

3369

GEOPHYSICAL
MAGNETOMETER SURVEY

Barb and Ram Claims *93B/866W*

CARIBOO M.D., B.C.

122 - 53 SE: 21-9-71 - 30-9-71

Alfred R. Allen, P.Eng.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3369 MAP

For:

→ GIBBEX MINES LTD. (N.P.L.)

Vancouver, B.C.

By:

ALLEN GEOLOGICAL ENGINEERING LTD.

303 - 325 Howe Street
Vancouver 1, B.C.

October 7, 1971

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MAGNETOMETER SURVEY

BARB and RAM CLAIMS

CARIBOO M.D.

B.C.

INTRODUCTION

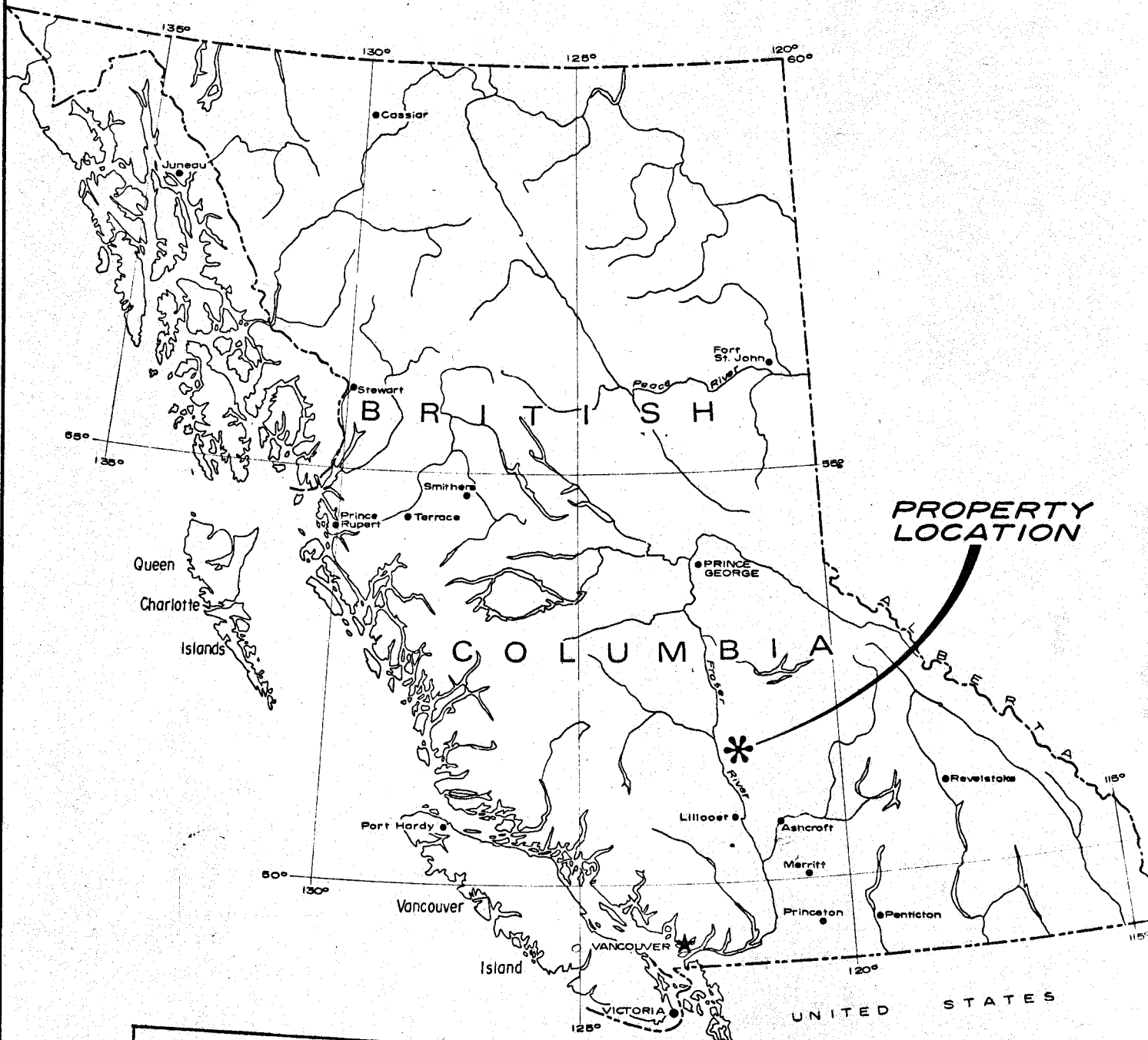
A magnetometer survey was conducted over the Barb 1-12 and Ram 1-8, 10, 12 and 14 claims, September 21-30, 1971.

North-south lines at 400 foot intervals were tied to an east-west base line, and stations were established by cedar stakes every 100 feet along all lines.

Readings taken with a Scintrex G 110 magnetometer were observed and recorded at each station.

The purpose of the survey was to detect any variations in the vertical component of the magnetic field over the surveyed grid on the property.

The object of mapping the magnetic field variations were twofold. Firstly, to locate the contact between the Cache Creek formation and the Granite Mountain intrusive rocks, and secondly, to outline either high or low anomalous areas, either of which might assist in the search for copper sulphide deposits.



Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. 3369 MAP # 11

GIBBEX MINES LTD. (N.P.L.)		
LOCATION MAP		
SCALE 1"=136 MIs.		
Drawn by ALTAIR	Date Oct. 1971	<i>Allen Geological</i> ALLEN GEOLOGICAL ENGINEERING LTD.
Checked by A.A.	Org. no. M-1	

LOCATION AND ACCESSIBILITY

The property is located in south central British Columbia at approximately 122°-17' west longitude and 52°- 23' north latitude.

This is known as the McLeese Lake Area, and it lies about midway between Williams Lake and Quesnel.

The property is one mile east of McLeese Lake, via secondary roads.

PROPERTY

The area surveyed includes the following adjoining located mineral claims:

Barb 1-12 inclusive

Ram 1-8 inclusive and 10, 12, and 14

The posts and lines have been inspected by the writer and are staked in accordance with the requirements of the British Columbia Mineral Act.

TOPOGRAPHY

The property lies east of McLeese Lake in a benched upland area. The lake is close to 2,800 feet above sea level, and the top of the highest hill on the property is over 3,400 feet elevation.

The general drainage is controlled by Sheridan creek which flows westerly into McLeese Lake a short distance to the north of the property.

GEOLOGY

The McLeese Lake area is underlain by a thick assemblage of highly folded and faulted sedimentary and volcanic rocks of Permian or earlier age, known as the Cache Creek group.

The Cache Creek group was invaded by granitic rocks of Jurassic or early Cretaceous age. A large exposure of these is included on the northern part of the Gibbex property and it extends northerly through the Gibraltar property and Granite Mountain.

Overlying the older granitic, sedimentary and volcanic rocks are Tertiary volcanics made up of vesicular basalt, andesite and minor tuffaceous rocks. These occur as thin remnants over some areas, but form an extensive cover west of the McLeese and Cuisson drainage areas.

The largest mineralized zones encountered to date in the McLeese Lake area occur in the altered granitic rocks of the Granite Mountain batholith. Along with pyrite, chalcopryite, bornite and molybdenite there is lesser pyrrhotite, hematite, and copper carbonates and oxides. The granitic rocks have been foliated, kaolinized and the more common secondary minerals are sericite, talc, chlorite, epidote, calcite and vuggy quartz.

Trenching on the Barb claims has exposed weak pyrite-chalcopryite mineralization in the granitic rocks, the contact rocks and the Cache Creek sedimentary and volcanic strata.

The contact appears to be nearly flat at this location. There is a wide irregular band of highly silicified Cache Creek material adjacent to granodiorite, quartz diorite, granite, with aplitic and pegmatitic dykes.

MAGNETOMETER SURVEY

A base line was established by chain and Brunton compass across the central portion of the claims area. From this, every 400 feet, north-south lines were surveyed by chain and compass the length of the property. Stations were established each 100 feet with marked cedar stakes. The lines were flagged and blazed.

At each grid station the vertical intensity of the magnetic field was measured in gammas with a Scintrex G 110 fluxgate magnetometer. Diurnal checks were made at least twice daily, and the corrected readings for all stations transferred from a field notebook to an office book and map.

For brevity and simplicity, the magnetometer results are shown on the map as follows:

55680 is shown as 80

55640 is shown as 64

The only reading above 55999 was 56070 and this is shown 607, with the two readings on each side being shown as 583 and 581.

The northern two-thirds of the property, which is underlain by granitic rocks and the contact zone with the Cache Creek series, show little or no variation from 55,640 to 55,670 gammas.

The southerly claims, which are underlain by Cache Creek rocks contain several zones of slightly higher magnetic intensity.

SURVEY RESULTS

The entire area underlain by intrusive and contact rocks is lacking in magnetic variance. The vertical component of the magnetic field over this area is 55,660 gammas with only minor areas showing as low as 55600 to 55620 range.

On the Barb 1-4 and Ram 1-6, there are three weak anomalous zones, as follows:

Anomaly #1

A large U-shaped anomaly peaks on the boundary between the Barb 2 and 3 claims at 56070 gammas. An irregular surrounding area lies within the 55810-55900 range. A second elongated zone in this range extends from the Ram 1 across the southwest corner of the Ram 2 and extends southeasterly close to the Barb 1 claim.

These are surrounded by a large area in the 55,710-55800 gamma range.

There are no outcrops on Anomaly #1, and it is not known why the field shows this slightly higher range. However, within the Cache Creek group elsewhere, altered volcanic rocks are known to contain disseminated magnetite, and it is possible that this is the reason for the anomaly.

Anomaly #2 and #3

On the Ram 5 there is a 1500-foot zone which is within the 55710-55800 gamma range.

Similarly, on the east side of the Ram 4 and 6 there is a 700-foot anomaly in the 55710-55800 gamma range.

These are just south of the projected contact between the Cache Creek and granitic intrusives and they may be the result of contact metamorphic zones containing minor magnetite or pyrrhotite mineralization.

All three anomalies are only slightly higher than normal and cannot be designated as prime exploration targets.

SUMMARY AND CONCLUSIONS

The magnetometer survey conducted over a 400 by 100 foot surveyed grid on the Barb 1-12 and RAM 1-8, 10, 12 and 14 claims shows that there are no magnetite or pyrrhotite mineral deposits of sufficient size or concentration on the property to be detectable by the technique and instrument used.

It is concluded, therefore, as follows:

- (a) There are no significant areas within the igneous rocks on the northern part of the property which by virtue of magnetic "lows" might be possible porphyry copper deposits such as the Highland Valley deposits.
- (b) There are no significant areas within either the igneous rock, the contact zone or the Cache Creek group which by virtue of magnetic "highs" might be possible copper-iron deposits such as the Craigmont deposit near Merritt.

RECOMMENDATIONS

Whereas the magnetometer results do not provide data which may be useful in the exploration of the property, the lack of such information does not preclude the possibility that copper-molybdenum mineralization such as that on the Gibraltar may be present.

Additional investigations by other techniques will be adviseable before a complete assessment of the potential of the property can be finalized, and such are recommended.

Respectfully submitted,
ALLEN GEOLOGICAL ENGINEERING LTD.

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

Vancouver, B.C.
October 7, 1971

REFERENCES

- Annual Reports, B.C. Minister of Mines, '57-'66
Geological Survey of Canada, Paper 1533, Sheet 93 B/9
Geological Survey of Canada, Maps 12-1959, 3-1961
Keevil Mining, Maps and Reports, 1960 - '62
A.R. Allen, Reports, Gibraltar Mines, 1964 - '67
Cominco, Reports and Maps, 1966-67

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303 - 325 Howe Street
Vancouver, B.C.

Alfred R. Allen

MAGNETOMETER SURVEY

21/9/71 - 30/9/71

Barb 1-12, Ram 1-8, 10, 12, 14 Claims

CARIBOO, M.D.

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

VANCOUVER, B.C.

EXPENDITURES

Crew:

A.J. Daly, Operator, Sept. 20-30, 1971	\$ 700.00
Alfred R. Allen, P.Eng. Sept. 20-26, 1971	1,000.00
Oct. 2-8, 1971	915.00

Motel and meals 260.00

Transportation

Car and truck rental 225.00

Magnetometer rental 165.00

Flagging tape 10.00

Mapping 25.60

Office 27.00

Total 3,327.60

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 1st
November, 1971, A.D.

Alfred R. Allen

Sub-mining Recorder

FIELD CREW

MAGNETOMETER SURVEY

21-9-71 : 30-9-71

Barb 1-12 incl.

Ram 1-8, 10, 12, 14

CARIBOO, M.D.

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

A.J. Daly, Murrayville, B.C. Experienced operator

303 - 325 Howe Street
Vancouver, B.C.

Alfred R. Allen

GRID - line cutting

Barb 1-12, Ram 1-8, 10, 12, 14 Claims

CARIBOO, M.D.

For: Gibbex Mines Ltd. (N.P.L.)
Vancouver, B.C.

27 line miles 400 feet by 100 feet and base line,

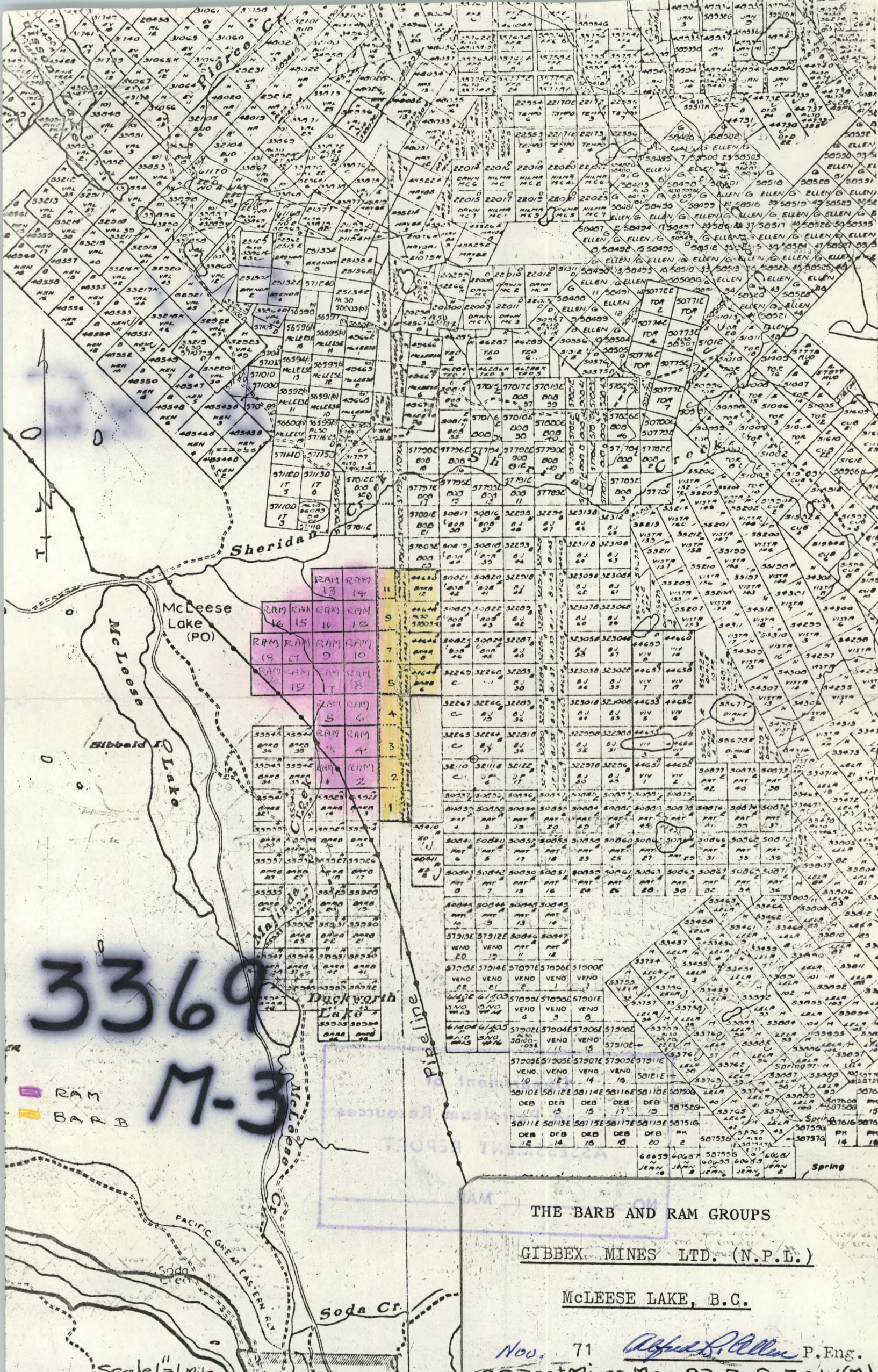
@ \$120.00 per line mile, \$3,240.00

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 1st
day of November, 1971, A.D.

Alfred R. Allen

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

Sub-mining Recorder



3369
M-3

RAM
BARB

Scale = 1 Mile

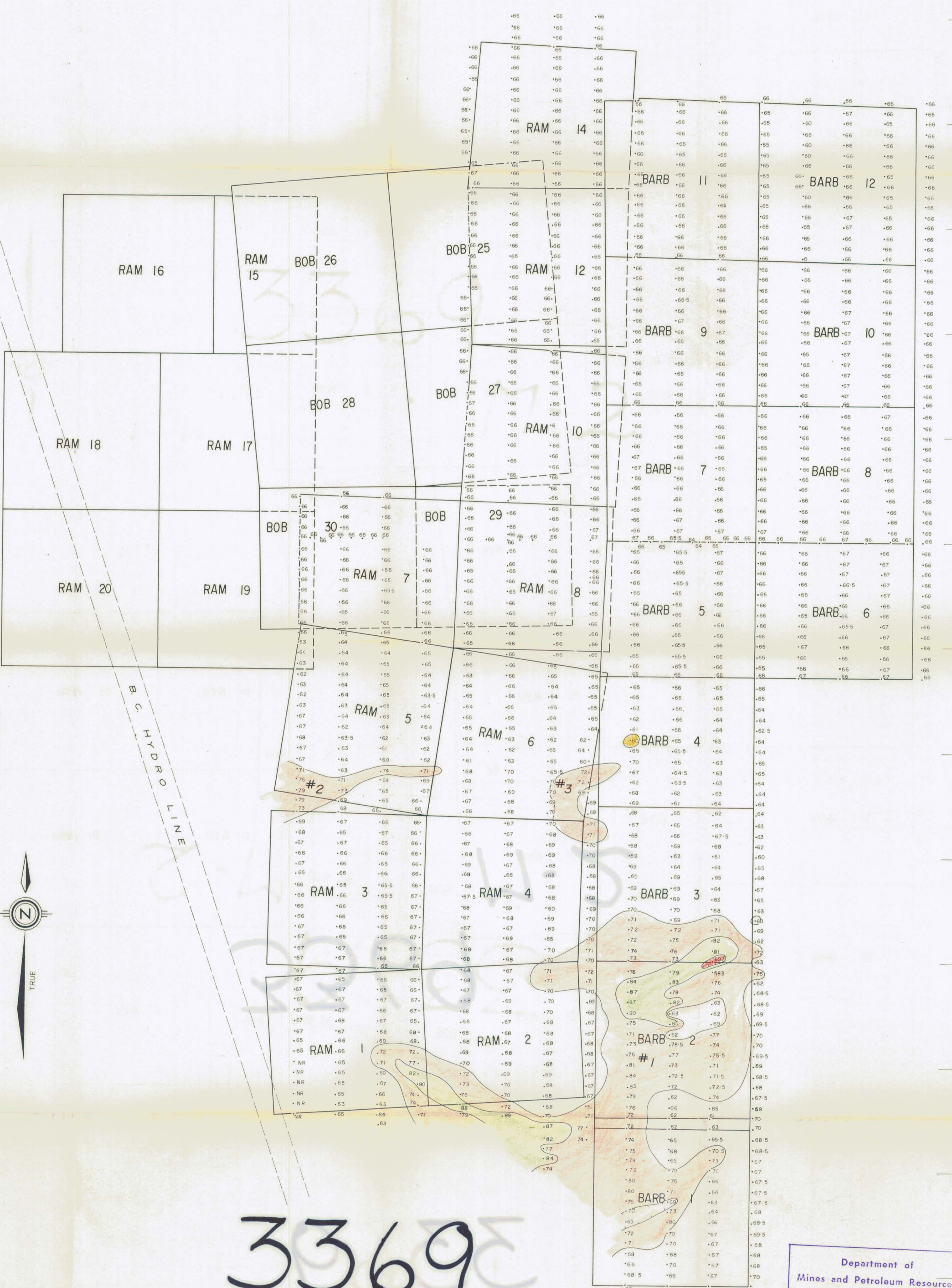
THE BARB AND RAM GROUPS
GIBBEX MINES LTD. (N.P.L.)

McLEESE LAKE, B.C.

Nov. 71 *Alfred P. Allen* P. Eng.
BC Dept Mines Map 93 B-8 E & W (M)

44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W 0 4E 8E 12E 16E

50N
40N
30N
20N
10N
0
10S
20S
30S
40S
50S
60S
70S



3369
M-2

LEGEND

- 91 +
- 81 - 90
- 71 - 80
- 61 - 70
- 51 - 60

Note: 55660 Gammas shown as 66

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3369 MAP #2

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

MAGNETOMETER SURVEY
BARB 1-12 and RAM 1-8,10,12,14
CARIBOO M.D.

SCALE: 1" = 500 FT.

DRAWN BY: ALTAIR / B.T. DATE: OCT. 1971
CHECKED BY: DWS. NO. ALLEN GEOLOGICAL ENGINEERING LTD. *Allen*