

GEOCHEMICAL REPORT

on Bornite Group located  
2 miles S of Perow, B.C.

54° 30' 126° 26'

for Normont Copper Ltd. (N.P.L.)

May 23rd to June 27th, 1967

October 25th to 30th, 1967

93L/8W#9W

By M.J. Beley, B.Sc.

Manex Mining Ltd. (N.P.L.)

January 4th, 1968

93L-8/9

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BORNITE PROPERTY

Report  
on  
Geochemical Survey  
Bornite Group  
for  
Normont Copper Ltd. (N.P.L.)

Located on the south side of the Bulkley  
River approximately 2 miles due south of  
Perow B.C. in the Omineca Mining District.

54° 30' 126° 26'

By M.J. Beley B.Sc.

January 4, 1968

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### MAPS

Figure 1 - Geochemical Map of Results # 2  
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### LOCATION AND ACCESS

The showings are located  $54^{\circ} 30'$  and  $126^{\circ} 26'$ . The property is approximately 7 miles from Topley, B.C. by road and 4-wheel drive vehicles are necessary for the last 4 miles. The use of vehicles on this programme was essential as the camp was located  $1\frac{1}{2}$  to 2 miles from the showings for lack of a closer water supply. Future work on this property will have to be carried out from Gilmore Lake as other water sources have proven unreliable.

The northern section of the claims is moderately hilly with good rock exposures. To the south flat swampy or heavily forested areas exist with extensive windfall making travel difficult.

### FIELD PROCEDURE

A grid was laid out over the area of known mineralization to establish the trend of the structure controlling the mineralization. A transit and chain were used to lay out the baseline and turn off the lines. Pickets were then utilized to extend the lines 1,500 feet in each direction from this baseline. Stations were located every 100 feet along the lines 200 feet apart. The grid measures 3,000 feet by 3,000 feet and represents 49,600 linear feet of line.

### GEOCHEMICAL SURVEY

The area is covered by transported soil of variable depth ranging from zero to in excess of 15 feet in cat trenches. The soil horizons were generally poorly developed although it was possible to distinguish the A horizon in most instances. The samples were carefully collected from the upper B horizon by auger where possible or from small pits dug at each station.

## INTERPRETATION

A statistical analysis of the data indicates a threshold value of 10 parts per million total copper would best serve to outline the anomalies. Although a very scattered distribution of 'high' geochemical values was found, those values near the threshold demonstrate a weak west northwesterly trend which is very close to the strike direction of a prominent set of lineations observed in air photo studies. The anomalous zones on line 0+00 are open to the west and warrant further investigation to evaluate their significance.

A study of the geological data available reveals that the volcanic strata strike generally northerly. There is no apparent relationship between the trend of the geochemical anomalies and the attitude of the volcanic units in the area.

## CONCLUSIONS AND RECOMMENDATIONS

The generally weak nature of the geochemical anomalies and the very scattered distribution of the 'high' values indicates that no additional work should be considered for this property until a more favorable target is delimited.

The following points should be considered in planning additional exploration on this prospect.

1. There is a possibility that the trend of the geochemical anomalies is a reflection of mineralization controlled by the same structures which can be observed as lineations in the air photographs. Therefore it can be recommended that soil samples be collected across these lineations to further investigate the possibility of fault controlled mineralization.

The samples were dried and sieved to -80 mesh by Technical Services Laboratory in Smithers, B.C. then forwarded to Vancouver for a hot acid extraction and an atomic absorption determination.

2. The presence of disseminated chalcopyrite and tetrahedrite (?) in the brecciated volcanics suggests that an induced polarization survey would prove valuable. A study of the resistivities obtained from such a survey would enable a trace to be made of the fault structures. This survey would only be carried out if sufficient encouragement was obtained from step 1.

*Respectfully submitted,*

*M. J. Leary*

*January 4, 1968*

## COST SCHEDULE

This programme was carried out in two phases, the initial phase involved laying out the grid cutting the lines, and putting in the stations. The next step was soil sampling. Thus the schedule involves a large number of personnel working at different times. The grid was laid out from May 23 to June 17th, 1967. Soil sampling took place from October 25 to October 30th, 1967.

### WAGES

M.J. Beley	General supervision & report 6½ days at \$75.00 per day	\$487.40
M. Wetherley	Geochemist - field supervisor 6 days at \$75.00 per day	450.00
D. Burton	49 hours at \$2.61	127.89
K. Baker	146 hours at \$2.38	347.48
K. Desjarlais	106 hours at \$2.38	252.28
B. Dockrill	138 hours at \$2.38	328.44
G. Graham	183 hours at \$2.38	437.15
J. Bot	74 hours at \$2.48	183.52
L. Warren	177 hours at \$2.87	507.99
B. Walkup	12 hours at \$2.92	35.04
J. Pelissier	47 hours at \$2.43	114.21
E. Lund	10 hours at \$2.30	23.00
G. Westgarde	35 hours at \$2.43	85.05
D. Hather	36 hours at \$2.30	82.80
B. Yorke-Hardy	19 hours at \$2.73	51.87

EQUIPMENT RENTALS Vehicles, powersaws, etc. 1,250.07

FOOD AND SUPPLIES 730.46

GEOCHEMICAL ANALYSIS for total Cu  
470 samples at \$1.20 ea. 564.00

\$6,055.55



STATEMENT OF QUALIFICATIONS

I completed my B.Sc. degree at the University of British Columbia in 1965, majoring in geology and physics. Since 1959 I have been active in mining exploration for Phelps Dodge Corporation of Canada Ltd., Anco Explorations Ltd., and Molybdenum Explorations Ltd., executing and supervising geological, geochemical and geophysical surveys in British Columbia.

At present I am working as manager for Manex Mining Ltd., a management company providing exploration services for exploration companies working in the Smithers area.



M.J. Beley



NORMONT COPPER LTD. (N.P.L.) 200-535 Thurlow Street, Vancouver 5, B.C. 682-3024

File No. 100-Umineca

February 12th, 1968

Chief Gold Commissioner,  
Department of Mines & Petroleum Resources,  
Victoria, B.C.

Dear Sir,

Re: Bornite Mineral Claims  
Geochemical Report


With reference to your letter of February 1st, 1968 I have enclosed in the previously submitted report the data which you require.

Under the section 'Geochemical Survey' there follows a description of the sampling procedure - quote "samples were collected from the upper B horizon by auger where possible or from small pits dug at each station".

The fact that the samples were taken from the upper B horizon indicates that every effort was made to get below the predominantly organic A horizon to obtain samples clear of organic material from the B horizon. Each sample was collected in a Kraft paper soil sample bag and clearly marked.

I hope this clarifies all the points mentioned in your letter. If not please direct mail to me at the above address.

Yours truly,  
Normont Copper Ltd. (N.P.L.)

  
M.J. Beley

MJB/jmr

c.c. Mining Recorder - Smithers, B.C.

126°27'



54°30'

54°30'

APPROXIMATE ROAD LOCATION

NO. 18	NO. 17	BORNITE 42			
NOV 14 1969	NOV 14 1969	NOV 24 1969			
NO. 15	NO. 16	BORNITE 41	BORNITE 39		
NOV 14 1969	NOV 14 1969	NOV 24 1969	NOV 24 1969		
NO. 14	NO. 13	BORNITE 3	BORNITE 2	BORNITE 35	BORNITE 36
NOV 14 1969	NOV 14 1969	JUNE 18 1969	JUNE 18 1969	NOV 24 1969	NOV 24 1969
BORNITE 46	BORNITE 12	BORNITE 1	BORNITE 33		
NOV 24 1969	JUNE 29 1969	JUNE 18 1969	JUNE 18 1969	NOV 24 1969	NOV 24 1969
BORNITE 45	BORNITE 11	BORNITE 4	BORNITE 5	BORNITE 10	BORNITE 32
NOV 24 1969	JUNE 29 1969	JUNE 23 1969	JUNE 23 1969	JUNE 29 1969	NOV 24 1969
BORNITE 43	BORNITE 44	BORNITE 7	BORNITE 6	BORNITE 9	BORNITE 31
NOV 24 1969	NOV 24 1969	JUNE 23 1969	JUNE 23 1969	JUNE 29 1969	NOV 24 1969
	BORNITE 28	BORNITE 26	BORNITE 24	BORNITE 22	BORNITE 20
	NOV 24 1969	NOV 24 1969	NOV 24 1969	NOV 24 1969	NOV 24 1969
		BORNITE 25	BORNITE 23	BORNITE 21	BORNITE 19
		NOV 24 1969	NOV 24 1969	NOV 24 1969	NOV 24 1969

126°27'

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1153 MAP 1

To ACCOMPANY GEOCHEMICAL REPORT BY  
M.J. BELEY B.Sc. ON BORNITE GROUP  
2 MILES S OF PEROW B.C.  
OMINECA M.D. JAN 4/68

MANEX MINING LTD (NPL)  
NORMONT COPPER LTD (NPL)  
BORNITE GROUP  
SCALE 1" = 1500'

JAN 4 1968 FIG. NO. 3 MJB

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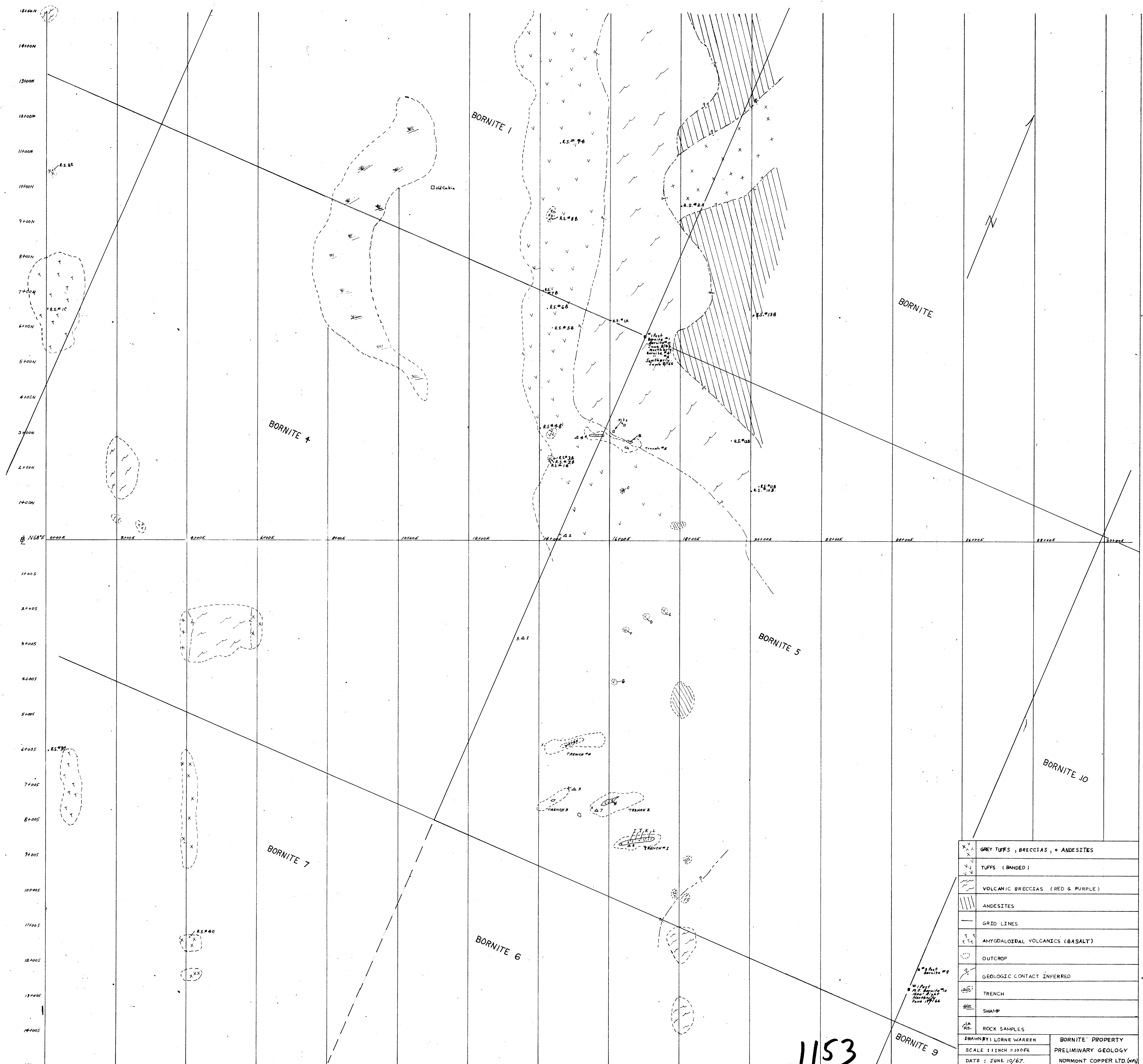
DEPARTMENT OF  
 MINES AND TECHNICAL SURVEYING  
 REPORT  
 NO. 10

TO ACCOMPANY GEOCHEMICAL REPORT  
 BY MJB ELEY B.Sc. ON BORNITE GROUP  
 2 MILES S OF PEROW B.C.  
 OMINECA M.D. JAN 4, 1968

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MANEX MINING LTD. (N.P.L.)	
NORMONT COPPER LTD. (N.P.L.)	
PROPERTY:	BORNITE
TITLE:	DISTRIBUTION OF TOTAL Cu IN SOIL
LEGEND:	CONTOUR VALUES 10 (GREEN), 20 (ORANGE), 30 (RED)
SCALE: 1 INCH = 200 FEET	DATE: Dec. 6, 1967 BY: M. Webster
Fig. No. 1	





	GREY TUFFS, BRECCIAS, + ANDESITES
	TUFFS (BANDED)
	VOLCANIC BRECCIAS (RED & PURPLE)
	ANDESITES
	GRID LINES
	AMYGDALOIDAL VOLCANICS (BASALT)
	OUTCROP
	GEOLOGIC CONTACT INFERRED
	TRENCH
	SWAMP
	ROCK SAMPLES
DRAWN BY: LORNE WARREN	
SCALE: 1 INCH = 100 FEET	
DATE: JUNE 10/67	
BORNITE PROPERTY	
PRELIMINARY GEOLOGY	
NORMONT COPPER LTD. (INC)	

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To ACCOMPANY GEOCHEMICAL REPORT BY M.J. BELEY B.Sc. ON BORNITE GROUP  
 2 MILES S OF PEROW B.C. Omineca M.D. JAN 4, 1968