

REPORT ON
A MAGNETOMETER SURVEY
HAINES JUNCTION AREA, YUKON
ON BEHALF OF
CANADIAN BARRANCA MINES LTD.

3262 m

by

Jon G. Baird, B.Sc., P.Eng.

July 25, 1969

CLAIMS:

M 5 - 27
MC 1 - 4

LOCATION:

About 18 miles NW of Haines
Junction, Yukon
60° 137° NW

DATES:

June 25 to July 16, 1969

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

J. G. Baird
RESIDENT GEOLOGIST

Approved as to cost in the amount
of: \$ 3750.00

J. B. Johnston
RESIDENT MINING ENGINEER

Accepted as representation work
under Section 53(4) Yukon Quartz
Mining Act.

[Signature]
COMMISSIONER OF YUKON

060731

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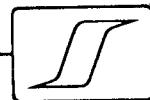
(in text)

Plate 1 - Property Location Map
1" = 32 miles

(in envelope)

Plate 2 - Claims and Grid Map
1" = 800'

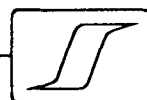
Plate 3 - Magnetometer Survey
1" = 400'



SUMMARY

A magnetometer survey of this property has not revealed any anomalies characteristic of vein type deposits which might contain pyrrhotite or magnetite. One area of increased magnetic intensity is interpreted to be due to the occurrence of a basic intrusive rock type.

Correlation of the geology of the property with the present magnetic data may provide an explanation for the general pattern of the magnetic contours and for the interpreted magnetic lineaments. Certain zones may then be selected which warrant further investigation by geological, geochemical and/or geophysical methods.



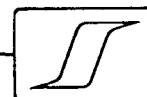
REPORT ON
A MAGNETOMETER SURVEY
HAINES JUNCTION AREA, YUKON
ON BEHALF OF
CANADIAN BARRANCA MINES LTD.

INTRODUCTION

During the period from June 25 to July 16 a field party under the direction of Mr. Rejean Lebrun cut grid lines and executed a magnetometer survey on some M and MC claims in the Haines Junction area, Yukon on behalf of Canadian Barranca Mines Ltd.

The property lies about 18 miles NW of Haines Junction. It is reached by truck following the Alaska Highway north-westwards from Haines Junction thence southwards along a tote road which crosses the Jarvis River. The location of the claim group is shown on Plate 1 on the scale of 1" = 32 miles. Glacial drift covers most of the surface of the property which is partly wooded and partly covered by buckbrush. The topographic relief is quite rugged. The claims covered, in whole or part, by this survey are listed on the title page of this report and are shown on Plate 2 on a scale of 1" = 800'. These claims are held by Canadian Barranca Mines Ltd.

A Sharpe MF-1 vertical force fluxgate magnetometer was employed for this survey. The reading accuracy of this instrument on the scale used for most of the observations on the present property is ± 5 gammas. The survey was controlled for diurnal drift by checking back, at least once per hour, to previously established base stations.



The purpose of a magnetometer survey is to map the subsurface distribution of magnetic minerals such as magnetite and pyrrhotite. In general, basic rocks contain more magnetite than acidic rocks and so can be expected to give rise to increased magnetic intensities. As well, some ore deposits contain magnetic minerals and are detectable by magnetic surveying.

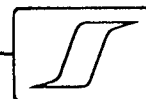
For the present survey a base line was cut oriented N 43° W and grid lines were established perpendicular thereto at 400' centres. Station intervals were 100'. Approximately 22 miles of grid lines cover the survey area.

GEOLOGY

A description of the geology of the area including and surrounding the present claims is found on GSC Map 1019A, "Dezadeash", on a scale of 1" = 4 miles. The property is believed to be underlain by metamorphosed sediments of the Dezadeash Group composed mainly of phyllites as well as later basic intrusive rocks in the peridotite range.

Three diamond drill holes undertaken by Canadian Barranca Mines in the area just east of the base line between grid lines 4 S and 8 S, have intersected a vein containing sulphide mineralization, mainly pyrite and chalcopyrite.

The purpose of the present survey was to search for narrow sulphide veins which might contain pyrrhotite and to locate areas for further exploration by interpreting such structure as might be revealed from the magnetic character of the rocks.



DISCUSSION OF RESULTS

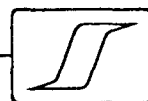
The results of the magnetometer survey are shown in contour form on Plate 3 on a scale of $1'' = 400'$. The actual magnetic intensities, corrected for diurnal variation, are shown in gammas. A contour interval of 100 gammas was adopted although in some areas of steep magnetic gradients some contours above the 1000 gamma contour have been omitted. Areas exhibiting magnetic intensities in excess of 900 gammas have been shaded.

The background magnetic intensities range from about 500 gammas to about 1000 gammas. The major area of above background magnetic intensities occurs between stations 36 W and 48 W on lines 4 S through 8 N, where any observations are seen to have amplitudes of a few thousand gammas. The general magnetic pattern is relatively smooth with a general decrease in magnetic intensity from the south to the north part of the grid.

Four magnetic lineaments which may be indicative of structures such as faults or contacts have been shown on the contour plan.

Sharp local features such as the magnetic highs at station 21 W on L 20 W and 2 W on L 12 N are indicative of very localized, near-surface concentrations of magnetic material, possibly in boulders.

The area of highest magnetic intensities near the west side of the grid appears typical of a body of basic intrusive rock such as peridotite which is thought to occur on this property. VLF electromagnetic data supplied to the writer by Canadian Barrance Mines shows conductive zones flanking the interpreted intrusive body. These conductive zones most likely reflect a contact or shear zone occurring between the two rock types.



CONCLUSIONS & RECOMMENDATIONS

The present survey has not located any anomalies typical of narrow vein-like deposits containing magnetite or pyrrhotite which might be a guide to sulphide mineralization. . Since there is no increased magnetic response over the known vein, other sulphide bodies which may occur on the property may not have a magnetic expression.

One area of high magnetic intensities has been interpreted as being underlain by a basic intrusive rock type and some structure as defined by magnetic lineaments can be seen.

The results of the present survey should be correlated with a geological map of the property in order to further interpret the significance of the present magnetic contour pattern and interpreted lineaments. Such a correlation may indicate areas within the survey grid which would require further investigation by geological, geochemical or geophysical methods.

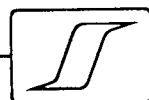
Respectfully submitted,

SEIGEL ASSOCIATES LIMITED

J. G. Baird
per R. O. Crosby

Jon G. Baird, B.Sc., P.Eng.
Geophysicist

Vancouver, B.C.
July 25, 1969



DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of a geophysical survey on behalf of
Canadian Barranca Mines Ltd.

I, E. M. Flett for Seigel Associates Limited

of 750 - 890 West Pender Street, Vancouver

in the Province of British Columbia, do solemnly declare that a magnetometer survey has been executed on some "M" and "MC" claims about 18 miles NW of Haines Junction, Yukon between June 25 to July 16, 1969. The following expenses were incurred:

(1) Wages:		
R. Lebrun	20 days @ \$40/day	\$ 800.00
M. Choulat	6 days @ \$30/day	
L. Greider	6 days @ \$30/day	
R. Paradis	6 days @ \$30/day	
G. Potvin	14 days @ \$30/day	
R. Albert	14 days @ \$30/day	
	46 days @ \$30/day	1,380.00
(2) Transportation:		
Transportation Whitehorse to property and on the job	20 days @ \$15/day	300.00
(3) Food and Camp Supplies		890.00
(4) Magnetometer Rental	20 days @ \$9/day	180.00
(5) Geophysical Consulting:		
J.G. Baird	2 days @ \$100/day	200.00
		\$3,750.00

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 28th
day of July, 1969, A.D.

E M Flett

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

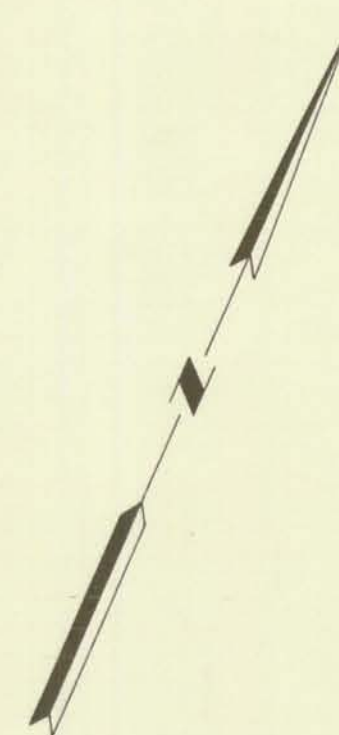
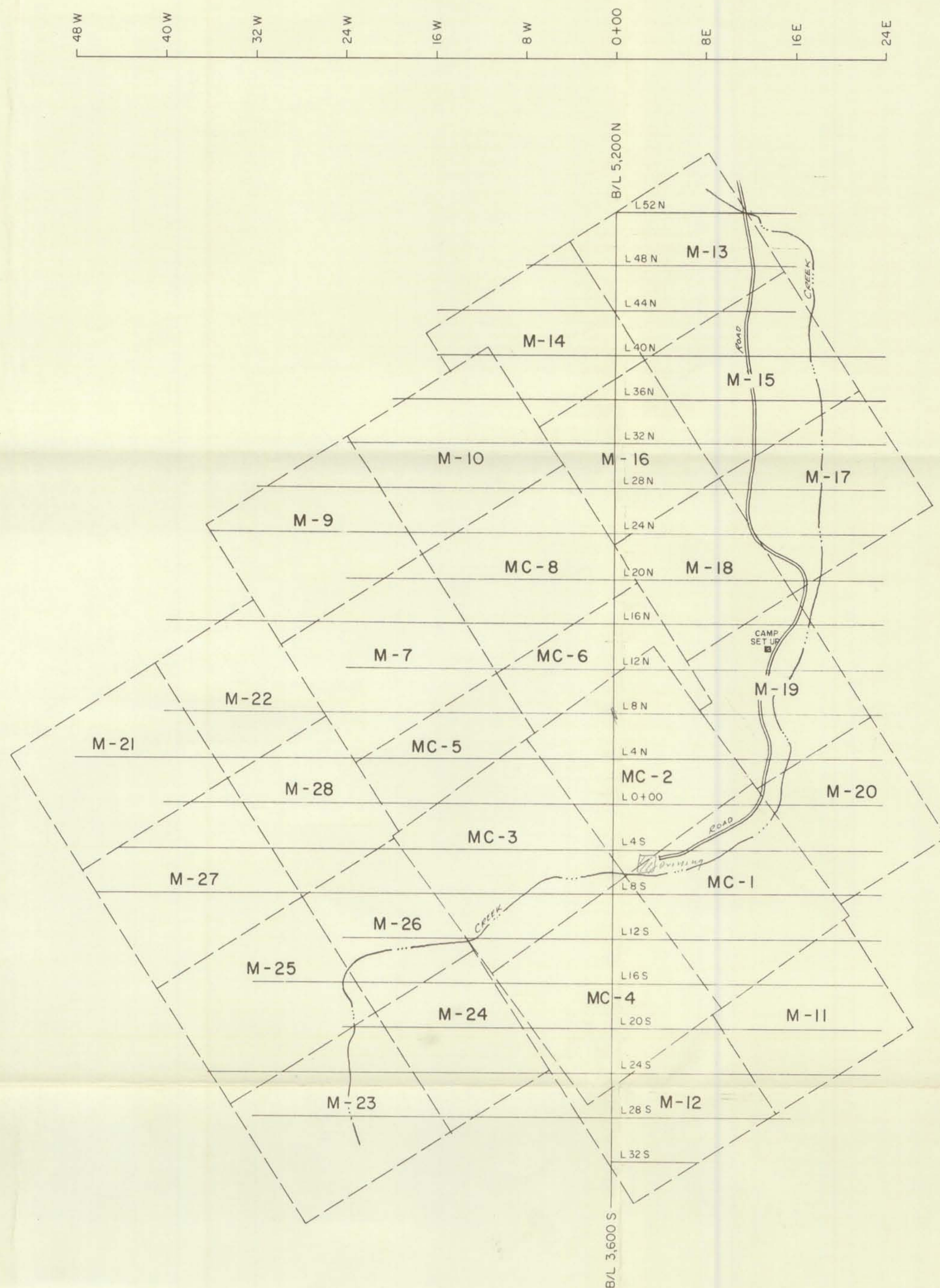


PLATE 2

CANADIAN BARRANCA MINES LTD.
HAINES JUNCTION, YUKON TERRITORIES.
CLAIMS AND GRID MAP

SCALE: 1" = 800'

TO ACCOMPANY A GEOPHYSICAL REPORT
BY J. G. BAIRD DATED JULY 25, 1969.

SURVEY BY SEIGEL ASSOCIATES LIMITED
JULY 1969



*J. G. Baird
per R. O. Crosby*

52 W. 48 W. 44 W. 40 W. 36 W. 32 W. 28 W. 24 W. 20 W. 16 W. 12 W. 8 W. 4 W. BASE LINE 4 E. 8 E. 12 E. 16 E. 20 E. 24 E.



LEGEND

— GRID LINE TRACE WITH VALUE IN GAMMAS

ISOMAGNETIC CONTOURS
NOMINAL CONTOUR INTERVAL 100 GAMMAS

MAGNETIC LINEAMENTS

INTERPRETED BASIC ROCK TYPE

TO ACCOMPANY A GEOPHYSICAL REPORT
BY J.G. BAIRD DATED JULY 25, 1969.

PLATE 3
CANADIAN BARRANCA MINES LTD.
HAINES JUNCTION, YUKON TERRITORIES.
MAGNETOMETER SURVEY
ISOMAGNETIC CONTOURS
SCALE: 1" = 400'
SURVEY BY SEIGEL ASSOCIATES LIMITED
JULY, 1969

REGISTERED PROFESSIONAL ENGINEER
J. G. BAIRD
PROVINCE OF ONTARIO
J.G. Baird
per R.D. Cusack