# 1917

GEOCHEMICAL SOIL SURVEY;

DW 1-6, DW I FRACTION, KRAIN 1 & KRAIN 6 FRACTION

50° 121° NE

B.O. BRYNELSEN, P. ENG.

J.D. KNAUER

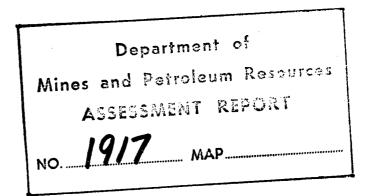
# NORANDA EXPLORATION COMPANY, LIMITED

KAMLOOPS MINING DIVISION

MAY 31, 1969 TO JUNE 7, 1969

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# Geochemical Soil Survey

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#### DW 1-6, DW 1 FRACTION, KRAIN 1 AND KRAIN 6 FRACTION

#### MINERAL CLAIMS

Noranda Exploration Company, Limited

#### INTRODUCTION:

The claims referred to in this report are a portion of the Bose Group and are beneficially owned by Comet Krain Mining Corporation Ltd. (NPL) under option to North Pacific Mines Ltd. (NPL) and held by Estey Agencies Ltd. as trustee. Claims are further optioned by Krain and North Pacific 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 survey was conducted on seven full-sized mineral claims and two fractional claims located south of Forge Mountain approximately 16 miles south-east of Ashcroft, British Columbia. Access to the claims is by paved road from Ashcroft to a mile below the Bethlehem mill and from this point five miles of two-wheel drive road leads north to the claim group. A two-wheel drive vehicle was used to transport men and equipment during the course of the survey.

Topography ranges from gentle to steep slopes with local cliffs. Elevation ranges from 5,200 to 5,650 feet above sea level.

Previous work on the area covered by this survey consisted of a limited Induced Polarization survey and bulldozer trenching.

During May and June of 1969 Noranda Exploration Company, Limited established a grid and a Geochemical Survey was performed on the DW 1-6, DW 1 Fraction, Krain 1 and Krain 6 Fraction claims.

Work was done under the direction of B.O. Brynelsen, P. Eng. with field supervision by J.D. Knauer and a crew of ten men. Results of the geochemical survey are plotted on a 1 inch to 400 feet base map. The survey was carried out from May 31 through June 7, 1969.

# GENERAL GEOLOGY:

The area is underlain by quartz diorite and porphyries of the Guichon Creek batholith. In certain areas tertiary pyroclastics and lavas overlie the Guichon rocks. Mineralization consists of pyrite, chalcopyrite, bornite, malachite, hematite and molybdenite.

#### **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. The control base line extending north-south was chain, 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 east-west lines were spaced at 400-foot intervals north-south along the base line.

## GEOCHEMISTRY:

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:

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.

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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. dithicl 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 400 p.p.m. are contoured by solid lines and molybdenum values greater than 12 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 2,600 p.p.m. Molybdenum values showed a background of 0-5 p.p.m. to anomalous values greater than 12 p.p.m. Results for copper show an anomalous zone extending from north to south and west of the canyon. The anomalous molybdenum values are within the copper anomalies on the north.

#### RECOMMENDATIONS AND CONCLUSIONS:

Recommendations are as follows:

- I. Extension of the soil survey to the north,
- 2. An Induced Polarization survey,
- 3. Detailed geological mapping.

Upon completion of the above mentioned surveys a comprehensive study of all information should be made to determine if any drilling targets exist.

Respectfully submitted,

B.O. Brynelsen, P. Eng.

J.D. Knauér Geochemical Coordinator

July 7, 1969

