

2375

GEOPHYSICAL SURVEY
GEOCHEMICAL SURVEY

928/2W
I

NICOLA M.D.
51° - 120° S.W.
for

GIBRALTAR MINES LTD. N.P.L.

A.R. Allen P.Eng.

17-7-69 : 8-8-69

September 12, 1969

ALLEN GEOLOGICAL ENGINEERING LTD.

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

C O N T E N T S

	<u>Page</u>
INTRODUCTION.....	1.
LOCATION AND ACCESSIBILITY.....	2.
PROPERTY.....	3.
TOPOGRAPHY.....	3.
GEOLOGY.....	4.
GEOCHEMICAL SURVEY.....	4.
SURVEY RESULTS.....	6.
RECOMMENDATIONS.....	7.
REFERENCES.....	
APPENDIX (1).....	DECLARATION
APPENDIX (2).....	SURVEY FIELD CREW
APPENDIX (3).....	EXHIBIT "A"

#1 MAP - *Geochemical Survey, Cope 1-12* - *Lead Pocket*

* * * * *

<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT</p> <p>NO. 2375 MAP.....</p>
--

THE CUPE PROPERTY
OF
GIBRALTAR MINES
GEOCHEMICAL SURVEY

INTRODUCTION

A soil sampling survey was conducted over the CUPE 1-12 mineral claims, Nicola Mining Division, on a grid pattern from July 17th to August 8th, 1969.

The field party, under the direction of the writer, consisted of T. Thomas Sr., operator, John Shaw, Frank Tonney, Robin Denning, James Elliott, R. Thomas, and T. Thomas Jr.

A tent camp was used as a base a short distance east of the property. A 4-wheel-drive G.M.C. truck was used for transporting personnel and supplies.

A base line was established in an east-west direction near the south boundary of the property, by chain and Brunton compass. Cross lines were surveyed by chain

and Brunton compass at 300-foot intervals in a north-south direction. Stakes were located along each line every 100 feet with the grid number marked thereon.

Since lenses of magnetite and hematite had been found on the property, and copper mineralization was noted in these deposits, it was considered advisable to check the entire area of the claims to ascertain the copper content of the extensive overburden cover.

LOCATION AND ACCESSIBILITY

The property is located 5 miles north of Merritt, B.C. The claims lie on the east side of Indian Reserve #1. This is north latitude $50^{\circ} 03'$ and west longitude $120^{\circ} 47'$.

Access is via the Merritt-Spences Bridge highway to the secondary Highland Valley road which branches north 4 miles northwest of Merritt. By the Highland Valley road, it is 2 miles north to the access road which leads to the claims, an additional 2 miles.

PROPERTY

The following adjoining located mineral claims make up the CUPE Group.

CUPE 1-12 inclusive 40763-40774

After the geochemical survey was completed, two claims were staked along the southeast corner of the property. These are the NAD #1 Fraction and NAD #2 Fraction, recorded August 1st. 1969.

The claims posts for all the claims have been examined and in the opinion of the writer they are located in accordance with the requirements of the B.C. Mineral Act.

TOPOGRAPHY

The claims are located on the gently undulating western slopes on the east bank of Guichon Creek Valley - east of the boundary of Indian Reserve #1.

Local small intermittent creeks flow southerly and westerly into Guichon Creek.

Overburden is light but extensive . There are scattered stands of timber over the area. Much of the timber has been recently logged off.

GEOLOGY

The property lies on the southeast side of the Guichon Creek batholith, and is believed entirely underlain by Nicola greenstone and andesites. Although not precisely located, the contact of the batholith is considered to be a short distance to the west of the property.

Fractures, and irregular small zones within the andesite contain magnetite, hematite, chalcopyrite, bornite, malachite and azurite. Several of these zones have been exposed by trenches on the Cupe 2 and 3 claims.

GEOCHEMICAL SURVEY

The geochemical survey was conducted over a grid pattern established as follows:

1. A base line was surveyed by chain and Brunton compass, in an east-west direction close to the southern boundary of the property.
2. At 300-foot intervals, parallel lines were established in a north-south direction across the property.
3. On all lines, stations were established every 100-feet by a cedar stake marked with the station number.

5.

Under the direction of T. Thomas, experienced operator, soil samples were taken at depths of 6 inches to 1-foot from the surface. The small handful of soil was placed in a paper bag marked to correspond with the station location, and this was so noted in a field book.

4.

The samples were dried and tested by the Rubianic method for copper, at Langley, B.C.

5.

Each sample result was graded as strong, medium or weak, so recorded in a notebook, and subsequently marked on a plan map on a scale of 400 feet per inch. The map accompanies this report and the areas designated by colours represent comparatively strong, medium and weak soil copper content.

SURVEY RESULTS

From the soil samples tested for copper content only a few appeared sufficiently strong and localized to indicate anomalous areas. There are numerous "spot-highs", and at nine locations two or three of these may represent small areas of high copper content, but additional detailed sampling is necessary to establish the exact outlines of each.

The largest are as follows:

<u>Claim</u>	<u>Location,</u>	<u>Width</u> Ft.	<u>Length</u> Ft.
Cupe 1	Central east boundary	100	800
Cupe 2	Northwest corner	100	600
Cupe 3	Central section	100	700
Cupe 4	West boundary	100	700
Cupe 5	South boundary	100	600
	Northeast corner	200	800
Cupe 6	South boundary	150	1200
	West boundary	50	600
Cupe 12	Central section	150	500

RECOMMENDATIONS

Since the claims are located in an area known to be favourable for the occurrence of copper mineralization, it is recommended that additional detailed geophysical investigations be made near the areas known to contain higher than average copper in the soil.

This detailed work may best be followed up by additional stripping, trenching and shallow diamond drilling.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per Alfred B. Allen P. Eng.

Vancouver, B.C.

September 12th. 1969.

REFERENCES

Dawson, G.M., Geological Survey of Canada,
Annual Report 1894

Drysdale, C.W., " " " "
Bardley Wilmot, V.C., " " " Report 1925

Cockfield, W.E., " " " " Memoir 249

Duffel, S., and McTaggart, E.C., " " " 262

B.C. Minister of Mines, Annual 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 CUPE 1-12 claims, 5 miles north of Merritt, B.C., was under my 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 Gibraltar Mines on the geophysical survey of the CUPE 1-12 mineral claims between the dates of July 17th. and August 8th. 1969.
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 18th day of June 1970 A.D.

Alfred R. Allen

[Signature]

GEOPHYSICAL CREW

CUPE 1-12 claims

Soil Sampling Survey

FIELD CREW

Alfred R. Allen, BAsC., MASc., P. Eng., Geologist.

Tom Thomas, Operator, Trained and worked under the supervision of Alfred R. Allen for the past fourteen years.

Plus six assistants, three of whom were University students.

ALFRED R. ALLEN

EXHIBIT "A"

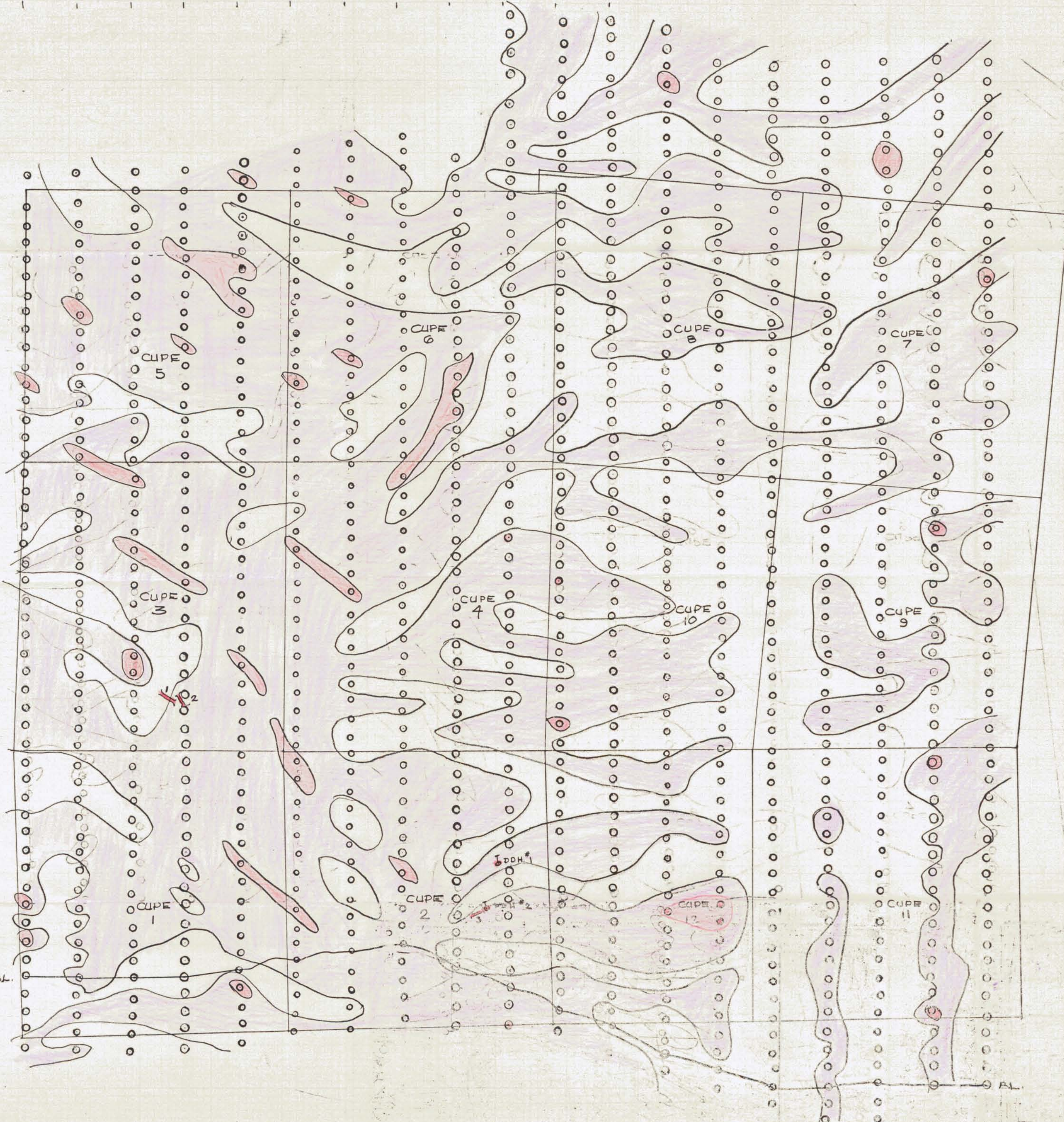
March 18th. 1970.

GEOPHYSICAL SURVEY

A soil sampling survey over a grid area covering the CUPE 1-12 mineral claims, 5 miles north of Merritt, B.C., conducted by the following crew, on the following working days, in 1969, from a camp established a short distance east of the property on Jesse Creek.

Alfred R. Allen, P. Eng., Vancouver, B.C.	July 28 and Aug. 2,	\$200.00
Tom Thomas, Sr., Operator, Langley, B.C.	July 29 and Aug. 4-7 incl,	225.00
J. Shaw, Instrument man, Vancouver, B.C.	July 27-31 incl, & Aug. 4-9 incl,	350.00
F. Tonney, Student Assistant, Vancouver, B.C.	July 25-31 " " Aug. 1-9 incl,	280.00
R. Dening, Student Assistant, Vancouver, B.C.	July 19-31 " " Aug. 4-9 incl,	400.00
J. Elliott, Student Assistant, Vancouver, B.C.	July 19-31 " " Aug. 4-9 incl,	400.00
R. Thomas, Assistant, Langley, B.C.	Aug. 1-4 & 6th & 8th,	90.00
T. Thomas Jr., Assistant Langley, B.C.	July 15-31st. incl,	340.00
		<hr/>
		\$2,285.00

33W 30W 27W 24W 21W 18W 15W 12W 9W 6W 3W 0 3E 6E 9E 12E 15E 18E 21E



LEGEND

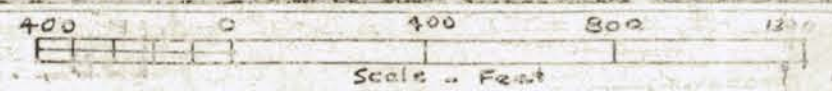
- STRONG CU
- MEDIUM CU
- WEAK CU
- TRENCHES
- D.D.H.
- RUBIANIC ACID METHOD

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **2375** MAP #1

2375

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

GEOCHEMICAL SURVEY
CUPE 1-12



DRAWN BY <i>Alfred Allen</i>	DATE Feb 10 1970	ALLEN GEOLOGICAL ENGINEERING LTD.
CHECKED BY	DWG. NO. C-1	<i>Alfred B. Allen</i>