

MACDONALD CONSULTANTS LTD.

SUITE 12 • 425 HOWE STREET, VANCOUVER 1, B.C.

2126

Report
on a
Geochemical Survey
on the
Judy Group of Mineral Claims
near Logan Lake
Highland Valley Area
(50° N, 120° W)
in the Kamloops Mining Division
by
MacDonald Consultants Ltd.
H. Wober, P. Eng.

December 2, 1969

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<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>2126</u> MAP.....</p>

INTRODUCTION

MacDonald Consultants Ltd. carried out a program of soil sampling on the Judy Group of Claims of Newmine Development Ltd. from October 30 to November 7, 1969. The subsequent compilation of the results and interpretation was done at the office of MacDonald Consultants in Vancouver. The writer visited the property on November 20, 1969 in order to inspect the lines and the work done in general. A cursory examination of the geology was done at the same time.

PROPERTY

Certificates of work are applied for on the following claims:

<u>Claim Name</u>	<u>Record No.</u>
Judy 1 - 12 incl.	76458 - 76469 incl.
July 13 - 40 incl.	76377 - 76404 incl.

The crew of MacDonald Consultants located all the claim posts and tied their location to the nearest station of the linegrid by compass and tape.

The claims are in the Kamloops Mining Division.

LOCATION AND ACCESS

The claims are located northeast of Logan Lake. The southwest corner of the claim block is at the east end of Logan Lake.

Logan Lake is located about 1 mile east of Guichon and Chartrand Creeks and about the same distance from the road junction of the gravel roads leading to Ashcroft, Savona, Kamloops and Merritt.

The road to Kamloops crosses the southern part of the claim group whence numerous logging roads provide access to all parts of the property.

GEOLOGY

The Judy Group of Claims are underlain by rocks of the Triassic Nicola Group.

The contact with the multiphase Guichon Batholith is about 1.5 miles west of the Judy Group boundary. The porphyry copper deposits of the Highland Valley Camp are associated with the younger central phases of the batholith and linked to fault and fracture zones, breccia zones and porphyry dyke systems representing deep-seated breaks. The Craigmont copper-iron deposit at the southern contact of the batholith is related to its offshoots of granodiorite into the older Nicola rocks with structural controls playing a significant part in the deposition. The exploration work on the Judy Group is aimed at the discovery of a deposit of the latter type.

GEOCHEMICAL SURVEY

a.) Line Cutting

Amex Exploration Services Ltd. of Kamloops, B. C. established a line grid on the property by blazing, flagging and in denser bush by cutting.

Compass and chain were used for line orientation and spacing. Four foot pickets were marked every 100 feet along the lines. The lines run approximately east - west. Line separation is 400 feet. This work was carried out from October 21 to October 30, 1969.

The total line mileage including base line is 43.9 miles.

b.) Soil Sampling

Mess'rs J. P. Henry and K. R. Ralfs of MacDonald Consultants carried out the soil sampling.

The samples were taken with a mattock from the 'B' horizon.

The samples were packaged in water-resistant, strong, numbered paper-bags provided by Bondar-Clegg & Co., Assayers, of North Vancouver, B. C.

The samples were predried in the field and then brought to Vancouver in the company's truck.

A total of 1,133 samples were collected.

c.) Assay Procedure

The samples were assayed for their total copper content by Bondar-Clegg & Co., 1500 Pemberton Avenue, North Vancouver, B. C.

The samples were dried and screened at the assay office; the -80 mesh fraction was used for analysis.

Hot aqua regia digestion and the atomic absorption method were used to determine the copper values in parts per million.

SUMMARY & CONCLUSION

MacDonald Consultants Ltd. carried out a geochemical survey on the Judy 1 - 40 Group of Claims near Logan Lake in the Highland Valley area.

Line control was provided by Amex Exploration Services Ltd. of Kamloops, B. C. who established a line grid totalling 43.9 miles with east - west oriented lines at a spacing of 400 feet.

The property is underlain by triassic rocks of the Nicola Group consisting of fine grained andesites, volcanic agglomerates and tuffs.

The contact with the younger intrusives of the Guichon batholith is about 1.5 miles west of the property.

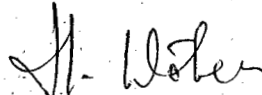
The geochemical response on the property is rather uniform with several isolated anomalous peaks. Higher trends seem to reflex lithology and depth of overburden rather than mineralization.

The exploration work is aimed at the discovery of a Craigmont type deposit. It should be noted that this type of deposit may not necessarily find a geochemical expression on surface, depending on the depth of a possible contact with the batholith or its offshoots.

Further exploration work should be in the nature of an air photo study and geological mapping and prospecting with the emphasis on structural patterns. A ground magnetometer survey with careful topographic and lithological correlation may render further information.

Respectfully submitted,

MACDONALD CONSULTANTS LTD.



H. H. Wober, P. Eng.

HHW/st

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December 2, 1969

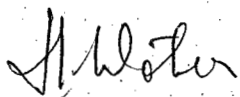
CERTIFICATE

I, Helmut Wober, with business and residential address in Vancouver,
B. C. do hereby declare:

- 1.) I am a consulting mining engineer.
- 2.) I am a graduate of the Montanistische Hochschule, Austria, 1963.
- 3.) I am a registered professional engineer in Yukon and British Columbia.
- 4.) I have gained experience in mining and exploration geology in positions of responsibility with Nordisk Mineselskab A/S in East Greenland in 1961 and 1962, with United Keno Hill Mines from 1964 to 1966. I held the position of Chief Mine Geologist with United Keno Hill Mines when I resigned to join MacDonald Consultants Ltd. in May, 1966.
- 5.) I have personally examined the property described in this report and studied all available information on the geology of the area described.
- 6.) I do not have, nor do I expect to have or beneficially own any interest, direct or indirect in the property described as Judy 1 - 40 Mineral Claims or in the securities of Newmine Development Ltd. (N.P.L.).

Respectfully submitted,

MACDONALD CONSULTANTS LTD.

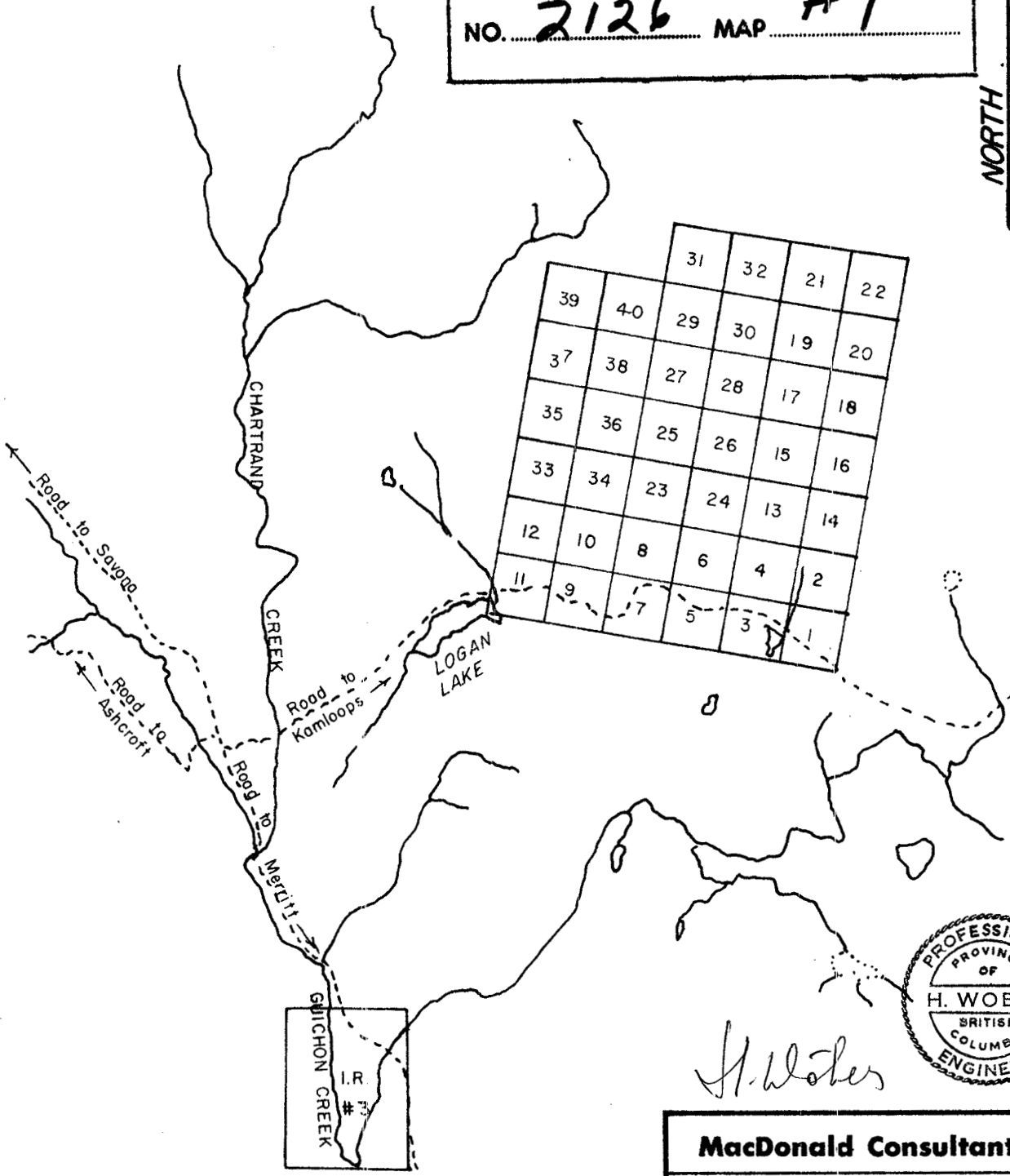

H. H. Wober, P. Eng.

HHW/st

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ASSESSMENT REPORT

NO. 2126 MAP # 1

NORTH ↑



H. Wober

--- KAMLOOPS M. D.
NICOLA M. D. ---

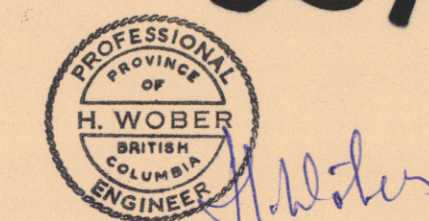
MacDonald Consultants Ltd.	
JUDY GROUP	
SCALE	1" = 3000'
DRAWN	J. P. H.
DATE	Nov. 24/69
NO.	277-1
LOCATION MAP	



Department of
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ASSESSMENT REPORT
NO. 2126 MAP #2

PPM COPPER
 0 - 30
 31 - 45
 46 - 60
 61 - 90
 91 - 150

2126



NEWMINE DEVELOPMENT LTD.
 MacDONALD CONSULTANTS LIMITED
 11 - 425 HOWE ST. VANCOUVER 1, B.C.

JUDY CLAIMS

SCALE 1" = 500 feet
 DRAWN K.R.
 DATE NOV 1969
 NUMBER 277

Geochemistry
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