

1864

GEOCHEMICAL SOIL SURVEY

NIC #1 - #4 MINERAL CLAIMS

49° 124° NE

B.O. BRYNELSEN, P. ENG.

J.D. KNAUER

NORANDA EXPLORATION COMPANY, LIMITED

VANCOUVER MINING DIVISION

MAY 20, 1968 TO MAY 29, 1968

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **1864** MAP.....

Geochemical Soil Survey
of the
Nic #1 - #4 Mineral Claims
Noranda Exploration Company, Limited

INTRODUCTION:

The Haslam Lake property includes four full-sized mineral claims. The property is located approximately six miles northeast of Powell River, B.C. near the west side of Haslam Lake. Access to the property from Powell River is by loose surface and logging roads, the latter requires a four wheel drive vehicle in some areas. A four wheel drive vehicle was used to transport men and equipment and to supply the camp during the course of this survey.

Topography ranges from gentle to steep slopes with local cliffs. Maximum relief within the property is about 1,500 feet. A portion of the area has been logged and thick underbrush occurs in places throughout the property.

Four claims were staked by Noranda Exploration Company, Limited in May 1965 to cover an area of reconnaissance stream sediments high in copper and molybdenum values.

During May 1968 a grid was established and a soil survey conducted in an attempt to locate a more specific target for the source of copper and molybdenum found in the stream sediments. A control base line was blazed and flagged at 100-foot intervals. Lines running east and west from the base line were established by chain and compass and marked by flagging and blazing. The east-west lines were spaced at 400-foot intervals north and south along the base line. Samples were taken at 200-foot intervals east and west. Claim lines, tie lines and topography were used in plotting the exact location of the grid.

Work was done under the direction of B.O. Brynelsen, P. Eng. with field supervision by J.D. Knauer and a crew of three men. Results of the soil survey are plotted on a 1 inch to 400 feet base map. The soil survey was carried out from May 20, 1968 through May 29, 1968

SUMMARY - CONCLUSIONS - RECOMMENDATIONS:

Nic 1, Nic 2, Nic 3 and Nic 4 mineral claims were covered by the soil survey to include the main area of interest based on the results from the stream sediments. Determinations were run on all soil samples for copper, molybdenum and zinc. From the results of the soil survey an area of interest was outlined with coincident anomalous copper and molybdenum values as indicated on the accompanying map. The few somewhat higher zinc values do not correspond with the anomalous copper and molybdenum values. Copper values range from a background of less than 60 p.p.m. to a maximum intensity of 480 p.p.m. Molybdenum values range from a background of less than 5 p.p.m. to a maximum intensity of 25 p.p.m. Zinc values have a background of less than 60 p.p.m. with a maximum intensity of 150 p.p.m. The general geology of the area indicates that the rock is part of the Jurassic-Cretaceous Coast Range Batholith. Outcrops show quartz-diorite and minor diorite into which a granite has intruded. Intense fracturing and alteration were noted. Molybdenite, chalcopyrite, malachite, specular hematite and pyrite were found in the outcrop.

Further work recommended on the property is as follows:

1. Induced Polarization survey in the area of interest outlined by the soil sampling.
2. Surface trenching and/or blasting followed by diamond drilling in the areas of favorable geology, geochemistry and geophysics.

GENERAL GEOLOGY:

Geologic mapping in the area covered by the Nic claims indicates the rock to be of the Jurassic-Cretaceous Coast Range Batholith. Quartz-diorite and minor diorite have been intruded by a granite stock. Rhyolite dykes were also observed. Intense fracturing and alteration occur in the area of interest. Weathering is intense over most of the outcrop but minor mineralization was observed which included molybdenite chalcopyrite, malachite, specular hematite and pyrite.

GEOCHEMISTRY:

All samples were analyzed for copper, molybdenum and zinc in the Noranda Exploration Company, Limited laboratory located at 1050 Davie Street, Vancouver 5, B.C.

Sampling Method:

Samples were obtained by digging holes with a mattock and shovel, to a depth at which the visible grey C Horizon was encountered. The C Horizon was sampled and the lower part of the B Horizon, where visible, was also sampled. Profiles were taken at specific locations on the grid. The sampled material was placed in "Hi Wet Strength Kraft, 3 1/2" by 6 1/8" Open End" envelopes and the grid station location was marked on the envelopes with indelible felt pens.

Laboratory Determination Methods:

The samples are first hung in a dry cabinet for a period of 24 hours to 48 hours. They are then mechanically screened and sifted to obtain a -80 mesh fraction.

The determination procedure for total copper is as follows: 0.125 grams of -80 mesh material is fused with potassium bisulfate. This is dissolved in .5 ml. of 0.5N hydrochloric acid. A 2 ml. aliquot is shaken with 10 ml. acetate buffer and 1 ml. biquinolin solution. The samples are then compared with colorimetric standards.

The determination procedure for total molybdenum is as follows: 0.1 gram sample of the -80 mesh material is fused with a sodium carbonate mixture. It is then dissolved in water (demineralized) and diluted to 10 ml. A 2 ml. aliquot is shaken with 2 ml. hydroxylamine hydrochloride solution and 0.5 ml. dithiol solution. The samples are then compared with colorimetric standards.

The determination procedure for total zinc is as follows: 0.1 gram sample of the -80 mesh material is fused with potassium bisulfate. This is dissolved in 5 ml. of 0.5N hydrochloric acid. Dilute to 10 ml. with 0.5N HCl. Pipette a 2 ml. aliquot of this solution in 5 ml. of buffer solution. Add 5 ml. of 0.001% dithizone. The samples are then compared with colorimetric standards.

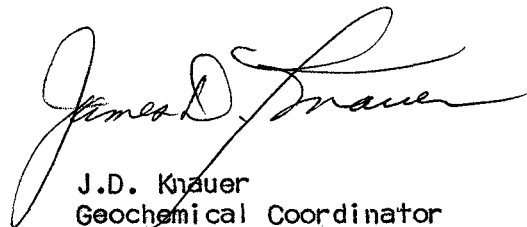
RESULTS:

Values for total copper showed a background of less than 60 p.p.m. to a maximum intensity of 480 p.p.m. Total molybdenum ranged from a background of less than 5 p.p.m. to a maximum intensity of 25 p.p.m. Zinc values have a background of less than 60 p.p.m. with a maximum intensity of 150 p.p.m. The more intense copper and molybdenum values coincide quite well and outline a primary area of interest (see map in pocket). The anomalous area is also quite favorable with regard to the geologic data. The few slightly higher zinc values do not appear to add anything to the interpretation. Further work is warranted in the anomalous area as previously stated in this report.

Respectfully submitted,



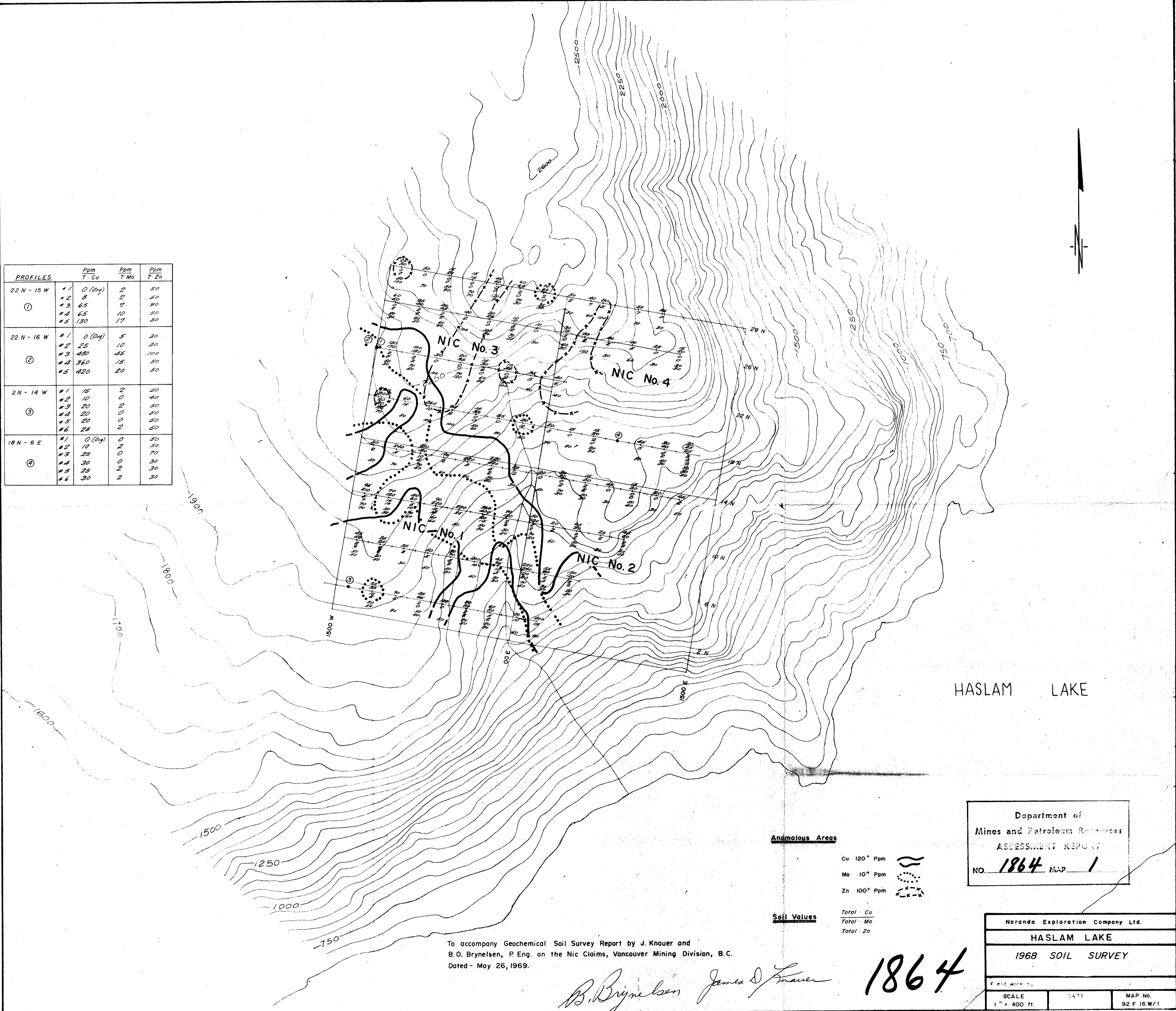
B.O. Brynelsen, P. Eng.



J.D. Krauer
Geochemical Coordinator


May 26, 1969


PROFILES		Ppm		Ppm
		T. Cu	T. Mo	
22 N - 15 W ①	#1	0 (Org)	2	50
	#2	8	2	50
	#3	65	7	80
	#4	65	10	50
	#5	130	17	50
22 N - 16 W ②	#1	0 (Org)	5	30
	#2	25	10	30
	#3	480	45	100
	#4	360	15	50
	#5	420	20	50
2 N - 14 W ③	#1	15	0	50
	#2	10	0	40
	#3	20	0	50
	#4	20	0	50
	#5	20	0	50
	#6	25	0	50
18 N - 6 E ④	#1	0 (Org)	0	50
	#2	10	0	50
	#3	25	0	70
	#4	30	0	30
	#5	25	0	30
	#6	30	2	30

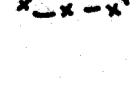


HASLAM LAKE

Anomalous Areas

Cu 120+ Ppm 

Mo 10+ Ppm 

Zn 100+ Ppm 

Soil Values

Total - Cu

Total - Mo

Total - Zn

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **1864** MAP **1**

To accompany Geochemical Soil Survey Report by J. Knauer and
B.O. Brynelsen, P. Eng. on the Nic Claims, Vancouver Mining Division, B.C.
Dated - May 26, 1969.

B. Brynelsen James D. Knauer **1864**

Noranda Exploration Company Ltd.
HASLAM LAKE
1968 SOIL SURVEY

Field work by _____
SCALE 1" = 400 ft. DATE _____ MAP No. 92 F 16 W/1