

2466

MAGNETOMETER SURVEY

A.R. Allen, P. Eng.

MIKE GROUP

92I/2W/Z

51°
0

120°

SW

NICOLA M.D.

MERRITT 24-4-70: 7-5-70 B.C.

For:

SILVER KEY EXPLORATIONS LTD.

CALGARY, ALBERTA.

By:

ALLEN GEOLOGICAL ENGINEERING LTD.

507 - 789 West Pender Street
Vancouver, B.C.

June 30th. 1970.

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REFERENCES

#1 MAP: Plan, Magnetometer Survey, Mike Group. (*See Pocket*)

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2466 MAP

THE MIKE GROUP
OF
SILVER KEY EXPLORATIONS LTD.

MAGNETOMETER SURVEY

INTRODUCTION

A magnetometer survey was conducted over the Mike 1-20 mineral claims from April 24th to May 7th. 1970.

The survey was conducted over a grid pattern and was supervised by the writer.

The field party consisted of Alfred R. Allen, Edward Hayes, Kenneth Moldoon and Dennis Lidicott.

The town of Merritt was used as the centre of operations, and one 4-wheel-drive truck and one passenger automobile were used for transportation onto the property.

A Fluxgate G-100 magnetometer was used, along with the usual necessary field equipment.

A north-south base line was established near the centre of the property and east-west parallel lines were surveyed every 500 feet. Along each line stations were established every 100 feet by the emplacement of a wooden lathe with the station number encribed thereon along with a short strip of red flagging.

Since the property is located a few miles east of the Craigmont mine, and since that property has associated with copper an appreciable amount of magnetite, it was considered advisable to check the area for possible magnetic mineral concentrations by the use of the magnetometer.

LOCATION AND ACCESSIBILITY

The property is located in southwestern British Columbia about 5 miles north of the town of Merritt.

This is on the east side of Indian Reserve No.1 at north latitude $50^{\circ} - 07'$ and west longitude $120^{\circ} - 46'$.

Access is northwest 4 miles from Merritt via the highway to Spences Bridge, then north 2 miles up the Highland Valley road to the Jesse Creek road, and finally 3 miles on that secondary road to the property.

Most of the claims area has been logged and there are numerous secondary roads crossing it in all directions.

PROPERTY

The Mike Group comprises the following adjoining located mineral claims.

MIKE 1-20, 40743-40762

The claim posts and lines were examined and are in accordance with the requirements of the B.C. Mineral Act.

TOPOGRAPHY

The property lies on the hills directly north of Merritt on the north side of the Nicola River, and east of Guichon Creek. Jesse Creek which flows westerly into Guichon Creek, traverses the northern part of the property.

Small rocky hillocks are just over 4,000 feet above sea level on the central portion of the property.

GEOLOGY

The property lies on the south side of Jesse Creek along which is located the contact between the Upper Triassic Nicola Group and Coast Intrusives of the southeasterly exposure of the Guichon Creek batholith.

The Nicola rocks are andesite and volcanic agglomerate at this location. The andesite ranges from fine grained to porphyritic, and the agglomerate is wholly andesitic. There are narrow but persistent rhyolitic to aplitic dykes within the andesitic country rock. There are fracture zones and weakly brecciated sections which contain iron and copper mineralization as indicated by rusty staining with blue and green copper carbonates and some sulphides included in the weathered surface material. Most of the claims area is covered with overburden, but this is believed to be for the most part less than 20 feet thick.

MAGNETOMETER SURVEY

A north-south base line was located by chain and Brunton compass through the central part of the claims area.

At right angles, parallel lines were similarly surveyed in an east-west direction every 500 feet. Stations, designated by wooden stakes with numbers inscribed on each, were located at 100 foot intervals along all lines.

Magnetometer readings were noted at all stations and at many intermediate points, and recorded in a notebook.

A Fluxgate G-100 magnetometer was used and individual readings noted at all stations. Diurnal checks were made twice daily and appropriate corrections applied. Normal, apparently unmineralized bedrock registered in the 54000 to 55,000 gamma range. For simplicity in mapping, these are shown as 40 to 50 by eliminating the first numeral "5" and the last two zeros.

Eight anomalous zones indicate an east-west trend to the areas of strongest magnetic deviation. These are shown on the plan, at a scale of 600 feet per inch, which accompanies this report. The anomalous areas are designated by letters A to I and are described under the heading of survey results.

SURVEY RESULTS

The most prominent area showing strong magnetic deviations is the northeast section of the property. Weaker and scattered anomalies lie along the south boundary area.

The northeast claims show three large and one smaller anomalous areas designated as A, B, C and D. The southern section has one large, one moderately large and three smaller anomalous zones designated as E, F, G, H and I respectively.

Anomaly A

Location: Mike 9
Dimensions: 1500 feet long, up to 400 feet wide
Maximum intensity: 106

Anomaly B

Location: Mike 9
Dimensions: 1500 feet long, up to 300 feet wide
Maximum intensity: 95

Anomaly C

Location: Mike 11
Dimensions: 1000 feet long up to 200 feet wide
Maximum intensity: 92

Anomaly D

Location: Mike 13
Dimensions: 200 feet long, 200 feet wide
Maximum intensity: 82

6.

Anomaly E

Location: Mike 4
Dimensions: 800 feet long and 200 feet wide
Maximum intensity: 96

Anomaly F

Location: Mike 5 and Mike 7
Dimensions: 250 feet long, 100 feet wide
Maximum intensity: 92

Anomaly G

Location: Mike 1
Dimensions: 250 feet long, 100 feet wide
Maximum intensity: 81

Anomaly H

Location: Mike 2
Dimensions: 200 feet long, 100 feet wide
Maximum intensity: 83

Anomaly I

Location: Mike 8
Dimensions: 200 feet long, 50 feet wide
Maximum intensity: 80

The results of the magnetometer survey indicate strong anomalous conditions on the Mike 9 and 11 claims. Three northerly trending zones of high magnetic deviation are separated by areas of pronounced low effects. The anomalous area on the Mike 4 claim is accompanied by a broad zone showing weaker but significant magnetic deviations.

The low zones are in the range of 52500 to 53000 gammas and the highs 59000 to over 60000 gammas.

SUMMARY AND CONCLUSIONS

The Mike 1-20 claims are located in an accessible area close to Merritt, B.C.

The geology is considered favourable by virtue of the location being a few miles east of the Craigmont mine.

Iron mineralization occurs on the property and this is significant because of the occurrence of copper along with magnetic iron at the Craigmont mine. In addition the property lies at and near the southern contact of the Guichon Creek batholith as do the Craigmont orebodies.

It is concluded that the Mike claims warrant further investigation in the vicinity of the anomalous zones outlined by the magnetometer survey.

RECOMMENDATIONS

It is here with recommended that the Mike group of mineral claims, near Merritt and the Craigmont mine, be thoroughly investigated for the possible occurrence of copper deposits at or near the iron mineralization indicated on the property.

The most practical method of checking the anomalous zones will be to strip and trench to and into bedrock, and where copper mineralization is exposed, to drill and determine the nature and extent of the mineralization underground.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per Alfred R. Allen P. Eng.

Alfred R. Allen

Vancouver, B.C.

June 30th. 1970.

REFERENCES

Cockfield, W.E., Geol. Surv. Can. Mem. 249

Duffell and McTaggart, Geol. Surv.Can. Mem. 262

B.C. Minister of Mines, Annual Reports

The Craigmont Mine, staff and published reports

* * * * *

DOMINION OF CANADA
PROVINCE OF BRITISH COLUMBIA

IN THE MATTER OF
THE MINERAL ACT

TO WIT:

I, Alfred R. Allen, of the Province of British
Columbia, City of Vancouver

Do Solemnly Declare that:

1. I am a consulting geological engineer, member of the Association of Professional Engineers of B.C. AND that the geophysical survey over the MIKE 1-20 was under my direction and supervision.
2. The statement hereto annexed and marked "Exhibit A" to this my declaration is a true and accurate statement of expenditures made by me on behalf of Silver Key Explorations Ltd. on the geophysical survey of the MIKE 1-20 mineral claims between the dates of April 24th. and May 7th. 1970.
3. The listed expenditures are exclusive of all other expenditures connected with the survey, including transportation, supplies and accommodation.

AND I make this solemn declaration, declaring it to be true and correct statement of the same force and effect as if made under oath, by virtue of the Canadian Evidence Act.

DECLARED before me at
THE CITY OF VANCOUVER
in the Province of British Columbia
this 10 day of July 1970 A.D.

Alfred R. Allen

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 10
day of July 1970, A.D.

Alfred R. Allen

Jessie Turner
A Commissioner for Taking Affidavits within British Columbia
A Notary Public in and for the Province of British Columbia
SUB-MINING RECORDER

GEOPHYSICAL CREW

MIKE 1-20 claims

Magnetometer Survey

FIELD CREW

Alfred R. Allen, P. Eng., Operator

Edward Hayes, Operator, Trained for several years
by experienced geophysicists
and Alfred R. Allen.

Plus two assistants, Kenneth Muldoon and D. Lidicott

ALFRED R. ALLEN

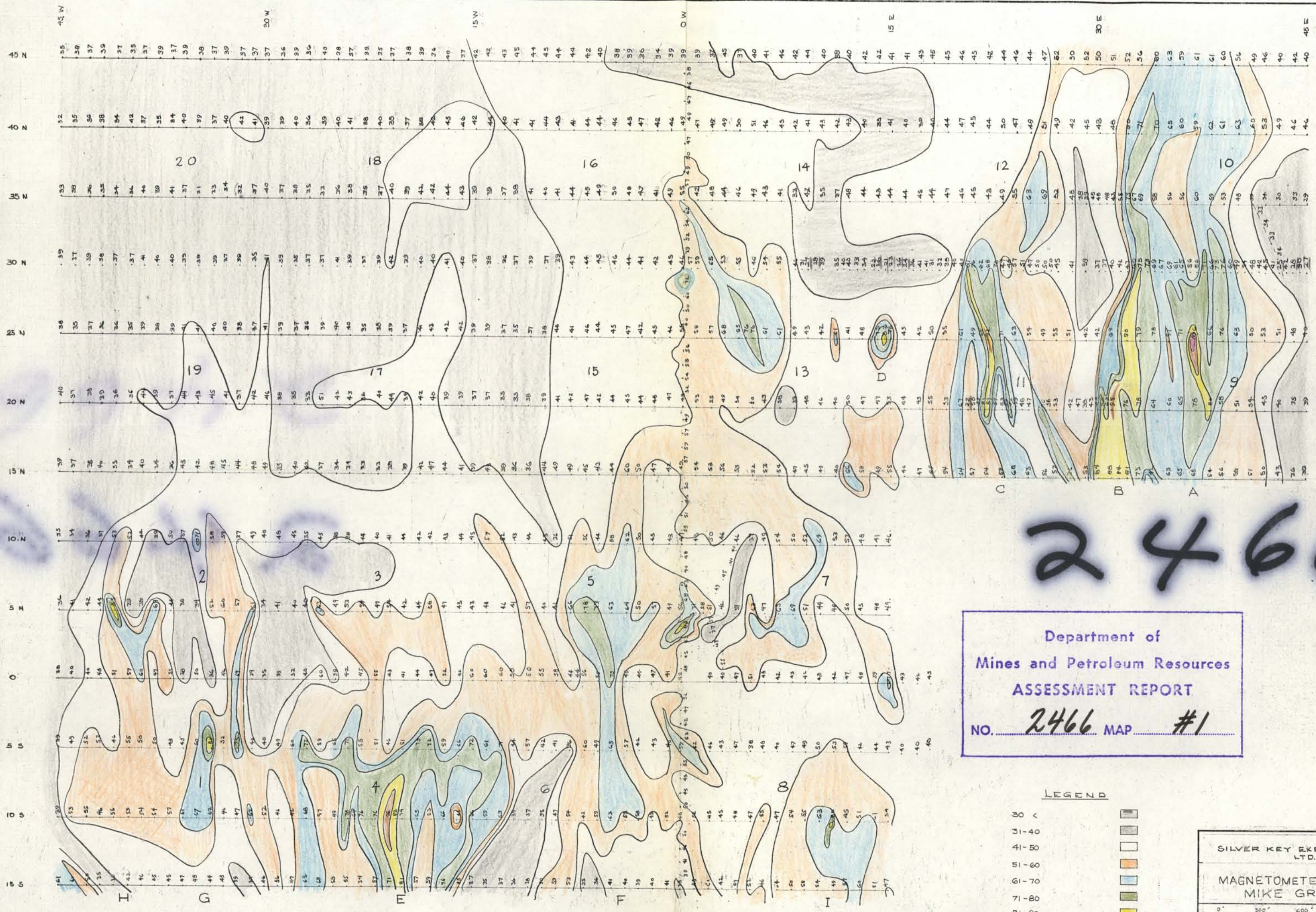
EXHIBIT "A"

June 30th. 1970.

GEOPHYSICAL SURVEY

A magnetometer survey over a surveyed grid covering the MIKE 1-20 claims, 4 miles north of Merritt, B.C. was conducted by the following crew from Merritt on the following dates, for the noted payments.

Alfred R. Allen, P.Eng., Operator, May 2 and 3 Vancouver, B.C.	\$ 200.00
Edward Hayes, Operator, April 24 to May 7 incl.	
Kenneth Muldoon, assistant, " "	
Dennis Lidicott, Assistant, " "	
All of Merritt, B.C.	/ 1,860.00
Instrument rental, maps, etc.	180.00
	<hr/>
	\$2,240.00



2466

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2466 MAP #1

LEGEND

- 30 <
- 31-40
- 41-50
- 51-60
- 61-70
- 71-80
- 81-90

SILVER KEY EXPLORATIONS LTD.	
MAGNETOMETER SURVEY MIKE GROUP	
SCALE: 1" = 300', 600', 900', 1200'	
DRAWN BY: ARA	DATE: June 20/70
CHECKED BY: M-1	ALLEN GEOLOGICAL ENGINEERING LTD.

ANOMALIES: A-I
CLAIMS: 1-20
NOTE: 30 = 53000 gammas 91-100
Fluxgate: G-100 100 >