## GEOPHYSICAL

921/16 MAGNETOMETER SURVEY

HY 50-64

KAMLOOPS M.D., B.C.

121-51 NE

2-9-71: 12-9-71

Alfred R. Allen, P. Eng.

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 3379 MAP

For:

Q.C. EXPLORATIONS LTD. (N.P.L.)

Vancouver, B.C.



ALLEN GEOLOGICAL ENGINEERING LTD.

303 - 325 Howe Street

Vancouver, B.C.

# CONTENTS

	Page
INTRODUCTION	1.
LOCATION AND ACCESSIBILITY	2.
PROPERTY	2.
GEO LOGY	2.
MAGNETOMETER SURVEY	••• 3•
SURVEY RESULTS	••• 4•
SUMMARY AND CONCLUSIONS	6.
RECOMMENDATIONS	• • • 7 •
REFERENCES	8.
MAPS:	

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Q.C. 2 Location Map

#### MAGNETOMETER SURVEY

HY 50-64 KAMLOOPS M.D.

#### INTRODUCTION

A magnetometer survey was conducted over the HY 50-64 mineral claims by Allen Geological Engineering Ltd. September 2-12, 1971.

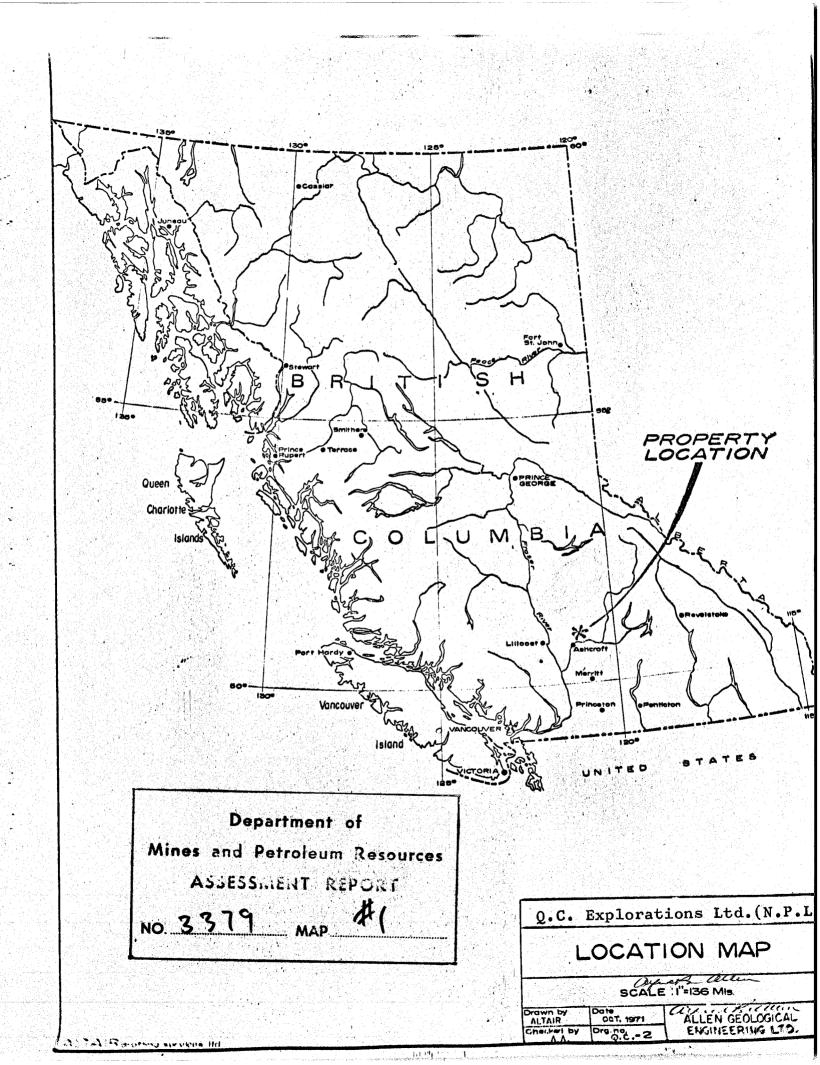
A surveyed grid was established with a base line along the main location line and cross lines at 400-foot intervals. Stations were established along the lines every 100 feet.

The vertical component of the magnetic field was measured and recorded at each station with a Scintrex G 110 fluxgate magnetometer.

The field crew was based in Ashcroft and was made up of Alfred R. Allen, P.Eng., J. Hunyadi, Edward Hayes, operator, and Frank Gaal.

The work was started September 2, and completed September 12, 1971.

The object of the survey was to detect any variations in the magnetic field over the property.



## LOCATION AND ACCESSIBILITY

Located in southwestern British Columbia eight miles southeast of Ashcroft, the property is accessible via secondary roads branching from the Bethlehem road.

The claims lie on the upper southwest slope of Glossy Mountain.

Geographic location is 121°-12' west longitude and 50°-40' north latitude.

## **PROPERTY**

The property is made up of the located and adjoining HY 50-64 mineral claims, Record Numbers 85989-86003, recorded December 4, 1969.

#### GEOLOGY

The upper west slopes of Glossy Mountain are blanketed with basalt. This has been removed by erosion on the HY 50-64 claims which are located lower down the mountain. All rock exposures observed are quartz diorite and granitic phases of the Guichon Creek batholith.

#### MAGNETOMETER SURVEY

A base line was surveyed by chain and Brunton compass along the location line of the HY 50-64 claims. Cross lines were surveyed by chain and Brunton compass approximately at right angles to the base line at about 400-foot intervals, to the property boundaries. Every 100 feet along each line, stations were established with wooden stakes. Each stake was marked with the grid location. Flagging was used, as well as stakes and blazes, to delineate the lines.

A Scintrex G 110 fluxgate magnetometer measured the vertical component of the magnetic field at each station and this information was recorded in a field book.

Diurnal checks were made at designated locations twice daily.

The corrected magnetometer readings were noted on a map which is included with this report.

For simplicity and to conserve space, the readings were coded as follows:

Only the middle three digits are shown, i.e., 56,460 gammas, is mapped as 646.

## SURVEY RESULTS

Variations in the vertical component of the magnetic field over the grid area are well defined, as shown on the accompanying map.

The range is from 54,060 to 57,860 gammas. The average range is designated as 55,000 to 56,000 gammas. Eight anomalous zones have been outlined on the HY 50-64 claims.

## ANOMALY #1.

On the HY 56 claim there is an irregularly shaped high anomaly 1,200 feet long and up to 600 feet wide. The range is from 56,080 to 56,400 gammas.

# ANOMALY #2.

On the HY 53 and 55 claims there is a 100 foot high extending southwesterly for 1,400 feet, and 600 feet to the northeast there is a similar 100 foot zone extending 500 feet southeast. The range is from 56,000 to 56,240 gammas.

## ANOMALY #3.

On the HY 57 claim a 600 foot anomaly trends northeasterly. It is about 100 feet wide. Six hundred feet to the east there is a spot location of similar intensity, i.e., ranging from 56,020 to 57,180 gammas.

## ANOMALY #4.

Extending westerly across the HY 58 claim there is a low 1,250 feet long and up to 500 feet wide. The range is 54,240 to 54,480 gammas.

## ANOMALY #5.

On the HY 61 an irregular anomaly of low intensity extends across the claim and is open to the west. This is surrounded by an extensive area registering low intensity. The range on the anomaly is 54,060 to 54,460 gammas

## ANOMALY #6.

On the HY 62 claim a 1,000 foot by 300 to 500 foot low extends southeasterly and is open to the east. This, too, is surrounded by low magnetic profile and could be considered a part of Anomaly #5. The range is 54,610 to 54,440 gammas.

## ANOMALY #7.

The southwest portion of the HY 63 contains a high magnetic response over a length of 600 and a width of 400 feet. This zone is open on the southwest and southeast. The range is from 56,080 to 57,860 gammas.

## ANOMALY #8.

Four hundred feet east of #7 anomaly, on the eastern side of HY 63 claim there is an anomaly 400 feet long and 100 feet wide. The range is from 56,100 to 56,800 gammas.

The areas of prime interest are Anomalies 4, 5 and 6 which exhibit low magnetic effects, and should be thoroughly checked.

The highs encountered on Anomalies 7 and 8 should be investigated.

Most of these areas are covered with overburden, but as with the remainder of the property they are believed to be underlain by granodiorite, quartz diorite and related intrusive rocks of the Guichon Creek batholith.

## SUMMARY AND CONCLUSIONS

The HY 50-64 mineral claims are located in the Highland Valley area west of Glossy Mountain.

A G 110 fluxgate Cintrex magnetometer was used to detect variations in the vertical component of the magnetic field. This was carried out over a 400 by 100 foot surveyed grid on the property.

Eight anomalous areas were detected and these are shown on the accompanying map. Five of these are "highs" and three are "lows". Elsewhere in the Highland Valley-Merritt area, high magnetic effects have lead to the discovery of copper and iron mineralization and low effects have indicated copper-molybdenum mineral deposits.

It is concluded that the anomalous areas should be investigated for possible mineral occurrences.

#### RECOMMENDATIONS

The Q.C. Explorations property, comprising the HY 50-64 mineral claims appears to be underlain by granodiorite, quartz diorite and related intrusive rocks of the Guichon Creek batholith. Magnetic anomalies have been outlined at eight locations.

It is recommended that these be investigated forthwith, as follows:

- 1. Acquire additional ground on the south and southwestof the present holdings.
- 2. Bulldoze trenches to bedrock on the HY 61 claim to provide information regarding the #5 Anomaly which indicates "low" magnetic effects.
- 3. Bulldoze trenches across the two areas of "high" magnetic effects on the HY 63 claim.
- 4. Extend the magnetometer survey south and west of the HY 61 and 63 claims to outline as completely as possible the extensions of the Anomalous zones 5 and 7.

The estimated costs of this work is \$1,000.00, and it should not require more than 10 days to complete.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Clifust ale. P. Eng

Alfred R. Allen

Vancouver, B.C. October 21, 1971

## REFERENCES

Annual Reports, B.C. Minister of Mines

Cockfield, W.E., G.S.C. Mem. 249

Duffel, S. and McTaggart, K.C., G.S.C. Mem 262

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## Alfred R. Allen

## MAGNETOMETER SURVEY

HY 50-64 121-51 NE

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#### KAMLOOPS M.D.

For: Q.C. EXPLORATIONS LTD. (N.P.L.)

Vancouver, B.C.

#### **EXPENDITURES**

### Crew:

E. Hayes, operator,	Sept. 3-11, incl. 1971	\$330.00
J. Hunyadi, operator,	Sept, 2-12, " 1971	400.00
F. Gaal, axeman,	Sept. 2-12 " 1971	300.00
A.R. Allen, P.Eng.,	Sept. 29, Oct. 1,2.	425.00

Truck Ro	<u>ental</u>							200.00
Transpo	rtation	, Food,	Gas,	etc.				76.30
Motel	***							80.00
Office,	reports	s, maps						60.00
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Total Expenditures

\$1871.30

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Province of British CVANGOUNER, B. C.

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#### FIELD CREW

THE HY 50-64 CLAIMS

MAGNETOMETER SURVEY

2-9-71: 12-9-71

Alfred R. Allen, Vancouver, B.C., P. Eng., Consulting Geological Engineer

Edward Hayes, Merritt, B.C., Operator

J. Hunyadi, Vancouver, B.C., Operator

F. Gaal, Vancouver, B.C., Axeman

