

2830



GEOPHYSICAL SURVEY

MAGNETOMETER

HY 1 - 21 CLAIMS

KAMLOOPS M.D.

*Plotted
No deposit
50' 40', 121' 100'*

Alfred R. Allen

51-121 NE 17-10-70 - 28-11-70

92I/11E

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2830 MAP.....

For:

GIBBEX MINES LTD. (N.P.L.)

Vancouver, B.C.

By:

ALLEN GEOLOGICAL ENGINEERING LTD.

507 - 739 West Pender Street
Vancouver, B.C.

January 15th. 1971.

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MAGNETOMETER SURVEY

HY 1-21 CLAIMS

KAMLOOPS M.D.

23-11-70 : 8-12-70

INTRODUCTION

A magnetometer survey was conducted over a surveyed grid on the HY 1-21 claims from the 17th. of October to the 28th. of November, 1970.

The field party was made up of Alfred R. Allen, Edward Hayes, E.L. Liepins and R. Olsen. Field headquarters was at Cache Creek. A 4-wheel-drive truck was used for transportation. onto the property.

The purpose of the magnetometer survey was to ascertain if there are detectable variations in the magnetic field on the property which may indicate variations in rock type or sulphide mineralization.

On the Bethlehem and other properties in the area, sulphide mineralization in the Guichon Creek batholith has been found to be associated with magnetic "lows".

LOCATION AND ACCESSIBILITY

The property is located in southwestern British Columbia in the Highland Valley region, about 8 miles southeast of Ashcroft. The Bethlehem mine is 14 miles to the southeast.

2.

Geographic location is $121^{\circ}-09'$ west longitude and $50^{\circ}-38'$ north latitude.

Access is via the Bethlehem road and by rough secondary roads which traverse the southwest slopes of Glossy Mountain.

PROPERTY

The following located adjoining mineral claims comprise the HY Group:

HY 1-21 inclusive Record No.'s 86811-86831 inclusive.

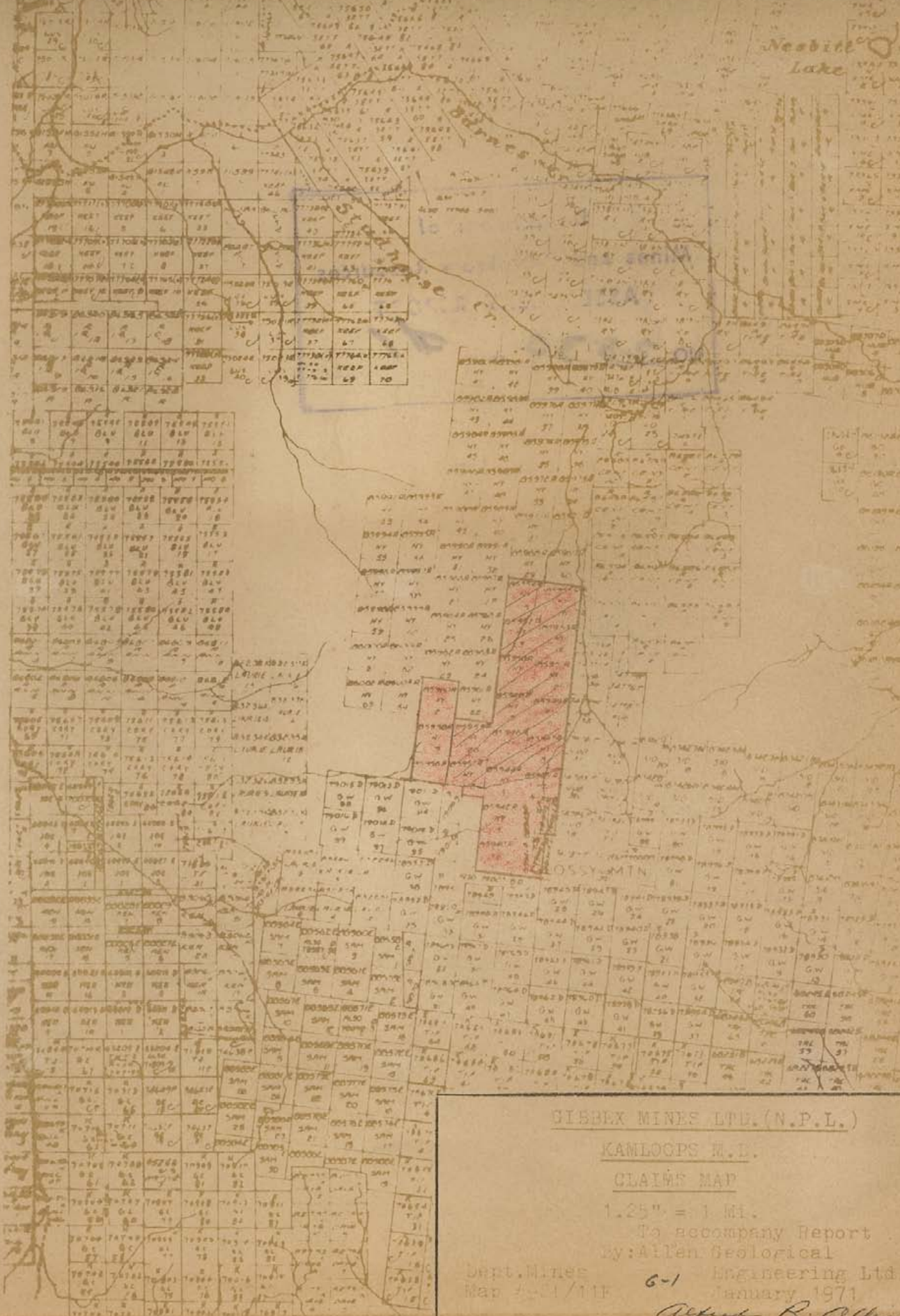
The posts and claims lines were mapped when the grid pattern was surveyed over the property, and are shown on the accompanying map of the magnetometer survey.

GEOLOGY

The Highland Valley area is underlain by the Guichon Creek batholith, a complex body of granodiorite, quartz-diorite, quartz-diorite porphyry, diorite porphyry, dacite porphyry and associated andesitic to aplitic dykes.

Sizeable copper and copper-molybdenum deposits have been discovered in the igneous complex, usually associated with the porphyries and fault and breccia zones.

Nesbitt Lake



GIBBEX MINES LTD. (N.P.L.)

KAMLOOPS B.C.

CLAIMS MAP

1.25" = 1 MI.

To accompany Report
by: Allen Geological

Dept. Mines
Map # 231/11F

G-1 Engineering Ltd.
January 1971

Alfred R. Allen

The northern section of the Highland Valley is blanketed with rocks of the Kamloops Volcanics which were extruded in Tertiary times. Isolated remnants of these rocks in irregular shapes as well as some associated dykes and plugs are scattered throughout the area.

The HY 1-21 claims area, which touches on the west side of Glossy Mountain, is largely covered with Tertiary lavas, but there are sizeable areas or "windows" of the older Guichon Creek batholithic rocks exposed, chiefly on the westerly part of the property.

MAGNETOMETER SURVEY

The magnetometer survey was conducted over a grid pattern previously slashed out. Grid lines were cleared and marked by coloured ribbons and blazed trees. Each 100 feet, a station, on lines at 400 foot intervals, is marked by metal tape scribed with a number. The grid lines are at right angles to base lines established as shown on the accompanying map in a north 10 degrees east direction. All lines were established by chain and compass.

Magnetometer readings were observed at each 100-foot station and recorded in a field notebook. Diurnal corrections were established by check readings at established locations twice each day.

The writer acted as operator, assisted by Mr. Edward Hayes, a trained and experienced field man.

Field data was transferred to a map and gamma ranges of 1000 are shown by colours thereon.

The instrument used was a Scintrex M F 1 Fluxgate magnetometer.

SURVEY RESULTS

A large, very irregular area of low magnetic intensity extends from the northern boundary of the surveyed area, claims HY 15 and HY 16, southerly through HY 14 and HY 11 to HY 10 on the upper reaches of Glossy Mountain.

There is a smaller, narrow zone of similar intensity, lying on the HY 12 and HY 14. These areas lie within the 54,000 to 54,500 gamma range. They are believed to be underlain by Kamloops volcanic rocks which are exposed in rugged outcrops on the top of Glossy Mountain.

There is a magnetic high area on the western portion of the property. This includes the HY 1-4 and HY 17, 19 and 21 claims. This lies within the 55,500 to 56,000 gamma range. This overlies an area of granitic outcroppings believed to be Guichon Creek quartz diorite. The magnetite disseminated throughout this rock is believed responsible for the increase in magnetic intensity.

Whereas there is no evidence of strongly magnetic mineralization on the surveyed area, it is evident that the southwestern part of the property is potentially the most important for prospecting considerations.

Anomalies four and five are on Glossy Mountain. They have the same magnetic variations as anomaly number 3, but this is believed to be caused by weakly magnetic minerals within the Tertiary volcanics.

SUMMARY AND CONCLUSIONS

The HY 1-21 claims extend from the top of Glossy Mountain down the northern and western flanks. Much of the area is underlain by Kamloops rhyolite, andesite, basalt and tuff.

These Tertiary volcanics blanket the quartz diorite of the Guichon Creek batholith. The important mineral deposits of the Highland Valley area are within the Guichon Creek batholith, and it is important to outline any areas where this rock type is exposed on a property.

There are scattered exposures of Guichon Creek quartz-diorite on the western part of the HY group.

The higher magnetic intensity in this general area indicates that much of the surrounding ground which is covered with overburden is also underlain by igneous rocks. This includes the HY 1-4 and 17-21, which are therefore classed as good prospecting ground.

RECOMMENDATIONS

It is recommended that the geology of the HY 1-21 claims group be mapped in detail in order that all exposures of Guichon Creek igneous rocks be located, and the outcrop areas outlined as closely as possible.

It is essential that a road be constructed across the western part of the property, and if practicable, around the west and north slopes of Glossy Mountain.

Geochemical investigations, over covered areas where the bedrock is believed to be granitic, should be carried out.

Some stripping of bedrock may be advantageous to establish actual contacts between volcanic and igneous rocks.

Time and cost schedules may be finalized at a later date, when weather conditions are improved and before actual field work is started.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per Alfred R. Allen P. Eng.
Alfred R. Allen

Vancouver, B.C.
January 15th. 1971.

REFERENCES

B.C. Minister of Mine Reports

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

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

Bethlehem Mines, Engineering and Production Reports

Trojan Mines, South Seas Mines, Engineering Reports

Krain Property, North Pacific Mines, Engineering Reports

Lornex Property, Engineering Reports

* * * * *

ALFRED R. ALLEN

MAGNETOMETER SURVEY

HY 1-21 inclusive

Kamloops M.D.

Highland Valley B.C.

Expenditures

Crew: Alfred R. Allen, P. Eng.,
507 - 789 West Pender Street
Vancouver, B.C.

November 25th-28th inclusive	1970	
December 12th-15th	"	1970
		\$ 800.00

E. Hayes, Merritt, B.C.

November 25th-28th inclusive	1970	200.00
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E.L. Liepens and R. Olsen
1010 - 789 West Pender Street
Vancouver, B.C.

October 17th - 28th inclusive	1970	1,701.00
		<u>\$2,701.00</u>

Declared before me at the *City* of *Vancouver*, in the Province of British Columbia, this *28* day of *January*, 1971, A.D.

Alfred R. Allen

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

FIELD CREW

MAGNETOMETER SURVEY

HY 1-21 claims

Kamloops M.D.

17-10-70 28-11-70

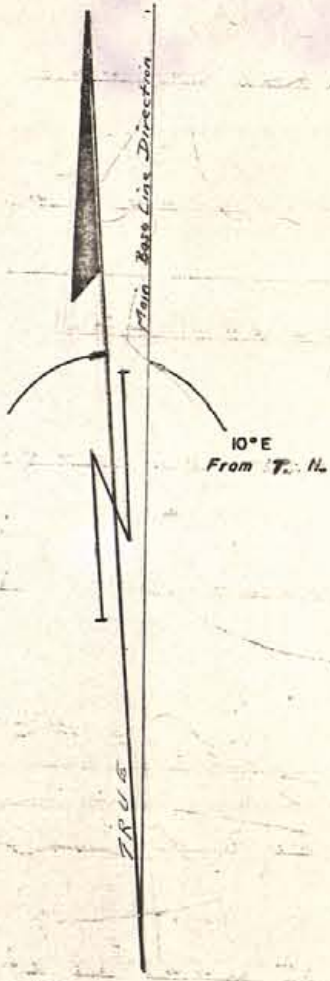
Alfred R. Allen, P. Eng.

E. Hayes , Assistant

E.L. Liepens, Line-cutter

R. Olsen, Line-cutter

Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. **2830**
 MAP **M-2**



2830 M-2

LEGEND

- Claim Posts: Observed
- Claim Posts: Not Observed
- Grid Lines: 34N
- Magnetometer Readings: 47
- Outcrop Areas: volcanic granitic
- Base Lines:

- 55500 - 56500 Gammas
- 54500 - 55500 Gammas
- 54000 - 54500 Gammas

*NOTE: Instrument: 5100 Fluxgate Magnetometer
Vertical Component.*

GIBBEX EXPLORATIONS LTD.(NPL)
HY-GROUP HIGHLAND VALLEY, B.C.

MAGNETOMETER SURVEY

Scale: 1" = 600' G-2

ALASKA GEOLOGICAL ENGINEERING
Alyssa K. Allen
Jan. 9, 1971