UMEX

UNION MINIERE EXPLORATIONS AND MINING CORPORATION LIMITED

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ASSESSMENT REPORT

GEOCHEMICAL ROCK AND SOIL SURVEY

ND CLAIMS

ND #1, 2, 4, 7, 8 Mineral Claims Record Numbers 132468, 69, 71, 74, 75 Omineca Mining Division, British Columbia

N.T.S. 940/14E

Latitude 56⁰01' Longitude 125⁰35'

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A.M. Pauwels, B.Sc. Department of nes and Petroleum Resources ASSESSMENT REPORT Work Dates: August 15-18, 1976 NO. 5957 MAP

Date: August 26, 1976

Owner: Union Miniere Explorations and Mining Corporation Limited

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ASSESSMENT REPORT GEOCHEMICAL ROCK AND SOIL SURVEY ND CLAIMS

INTRODUCTION

The ND claim group is located approximately 38 miles northwest of Germansen Landing, B.C. Access to the property is by chartered helicopter from either Johanson Lake or Germansen Landing, B.C. This report covers assessment requirements for the following claims:

| Claim | Name | Record Number | Record Date |
|-------|------|---------------|--------------------|
| ND 1, | 2,4 | 132468-69, 71 | August 26, 1974 |
| ND 7, | 8 | 132474-75 | September 18, 1974 |

Soil sampling, rock sampling, and line location were done on August 16, 17, and 18, 1976. The field work was completed by A.M. Pauwels, B.Sc., and E. Perkins, B.Sc., geologists.

GRID CONTROL

Compass and chain were used to locate the lines. The base line was oriented $N80^{\circ}W$ and cross lines were oriented $N10^{\circ}E$ at 121.5m intervals along the base line. Lines were flagged and marked at 30.5m intervals. Samples were taken partly at 30.5m and partly at 61m intervals. The location of the rock samples was measured by chain and compass from the nearest survey line.

GEOLOGY

The claims are located within the Hogem Batholith of Late Jurassic to Early Cretaceous Age. According to geological mapping in 1974 and 1975¹ the area of the soil and rock sample survey is underlain by fine-grained foliated syenite sparsely mineralized with pyrite and chalcopyrite.

GEOCHEMICAL SURVEYS

Method

A total of 89 soil samples and 16 rock samples were collected. All

Assessment Report on Geological Mapping on Mineral Claims ND 1 to 8, by A.M. Pauwels, B.Sc., and A.A. Burgoyne, P.Eng., September 17, 1975.



samples were analysed for copper. At each soil sample location a pit was dug with a shovel to a depth of two feet or less, depending on soil development and a sample was taken from the B soil horizon. Where no distinctive soil development was noted or where soil horizons were greatly disturbed by frost action the C soil horizon was sampled. The soil was then placed in a Kraft paper soil sample bag and marked.

The soil development in the surveyed area is:

- Ao Organic litter, 0 to 2 cm thick but thicker in swampy areas and valley bottoms.
- A1 Decomposed organic debris and humus, rich black in colour, 0 to 5 cm thick but considerably thicker in swampy areas and valley bottoms.
- A2 Light coloured horizon of maximum eluvation. Thickness varies from 3 to 8 cm; spotty distribution.
- B Brown to orange in colour, loose structure, accumulation of clay minerals, iron rich minerals and organic matter 0 to 20 cm thick.
- C Weathered bedrock or glacial overburden.

Rock samples were taken from bedrock outcrops. Care was taken to chip away the outer zone (0-2 cm thick) of weathering. Five to fifteen chips were collected at each location over a width of 1.5 to 5m.

Analytical Treatment

The samples were analysed by Chemex Labs Ltd. of North Vancouver, B.C. The soil samples were dried in their bags at a temperature of 50° C and sieved through a -80 mesh screen. One-half gram portions of the -80 mesh fraction were placed in culture tubes and digested in 4 ml of a perchloric-nitric acid solution for three hours. The digested samples were bulked to a specific volume with deionized water and then aspirated into an atomic absorption spectrophotometer. Calibration of the spectrophotometer is done by preparation of copper standard solutions daily.

Rock samples are pulverised to -100 mesh and one-half gram of this is further digested and analysed in the same way as soil samples.

Results

A total of 89 soil samples and 16 rock samples were collected. All samples were analysed for copper. The results are illustrated on Figure 2. 2

The limited extent of the survey makes statistical analysis of the results unreliable. Parallel to a soil sample survey conducted in 1973 on nearby claims² samples over 75 ppm Cu are considered possibly anomalous and samples over 210 ppm Cu are considered anomalous.

Values obtained from rock chip samples parallel the soil sample survey except for some higher values found near Line 8E 1N and 11E 8N. Areas with possible anomalous copper are found near the base line from 4W to 8E and along Line 6N from 16W to 8W and along 8N from 4E to 11E. These areas have some outcrop of foliated symmitte mineralized with pyrite and sparse chalcopyrite. The highest anomalous values near Line 0/4E could be caused by bornite mineralization found in situ immediately upslope.¹ The high values along Line 11E could be caused by creek transport from the same source area.

CONCLUSIONS AND RECOMMENDATIONS

Rock and soil samples indicate very weak copper mineralization in foliated syenite. Some high values in soils are probably caused by downslope migrations of uneconomic bornite mineralization in quartz veins.

No further work is recommended for these claims.

Respectfully submitted,

Paula

A.M. Pauwels, B.Sc.

²Assessment Report on Ground Magnetics, Geochemical Soil Sampling and Geological Mapping: Mineral Claims Rain 1-58, 63-72, 74, 78-88, Amp 1-7, by A.A. Burgoyne, P.Eng., and A. Pauwels, B.Sc., for Union Miniere Explorations and Mining Corporation Limited, November 27, 1973.

APPENDIX I

STATEMENT OF EXPENDITURES

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MOBILIZATION

| Cessna 180 Charter, Smithers-Johanson Lake, August 15, 1976, Trans-Provincial Airlines, Smithers, B.C. | \$ 319.00 |
|--|-----------|
| 206 Charter, Johanson-Property, 2 hours @ \$260/hr., August 15, August 19 - Northern Mountain Helicopters, Prince Coarses B.C. | : |
| George, B.C. | 520.00 |

PERSONNEL

| Ε. | Perkins, | August | 16, | 17, | 18 | - | 3 | days | 6 | \$60/day | 180.00 |
|----|----------|--------|-----|-----|----|---|---|------|---|----------|--------|
| A. | Pauwels, | August | 16, | 17, | 18 | - | 3 | days | 0 | \$93/day | 279.00 |
| Fo | ođ | | | | | | | | | - | 35.00 |

ANALYSIS

| 89 soil | samples | analysed | for | Cu | - | Chemex | Labs, | North | Vancouver | 128.16 |
|---------|----------|----------|-----|----|---|--------|-------|-------|-----------|--------|
| TO LOCK | samples | analysed | | | | | • | | | 36.00 |
| Freight | for samp | les | | | | | | | | 12.00 |

\$1509.16

APPENDIX 11

STATEMENT OF QUALIFICATIONS

I, Andre Pauwels, do certify that

- 1) I am a geologist residing at 490 Mariposa Court, Richmond, B.C.
- 2) I am a graduate of the State University of Ghent (Belgium) with a Bachelor Degree in Geology in July 1970.
- 3) That I have practised my profession as geologist for six years in Canada with Union Miniere Explorations and Mining Corporation Limited.
- 4) That I personally did the surveys described in this report.

I. Parals

A.M. Pauwels ' August 31, 1976



Lake ND#8 Department of Mines and Petroleur ASSESSMENT RUNGER NO. 5957 MAP #1 ND CLAIMS Geochemistry Cu in Soils and Rocks 200' 400' 1/4800 Scole UMEX CORPORATION LTD. Drawn by AP Date Avg 76 Surveyed by AP.EP. DWG. No 76 -