

GEOCHEMICAL REPORT

- on the -

GIL CLAIMS

KAMLOOPS MINING DIVISION

- for -

BARRIER REEF RESOURCES LTD. (NPL),

#904-675 West Hastings Street,

VANCOUVER, B. C.

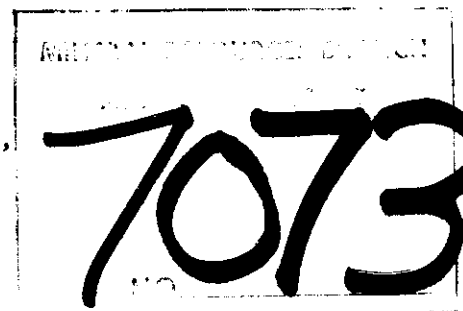
Covering: Gil Claim (20 units)
Gil #2 Claim(10 units)

Location: 50°37'N; 120°38'W.
NTS 921/10E.
21 km. SW of Kamloops.

PREPARED BY:

KERR, DAWSON & ASSOCIATES LTD.,
#1-219 Victoria Street,
KAMLOOPS, B. C.

John R. Kerr, P. Eng.,
January 12, 1979.



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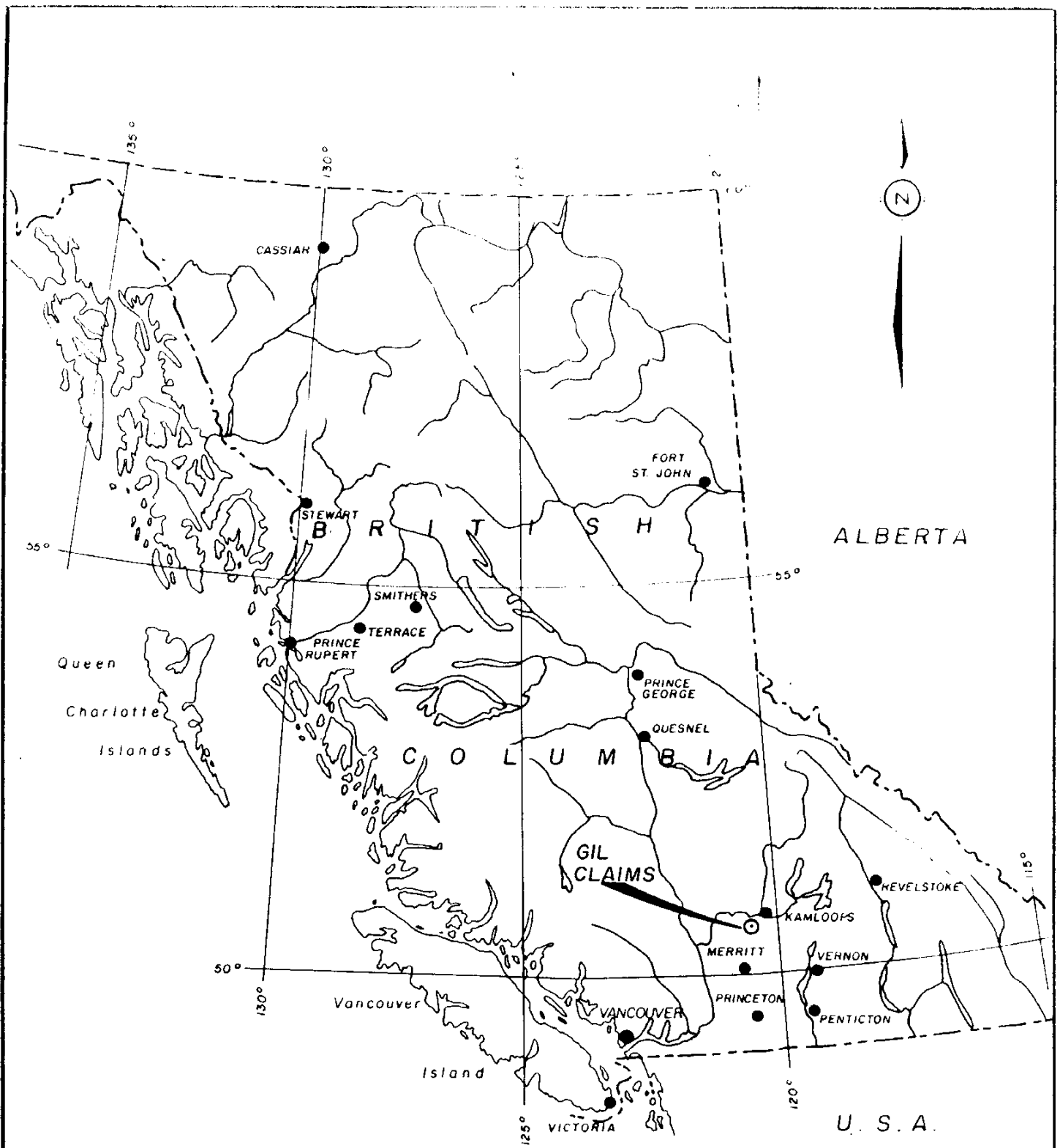
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INTRODUCTION

General Statement:

The Gil claims (30 units), cover a relatively unexplored calcalkaline stock between the Iron Mask and Guichon batholiths. Previous geological mapping, and reconnaissance soil sampling revealed significant chalcopyrite and molybdenite associated with geochemical anomalies and the calcalkaline stock.

The claims were staked in January, 1977, to cover the main stock, and were sold to Barrier Reef Resources Ltd. (NPL). During October, 1978, a two man crew completed three days of geochemical soil sampling on the Gil #2 claim. This report summarizes the results of this programme.



BARRIER REEF RESOURCES LTD(NPL)

LOCATION MAP

GIL CLAIMS

KAMLOOPS MINING DIVISION, B.C.

Technical Work by
Kerr, Dawson & Assoc. Ltd.

Date : Jan., 1979.

Scale : 1cm. = 87 km

Dwg No. 150-1

Location and Access:

The claims are located on the north slope of Greenstone Mountain, approximately 21 km. southwest of Kamloops, B. C. The geographic coordinates of the property are 50°37'N; 120°38'W (NTS - 92I/10E).

Access to the property is possible along a gravel logging road leaving the Trans Canada Highway at Cherry Creek. Access to the southern portion of the claims is possible along the main route to the microwave relay station on top of Greenstone Mountain. Access to the northern and central portion of the claims is possible along a new logging road, leaving the main logging road at a point 11 km. south of Cherry Creek.

Topography and Vegetation:

The peak of Greenstone Mountain (elevation 1,794 m a.s.l.) is located within the southern portion of the Gil #2 claim, and forms a height of land in the broad, gentle terraine of the Interior Plateau. Total relief on the property is in excess of 480 meters, ranging from 1,310 m (a.s.l.) in the northeast corner

of the claims to the peak of Greenstone Mountain. Local, precipitous cliffs occur in the southern and central portion of the claims.

Except for small logged-off areas, the claims are tree covered, consisting mainly of fir, balsam, and jack-pine.

Property:

The property consists of two contiguous claims, located by the Modified Grid System.

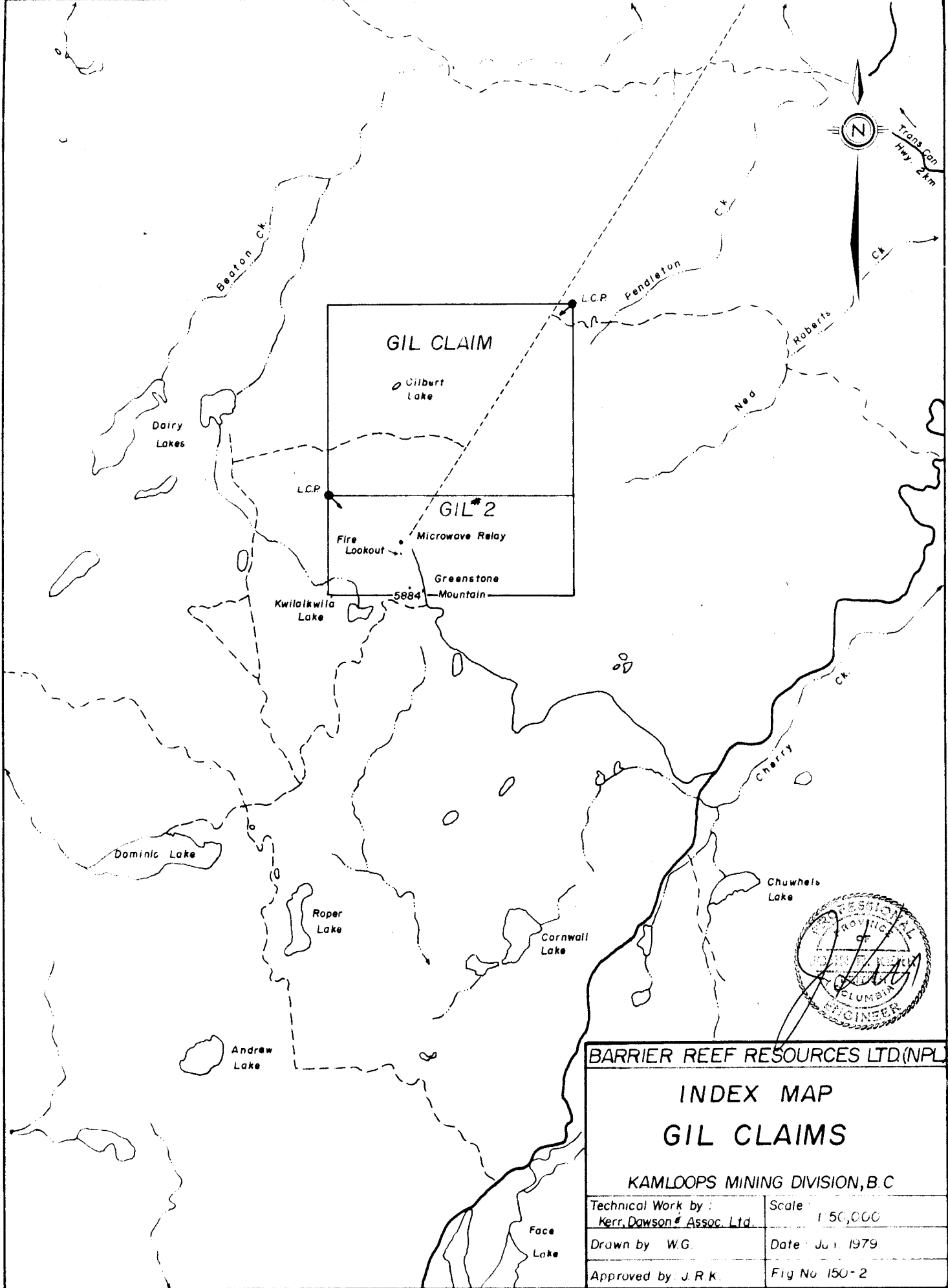
<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Mining Div.</u>	<u>Expiry Date</u>
Gil #1	670	20	Kamloops	Jan.10,1980
Gil #2	685	10	Kamloops	Jan.24,1980 *

* On acceptance of this report.

The registered owner of the claims is Barrier Reef Resources Ltd. (NPL).

History of Work:

The ground currently covered by the Gil claims was previously held by Moneta Porcupine Mines Ltd. In 1972 and 1973, a broad-spaced reconnaissance geological



BARRIER REEF RESOURCES LTD.(NPL)

INDEX MAP
GIL CLAIMS

KAMLOOPS MINING DIVISION, B.C.

Technical Work by : Kerr, Dawson & Assoc. Ltd.	Scale : 1 50,000
Drawn by : W.G.	Date : Jun. 1979
Approved by : J.R.K.	Fig No 150-2

mapping and soil sampling programme was completed over a relatively large claim holding. This programme resulted in the discovery of the identified mineral showings, the geological interpretation, and broad geochemical anomalies.

There is no record of previous exploration being completed on the property.

GEOLOGY

The Gil property is underlain by volcanic rocks of the Nicola group, intruded by several small granitic plugs.

The Nicola rocks consist primarily of massive porphyritic andesite flows. These rocks are relatively fresh, dark gray-green in colour with euhedral pyroxene crystals up to 30 mm. long. Locally tuffaceous sediments and agglomerates predominate. Near the summit of Greenstone Mountain an area of andesite breccia has been noted. Disseminated pyrite is common in this breccia zone and minor chalcopyrite can be seen in some places.

There are at least three small granitic plugs present on the subject claims. In composition, they vary from quartz monzonite to granodiorite. In addition, a number of feldspar porphyry dikes, presumably related to these intrusives, cut the Nicola volcanics.

The largest intrusive body is located near Gilbert Lake and is predominantly medium grained quartz monzonite. Parts of this plug are hydrothermally altered and contain minor quartz veins carrying traces of chalcopyrite and molybdenite. The two smaller plugs located on the north slope of Greenstone Mountain are of relatively fresh granodiorite and have no mineralization associated directly with them.

GEOCHEMISTRY

During the period October 17-19, 1978, a two-man crew collected 147 soil samples at 50 meter intervals along lines spaced 400 meters on the Gil #2 claim. The grid lines were established by chain and compass methods concurrently with soil sampling.

Samples were collected from the "B" horizon of soils, at depths of 5 - 20 cm., placed in brown Kraft envelopes, and shipped to the laboratories of Bondar-Clegg and Company Ltd. for Cu-Mo analysis. The samples were dried and sieved, an aliquot of the -80 mesh fraction being digested in hot aqua-regia. The copper and molybdenum content was determined by atomic absorption methods, and is expressed in parts per million (ppm).

A statistical analysis of the results for each metal was completed, and anomalous limits were determined by the following methods:

Copper:

No. of samples (n)	147
Mean (m)	68.87 ppm Cu.
Standard Deviation (s)	72.48 ppm Cu.
Possibly Anomalous ($> m$)	> 68 ppm Cu.
Probably Anomalous ($> m+s$)	> 141 ppm Cu.
Definitely Anomalous	
($> m + 2s$)	> 210 ppm Cu.

Molybdenum:

No. of samples (n)	147
Mean (m)	4.17 ppm Mo.
Standard Deviation (s)	5.69 ppm Mo.
Possibly Anomalous ($> m$)	> 4 ppm Mo.
Probably Anomalous ($> m+s$)	> 9 ppm Mo.
Definitely Anomalous	
($> m + 2s$)	> 15 ppm Mo.

The values were plotted on the accompanying 1:5,000 scale map sheets (Figures 150-3 & 4), and contoured according to possibly and definitely anomalous limits.

There is a broad coincident geochemical pattern in the eastern portion of the Gil #2 claim, with irregular isolated definitely anomalous zones of copper and molybdenum. The work completed is insufficient, and further detailed sampling in this area is required to interpret and delineate anomalies in detail.

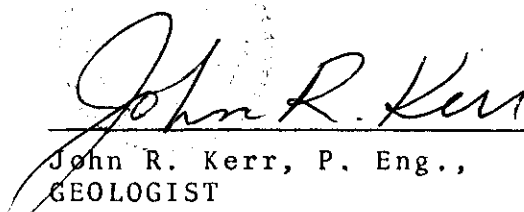
DISCUSSION OF RESULTS

There is a correlation of the broad geochemical anomaly in the eastern portion of the Gil #2 claim with the two small granitic stocks. Known MoS_2 and chalcopyrite mineralization occurs in the northern stock on the Gil claim. Although speculative at the present time, it is possible that the three stocks may be part of a large intrusive mass, capped by a thin layer of the Nicola volcanics.

The broad geochemical pattern is typical of porphyry Cu-Mo deposits. Further detailed geochemistry, and deep induced polarization surveys are recommended in the area of the three stocks,

Respectfully Submitted By:

KERR, DAWSON & ASSOCIATES LTD.,



John R. Kerr, P. Eng.,
GEOLOGIST

Kamloops, B. C.,

January 12th., 1979.

APPENDIX A

Cost Statement

COST STATEMENT

LABOUR: (October 17-19, 1978).

M. E. Dawson, Field Assistant		
3 days @ \$75.00/day	\$225.00	
 P. Duquette, Field Assistant		
3 days @ \$75.00/day	<u>225.00</u>	\$. 450.00

GEOCHEMICAL ANALYSIS:

147 samples Mo-Cu @ \$2.25/sample	\$330.75	
Sample Preparation @\$0.35/sample	<u>51.45</u>	. . . 382.20

ROOM AND BOARD:

6 man days @ \$26.00/man/day	156.00	
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TRUCK RENTAL:

3 days @ \$20.00/day	\$ 60.00	
150 mi. @\$0.20/mile	<u>30.00</u>	. . . 90.00

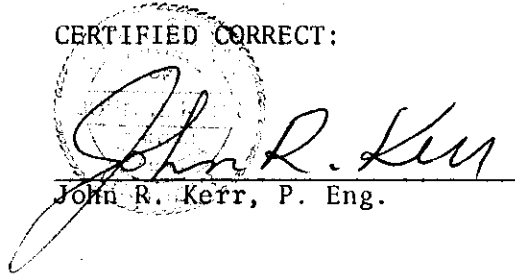
MISC. SUPPLIES & EQUIPMENT RENTAL 66.40

REPORT PREPARATION: (January 10-12, 1979).

John R. Kerr, P. Eng.	\$375.00	
Drafting	160.00	
Reproduction, secretarial, and report binding	<u>71.00</u>	. . . <u>606.00</u>

TOTAL \$1,750.60

CERTIFIED CORRECT:


John R. Kerr, P. Eng.

APPENDIX B

Statement of Qualifications

JOHN R. KERR, P.ENG.
GEOLOGICAL ENGINEER

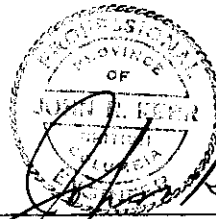
1 - 219 VICTORIA STREET
KAMLOOPS, B.C.
PHONE (604) 374-0544

STATEMENT OF QUALIFICATIONS

I, JOHN R. KERR, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY
CERTIFY THAT:

- (1). I am a geologist residing at 295 Greenstone Drive, Kamloops, B. C., and am employed by Kerr, Dawson and Associates Ltd. of #1-219 Victoria Street, Kamloops, B. C.
- (2). I am a graduate of the University of British Columbia, BA. Sc. (1964), a fellow of the Geological Association of Canada, and a member of the Professional Engineers of British Columbia. I have practised my profession continuously since graduation.
- (3). I am the author of this report, which describes an exploration programme supervised by myself and J. M. Dawson, P. Eng. on the Gil claims, Kamloops Mining Division.

KERR, DAWSON & ASSOCIATES LTD.,



John R. Kerr

John R. Kerr, P. Eng.,
GEOLOGIST

Kamloops, B. C.,
January 12th., 1979.

APPENDIX C

Geochemical Data



Geochemical Lab Report

Extraction Hot Aqua Regia

Report No. 28 - 1656

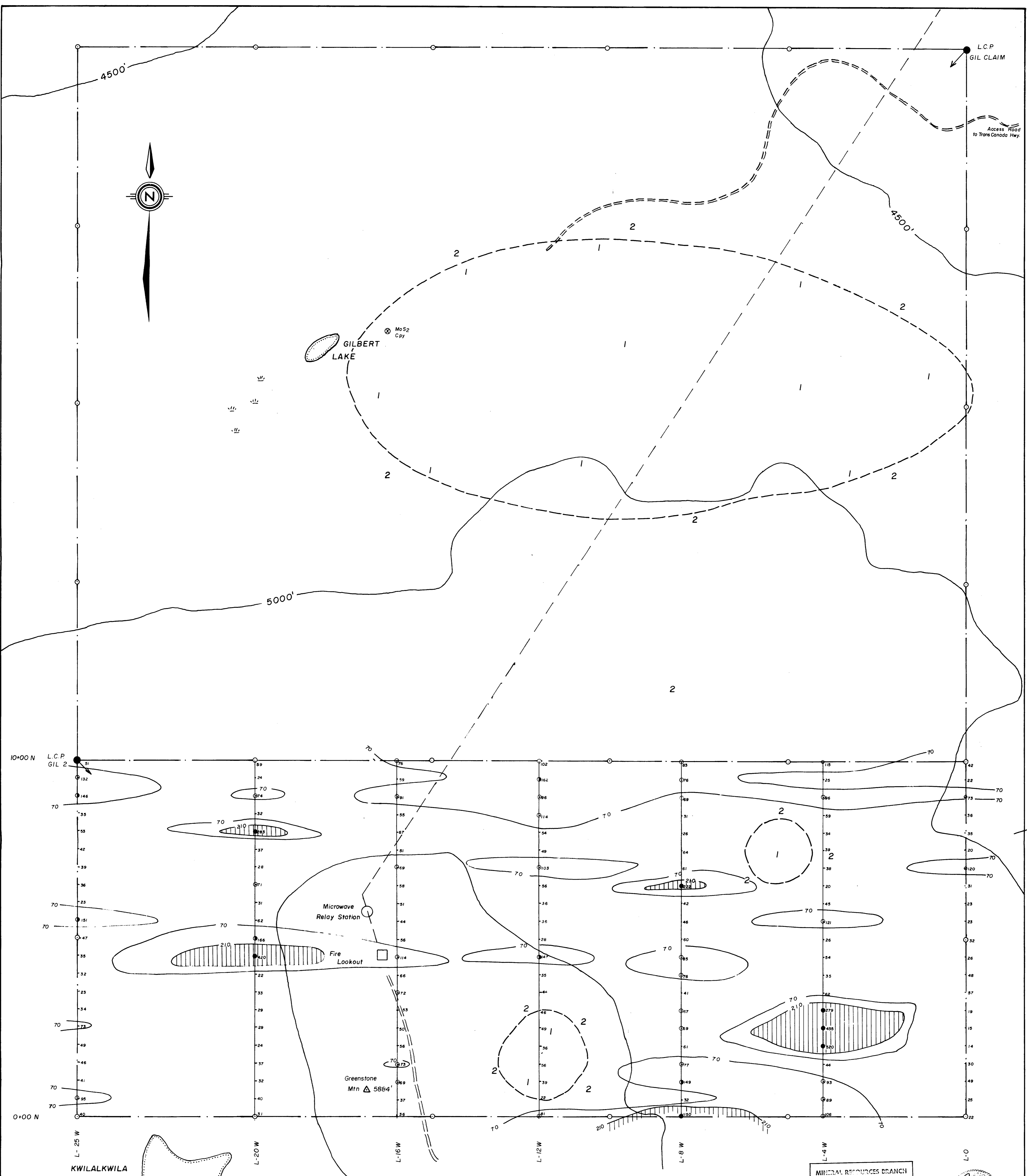
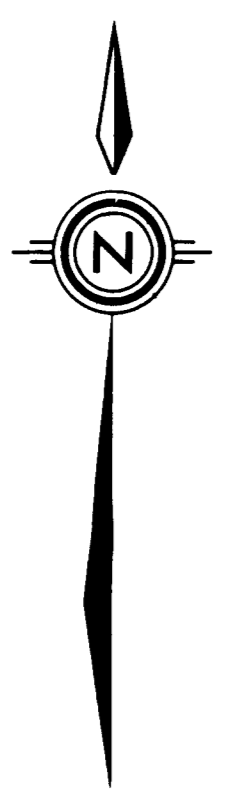
Method Atomic Absorption

From Barrier Reef

Fraction Used _____

Date October 26 19 78

SAMPLE NO.	Cu ppm	Mo ppm			SAMPLE NO.	Cu ppm	Mo ppm		
SE 0+00N	22	7			4W 4+50N	54	8		
0+50N	25	7			5+00N	26	5		
1+00N	49	7			5+50N	141	5		
1+50N	30	4			6+00N	45	10		
2+00N	14	7			6+50N	20	7		
2+50N	15	4			7+00N	38	7		
3+00N	19	3			7+50N	39	7		
3+50N	57	6			8+00N	34	7		
4+00N	48	4			8+50N	59	24		
4+50N	26	5			9+00N	96	43		
5+00N	32	4			9+50N	25	12		
5+50N	23	5			10+00N	115	44		
6+00N	23	3			8W 0+00N	1150	8		
6+50N	31	4			0+50N	32	5		
7+00N	120	6			1+00N	149	2		
7+50N	20	2			1+50N	77	3		
8+00N	35	3			2+00N	61	3		
8+50N	36	3			2+50N	69	3		
9+00N	73	3			3+00N	67	3		
9+50N	22	2			3+50N	41	3		
10+00N	42	3			4+00N	76	5		
8W 0+00N	106	3			4+50N	85	4		
0+50N	89	2			5+00N	60	2		
1+00N	93	2			5+50N	46	3		
1+50N	44	1			6+00N	42	3		
2+00N	520	13			6+50N	222	3		
2+50N	455	11			7+00N	61	6		
3+00N	279	14			7+50N	64	8		
3+50N	62	10			8+00N	26	7		
4+00N	35	6			8+50N	31	6		



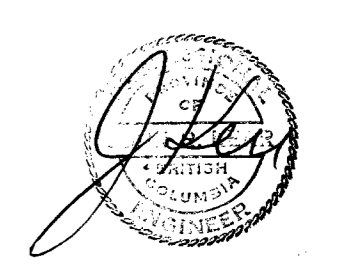
LEGEND

- Road
- Hydro line
- 5000 Topographic contour in feet (a.s.l.)
- Survey line with sample station and value in parts per million (ppm) Copper
- Claim boundary with Legal Corner Post (L.C.P.)
- Geological contact
- Granodiorite
- Nicola volcanics
- Molybdenite
- Chalcopyrite

GEOCHEMICAL CATEGORIES

- Negative < 6887 ppm Cu
- Possibly Anomalous 6887 - 14135
- Probably Anomalous 14135 - 210.22
- ⊥ Definitely Anomalous > 210.22

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7073
NO.



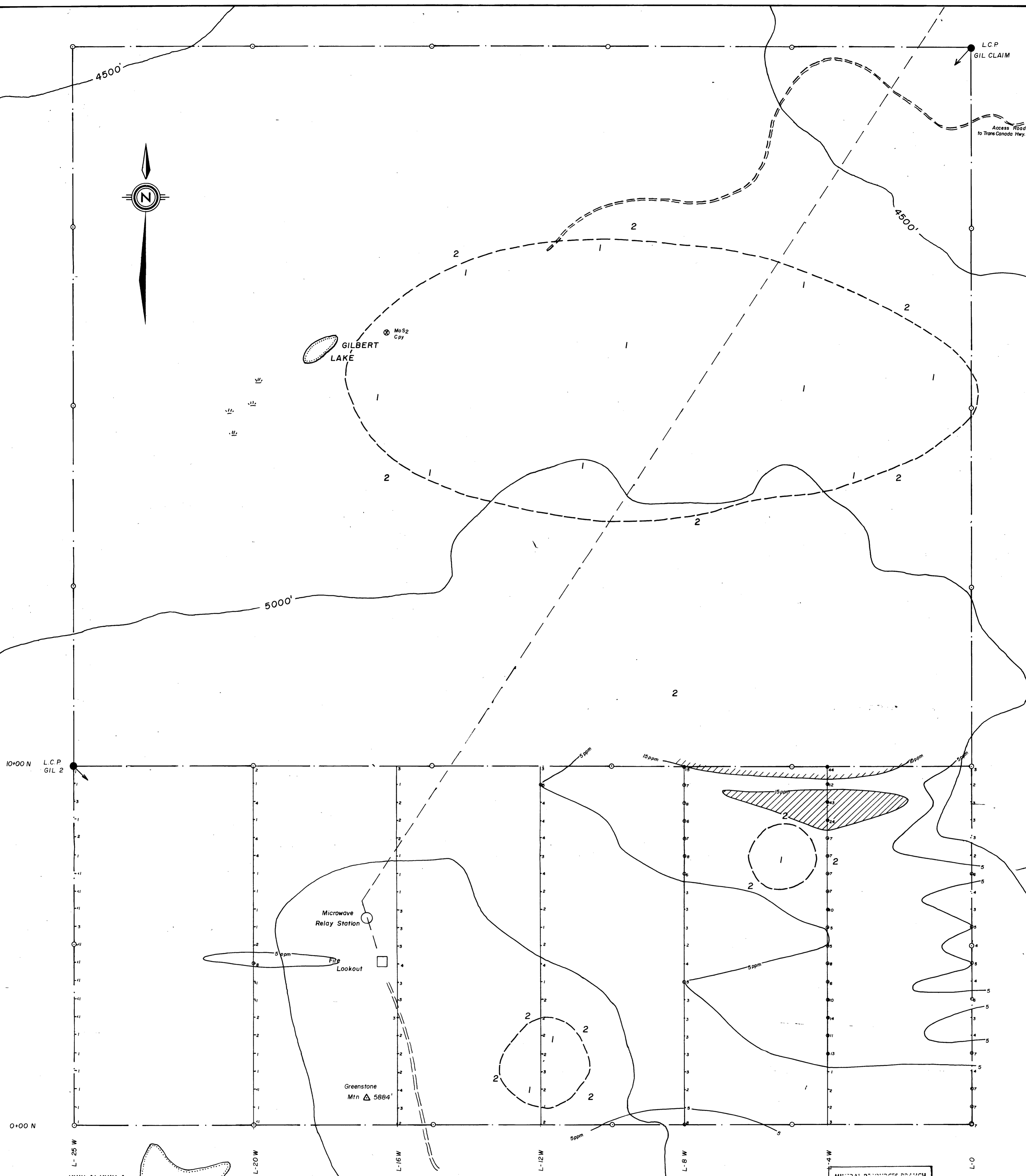
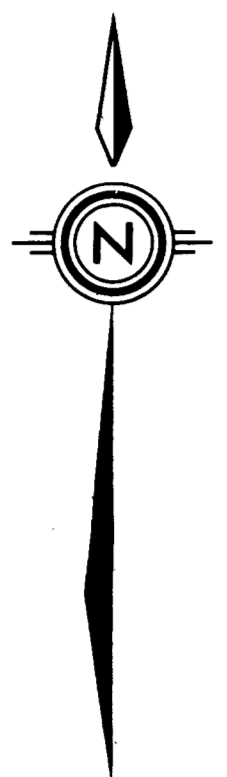
BARRIER REEF RESOURCES LTD (N.P.L.)

Cu DISTRIBUTION IN SOILS

GIL CLAIMS

KAMLOOPS MINING DIVISION, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000
DRAWN BY: J. R. KERR, P. ENG.	DATE: JAN., 1979.
APPROVED BY: J. R. KERR, P. ENG.	FIG. NO. 150-3



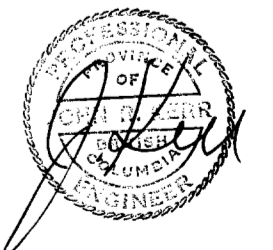
LEGEND

- Road
- Hydro line
- 5000 Topographic contour in feet (a.s.l.)
- Survey line with sample station and value in parts per million (ppm) Molybdenum.
- Claim boundary with Legal Corner Post (L.C.P.)
- Geological contact
- 1 Granodiorite
- 2 Nicola volcanics
- MoS₂ Molybdenite
- Cpy Chalcopyrite

GEOCHEMICAL CATEGORIES

- Negative < 4.17 ppm Mo
- Possibly Anomalous 4.17 - 9.86
- Probably Anomalous 9.86 - 15.55
- Definitely Anomalous > 15.55

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7073
NO.



BARRIER REEF RESOURCES LTD (NPL.)

Mo DISTRIBUTION IN SOILS

GIL CLAIMS

KAMLOOPS MINING DIVISION, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000
DRAWN BY: J.R.K & W.G.	DATE: JAN., 1979.
APPROVED BY: J.R. KERR, P.ENG.	FIG. NO. 150 - 4