CLAIMS: Pehr 1, 2, 4; Lady; Geochemical Soil Survey Black Mountain Property 54° 126° NE 931/10E G.E. Dirom, P. Eng. 13L- 7/10 J.D. Knauer Noranda Exploration Company, Limited Omineca Mining Division October 13, 1967 to December 7, 1967



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GEOCHEMICAL SOIL SURVEY

BLACK MOUNTAIN PROPERTY

54⁰ 126⁰ NE

G.E. Dirom, P. Eng. J.D. Knauer

NORANDA EXPLORATION COMPANY, LIMITED

OMINECA MINING DIVISION

October 13, 1967 to December 7, 1967

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Noranda Exploration Company, Limited Geochemical Soil Survey of the Black Mountain Property

INTRODUCTION:

The following report covers a geochemical soil survey on the Pehu #1, Pehu #2, Pehu #4, Lady, Lucky, Py #1, Py #2, Pat #1, Pat #2, Pat #4, Al #1, West #3 and West #4 Mineral Claims, located approximately 14 miles north-northeast of Houston, B.C. and 6 miles northwest of Perow, B.C. Black Mountain is near the center of the area of interest. Previous work on the property consisted of stripping, trenching and blasting in the area of the showing. On October 10, 1967 Noranda Exploration Company, Limited acquired the Black Mountain Claims through an option with Normont Copper Ltd. (N.P.L.). A grid was established and a soil survey conducted in an attempt to determine if the copper mineralization extended into the surrounding areas where the depth of the overburden prevented the bedrock from being exposed by surface trenching. A control base line extending north-south was cut and picketed at 100 foot intervals. Lines running east and west from the base line were established by chain and compass, cut and marked by pickets. 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 and roads were used in plotting the exact location of the grid. Work was done under the direction of G.E. Dirom, P. Eng., with field supervision by J.D. Knauer and a crew of four men. Results of the soil survey are plotted on a 1 inch to 400 feet base map. The soil survey was carried out from October 13, 1967 through December 7, 1967.

SUMMARY-CONCLUSIONS-RECOMMENDATIONS:

Pehu #1, Pehu #2, Pehu #4, Lady, Lucky, Py #1, Py #2, Pat #1, Pat #2, Pat #4, Al #1, West #3 and West #4 claims were covered by the soil survey to include the main area of interest, known at the present time, determined by previous work. Results of this survey gave no indication of an extension of the known mineralized zone. Copper values range from 5 p.p.m. to 90 p.p.m. with a background of 20 - 30 p.p.m.

No further soil sampling is recommended in this immediate area at the present time. Drilling is recommended in the area where mineralization was exposed by stripping and trenching.

GENERAL GEOLOGY:

Rocks exposed by stripping and trenching in the area of shallow overburden are altered Hazelton andesitic tuffs, breccias, flows, and graywackes. Alteration of the rocks includes general bleaching, carbonatization and chloritization.

Mineralization occurs in veins and fractures and consists of chalcopyrite, bornite, calcite and hematite.

GEOCHEMISTRY:

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

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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. One sample was then taken from the lower part of the overlying brownish B Horizon. 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 drying 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 zinc is as follows: O.I 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 aliquote of this solution into 5 ml of buffer solution. Add 5 ml of 0.001 to dithizone. The samples are then compared with colorimetric standards.

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RESULTS:

Values for copper showed a range of 5 p.p.m. to 90 p.p.m. No anomalous areas were outlined from these results. Test profiles were also analysed for zinc. The only anomalous copper values were in one test profile in shallow overburden near exposed mineralization.

Respectfully submitted,

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James D. Knauer

Geochemical Co-ordinator

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Gavin E. Dirom P. Eng. May 27, 1968



