## UNION MINIÈRE EXPLORATIONS AND MINING CORPORATION LIM AND MINING CORPORATION LIMITED

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### ASSESSMENT REPORT ON GROUND MAGNETOMER SURVEYS ON

BOLDUC MINERAL CLAIM

Record No. 269 Victoria Mining Division

N.T.S. 92C9w

48°44'N 124° 17'W

by

A. Pauwels, B.Sc.

Owner and Operator:

Union Miniere Explorations and

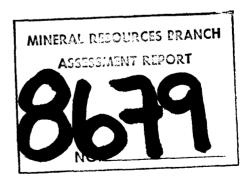
Mining Corporation Limited.

Work Dates:

August 4 - 11th, 1980

Report:

November 17, 1980.



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FIGURE 1 - Bolduc claim location 1/50,000

# ASSESSMENT REPORT ON GROUND MAGNETOMETER SURVEYS ON BOLDUC MINERAL CLAIM

#### INTRODUCTION

The Bolduc claim is located 12 km due south of Honeymoon Bay on southeastern Vancouver Island (See Figure 1). The claim area is easily reached by logging roads (20 km by road), belonging to B.C. Forest Products.

Elevations on the claim range from 550 to 1000 m on the western reaches of the claim. The claim straddles the boundary of the E & N Railway Land Grant. No mineral rights are presently retained by the E & N Railway Company over the Bolduc claim area.

Magnetometer surveys were done between August 4 and 11, 1980. The work was slowed down by slash burning in the area.

The surveys were planned and supervised by A. Pauwels, B.Sc. Messrs. H. Holm and R. Turna did the line placement and magnetometer readings.

GEOLOGY AND MINERALISATION

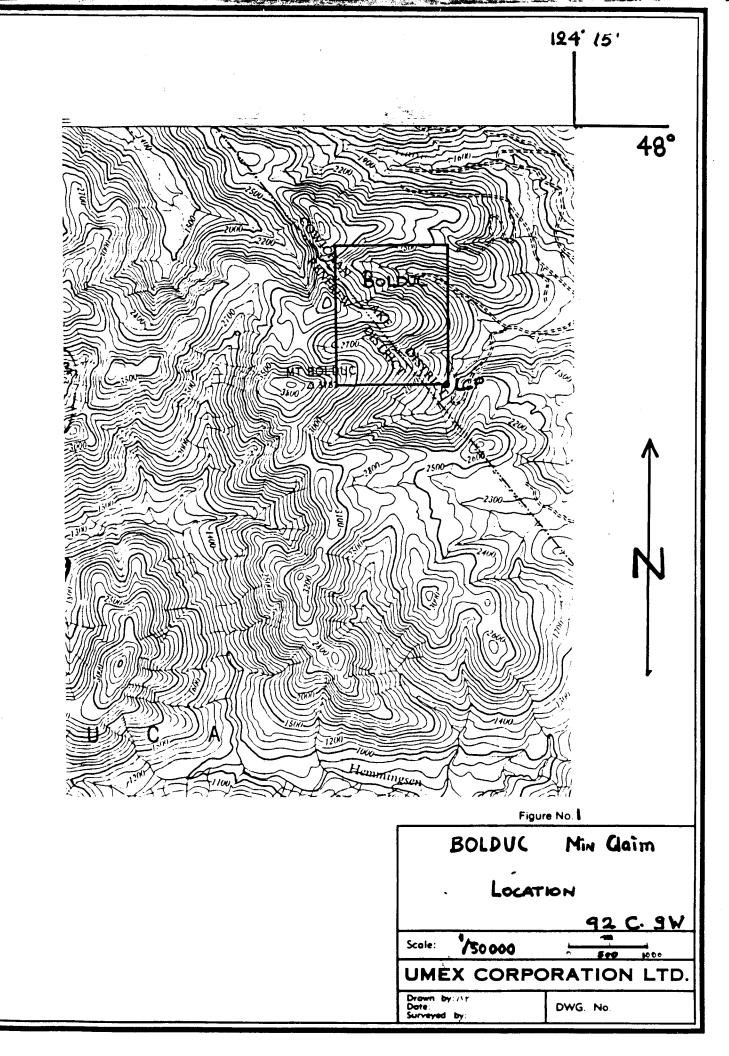
The property is underlain by Triassic Basalts of the Karmutsen Formation, overlain by the Quatsino formation (Upper Triassic). Discontinuous lenses of limestone interlayered in the top parts of the Karmutsen volcanics, are also present on the property. Close to half of the rock outcrops on the property consist of fine ground diorite intruding both the volcanics and the sediments.

Mineralisation on the property consists of garnet-epidote skarns in limestone with rratic pods and stringers of magnetite and chalcopyrite. Such mineralization is wide spread in the area south of Cowichan Lake and exploration has been considerable in the past. Only skant information of this exploration is available in public files as until recently the mineral rights belonged to the E & N Railway Company. No record could be found of previous work on the Bolduc claim specifically. Immediately northeast of the claim, extensive trenching is visible exposing garnet skarn in limestone with massive magnetite pods. Prospecting on the property showed the existence of a 20 to 50 m thick limestone horizon, interlayered with the Karmutsen volcanics — a short stratigraphic distance below the main Quatsino limestone-Karmutsen volcanics contact. Two small showings with magnetite and chalcopyrite were observed in this limestone. The magnetomete survey was aimed at tracing the magnetite mineralisation in this limestone band.

MAGNETOMETER SURVEY

#### Line Placement

Lines were all traced by compass, marked with coloured flagging, and distances measured with a hip chain. Stations were marked every 25 meters. The lines were run north-south and were spaced 150 meters apart.



35.13

#### Magnetometer Survey

The instrument used was a McPhar M700 magnetometer which measures the vertical component of the earth's magnetic field. The maximum sensitivity of the instrument is 20 gamma's on the 1000 gamma scale division. A base station was selected at 0+3W of the line grid. Twice daily, checks at this base station permitted corrections of the readings for divisional variations. Readings were taken every 12.5 m over a total length of 8.8 km. The results of the survey are illustrated in Figure 2.

Most values range from -300 to + 1000 gamma's. Higher values ( 1000 gamma's) coincide with irregular zones of skarn (garnet-epidote marble) in limestone. Spot peak values (37,000 gamma's) were found over outcropping magnetite near 0+00.

It is interpreted that the +1000 gamma contour closely outlines areas of skarns with magnetite in limestone. The values over these zones of skarnification range from 1000 to 4000 gamma's.

#### CONCLUSIONS AND RECOMMENDATIONS

Ground magnetic surveys clearly outlined areas of skarnification with magnetite on the Bolduc claims.

High spot values up to 37,000 gamma's were found in the vicinity of outcropping minor magnetite mineralisation.

The low amplitude (1000 - 4000 gamma's) of the magnetic response over other areas of skarnification is an indication of their low magnetite content. No further magnetic surveys are recommended on the Bolduc claim.

Some further prospecting and geological mapping should be done to more firmly establish the link between the higher magnetic values, magnetite mineralisation and areas of skarn in limestones.

Respectfully Submitted,

Paurels

A. Pauwels

#### APPENDIX I

#### STATEMENT OF EXPENDITURES

A. Pauwels - Planning, supervision - ½ day @ \$162.32/day		\$ 3	81.16
H. Holm - Aug. 4-8,10,11, 1980 - 7 days @ 100.96/day		7	06.72
R. Turna - Aug. 4,7 - 2 days @ 91.92/day		1	83.84
Motel-Food - 9 days @ 25.00/day/person		2	25.00
Truck, equivalent rental + gasoline 7 days @ 45.00/day		3	15.00
Drafting - H. Holm ½ day @ 100.96/day			50,48
Survey supplies, office supplies, typing			50.00
	*	\$1,6	12.20

\* The total differs slightly from the amount stated on the Statement of Exploration and Development submitted on August 14, shortly after the survey. No totally accurate tabulation of all costs could be done at the time.

H.HOLM. EXPLORATION TECHNICIAN-INSTRUMENT OPERATOR,
B.Sc. MATH., ID YEARS WITH LIMEX

#### APPENDIX II

#### AUTHOR'S QUALIFICATIONS

- I, Andre Pauwels of 4900 Mariposa Court, Richmond, B.C., hereby certify that:
  - 1) I am a graduate of the Rijksuniversitet of Ghent, Belgium, B.Sc. Geology in 1970.
  - 2) I have practised my profession since 1970 with Union Miniere Explorations and Mining Corporation Limited (UMEX) in Ontario (1970-1972) and British Columbia (1972-1980).

•-230 •-150 •-180 •-130 •-30 •130 •120 •260 •20 •430 •140 •100 NOTE: Contoured at 1000 gammas. Instrument = M&Phar M700 fluxgate magnetometer. MINERAL RESOURCES SIGNATOR ASSESSMENT REPORT To accompany "Assessment Report on ground magnetometer surveys on Bolduc Mineral claim, Victoria Mining Division" November 17, 1980 by A. Pauwels, B.Sc. BOLDUC CLAIM GROUND MAGNETICS NTS 92C/9W (San Juan) Legal corner post. UMEX CORPORATION LTD. DRAWN BY: H. Holm DATE: September II, 1980 SURVEYED BY: H. Holm DWG. No.