GEOCHEMICAL AND PETROGRAPHIC 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

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by

U. MOWAT, P. GEO.

February, 1997

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1.0 INTRODUCTION

On November 1, 1996, two men collected 14 rock samples (approximately 120 kg) from selected parts of the Star Claims for geochemical and petrologic examination. Previous sampling by a variety of companies indicated the presence of Ni, Cr, Pt, Pd and Au. The 14 rock samples which were subjected to a variety of geochemical tests indicated that the Ni values from the previous work were not generated by nickel silicates but from awaruite, heazlewoodite or pentlandite. Petrologic examination of 3 selected hand specimens also confirmed the presence of nickel sulphides.

2.0 LOCATION AND ACCESS

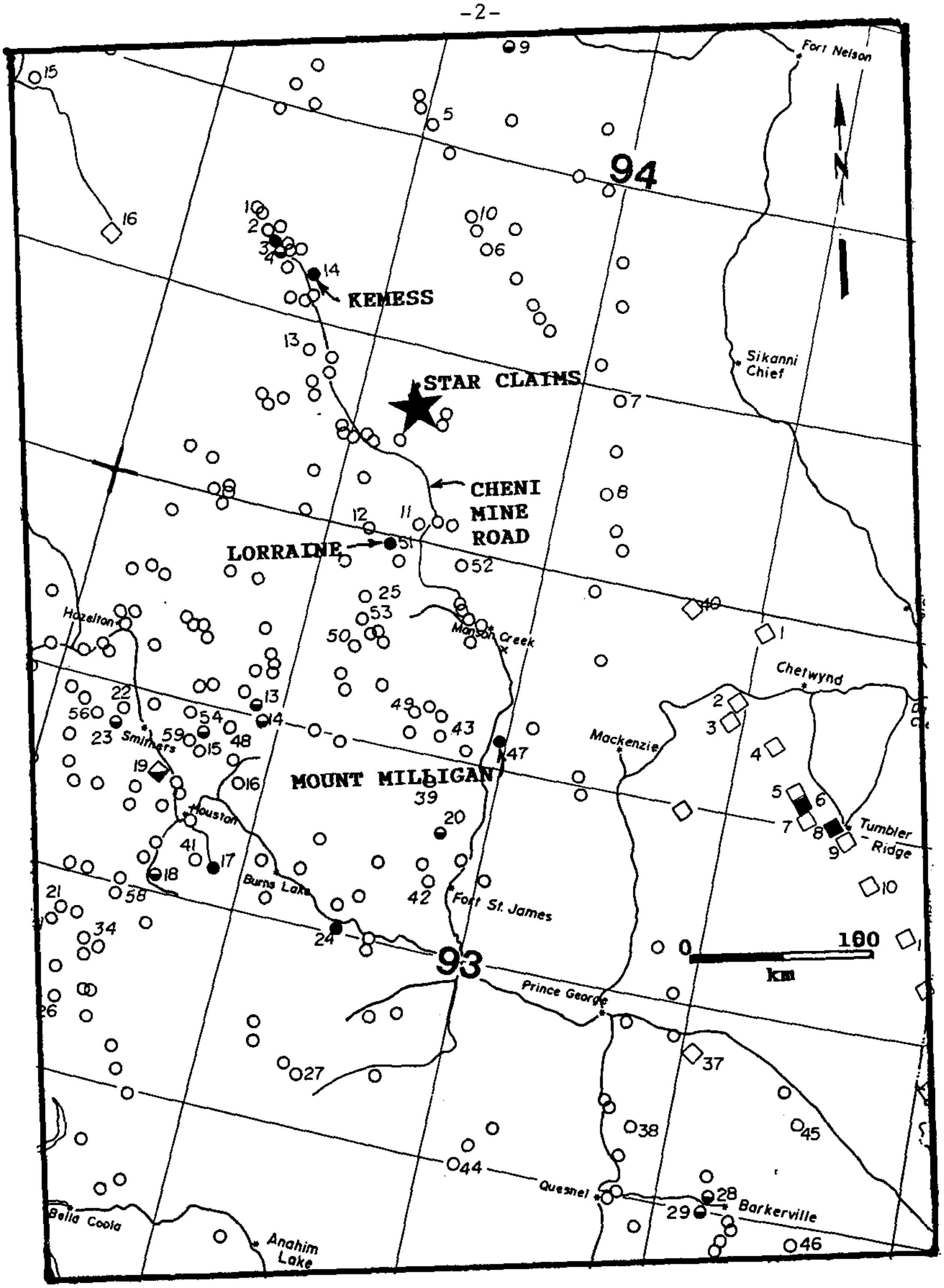
The Star 1 - 5 claims, which are located on map sheets 94-C-5E and 94-C-12E, are 13 km northeast of Aiken Lake and 100 km almost due north of Germansen Landing.

Access to the property is by helicopter from Fort St. James. The Cheni Mine Road (Omineca Forestry Road) passes within 8 km 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

The property consists of 5 4-post claims, totalling 100 units. The registered owner is U. Mowat.



LOCATION MAP : STAR CLAIMS

FIGURE 1

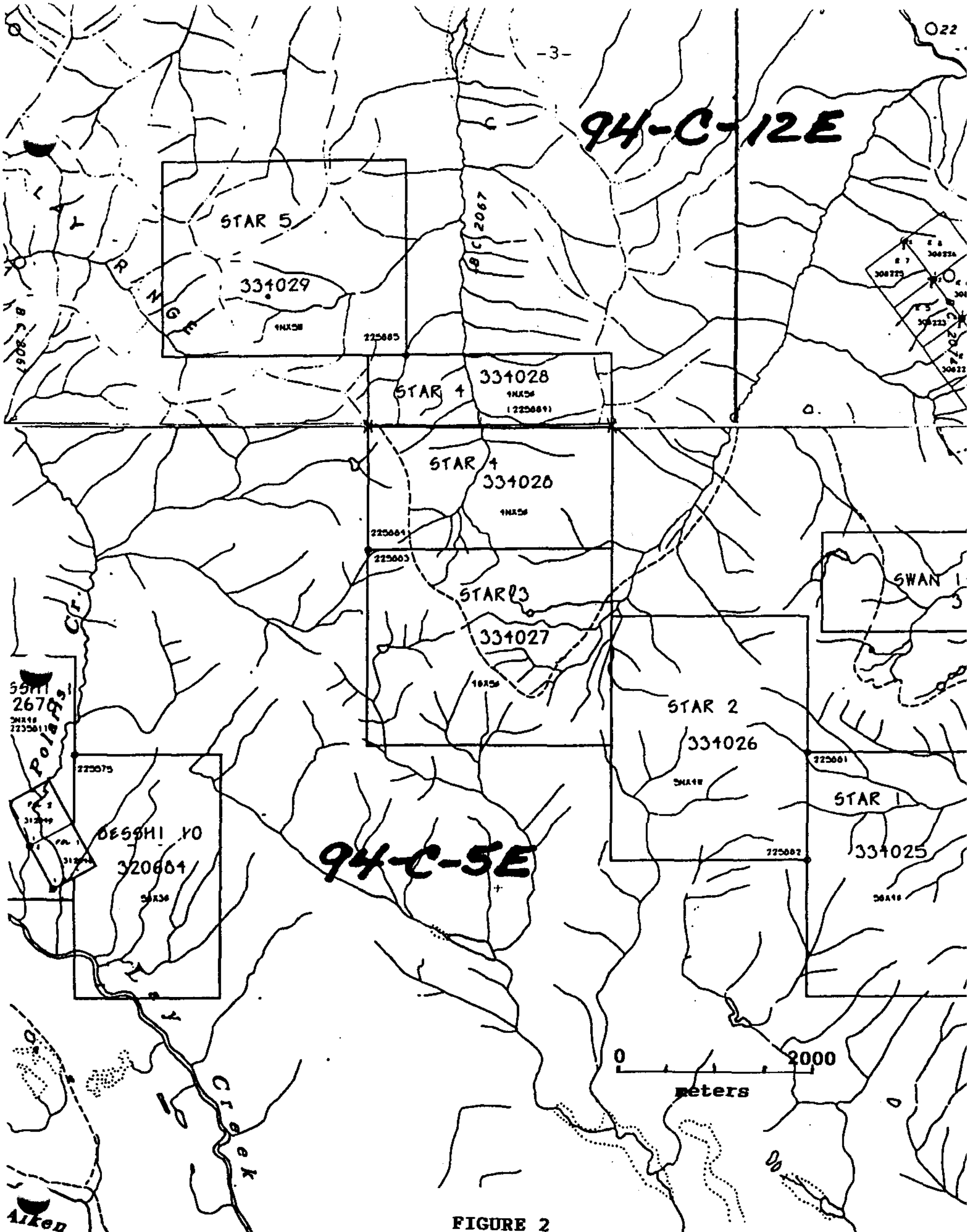


FIGURE 2

CLAIM MAP

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 rocks of dunite, peridotite and wehrlite. The outer phases become more pyroxenitic and grade from olivine clinopyroxene 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$\pm$ 9 Ma and 156 $\pm$ 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 the argillite, amphibolite containing coarsely crystalling pyrrhotite, pyrite, chalcopyrite and arsenopyrite as seams and as bodies up to 8 meters wide and 150 meters long consisting of 40% sulphide, and also shale-hosted zinc-lead sedex-type mineralization.

6.0 PROPERTY GEOLOGY

The Star 1 - 5 claims are dominantly underlain by a pyroxenitic suite of rocks of the Polaris Complex. The pyroxenitic unit varies from olivine pyroxenite to coarse-grained pyroxenite to hornblende-rich pyroxenite. The southern claims and the lower elevations of the property are more olivine-rich. The northern portion (Star 5) appears to be underlain mainly by metamorphosed basalt? and siltstones.

Several intrusives have been observed intruding the ultramafic rocks of the Polaris Complex. They range in composition from syenite to diorite to norite and occur as dykes and plugs.

7.0 MINERALIZATION

The mineralization of economic significance consists of awaruite, pentlandite and heazlewoodite which are dominantly found in the more olivine-rich phases of the Polaris Complex. The nickel mineralization appears to be rather uniformly disseminated throughout the olivine-rich units.

The pyroxenitic units are host to pyrite and chalcopyrite which occur as coarse-grained disseminations and can form up to 40% of a specimen. Previous sampling by Lacana and Equinox clearly show that the chalcopyrite in this unit carries Pt, Pd and occasionally Au. Grab samples collected in 1995 also indicate that the pyroxenite is anomalous in Pt and Pd (112 ppb Pt, 35 ppb Pd) and since no sulphides were noted in the samples, it is suggested that the PGE's occur as discrete entities probably associated with magnetite.

Pyrite forms an intense halo around several of the intrusive bodies. It also occurs as coarse-grained disseminations and forms 10 to 40% of a specimen.

Pyrite was also seen in the siltstones located on the Star 5 claim. The pyrite is fine-grained and forms 5 to 10% of the siltstone.

Pyrite and arsenopyrite were noted in some listwanite and in quartz boulders.

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 with a trace of pyrite and arsenopyrite. 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.

Intrusives within the ultramafic complex have, in several locations, produced a potassic alteration halo consisting of biotite which reaches 2.5 cm in diameter and minor quartz veining with K-spar, carbonate and epidote.

The basalt and siltstones appear to be little altered save for minor hornfelsing.

9.0 WORK PROGRAM

On November 1, 1996, 2 men collected 14 rock samples (approximately 120 kg) for geochemical testing and petrological examination. The samples were subjected to a variety of tests including:

1) 30 element analysis by ICP using total digestion ($HClO_4$-HNO_3-HCl-HF) on both the -100 and the +100 mesh fractions
2) 30 element analysis by ICP using 3:1 HCl-HNO_3 digestion on the -100 and the +100 mesh fractions
3) 30 element analysis by ICP on the magnetic and non-magnetic portions of selected samples using 3:1 HCl-HNO_3 digestion.

In addition, 3 samples were submitted for petrographic examination.

Two samples were submitted to Ashton Mining of Canada as a check test of both geochemical testing and the petrographic examination by other laboratories.

10.0 SAMPLE DESCRIPTION

Sample #	Sample Description
11678	Black, locally fairly magnetic - overall weak; peridotite with some c.g. phenocrysts of pyroxene and phlogopite visible; 0.5% silvery white metallic laths (awaruite); no visible sulphides
11679	Black slightly magnetic harzburgite or olivine pyroxenite with some carbonate alteration; trace silvery white metallic pin pricks (awaruite)

Sample #	Sample Description
11680	As Sample 11679
11681	Black, fairly magnetic olivine pyroxenite; 0.5% gold-coloured sulphide; speck of chalcopyrite; speck of gold?; weathered surface quite rusty - more than normal; rare lath-shaped silvery white metallic and pin prick silvery white metallics; trace phlogopite
11682	Migmatized norite; 60% chloritized clino-pyroxene and 40% white feldspar; cut by pinkish feldspar veinlets with minor pyrite; non-magnetic
11683	Norite; grey; 50% biotite/hornblende; trace disseminated vfg pyrite; non-magnetic
11684	C.g. porphyritic pyroxenite with white feldspar interstitially; trace sulphide; feldspar veinlets as above; non-magnetic
11685	Dunite; yellow weathering; black on fresh surface; trace white metallic pin pricks; trace yellow sulphide; not very magnetic
11686	Peridotite with c.g. pyroxene; black, locally fairly magnetic - overall weak; trace silvery white metallic pin pricks; no visible sulphides
11687	Peridotite; black, f.g.; weakly magnetic; o.5% silvery white metallic pin pricks
11688	Olivine pyroxenite; f.g.; weakly magnetic; trace silvery white metallic pin pricks
11689	Dunite; olive green intensely serpentinized; dense, vfg with 5% disseminated magnetite and occasional speck of yellow sulphide
11689A	Olivine pyroxenite
11690	??? no fresh surface; probably peridotite; non-magnetic

11.0 ANALYTICAL WORK

The first phase of the analytical work consisted of analyzing the 15 rock samples for 30 elements by ICP and Au, Pt, Pd by fire assay. Two types of digestion methods were used, total ($HClO_4$-HNO_3-HCl-HF) and the standard 3:1 HCl-HNO_3 method. Two size fractions (-100 and +100 mesh) were subjected to the 2 different digestion methods. The analyses showed that the nickel present in the samples was not nickel silicates. The nickel in the samples is either awaruite, which was seen in the hand specimens, or nickel sulphide.

The +100 fraction was analyzed in order to detect metallic particles. This size fraction would detect such minerals as native gold, platinum or awaruite which is highly malleable.

The second phase of analytical work consisted of sending the pulps and rejects from the 15 rock samples to Cominco Laboratories. An attempt to separate the samples into magnetic and non-magnetic fractions by magnetic separation/heavy mineral separation failed. Only one sample produced enough magnetic fraction residue for analysis. The magnetic separation was attempted in order to try to concentrate awaruite, which is highly magnetic, or other nickel sulphides.

The samples were then shipped to Process Research Associates for magnetic separation using a Davis Tube. Only 3 samples were selected for testing. Both the magnetic and non-magnetic fractions were then re-analysed for 30 elements by ICP and Au, Pt, Pd by fire assay.

Concurrently with the above analytical work, Ashton Mining of Canada magnetically separated 2 samples using a magnetic separator. Both the magnetic and non-magnetic fractions were then re-analysed for 31 elements by ICP. Both the magnetic and non-magnetic fractions were analyzed. A description of the magnetic separation technique is included in the summary reports in Appendix I.

The following tables 1 to 5 compare the different digestion methods of both the -100 and +100 fractions as well as the magnetic and non-magnetic fractions.

TABLE 1 - NICKEL IN PPM

Sample Number	Rock Type	3:1 -100	3:1 +100	Total -100	Total +100	Acme N.M.	Acme Mag	IPL N.M.	IPL Mag
11678	pdt	1299	1118	1218	1255	945	1665		
11679	olpx	1189	941	1138	1128				
11680	olpx	1338	1134	1361	1202				
11681	olpx	1314	1219	1290	1222				
11682	nor	88	50	126	89				
11683	nor	31	15	55	28				
11684	pyx	40	21	65	36				
11685	dun	1558	1651	1547	1591	1222	1691	1773	1714
11686	pdt	1098	1094	1066	1099				
11687	pdt	1510	1562	1465	1586				
11688	olpx	1708	1885	1755	1850	2137	1659	2033	1954
11689	dun	1268	1327	1299	1294				
11689A	olpx	1056	1110	1437	1459				
11690	pdt	1263	1075	1249	985				

pdt	peridotite
olpx	olivine pyroxenite
nor	norite
pyx	pyroxenite
dun	dunite
3:1	$HCl-HNO_3$ digestion
Total	$HClO_4-HNO_3-HCl-HF$ digestion
N.M.	non-magnetic fraction
mag	magnetic fraction

TABLE 2 - COBALT IM PPM

Sample Number	Rock Type	3:1 -100	3:1 +100	Total -100	Total +100	Acme N.M.	Acme Mag	IPL N.M.	IPL Mag
11678	pdt	103	83	86	86	65	107		
11679	olpx	96	70	82	78				
11680	olpx	100	79	91	78				
11681	olpx	109	95	94	87				
11682	nor	18	8	27	20				
11683	nor	15	8	24	14				
11684	pyx	24	10	39	18				
11685	dun	117	119	104	105	80	166	109	106
11686	pdt	108	102	96	95				
11687	pdt	125	126	110	118				
11688	olpx	115	123	107	110	130	119	108	104
11689	dun	114	114	108	105				
11689A	olpx	85	83	88	88				
11690	pdt	87	71	81	64				

pdt peridotite
olpx olivine pyroxenite
nor norite
pyx pyroxenite
dun dunite
3:1 $HCl-HNO_3$ digestion
Total $HClO_4-HNO_3-HCl-HF$ digestion
N.M. non-magnetic fraction
mag magnetic fraction

TABLE 3 - COPPER IN PPM

Sample Number	Rock Type	3:1 -100	3:1 +100	Total -100	Total +100	Acme N.M.	Acme Mag	IPL N.M.	IPL Mag
11678	pdt	11	10	13	11	9	88		
11679	olpx	7	5	9	7				
11680	olpx	5	4	7	6				
11681	olpx	13	10	14	9				
11682	nor	82	50	67	42				
11683	nor	85	54	79	56				
11684	pyx	100	46	94	42				
11685	dun	5	4	6	5	5	70	30	2
11686	pdt	7	5	8	6				
11687	pdt	5	4	6	7				
11688	olpx	4	6	8	7	7	27	18	3
11689	dun	7	6	8	7				
11689A	olpx	498	493	480	473				
11690	pdt	288	82	271	69				

pdt	peridotite
olpx	olivine pyroxenite
nor	norite
pyx	pyroxenite
dun	dunite
3:1	$HCl-HNO_3$ digestion
Total	$HClO_4-HNO_3-HCl-HF$ digestion
N.M.	non-magnetic fraction
mag	magnetic fraction

TABLE 4 - CHROMIUM IN PPM

Sample Number	Rock Type	3:1 -100	3:1 +100	Total -100	Total +100	Acme N.M.	Acme Mag	IPL N.M.	IPL Mag
11678	pdt	350	403	1184	1558	125	5253		
11679	olpx	470	543	1344	1953				
11680	olpx	338	360	1335	1563				
11681	olpx	312	343	1317	1495				
11682	nor	92	47	278	166				
11683	nor	50	17	101	36				
11684	pyx	51	22	85	44				
11685	dun	83	94	490	481	39	969	210	93
11686	pdt	287	311	1412	1584				
11687	pdt	94	84	680	802				
11688	olpx	116	124	927	1039	62	1456	136	108
11689	dun	138	182	1010	1248				
11689A	olpx	130	125	633	394				
11690	pdt	64	50	442	255				

pdt	peridotite
olpx	olivine pyroxenite
nor	norite
pyx	pyroxenite
dun	dunite
3:1	$HCl-HNO_3$ digestion
Total	$HClO_4-HNO_3-HCl-HF$
N.M.	non-magnetic fraction
mag	magnetic fraction

TABLE 5 - SILVER IN PPM

Sample Number	Rock Type	3:1 -100	3:1 +100	Total -100	Total +100	Acme N.M.	Acme Mag	IPL N.M.	IPL Mag
11678	pdt	< .3	< .3	.8	.6	< .3	.8		
11679	olpx	< .3	< .3	1.0	< .5				
11680	olpx	< .3	.3	< .5	.5				
11681	olpx	< .3	< .3	< .5	< .5				
11682	nor	< .3	.3	< .5	1.7				
11683	nor	< .3	< .3	< .5	< .8				
11684	pyx	.4	< .3	< .5	< .5				
11685	dun	< .3	< .3	< .5	< .5	< .3	1.9		
11686	pdt	.3	< .3	< .5	.5				
11687	pdt	< .3	< .3	< .5	< .5				
11688	olpx	< .3	< .3	< .5	< .5	< .3	.3		
11689	dun	< .3	< .3	< .5	< .5				
11689A	olpx	.3	.5	.5	< .5				
11690	pdt	.3	< .3	< .5	.5				

pdt	peridotite
olpx	olivine pyroxenite
nor	norite
pyx	pyroxenite
dun	dunite
3:1	$HCl-HNO_3$ digestion
Total	$HClO_4-HNO_3-HCl-HF$ digestion
N.M.	non-magnetic fraction
mag	magnetic fraction

12.0 ANALYTICAL RESULTS

12.1 NICKEL

1) All lithologies, except understandably the norite, carry elevated nickel values.
2) Nickel values do not appear to favour the more olivine-rich phases. The highest value is found in olivine pyroxenite.
3) Higher nickel values are found in rocks digested with the 3:1 $HCl-HNO_3$ method. The lower nickel values in the total digestion method are believed to be caused by the loss of nickel by fuming.
4) There is no appreciable difference in nickel values for either the -100 mesh or +100 mesh fractions by either digestion method although the -100 mesh fraction tends to be slightly more anomalous.
5) All nickel values are very constant between the 3:1 and the total digestion method indicating that the nickel values are not nickel silicate but rather awaruite or nickel sulphide.
6) In several cases (5 out of 11) the +100 mesh fraction has higher values than the -100 mesh fraction which would indicate that at least some of the nickel value is generated by nickel metallics (awaruite).
7) MAgnetic separation shows some elevation in nickel values. The elevation of nickel values in the non-magnetic fraction of sample 11688 remains a mystery. Variations in nickel values in the magnetic and non-magnetic from laboratory to laboratory are believed to be due to variations in the size of the samples.

12.2 COBALT

1) Cobalt values are fairly uniform in all lithologies, except understandably the norite, although the more olivine-rich phases have the higher cobalt values.
2) In general, the -100 mesh fraction is more anomalous for cobalt values.
3) Cobalt values obtained from the 3:1 $HCl-HNO_3$ digestion method are more anomalous than the cobalt values obtained from total digestion. The lower values may reflect the loss of cobalt from fuming.

4) In 2 out of 3 samples, cobalt values increased in the magnetic fraction.

12.3 COPPER

1) Typically the norite has more elevated copper values than the ultramafic lithologies.
2) The -100 mesh fraction is more anomalous in copper.
3) Copper values obtained from the 3:1 $HCl-HNO_3$ digestion method are substantially higher than copper values obtained from the total digestion method. The lower copper values obtained from the total digestion method may be due to fuming.
4) The magnetic fraction shows substantial increases in copper values.
5) Coincident anomalous copper and nickel values in samples 11689A and 11690 may indicate the presence of massive mineralization in the sample area.

12.4 CHROMIUM

1) Chromium values are distributed throughout the ultramafic and much less so in the norite.
2) Higher chromium values do not favour the more olivine-rich phases of the ultramafic.
3) Chromium values obtained from the total digestion method are substantially higher than chromium values obtained from the 3:1 $HCl-HNO_3$ digestion method.
4) Chromium values obtained from the +100 mesh fraction and using the total digestion method are substantially higher than the -100 mesh fraction.
5) Understandably, the chromium values in the magnetic fraction are substantially elevated. The large discrepance between the Acme and IPL results cannot be explained.

12.5 SILVER

1) Silver values are low and erratic but seem to prefer the norite and the +100 mesh total digestion. This suggests that metallic silver may be present.

2) The magnetic fraction has substantially higher silver values.

13.0 PETROGRAPHIC WORK

The first stage of the petrographic work consisted of a thorough examination of approximately 120 kg of rock collected on November 1, 1996 from the Star claims. The examination (see page 8) clearly showed the presence of awaruite and a yellow metallic which was not identifiable due to the vfg nature of the mineralization although in one instance it could be determined that one of the yellow metallic pin pricks was chalcopyrite.

Three samples were submitted to Cominco's Research Laboratory for preparation of polished thin sections and their subsequent microscopic examination. The details of the examination are located in Appendix II. The examination showed the presence of pentlandite and possible heazlewoodite.

Two samples were submitted to Ashton Mining of Canada for preparation of polished thin sections. An examination of the thin sections showed trace amounts of high reflectivity Fe-Ni (awaruite) are present as disseminations. The details of the thin section examination are included in Appendix II.

At face value there appears to be a large discrepancy between the initial hand specimen description which reported up to 0.5% disseminated awaruite and the subsequent thin section examinations by both Ashton and Cominco. It should be pointed out that awaruite is extremely difficult to mistake being characterized by a brilliant silvery white metallic colour and which forms as lath shapes or as pin pricks. Usually it is vfg but against the black ultramafic background it is readily discernible. In fact in one specimen (#1) submitted to Cominco, awaruite was visible with the naked eye. Mr. C. Hood in personal communication has reported seeing the brilliant silvery white metallic.

Another discrepancy exists between the thin section work of Cominco who only report pentlandite and possibly heazlewoodite and Ashton who report awaruite. No explanation is offered for this phenomena.

14.0 CONCLUSIONS

1) Analytical work has showed that the nickel values in rocks collected from the Star Claims is awaruite or nickel sulphides and not nickel silicate. This was clearly shown by comparing the nickel values obtained from total digestion with the nickel values obtained from the 3:1 HCl-HNO_3 digestion method which is too weak to attack silicates.

2) Analytical work using the +100 mesh fraction for metallics strongly indicates that nickel occurs as a metallic (awaruite).

3) Magnetic separation may be a useful tool in the production of a Ni +/- Cu +/- Co +/- Cr concentrate. More testing is required to verify this concept. Although Pt and Pd values occur sporadically throughout the Star Claims, magnetic separation may enhance their presence as well.

15.0 RECOMMENDATIONS

Besides performing much more detailed sampling of rock on the Star Claims, it is recommended that tests of a more metallurgical nature be conducted in order to determine the economic viability of a large, low-grade, open-pittable nickel-cobalt-copper-chromite-precious metal deposit which the Star Claims appear to be.

16.0 REFERENCES

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17.0 STATEMENT OF COSTS

Analytical Work (Acme)

28 rock samples analysed for 30 elements by ICP at $6.20/ sample	$ 173.60
28 multi-acid digestion with 30 element ICP analysis at $8.30/sample	232.40
28 rock samples analysed for Au, Pt, Pd by FA at $20.10/ sample	562.80
14 rock sample prep at $4.10/ sample	57.40
14 sieving -100 mesh at $1.30/ sample	18.20
pulverizing excess weight 3.5 kg at $3.20/kg	11.20
GST	73.89
	$1129.49

Helicopter

3.7 hours at $715.00/hour	$2645.50
287 liters of fuel at $0.70/liter	201.32
100 liters of fuel at $1.15/liter	115.00
oil - 3.7 at $2.00/	7.40
GST	207.85
	$3177.07

Accommodation

2 rooms at $51.75/room	$ 103.50

Freight	$ 67.78

Analyses (Cominco)

1 heavy mineral separation at $30.00/sample	$ 30.00
1 total digestion for Cu by AA at $4.25/sample	4.25
1 total digestion for Ni by AA at $2.00/sample	2.00
1 total digestion for Co by AA at $2.00/sample	2.00
1 total digestion for Ag by AA at $2.50/sample	2.50
GST	2.85
	$ 43.60

Analytical Work (Process Research)

3 magnetic separations at $25.00/sample	$ 75.00
6 samples analysed for 30 elements by ICP and Au, Pt, Pd by fire assay at $32.61 per sample	195.70
Courier	15.00
GST	20.00
	$ 305.70

Petrographic Work (Cominco)

3 polished thin sections at $24.00/section	$ 72.00
3 SEM-EDX at $75.00/section	225.00
GST	20.79
	317.79

Analytical Work (Ashton)

2 days sample prep at $180/day	$ 360.00
2 thin sections at $30.00/section	60.00
2 SEM analyses at $100/hour for 1.5 hours	150.00
4 analyses for 31 elements by ICP at $9.50/sample	38.00
	$ 608.00

Wages

1 man for 4 days at $400.00/day	$1600.00
1 man for 4 days at $250.00/day	1000.00
	$2600.00

Meals $ 55.36

TOTAL **$8364.69**

18.0 STATEMENT OF QUALIFICATIONS

1. I am a graduate of the University of British Columbia having graduated in 1969 with a Bachelor of Science in Geology.

2. 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 G. Mowat

Ursula G. Mowat, P. Geo.

Dated this 14th day of May, 1997

at Vancouver, B. C.

APPENDIX I

Process Research Associates Ltd.
9145 Shaughnessy Street, Vancouver, B.C. V6P 6R9
Telephone:(604)322-0118 Fax:(604)322-0181

February 19, 1997

Ms Ursala Mowat
1405 - 1933 Robson Street
Vancouver, B.C.
V6G 1E7

Dear Ms Mowat:

We enclose a copy of the Certificate of Analysis on samples 11678, 11685 and 11688 from Acme Analytical Lab. We will forward the original Certificate to you as soon as we receive it. The magnetic separation test results on the samples are shown below:

Sample	Weight (g)
11678	
Non-Magnetic	285.57
Magnetic	4.31
11685	
Non-Magnetic	307.18
Magnetic	4.67
11688	
Non-Magnetic	301.84
Magnetic	8.21

Bern Klein is away from the office until the first week of March and will contact you on his return.

Sincerely yours,
PROCESS RESEARCH ASSOCIATES LTD.

Peter Tse, A.Sc.T.
Laboratory Manager

MAGNETIC SEPARATION

TEST RESULTS

Prepared for: **Ms. Ursala Mowat**
Suite 1405, 1933 Robson Street
Vancouver, B.C.
V6G 1E7

Prepared by: **PROCESS RESEARCH ASSOCIATES LTD.**
9145 Shaughnessy Street
Vancouver, B.C.
V6P 6R9

PRA Project No.: **97-015**

Bern Klein

Bern Klein, Ph.D.
Senior Process Metallurgist

Date: May 3, 1997

1.0 INTRODUCTION

Magnetic separation tests were performed on mineral samples provided by Ms. Ursala Mowat. The objective of the test was to concentrate the precious metals and base metals into a magnetic product. This report describes the test procedures and presents the tabulated results.

2.0 PROCEDURES

Magnetic separation tests were performed on seven mineral samples. The samples were pulverized prior to being received. The samples were fed to a Davis Tube wet magnetic separator with the field strength set to 5,000 Gauss. The magnetic and non-magnetic products were dried, weighed and submitted to ACME Analytical Laboratories for analyses. The products were analyzed for Au, Ag, Pt, Pd and ICP metals.

3.0 RESULTS

The results of the analyses on the magnetic and non-magnetic test products are presented in the appended Certificates of Analyses from ACME. Metallurgical balances were produced for each of the seven tests showing product weights and the grades and distributions of selected metals. The balances are presented in the appended Magnetic Separation Test Reports.

ACME ANALYTICAL

Process Research Associates PROJECT 97-015 FILE # 97-0589

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Ag** gm/t	Au** gm/t	Pt** gm/t	Pd** gm/t
11678 NAG	30	88	57	114	.8	1665	107	1103	15.78	<2	<5	<2	<2	4	2.0	<2	<2	157	.12	.005	1	5253	8.90	7	.06	11	.11	<.01	<.01	<2	<.3	.01	.01	<.01
11685 NAG	19	70	35	59	1.9	1691	166	1071	16.24	9	<5	<2	<2	2	2.5	<2	<2	18	.11	.004	<1	969	14.29	4	.01	11	.07	<.01	<.01	<2	<.3	<.01	.01	<.01
11688 NAG	6	27	34	36	.3	1659	119	941	11.49	5	<5	<2	<2	3	1.9	5	<2	14	.06	.004	<1	1456	10.80	9	<.01	<3	.08	.01	.01	<2	<.3	.04	.01	.01

Sample type: PULP.

Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Process Research Associates PROJECT 97-015 File # 97-0589 Page 1

9145 Shaughnessy St., Vancouver BC V6P 3R9

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Ag** gm/t	Au** gm/t	Pt** gm/t	Pd** gm/t
11678 NON MAG	<1	9	15	52	<.3	945	65	711	3.92	2	<5	<2	<2	1	.8	<2	<2	6	.10	.004	<1	125	10.83	3	<.01	5	.06	<.01	<.01	<2	1.0	<.01	.01	<.01
11685 NON MAG	<1	5	4	27	<.3	1222	80	705	3.39	2	<5	<2	<2	1	.8	<2	2	1	.04	.003	1	39	15.28	2	<.01	7	.02	<.01	<.01	<2	1.0	.01	<.01	<.01
11688 NON MAG	<1	7	13	41	<.3	2137	130	1161	5.86	4	<5	<2	<2	2	1.1	<2	<2	<1	.06	.004	1	62	24.16	5	<.01	<3	.02	<.01	<.01	<2	.3	<.01	<.01	<.01
RE 11688 NON MAG	<1	9	10	39	<.3	2114	129	1142	5.78	4	<5	<2	<2	2	1.4	<2	2	<1	.06	.004	1	62	23.93	5	<.01	<3	.02	<.01	<.01	<2	.8	<.01	<.01	<.01

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.
- SAMPLE TYPE: PULP AG** AU** PT** & PD** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: FEB 5 1997 DATE REPORT MAILED: Feb 19/97 SIGNED BY. C. Leong ... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data ____ FA ____

MAGNETIC SEPARATION TEST REPORT

Project: 97-015 **Date :** 03-May-97

Test: T1
Sample: 11678

Product	Weight		Grade (ppm)						Distribution					
	(g)	(%)	Au	Ag	Pt	Pd	Ni	Co	Au	Ag	Pt	Pd	Ni	Co
Magnetic	4.3	1.5	0.01	<0.3	0.01	<0.01	1665	107	100.0	<1	1.5	N/A	2.6	2.4
Non-magnetic	285.6	98.5	<0.01	1	0.01	<0.01	945	65	<1	100	98.5	N/A	97.4	97.6
Total	289.9	100.0	0.0001	1	0.01	<0.01	956	66	100.0	100.0	100.0	N/A	100.0	100.0

Test: T2
Sample: 11685

Product	Weight		Grade (ppm)						Distribution					
	(g)	(%)	Au	Ag	Pt	Pd	Ni	Co	Au	Ag	Pt	Pd	Ni	Co
Magnetic	4.7	1.5	<0.01	<0.3	0.01	<0.01	1691	166	<1	<1	100.0	N/A	2.1	3.1
Non-magnetic	307.2	98.5	0.01	1	<0.01	<0.01	1222	80	100.0	100.0	<1	N/A	97.9	96.9
Total	311.9	100.0	0.01	1	0.0001	<0.01	1229	81	100.0	100.0	100.0	N/A	100.0	100.0

Test: T3
Sample: 11688

Product	Weight		Grade (ppm)						Distribution (%)					
	(g)	(%)	Au	Ag	Pt	Pd	Ni	Co	Au	Ag	Pt	Pd	Ni	Co
Magnetic	8.2	2.6	0.04	<0.3	0.01	0.01	1659	119	100	<1	100	100	2.1	2.4
Non-magnetic	301.8	97.4	<0.01	0.3	<0.01	<0.01	2137	130	<1	100	<1	<1	97.9	97.6
Total	310.1	100.0	0.001	0.3	0.0003	0.0003	2124	130	100	100	100	100	100.0	100.0

MAGNETIC SEPARATION TEST REPORT

Project: 97-015 **Date :** 03-May-97

Test: T4
Sample: 11682

Product	Weight		Grade (ppb)			Distribution (%)		
	(g)	(%)	Au	Pt	Pd	Au	Pt	Pd
Magnetic	0.09	0.1	99999	<1	<1	33.8	<1	<1
Non-magnetic	99.1	99.9	178	4	4	66.2	100	100
Total	99.1	100.0	269	4	4	100.0	100	100

Test: T5
Sample: 11683

Product	Weight		Grade (ppb)			Distribution (%)		
	(g)	(%)	Au	Pt	Pd	Au	Pt	Pd
Magnetic	0.07	0.1	94650	<1	<1	51.1	<1	<1
Non-magnetic	99.2	99.9	64	4	4	48.9	100	100
Total	99.3	100.0	131	4	4	100.0	100	100

Test: T6
Sample: 11689A

Product	Weight		Grade (ppb)			Distribution (%)		
	(g)	(%)	Au	Pt	Pd	Au	Pt	Pd
Magnetic	0.46	0.5	39690	<1	<1	79.1	<1	<1
Non-magnetic	98.7	99.5	49	2	2	20.9	100	100
Total	99.1	100.0	233	2	2	100.0	100	100

Test: T7
Sample: 11690

Product	Weight		Grade (ppb)			Distribution (%)		
	(g)	(%)	Au	Pt	Pd	Au	Pt	Pd
Magnetic	1.58	1.6	3385	26	<1	75.3	12	<1
Non-magnetic	97.3	98.4	18	3	3	24.7	88	100
Total	98.8	100.0	72	3	3	100.0	100	100

APPENDIX II

ASHTON MINING
OF CANADA INC.

SUMMARY REPORT
STAR CLAIMS/ BORNITE CLAIMS SUBMITTAL
(NORTH-CENTRAL BRITISH COLUMBIA)

By: Chris Hood, M.Sc.

I.) STAR CLAIMS

Summary

Two samples (11685 and 11688) of serpentinized peridotitic rocks were selected from material from the Star claims. The samples were chosen primarily for their elevated Ni contents and presence of visible opaque phases (eg. oxides, sulfides,or metal alloys). Polished thin sections of each sample were made and subsequently analyzed by reflected and transmitted light microscopy.

In general, the rocks consist dominantly of olivine and lesser pyroxenes, with the bulk of the opaque mineralogy dominated by subhedral to euhedral chromian spinels and irregular masses of magnetite. Trace amounts of possible high reflectivity Fe-Ni phases (awaruite, josephinite?) are present as disseminations. The opaque population forms a maximum of 2-3% of the rocks (by volume). Scanning electron microscopic analysis of the opaque phases failed to identify Ni-bearing phases, although the instrument is unable to easily define the presence of Ni in amounts of less than 0.5%.

The rocks were also crushed to -1.0 mm, with the resultant material passed over a magnetic separator in an attempt to scalp a paramagnetic fraction enriched in Ni-bearing phases. Splits from both the magnetic and non-magnetic fractions were examined with a binocular microscope, with an apparent concentration of opaque phases present in the magnetic fraction. The splits were then submitted to IPL for 31 element ICP analysis (Aqua Regia digestion). Results indicate that there is little or no correlation between magnetic properties and assays for each sample, with only minor differences in Ni and Co contents noted for the individual fractions. Nickel contents were found to be about 3-4% higher in the magnetic fractions (to a maximum of 0.2% Ni), a number which does not support the sole concentration of Ni within a native metal or alloy state. The relative lack of variability could be attributed to the occurrence of Ni in a non-magnetic phase such as olivine, or a very small grain size which was not liberated by the crushing. Olivine in alpine ultramafic complexes normally contains up to 2000 ppm Ni, and an olivine-rich

rock subjected to a strong digestion may in fact contribute a geochemically significant (based on a 50-70% digestion of silicates in "strong" acids) amount of Ni to each analysis. Nickel contents for each sample would thus be sourced from a combination of Ni-bearing silicates and alloys, with only a part of the total contained metal recoverable by simple processing techniques.

The occurrence of a broad area of elevated Ni values would be of great interest if the metal could be definitively linked to alloy or sulfide phases. The presence of Ni-bearing alloys in the massif has been established by other investigators, but could not be verified by the author. If the alloys are in fact evenly distributed throughout the complex, then the property has significant potential for a large tonnage, low grade Ni reserve. The widespread occurrence of the metals would also imply that the magmatic system was unusually low in sulfur content; exploration for other commodities (eg. Platinum Group) would have to target changes in silicate mineralogy as well as pathfinder metals.

Cost Breakdown

Type of Work	Unit Cost	Quantity	Total
Geologist	$250/day	6 days	$1500
Lab Technician	$180/day	2 days	$360
Thin Sections	$30/unit	2 units	$60
SEM Analysis	$100/hour	1.5 hours	$150
ICP Analysis	$9.50/analysis	4 analyses	$38
Overall Total			**$2108**

II.) BORNITE CLAIMS

Summary

A sample (9612) from the Bornite claims was also evaluated through a similar process, with two polished thin sections examined for sulfide mineralogy. Host rocks were almost entirely replaced by a fibrous to radiating, low birefringence phase (probably serpentine and possibly zeolites), with original textures almost completely erased. Magnetite is the dominant (10-15% of rock) opaque phase, occurring as irregular masses and fracture infillings up to one centimeter across. Partial replacement by hematite is evident throughout the rocks. Chromite is also present, as small euhedral grains

ASHTON MINING
OF CANADA INC.

associated with the larger magnetite aggregates. Sulfides are generally rare, consisting of very fine grained pyrrhotite disseminations or as a blebby, moderate reflectivity phase (bornite?) noted within some of the largest magnetite masses. The latter phase could account for the copper values observed in sample assays.

As for the Star claims, the material from the Bornite claims was crushed to -1.0 mm. and split into paramagnetic and nonmagnetic fractions, with each concentrate submitted to IPL for 31 element ICP analysis. Results indicate a significant concentration of Cu, Cr, and Co in the paramagnetic fraction, probably a result of the magnetite-chromite-bornite association. Nickel values remained relatively constant, suggesting that much of the element may occur in the silicate fraction as well as in the oxide/sulfide material. Copper is probably the main element of interest, with a value of 0.73% obtained for the paramagnetic fraction.

The presence of elevated Cu values is supportive of exploration for a large tonnage, low grade target on the property.

Cost Breakdown

Type of Work	**Unit Cost**	**Quantity**	**Total**
Geologist	$250/day	4 days	$1000
Lab Technician	$180/day	2 days	$360
Thin Sections	$30/unit	2 units	$60
SEM Analysis	$100/hour	0.5 hours	$50
ICP Analysis	$9.50/analysis	2 analyses	$19
Overall Total			**$1489**

UNIT 123-930 WEST 1ST STREET NORTH VANCOUVER B.C. CANADA V7P 3N4 TEL 604/983-7750 FAX 604/987-7107

INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS
iPL 96L1295

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Client: Ashton Mining of Canada Inc   iPL: 96L1295   Out: Dec 19, 1996   Page 1 of 1   Section 1 of 1
Project: 2097   2 Rock   In: Dec 17, 1996   [129513:34:06:69121996]   Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
AMC-9612A	R	2.9	7271	11	26	<	<	<	7	<	<	4.5	271	488	16	<	354	62	311	<	4	3	10	0.03	1.88	3.84	11%	5.09	<	<	0.05
AMC-9612B	R	1.4	2522	11	29	29	5	<	7	<	<	2.6	108	443	110	<	133	70	354	15	51	2	15	0.04	3.21	2.12	3.53	9.53	0.09	0.05	0.09
Min Limit		0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
x Reported*		99.9	20000	20000	20000	9999	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	9.99	9.99	9.99	9.99	9.99	5.00	5.00
[illegible]		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

A = mags
B = non-mags

iPL INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS
iPL 97B0101

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Client : Ashton Mining of Canada Inc
Project: 97-NA:SEN

6 Samples
5=Rock 1=Sand

[010112:02:51:79020797]

Out: Feb 06, 1997
In : Feb 05, 1997

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
AMC - 11685A R	0.1	30	5	33	<	<	<	8	<	<	<	109	1773	6	<	210	4	1000	<	4	1	3	<	0.06	0.10	5.98	27%	<	0.01	<
AMC - 11685B R	<	2	2	26	<	<	<	5	<	<	<	106	1714	<	<	93	2	929	<	2	<	2	<	0.03	0.05	4.90	26%	<	0.01	<
AMC - 11688A R	<	18	3	31	<	<	<	5	<	<	<	108	2033	3	<	136	2	1017	<	3	<	3	<	0.03	0.06	5.50	25%	<	0.01	<
AMC - 11688B R	<	3	7	30	<	<	<	6	<	<	<	104	1954	3	<	108	2	998	<	3	1	3	<	0.02	0.05	5.18	25%	<	0.01	<
[redacted]																														

A = mags
B = non-mags

	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Tl	Bi	Cd	Co	Ni	Ba	W	Cr	V	Mn	La	Sr	Zr	Sc	Ti	Al	Ca	Fe	Mg	K	Na	P
Min Limit	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max Reported*	99.9	20000	20000	20000	9999	999	9999	999	999	9999	99.9	9999	9999	9999	999	9999	9999	9999	9999	9999	9999	9999	1.00	9.99	9.99	9.99	9.99	9.99	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck 1000 %=Estimate % R=Rock S=Sand

MOWAT, URSULA-X97

Job V 97-0050H

6164,11678 - 11690

Report date 23 JAN 1997

LAB NO	FIELD NUMBER	Cu(2) ppm	Ni(2) ppm	Co(2) ppm	Ag ppm	Wt HM gram	Volume ml	YIELD G/L
H9700112	11688	13	1220	80	<0.4	2.5	150	17

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS
Cu(2) HF - HClO4 decomposition / AAS
Ni(2) HF - HClO4 decomposition / AAS
Co(2) HF - HClO4 decomposition / AAS
Ag Aqua regia decomposition / AAS
Volume is the vol of screened -18+400 mesh material put through heavy liquid
Wt HM is the weight of heavy minerals(sink) after removal of the strongly magnetic fraction
Ratio G/L is the yield of heavy minerals in gram /litre

Cominco Ltd./Exploration Research Laboratory/1486 East Pender Street
Vancouver, B.C./Canada V5L 1V8/Tel. (604) 685-3032/Fax. (604) 844-2686

Exploration
Research Laboratory

Ms. Ursula Mowat
1405 - 1933 Robson Street
Vancouver, B.C.
V6G 1E7

18 March, 1997

Dear Ms. Mowat: ***RE: E.R.L. JOB V97-103R***

Three samples were submitted to Cominco's Exploration Research Laboratory for preparation into polished thin sections and subsequent microscopic examination. They are numbered as follows:

LAB NO.	***FIELD NO.***
R97:1489	#1
R97:1490	#11678
R97:1491	#11685

Following are brief microscopic observations of each sample.

SAMPLE R97:1489.

In transmitted light the rock is seen to be intensely fractured with Fe-oxides and very fine grained carbonate developed along these fractures. The rock is nearly completely altered to serpentine with a few remnant cores of olivines (to 0.25 mm). The rock is thus a serpentinite.

In reflected light Cr-Fe spinels from 30 to 150 microns are widely disseminated and Fe-oxides are developed along fractures. A few minute grains of pentlandite are noted.

SAMPLE R97:1490.

In transmitted light olivine grains reach 5 mm in size and tend to be anhedral. They may be included entirely in pyroxene grains, some of which are up to 5 mm in length. The rock is relatively fresh with only minor serpentine development. It is a lherzolite.

In reflected light grains of Cr-Fe spinel to 0.2 mm are disseminated and account for about 1% of the section. Rare grains of pentlandite are noted. The largest grain of pentlandite is about 0.25 mm but most are much smaller.

SAMPLE R97:1491.

The host rock is dominated by olivine in grains as coarse as 5 - 7 mm on down to those of 1 mm. A few percent of pyroxene is noted interstitial to olivine. The rock is now 20% replaced by serpentine. Originally it was an dunite.

In reflected light about 1% of the section is as opaques with Cr-Fe spinels to 0.3 mm in size. These tend to be disseminated. A few grains in the 5 - 30 micron size of a nickel sulfide, possibly heazlewoodite are noted.

DISCUSSION:

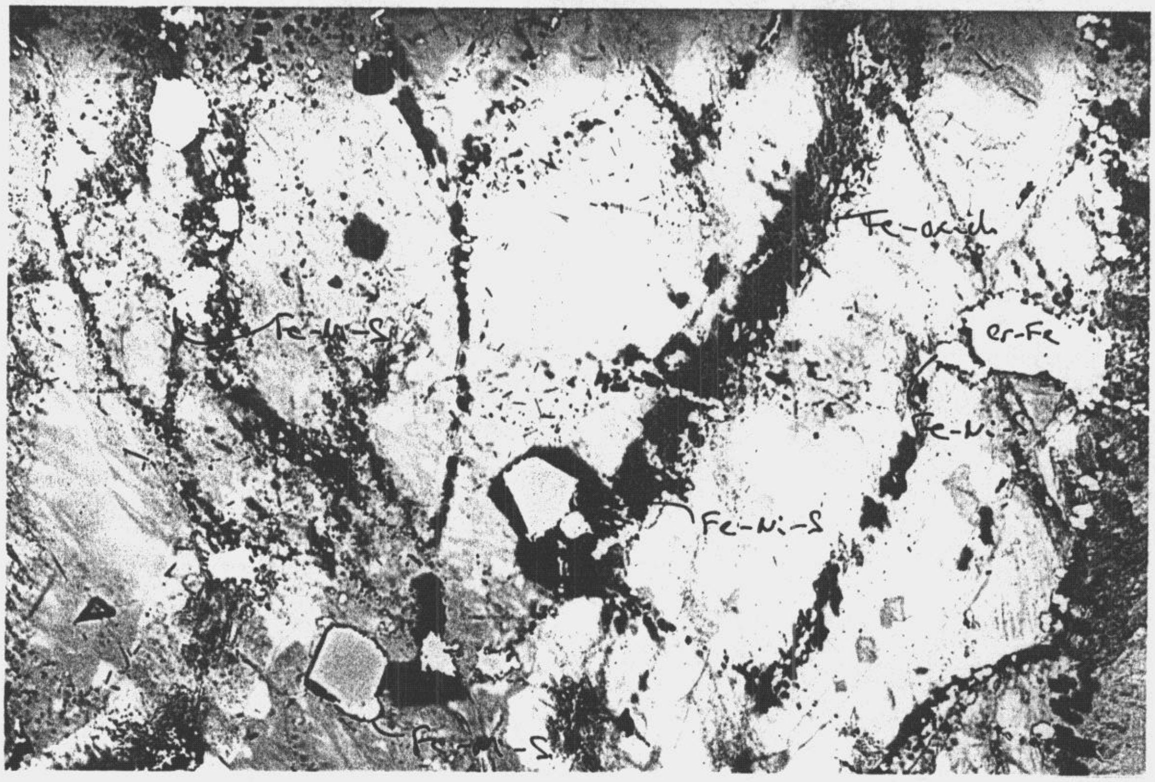
A few photomicrographs have been taken to illustrate both reflected and transmitted light minerals and rock texture. These are captioned and appended.

Yours truly,

J.A. McLeod. M.A.Sc., P.Eng.
E.R.L. Manager

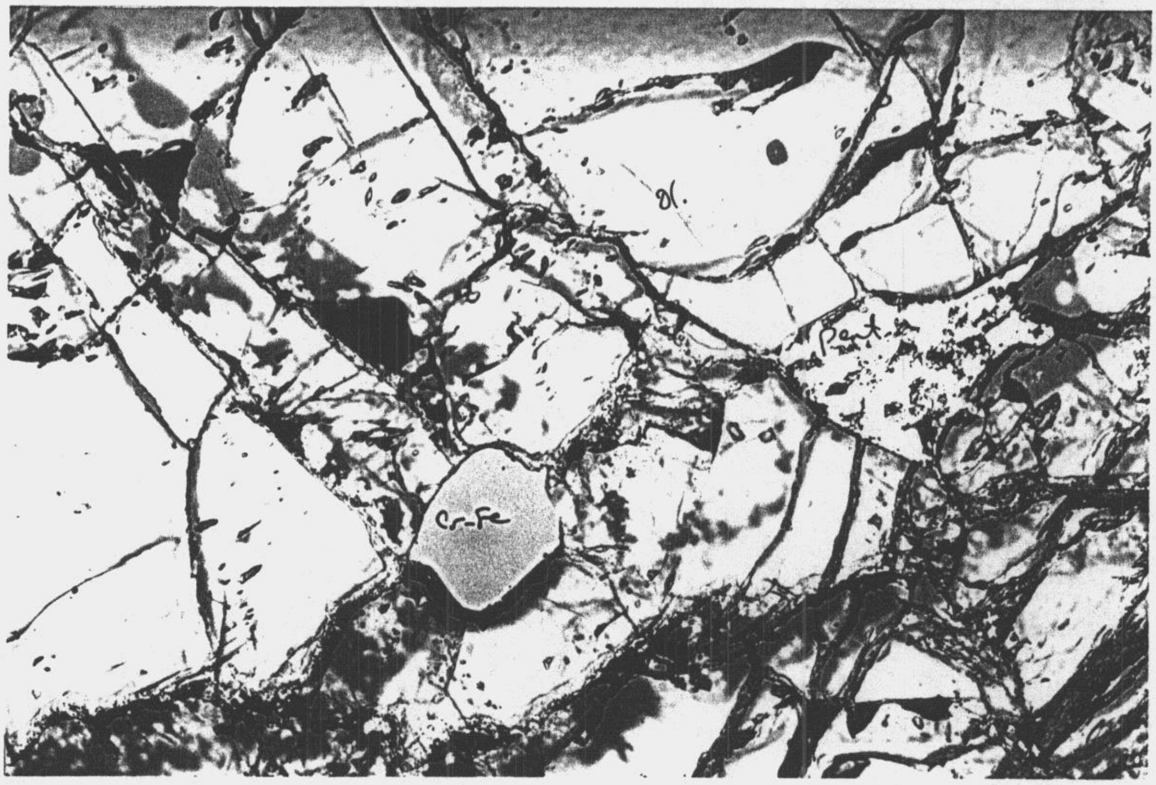
JAM/skw
App.

PHOTOMICROGRAPHS - MOWAT (V97-103R)



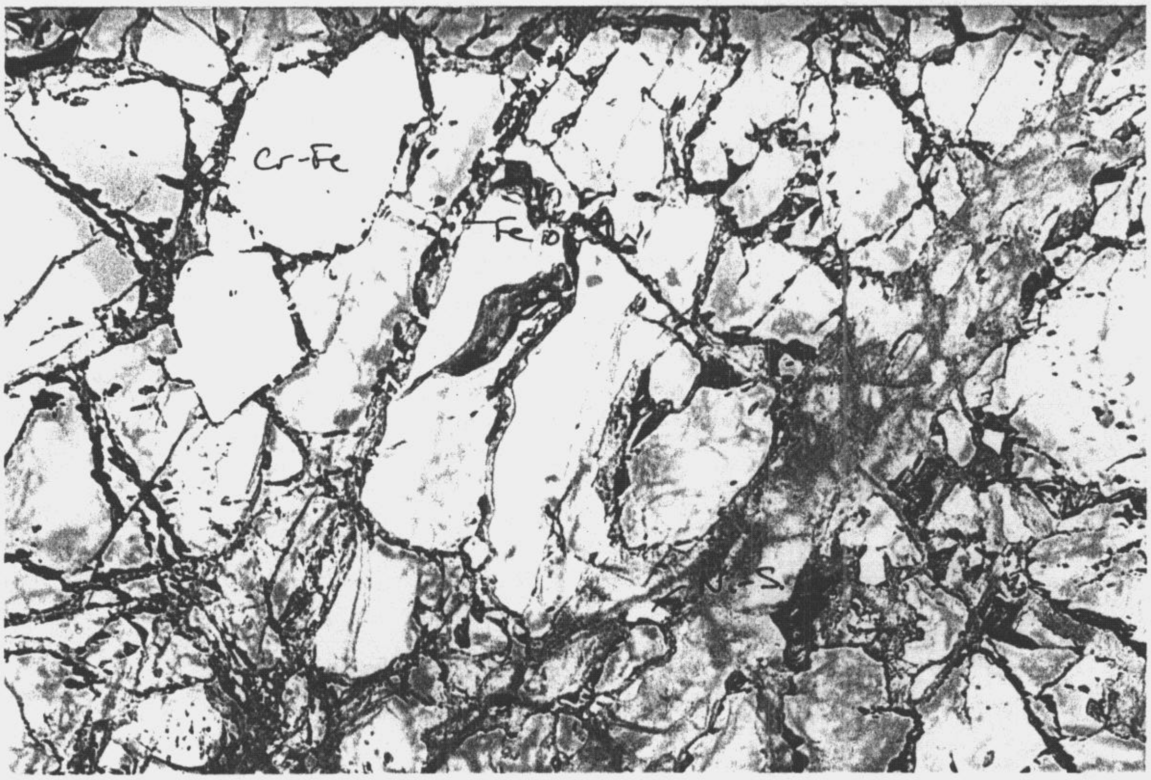
45 µm

R97:1489. Cr-Fe spinel, trails of Fe-oxide and Fe-Ni-S opaques. Reflected light, magnification 160x.



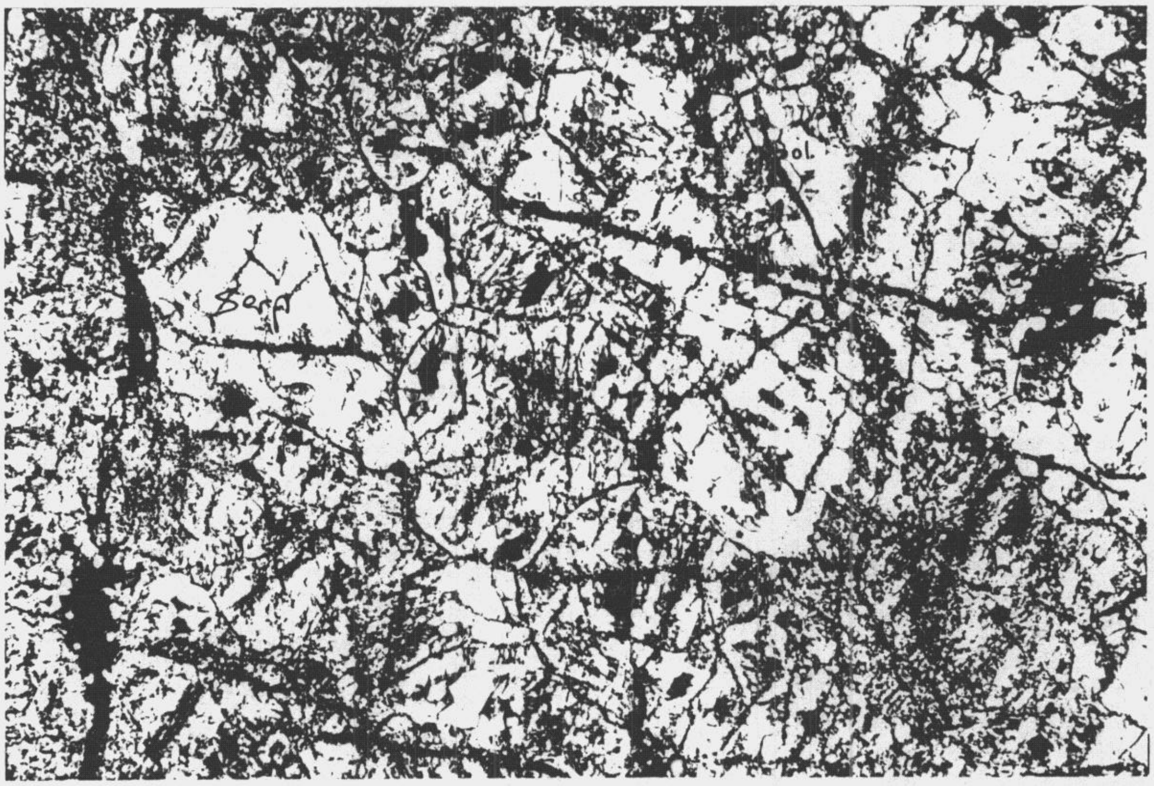
45 µm

R97:1490. Pentlandite and Cr-Fe spinel. Reflected light, magnification 160x.



45 μm

R97:1491. A Ni-S, Cr-Fe spinel and Fe-oxide. Reflected light, magnification 160x.



280 μm

R97:1489. Serpentine with small residual cores of olivine. Fractures have Fe-oxides and carbonate. Transmitted light, x-nicols, magnification 25x.

APPENDIX III

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Ursula Mowat PROJECT STAR File # 96-6164 Page 1

1405 - 1933 Robson St., Vancouver BC V6G 1E7

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Sn ppm	Y ppm	Nb ppm	Be ppm	Sc ppm
C 11678 +100	<2	11	<5	63	.6	1255	86	1167	6.54	<5	<10	<4	4	22	<.4	6	<5	69	5.68	.008	<2	1558	17.69	395	.09	.52	.09	.03	<4	4	<2	3	<2	<1	31
C 11679 +100	<2	7	10	56	<.5	1128	78	1117	6.08	<5	10	<4	3	35	<.4	<5	5	95	7.11	.007	<2	1953	16.48	18	.12	.68	.13	.04	<4	4	<2	4	<2	<1	40
C 11680 +100	<2	6	<5	50	.5	1202	78	1018	5.66	<5	<10	<4	4	21	<.4	<5	<5	65	6.07	.006	<2	1563	17.21	7	.09	.50	.08	.01	<4	3	<2	3	<2	<1	30
C 11681 +100	<2	9	<5	57	<.5	1222	87	1138	6.56	<5	<10	<4	2	21	<.4	<5	<5	56	3.99	.006	<2	1495	17.56	10	.08	.50	.09	.02	<4	3	<2	3	<2	<1	21
C 11682 +100	<2	42	8	42	1.7	89	20	662	3.52	9	17	<4	7	403	<.4	32	<5	92	8.36	.032	3	166	3.29	155	.18	9.49	2.25	.65	8	8	<2	9	5	<1	18
C 11683 +100	<2	56	<5	49	.8	28	14	863	4.81	<5	<10	<4	5	865	<.4	16	<5	193	7.94	.099	5	36	2.05	221	.43	9.54	2.63	.55	<4	8	<2	14	2	1	18
C 11684 +100	<2	42	6	51	<.5	36	18	1000	5.30	<5	21	<4	2	581	<.4	5	<5	253	7.79	.026	<2	44	2.50	233	.90	9.03	2.40	.75	<4	10	2	15	<2	<1	32
C 11685 +100	<2	5	<5	34	<.5	1591	105	957	5.54	<5	<10	<4	2	5	<.4	<5	<5	6	.26	.005	<2	481	23.28	8	.01	.11	.03	<.01	<4	<2	<2	<2	<2	<1	4
C 11686 +100	<2	6	<5	42	<.5	1099	95	1052	5.95	<5	<10	<4	3	31	<.4	<5	<5	43	3.34	.008	<2	1584	20.01	35	.07	.61	.12	.04	<4	3	<2	2	<2	<1	20
C 11687 +100	<2	7	6	42	.5	1586	118	1076	6.33	10	13	<4	3	3	<.4	7	<5	4	.24	.006	2	802	25.29	20	<.01	.03	.02	.01	<4	<2	<2	<2	<2	<1	4
RE C 11687 +100	<2	5	6	41	<.5	1528	113	1039	6.09	5	<10	<4	3	3	<.4	7	<5	3	.23	.005	<2	809	24.34	15	<.01	.03	.02	<.01	<4	<2	<2	<2	<2	<1	4
C 11688 +100	<2	7	6	36	<.5	1850	110	1005	5.87	6	11	<4	3	4	<.4	5	5	4	.12	.006	2	1039	24.27	284	<.01	.05	.02	.02	<4	<2	<2	<2	<2	<1	4
C 11689 +100	<2	7	11	43	<.5	1294	105	996	6.11	5	<10	<4	3	9	<.4	5	<5	12	1.96	.006	<2	1248	20.69	103	.01	.13	.03	.01	<4	<2	<2	<2	2	<1	14
C 11689(A) +100	<2	473	27	51	<.5	1459	88	602	3.65	<5	<10	<4	2	6	<.4	7	<5	2	.08	.006	<2	394	20.53	581	<.01	.04	.03	<.01	<4	<2	21	<2	<2	<1	2
C 11690 +100	<2	69	<5	33	.5	985	64	666	4.16	<5	<10	<4	4	587	<.4	<5	<5	46	2.07	.044	3	255	12.86	1268	.07	3.65	1.76	.16	4	4	2	2	3	1	6
STANDARD CT2	18	53	44	153	5.8	76	34	1095	4.18	32	50	5	39	228	17.8	19	16	128	1.20	.111	44	123	1.26	850	.32	6.55	1.51	1.70	17	53	18	13	7	2	16

ICP - .250 GRAM SAMPLE IS DIGESTED WITH 10ML HCLO4-HNO3-HCL-HF AT 200 DEG. C TO FUMING AND IS DILUTED TO 10 ML WITH DILUTED AQUA REGIA. THIS LEACH IS PARTIAL FOR MAGNETITE, CHROMITE, BARITE, OXIDES OF AL, ZR & MN AND MASSIVE SULFIDE SAMPLES. AS, CR, SB, AU SUBJECT TO LOSS BY VOLATILIZATION DURING HCLO4 FUMING.
- SAMPLE TYPE: ROCK <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

DATE RECEIVED: NOV 22 1996 **DATE REPORT MAILED:** Dec 3/96 **SIGNED BY** ....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL

Ursula Mowat PROJECT STAR FILE # 96-6164

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Sn ppm	Y ppm	Nb ppm	Be ppm	Sc ppm
C 11678 -100	<2	13	7	60	.8	1218	86	1067	6.34	8	16	<4	5	16	<.4	6	<5	51	3.50	.008	<2	1184	16.82	6	.06	.35	.07	.03	<4	3	<2	2	2	<1	22
C 11679 -100	<2	9	7	54	1.0	1138	82	979	5.80	7	17	<4	5	33	.5	8	<5	66	3.60	.009	<2	1344	15.22	19	.09	.49	.10	.04	<4	4	<2	2	3	<1	26
C 11680 -100	<2	7	8	53	<.5	1361	91	1037	6.15	<5	12	<4	3	19	<.4	<5	<5	55	3.92	.008	<2	1335	18.61	9	.08	.44	.09	.03	<4	3	<2	2	<2	<1	23
C 11681 -100	<2	14	<5	58	<.5	1290	94	1114	6.80	6	<10	<4	3	19	.6	<5	<5	47	2.43	.007	<2	1317	18.11	307	.07	.43	.09	<.01	<4	3	<2	2	<2	<1	15
C 11682 -100	<2	67	<5	54	<.5	126	27	827	4.74	<5	<10	<4	<2	218	<.4	<5	<5	132	6.06	.041	<2	278	4.48	129	.27	7.27	1.76	.56	<4	9	<2	12	<2	<1	26
C 11683 -100	<2	79	<5	71	<.5	55	24	1157	6.25	<5	<10	<4	3	569	<.4	<5	<5	266	6.60	.103	4	101	3.27	179	.61	7.86	2.08	.48	<4	10	<2	20	<2	<1	29
C 11684 -100	<2	94	<5	92	<.5	65	39	1542	8.70	<5	<10	<4	2	339	<.4	<5	<5	423	8.18	.069	<2	85	4.54	334	1.26	6.90	1.72	.48	<4	18	3	28	<2	<1	53
C 11685 -100	<2	6	<5	33	<.5	1547	104	932	5.53	<5	<10	<4	<2	3	<.4	<5	<5	6	.20	.006	<2	490	22.65	1	.01	.07	.02	<.01	<4	<2	<2	<2	<2	<1	4
C 11686 -100	<2	8	6	39	<.5	1066	96	990	5.88	<5	<10	<4	<2	28	<.4	<5	<5	35	2.21	.011	<2	1412	19.21	11	.06	.54	.12	.03	<4	2	<2	<2	<2	<1	15
C 11687 -100	<2	6	<5	39	<.5	1465	110	988	6.03	<5	<10	<4	<2	3	<.4	<5	<5	<2	.19	.004	<2	680	23.00	6	<.01	.02	.01	<.01	<4	<2	<2	<2	<2	<1	4
RE C 11687 -100	<2	11	<5	41	<.5	1471	111	994	6.03	<5	<10	<4	<2	2	<.4	<5	<5	2	.20	.005	<2	717	23.28	4	<.01	.02	.01	<.01	<4	<2	<2	<2	<2	<1	4
C 11688 -100	<2	8	<5	36	<.5	1755	107	974	5.71	<5	<10	<4	3	3	<.4	5	<5	4	.09	.006	<2	927	22.83	85	<.01	.03	.01	<.01	<4	<2	<2	<2	<2	<1	4
C 11689 -100	<2	8	5	46	<.5	1299	108	1017	6.28	5	<10	<4	2	7	<.4	6	<5	9	1.34	.006	<2	1010	20.86	274	.01	.10	.02	<.01	<4	<2	<2	<2	2	<1	11
C 11689(A) -100	<2	480	33	54	.5	1437	88	619	3.79	<5	<10	<4	3	4	<.4	8	<5	3	.08	.005	<2	633	20.89	6	<.01	.03	.02	<.01	<4	<2	23	<2	<2	<1	2
C 11690 -100	<2	271	18	57	<.5	1249	81	809	5.15	<5	<10	<4	2	219	<.4	<5	<5	50	1.26	.041	3	442	17.06	566	.08	1.73	.86	.08	<4	4	12	2	<2	<1	7

Sample type: ROCK. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL/ASSAY CERTIFICATE

Ursula Mowat PROJECT STAR File # 96-6164

1405 - 1933 Robson St., Vancouver BC V6G 1E7

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** oz/t	Pt** oz/t	Pd** oz/t	SAMPLE lb
C 11678 +100	1	10	<3	56	<.3	1118	83	975	5.64	2	<5	<2	<2	4	.5	<2	<2	19	.18	.006	1	403	15.92	13	.02	4	.16	.01	.02	<2	<.001	<.001	<.001	16
C 11679 +100	<1	5	<3	41	<.3	941	70	815	4.69	<2	<5	<2	<2	15	.4	<2	<2	29	.44	.004	<1	543	13.00	16	.03	18	.22	.01	<.01	<2	<.001	<.001	<.001	22
C 11680 +100	1	4	<3	43	.3	1134	79	867	5.07	<2	<5	<2	<2	2	<.2	<2	<2	17	.17	.004	1	360	16.21	5	.02	5	.17	.01	<.01	<2	<.001	<.001	<.001	18
C 11681 +100	1	10	5	53	<.3	1219	95	1110	6.38	2	<5	<2	<2	5	<.2	<2	<2	16	.26	.005	<1	343	16.44	6	.02	<3	.16	.01	.01	<2	<.001	<.001	<.001	20
C 11682 +100	1	50	<3	17	.3	50	8	163	1.09	<2	<5	<2	<2	29	<.2	2	<2	23	1.22	.023	<1	47	.92	17	.07	4	1.45	.06	.06	<2	<.001	<.001	<.001	18
C 11683 +100	<1	54	<3	27	<.3	15	8	315	1.79	<2	<5	<2	<2	68	<.2	<2	2	76	1.29	.090	2	17	.83	26	.15	4	1.48	.07	.04	<2	<.001	<.001	<.001	22
C 11684 +100	1	46	<3	20	<.3	21	10	209	1.99	<2	<5	<2	<2	36	<.2	<2	<2	98	1.23	.022	<1	22	.62	27	.16	6	1.33	.08	.06	<2	<.001	<.001	<.001	25
C 11685 +100	1	4	4	37	<.3	1651	119	1113	6.01	2	<5	<2	<2	2	<.2	<2	<2	5	.05	.005	<1	94	23.11	6	<.01	5	.05	.01	<.01	<2	<.001	<.001	<.001	23
C 11686 +100	<1	5	4	35	<.3	1094	102	1040	5.70	3	<5	<2	<2	6	.5	<2	<2	12	.18	.006	<1	311	16.82	10	.01	<3	.18	.01	.01	<2	<.001	<.001	<.001	22
C 11687 +100	1	4	6	41	<.3	1562	126	1189	6.45	2	<5	<2	<2	2	<.2	<2	<2	3	.06	.004	<1	84	23.60	3	<.01	<3	.01	.01	<.01	<2	<.001	<.001	<.001	21
C 11688 +100	1	6	5	38	<.3	1885	123	1169	6.29	<2	<5	<2	<2	2	<.2	<2	<2	3	.06	.005	<1	124	23.74	6	<.01	<3	.04	.01	<.01	<2	<.001	<.001	<.001	10
C 11689 +100	1	6	3	41	<.3	1327	114	1074	6.22	<2	<5	<2	<2	3	<.2	<2	<2	5	.14	.005	<1	182	18.63	6	<.01	31	.06	.01	<.01	<2	<.001	<.001	<.001	28
C 11689(A) +100	1	493	32	47	.5	1110	83	649	3.33	3	<5	<2	<2	4	.3	<2	<2	2	.08	.002	<1	125	17.31	7	<.01	35	.03	.01	<.01	<2	<.001	<.001	<.001	20
C 11690 +100	<1	82	9	32	<.3	1075	71	687	3.91	<2	6	<2	<2	103	<.2	<2	<2	20	.80	.043	1	50	15.82	39	.02	<3	1.15	.49	.05	<2	<.001	<.001	<.001	29

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H20 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 AU** PT** & PD** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

DATE RECEIVED: NOV 22 1996 **DATE REPORT MAILED:** Dec 3/96 **SIGNED BY**............D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL

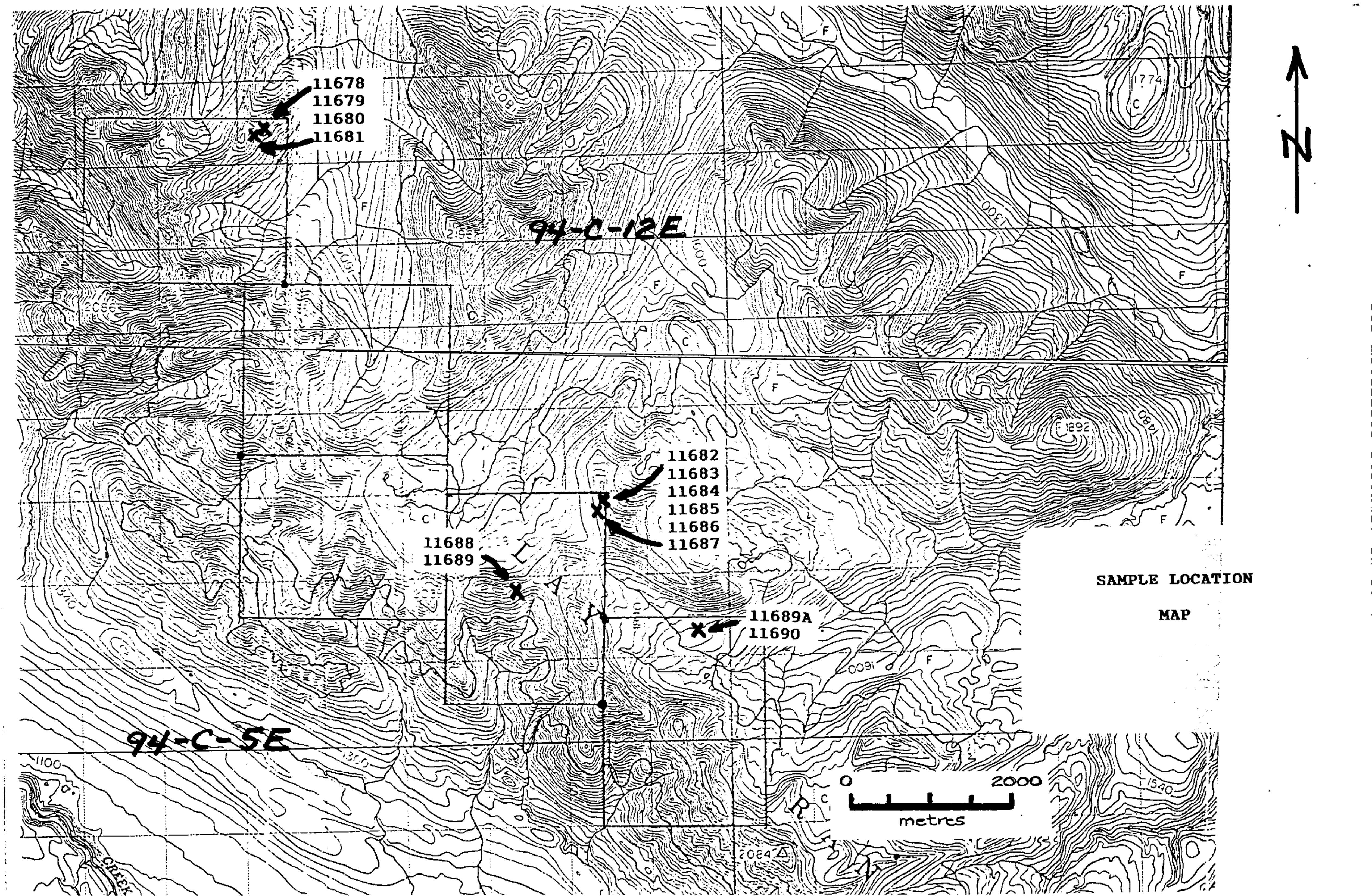
Ursula Mowat PROJECT STAR FILE # 96-6164

ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** oz/t	Pt** oz/t	Pd** oz/t	SAMPLE lb
C 11678 -100	1	11	4	65	<.3	1299	103	1183	6.51	<2	<5	<2	<2	3	.2	<2	<2	16	.15	.007	<1	350	15.67	6	.01	4	.11	.01	<.01	<2	<.001	<.001	<.001	462
C 11679 -100	1	7	<3	54	<.3	1189	96	1043	5.75	<2	<5	<2	<2	19	.4	2	2	25	.42	.006	<1	470	13.57	18	.02	25	.19	.01	<.01	<2	<.001	<.001	<.001	428
C 11680 -100	1	5	4	52	<.3	1338	100	1044	5.76	<2	<5	<2	<2	3	<.2	<2	<2	15	.15	.006	<1	338	15.93	5	.01	8	.14	.01	<.01	<2	<.001	<.001	<.001	454
C 11681 -100	1	13	3	61	<.3	1314	109	1230	6.79	<2	<5	<2	<2	4	<.2	<2	<2	14	.21	.006	<1	312	16.80	4	.01	<3	.13	.01	<.01	<2	<.001	<.001	<.001	455
C 11682 -100	1	82	4	25	<.3	88	18	289	2.03	<2	<5	<2	<2	28	<.2	2	<2	42	1.51	.044	<1	92	1.74	23	.11	3	1.99	.09	.09	<2	<.001	<.001	<.001	446
C 11683 -100	1	85	6	40	<.3	31	15	498	2.79	<2	<5	<2	<2	83	<.2	3	3	119	1.80	.109	1	50	1.39	40	.23	<3	2.03	.11	.08	<2	<.001	<.001	<.001	485
C 11684 -100	1	100	<3	40	.4	40	24	426	3.82	<2	<5	<2	<2	48	<.2	3	6	198	1.91	.071	<1	51	1.36	42	.26	<3	1.98	.17	.09	<2	<.001	<.001	<.001	456
C 11685 -100	1	5	<3	36	<.3	1558	117	1083	5.59	<2	<5	<2	<2	2	.2	<2	<2	4	.05	.004	<1	83	22.34	2	<.01	7	.03	.01	<.01	<2	<.001	<.001	<.001	446
C 11686 -100	1	7	<3	38	.3	1098	108	1083	5.70	<2	<5	<2	<2	6	<.2	<2	<2	11	.19	.008	<1	287	17.81	7	.01	3	.16	.01	.01	<2	<.001	<.001	<.001	476
C 11687 -100	1	5	<3	41	<.3	1510	125	1177	6.08	2	<5	<2	<2	2	<.2	<2	<2	3	.06	.005	<1	94	23.55	2	<.01	<3	.01	.01	<.01	<2	<.001	<.001	<.001	448
RE C 11687 -100	1	3	7	38	<.3	1437	119	1110	5.73	<2	<5	<2	<2	2	.2	<2	<2	2	.05	.005	<1	89	22.17	2	<.01	<3	.01	.01	<.01	<2	<.001	<.001	<.001	-
C 11688 -100	1	4	<3	36	<.3	1708	115	1083	5.51	<2	<5	<2	<2	2	.3	<2	2	3	.05	.004	<1	116	21.78	5	<.01	<3	.02	.01	<.01	<2	<.001	<.001	<.001	460
C 11689 -100	1	7	8	45	<.3	1268	114	1091	5.85	<2	<5	<2	<2	4	.2	2	<2	3	.13	.006	<1	138	18.69	6	<.01	30	.05	<.01	<.01	<2	<.001	<.001	<.001	445
C 11689(A) -100	<1	498	35	49	.3	1056	85	699	3.34	<2	<5	<2	<2	4	.2	<2	2	2	.09	.001	<1	130	18.22	7	<.01	32	.03	.01	<.01	<2	<.001	<.001	<.001	437
C 11690 -100	1	288	28	54	.3	1263	87	843	4.49	<2	5	<2	<2	53	<.2	<2	2	19	.56	.039	<1	64	19.89	23	.02	<3	.74	.33	.04	<2	<.001	<.001	<.001	417

Sample type: ROCK. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA ___



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SAMPLE LOCATION
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