MAPPING AND SAMPLING PROGRAM

on the

BORNITE CLAIMS

Omineca Mining Division

N.T.S. 93-K-13E

Lat.: 54°55'N Long.: 125°32'W

by

U. Mowat, P. Geo.

February, 2001

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1.0 Introduction

On June 2 and 3, 2000 three men spent one day mapping and sampling along a newly constructed logging road which cuts across a part of the Bornite 1 claim. Twenty samples were collected from 1.7 km of road traverse and analysed for 30 elements by ICP and Au, Pt, Pd by Ultra/ICP. The logging road construction has exposed a rather lithologically consistent amount of float and subcrop ranging from predominantly volcanics with lesser amounts of peridotite and silicified limestone. The logging road construction has also revealed that soil development is none existent and that most of the detrital material is of glacio-fluvial nature. During this time a total of 38 core samples were collected from drill hole 95-4 and 95-4A. The core was analysed for Au, Pt and Pd by Ultra/ICP.

On August 2, 2000 two men spent one day examining selected areas of anomalous copper, nickel and cobalt outlined by previous soil sampling in an attempt to locate the source of the coincident soil anomalies. Seven samples were collected from 1.8 km of traverse and analysed for 30 elements by ICP and Au, Pt, Pd by Ultra/ICP. The traverse only located one small outcrop with most of the samples collected being locally derived float. With the discovery of flagging indicating that the area is to be logged further examination was abandoned until the logging takes place.

Seven samples collected previously were submitted for Au, Pt, Pd analyses by Ultra/ICP.

Two samples of drill core were also submitted for thin section examination.

2.0 Location and Access

The Bornite claims are located 100 km northwest of Fort St. James on map sheet 93-K-13E. The property is located at co-ordinates 54° 55'N and 125° 32'W.

Access to the property is by helicopter from either Fort St. James or Smithers and by logging roads from Burns Lake.

3.0 Claim Data

The Bornite property consists of the following claims:

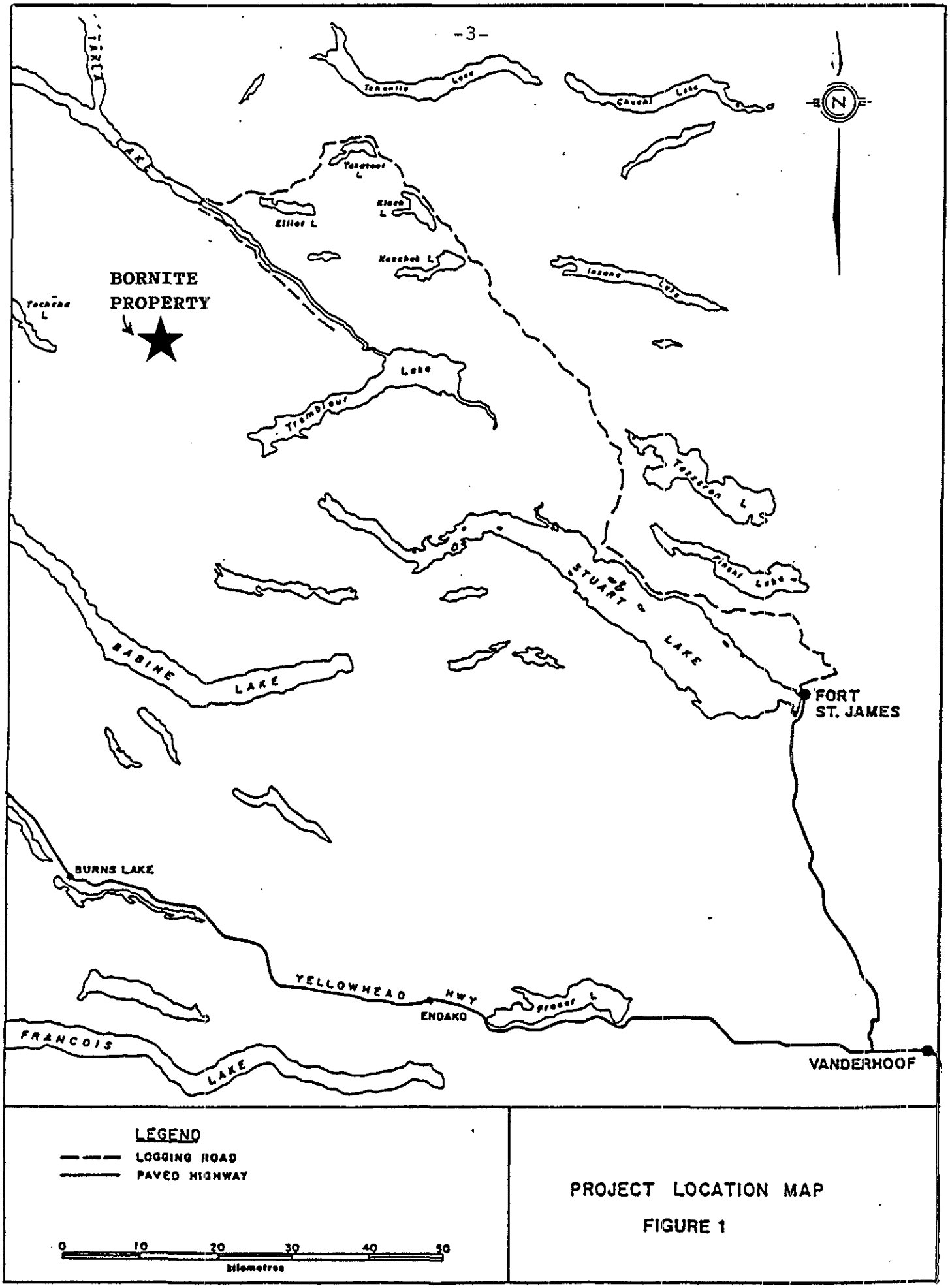
Claim Name	Record Number	No. of Units
Bornite 1	334030	20
Bornite 2	334031	20
Bornite 10	340940	1
Bornite 11	340941	1

The property consists of two 4-post claims and 2 two post claims totalling 42 units.

4.0 History

The general area of the Bornite claims has received a limited amount of geologic work or exploration. In 1936 and 1937, J. E. Armstrong of the G.S.C. conducted some preliminary mapping in the vicinity of the Bornite claims. With the onset of World War II, the G.S.C. conducted a program of mapping and exploration for chromite deposits in the ultramafic rocks outlined by the previous work of J. E. Armstrong. While mapping in the area of the Bornite 2 claim, "fist-sized" boulders of massive bornite and chalcopyrite were discovered in dunite talus. Old claim posts plus a blasted pit indicate that prospectors attempted to locate the source of the mineralized float.

In 1967, the ultramafic which underlies the Bornite 2 claim was staked by L. Vass. No exploration work is recorded on the VSF claims.



PROJECT LOCATION MAP

FIGURE 1

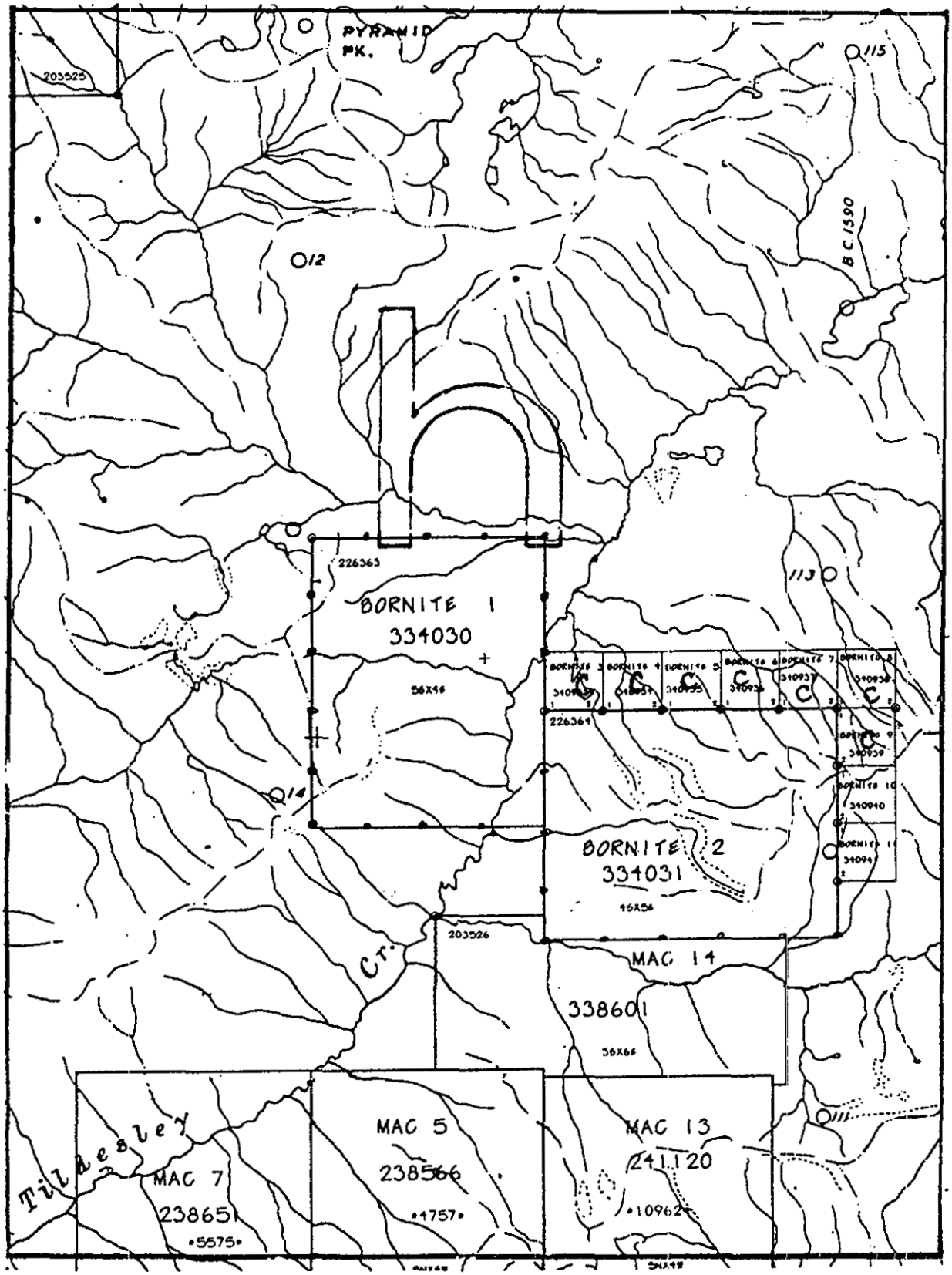


Figure 2: CLAIM MAP

In 1969, reconnaissance silt sampling by MacDonald Consultants for Terra Nova Explorations located highly anomalous copper values in silt samples from a small stream located on the Bornite 1 claim. This prompted the staking of the Diane claims plus follow-up soil sampling and a ground magnetomete-EM survey.

More recently, exploration in the area has been focused on the MAC claims which lie immediately south of the Bornite claims. Rio Algom/Spokane Resources have been continuing to define the molybdenum-copper potential of the MAC claims.

On February 27 and 28, 1995, the Bornite 1 and 2 claims were staked to cover the copper in soil anomaly outlined by MacDonald Consultants on the Diane claims and to cover the area of the bornite and chalcopyrite boulders in the dunite talus.

5.0 Regional Geology

The area of the Bornite claims is underlain by a 15 km wide belt of northwesterly-trending Pennsylvanian and Permian Cache Creek Group rocks consisting of ribbon chert, argillaceous quartzite, argillite, slate, greenstone, limestone with minor conglomerate and greywacke. The Cache Creek Group has been intruded by Upper Jurassic or Lower Cretaceous Omineca Intrusions consisting of granodiorite, quartz diorite, diorite with minor granite, syenite, gabbro and pyroxenite. As well, Post-Middle Permian, Pre-Upper Triassic Trembleur Intrusions consisting of peridotite, dunite, minor pyroxenite and gabbro with serpentinized and steatized equivalents intrude the Cache Creek Belt.

The northwesterly-trending belt of Cache Creek Group rocks is bordered on the east by the Pinchi Fault and Upper Triassic Takla Group andesites, basaltic flows, tuffs, breccias and agglomerates with interbedded conglomerate, shale, greywacke and limestone. On the west, the belt is bounded by the Takla Fault, an east-dipping zone which is up to 5 km wide and contains a melange of serpentine and greenstone. The melange is adjacent to Triassic metamorphosed pyroclastic rock, basalt, rhyolite, greywacke and argillite of the Sitlika assemblage.

Between the Pinchi Fault and the Takla Fault, the predominant units of the Cache Creek Group of chert, phyllite, argillite and greenstone with minor greywacke and limestone are highly deformed. Three deformational periods have been recognized in the Cache Creek Group which has been metamorphosed to lower greenschist facies with local glaucophane. The oldest structures are a prominent foliation that parallels compositional layering and trends east-west, marking the axial planes of isoclinal folds. A later structure consists of chevron folds which trend north-south with axial planes dipping moderately westwards. The youngest structures are warps and kinks, probably related to late faulting.

6.0 Property Geology

The west half of the Bornite claims is underlain by andesitic volcanics which range from lapilli tuffs to limey aquagene tuffs and volcanic glass. Minor amounts of limestone, silicified limestone and skarn have been seen as locally derived float. Mapping by use of outcrop, which is ver limited, and field notes from previous soil sampling which recorded rock chip lithologies in the soil samples indicate that the west side volcanics are cut by two dyke-like intrusives, a gabbro and a monzonite.

A traverse of the newly constructed logging road shows that the southern portion of the Bornite 1 claim has three types of float plus andesitic volcanics as subcrop. The dominant variety of float consists of a greyish green to blackish green dense-looking andesitic volcanic. The second most common lithology is peridotite. No peridotite was seen in outcrop but the angularity and size of the float suggests a local source. Small amounts of a sucrosic-appearing silicified limestone were also noted. The only subcrop occurs towards the northern half of the road and consists of andesitic volcanics.

A traverse of line 1+00N showed the area to be underlain by andesitic volcanics identical to the volcanics found in subcrop along the logging road. A traverse to the north of drill hole 95-1 and over a strong copper in soil anomaly did not locate any outcrop but several small angular boulders of andesitic volcanics and peridotite were noted.

A traverse down line 5+00N back to the logging road showed the lithologies to be predominantly andesitic volcanics with minor amounts of gabbro.

The central portion of the property is underlain by black argillites with minor siltstone. Other than an andesitic dyke intersected in drill core, the presence of an intrusive is suggested by biotite flakes in the argillite and the recrystallization of quartz in siltstone lamina. The argillite appears to be vertical and trends 320°. None of the argillites encountered while mapping were lithologically similar to the argillite in drill hole 95-3. The argillite in drill hole 95-3 consisted of intensely sheared material where the siltstone lenses formed an augen texture. The argillite also contained pyrrhotite with chalcopyrite. The sulphides occur along bedding planes, parallel to bedding planes and as small lenses.

The eastern half of the property is predominantly underlain by very altered ultramafics of peridotite composition with lesser amounts of dunite. Black argillite and andesitic volcanics are found overlaying the ultramafic plug. Aplite and monzonite dykes have intruded the ultramafic.

7.0 Mineralization

7.1 Volcanics

Volcanics on both the eastern and western portions of the Bornite claims are generally devoid of mineralization but where present consist of minor amounts of chalcopyrite, pyrite or pyrrhotite. The sulphides are generally very fine grained but also occur as clots 5 mm in diameter in drill core. Several areas locally contain 5% to 20% coarse grained pyrite with minor chalcopyrite.

The volcanics found along the logging road and along lines 1+00N and 5+00N contained trace to 0.5% very fine grained pyrite and chalcopyrite as disseminations.

7.2 Limestone

The limestone which is only seen as float is generally devoid of mineralization particularly when silicified. Locally minor amounts of covellite has been seen. Occasionally the limestone is completely replaced by magnetite. Silicified limestones located along the logging road contained 0.5% disseminated pyrite plus abundant limonite filled voids. One specimen returned a value of 12762 ppm manganese.

7.3 Argillites

Argillites are generally devoid of mineralization on both the central and western portions of the Bornite claims. Drill hole 95-3 intersected a substantial amount of pyrrhotite with minor chalcopyrite. In addition, a brown mineral tentatively identified as sphalerite was noted in the core. The "sphalerite" appears to be related to white carbonate veining while the pyrrhotite-chalcopyrite occurs along bedding planes, parallel to bedding planes and as small lenses up to 5 cm in length.

Argillites located just west of drill hole 95-3 contain minor amounts of chalcopyrite and bornite which occur as very fine grained disseminations within the argillite and particularly within the siltstone lamina. A minor amount of malachite was noted on the surface of the argillite.

7.4 Ultramafics

The ultramafics underlying the eastern portion of the Bornite 2 claim are highly anomalous in nickel which occurs as heazlewoodite, bravoite, siegenite? and awaruite. The nickel mineralization occur as rather uniform, very fine grained disseminations. The ultramafic is sporadically mineralized with gold which reaches 862 ppb in a 1 meter chip sample. The source of the "fist-sized" boulders of bornite and chalcopyrite was not located but it is believed that they may have been derived from volcanic rafts within the ultramafic.

Coarse-grained pyrrhotite with minor chalcopyrite has been seen in an intensely altered structure within the ultramafic. The structure is marked by intense shearing and brecciation of the ultramafic and by the development of strong talc-carbonate

alteration. The structure which is poorly exposed has been traced for approximately 300 meters and was mineralized throughout.

Ultramafics seen along the logging road and on the eastern portion of the Bornite claims contained only minor amounts of very fine grained disseminated sulphides.

8.0 Alteration

8.1 Volcanics

The volcanics on the western portion of the Bornite claims are variably altered by sericite, carbonate, chlorite, epidote, tremolite and plagioclase. Carbonate, quartz and chalcedony veining are relatively common. Corundum has been seen in thin section. It is unclear whether the limey volcanics are an alteration product or the original rock was a "limestone". The limey volcanics host significant garnet development in drill core.

The volcanics located along the logging road were typically altered by coarse to very coarse sericite development. The greenish colouration suggests weak chlorite development as well. Several specimens showed weak pervasive silicification and minor fine grained garnet.

8.2 Limestones

The limestones located to date are typically altered by sucrosic quartz replacement. Locally the limestones are replaced by magnetite or intense epidote. The limestones also have garnet development locally.

8.3 Argillites

Argillites show the least amount of alteration. Generally the argillites appear fresh except near the contact with the ultramafic where they are intensely silicified. Minor biotite has been seen on some fracture surfaces. Locally the argillite is cut by numerous white carbonate veinlets.

8.4 Ultramafics

Ultramafics on the Bornite claims are generally intensely altered by either serpentinization or steatization. The contacts of the main ultramafic body on the Bornite 2 claim are particularly intensely altered and are marked by intense talc alteration which completely replaces the ultramafic so no primary texture remains. The talc alteration is typically coarse grained and orange in colour. A structure located in 1998 has been replaced by intense carbonate-talc alteration which has completely replaced the ultramafic leaving the breccia texture visible on the weathered surface. Alteration along the structure is believed to be due to an adjacent aplite dyke. Volcanic rafts located within the ultramafic are variably altered and range from minor chloritization to virtually total assimilation where only very fine grained kaolinized feldspar is identifiable.

Ultramafics located on the western portion of the Bornite claims are variably altered by serpentinization and talc. The degree of alteration is less intense than the alteration in the ultramafics on the eastern side of the property.

8.5 Intrusives

All intrusives located to date are generally fresh in appearance.

9.0 Work Program

On June 2 and 3, 2000, three men spent 1 day mapping and sampling along a newly constructed logging road which cuts across part of the Bornite 1 claim. Twenty samples were collected from 1.7 km of road traverse and analysed for 30 elements by ICP and Au, Pt, Pd by Ultra/ICP. One day was spent collecting core from drill hole 95-4 and 95-4A. A total of 38 core samples were collected and analysed for Au, Pt and Pd by Ultra/ICP.

On August 2, 2000, two men spent one day examining an area of anomalous copper, nickel and cobalt outlined by previous soil sampling in an attempt to locate the source of the coincident soil anomaly. Seven samples were collected from 1.8 km of traverse and analysed for 30 elements by ICP and Au, Pt, Pd by Ultra/ICP.

Seven samples collected previously were submitted for Au, Pt and Pd analysis by Ultra/ICP.

Two samples of core were submitted for thin section examination.

10.0 Sample Descriptions

Sample No.	Sample Description
158246	142365: pyroxenite? volcanic? very fine grained greenish black equigranular; dense; occasional feldspar-like laths; minor clots of chalcopyrite
158247	95-5-527: dark grey limestone? patches of very coarse grained carbonate; coarse grained clots of chalcopyrite; black colouration from disseminated magnetite
158248	95-5-120: peridotite; mottled black magnetite-rich fragments in pale yellowy green matrix which is intensely serpentinized; cut by thin irregular white carbonate veinlets; magnetite occasionally 1 mm clots; trace yellow disseminated sulphide and trace white lath-like silvery metallic
158249	RD: medium grey dense volcanic with 5% disseminated sulphides; pyrrhotite, pyrite, trace chalcopyrite
158250	142758; medium grey fine grained diorite? or volcanic; intensely sericitized; rusty on surface; fine grained pyrrhotite disseminated throughout
158251	95-5-545; dark greenish black fragments of serpentinized, chloritized in a white carbonate-talc matrix; matrix has black spots of residual magnetite; no visible sulphides

Sample No.	Sample Description
158252	yellow green serpentine with angular vugs from weathered carbonate? vugs filled with black Mn? and buff carbonate?; no visible sulphides
158253	pale green, dense volcanic composed of very coarse grained sericite; small irregular patches of white sucrosic quartz; dots of reddish brown garnet? or hematitic stain after sulphides; trace very fine grained chalcopyrite
158254	sucrosic quartzite or replaced limestone; variably coloured from white (pure quartz) to dark grey with white patches (graphite) or white streaked with black lined fractures in all directions; sulphide content ranges from nil to 10% limonite-filled dots to 0.5% very fine grained disseminated pyrite
158255	dark greenish black serpentinized peridotite; 0.5% very fine grained disseminated sulphide; occasional coarse grained magnetite clot
158256	medium greenish grey relatively fresh peridotite; 0.5% very fine grained disseminated sulphides
158257	medium greenish grey weakly serpentinized peridotite; trace very fine grained disseminated sulphides
158258	black peridotite with occasional pyroxene crystal visible on fresh surface and pitted weathered surface; no visible sulphides
158259	dark greenish black peridotite moderately altered by talc; no visible sulphides
158260	pale greenish grey fissile volcanic composed of very coarse grained sericite; minor small white sucrosic quartz patches; 10% limonite filled voids; trace very fine grained chalcopyrite
158261	pale greenish grey limey volcanic; somewhat fissile with deep brownish streaks; no visible sulphides
158262	pale greenish grey dense volcanic; appears somewhat quartzose; rusty fractures; occasional trace of very fine chalcopyrite?
158263	black dense weakly serpentinized peridotite; trace very fine grained sulphides

Sample No.	Sample Description
158264	pale greenish grey sericitized dense volcanic; occasional limonite-filled fine grained patch; trace very fine grained disseminated chalcopyrite
158265	medium greenish grey dense peridotite; moderately altered by talc with weak serpentinization; trace very fine grained silvery metallic; trace very fine grained disseminated sulphides
158266	very rusty weathering white sucrosic quartz; occasional very fine grained black dot of chlorite or altered pyrite? trace very fine grained disseminated pyrite
158267	pale greenish grey volcanic; weakly sericitized; voids partially filled with deep reddish brown to black FeO; 0.5% very fine grained disseminated chalcopyrite and pyrite
158268	black sooty looking sucrosic quartz; nonmagnetic; no visible sulphides
158269	heavily varnished pale greenish grey dense volcanic; very fine grained black clots of magnetite +/- bornite, chalcopyrite; also very fine grained disseminated pyrite-chalcopyrite; total sulphide content 0.5%
158270	medium greenish grey volcanic; moderately sericitized; streaks and fine grained dots of deep brown to black; cut by white coarse grained carbonate veinlets; graphite on fracture surfaces as smears; no visible sulphides
158271	black dense peridotite with occasional pyroxene pheno visible; weakly serpentinized; trace very fine grained silvery metallic
158272	pale greenish grey volcanic with clots of coarse grained carbonate; occasional carbonate-filled void usually deep brown to black in colour; trace very fine grained chalcopyrite, pyrite usually in carbonate clots

Sample Number	From meters	To meters	Au ppb	Pt ppb	Pd ppb
Drill Hole 95-4A					
158276	30.48	31.39	1	3	7
158277	31.39	33.22	1	0	0
158278	33.22	35.66	0	2	3
158279	35.66	36.58	0	9	6
158280	36.58	37.19	2	3	4
158281	37.19	39.62	0	2	6
158282	39.62	40.54	9	9	6
158283	40.54	41.45	0	2	7
158284	41.45	42.37	2	5	2
158285	42.37	44.50	2	4	6
158286	44.50	45.42	1	5	3
158287	45.42	47.24	2	4	5
158288	47.24	48.16	1	1	4
158289	48.16	50.29	0	4	4
158290	51.82	54.86	0	4	7
158291	54.86	57.91	2	3	5
142332	57.91	60.96	12	6	7
158292	60.96	64.00	9	1	3
158293	64.00	66.75	1	5	2
158294	66.75	69,19	0	4	4
158295	69.19	70.10	0	8	3
158296	70.10	71.02	0	6	4
158297	71.02	72.54	1	2	2
158298	72.54	73.46	5	6	6
158299	73.46	76.51	1	6	4
158300	76.51	79.86	1	3	2
158301	79.86	82.60	5	5	5
158302	82.60	85.65	2	4	5
158303	85.65	88.70	0	4	3

Sample number 142332 was sampled in 1997.

Sample Number	From meters	To meters	Au ppb	Pt ppb	Pd ppb
Drill Hole 95-4					
158304	2.59	9.15	0	3	0
158305	9.15	12.20	0	5	1
158306	12.20	16.47	1	7	3
158307	16.47	18.00	0	8	7
158308	18.00	22.27	1	0	1
158309	22.27	24.71	6	1	2
158310	24.71	27.45	12	2	3
158311	27.45	29.28	0	2	0
158312	29.28	30.50	2	3	8
158313	33.55	36.30	1	10	7

Sample Number	Sample Description
158356	medium grey dense intensely carbonated volcanic with visible sericite; trace pyrite and chalcopyrite
158357	dark grey sericitized volcanic with trace very fine grained disseminated chalcopyrite
158358	rusty weathering medium grey volcanic; sericitized and epidotized; occasional reddish hematite spot; trace very fine grained sulphides
158359	rusty weathering dark grey gabbro with occasional 4 mm white altered pyroxene phenos; no visible sulphides
158360	dark grey very fine grained diorite? with a quasi-volcanic appearance; feldspars slightly chloritized; no visible sulphides
158361	rusty weathering dark grey gabbro; trace very fine grained disseminated sulphides
158362	rusty weathering dark grey diorite? trace very fine grained sulphides as disseminations and in irregular veinlets

11.0 Results

The logging road construction has revealed no soil development. All material exposed in the road cut is of glacio-fluvial nature. Float located along the road appears to be of local origin.

Geochemical analyses of the volcanics shows the background to be 257 ppm copper.

No economic values were encountered in the volcanics or in any of the ultramafics sampled.

12.0 Conclusions

It would appear that at least some of the copper in soil anomalies are generated by float. Future logging and road building on the Bornite claims should expose enough material to indicate which anomalies are transported or hydromorphic.

Sampling of the ultramafics have so far indicated a lack of Pt and Pd.

Sampling of the volcanics has returned only weak Pt and Pd values which appear to be associated with elevated copper.

The majority of the ground magnetic anomalies outlined by previous work appear to be generated by ultramafics.

13.0 References

Armstrong, J. E., Preliminary Report Northwest Quarter of the Fort Fraser Map-Area, B. C., G.S.C. Paper 38-10, 1938.

Armstrong, J. E., Fort St. James Map-Area, Cassiar and Coast Districts, British Columbia, G.S.C. Memoir 252, 1965.

Little, H. W., The Ultrabasic and Associated Rocks of the Middle River Range, B. C., Ph. D. Thesis, 1947.

Assessment Report 2414, Report on a Geochemical and Geophysical Survey on the Diane 1 - 16 Mineral Claims, Tsitsutl Mountain Area, by E. D. Dodson, P. Eng., May 25, 1970.

Assessment Report 24277, Drilling and Sampling Program on the Bornite Property, by U. Mowat, January, 1996.

Assessment Report 25477, Geochemical Report on the Bornite Claims, by U. Mowat, April, 1998.

Assessment Report 25668, Mapping and Sampling Program on the Bornite Claims, by U. Mowat, October, 1998.

14.0 Statement of Costs

Analyses

7 rock samples analysed for Au, Pt, Pd by Ultra/ICP at $12.00/sample	$ 84.00
7 rock preps at $4.50/sample	31.50
surcharge	7.00
GST	9.28
	$ 131.78
38 core samples analysed for Au, Pt and Pd by Ultra/ICP at $12.00/sample	$ 456.00
38 core preps at $4.50/sample	171.00
GST	43.89
	$ 670.89
20 rock samples analysed for 30 elements by ICP and Au, Pt, Pd by Ultra/ICP at $16.65/sample	$ 333.00
20 rock preps at $4.50/sample	90.00
GST	29.61
	$ 452.61
7 rock samples analysed for 30 elements by ICP and Au, Pt, Pd by Ultra/ICP at $16.65/sample	$ 116.55
7 rock preps at $4.50/sample	31.50
surcharge	7.00
	$ 165.90
2 thin section preps at $12.00/sample	$ 24.00
report - 1 hour at $90.00/hour	90.00
GST	7.98
	$ 121.98

Helicopter

6.8 hours at $630.00/hour	$4284.00
775.2 liters fuel at 0.80/liter	620.16
GST	343.29
	$5247.45

Labour

1 man for 5 days at $275.00/day	$1375.00
1 man for 4 days at $200.00/day	800.00
1 man for 14 days at $400.00/day	5600.00
	$7775.00

Accommodation

1 room for 3 nights at $67.85/night	$ 203.55
1 room for 5 nights at $59.80/night	299.00
1 room for 1 night at $36.97/night	36.97
1 room for 2 nights at $59.80/night	119.60
	$ 659.12

Truck

5 days at $75.00/day	$ 375.00
Gas	100.00
	$ 475.00

Meals	$ 325.25
Freight	$ 152.12
Supplies	$ 49.38
Airfare	$ 202.95
Taxi	$ 50.00
Bus	$ 39.30
Phone	$ 15.67
Reproduction	$ 35.00

TOTAL **$16569.40**

15.0 Statement of Qualifications

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

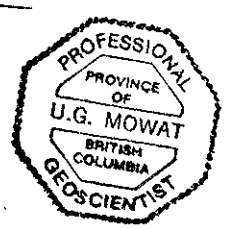
2.0 I have practiced my profession since 1969 in mineral exploration, oil and gas exploration and coal exploration.

3.0 I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.

4.0 I have a direct interest in the Bornite Claims.

Ursula G. Mowat

Ursula G. Mowat, P. Geo



Dated this 19th day of February, 2001

at Vancouver, B. C.

Appendix

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

GEOCHEM PRECIOUS METALS ANALYSIS

Mowat, Ursula PROJECT BORNITE File # A001316

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

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb
B 158246	<1	3	2
B 158247	<1	<1	5
B 158248	2	1	2
B 158249	5	1	15
B 158250	4	1	1
B 158251	<1	<1	2
B 158252	70	9	5
GABBRO	6	2	<1
RE GABBRO	5	2	1
STANDARD FA100	48	47	48

GROUP 3B - FIRE GEOCHEM AU, PT, PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.
- SAMPLE TYPE: ROCK/CORE Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAY 1 2000 DATE REPORT MAILED: May 11/2000 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ___

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GEOCHEMICAL ANALYSIS CERTIFICATE

Mowat, Ursula PROJECT BORNITE/RECCE File # A001717

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 158253	16	242	<3	64	<.3	33	19	770	4.28	7	<8	<2	<2	14	.2	3	<3	134	1.68	.075	3	69	1.24	7	.45	4	2.03	.06	<.01	4	1	3	14
B 158254	4	57	3	11	<.3	10	2	130	.61	<2	<8	<2	<2	2	<.2	<3	<3	9	.06	.009	4	13	.15	8	.01	5	.19	.03	.01	5	<1	<1	2
B 158255	2	17	<3	25	<.3	1359	70	807	4.17	<2	<8	<2	<2	2	.2	<3	<3	45	.07	<.001	1	884	18.49	10	<.01	48	.49	<.01	<.01	3	1	5	8
B 158256	1	14	<3	23	<.3	1395	69	792	4.06	<2	<8	<2	<2	3	<.2	<3	<3	46	.09	<.001	2	795	18.03	11	<.01	50	.50	<.01	<.01	3	<1	1	4
B 158257	1	14	<3	30	<.3	1407	71	850	4.22	<2	<8	<2	<2	2	.2	<3	<3	44	.08	<.001	1	848	18.66	12	<.01	52	.49	<.01	<.01	3	1	1	7
B 158258	1	1	<3	25	<.3	1565	79	871	4.84	5	<8	<2	<2	<1	<.2	<3	<3	25	.03	.002	<1	480	19.03	3	<.01	9	.19	.01	<.01	3	2	7	9
B 158259	2	5	<3	20	<.3	1217	69	834	4.53	<2	<8	<2	<2	<1	.2	<3	<3	26	.22	.001	2	565	12.33	4	<.01	28	.09	<.01	<.01	2	4	5	3
B 158260	1	212	6	120	<.3	130	53	1462	7.89	11	<8	2	<2	44	.2	4	<3	170	2.48	.122	8	366	3.36	25	.30	3	4.16	.05	.04	4	5	4	2
B 158261	<1	21	<3	89	<.3	106	28	1064	4.79	3	<8	2	<2	10	.2	<3	<3	78	.78	.100	7	197	2.42	50	.27	5	2.82	.05	.08	4	1	3	4
B 158262	1	233	<3	43	<.3	91	26	881	3.46	5	<8	2	<2	41	.4	<3	<3	65	1.03	.126	5	106	2.01	50	.29	7	2.24	.05	.04	5	1	2	16
B 158263	1	13	<3	27	<.3	1449	98	1212	5.86	3	<8	<2	<2	1	<.2	<3	<3	34	.12	<.001	2	679	15.29	5	<.01	57	.21	<.01	<.01	3	2	10	12
B 158264	<1	426	<3	93	<.3	56	32	1134	6.94	6	<8	<2	<2	6	.2	<3	<3	121	1.02	.077	4	58	2.77	46	.49	6	3.52	.01	<.01	4	3	11	37
B 158265	1	7	<3	13	<.3	1109	52	438	4.42	<2	<8	<2	<2	<1	<.2	<3	<3	31	.09	.001	1	575	10.35	3	.01	24	.26	<.01	<.01	4	38	4	4
B 158266	1	51	8	30	<.3	31	7	216	1.08	<2	<8	<2	2	3	<.2	<3	<3	13	.06	.032	5	11	.23	128	.02	9	.31	.01	.11	4	<1	2	7
B 158267	<1	317	<3	59	<.3	38	23	844	4.63	5	<8	<2	<2	10	.2	<3	<3	116	1.69	.039	2	63	2.33	11	.35	3	2.63	.07	.03	4	<1	9	18
B 158268	2	37	4	40	<.3	37	13	12762	1.49	9	<8	<2	<2	32	.2	<3	<3	19	.33	.020	8	16	.34	162	.02	11	.65	.02	.07	5	<1	3	3
B 158269	1	214	<3	83	<.3	144	45	651	4.86	3	<8	<2	<2	10	<.2	<3	<3	55	.71	.098	4	308	1.74	20	.26	4	2.31	.08	.07	4	<1	11	8
B 158270	1	298	<3	78	<.3	42	25	1027	5.75	8	<8	<2	<2	13	.3	3	<3	147	1.71	.066	3	100	2.16	24	.37	<3	2.88	.05	.05	4	<1	3	24
B 158271	<1	4	<3	43	<.3	1592	76	838	4.75	2	<8	<2	<2	1	<.2	<3	<3	24	.08	.003	1	413	21.51	6	<.01	9	.21	<.01	<.01	3	3	4	9
B 158272	1	113	<3	42	<.3	52	25	709	3.83	3	<8	<2	<2	3	.2	<3	<3	57	.59	.009	3	122	2.05	3	.18	7	2.28	.04	.01	4	<1	2	11
B 158273	1	144	<3	35	<.3	30	17	1462	3.74	9	<8	<2	<2	47	.2	5	<3	95	4.24	.060	<1	25	4.53	12	.05	7	2.64	.01	.12	5	19	<1	3
B 158274	<1	343	<3	88	.6	47	35	1570	7.37	37	<8	<2	<2	48	.4	<3	<3	105	5.74	.088	7	38	5.39	24	<.01	3	3.89	.01	.20	5	49	6	7
B 158275	<1	3	<3	12	<.3	341	34	559	3.31	<2	<8	<2	<2	1	<.2	<3	<3	36	.25	.002	2	793	10.36	2	<.01	7	.35	<.01	<.01	4	15	5	9
RE B 158275	<1	3	<3	13	<.3	333	33	538	3.22	<2	<8	<2	<2	1	<.2	<3	<3	35	.23	.002	2	777	9.98	1	<.01	6	.33	<.01	<.01	3	6	5	5
B 158314	<1	94	<3	20	<.3	20	28	1103	5.91	118	<8	2	<2	297	.5	5	<3	41	7.48	.029	<1	10	2.50	84	.01	5	.49	.07	.21	6	32	4	5
B 158315	<1	27	<3	30	<.3	37	25	322	4.68	8	<8	<2	<2	63	.3	<3	<3	246	1.50	.029	3	21	1.84	71	.24	8	1.91	.09	.08	5	12	1	4
B 158316	4	72	5	57	<.3	16	7	781	3.69	40	<8	<2	<2	16	.2	6	<3	107	4.10	.058	1	30	.83	110	.17	19	3.90	.02	.03	7	13	2	4
B 158317	1	744	4	31	<.3	12	30	737	6.97	10	<8	<2	<2	35	.2	3	3	67	2.23	.091	2	13	.49	35	.21	19	1.93	.08	.20	22	2	6	3
B 158318	2	38	<3	29	<.3	18	9	475	3.02	4	<8	<2	<2	32	<.2	<3	<3	72	1.25	.082	7	25	.77	66	.11	12	1.78	.09	.14	6	6	<1	2
B 158319	1	31	3	21	<.3	4	7	288	2.57	4	<8	<2	5	87	<.2	<3	<3	59	1.25	.117	20	14	.44	110	.08	13	1.39	.13	.15	5	<1	<1	1
B 158320	1	18	<3	18	<.3	1093	54	678	3.11	4	<8	<2	<2	20	<.2	<3	<3	41	.72	.001	4	908	9.58	30	<.01	38	.31	.01	<.01	4	2	5	10
B 158321	2	346	<3	44	<.3	10	11	2595	6.51	12	<8	<2	<2	20	.3	<3	<3	62	6.00	.081	3	16	.12	3	.12	15	1.86	.01	<.01	9	<1	4	4
B 158322	1	30	<3	24	<.3	1671	78	792	4.67	<2	<8	<2	<2	1	.2	<3	<3	28	.21	<.001	2	458	22.46	1	<.01	<3	.12	<.01	<.01	3	3	7	11
B 158323	1	7	<3	25	<.3	1581	77	787	4.61	2	<8	<2	<2	2	<.2	<3	<3	30	.29	<.001	3	506	22.24	1	<.01	<3	.14	<.01	<.01	3	<1	6	9
B 158324	1	3	<3	22	<.3	1586	78	798	4.64	<2	<8	<2	<2	2	<.2	<3	<3	29	.16	<.001	2	548	21.97	1	<.01	<3	.14	<.01	<.01	2	<1	6	12
MCK	<1	20	<3	17	<.3	1460	71	934	3.21	8	<8	<2	<2	12	<.2	4	<3	45	2.07	<.001	1	1086	12.94	20	<.01	17	.51	<.01	<.01	4	<1	5	9
STANDARD C3/FA-10R	29	67	36	170	5.7	36	11	812	3.42	62	25	<2	22	29	20.8	16	24	91	.59	.099	21	172	.61	161	.09	19	1.90	.04	.16	21	475	472	476
STANDARD G-2	2	3	3	43	<.3	7	3	549	2.06	<2	<8	<2	4	78	<.2	<3	<3	55	.68	.103	10	75	.60	242	.13	9	1.07	.12	.53	6	<1	2	<1

BORNITE

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: JUN 7 2000 DATE REPORT MAILED: June 15/00 SIGNED BY: C. [illegible] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ___ FA ___

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

GEOCHEM PRECIOUS METALS ANALYSIS

Mowat, Ursula PROJECT BORNITE File # A001695 Page 1

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

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb
B 158276	1	3	7
B 158277	1	<1	<1
B 158278	<1	2	3
B 158279	<1	9	6
B 158280	2	3	4
B 158281	<1	2	6
B 158282	9	9	6
B 158283	<1	2	7
B 158284	2	5	2
B 158285	2	4	6
B 158286	1	2	2
RE B 158286	1	5	3
RRE B 158286	1	3	3
B 158287	2	4	5
B 158288	1	1	4
B 158289	<1	4	4
B 158290	<1	4	7
B 158291	2	3	5
B 158292	9	1	3
B 158293	1	5	2
B 158294	<1	4	4
B 158295	<1	8	3
B 158296	<1	6	4
B 158297	1	2	2
B 158298	5	6	6
RE B 158298	9	6	5
RRE B 158298	7	7	6
B 158299	1	6	4
B 158300	<1	3	2
B 158301	5	5	5
B 158302	2	4	5
B 158303	<1	4	3
B 158304	<1	3	<1
B 158305	<1	5	1
B 158306	1	7	3
B 158307	<1	8	7
STANDARD FA-10R	480	461	479

95-4A

95-4

GROUP 3B - FIRE GEOCHEM AU, PT, PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.
- SAMPLE TYPE: CORE Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 6 2000 DATE REPORT MAILED: June 16/00 SIGNED BY. . . . . D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data 1 FA ___

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb
B 158308	1	<1	1
B 158309	6	1	2
B 158310	12	2	3
B 158311	<1	2	<1
B 158312	2	3	8
B 158313	3	5	9
RE B 158313	1	10	7
STANDARD FA-10R	450	467	429

95-4

Sample type: CORE. 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
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Mowat, Ursula PROJECT BORNITE File # A003022

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 158356	<1	182	6	58	<.3	58	24	648	4.03	<2	<8	<2	<2	7	.3	<3	<3	72	.80	.041	1	69	1.76	5	.37	3	2.19	.04	.01	2	4	6	14
B 158357	<1	93	6	41	<.3	66	26	650	3.51	<2	<8	<2	<2	7	.2	3	<3	38	.67	.010	<1	141	2.08	4	.15	3	2.29	.03	<.01	2	3	6	12
B 158358	<1	32	3	137	<.3	22	29	1112	3.63	5	<8	<2	<2	46	.3	<3	<3	95	2.97	.018	1	89	2.55	12	.23	3	2.21	.03	.02	3	3	9	10
B 158359	<1	13	4	31	<.3	1902	89	853	4.64	2	<8	<2	<2	1	.4	<3	<3	13	.07	.007	<1	635	16.04	6	<.01	11	.29	<.01	<.01	<2	3	2	2
B 158360	<1	7	7	57	<.3	64	26	879	4.11	<2	<8	<2	<2	79	.2	<3	<3	75	1.48	.033	<1	120	2.50	56	.23	<3	2.65	.01	.12	<2	1	2	2
B 158361	<1	16	4	36	<.3	1783	118	1373	5.46	4	<8	<2	<2	1	.6	<3	<3	<1	.04	.010	<1	210	17.33	9	<.01	23	.11	<.01	<.01	<2	1	<1	3
B 158362	<1	235	4	76	<.3	64	29	903	5.65	2	<8	<2	<2	15	.2	<3	<3	117	.79	.074	2	67	2.04	39	.43	<3	2.60	.03	.01	<2	2	1	18
RE B 158362	<1	237	5	78	<.3	70	30	910	5.68	3	<8	<2	<2	15	.5	3	<3	117	.81	.075	2	66	2.05	40	.43	<3	2.61	.04	.01	2	<1	3	18

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 R150 60C 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: AUG 15 2000 DATE REPORT MAILED: Aug 29/00 SIGNED BY. C. Leong 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) 844-2686

Cominco

URSULA MOWAT
#1405 - 1933 Robson Street
Vancouver, B.C.
V6G 1E7

12 June, 2000

Dear Ursula: ***RE: #522 & #525 / E.R.L. Job V00-0258R***

Two samples were submitted for thin sectioning.

SAMPLE R00:3402 (#522/95-3) is seen to be comprised of wispy seams and streaks of opaques, non crystalline material cemented by recrystallized quartz, chlorite, secondary amphiboles and patches of epidote. The epidote is relatively abundant. Some reddish colouration is present in the rock when very fine aggregates of hematite are concentrated.

The rock appears to be some sort of altered volcanic glass flow with the alteration assemblage quartz-epidote-chlorite being well established.

SAMPLE R00:3403 (#525/95-5) is dominated by fine grained talc present in massive forms. Seams within the talc and along the edges of the section contain wispy, bands of serpentine and carbonate (likely magnesite). A few small grains of opaques are noted.

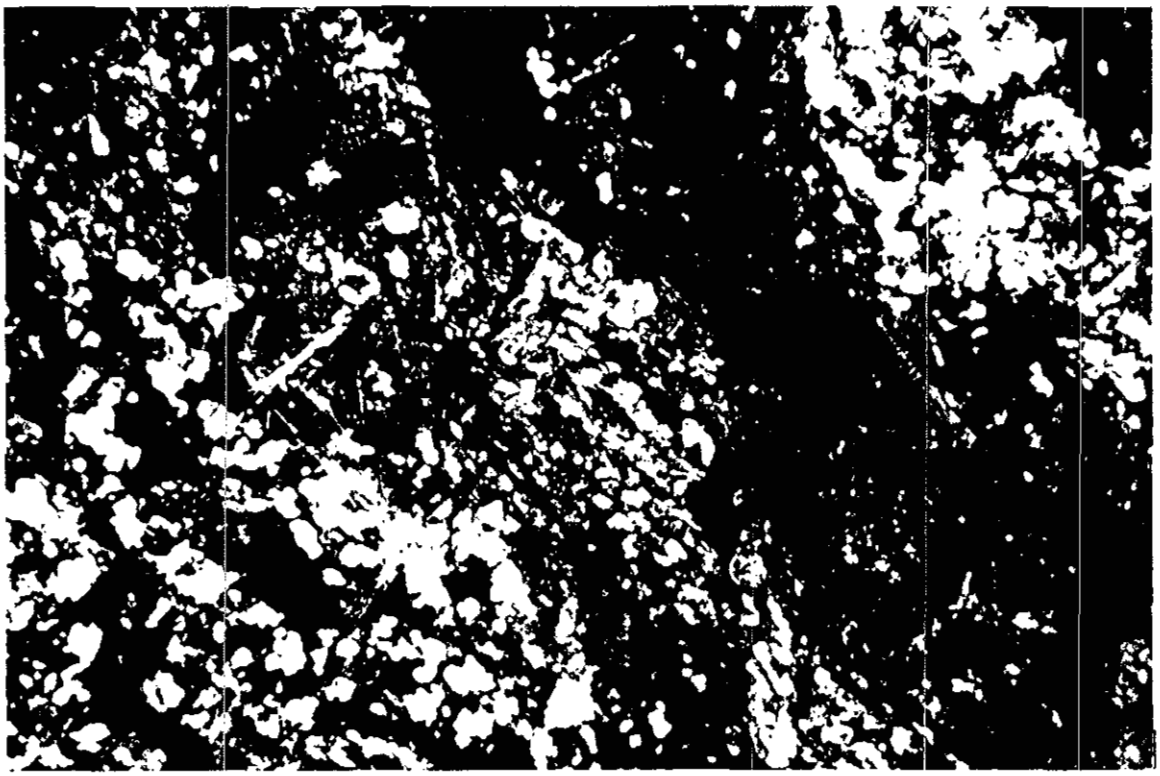
The rock is an altered mafic-ultramafic.

J.A. McLeod, M.A.Sc., P.Eng.
Manager, Exploration Technical Services

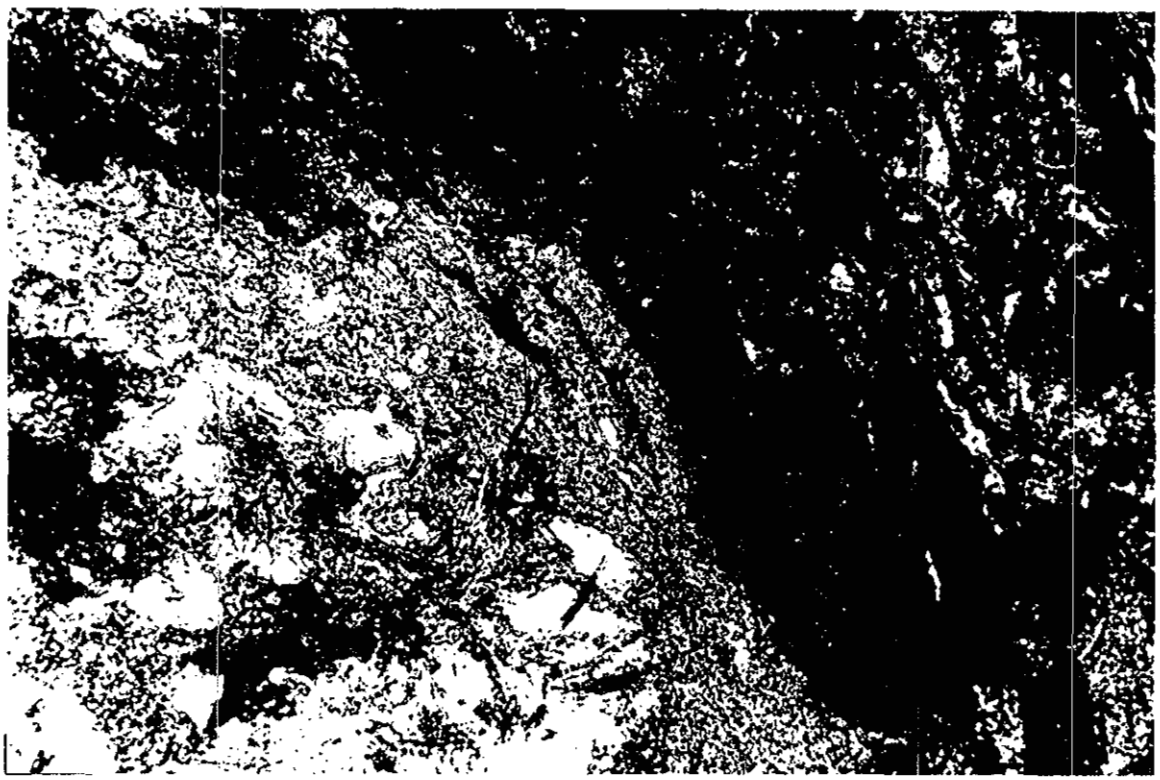
JAM/skw

App. (photos)

PHOTOMICROGRAPHS - MOWAT, URSULA (V00-0258R)

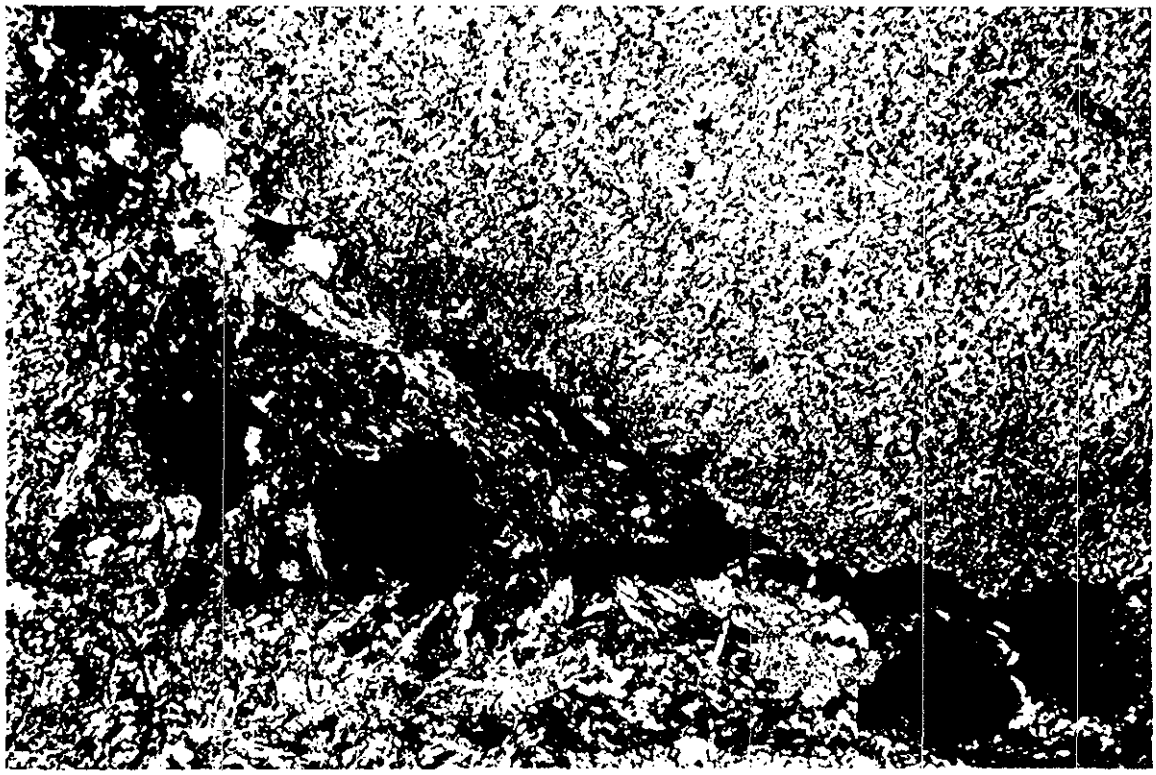


R00:3402. Opaques, quartz and epidote. Transmitted light, crossed nicols, magnification 25x.

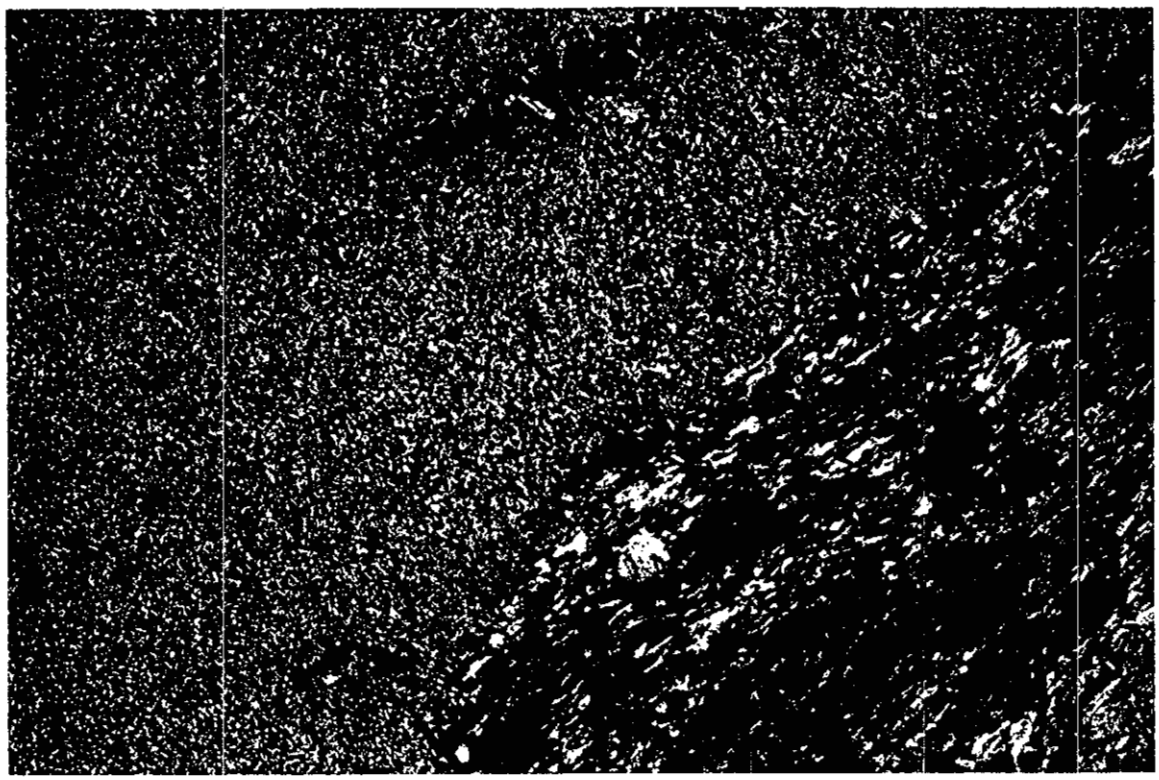


R00:3402. Transmitted light, magnification 63x.

R00:3402. As previous photomicrograph with opaques, epidote, quartz, chlorite and amphibole. Transmitted light, crossed nicols, magnification 63x.



R00:3403. Talc, serpentine with magnesite and opaques. Transmitted light, crossed nicols, magnification 25x.



R00:3403. Talc and serpentine. Transmitted light, crossed nicols, magnification 25x.

20+00W
15+00W
10+00W
5+00W
BL
TILDESLEY CREEK
4000
11+00N
9+00N
7+00N
5+00N
3+00N
1+00N
1+00S
3+00S
5+00S
7+00S
9+00S
5000
158360
158361
di
P
158362 (235)
158359
158250
Volcanic talus
158356 (182)
158358
158357 (93)
95-1
95-2
158272 (113)
V
158249
158271
158247-270 (317/214, 298)
158265 P
158263, 264 (13, 424)
(233) 158262 V
158261
Schistose V
158260 (212)
158259
158258
158255-257
158254
Sclst
158253 (242)
CAMP
158246
158247
158248
158251
158252
95-4
158276-313
95-3
4500
5000

x 158264 (426)
rock sample number
(Cu in ppm)

subcrop

drill hole

road

P peridotite
V volcanic
di diorite

N

SAMPLE LOCATION MAP

...OGICAL SURVEY BRANCH
...PORT

26,513

0 500
meters