

1039

GEOCHEMICAL REPORT

PAT CLAIMS, WHITEMAN CREEK

50° 119° SW

B. BRYNELSEN

NORANDA EXPLORATION COMPANY, LIMITED

VERNON MINING DIVISION

JULY 10, 1967 TO JULY 22, 1967

#1 Soil Survey Map

Noranda Exploration Company, Limited  
Geochemical Soil Survey  
of the  
Pat Mineral Claims

INTRODUCTION:

The following is a report on the geochemical soil survey and reconnaissance geology done on 15 Pat mineral claims, located in the Whiteman Creek area along Whiteman Creek approximately eight miles from its mouth. Whiteman Creek flows east into the northern part of Lake Okanagan. The ground was staked during August of 1966 to cover the area of reconnaissance silt values high in molybdenum. A soil survey was conducted as the next step in locating the source of molybdenum found in the stream sediments. The work was done under the direction of B. O. Brynelsen by a crew of five field assistants. A grid was established by chain and compass and was controlled by flagging and blazing. The lines were spaced at 800 foot intervals and samples were taken along these lines every 200 feet. Claim lines and tie lines were used to help in plotting the exact location of the grid. Results of the soil survey are plotted on a 1" = 400' scale map. The soil survey was carried out from July 10, 1967 thru July 22, 1967.

SUMMARY - CONCLUSION - RECOMMENDATIONS:

The soil survey on the Pat claims (Pat 4, 6, 8, 10, 12 and 21 thru 30, 43, 45, and 47) covered the main area of interest shown by the reconnaissance silting. From the results of the soil sampling and reconnaissance geology a favourable area approximately 800 feet in width and 1600 feet in length was outlined. Additional high molybdenum values were encountered on other portions of the grid. Maximum intensity was 75 ppm molybdenum. The anomalous values correspond with an altered syenite. The syenite has been leached on the surface with only secondary oxides remaining. This could be the cause of the

anomalous value in both the stream sediments and the soils.

Further work recommended on the property is as follows:

1. Soil sample intermediate 400' lines at 200' intervals in the areas of interest shown by the original samples.
2. In the main anomalous area, surface blasting to expose fresh, unleached rock, if possible.

#### GENERAL GEOLOGY:

Reconnaissance geology shows that the area of interest is a Mesozoic or Tertiary syenite stock with quartz latite porphyry dykes. There is evidence of some minor faulting within the stock. The stock was intruded into either Paleozoic or Mesozoic metasediments.

#### GEOCHEMISTRY:

All analyses for molybdenum and for copper were made in the Noranda Exploration Company, Limited laboratory located at 1050 Davie Street, Vancouver, B. C.

#### Sampling Method:

The samples were obtained by digging holes with a mattock and shovel, to a depth at which the grey C Horizon was encountered. Two samples were then taken; one from the overlying brownish B Horizon, and one from the C Horizon. In some cases it was possible to obtain only one representative sample. The sampled material was then placed in "Hi Wet Strength Kraft, 3 1/2" by 6 1/8" Open End" envelopes and the grid station locations were marked on the envelopes with indelible felt pens.

#### Laboratory Determination Method:

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 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 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.

RESULTS:

Values ranged from 0 ppm to 75 ppm molybdenum on the sampled grid. The main area of interest lies in the north east portion of the grid with values to a maximum of 75 ppm total molybdenum. The area is approximately 800 feet in width and 1600 feet in length, this also corresponds with favourable geology. There also are erratically scattered highs on other portions of the grid which, with more detailed sampling, could prove more interesting.

Respectfully submitted,

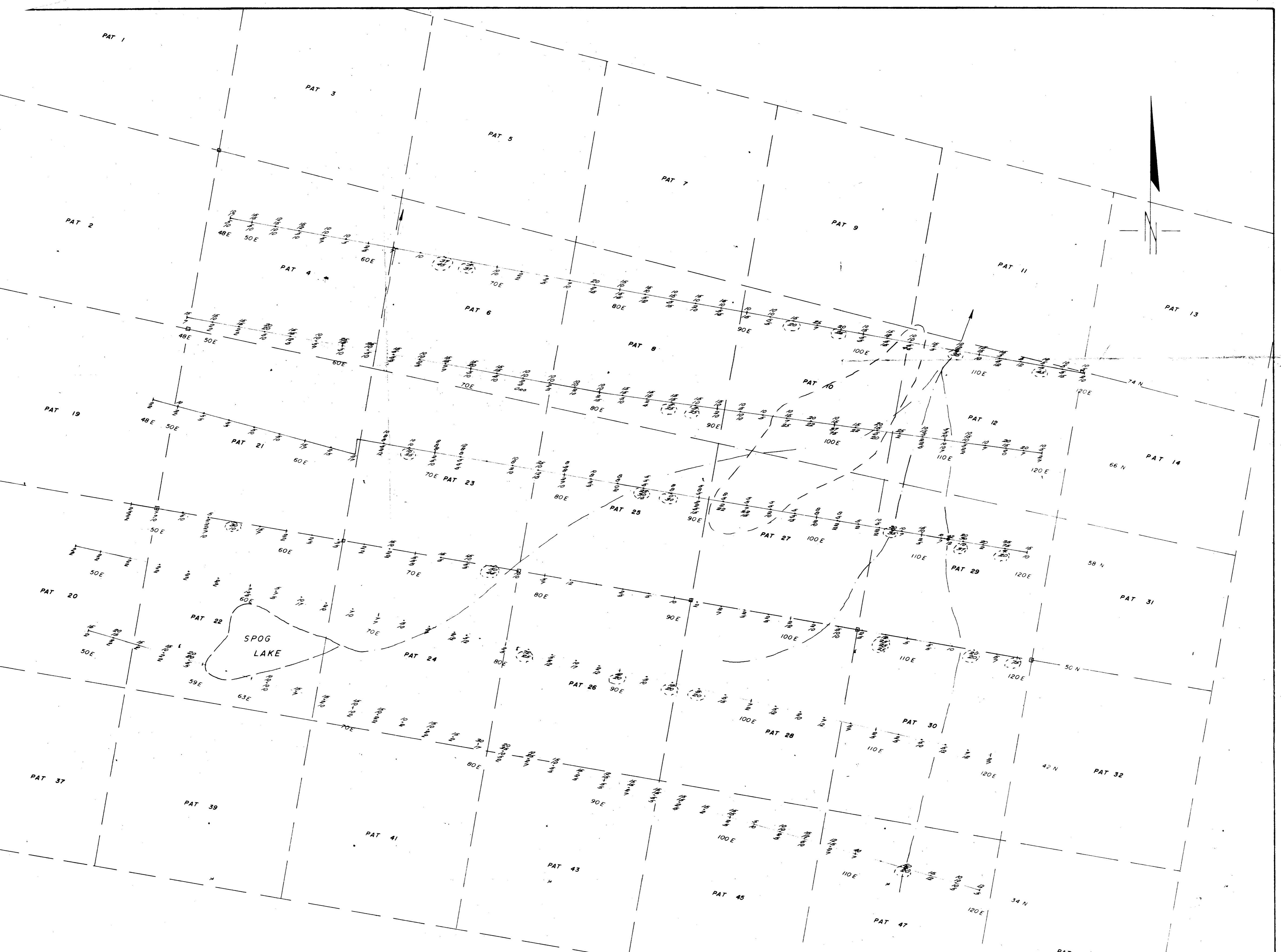


*B. Bryneksen*

B. O. Bryneksen

August 10, 1967





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Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1039 MAP #1

"To accompany Geochemical Survey Report by  
B.O. Brynelsen, P. Eng., on the Pat Mineral  
Claims, on Whiteman Creek, Vernon M. D. dated  
August 10, 1967."

*B. Brynelsen*

Total Cu  
Total Mo  
① SILT SAMPLE HCl-Cu  
Total Mo  
⊖ Anomalous Areas

NORANDA EXPLORATION COMPANY, LIMITED		
WHITEMAN CREEK PROPERTY		
<b>SOIL SURVEY</b>		
Scale 1" = 400'	Date JULY, 1967	Map No. 82 L / 4 E