GEOCHEMICAL SOIL SURVEY

1934

MIKE 1 & 2 FRACTIONS & MIKE 1-10, BILL 2-11, JB 20-21

MINERAL CLAIMS

50° 120° NW

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J.D. KNAUER

NORANDA EXPLORATION COMPANY, LIMITED

KAMLOOPS MINING DIVISION

APRIL 25, 1969 to JUNE 29, 1969

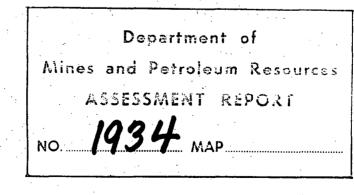


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RECOMMENDATIONS AND CONCLUSIONS

Geochemical Soil Survey

of the

Mike 1-10, Mike 1 & 2 Fraction, Bill 2-11 and JB 20-21 Mineral Claims Noranda Exploration Company, Limited

INTRODUCTION:

The claims referred to in this report are owned by North Pacific Mines Ltd. (NPL) and are under option to Thermochem Industries Limited (which changed its name to Brameda Resources Limited) which has a working agreement with Noranda Exploration Company, Limited (No Personal Liability). The names and record numbers of the claims are: Mike I-10, Mike I Fraction, Mike 2 Fraction, Bill 2-11 and JB 20-21; 50661 to 50670, 50671, 50672, 50674 to 50683 and 50639-50640 respectively. The survey was conducted on the above twenty two mineral claims and two fractional claims located approximately 16 miles south of Savona, B.C. Access to the claims is by loose-surface, all-weather road to a turn off approximately 3 miles north of the Mamit Lake-Witches Brook intersection, which can be reached from Ashcroft, Merritt or Savona, B.C. From this turnoff a two-wheel drive road leads west and north to the claims. A four-wheel drive vehicle was used to transport men, equipment and supplies during the course of the survey.

Elevation ranges from 3,900 to 4,400 feet. Topography is gentle and rolling with local steep slopes.

During April, May and June of 1969 Noranda Exploration Company, Limited established a grid and a Geochemical Survey was performed on the Mike 1-10, Mike 1 Fraction, Mike 2 Fraction, Bill 2-11 and J.B. 20-21 claims.

Work was done under the direction of R.C. Heim, Ph.D., P. Eng. with field supervision by J.D. Knauer, a crew of fourteen men and line preparation by Smith and Hamilton Contractors. Results of the Geochemical Survey are plotted on a 1 inch to 400 feet base map. The survey was carried out from April 25 through June 29, 1969.

GENERAL GEOLOGY:

The area of the survey is underlain by quartz diorite and porphyries of the Guichon Creek batholith. Mineralization consists of pyrite, chalcopyrite, bornite, magnetite and hematite. Secondary minerals include malachite and azurite. Mineralization is associated with shearing and fractured zones.

GRID PREPARATION:

Roads, creeks, topography and tie lines were used in plotting the exact location of the grid on a topographic map made from aerial photographs. A control base line extending north-south was surveyed, chained, blazed and picketed at 100-foot intervals. Lines running east-west were established by chain and compass, and marked by blazing, flagging and pickets. The eastwest lines were spaced at 400-foot intervals north-south along the base line.

GEOCHEMI STRY :

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

Sampling Method:

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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 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.

Soil samples were taken at 200-foot intervals along the east-west lines.

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. hydroxlyamine hydrochloride solution and 0.5 ml. dithiol solution. The samples are then compared with colorimetric standards.

Presentation of Results:

Results of this survey are presented on a plan map showing copper and molybdenum determinations in parts per million. Copper values greater than 180 p.p.m. are contoured by solid lines and molybdenum values greater than 2 p.p.m. are contoured by dotted lines.

Discussion of Results:

Values for total copper range from a background of less than 100 p.p.m. to a maximum intensity of 480 p.p.m. Molybdenum values showed a background of 0-2 p.p.m. with only I determination greater than 2 p.p.m. Results for total copper show scattered high values over the entire grid, but no definite anomalous zone was indicated. The one 5 p.p.m. molybdenum value cannot be considered anomalous.

RECOMMENDATIONS AND CONCLUSIONS:

Recommendations are as follows:

 Extension of the soil survey to the north to cover the remaining claims. The soils should be taken on lines spaced 800 feet apart along the base line rather than 400 feet apart.

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2. Induced Polarization survey on a reconnaissance basis. Upon completion of the above mentioned surveys a comprehensive study of all information including the completed detailed geological mapping should be made to determine if any drilling targets exist.

Respectfully submitted,



R.C. Heim, Ph.D., P. Eng.

J.D. Knauer Geochemical Coordinator

July 31, 1969

