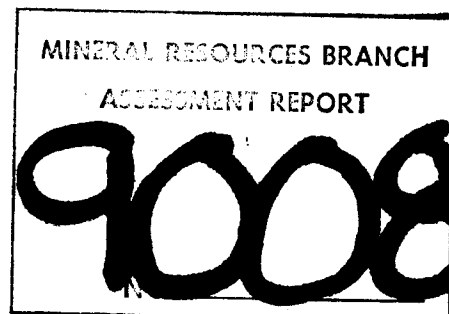


GEOCHEMICAL AND GEOPHYSICAL REPORT

- on the -



FOGGY #11 CLAIM

Kamloops Mining Division

British Columbia

- for -

BARRIER REEF RESOURCES LTD.,
904-675 West Hastings Street,
VANCOUVER, B. C. V6B 1N2.

Covering: Foggy #11 Claim (20 units).
Work Performed: July 8, 1980 to March 10, 1981.
Location: (1). 51°32'N; 119°53'W.
(2). NTS Map 82M/12W.
(3). 7.5 km. south of Birch Island, B.C.

PREPARED BY:
KERR, DAWSON & ASSOCIATES LTD.,
#1-219 Victoria Street,
Kamloops, B. C.
James M. Dawson, P.Eng.,
- March 20, 1981.

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BARRIER REEF RESOURCES LTD.	
LOCATION MAP	
FOGGY #II CLAIM	
KAMLOOPS MINING DIVISION, B. C.	
Technical Work by: Kerr, Dawson & Assoc. Ltd.	Date : Mar 1980
Scale : 1cm. = 87km.	Dwg No. 193-1

INTRODUCTION

This report describes the results of a continuing exploration programme on the Foggy #11 claim.

Original geochemical and geophysical surveys were carried out in 1979 and the results warranted further work. This led to an expansion of the original grid area in 1980 with soil sampling and VLF-EM surveys over this new grid.

Results of this work are appended on a series of maps accompanying this report.

SUMMARY AND CONCLUSIONS

- (1). This report covers the Foggy #11 claim consisting of 20 metric units. It is located in moderate terrain in southern British Columbia and is road accessible.

- (2). The subject ground has been staked several times in recent years; however, the massive sulphide occurrence was only exposed by a recent logging road. Attention was first drawn here when an airborne Dighem II survey outlined an area of low resistivity within which the massive sulphide outcrop was later located.

- (3). The claim is underlain by typical phyllites and quartz-sericite schists of the Eagle Bay succession. These rocks host a (?) conformable, massive pyrite horizon which strikes northeasterly but is complexly folded. This horizon appears to be at least 3 to 4 meters thick and to extend some distance along strike to the northeast and southeast. Minor copper, lead, zinc, and silver values are present in the massive sulphide outcrop.

- (4). Soil geochemistry and mineralized float indicate that the mineralization could extend at least 700 meters to the southwest and possibly further to the northeast. It is also possible that other parallel zones of mineralization may be present.
- (5). The VLF-EM data outline several weak, linear conductors, one of which is adjacent to the massive sulphide outcrop and can be traced for about 200 meters. It may be that the mineralization becomes more disseminated in character further along strike. The large area of the Dighem II anomaly may represent disseminated pyrite-chalcopyrite (Harper Creek type) mineralization with local areas of massive to submassive sulphides.

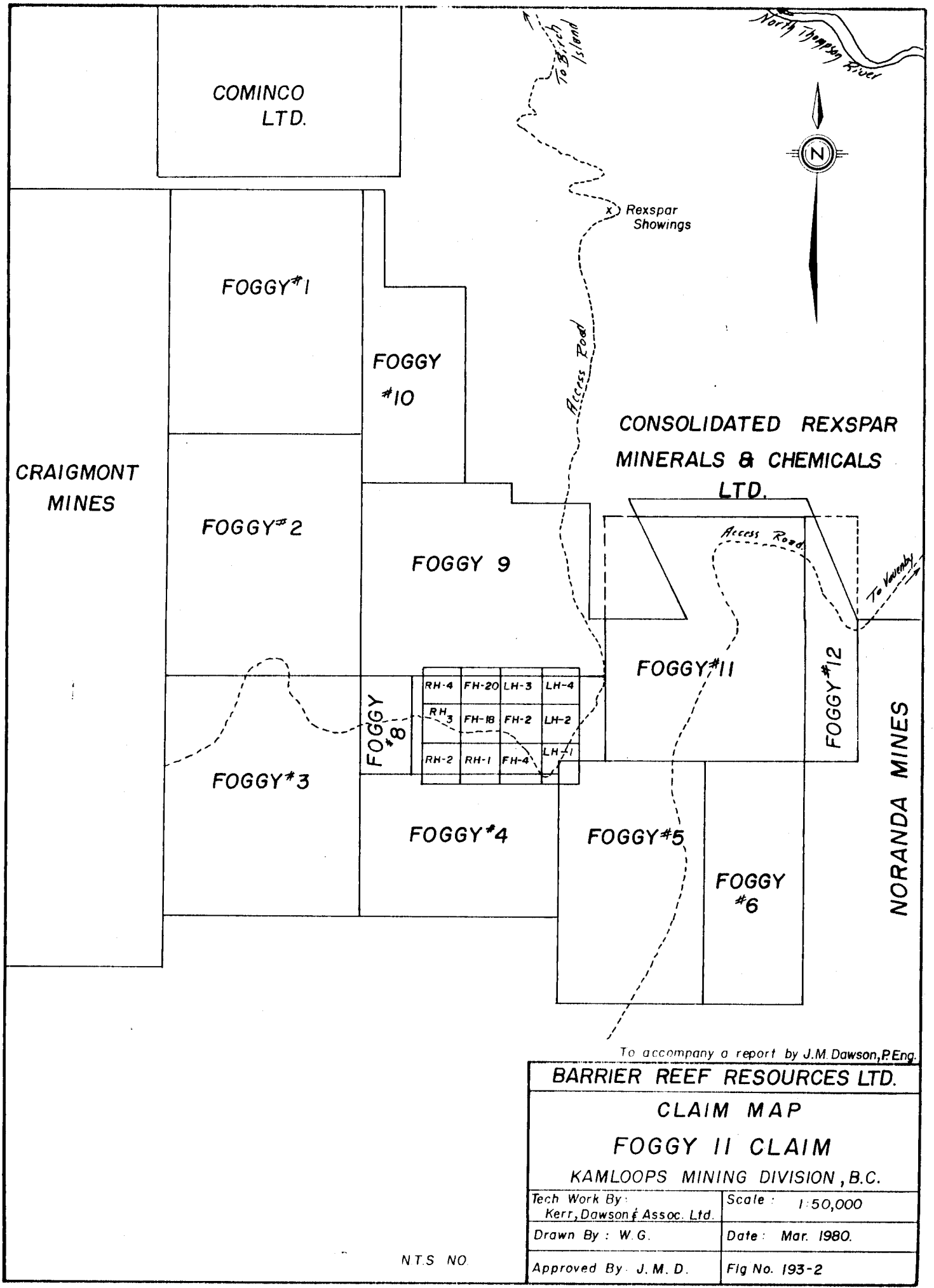
PROPERTY

The property consists of one 20 unit metric claim as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Tag No.</u>	<u>Expiry Date</u>
Foggy #11	20 13 ²	47793	Aug. 23/81



The registered owner of this claim is
Barrier Reef Resources Ltd.



COMINCO LTD.

FOGGY #1

FOGGY #10

CONSOLIDATED REXSPAR MINERALS & CHEMICALS LTD.

CRAIGMONT MINES

FOGGY #2

FOGGY 9

FOGGY #11

FOGGY #12

FOGGY #3

FOGGY #8

RH-4	FH-20	LH-3	LH-4
RH-3	FH-1B	FH-2	LH-2
RH-2	RH-1	FH-4	LH-1

FOGGY #4

FOGGY #5

FOGGY #6

NORANDA MINES

To accompany a report by J.M. Dawson, P.Eng.

BARRIER REEF RESOURCES LTD.

CLAIM MAP

FOGGY II CLAIM

KAMLOOPS MINING DIVISION, B.C.

Tech Work By: Kerr, Dawson & Assoc. Ltd.

Scale: 1:50,000

Drawn By: W.G.

Date: Mar. 1980.

Approved By: J.M.D.

Fig No. 193-2

NTS NO

LOCATION AND ACCESS

The property is located in south central British Columbia about 100 km. NNE of the city of Kamloops. The claim lies 7 miles south of the village of Birch Island and immediately south of the Rexspar uranium - fluorite property. Approximate geographic center of the property is at 51°32' north latitude and 119°54' west longitude.

Access to the property is gained by driving east from Birch Island along the south side of the North Thompson River for about 16 km. Here the Jones Creek logging road leads south and west across Baker Creek and Lute Creek to the subject claim. This road distance is about 20 km.

PHYSIOGRAPHY AND VEGETATION

The claim covers part of a northerly-trending ridge lying between Foghorn Creek and Lute Creek. Most of the topography is gently sloping to the north and northeast except for that part covering the steep east slope of Foghorn Creek valley. Elevations vary between 4,800 and 6,000 feet a.s.l. However, most of the area of interest is at approximately 5,500 feet a.s.l.

Most of the property is covered by a dense growth of mature spruce, cedar and fir. A number of very recent logging slashes are the only open areas.

Roads and creeks provide the only opportunity for bedrock to outcrop in this gentle terrain.

HISTORY

This district has seen a number of bursts of activity. First in the early 1950's during the original work on the Rexspar showings (about 4 km. to the north-northwest) and then in the late 1960's and early 1970's with the discovery of the Harper Creek copper property (about 4 km. east). A number of old roads and grid cut-lines appear to date from the earliest Rexspar activity. There is no previous mention of work done on the mineral occurrences described in this report.

In the spring of 1979, a Dighem II airborne geophysical survey was flown over the area of the Foggy #11 claim. One area of lower resistivity was outlined on the claim. Ground investigation of this area revealed one outcrop of massive to submassive sulphides.

Detailed soil sampling, prospecting and VLF-EM surveys were performed in the immediate area of the sulphide occurrence.

During 1980, these surveys were expanded in an attempt to trace the sulphide body to the northeast and southwest.

GEOLOGY AND MINERALIZATION

The property is underlain by typical buff-coloured phyllite and quartz-sericite schist of the Eagle Bay succession. Outcrops are scarce but the overall attitude of the foliation appears to be northeast with a gentle to moderate dip to the northwest. However, small scale structures appear to indicate that the bedding has been deformed into tight isoclinal folds.

Minor pyrite is commonly found as scattered disseminated grains in Eagle Bay phyllite. It seldom makes up more than 5% of the rock volume.

Minor chalcopyrite and traces of galena were observed in two outcrops on tributaries of Lute Creek in the northeast part of the claim (see figure 193-10). This mineralization occurs as fracture plane coatings in buff-coloured phyllite which contains frequent patches of bright, orange-brown limonite.

At 5+25G, 1+15E, (see grid) a new logging road exposes an outcrop of massive pyrite with occasional thin layers of sphalerite and minor chalcopyrite and galena. This outcrop is not well exposed and seemed at first to be a conformable layer; however, subsequent examination has revealed that the sulphides are complexly folded with the enclosing country rock.

No other outcrops of this sulphide material were found; however, the surrounding area is virtually flat and uniformly overburden - covered.

About 600 meters southwest of the sulphide outcrop, on strike with it and also with the trend of the Dighem II anomaly, a number of mineralized boulders are exposed along another logging road. About 15 such boulders were found and are roughly half of the massive pyrite type and half of silicified phyllite and quartz-sericite schist. They contain minor chalcopyrite, occasional traces of galena and sphalerite - mostly as fracture coatings. There are no outcrops in this vicinity.

GEOCHEMISTRY

An additional 275 soil samples were collected over the expanded grid. Together with the 1979 samples this makes a total of 513. Samples were collected at 50 meter intervals on grid lines spaced 100 meters apart (see figures 193-11 and 193-12).

Samples were collected from the "B" horizon where possible (approximately 15 to 45 cm. deep). Sample stations were marked with flagging and the appropriate grid co-ordinates. After collection samples were stored and shipped in waterproof kraft envelopes.

Samples were analysed for copper and zinc in the Vancouver laboratories of Bondar, Clegg and Company. Samples were dried and sieved and an aliquot of the -80 mesh fraction obtained. Extraction was attained by hot aqua regia with analysis by atomic absorption spectrophotometry.

The mean and standard deviation for both metals was computed and the data classified into the following categories:

Negative	0	-	Mean
Possibly Anomalous	Mean	-	(Mean + 1 Std. Dev.)
Probably Anomalous	(Mean + 1 Std. Dev.)	-	(Mean + 2 Std. Dev.)
Definitely Anomalous			(Mean + 2 Std. Dev.)

The values were plotted on 1:2,500 scale base maps of the property and definitely anomalous, probably anomalous and possibly anomalous areas were outlined (see figures 193-11 and 193-12).

Anomalous copper values grossly follow the trend suggested by the DIGHEM II Survey. This northeasterly-trending anomalous zone can be traced from about 5W, 9+50S to 11+50E, 6N, a distance of about 2,200 meters. Northeast of 6E, 1S the anomalous values are weaker and more scattered; however, the trend is still present. In the central part of the anomalous zone, the anomalous values are spread over a wider area (NW-SE) and there is some suggestion of weaker, parallel zones.

Anomalous zinc values follow some of the main trends of anomalous copper; however, the axis of the larger anomalous trend seems to be somewhat south of where higher

copper values plot. The suggestion of parallel zone(s) to the south is still apparent as well as discrete highs northwest of the major zone of higher values.

GEOPHYSICS

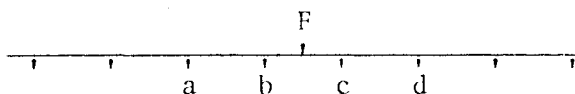
The Digham II survey outlined a large area of low resistivity, oriented parallel to the strike of regional foliation and (?) bedding of the underlying Eagle Bay rocks. Investigation of this anomaly revealed one outcrop of massive to submassive sulphides as well as several minor occurrences of copper.

A VLF-EM survey was carried out over a grid oriented north-south and covering the whole of the Digham II anomaly. The instrument used was a Sabre Electronics VLF-EM unit - Model 27. Readings were taken at 25 meter intervals. Since the direction of grid lines was north-south, Annapolis Md. frequency (21.4 Khz.) was used as a transmitting base.

The Sabre Electronics VLF-EM unit and method of reading is similar to other VLF-Em equipment. The method of reading is to locate the orientation of the transmitting station (Annapolis) from the null of field strength. From orientation at right angles to

the transmitting station, the maximum field strength (100%) is adjusted by a gain control knob. The unit is then held vertical with the coil at right angles to the transmitting station, and rotated to locate the field strength null point. The angle of rotation is therefore recorded either to the right (+) or to the left (-).

Data were recorded in field notes as if all lines had been surveyed from north to south (the same orientation was used at each station irrespective of whether the traverse was run NS or SN). This was done to utilize and simplify the Fraser Filter Method of displaying anomalies. The following calculation illustrates this method:



a,b,c,d - station readings

F - filtered value

$$F = (a+b) - (c+d)$$

The Fraser Filter Method serves three useful purposes in the display and interpretation of results:

- (1). Crossovers (normal anomaly interpretation) are displayed as high positive numbers, which may be contoured to correlate the varying strengths of the conductor along its axis, and to enhance interpretation and display of the better conductors.

- (2). Topography has a major effect in the reading of ground EM equipment. Steep hills will influence either the positive or negative orientation while rotating the EM unit, depending upon the orientation of the hill. Consequently ridges will be displayed as apparent crossovers. The Fraser Filter Method smooths out some of this topographic effect, thus resulting apparent anomalies are not as significantly displayed as if they had been shown as profiles of the raw data.

- (2). For the same topographic reasons, strong anomalies may not produce an actual crossover in steep terrain. The Fraser Filter Method enhances these anomalies to their proper perspective.

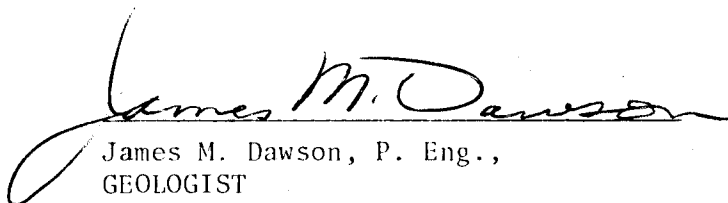
For the present survey, all readings were plotted on a 1:2,500 scale base map (see figure 193-13). Filtered values are displayed below station readings and are plotted midway between reading stations. Contours are drawn at $+10^{\circ}$, $+20^{\circ}$, and $+40^{\circ}$ to illustrate anomalies.

The data outline several weak, linear conductive zones which lie in or adjacent to the area outlined by the Dighem II anomaly. These results are disappointing in that they indicate no great lateral continuity to the massive sulphide "layer". It may be that the horizon(s) containing the sulphides is continuous but carrying say only 20 to 50% sulphides. It is possible that there is a large area of disseminated pyrite-chalcopyrite type mineralization (similar to the Harper Creek deposit) with isolated areas of massive to sub-massive sulphides.

Respectfully Submitted By:

KERR, DAWSON AND ASSOCIATES LTD.,




James M. Dawson, P. Eng.,
GEOLOGIST

KAMLOOPS, B. C.,
March 20, 1981.

APPENDIX A

PERSONNEL

PERSONNEL

J. M. Dawson, P. Eng.	Geologist	July 8, 11, 13, September 13, 14, 18, October 23, 25, November 6, March 5,6, 1981.	- 12 days
W. Gruenwald, B. Sc.	Geologist	March 6, 1981	- 1 day
M. Dawson	Field Supervisor	July 8-13, September 13-14, 1981	- 8 days
R. Henderson	Technician	July 8-13,1981	- 6 days

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

NOTE: Only those expenditures incurred after the assessment anniversary date are documented here.

(1). LABOUR:

J. M. Dawson, P. Eng., 8 days @ \$200.00/day	\$1,600.00	
W. Gruenwald, B. Sc., 1 day @ \$150.00/day	150.00	
M. Dawson, 2 days @ \$115.00/day	<u>230.00</u>	\$ 1,980.00

(2). EXPENSES AND DISBURSEMENTS:

(a). Geochemical Analyses: . . .	\$ 419.10	
(b). Truck Rental:		
6 days @ \$30.00/day	\$180.00	
775 mi. @ 30¢/mile	<u>232.50</u>	412.50
(c). Room and Board:	244.20	
(d). Instrument Rental:	40.00	
(e). Xerox, Blueprints, Telephone, Secretarial, Binding, etc.	<u>107.65</u>	<u>1,223.45</u>

TOTAL COSTS \$3,203.45

APPENDIX C

WRITER'S CERTIFICATE

JAMES M. DAWSON, P. ENG.

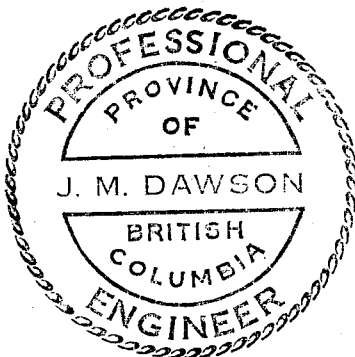
Geological Engineer

#1 - 219 VICTORIA STREET • KAMLOOPS, B.C. V2C 2A1 • TELEPHONE (604) 374-0544

CERTIFICATE

I, JAMES M. DAWSON, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT:

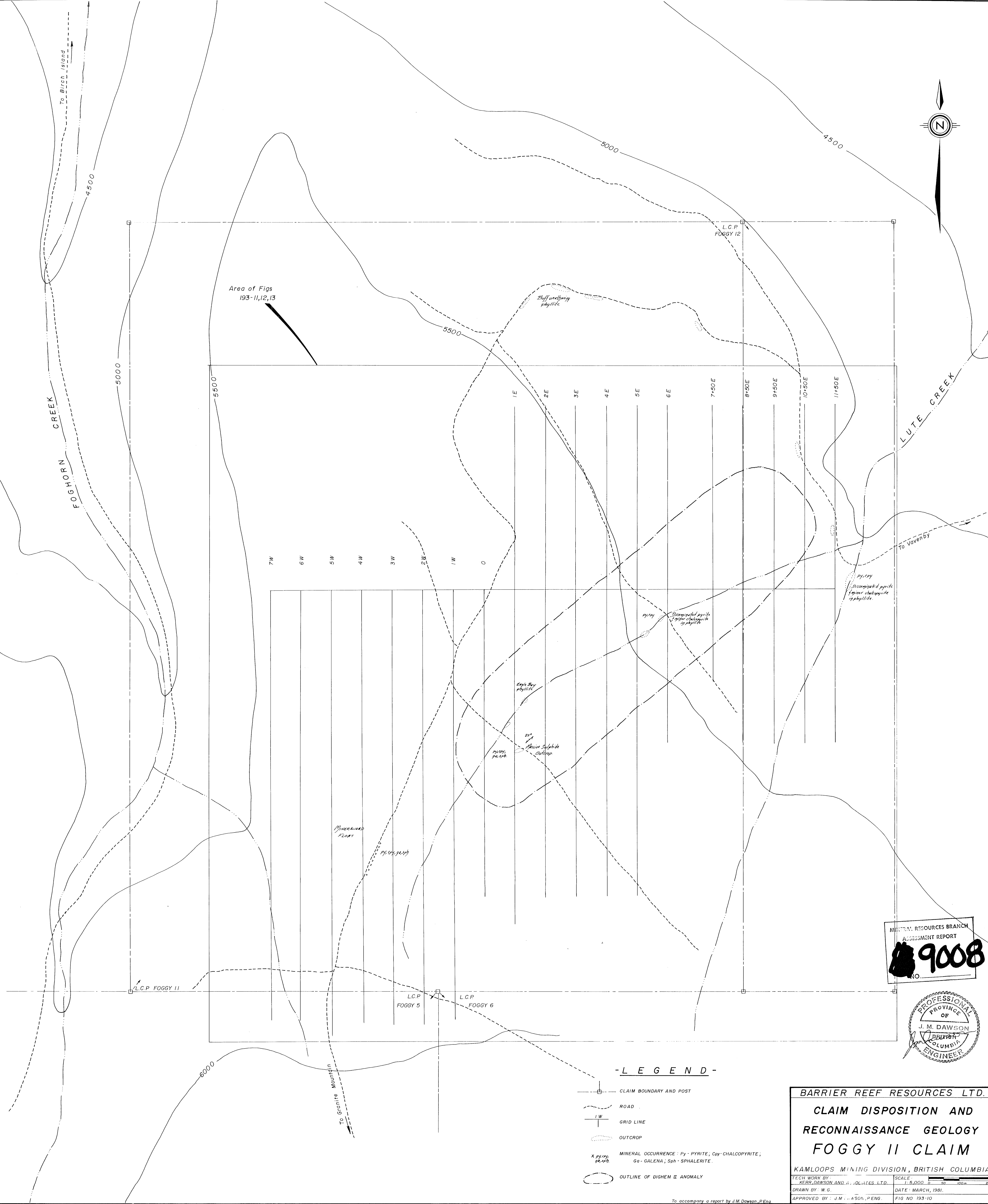
- (1). I am a geologist employed by Kerr, Dawson and Associates Ltd., of Suite #1, 219 Victoria Street, Kamloops, B. C.
- (2). I am a graduate of the Memorial University of Newfoundland - B. Sc. (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a Member of the Association of Professional Engineers of British Columbia. I have practised my profession for 17 years.
- (3). I am the author of this report which is based on an exploration programme carried out on the subject property under my direct supervision.



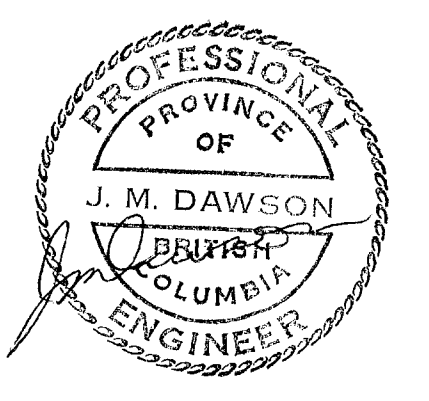
KERR, DAWSON AND ASSOCIATES LTD.,

James M. Dawson
James M. Dawson, M. Sc., P. Eng.,
GEOLOGIST

March 20, 1981,
KAMLOOPS, B. C.



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9008
NO.



- L E G E N D -

- CLAIM BOUNDARY AND POST
- ROAD
- GRID LINE
- OUTCROP
- MINERAL OCCURRENCE : Py - PYRITE; Cpy - CHALCOPYRITE;
Go - GALENA; Sph - SPHALERITE.
- OUTLINE OF DIGHEM II ANOMALY

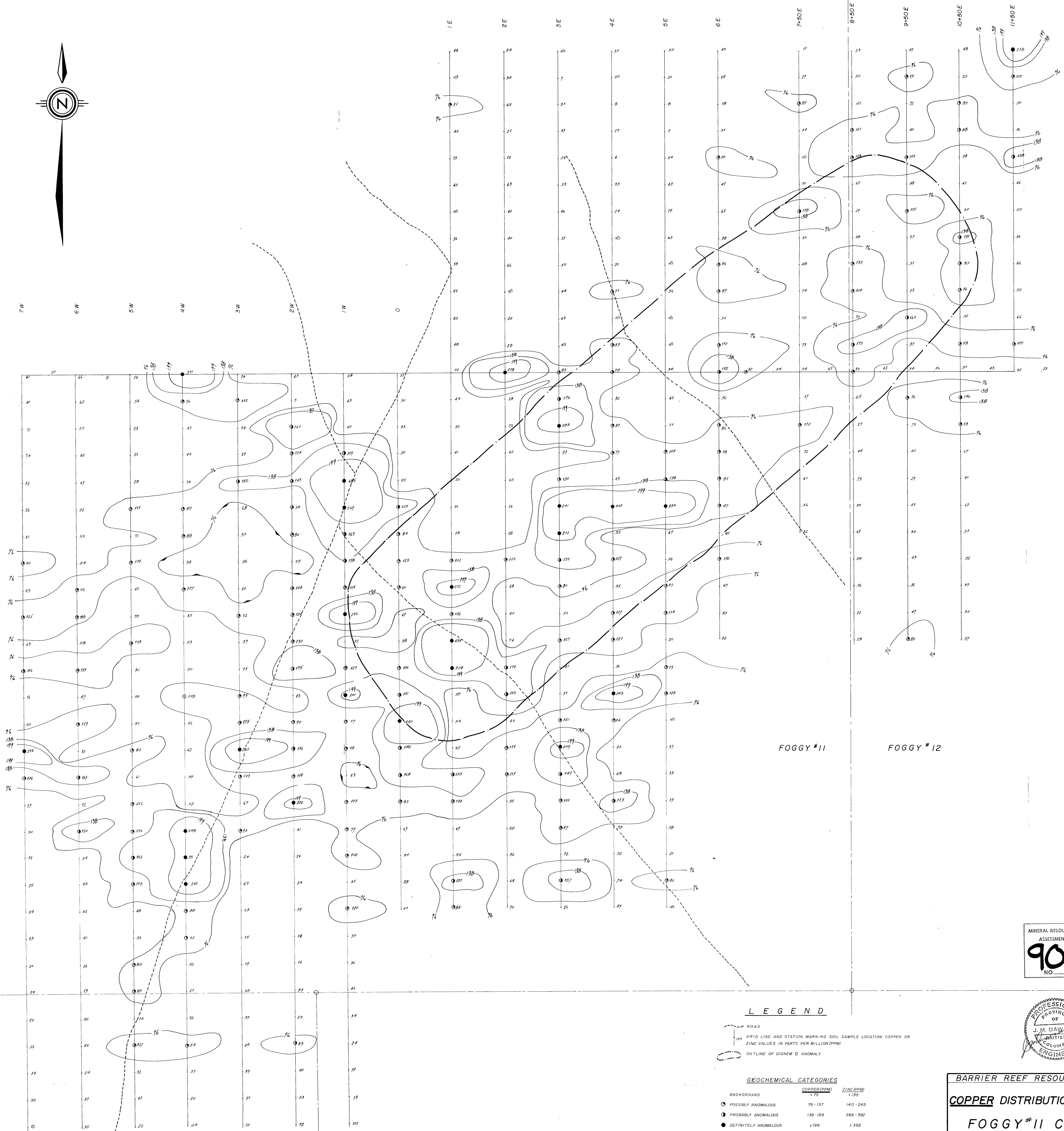
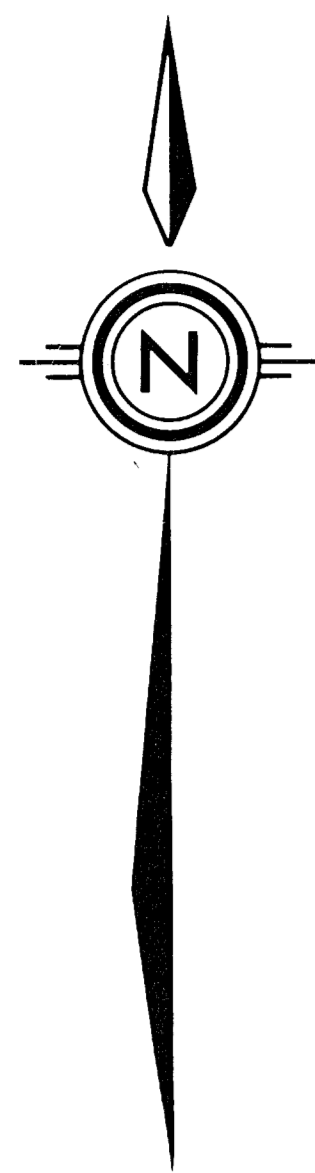
BARRIER REEF RESOURCES LTD.

**CLAIM DISPOSITION AND
RECONNAISSANCE GEOLOGY
FOGGY II CLAIM**

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA.

TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000
DRAWN BY: W.G.	DATE: MARCH, 1981.
APPROVED BY: J.M. DAWSON, P.ENG.	FIG NO 193-10

To accompany a report by J.M. Dawson, P.Eng.



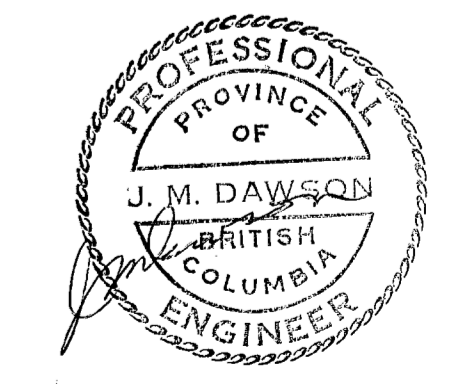
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9008
NO.

LEGEND

- ROAD
- GRID LINE AND STATION MARKING SOIL SAMPLE LOCATION COPPER OR ZINC VALUES IN PARTS PER MILLION (PPM)
- OUTLINE OF DIGHEM II ANOMALY

GEOCHEMICAL CATEGORIES

	COPPER (PPM)	ZINC (PPM)
BACKGROUND	< 75	< 130
POSSIBLY ANOMALOUS	76 - 137	140 - 265
PROBABLY ANOMALOUS	138 - 199	266 - 392
DEFINITELY ANOMALOUS	> 199	> 392



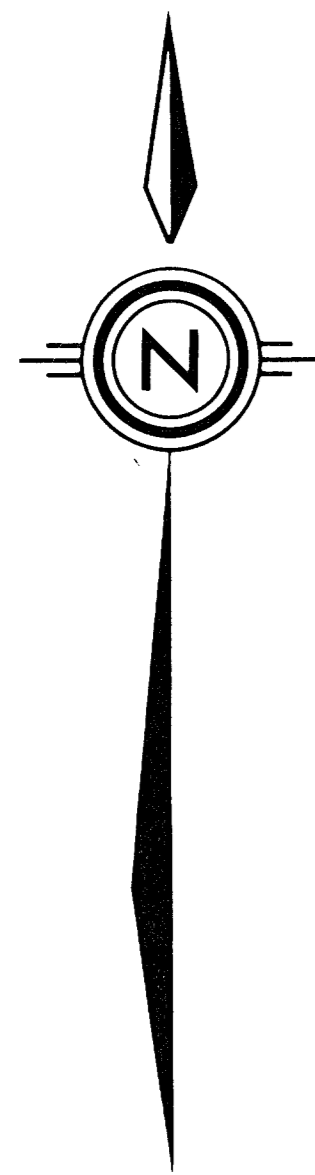
BARRIER REEF RESOURCES LTD.

COPPER DISTRIBUTION IN SOILS
FOGGY #11 CLAIM

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA.

TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD. SCALE: 1:2,500
DRAWN BY: W.G. DATE: MARCH, 1991.
APPROVED BY: J.M. DAWSON, P.ENG. FIG. NO. 193-11

To accompany a report by J.M. Dawson, P.Eng.



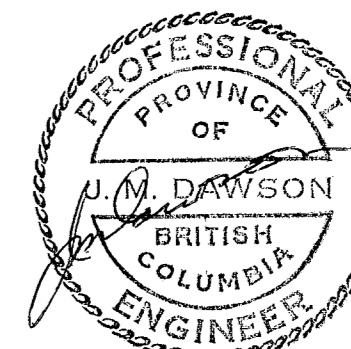
LEGEND

- ROAD
- GRID LINE AND STATION MARKING SOIL SAMPLE LOCATION COPPER OR ZINC VALUES IN PARTS PER MILLION (PPM)
- OUTLINE OF DIGHEM II ANOMALY

GEOCHEMICAL CATEGORIES

	COPPER (PPM)	ZINC (PPM)
BACKGROUND	< 75	< 139
● POSSIBLY ANOMALOUS	76 - 137	140 - 265
● PROBABLY ANOMALOUS	138 - 199	266 - 392
● DEFINITELY ANOMALOUS	> 199	> 392

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9008
NO.

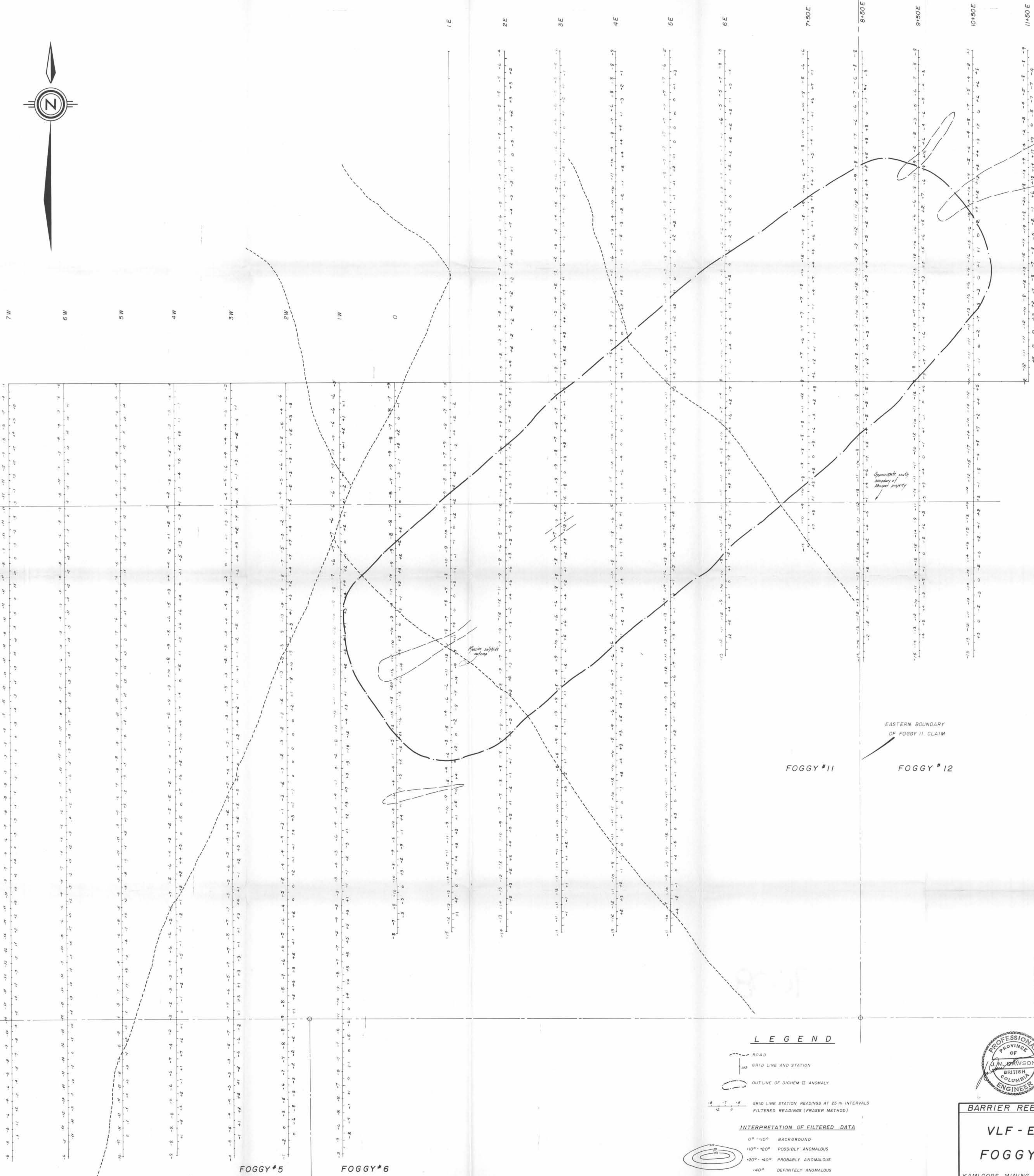


BARRIER REEF RESOURCES LTD.

**ZINC DISTRIBUTION IN SOILS
FOGGY # 11 CLAIM**

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA.
TECH WORK BY: KEHR, DAWSON AND ASSOCIATES LTD. SCALE: 1:2,000
DRAWN BY: W.G. DATE: MARCH, 1981.
APPROVED BY: J.M. DAWSON, P.ENG. FIG. NO. 193-12

To accompany a report by J.M. Dawson, P.Eng.



FOGGY #11 FOGGY #12

EASTERN BOUNDARY OF FOGGY II CLAIM

FOGGY #5 FOGGY #6

LEGEND

- ROAD
- GRID LINE AND STATION
- OUTLINE OF DIGHEM II ANOMALY
- GRID LINE STATION READINGS AT 25 m INTERVALS FILTERED READINGS (FRASER METHOD)

INTERPRETATION OF FILTERED DATA

- 0° - 10° BACKGROUND
- 10° - 20° POSSIBLY ANOMALOUS
- 20° - 40° PROBABLY ANOMALOUS
- 40° DEFINITELY ANOMALOUS

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9008
NO.



BARRIER REEF RESOURCES LTD.

VLF - EM SURVEY
FOGGY #11 CLAIM

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA.

TECH. WORK BY: KEND. DAWSON AND ASSOCIATES LTD. SCALE: 1:2,500
DRAWN BY: W.G. DATE: MARCH, 1981
APPROVED BY: J.M. DAWSON, P.ENG. FIG. NO. 193-13

To accompany a report by J.M. Dawson, P.Eng.