MAPPING AND SAMPLING

on the

STAR CLAIMS

OMINECA MINING DIVISION

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

Lat.: 56° 29'N Long.: 125° 40'W

by

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March, 2000

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Maps

1.0 Introduction

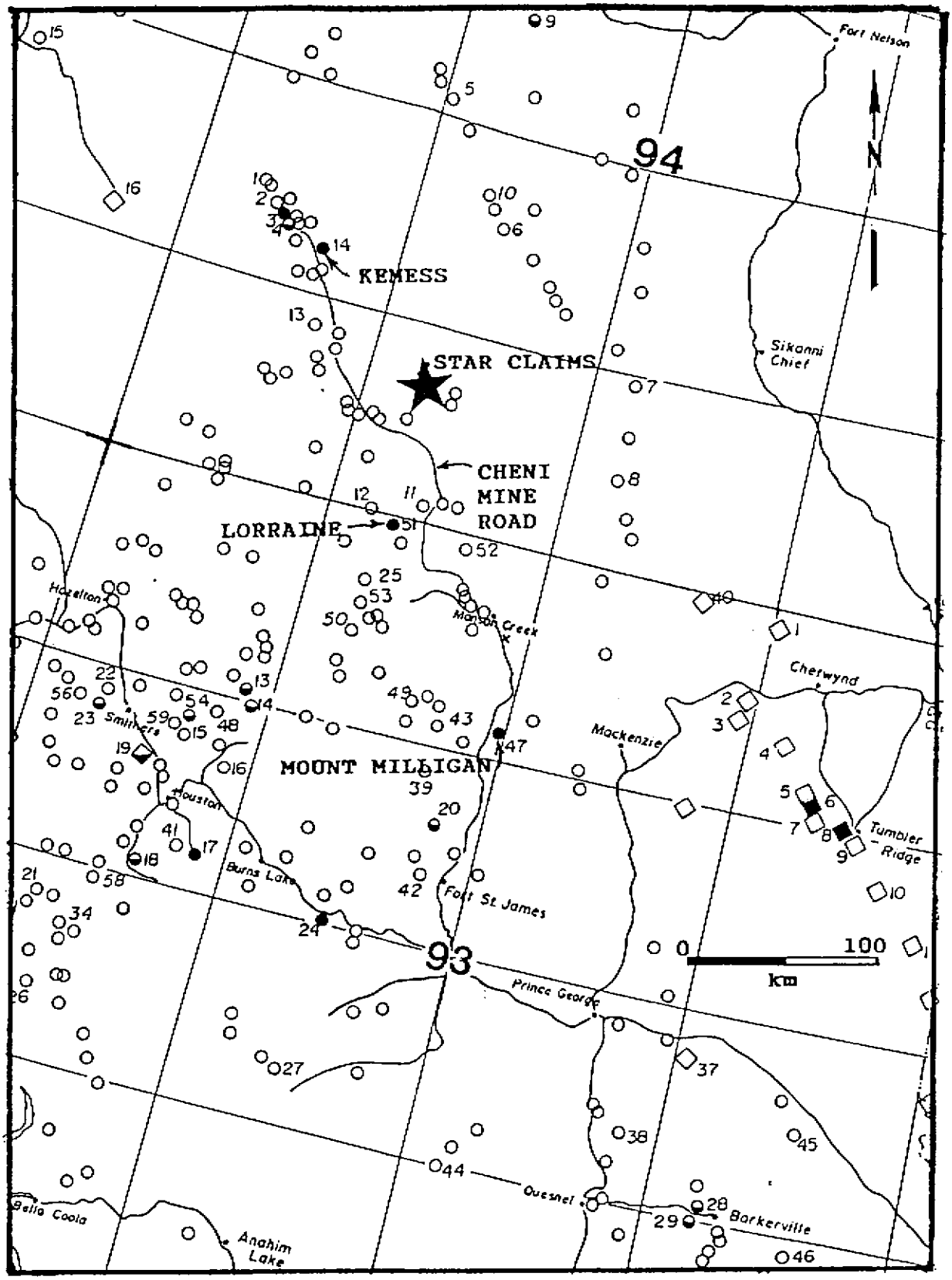
Between July 25 and July 31, 1999 two men spent four days sampling and mapping on the Star 2 and Star 3 claims. Sixty-six rock samples and 2 soil samples were collected. Thirteen rock samples collected previously were also submitted for analyses. All samples were analysed for 30 elements by ICP and Au, Pt, Pd by fire assay/ICP.

Although the main focus of exploration is to search for economic Pt and Pd mineralization, some time was spent in an area of white felsic rock geochemically identified as albitite. Four samples were submitted for thin section and/or XRD examination in order to ascertain whether this material was the plumasites, corundum dykes, mentioned by J. E. Armstrong in Memoir 252. Further interest in this white lithology is warranted because of fine grained glassy red minerals seen in 1998. The geologic scenario suggests that the red mineral may possibly be ruby.

2.0 Location and Access

The Star 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. The property is located at co-ordinates 56° 29'N and 125° 40'W.

Access to the property is by helicopter from Fort St. James approximately 300 km due south. The Cheni Mine Road (Omineca Forestry Road) and the Kemess power line pass within 8 km of the property boundary. Logging roads reach the outer boundary of the property.



LOCATION MAP : STAR CLAIMS

FIGURE 1

3.0 Claim Data

The Star property consists of five 20 unit claims totalling 100 units. The property is located within the Omineca Mining Division.

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

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 Equinox Resources who conducted an extensive silt and rock sampling program over their ground in a search for Pt and Pd. In 1987, Lacana Mining Corporation and Esso Minerals also staked portions of the Polaris Complex. 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 the pyroxenitic outer phase of the Polaris Complex and also to cover known mineralization.

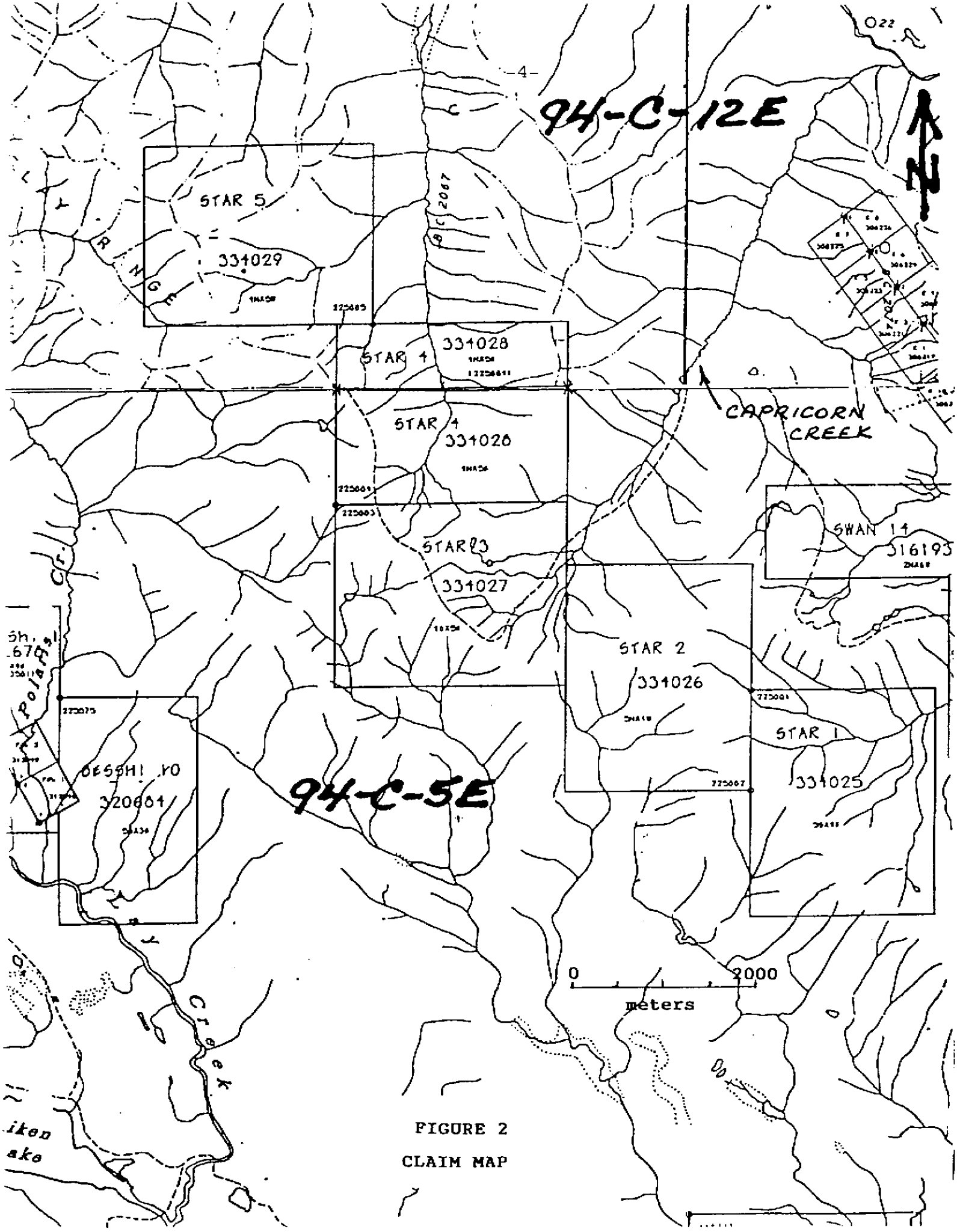


FIGURE 2

CLAIM MAP

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 Group 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 or 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 $\pm$ 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 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 underlain by a variety of lithologies. The eastern portion of the property is underlain by an ultramafic complex of layered dunite, peridotite, olivine clinopyroxenite and pyroxenite. All units are generally very fine grained to fine grained, dense and appear fresh. The pyroxenite, however, does reach a very coarse grained grain size particularly in proximity to granitic intrusives. Mica-rich dunites and mica-rich porphyritic pyroxenites have also been seen. Although thin section examination indicates that the mica which was identified as phlogopite is primary, the mica was only found in close proximity to granitic intrusives. The mica-bearing rocks are discussed further in the section on alteration. Mapping in 1999 indicates that the ultramafic layering on the ridge located southeast and above Capricorn Creek strikes 320° and is vertically dipping.

The western portion of the property is underlain by porphyritic pyroxenite, porphyritic hornblendite, gabbro and metamorphic hedenbergite? diopside?. Although these lithologies have been described by other authors as being a metamorphic and metasomatic halo of the Polaris Ultramafic Complex, their location is usually in close proximity to or at the contact of diorite plugs and/or albitite/feldspar pegmatite dykes. This relationship strongly suggests that these lithologies are metamorphic and metasomatic expressions of granitic activity. A traverse in the cirque at the headwaters of Capricorn Creek passed from diorite to listwanite to porphyritic hornblendite to a mix of porphyritic hornblendite and porphyritic pyroxenite to porphyritic pyroxenite to gabbro or ultramafic. Crystal sizes of the hornblende in the porphyritic hornblendite reach up to 15 cm in length near the diorite intrusive and gradually becomes finer grained away from the diorite.

The ultramafics have been intruded by several diorite plugs and numerous albitite/feldspar pegmatite dykes. Airphoto analysis and preliminary mapping suggest the plugs form along a northwesterly trending structure which parallels the Mesilinka and Swannell fault zones. The diorite plugs also occur between the ultramafics and the metamorphic-metasomatic assemblages. The diorite is fairly fresh with only minimal chloritization of the hornblendes. In addition to the diorite, dykes of pink, fine grained granite and more commonly albitite/feldspar pegmatite have also been seen. The albitite/feldspar pegmatite appears to be restricted to the ultramafics while the granite dykes are seen cutting the amphibolite. The albitite/feldspar pegmatite, previously mapped as syenite, most commonly occurs as narrow dykes trending $320^{o}/90^{o}$ and is frequently at the contact of compositional changes (layering) within the ultramafic. In the Ruby Zone area the albitite/feldspar pegmatite which occasionally contains hornblende crystals up to 15 cm long, appears to be a massive feature that forms the outer phase of a diorite plug.

The Ruby Zone area is quite unique. Besides the albitite which contains sanidine, a circular vent approximately 10 meters in diameter consisting of limestone was also noted. The limestone contains rounded greenish breccia fragments of prehnite? replaced limestone. This circular feature is well within the diorite stock.

7.0 Mineralization

The main mineralization of interest is Pt-Pd+/-Au bearing chalcopyrite and pyrite which occurs as very fine grained disseminations in the pyroxenitic phases of the Polaris Complex. The actual dimensions of the mineralization has not yet been determined. Sampling in 1998 and 1999 showed that Pt and Pd values are associated with high copper at or near the contact with granitic intrusives. The following are samples collected in 1998 and 1999 from four separate areas and in close proximity to granitic intrusives:

Sample Number	Cu ppm	Au ppb	Pt ppb	Pd ppb
125962	1833	32	82	146
125971	3020	39	277	254
125984	2697	32	94	84
125985	1389	32	101	143
158186	1118	3	52	74
158193	2176	43	79	112

Sampling has also shown that Pt and Pd values can occur with no visible sulphides or no alteration or any anomalous elements such as Ni, Cr, As, Cu or Fe. For example a sample collected in 1998 (125990) returned values of 178 ppb Pt and 110 ppb Pd with no anomalous copper, nickel, chrome or iron. It is believed that Pt and Pd may occur in the native form. Several listwanites have also returned anomalous Pt and Pd values. Sample 158145, a listwanite, returned a value of 72 ppb Pt.

The metamorphic suite of rocks where mapped and sampled vary in sulphides content ranging from 0 to 40%. The sulphides, where present, occur as coarse grained disseminated pyrite with minor chalcopyrite. No Pt, Pd or Au values of economic significance has been found in the metamorphic rocks.

Although generally barren, the diorite is occasionally mineralized with disseminated pyrite and minor chalcopyrite and bornite. The best value to date was 0.14% Cu with no significant Au, Pt or Pd values.

Numerous listwanite zones have been located on the Star claims. The most significant listwanite occurs in the Ruby Zone area and is 500 meters long and 50 meters wide. Although grab rock samples have not returned significant results, soil sampling has indicated elevated Pt and Pd values. The only sulphides noted in the listwanite are minor amounts of very fine grained pyrite and arseno-pyrite.

Other mineralization on the Star claims consists of low sulphide nickel minerals which are disseminated throughout the olivine-rich phases.

8.0 Alteration

The most impressive and probably the most extensive alteration is the porphyritic hornblendite and the porphyritic pyroxenite metamorphic and metasomatic halo. Hornblende crystals commonly reach 15 cm in length but are generally 10 cm long. Memoir 252 reports that hornblende crystals 1 meter long were found. Pyroxene crystals average 5 cm in length. The porphyritic hornblendite and the porphyritic pyroxenite form a gradational zone in the vicinity of a diorite plug grading from diorite to porphyritic hornblendite to porphyritic hornblendite with porphyritic pyroxenite to porphyritic pyroxenite to gabbro/ultramafic.

The most obvious alteration are the red-orange weathering carbonate listwanite zones which are mainly found at the contact of either diorite plugs and occasionally at the contact with the albitite/feldspar pegmatite dykes. The largest listwanite zone found to date is 500 meters long and 50 meters wide and is dominantly composed of carbonate with minor quartz and carbonate as veinlets and minor mariposite.

As discussed previously, areas of mica-bearing dunite and mica-bearing pyroxenite were observed mainly in areas of granitic intrusions. The mica is porphyritic reaching 2.5 cm but averaging 1 cm in diameter. A variety of colours were observed ranging from white, brown to black. Frequently several colours were observed in the same specimen. The colouration difference is not from oxidation as the micas were observed on freshly broken surfaces. Although thin section examination identified the mica as being phlogopite, the colour differences and the geochemical analyses which reports very variable differences in potassium levels which correspond to the presence of the black-coloured mica suggest that biotite and possibly muscovite are also present.

Most of the ultramafic lithologies are generally fresh in appearance. Only small areas of weak serpentinization have been seen to date.

Alteration of the granitic intrusions varies in intensity from relatively non-altered to intensely bleached or occasionally totally replaced by pervasive fine-grained epidote. Minor potassic alteration consisting of K-spar has also been noted. The granitic intrusives have, however, produced thermal and pyritic haloes. Skarns, marble and biotite hornfels and the metamorphic lithologies have been found in close proximity to diorite plugs.

Other alteration noted to date are minor rhodochrosite in porphyritic hornblende-bearing albitite/feldspar pegmatite and an area of intense quartz stockworks in amphibolite.

9.0 Sample Descriptions

158129	Orange-weathering, black vfg dense dunite; minor white mica; no visible sulphides (1229 ppm Ni, 110 ppm Co)
158130	Light brownish to greyish white dense feldspar pegmatite; occasional green to black patch with translucent elongate needles; minor vugs; no visible sulphides
158131	Rusty weathering vfg dunite; black, dense; no mica; no visible sulphides; (1417 ppm Ni, 96 ppm Co)
158132	As 158129; (1382 ppm Ni, 100 ppm Co)
158133	Rusty weathering, black c.g. pyroxenite; pyroxenite crystals 1 cm; trace vfg disseminated chalcopyrite
158134	Rusty, hackley weathering olivine pyroxenite; pyroxene crystals 5 mm; trace vfg disseminated sulphides; (55 ppb Pt, 11 ppb Pd)
158135	As 158134 but with pronounced 5 mm pyroxene crystals on weathered surface; trace vvfg disseminated sulphides; (33 ppb Pt, 13 ppb Pd)
158136	Orange, hackley weathering black peridotite with pyroxene crystals on weathered surface; crystals 5 mm; much black crystalline magnetite? chromite? as veinlets and on fractures; also voids throughout on weathered surface from carbonate-chlorite-garnet? clots; no visible sulphides; white and brown mica up to 5 mm in clots; (1388 ppm Ni, 87 ppm Co)
158137	Orange weathering black dunite with 10% brown mica concentrated in spots; no visible sulphides; (1522 ppm Ni, 90 ppm Co)
158138	Rusty weathering hackley black olivine pyroxenite with pyroxene crystals of 5 mm on weathered surface; trace vvfg disseminated sulphides;
158139	Orange weathering vfg dunite with no visible sulphides; (1272 ppm Ni, 96 ppm Co)
158140	Greenish grey weathering black vfg dunite; no visible sulphides; (1240 ppm Ni, 104 ppm Co)
158141	Orange weathering light greenish grey carbonate listwanite; no visible sulphides

158142	Rusty orange weathering black dunite; trace vfg disseminated silvery metallics; (1228 ppm Ni, 101 ppm Co)
158143	Black chlorite? (1307 ppm Ni, 89 ppm Co, 70 ppb Pt)
158144	Orange weathering pale grey carbonate listwanite with trace vvfg disseminated arsenopyrite
158145	Orange weathering carbonate listwanite cut by numerous white quartz-carbonate veinlets; minor mariposite on fractures; no visible sulphides; (66/72 ppb Pt)
158146	Rusty weathering black olivine pyroxenite with minor white interstitial feldspar; trace vvfg disseminated sulphides
158147	Porphyritic pyroxenite; black pyroxene crystals up to 3 cm in dark green serpentinized matrix; no visible sulphides
158148	Black porphyrtic crystals of pyroxene and hornblende in dark green matrix; large voids (interstital) filled with white and pink carbonate; 2 mm magnetite crystals throughout; no visible sulphides; one hornblende crystal 8 cm long
158149	White 3-5 mm feldspar crystals, occasionally replaced by carbonate, in black matrix of f.g. magnetite and pyroxene? hornblende?; trace covellite
158150	Rusty weathering black f.g. pyroxenite with 2-3 mm white feldspar phenocrysts; 3% pyrite disseminated throughout; (201 ppm Cu, 11 ppb Pt, 20 ppb Pd)
158151	Dark grey diorite with hornblende; 3% disseminated pyrite
158152	Porphyritic pyroxenite with pyroxene crystals up to 1 cm long; sheared; serpentinized; trace vfg sulphides
158153	Porphyritic pyroxenite; pyroxene crystals 1-2 cm in matrix of dark green serpentinized material; white and pale green clots of carbonate or epidote some with vfg red glassy crystals; trace disseminated sulphides
158154	Orange weathering carbonate listwanite with minor white carbonate veinlets; weak mariposite; no visible sulphides; (19 ppb Pt, 18 ppb Pd)
158155	Soil; (42 ppb Pt, 24 ppb Pd)

158156	Dark grey vfg diorite with occasional remnant pyroxene crystals up to 1 cm; very granular; no visible sulphides
158157	Very rusty weathering dark grey f.g. to c.g. augite-biotite-magnetite diorite; feldspars slightly chloritized; 3% disseminated pyrite; trace chalcopyrite
158158	Mixture of black f.g. hornblende diorite and hornblende diorite with 30% white feldspar as 3 mm dots
158159	Black porphyritic hornblendite with crystals up to 5 cm; minor white interstitial feldspar; no visible sulphides
158160	Black porphyritic to m.g. pyroxenite; no visible sulphides; (27 ppb Pt, 17 ppb Pd)
158160A	Soil; (37 ppb Pt, 18 ppb Pd)
158161	Vcg to porphyritic amphibolite with hornblende crystals up to 15 cm; no visible sulphides
158162	Black porphyritic amphibolite with occasional interstitial epidote patch; epidote occurs as crystals; hornblende crystals 15 cm long; also vcg mica flakes up to 2.5 cm in diameter; no visible sulphides
158163	Vcg amphibolite with 8 cm hornblende crystals; occasional patch of epidote; one 3 mm bleb of chalcopyrite-pyrrhotite; (529 ppm Cu)
158164	Porphyritic pyroxenite; crystals 2.5 cm long and pale green; minor c.g. mica; no visible sulphides
158165	Black c.g. amphibolite with white interstitial patches of carbonate; minor c.g. 10 mm black mica; 5% disseminated pyrite
158166	Dark greenish grey pyroxenite; crystals 10 mm long; occasional carbonate-epidote patch; mica up to 5 mm; no visible sulphides; weathered surface full of limonite-lined voids
158167	As 158166; (17 ppb Pt, 9 ppb Pd)
158168	As 158166 but sheared
158169	Orange weathering carbonate listwanite cut by white carbonate veinlets; moderate mariposite; no visible sulphides
158175	Dark grey olivine pyroxenite with minor brown mica; no visible sulphides
158176	Greyish white vfg albitite with minor vague black spots of hornblende?; no visible sulphides
158177	Dark grey olivine pyroxenite; no visible sulphides; (35 ppb Pt)

158178	Mixture of black c.g. pyroxenite with trace of pyrrhotite? and white feldspar-rich patches with vcg 5 cm black hornblende phenocrysts; trace vfg pyrite and 10% magnetite; incipient black vfg hornblende growing in dark green chloritized pyroxene phenocrysts
158179	Rusty weathering black, variably vcg to vfg pyroxenite with minor white interstitial feldspar; trace vfg sulphide
158180	Dark grey peridotite with 25% white mica; no visible sulphides; (1665 ppm Ni, 88 ppm Co)
158181	Rusty weathering c.g. pyroxenite with minor white interstitial feldspar; 0.5% sulphides as pyrrhotite, pyrite, chalcopyrite; (287 ppm Cu, 10 ppb Pt, 8 ppb Pd)
158182	As 158181; (310 ppm Cu, 25 ppb Pt, 39 ppb Pd)
158183	As 156181; (306 ppm Cu, 31 ppb Pt, 38 ppb Pd)
158184	Black c.g. peridotite with c.g. light brown mica (10%); no visible sulphides; (1625 ppm Ni, 74 ppm Co)
158185	As 158184; (1877 ppm Ni, 89 ppm Co)
158186	As 158181; (1118 ppm Cu, 143 ppm Co, 53 ppb Pt, 74 ppb Pd)
158187	Rusty weathering black pyroxenite with trace vfg sulphides and dark grey hornblende diorite with 70% hornblende, 30% feldspar; trace vfg disseminated sulphides; (433 ppm Cu, 19 ppb Pt, 25 ppb Pd)
158188	Orange weathering carbonate listwanite cut by white carbonate veinlets; trace vfg sulphide
158189	Black f.g. peridotite; no visible sulphides (1493 ppm Ni, 92 ppm Co)
158190	Black f.g. peridotite with pale green pyroxene phenocrysts (altered)
158191	White c.g. carbonate listwanite; rusty weathering; no visible sulphides
158192	White aphanitic albitite; no visible sulphides
158193	Rusty weathering f.g. pyroxenite; no visible sulphides; (2176 ppm Cu, 43 ppb Au, 79 ppb Pt, 112 ppb Pd)
158194	Dark grey pyroxenite with trace vfg silvery metallics and vfg sulphides; rusty patches on surface
158195	Orange weathering greenish grey carbonated pyroxenite with trace silvery metallics and trace sulphides; red hematite patches throughout; (262 ppm Cu, 16 ppb Pt, 23 ppb Pd)

158196 C.g. peridotite with 10% c.g. pale brown mica; no visible sulphides; (1435 ppm Ni, 96 ppm Co)

158197 Black c.g. pyroxenite with much black biotite; trace sulphide

158198 Dark grey peridotite with 30% c.g. medium brown mica; trace silvery metallics; (1082 ppm Ni, 82 ppm Co)

158199 Dark grey f.g. olivine pyroxenite with 5% dark brown mica; trace silvery metallics

158200 Dark grey dunite with 5% dark brown mica; trace silvery metallics; (2140 ppm Ni, 95 ppm Co)

158234 (Old 125983); white syenite (albitite) with black fragments of hedenbergite/diopside and occasional hornblende crystal up to 5 cm long; very rusty; minor clot of sub-euhedral pyrite; trace malachite; f.g. epidote patches throughout; (875 ppm Cu)

158235 (Old 125983); white albitite with black fragments of hornblendite and olivine pyroxenite?; minor pyrite as sub-euhedral clots; very rusty

158236 (Old L); black c.g. pyroxenite with 5% f.g. pyrite growing between crystal faces and on crystal faces

158237 (Old A); dark greenish c.g. pyroxenite with minor olivine; 1% vfg pyrite disseminated throughout; trace white interstitial feldspar

158238 White quartz vein with bluish grey smears; very rusty; pyrite throughout

158239 (Old 142312); m.g. dark grey diorite with 5% vfg disseminated pyrite throughout; (1840 ppm Cu, 10 ppb Pt, 18 ppb Pd)

158240 (Old I); medium grey vfg diorite with fragment of black m.g. pyroxenite; cut by myriads of pyrite-filled gash veinlets; pyrite also disseminated; 5% pyrite

158241 Dark greenish grey grainy olivine pyroxenite with 1% vfg interstitial and disseminated pyrite; (202 ppm Cu, 19 ppb Pt, 40 ppb Pd)

158242 (Old 158135); black dense dunite with some c.g. phlogopite flakes; trace vvfg disseminated pyrite; minor feldspar crystals; (2151 ppm Ni, 111 ppm Co)

158243 As 158242; no visible sulphides; (1975 ppm Ni, 107 ppm Co)

158244 Dark greenish grey olivine pyroxenite with 5% vfg disseminated pyrite; trace chalcopyrite; (236 ppm Cu, 12 ppb Pt, 24 ppb Pd)

158245 As 158244; (350 ppm Cu)
142310 Black c.g. hornblendite cut by white feldspar veinlets with hornblende crystals; 3-5% f.g. disseminated pyrite; (504 ppm Cu)

10.0 Work Program

Between July 25 and July 31, 1999 two men spent four days sampling and mapping on the Star 2 and Star 3 claims. Sixty-six rock samples and 2 soil samples were collected. Rock samples were collected approximately every 50 meters or where major lithological changes were encountered. Samples were collected from 1.53 km of traverses. In addition, thirteen rock samples collected in previous years were also submitted for analyses. All samples were analysed for 30 elements by ICP and Au, Pt, Pd by fire assay/ICP.

Two rock samples were submitted for thin section examination, one rock sample was submitted for thin section/XRD examination and one rock sample was submitted for XRD examination.

Several days were spent examining air photos covering the Star claims in order to attempt to identify granitic contacts, major lithological changes and also to attempt to locate the pluma-site dykes. Overlays were made and all whitish linear feature were marked as well as other pertinent features.

11.0 Results

Sampling and mapping both in 1998 and 1999, show that Cu, Pt, Pd +/_ Au values are greatly enhanced in proximity to granitic activity.

The degree of mica development does not appear to be an effective exploration guide for finding Cu-Pt-Pd mineralization.

The metamorphic-metasomatic porphyritic halo, although well mineralized in places, does not appear to have economic potential although it is somewhat anomalous in copper.

Although Pt and Pd are usually associated with chalcopyrite on the Star claims, they can also occur without any indicator elements or without visible sulphides suggesting they may occur as particulate grains.

Platinum and palladium values are most often found in the more pyroxene-rich lithologies excluding the metamorphic-metasomatic porphyritic pyroxenites.

Mapping and air photo interpretation has indicated a substantial amount of granitic intrusives not previously mapped. Even though the air photos as in black and white, numerous whitish linear features were seen. Some of these features are known to be either listwanites or the feldspar pegmatite dykes.

Thin section/XRD examination proved the white dykes encountered so far are not the plumasite dykes.

12.0 Conclusions

More sampling and mapping are required particularly in areas of elevated Cu-Pt-Pd-Au values in rock samples collected in both 1998 and 1999. More sampling is required in the vicinity of the contacts of the major diorite plugs.

13.0 REFERENCES

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14.0 Statement of Costs

Analyses	
81 samples analysed for 30 elements by ICP and Au, Pt, Pd by FA/ICP at $17.40/sample	$1409.40
79 rock sample preps at $4.25/sample	285.75
2 soil preps at $1.35/sample	2.70
GST	118.85
	$1816.70
Helicopter	
8.1 hours at $630.00/hour	$5103.00
723.4 liters at $0.70/liter	506.38
300 liters at $1.10/liter	330.00
GST	418.76
	$6358.14
Labour	
1 man for 4 days at $275.00/day	$1100.00
1 man for 20 days at $400.00/day	8000.00
	$9100.00
Petrographic Analyses	
3 thin sections at $12.00/section	$ 36.00
2 mineral study/report at $75.00/hour	150.00
2 XRD analyses at $25.00/sample	50.00
GST	16.52
	$ 252.52
Freight	$ 152.17
Supplies	$ 82.40
Airfare	$ 143.03
Bus	$ 39.27
Taxi	$ 56.00
Accommodation	
7 nights at $45.18/night	$ 316.25
Meals	$ 420.00
Reproduction	$ 50.00
Xerox	$ 18.01
TOTAL	$18804.49

15.0 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, P. Geo.

Dated this 10th day of March, 2000

at Vancouver, B. C.

ACME ANALYTICAL LABORATORIES LTD. (ISO `02 Accredited Co.)
852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANAI IS CERTIFICATE

Mowat, Ursula PROJECT STAR File # 9902609

1405 - 1933 Robson St., Vancouver BC V6G 1E7 Submitted by: Ursula Mowat

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** ppb	Pt** ppb	Pd** ppb
B 158129	1	1	<3	23	.3	1229	110	963	5.05	3	<8	<2	<2	3	.2	<3	<3	<1	.06	.005	<1	54	23.27	2	<.01	7	.01	.01	<.01	<2	1	10	<1
B 158130	<1	<1	19	2	<.3	19	1	139	.14	<2	<8	<2	16	86	<.2	<3	<3	1	.13	.006	9	4	4.30	117	<.01	<3	1.92	.05	.22	<2	2	<1	<1
B 158131	<1	3	<3	20	<.3	1417	96	759	4.32	<2	<8	<2	<2	6	<.2	<3	<3	2	.05	.005	<1	59	21.68	5	<.01	14	.10	<.01	<.01	<2	1	2	2
B 158132	<1	2	<3	20	.3	1382	100	834	4.52	2	<8	<2	<2	6	.3	<3	<3	1	.10	.004	<1	60	22.91	4	<.01	12	.02	<.01	<.01	<2	1	6	2
B 158133	1	58	<3	24	<.3	388	43	632	3.20	<2	<8	<2	<2	44	<.2	<3	<3	34	1.06	.020	<1	311	5.54	15	.03	<3	.65	.14	.06	<2	5	5	6
B 158134	1	5	<3	33	<.3	419	64	786	5.19	3	<8	<2	<2	1	<.2	<3	<3	64	.14	.004	<1	743	7.41	3	.05	<3	.08	<.01	<.01	<2	2	55	11
B 158135	1	3	3	38	<.3	816	87	1038	5.84	<2	<8	<2	<2	1	<.2	<3	<3	15	.09	.004	<1	339	15.30	2	.01	3	.04	<.01	<.01	<2	2	33	13
B 158136	1	8	<3	25	<.3	1388	87	894	5.32	<2	<8	<2	<2	1	<.2	<3	<3	7	.11	.005	<1	171	19.08	18	.01	14	.09	<.01	.05	<2	3	4	3
B 158137	1	2	<3	28	<.3	1522	90	873	5.09	<2	<8	<2	<2	1	<.2	<3	<3	4	.07	.004	<1	150	21.34	32	.01	13	.12	<.01	.11	<2	2	2	<1
B 158138	<1	7	<3	36	.3	736	84	1010	5.90	<2	<8	<2	<2	1	<.2	<3	<3	20	.10	.004	<1	505	12.53	5	.02	5	.06	<.01	<.01	<2	1	19	7
B 158139	1	2	<3	19	<.3	1272	96	819	4.30	<2	<8	<2	<2	3	<.2	<3	<3	<1	.06	.004	<1	40	22.52	1	<.01	<3	.01	<.01	<.01	<2	1	3	<1
B 158140	1	2	3	19	<.3	1240	104	866	4.64	3	<8	<2	<2	6	.2	<3	<3	1	.09	.006	<1	82	22.40	4	<.01	80	.02	<.01	<.01	<2	1	8	1
B 158141	<1	<1	<3	5	<.3	664	75	769	3.49	<2	<8	<2	<2	5	<.2	<3	<3	1	.14	.004	<1	81	12.12	8	<.01	5	.01	.01	<.01	<2	1	1	1
B 158142	1	1	<3	28	.3	1228	101	1024	5.38	3	<8	<2	<2	1	<.2	<3	<3	1	.11	.005	<1	74	22.15	1	<.01	9	.02	<.01	<.01	<2	2	<1	1
B 158143	<1	3	<3	15	<.3	1307	89	806	4.35	<2	<8	<2	<2	2	<.2	<3	<3	2	.02	.005	<1	136	20.89	5	<.01	13	.26	<.01	<.01	<2	1	70	2
B 158144	<1	<1	<3	6	<.3	491	56	752	3.59	<2	<8	<2	<2	8	<.2	<3	<3	3	.62	.004	<1	96	11.08	11	<.01	6	.03	<.01	<.01	<2	1	3	2
B 158145	1	3	<3	13	<.3	609	57	769	3.98	13	<8	<2	<2	79	<.2	<3	<3	13	1.68	.005	1	254	10.38	25	<.01	3	.05	.02	.03	2	1	66	1
RE B 158145	1	3	<3	13	<.3	597	56	754	3.90	7	<8	<2	<2	78	<.2	<3	<3	13	1.64	.005	1	248	10.14	25	<.01	3	.05	.02	.02	2	3	72	<1
B 158146	1	4	3	25	<.3	779	69	713	4.10	<2	<8	<2	<2	4	<.2	<3	<3	6	.22	.004	<1	246	11.19	15	.01	40	.07	<.01	<.01	<2	1	5	2
B 158147	<1	4	<3	29	.4	58	27	309	5.64	<2	<8	<2	<2	83	<.2	<3	<3	313	1.74	.006	1	119	1.97	38	.26	<3	1.47	.24	.18	<2	1	3	<1
B 158148	<1	2	<3	67	.3	13	25	575	10.55	2	<8	<2	<2	163	.5	<3	<3	517	3.39	.789	8	7	.91	43	.05	4	1.34	.07	.08	<2	2	<1	3
B 158149	<1	31	3	74	<.3	13	20	886	4.64	4	<8	<2	<2	281	<.2	<3	<3	189	2.05	.246	7	8	1.51	69	.18	3	2.25	.13	.12	<2	2	7	5
B 158150	<1	201	<3	46	.4	56	27	608	5.02	<2	<8	<2	<2	97	<.2	3	3	216	3.00	.197	6	112	1.95	92	.22	6	2.79	.24	.15	<2	2	11	20
B 158151	1	43	3	67	<.3	6	14	684	3.65	<2	<8	<2	<2	213	<.2	<3	<3	133	1.82	.212	6	6	1.22	51	.16	3	2.05	.14	.16	2	2	4	7
B 158152	1	7	<3	22	<.3	105	36	401	3.60	<2	<8	<2	<2	15	<.2	4	<3	83	.55	.012	<1	338	3.37	11	.08	7	.64	.04	.02	<2	1	10	2
B 158153	<1	209	<3	50	<.3	36	31	568	8.34	<2	<8	<2	<2	118	<.2	<3	<3	489	1.78	.107	1	92	1.62	84	.24	<3	1.45	.20	.14	<2	2	10	6
B 158154	1	51	<3	26	<.3	215	40	850	4.85	6	<8	<2	<2	148	<.2	32	<3	84	5.85	.011	<1	185	4.88	13	<.01	4	.16	<.01	.09	<2	3	19	18
STANDARD C3/FA100	26	64	35	166	6.0	40	12	768	3.39	57	21	2	22	31	24.1	19	21	84	.59	.091	19	179	.59	157	.09	20	1.95	.04	.18	17	48	49	46
STANDARD G-2	1	2	<3	41	<.3	9	4	516	1.98	<2	<8	<2	7	74	<.2	<3	<3	40	.65	.092	8	77	.57	219	.12	<3	.92	.07	.47	2	1	<1	<1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 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 MASSIVE SULFIDE 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 & ANALYSIS BY ULTRA/ICP. (30 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 30 1999 DATE REPORT MAILED: Aug 9/99 SIGNED BY: D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.)
852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Mowat, Ursula PROJECT STAR File # 9902610

1405 - 1933 Robson St., Vancouver BC V6G 1E7 Submitted by: Ursula Mowat

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** ppb	Pt** ppb	Pd** ppb
B 158155	<1	29	<3	50	<.3	31	35	475	6.45	<2	<8	<2	<2	96	<.2	<3	<3	331	1.49	.033	1	89	2.47	70	.32	<3	2.30	.27	.20	<2	1	42	24

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 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 MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm)

DATE RECEIVED: JUL 30 1999 DATE REPORT MAILED: Aug 9/99 SIGNED BY. C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Mowat, Ursula PROJECT STAR File # 9902653 Page 1

1405 - 1933 Robson St., Vancouver BC V6G 1E7 Submitted by: Ursula Mowat

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** ppb	Pt** ppb	Pd** ppb
B 158156	<1	175	6	63	.4	35	19	605	4.01	9	<8	<2	<2	26	<.2	<3	<3	129	1.30	.134	6	113	1.65	202	.28	3	1.80	.05	.07	<2	2	2	2
B 158157	<1	126	3	39	<.3	20	15	290	2.91	7	<8	<2	<2	41	<.2	<3	<3	100	1.43	.131	5	34	.72	59	.16	3	1.51	.06	.12	2	<1	5	7
B 158158	<1	66	<3	62	.3	40	22	691	6.74	6	<8	<2	<2	253	<.2	<3	<3	288	1.79	.218	4	66	1.20	68	.12	<3	1.73	.14	.09	2	1	7	9
B 158159	<1	26	<3	52	<.3	22	20	769	6.09	3	<8	<2	<2	163	.2	<3	<3	285	1.73	.056	3	11	1.62	85	.25	4	1.72	.35	.18	2	<1	2	3
B 158160	<1	13	3	36	<.3	32	23	392	6.52	6	<8	<2	<2	79	.3	<3	<3	333	1.51	.078	1	127	1.48	39	.21	<3	1.24	.29	.14	<2	<1	27	17
B 158161	<1	6	<3	38	.5	44	26	526	6.53	9	<8	<2	<2	123	<.2	<3	<3	327	2.09	.041	1	43	2.16	66	.29	<3	1.86	.45	.23	3	<1	8	5
B 158162	<1	4	<3	28	<.3	32	21	395	3.87	3	<8	<2	<2	166	.6	<3	<3	213	2.25	.040	<1	16	2.18	55	.28	4	2.00	.48	.26	<2	<1	<1	<1
B 158163	<1	529	<3	40	.8	13	32	573	8.35	8	<8	<2	<2	107	.5	<3	<3	427	2.06	.023	<1	7	2.12	66	.34	<3	1.98	.44	.21	3	4	5	6
B 158164	<1	13	<3	20	<.3	36	13	336	1.51	<2	<8	<2	<2	25	.2	<3	<3	36	.80	.022	1	144	1.14	15	.07	<3	.67	.07	.04	2	<1	3	<1
B 158165	<1	132	9	58	.5	80	35	517	10.07	4	<8	<2	<2	110	.5	<3	<3	485	2.23	.222	3	36	1.49	59	.25	4	1.88	.39	.18	<2	2	4	6
B 158166	<1	10	<3	22	<.3	90	36	252	7.70	2	<8	<2	<2	15	<.2	<3	<3	301	.54	.011	<1	310	1.70	31	.14	6	.61	.05	.06	2	<1	4	4
B 158167	1	7	<3	16	<.3	72	24	252	2.43	5	<8	<2	<2	10	<.2	<3	<3	48	.50	.015	<1	103	2.23	43	.08	<3	.74	.02	.05	3	<1	17	9
B 158168	<1	10	<3	10	<.3	40	12	189	1.36	<2	<8	<2	<2	25	<.2	<3	<3	34	.62	.020	<1	144	1.48	27	.08	6	.78	.03	.05	2	<1	3	1
B 158169	<1	5	<3	29	.5	863	68	1417	6.66	11	<8	<2	<2	84	<.2	4	<3	49	3.98	.016	<1	298	11.13	29	<.01	7	.15	.02	.07	<2	<1	2	<1
B 158175	1	5	<3	33	<.3	705	63	696	4.20	5	<8	<2	<2	8	<.2	<3	<3	10	.20	.006	<1	249	9.93	25	.01	4	.16	<.01	.04	<2	<1	9	4
B 158176	<1	9	20	13	<.3	15	1	107	.46	<2	<8	<2	2	18	<.2	<3	<3	8	.10	.002	9	8	.17	206	.01	<3	1.49	1.04	.41	2	<1	<1	<1
B 158177	1	9	<3	33	<.3	422	66	788	4.92	6	<8	<2	<2	3	.3	<3	<3	16	.11	.004	<1	386	7.79	11	.02	6	.12	.02	.01	<2	<1	35	4
B 158178	<1	38	3	35	.4	7	12	407	5.32	4	<8	<2	<2	111	.3	<3	<3	171	5.72	.350	3	5	.98	35	.08	4	4.36	.82	.25	5	<1	2	3
B 158179	<1	77	<3	21	<.3	68	20	352	11.68	<2	<8	<2	<2	57	.2	4	<3	558	1.88	.175	1	53	1.35	45	.21	5	1.22	.38	.12	<2	<1	5	10
B 158180	<1	17	<3	37	<.3	1604	86	852	5.45	8	<8	<2	<2	28	<.2	<3	<3	18	.14	.023	1	568	17.85	106	.03	3	.47	.10	.29	<2	<1	1	2
RE B 158180	1	18	5	38	.4	1665	88	886	5.65	5	<8	<2	<2	29	.2	<3	<3	18	.15	.024	<1	588	18.55	116	.03	<3	.48	.10	.30	<2	<1	2	3
B 158181	<1	287	<3	20	.4	18	9	293	8.49	4	<8	<2	<2	124	<.2	<3	<3	338	1.43	.174	1	177	.90	68	.18	<3	1.51	.21	.13	2	2	10	8
B 158182	<1	310	<3	24	<.3	39	11	289	6.37	2	<8	<2	<2	68	.2	<3	<3	276	1.58	.196	2	182	1.26	41	.18	<3	1.22	.26	.13	<2	4	25	39
B 158183	<1	306	<3	21	<.3	63	13	246	4.44	<2	<8	<2	<2	56	<.2	<3	<3	209	1.35	.097	1	171	1.28	46	.15	<3	1.03	.20	.13	2	<1	31	38
B 158184	<1	33	<3	37	<.3	1625	74	674	4.65	6	<8	<2	<2	57	.3	3	<3	31	.20	.030	<1	339	15.05	129	.05	30	.97	.21	.49	<2	<1	3	5
B 158185	<1	4	<3	25	<.3	1877	89	814	4.53	5	<8	<2	<2	12	<.2	<3	<3	12	.23	.012	<1	513	22.51	31	.01	32	.27	.02	.09	<2	<1	<1	<1
B 158186	<1	1118	<3	9	<.3	385	143	128	4.25	5	<8	<2	<2	2	<.2	<3	<3	11	.17	.002	<1	274	1.94	23	.01	8	.11	.01	<.01	<2	3	53	74
B 158187	<1	433	6	36	.3	29	17	323	4.83	3	<8	<2	<2	75	.2	<3	<3	175	1.54	.287	5	121	1.15	30	.17	<3	1.55	.20	.07	<2	<1	19	25
B 158188	<1	11	<3	16	<.3	365	37	853	3.47	83	<8	<2	<2	149	.5	5	<3	40	7.79	.009	<1	573	7.61	38	<.01	4	.21	.02	.04	<2	2	2	5
B 158189	1	5	5	40	<.3	1493	92	1073	6.33	6	<8	<2	<2	4	<.2	<3	<3	7	.20	.006	<1	254	18.23	4	.01	51	.09	.01	.01	<2	<1	<1	3
B 158190	1	13	<3	40	<.3	1006	83	872	5.52	4	<8	<2	<2	5	.6	<3	<3	13	.17	.007	<1	401	13.12	14	.01	23	.18	<.01	.02	<2	2	3	5
B 158191	1	18	3	12	<.3	62	8	306	1.16	8	<8	<2	7	314	<.2	7	<3	24	2.49	.006	6	69	1.35	32	<.01	<3	.14	.07	.04	2	<1	2	3
B 158192	<1	32	14	6	<.3	21	2	80	.35	7	<8	<2	5	263	.6	<3	<3	8	1.31	.028	6	23	.28	78	.01	<3	6.91	5.47	.06	4	<1	<1	4
B 158193	1	2176	<3	11	.9	195	20	140	3.31	<2	<8	<2	<2	11	<.2	<3	<3	43	.35	.006	<1	259	1.17	19	.04	<3	.27	.03	.02	<2	43	79	112
B 158194	1	24	4	32	<.3	406	45	590	3.84	3	<8	<2	<2	5	.3	<3	<3	32	.26	.005	<1	343	5.48	13	.03	12	.23	.03	.01	<2	1	5	6
STANDARD C3/FA100	27	66	35	168	5.7	41	13	817	3.66	59	22	3	22	31	24.8	19	26	82	.59	.092	18	177	.62	155	.09	22	1.95	.04	.17	17	50	49	49
STANDARD G-2	1	3	5	43	<.3	9	5	566	2.10	2	<8	<2	4	76	.6	<3	<3	41	.66	.100	7	77	.59	234	.13	<3	.99	.08	.50	3	<1	<1	<1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 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 MASSIVE SULFIDE 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 & ANALYSIS BY ULTRA/ICP. (30 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 4 1999 DATE REPORT MAILED: Aug 13/99 SIGNED BY. . . . . D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ___ FA ___

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Mowat, Ursula PROJECT STAR File # 9902654

1405 - 1933 Robson St., Vancouver BC V6G 1E7 Submitted by: Ursula Mowat

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** ppb	Pt** ppb	Pd** ppb
158160A	<1	73	<3	64	<.3	28	22	851	5.39	10	<8	<2	<2	122	<.2	3	<3	242	.89	.401	7	66	1.37	105	.04	<3	1.99	.08	.11	<2	2	37	18

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 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 MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm)

DATE RECEIVED: AUG 4 1999 DATE REPORT MAILED: Aug 13/99 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

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** ppb	Pt** ppb	Pd** ppb
B 158195	<1	262	<3	31	.3	365	55	746	5.04	5	<8	<2	<2	34	.5	<3	6	74	2.92	.007	<1	459	4.48	51	.02	11	.37	.04	.08	<2	1	16	23
B 158196	1	17	<3	48	.3	1435	96	1300	7.72	<2	<8	<2	<2	1	.2	<3	11	5	.08	.004	<1	135	17.33	7	.01	4	.05	.01	.03	<2	1	1	6
B 158197	1	124	5	24	<.3	89	20	380	5.42	<2	<8	<2	<2	76	<.2	<3	<3	230	1.78	.100	1	237	1.86	37	.17	3	1.36	.34	.16	<2	<1	6	10
B 158198	<1	11	<3	47	<.3	1021	82	995	6.16	3	<8	<2	<2	5	<.2	<3	14	13	.15	.007	<1	321	13.01	17	.02	6	.20	.01	.08	<2	1	5	7
B 158199	<1	15	3	45	<.3	728	62	945	5.21	4	<8	<2	<2	28	<.2	<3	8	42	.37	.061	<1	509	8.86	150	.06	4	.78	.12	.61	<2	<1	2	8
B 158200	<1	3	3	24	<.3	2140	95	957	5.37	6	<8	<2	<2	5	<.2	<3	9	7	.13	.006	<1	247	24.27	20	.01	35	.12	.01	.04	<2	<1	6	3
RE B 158200	<1	3	5	23	<.3	2119	93	944	5.27	6	<8	<2	<2	5	.3	<3	10	7	.12	.005	<1	244	23.82	27	.01	24	.11	.02	.04	<2	<1	4	4

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

Data A FA

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Mowat, Ursula PROJECT STAR File # 9904220

1405 - 1933 Robson St., Vancouver BC V6G 1E7 Submitted by: Ursula Mowat

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** ppb	Pt** ppb	Pd** ppb
142310	<1	504	9	63	<.3	84	40	600	5.86	7	<8	<2	<2	101	.7	3	<3	278	1.72	.060	2	76	1.63	108	.28	<3	1.80	.29	.26	<2	2	4	7
B 158234	<1	875	12	38	<.3	9	9	120	1.84	4	<8	<2	<2	147	.5	<3	<3	32	.91	.017	2	16	.58	253	.05	3	1.19	.07	.10	<2	5	2	1
B 158235	1	276	7	20	<.3	6	5	114	1.25	3	<8	<2	<2	116	.2	<3	<3	25	.86	.018	2	14	.45	133	.05	3	1.14	.08	.08	<2	3	2	2
B 158236	<1	228	4	25	<.3	66	46	298	8.83	15	<8	<2	<2	34	.5	<3	<3	362	1.60	.040	<1	9	1.38	65	.33	<3	1.08	.29	.13	<2	2	6	9
B 158237	<1	174	4	40	<.3	71	29	366	5.57	7	<8	<2	<2	62	.5	<3	<3	271	1.58	.047	3	25	1.50	49	.32	<3	1.51	.31	.14	<2	1	7	7
B 158238	2	239	6	21	.3	10	5	40	1.11	4	<8	<2	<2	2	.2	4	<3	8	.06	.004	<1	20	.04	20	.01	<3	.04	.01	<.01	7	1	4	3
B 158239	<1	1840	5	41	<.3	67	52	506	7.13	7	<8	<2	<2	120	.7	<3	<3	88	2.03	.252	3	63	1.93	50	.11	<3	2.67	.11	.14	<2	4	10	18
B 158240	1	50	7	9	<.3	14	20	104	3.16	2	<8	<2	<2	19	.2	<3	<3	40	.62	.109	6	10	.26	16	.21	<3	.23	.10	.02	<2	<1	4	4
B 158241	1	202	4	22	<.3	75	29	118	3.21	<2	<8	<2	<2	15	<.2	<3	<3	119	.52	.019	1	148	.84	21	.13	<3	.57	.03	.02	<2	7	19	40
B 158242	<1	4	3	43	<.3	2119	109	1118	6.80	6	<8	<2	<2	1	.8	3	<3	6	.08	.005	<1	104	22.93	19	.01	11	.08	<.01	.06	<2	<1	1	<1
RE B 158242	<1	4	4	44	<.3	2151	111	1140	6.90	5	<8	<2	<2	1	.9	<3	<3	6	.08	.005	<1	111	23.18	21	.01	10	.08	<.01	.07	<2	<1	<1	1
B 158243	<1	4	<3	37	<.3	1975	107	1149	6.78	4	<8	<2	<2	1	.9	3	<3	4	.08	.005	<1	113	21.92	17	.01	16	.07	<.01	.06	<2	<1	5	5
B 158244	<1	236	3	29	<.3	111	40	189	5.09	5	<8	<2	<2	16	.4	4	<3	206	.65	.012	1	396	1.45	40	.20	<3	1.00	.08	.05	<2	5	12	24
B 158245	<1	350	3	38	<.3	50	34	396	4.88	5	<8	<2	<2	64	.2	<3	<3	225	1.92	.043	1	34	1.67	48	.31	<3	1.50	.32	.17	<2	3	8	11
STANDARD C3/AU-R	25	62	37	164	5.6	36	11	746	3.24	56	26	3	20	28	23.4	19	25	78	.54	.089	17	165	.57	145	.08	18	1.83	.04	.15	16	54	46	51
STANDARD G-2	1	4	5	43	<.3	8	4	541	2.05	2	<8	<2	5	72	<.2	<3	<3	41	.65	.099	7	76	.59	227	.13	<3	.95	.07	.48	3	<1	<1	<1

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
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** GROUP 3B BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 1 1999 DATE REPORT MAILED: Nov 4/99 SIGNED BY. ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

Cominco Ltd. / Exploration Research Laboratory / 1486 East Pender Street / Vancouver, B.C. / Canada V5L 1V8
Phone: (604) 685-3032 / Fax: (604) 844-2486

Cominco

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

8 December, 1999

Dear Ursula: ***RE: Microscope Study / E.R.L. Job V990767R***

Four samples were submitted for mineralogical study including some thin section/microscopy and some x-ray diffraction. The samples are labelled as follows:

LAB NO.	*FIELD NO.*	*WORK DONE*
R99:11682	TS-137	Thin Section
R99:11683	TS RUBY ZONE	Thin Section
R99:11684	130	Thin Section / XRD
R99:11685	RX	XRD

Following are the mineralogical findings.

SAMPLE R99:11682 (TS-137).

In section anhedral grains of olivine are seen to be fresh, in the 2 - 4 mm size range. Fractures are abundant producing the typical church window texture. A few percent of phlogopite in irregular shaped grains to 1 mm are noted. The rock contains a few percent of disseminated opaques, perhaps 2 - 3%.

The rock is a phlogopite bearing dunite.

SAMPLE R99:11683 (TS Ruby Zone).

In section grains of feldspar, some of which are believed to be orthoclase and others are positively identified as plagioclase tend to be anhedral and relatively coarse, ranging from a few mm's to a cm or more in size. The larger the crystal the more tabular is the shape. Most grains have overgrowth and sutured boundaries. A minor amount of interstitial biotite, biotite altered to chlorite, opaques, sphene and other accessory minerals are present. These minerals account for perhaps 5% of the rock area. Feldspars constitute about 95% of the rock.

The rock is a feldspar pegmatite.

SAMPLE R99:11684 (130).

In thin section large vugs to 2 - 3 cm are replaced by fine grained amphibole (hornblende). The rock is comprised mainly of larger crystals of feldspars that appear to be somewhat altered and recrystallized. These feldspars are potash varieties.

The rock is a recrystallized, altered hornblende feldspar pegmatite.

An x-ray diffraction of the black mineral confirms the presence of amphibole.

SAMPLE R99:11685 (RX).

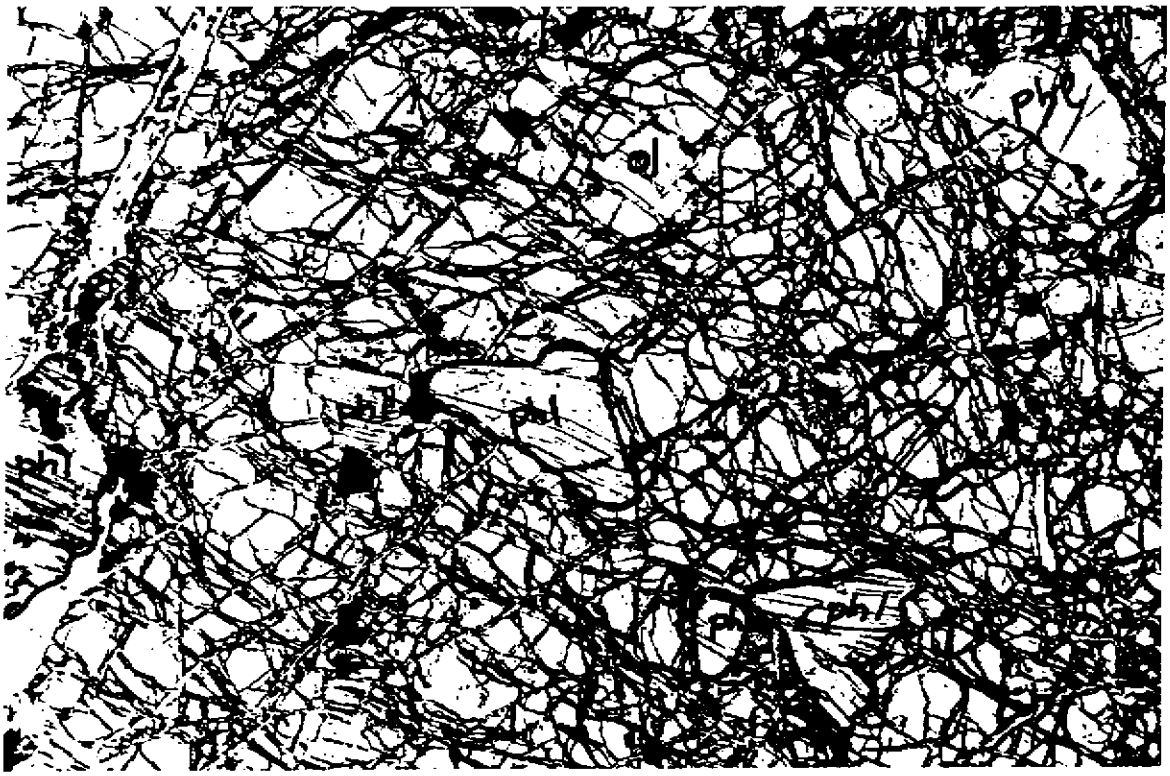
The reddish brown mineral in this rock proved, to be pyrite altering to goethite, by x-ray diffraction. The bluish-grey phase is feldspar.

A few photomicrographs have been taken. These are captioned and appended.

Yours truly,

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

JAM/skw
App. (photos, diffractograms)

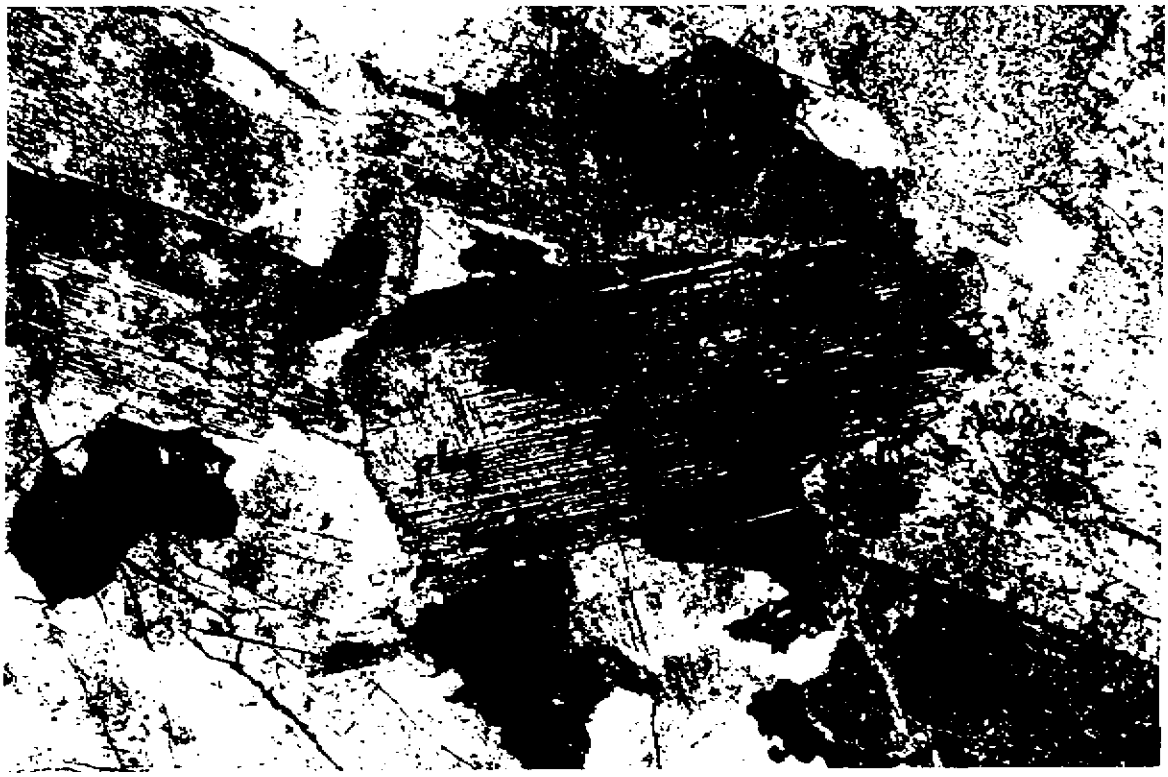


R99:11682. Fractured "church window" olivine with interstitial phlogopite and small granular opaques. Transmitted light, magnification 25x.

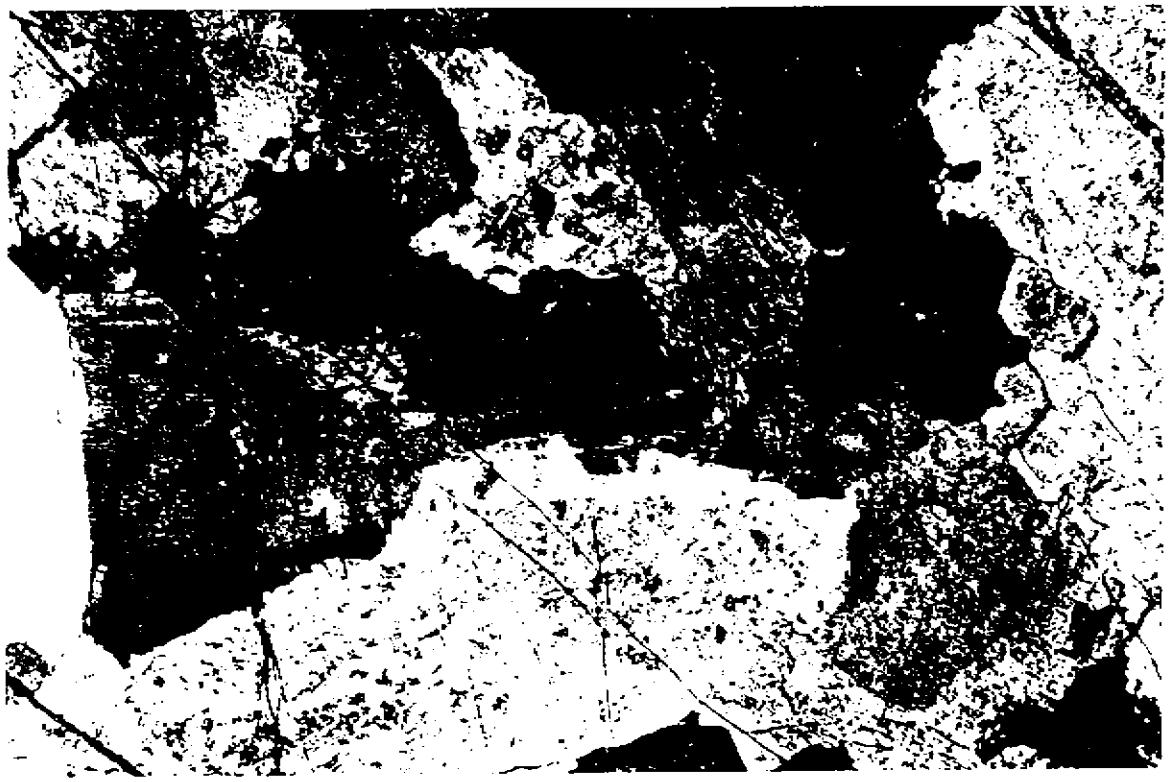
R99:11682. As above but crossed nicols.

R99:11684. Altered, recrystallized potash feldspars cemented by a massive fine grained amphibole matrix. Transmitted light, magnification 25x.

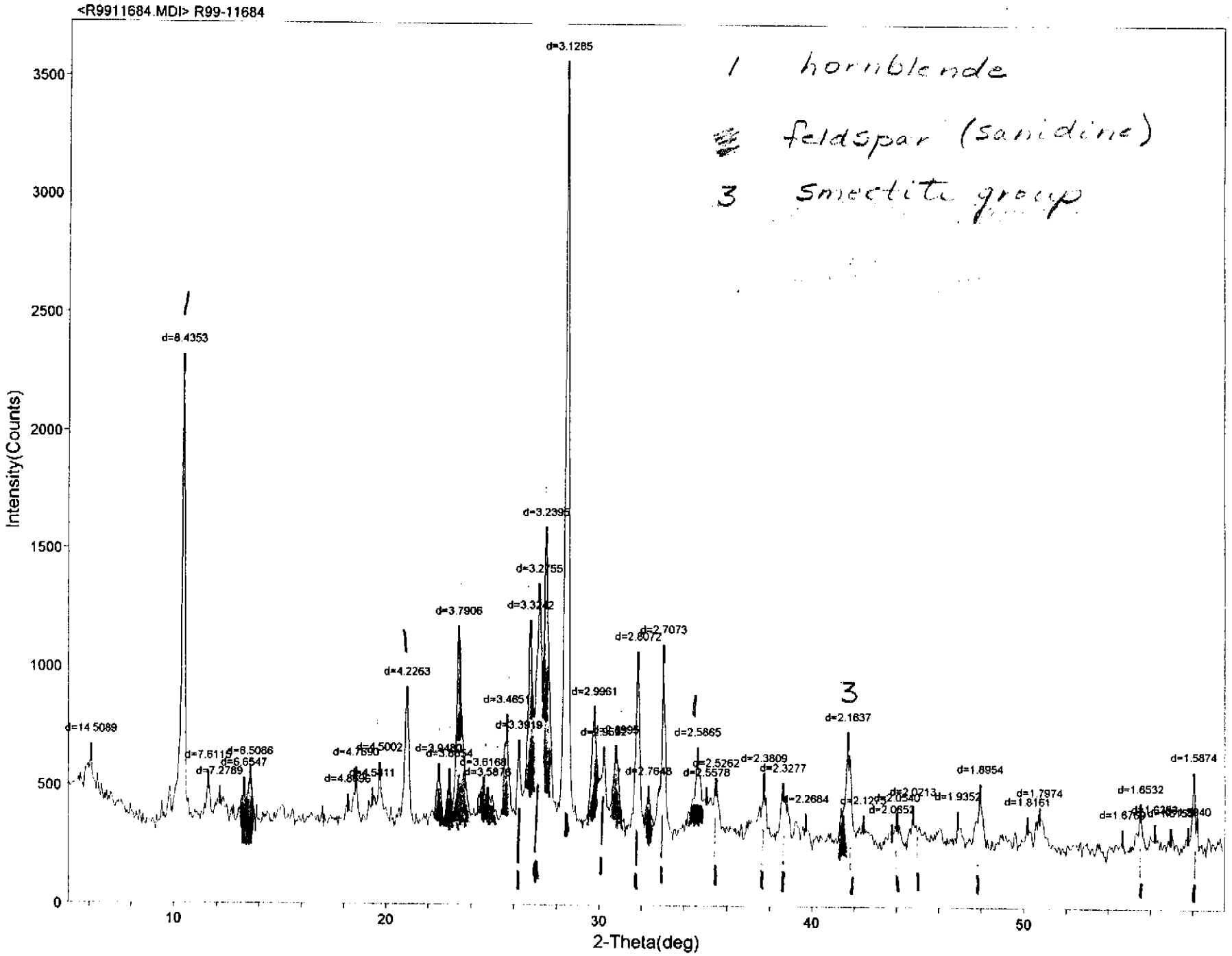
R99:11684. As above but in crossed nicols.



R99:11683. Large plagioclase grain plus other feldspars (both plagioclase and orthoclase). Transmitted light, magnification 25x.



R99:11683. Biotite intergranular to plagioclase. Transmitted light, crossed nicols, magnification 25x.


<R9911684.MDI> R99-11684
1 hornblende
2 feldspar (sanidine)
3 smectite group
Intensity(Counts)
2-Theta(deg)
d=8.4353
d=3.1285
d=4.2263
d=3.7906
d=3.2396
d=3.2755
d=3.3242
d=2.7073
d=2.8072
d=2.9961
d=3.4651
d=3.3919
d=2.5865
d=2.1637
d=14.5089
d=7.2789
d=6.6547
d=8.5086
d=4.5002
d=4.5911
d=3.6169
d=3.5878
d=2.7648
d=2.5578
d=2.5262
d=2.3809
d=2.3277
d=2.2684
d=2.0713
d=2.0540
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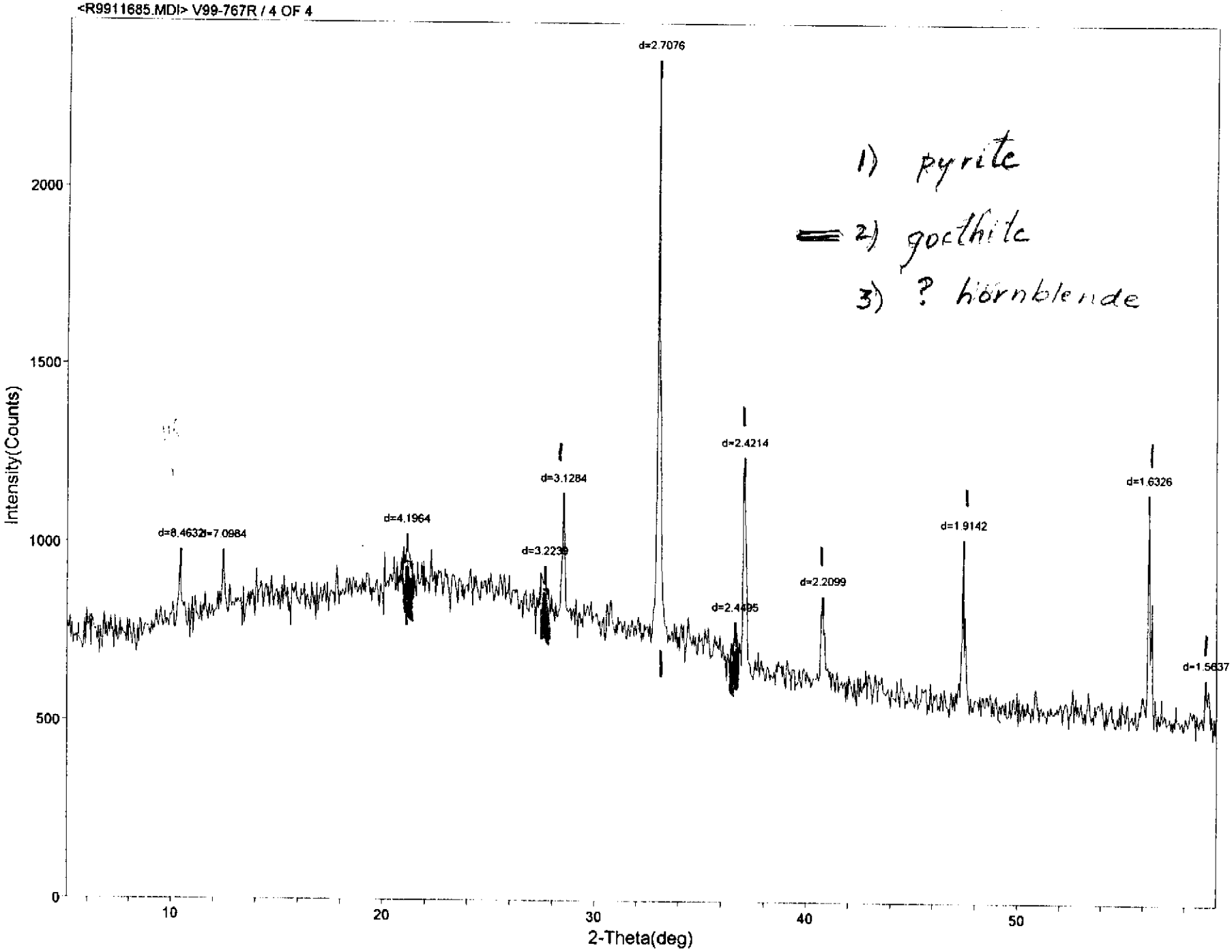
<R9911685.MDI> V99-767R / 4 OF 4
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d=4.1964
d=8.4632
d=7.0984
d=3.2239
d=1.9142
d=2.2099
d=2.4495
d=1.5637
1) pyrite
2) goethite
3) ? hörnblende
Intensity(Counts)
2-Theta(deg)
0
500
1000
1500
2000
10
20
30
40
50

<R9911684.MDI> R99-11684 [JADE - Peak List Report]

Scan Parameters: Range = 5.0-59.5/0.05, Dwell = 1(sec), Max-I = 3552, Anode = CU Date: 11-19-99@15:05

Search Parameters: Filter = 11(pts), Threshold = 3.0(esd), Peak-Cutoff = 0.5%, 2-Theta Zero Offset = 0.0(deg)

Note: Intensity data from raw counts, Summit peak location, Wavelength for computing d-spacing = 1.540562<CU, K-alpha1>

#	2-Theta	d(A)	h	k	l	BG	Peak	P%	Area	A%	FWHM	Size(A)	#
1	6.087	14.5089				467	173	5.5	29	4.2	0.130	>1000	1
2	10.479	8.4353				372	1926	61.2	315	47.1	0.131	>1000	2
3	11.616	7.6115				372	159	5.1	26	3.8	0.128	>1000	3
4	12.149	7.2789				369	94	3.0	24	3.6	0.202	>1000	4
5	13.294	6.6547				363	137	4.4	22	3.2	0.124	>1000	5
6	13.593	6.5086				359	190	6.0	40	5.9	0.167	>1000	6
7	18.203	4.8696				356	78	2.5	15	2.1	0.144	>1000	7
8	18.590	4.7690				364	183	5.8	28	4.1	0.119	>1000	8
9	19.360	4.5811				360	100	3.2	26	3.9	0.207	910	9
10	19.711	4.5002				359	211	6.7	34	5.0	0.126	>1000	10
11	21.003	4.2263				354	536	17.0	122	18.1	0.181	>1000	11
12	22.502	3.9480				391	176	5.6	37	5.4	0.164	>1000	12
13	22.989	3.8654				453	91	2.9	9	1.2	0.073	>1000	13
14	23.449	3.7906				398	750	23.8	201	30.1	0.214	670	14
15	24.593	3.6168				381	127	4.0	50	7.3	0.309	319	15
16	24.796	3.5876				378	88	2.8	38	5.7	0.345	273	16
17	25.688	3.4651				401	374	11.9	80	12.0	0.171	>1000	17
18	26.252	3.3919				473	195	6.2	23	3.4	0.093	>1000	18
19	26.796	3.3242				428	746	23.7	214	32.0	0.229	527	19
20	27.203	3.2755				482	848	27.0	303	45.4	0.286	354	20
21	27.511	3.2395				438	1132	36.0	348	52.1	0.246	453	21
22	28.507	3.1285				407	3145	100.0	668	100.0	0.170	>1000	22
23	29.795	2.9961				394	419	13.3	126	18.8	0.240	465	23
24	30.239	2.9532				431	210	6.7	35	5.2	0.131	>1000	24
25	30.813	2.8995				399	251	8.0	61	9.0	0.192	772	25
26	31.852	2.8072				350	695	22.1	142	21.2	0.163	>1000	26
27	32.354	2.7648				389	88	2.8	11	1.6	0.094	>1000	27
28	33.060	2.7073				345	729	23.2	133	19.9	0.146	>1000	28
29	34.652	2.5865				359	284	9.0	105	15.6	0.293	332	29
30	35.053	2.5578				329	144	4.6	111	16.5	0.612	140	30
31	35.506	2.5262				435	78	2.5	9	1.3	0.092	>1000	31
32	37.753	2.3809				299	236	7.5	54	8.0	0.182	782	32
33	38.649	2.3277				309	186	5.9	53	7.8	0.224	493	33
34	39.702	2.2684				292	71	2.3	8	1.1	0.084	>1000	34
35	41.709	2.1637				303	408	13.0	114	17.0	0.222	493	35
36	42.453	2.1275				299	60	1.9	8	1.1	0.097	>1000	36
37	43.799	2.0652				265	56	1.8	8	1.2	0.111	>1000	37
38	44.050	2.0540				268	103	3.3	23	3.4	0.177	759	38
39	44.801	2.0213				278	120	3.8	26	3.8	0.168	858	39
40	46.912	1.9352				279	101	3.2	11	1.5	0.081	>1000	40
41	47.958	1.8954				270	226	7.2	61	9.1	0.215	510	41
42	50.193	1.8161				293	66	2.1	8	1.2	0.096	>1000	42
43	50.752	1.7974				261	136	4.3	46	6.8	0.267	375	43
44	54.691	1.6769				247	61	1.9	7	0.9	0.079	>1000	44
45	55.540	1.6532				262	154	4.9	25	3.7	0.130	>1000	45
46	56.203	1.6353				265	66	2.1	8	1.1	0.090	>1000	46
47	56.955	1.6155				257	59	1.9	7	1.0	0.093	>1000	47
48	57.795	1.5940				254	68	2.2	9	1.2	0.095	>1000	48
49	58.057	1.5874				256	297	9.4	53	7.9	0.142	>1000	49
@	End-of-List												

<R9911685.MDI> V99-767R / 4 OF 4 [JADE - Peak List Report]

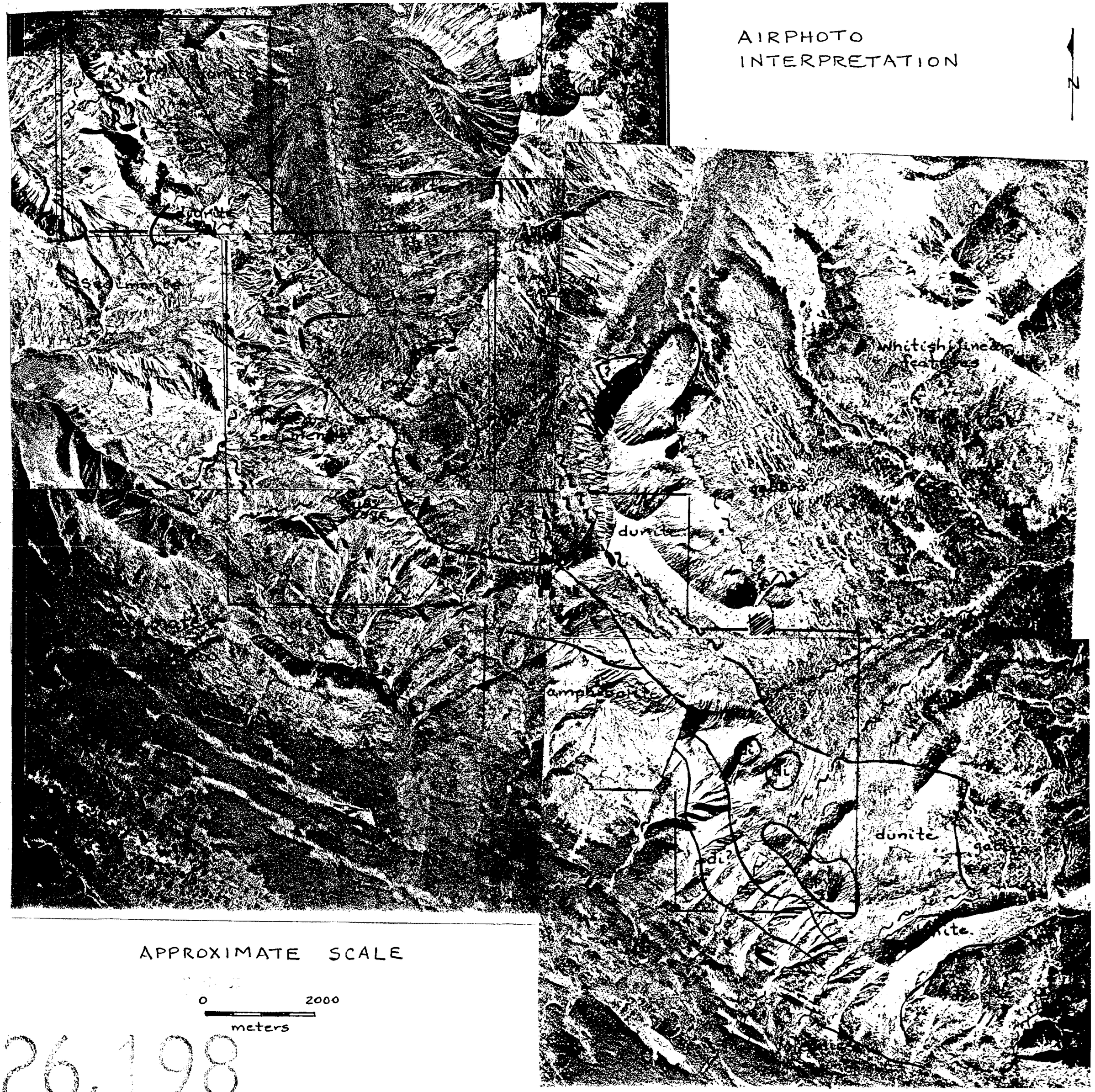
Scan Parameters: Range = 5.0-59.5/0.05, Dwell = 1(sec), Max-I = 2349, Anode = CU Date: 11-19-99@14:08

Search Parameters: Filter = 11(pts), Threshold = 3.0(esd), Peak-Cutoff = 0.5%, 2-Theta Zero Offset = 0.0(deg)

Note: Intensity data from raw counts, Summit peak location, Wavelength for computing d-spacing = 1.540562<CU, K-alpha1>

#	2-Theta	d(A)	h	k	l	BG	Peak	P%	Area	A%	FWHM	Size(A)	#
1	10.444	8.4632				797	165	10.4	19	7.4	0.087	>1000	1
2	12.459	7.0984				842	119	7.5	12	4.9	0.079	>1000	2
3	21.154	4.1964				893	116	7.3	15	5.9	0.099	>1000	3
4	27.647	3.2239				823	100	6.3	13	5.0	0.097	>1000	4
5	28.508	3.1284				814	313	19.7	48	19.6	0.121	>1000	5
6	33.057	2.7076				758	1591	100.0	242	100.0	0.122	>1000	6
7	36.657	2.4495				674	96	6.0	12	4.9	0.098	>1000	7
8	37.098	2.4214				667	563	35.4	99	40.8	0.140	>1000	8
9	40.798	2.2099				620	224	14.1	45	18.3	0.158	>1000	9
10	47.456	1.9142				557	447	28.1	72	29.5	0.128	>1000	10
11	56.302	1.6326				519	615	38.7	97	40.0	0.126	>1000	11
12	59.021	1.5637				532	85	5.3	8	3.1	0.070	>1000	12
@	End-of-List												

AIRPHOTO
INTERPRETATION



APPROXIMATE SCALE

0 2000

meters

N

1 DUNITE

2 PERIDOTITE

3 OLIVINE CLINOPYROXENITE

4 HORNBLENDE - MAGNETITE CLINOPYROXENITE

5 AMPHIBOLITE

B BASIC VOLCANIC TUFFS

T TUFFS + SEDIMENTS

L LISTWANITE

S SYENITE

G GABBRO + DIABASE

x rock sample

• soil sample

X 1840, 67, 52, 10, 18
Cu ppm, Ni ppm, Co ppm, Pt ppb, Pd ppb

(old sample results)

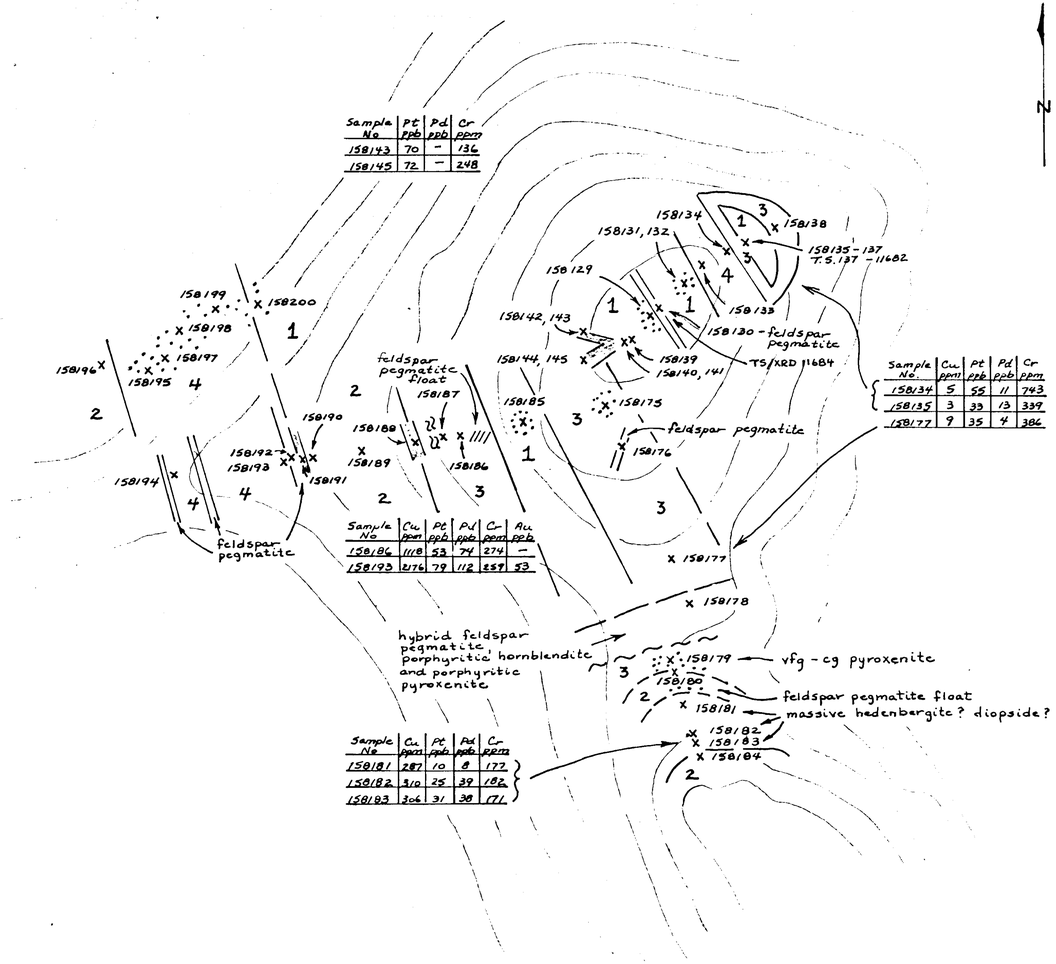
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,109

STAR CLAIMS

Sample Location Map

0 1000
meters
1: 25000

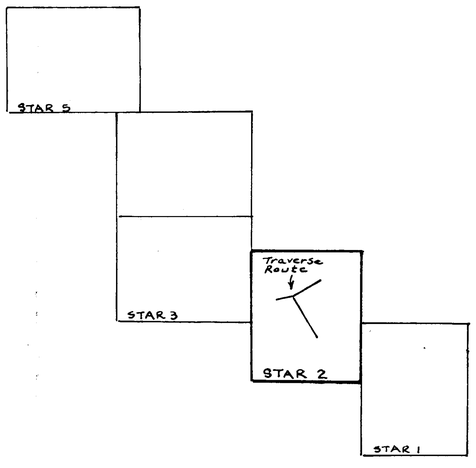


Sample No	Pt ppb	Pd ppb	Cr ppm
158143	70	–	136
158145	72	–	248

Sample No	Cu ppm	Pt ppb	Pd ppb	Cr ppm	Au ppb
158186	1118	53	74	274	–
158193	2176	79	112	259	53

Sample No	Cu ppm	Pt ppb	Pd ppb	Cr ppm
158134	5	55	11	743
158135	3	33	13	339
158177	9	35	4	386

Sample No	Cu ppm	Pt ppb	Pd ppb	Cr ppm
158181	287	10	8	177
158182	310	25	39	182
158183	306	31	38	171

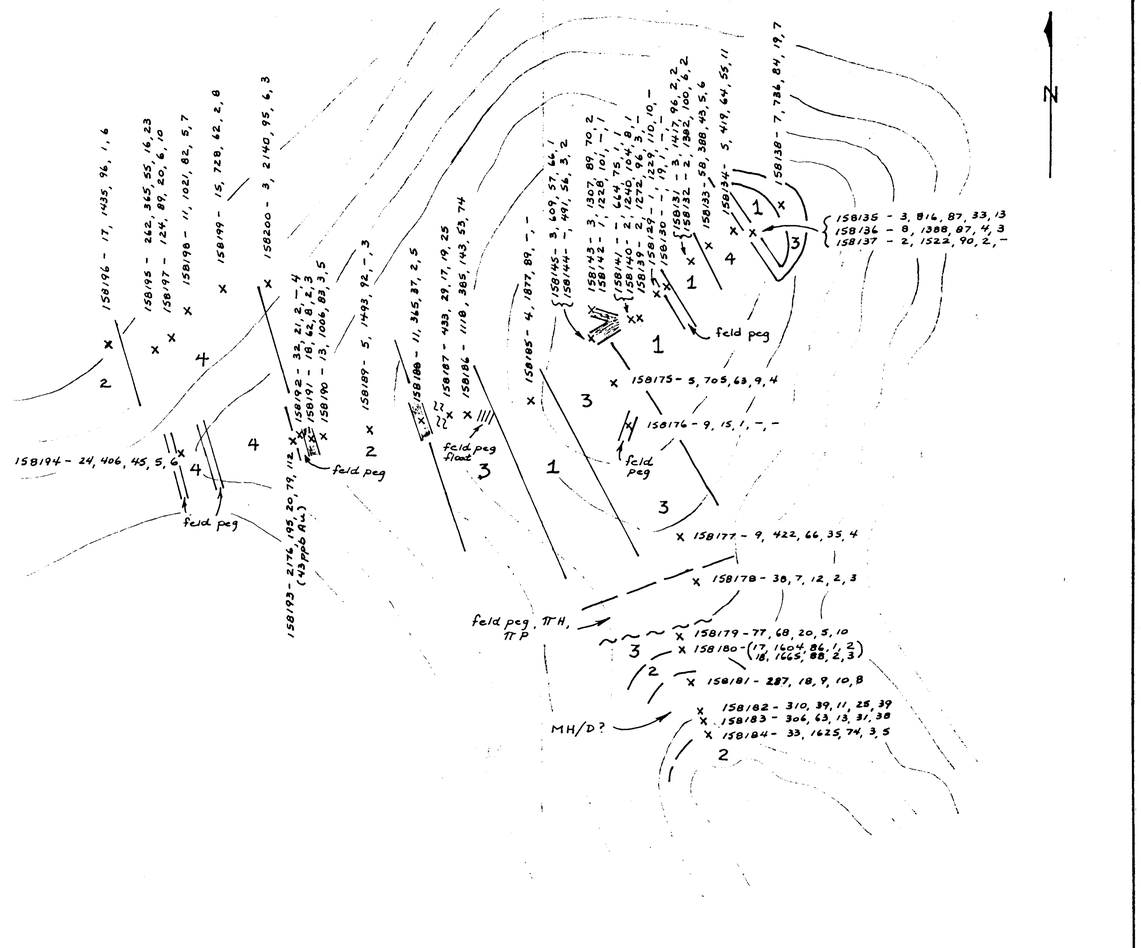


LEGEND

- x rock sample
- mica
- listwanite
- 1 dunite
- 2 peridotite
- 3 olivine clinopyroxenite
- 4 pyroxenite
- float

SAMPLING LOCATION MAP
STAR 2 CLAIM

0 100 meters



x 158193 - 2176, 195, 20, 79, 112
sample no. - Cu ppm, Ni ppm, Co ppm, Pt ppb, Pd ppb

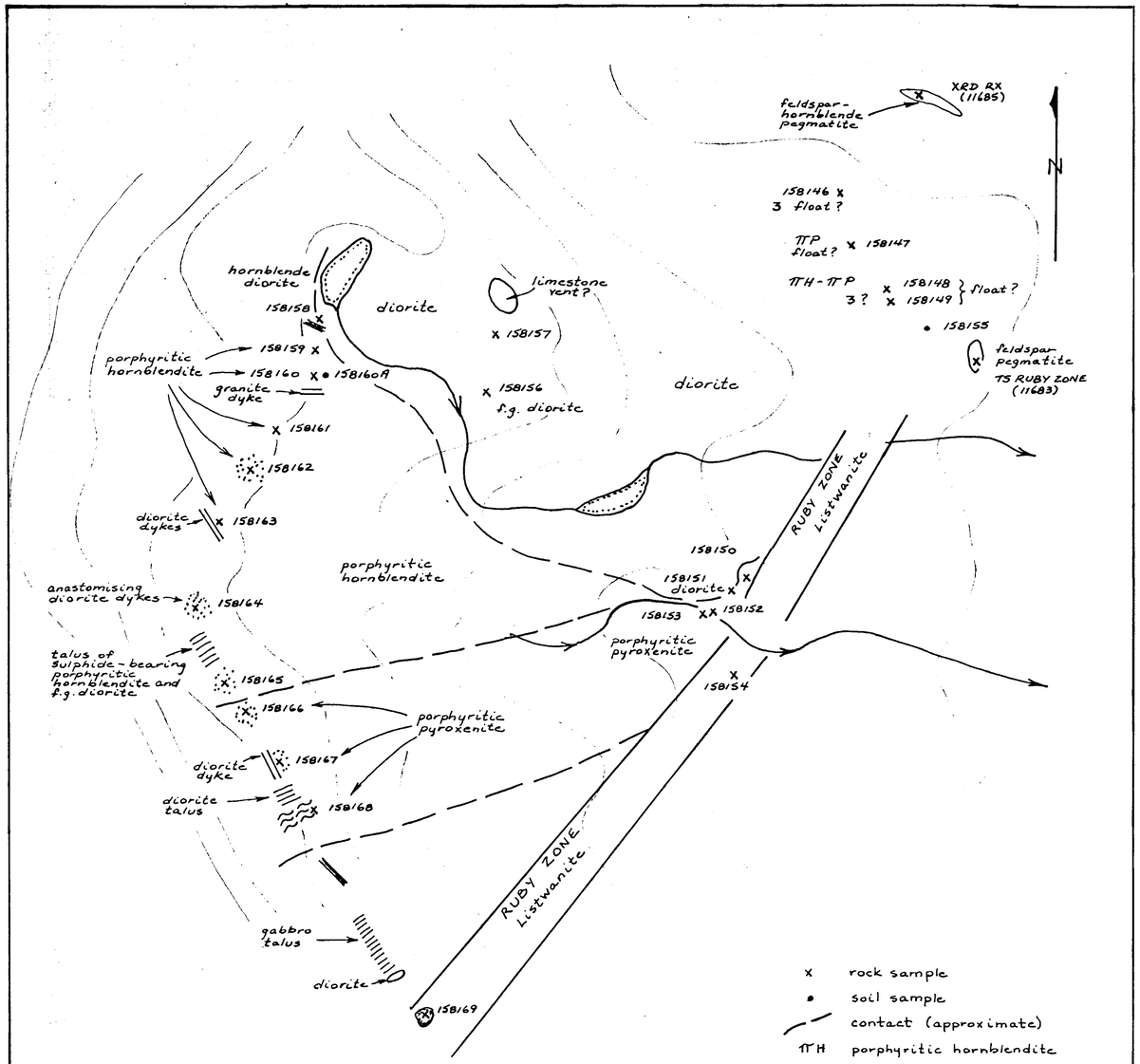
LEGEND

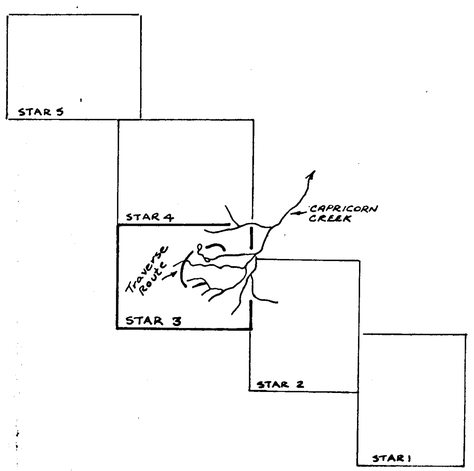
- x rock sample
- listwanite
- 1 dunite
- 2 peridotite
- 3 olivine clinopyroxenite
- 4 pyroxenite
- float

feld. peg	feldspar pegmatite
MH/D	metamorphic hedenbergite/diopside
π H	porphyritic hornblendite
π P	porphyritic pyroxenite

ANALYTICAL RESULTS

0 100 meters

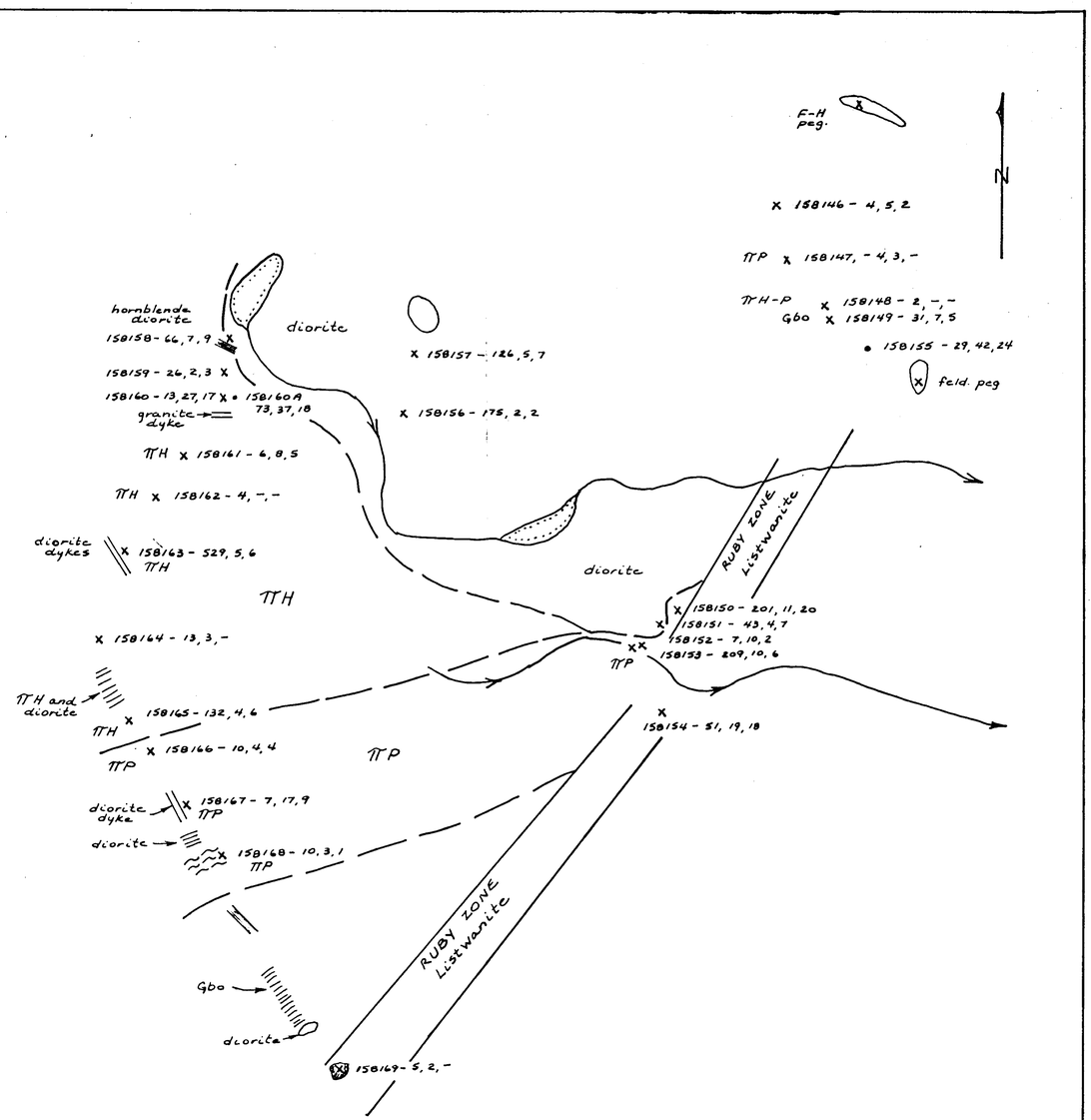




- X rock sample
- • soil sample
- contact (approximate)
- πH porphyritic hornblendite
- πP porphyritic pyroxenite
- listwanite

SAMPLE LOCATION MAP
STAR 3 CLAIM

0 100 meters



LEGEND

- X rock sample
- • soil sample
- listwanite
- float

feld. peg	feldspar pegmatite
F-H peg	feldspar-hornblende pegmatite
Gbo	gabbro
πH	porphyritic hornblendite
πP	porphyritic pyroxenite

ANALYTICAL RESULTS

0 100 meters