 <.2 <3 <3 55 .24 .019 11 10 .25 266 .08 <3 .38 .06 .11 2 <2 <1 2 1 784 13 40 <.3 43 59 405 6.91 2 <8 <2 <2 172 <.2 <3 <3 205 2.06 .231 4 51 1.55 22 .22 3 2.03 .28 .11 <2 5 18 31 AU-R 27 69 40 168 5.7 41 13 769 3.59 55 29 <2 18 30 23.5 14 26 88 .60 .090 19 178 .65 155 .10 22 1.99 .04 .16 16 471 - |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPN & AU > 1000 PPB - SAMPLE TYPE: ROCK AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ICP/GRAPHITE FURMACE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

| ACME ANAJ "IC | AL L | ABO | RAT | ORI | ES | LTD. | | 8 | 52 E | . H | 1ST | ING | S S | T. | V7 | '0 0 | VER | BC | V | 5 a 1 | R6 | | PHO | NE (6 | 04) | 25 | 3-31 | 58 | FA | 7 ' T | 04) | 253 | 1716 |
|---|----------------|-------------------|----------------|----------------|-------------------|------------------|-----------|--------------------|----------------------|------------|----------------|----------------|------------|-------------|-----------------------|-------------|-----|---------------|---------|----------------------|-----------|-----------|-------------------------|-----------|----------|---------------|---------------------|---------|----------|----------------|---------------|--------------|----------------|
| <u>A</u> A | | | | | | | | | GE(<u>Mow</u> | at, | បៈ | rsu | <u>.1a</u> | I | Lia File St., V | ≥ # | 9' | 7 – 5 | 238 | 3R | ſE | | | | | | | | | | | | |
| SAMPLE# | Mo ppm | Cu | Pb ppm | | Ag | N î ppm | Co ppm | Mn ppm | | As ppm | U | Au | Th | \$г | Cd ppm | Şþ | Bi | ۷ | Ca % | P | La ppm | | | Ba ppm | Ti %p | B | Al % | Na % | к % р | N N more | | ot** bbp | Pd** ppb |
| C 11981 C 11986 | <1 <1 | 137 5 | <3 10 | | <.3 <.3 | 22 1445 | | | 11.56 7.10 | _ | - | _ | <2 <2 | 156 9 | | <3 <3 | | 542 19 | | .434 .005 | _ | | 2.80 19.91 | | | | 2.47 | | | <2 <2 | 1 45 | 12 22 | 26 4 |
| C 11987 C 11989 C 11991 | <1 1 | 232 | <3 <3 <3 | 23 | <.3 | | 90 | | 4.73 5.21 5.31 | <2 | <8 | _ | | 6 1 1 | .3 <.2 3. | ⊲ ⊲ ⊲ | <3 | <1 1 <1 | .07 | .005 .004 .004 | - | 125 | 23.41 15.07 24.02 | 7. | .01 | 12 3 <3 | .05< | | | <2 <2 <2 | 3 9 <1 | 1 <1 6 | 2 2 5 |
| c 11993 | <1 | - | - <3 | 40 | <.3 | 1302 | 135 | 1538 | 7.84 | <2 | <8 | <2 | <2 | | .3 | - <3 | <3 | <1 | .07 | .004 | <1 | 84 | 25.22 | 4<. | .01 | <3 | .04 | .01< | .01 | <2 | 2 | 4 | 1 |
| C 11994 C 12000 RE C 12000 | | 2 1431 1437 | 3 | 25 53 53 | <.3 | 1724 52 43 | | 1278 757 759 | 6.50 | 2 | <8 <8 <8 | <2 <2 <2 | <2 | | .2 <.2 <.2 | | <3 | 154 | 3.03 | | 6 | 48 | 23.33 2.17 2.15 | 47 | .19 | 33 | .05 3.19 3.22 | .08 | .07 | <2 <2 2 | 2 | 6 11 9 | 5 21 21 |
| E 142308 | - | 151 | <ŝ | | <.3 | 21 | | 358 | | | - | <2 | <2 | 124 | <.2 | <3 | <3 | 233 | 1.76 | .047 | 3 | 11 | 1.23 | 101 | .24 | <3 | 1.62 | .23 | | <2 | <1 | 4 | 8 |
| E 142310 E 142311 E 142313 | <1 <1 <1 | 471 164 121 | - | 35 | <.3 <.3 <.3 | 97 36 23 | 32 | 539 | 6.71 5.22 4.57 | <2 | <8 | <2 | _ | 139 | <.2 <.2 <.2 | <3 | <3 | 274 | 2.70 | .050 .069 .103 | 2 | 41 | 1.70 2.26 2.44 | 81 | .32 | <3 7 | 2.37 | .39 | .26 | <2 <2 <2 | 1 10 √1 | 5 37 9 | 14 40 24 |
| E 142315 E 142315 STANDARD C3/FA100 | <1 24 | 761 62 | <3 | | <.3 | 38 | 56 | 416 | 7.35 | <2 | <8 | <2 | <2 | 180 | <.2 22.0 | <3 | <3 | 198 | 2.02 | .211 | 3 | 52 169 | 1.53 | 57 153 | .20 | <3 | 2.04 | .16 | .11 | <2 15 | 3 48 | 22 53 | 24 37 54 |
| STANDARD G-1 | <1 | 3 | 3 | 48 | <.3 | 10 | 5 | 626 | 2.20 | <2 | <8 | <2 | 6 | 73 | <.2 | <3 | <3 | 44 | .65 | .081 | 9 | 101 | .70 | 288 | .17 | 4 | 1.12 | .06 | .51 | <2 | <1 | 2 | 2 |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: ROCK REJ. AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm), Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data

DATE RECEIVED: OCT 27 1997 DATE REPORT MAILED: $\sqrt{0}\sqrt{6}/\hat{47}$

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

| | | | na nan n Cina an in Maria | | | | | | | | | G | FO | CHI | IME | CAL | AN | AL_ | JIS | CE | RTI | FIC | ATE | | | | en normalise Son a forski e Soner a forski | | anna an | | | | میں بریکر ہے۔ محمد ہوتے ہوتے حالہ بریکر انہ | | |
|---|--------------|-----------------|---------------------------------|-------------|----------------|----------------|-----------------|----------------|--------------------|------------|--------------------|---------------------|----------------------|----------------------|--------------------|-------------------|----------------|-----------------------|---------------------------|-------------------------|-----------------------|-----------------------|---------------------------------------|----------------|-------------------|-------------------|--|-------------------|--|----|--------------------------|----|---|---------------------------------|---------------------------------|
| | | | | | | м | സ്ത | at. | ា | rsn | l a | Ъ | ۲.Os | ጉርግ | r n | тск | EL. | ST | AR (| | IMS | F | ile | # ! | 97- | 523 | 38R: | 2 2 | | | | | | | |
| | | | | | | | | | | | | | | 1405 | - 15 | 933 R | obson | St., | Vanco | uver | BC V6 | G 1E7 | | | | | | | | | | | | | |
| MPLE# | Mo pprn p | | | | - | - | | Co ppm | Mn ppn | | | | | | | | | Bi ppm p | V C | Ca % | PLa % ppn | | | Ba ppm | | | | | к % г | | Au** ppb | | | ORG. gm | CONC. |
| 11981 11983 11986 142311 142315 | <1 1 | 206 9 151 | 5 <3 <3 | 6 5 6 | 7 <.3) <.3 | 3 3 13 3 | 10 358 48 | 25 97 44 | 671 1244 667 | 6.4 6.8 | .7 < 19 18 < | <2 < 3 < <2 < | <8 < <8 < <8 < | <2 < <2 < <2 < | <28 <21 <215 | 1.2 3.2 7.3 | <3 <3 <3 | ব্য 2 ব্য ব্য 4 | 93 2.4 27 .1 20 3.3 | 47 .0 14 .0 38 .0 | 63 4 04 <' 57 3 | 4 14 1 581 3 66 | 2.87 1.59 18.49 2.88 1.87 | 97 97 90 | .27 .05 .40 | 10 : <3 3 : | 3.14 .48 2.77 | .14 .04 .55 | .20 .33 .37 | <2 | 2 10 155 3 3 | 30 | 8 1 27 | 750 660 780 770 750 | 160 150 160 170 160 |
| E 142315 | <1 | 793 | <3 | 3 | 7 <.: | 3 | 52 | 101 | 513 | 10.0 | 4 < | <2 · | <8 < | <2 • | <2 18 | 4 <.2 | <3 | <3 2 | 65 2.5 | 57.1 | 91 | 3 72 | 1.88 | 34 | .27 | 3 | 2.24 | .30 | .18 | 2 | 4 | 20 | Z5 | - | - |
| DATE RE | | | - • | | | ., | ., | | | | | | | - | 140 | | - / | '/ | | | | | | _ | | | | - | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | I | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | | | | | | | | | | I | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | | | | | | | | | | I | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | | | | | | | | | | Ι | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | | | | | | | | | | Ι | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | | | | | | | | | | Ι | | | | | | | | | | | |
| | | | | | | | | | | | | | - | | | | | | | | | | | Ι | | | | | | | | | | | |

| ACME ANAJ | TCAL | LAB(| JRA' | TOF | IES | S.LI | D. | | 853 | 2 E | . H | AST | ING | SS | T | VA | ١ | JVEI | BC | Ve | iA J | R6 | | PHO |)NE (| 60 | 4)25 | 3 | 315 | 8 | FAX | *4 | 253- | 1716 |
|-------------------------|------|----------------|------|-----|-----|-----------|------------|------------|--------------|----------|----------|-----------|----------|-----|----|-----------|----|----------|--------------------|-----|-----------|------------|--------|-----------|-------|-----------|---------|---------|-----|----------|-------------|----------|-------------|------|
| <u> </u> | | | | | | | | 1405 | | Mot | vat | | Ūrs | sul | a | Fi | le | | ERT 97- Subm | 523 | 9 | | ula Mc | wat | | | | | | | | | | A |
| SAMPLE# | | Cu f ppn pp | | | - | Ni ppm | Co ppm | Mn ppm | | | U mqq | Au ppm | | | | Sb ppm | | V ppm | Ca % | | La ppm | | | Ba ppm | | 8 Inqq | AL ۲ | Na X | | ¥ ppm | Au** ppb | | Pd** ppb | |
| C 11998 | <1 | | | | | 1156 | 9 6 | 1269 | | _ | _ | _ | <2 | | .2 | - | <3 | | .52 | | | | 13.57 | | | | .53 | | | _ | | 7 | 11 | |
| E 142316 RE E 142316 | - | 707 · 764 · | | | | | 31 32 | 403 421 | 5.41 5.37 | <2 <2 | | _ | <2 <2 | | | | - | | 1.21 | | _ | 117 114 | 1.81 | | | - | 1.73 | | | _ | 2 | 12 18 | | |

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

