

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL
REPORT

- on the -

FOGHORN SHOWINGS

FOGGY CLAIMS

Kamloops Mining Division
British Columbia

- for -

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

Covering: Foggy #2, #3, #4, #8, and #9 claims.

Work Performed: July 22, 1979 to January 4, 1980.

Location: (1). 51°33'N; 119° 56'W.
(2). NTS Map 82 M/12 W.
(3). 9 km. SSW of Birch Island, B. C.

PREPARED BY:

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

J. M. Dawson, P. Eng.,
January 4, 1980.

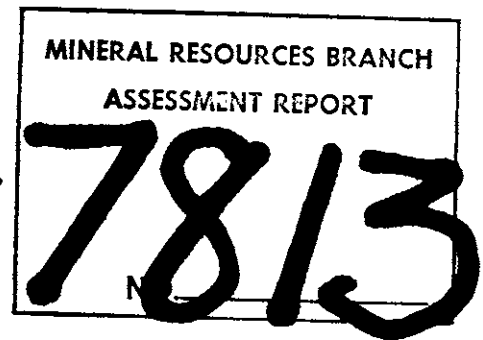
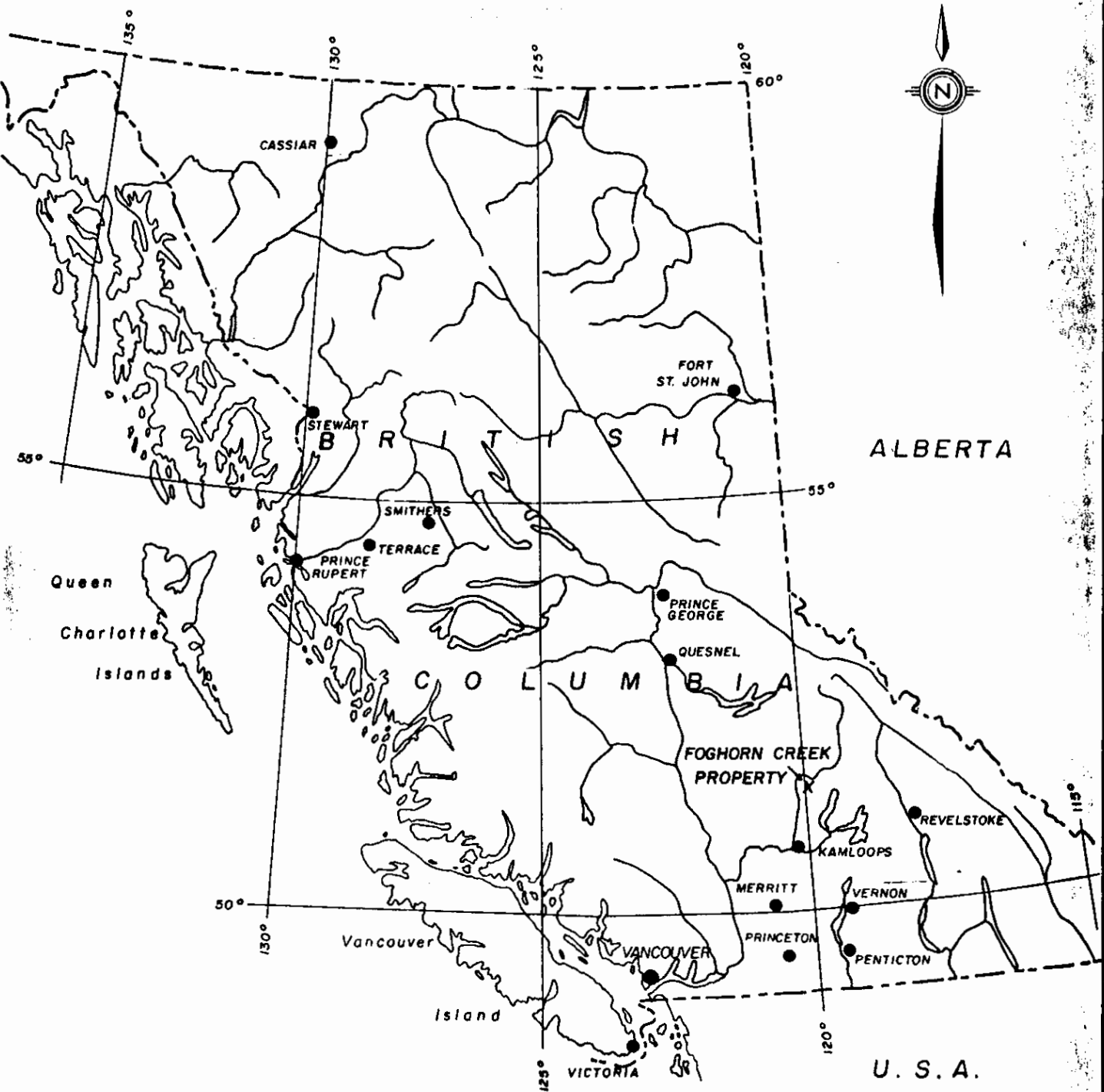


TABLE OF CONTENTS

	<u>Page No.</u>
INTRODUCTION	1
SUMMARY AND CONCLUSIONS	2
PROPERTY	4
LOCATION AND ACCESS	5
PHYSIOGRAPHY AND VEGETATION	6
PREVIOUS WORK	7
GEOLOGY	10
MINERALIZATION	13
GEOCHEMISTRY	15
GEOPHYSICS	19
EXPLORATION POTENTIAL	23
APPENDIX A: - Rock Geochemistry & Assay Data	
APPENDIX B: - Personnel	
APPENDIX C: - Statement of Expenditures	
APPENDIX D: - Writer's Certificate	
APPENDIX E: - Maps	
Figure 193-1 - Location Map	
Figure 193-2 - Claim Map	
Figure 193-4 - Geology of Foghorn Showing Area	
Figure 193-5 - Detailed Plan of Surface Workings - Foghorn Showings	
Figure 193-6 - Copper Distribution in Soils - Foghorn Showings	
Figure 193-7 - Zinc Distribution in Soils - Foghorn Showings	
Figure 193-8 - Silver Distribution in Soils - Foghorn Showings	
Figure 193-9 - VLF-EM Survey - Foghorn Showings	



BARRIER REEF RESOURCES LTD (NPL)

**LOCATION MAP
FOGHORN CREEK PROPERTY**

KAMLOOPS MINING DIVISION, B.C.

Technical Work by: Kerr, Dawson & Assoc. Ltd.	Date: March, 1979.
Scale: 1cm. = 87 km.	Dwg No. 193-1

INTRODUCTION

The Foggy claims were staked to cover a geological environment interpreted to be similar to that hosting the Chu Chua Mountain massive sulphide deposit.

This report describes an investigation of the old Foghorn showings located near the western boundary of the subject claims.

Geological, geochemical, and geophysical surveys were carried out, results were interpreted and the data are presented on a series of maps accompanying this report.

SUMMARY AND CONCLUSIONS

- (1). The present report covers portions of Foggy #2, and Foggy #3 which claims are part of a contiguous group of 10 metric claims totalling 163 units. The property is located in moderate terrain in southern British Columbia and is road accessible.

- (2). The Foghorn showings have been intermittently prospected since the early 1900's. Considerable trenching and limited underground work was done on a number of the high grade veins between 1910 and 1920 and a limited amount of hand sorted ore was shipped. Consolidated Rexspar did limited geological and geophysical surveys in 1958 since anomalous radioactivity was detected in the same general area.

- (3). The general area of the Foghorn showings is underlain by metavolcanic rocks of the Eagle Bay succession cut by at least one major fault.

- (4). A number of narrow, discontinuous, steeply dipping quartz veins contain spotty to sub-massive lenses of galena and sphalerite with lesser amounts of pyrite and chalcopyrite. These veins are contained within a north-northeasterly trending zone about 400 meters long and up to 150 meters wide.

- (5). Soil geochemistry outlines the known zone of mineralization but also indicates areas of equal or greater geochemical response in the southern third of the grid area.

- (6). VLF-EM confirms an airborne Dighem II anomaly and outlines two linear conductive zones which conform in part to geochemical soil anomalies.

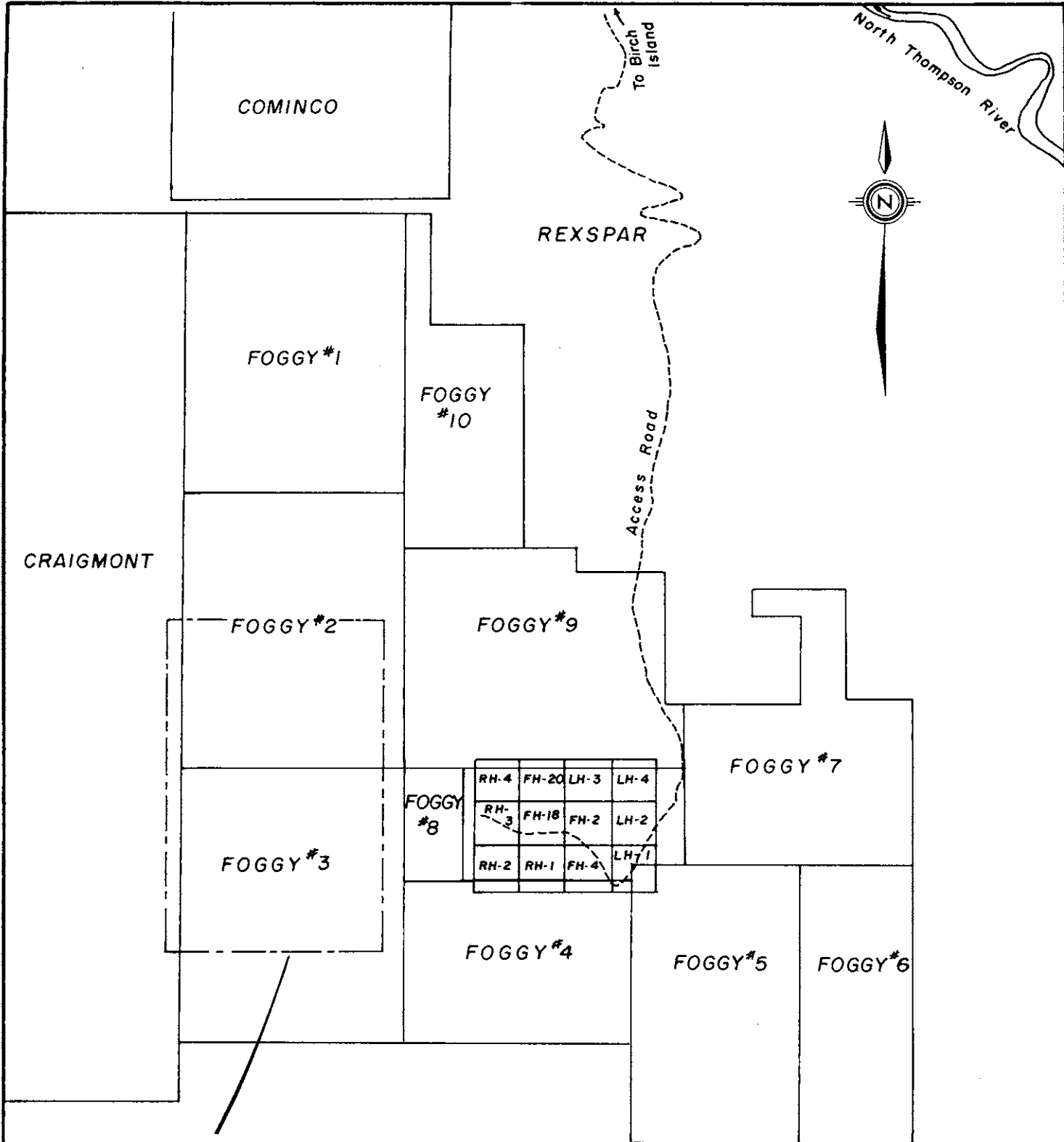
- (7). The general setting is favorable for volcanogenic massive sulphide deposits and the current work and adjacent exploration by Craigmont Mines indicate that further exploration is certainly warranted.

PROPERTY

The property consists of 10 contiguous metric claims, totalling 163 units as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>No.of Units</u>	<u>Expiry Date</u>
Foggy #1	1677	20	Jan. 5/81
Foggy #2	1678	20	Jan. 5/81
Foggy #3	1679	20	Jan. 5/81
Foggy #4	1680	12	Jan. 5/81
Foggy #5	1681	15	Jan. 5/81
Foggy #6	1682	10	Jan. 5/81
Foggy #8	1684	2	Jan. 5/81
Foggy #9	1685	20	Jan. 5/81
Foggy #10	1686	12	Jan. 5/81
Foggy #11	2023	20	Aug.23/80

Disposition of these claims is shown on Figure 193-2 in this report.



MAP AREA
FIG. NOs 193-4 thru 193-9

BARRIER REEF RESOURCES LTD(N.P.L.)	
CLAIM MAP	
FOGHORN CREEK PROPERTY	
KAMLOOPS MINING DIVISION, B.C.	
Tech. Work By: Kerr, Dawson & Associates Ltd.	Scale: 1:50,000
Drawn By: W.G.	Date: March, 1979.
Approved By: J.M.D.	Dwg No. 193-2

LOCATION AND ACCESS

The property is located in south-central British Columbia about 100 km. NNE of the city of Kamloops. The claim block stretches from 3 to 10 km. south of the village of Birch Island and lies immediately west of the Rexspar uranium-fluorite property. Approximate geographic center of the property is at 51°33' north latitude and 119°57' west longitude.

Access to the property is gained by a four-wheel-drive road which leads south from Birch Island across the Rexspar property and up Foghorn Creek to the alpine area surrounding Granite Mountain and Foghorn Mountain. Road distance from Birch Island is approximately 20 km.

PHYSIOGRAPHY AND VEGETATION

The property comprises an irregular claim block occupying mostly a rolling upland area north of Granite and Foghorn mountains. The only areas of appreciable relief are the upper valley of Foghorn Creek and the north and northeasterly-facing slopes along the northern boundary of the claims.

Elevations vary from about 3,500 feet a.s.l. (1,070 meters) at the north edge of the property to more than 6,500 feet a.s.l. (1,980) at the summit of Foghorn Mountain.

The central and southern reaches of the property are forested with mature alpine spruce and fir interspersed with frequent alpine meadows. The lower parts of Foghorn Creek valley and the north end of the claim block support a dense growth of mature spruce, fir, and cedar.

PREVIOUS WORK

The claim block covers portions of several old properties principally the Lydia, Foghorn, Chindgren, and Granite Mountain. The Lydia has received most attention in more recent years and was investigated during the course of work on the subject claims in 1979 (see references).

The present report deals principally with the area of the old Foghorn showings.

These showings were discovered in the early 1900's by the Fennell family of Barriere and held almost continuously up to 1976.

The property is first mentioned in the annual report of Minister of Mines for 1913. A crosscut tunnel was being driven to intersect 4 narrow galena bearing quartz veins at depth.

In 1915, development work consisted of a 200 foot crosscut adit, a 40' vertical shaft with about a 40' drift at the bottom and two open surface cuts on exposed

veins. Three main fissures were noted varying between 6-12" wide on surface and carrying almost solid galena; the vein exposed at the bottom of the shaft seemed to contain more sphalerite and pyrite and a representative sample assayed: gold trace, silver 16 oz., lead 16.7%, copper 6.6%, zinc 16.5%, iron 17.5%.

In 1916 2 carloads of ore, approximately 75 tons, were shipped and brought a net return of about \$3,500.00.

In 1924 reference is made to several other vein-type showings (Chindgren property) carrying similar mineralization. They are located about 2,000 feet north of the Foghorn showings and have been developed by a number of deep trenches.

In 1958 the property was optioned to Rexspar Uranium and Metals Co. A seven mile access road was constructed from the Rexspar camp to Foghorn Mountain. Radiometric surveys were carried out over a wide area and some trenching was done on the best showings. Self potential,

electromagnetic and geochemical soil sampling surveys were carried out over the area of the old lead-zinc showings and bulldozer trenching was done on the best anomalies.

In early 1979, an airborne Dighem II geophysical survey was flown over the entire area of the Foggy claims and several anomalies were delineated. One of these anomalies roughly coincided with the area of the old Foghorn showings.

GEOLOGY

The area of the Foghorn showings is underlain by a sequence of metavolcanic rocks of the Eagle Bay succession cut by at least one major fault. These rocks have been arbitrarily sub-divided into four types as follows:

Type one consists primarily of schistose, grey-green andesitic tuff. Small fragments are easily discernible on a weathered surface and are usually stretched in the direction of the foliation. Fragments are usually grey-white against the darker, chloritic groundmass and range up to 2 cm. in size. In places where the original rock was uniformly fine grained, the present tuffs are now chlorite-sericite phyllites.

Where Type one rocks have been altered because of the mineralizing activity (see figure 193-4), the original tuffs are now buff to orange-brown phyllites and quartz-sericite schists. Narrow quartz veins and stringers are occasionally present and bright orange-brown limonite is common along fracture planes.

Rock Type two is a rather arbitrary sub-division as it is quite similar to the andesitic tuff except that the fragments are larger. Typically the rock is greenish-gray in colour with white to gray, subrounded fragments from 10 to 25 cm. in diameter. Such fragments usually make up 30 to 60% of the rock volume and are attenuated in the direction of schistosity.

This rock type was separated from the largely similar meta-andesite tuffs because it may be analogous to the "mill rock" found in some volcanogenic sulphide environments.

Rock Type three is an enigmatic lithology which throughout its outcrop area is remarkably homogeneous. It is a dense, hard, fine grained, cherty rock which contains no layering or bedding structures. It is everywhere laced with white quartz veins and stringers and frequently its surface is coated with various shades of iron staining. It has been suggested by N. B. Vollo (personal communication) that it is a deposit of siliceous sinter or "exhalite".

The prominent linear which traverses the map area (figure 193-4), is interpreted as being a strong through-going fault. It cannot be demonstrated in outcrop but at least one trench near its postulated trace shows rubble of highly sheared, limonitic schist and some graphitic slate.

The abrupt discontinuity between the mineralized zone and the chert (exhalite) is also interpreted as a fault.

Along the west edge of the grid several occurrences of highly altered, pyritic and sheared quartz-mica schist and phyllite may indicate the presence of another fault paralleling the main north-northeasterly trending structure.

MINERALIZATION

The main area of the Foghorn showings is an elliptical zone about 400 meters long and up to 150 meters wide. It is outlined by a distinctive buff to orange brown alteration colour to the host intermediate tuffs. Within this zone a large number (20+) of narrow, discontinuous, steeply dipping, quartz veinlets contain spotty to sub-massive lenses of galena and sphalerite with lesser amounts of pyrite and chalcopyrite. Most veins vary from 5 to 20 cm. wide and cannot be traced for more than a few meters or tens of meters. Occasionally intersecting shear zones or breccia zones may lead to the development of local wider "kidneys" of mineralization but these are not larger than several meters square.

Considerable trenching was done to try to get some continuity on these veinlets but to no avail. The discontinuous and spotty nature of the mineralization was also noted in the underground workings.

Several character samples of the mineralization were submitted for assay to get an idea of the ratio of base to precious metals. In general, gold values are extremely low and the ratio of lead plus zinc to

silver is usually less than one ounce silver per 3 per cent combined lead-zinc. A number of grab samples of altered material and wall rock showed some anomalous values but nothing that would carry the grade away from the narrow, high grade veins.

Away from the main Foghorn showing area, there are some local gossan zones with varying amounts of finely disseminated pyrite. One piece of high grade lead-zinc float was noted in one of the old Rexspar trenches (4+35 SW, 0+60 SE). A grab of barren looking quartz from an old pit at the eastern edge of a large gossan area (0+50 SW, 4+40 NW), returned values of 1,030 PPM copper and 18.0 PPM silver.

GEOCHEMISTRY

Soil samples were collected at 50 meter intervals on grid lines spaced 100 meters apart. The grid measured 500 meters by 2,000 meters and was positioned to cover the known showings and a possibly related airborne "Dighem II" geophysical anomaly (see figures 193-6, 193-7, and 193-8).

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.

A total of 230 soil samples were collected and analysed for copper, zinc, and silver. Analysis was performed by Bondar, Clegg and Company Ltd. at their Vancouver laboratories. Samples were dried and sieved and an aliquot of the -80 mesh fraction obtained. Extraction was attained by using hot aqua regia with analyses by atomic absorption spectro-photometry.

The mean and standard deviation for all three 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 1:5,000 scale base maps of the property and definitely anomalous, probably anomalous, and possibly anomalous areas were outlined (see figures 193-6, 193-7, and 193-8).

For copper, some anomalous values are explained in that they lie peripheral to the known area of vein type mineralization in the northern third of the grid. However, larger areas of anomalous values occupy the bulk of southern third of the grid, on either side of the prominent fault (?) depression which roughly parallels the base line. These anomalies are in part open to the south, west and east. The area underlain by the chert (exhalite?) is significantly devoid of anomalous values.

Zinc values in soils correlate well with the area of known mineralization and suggest a possible

extension or "faulted off" segment east of the south end of the known mineralized zone. In the southern third of the grid, there is good correlation of higher zinc values with areas of anomalous copper, approximately the same configuration being present. Again the known outcrop area of the chert is devoid of anomalous values.

Distribution of silver values in soils varies significantly from copper and zinc. Silver does outline roughly the area of known vein-type mineralization, but does connect it with an arcuate band of higher values which swings southwesterly across the southern end of the chert (exhalite?) outcrop area. Several isolated silver highs correlate with portions of the southern zinc and copper anomalies.

A number of rock geochemical samples were taken and analysed for copper, zinc, and silver. A number of conclusions can be drawn from these results (see appendix A): There is not much difference in background between unaltered andesite tuff and altered but unmineralized rock from the mineralized zone.

Although the chert and related nearby rock is very low in copper and zinc, silver background is higher and validates the silver soil anomaly which departs appreciably from the patterns for copper and zinc. Some of the intensely gossanized outcrops may be almost totally leached of metals. In altered and gossanized rock, copper and zinc are sometimes present in anomalous amounts; however, silver is almost always present in anomalous amounts. Thus it may be much more meaningful in indicating nearby mineralization or mineralization below a leached capping.

GEOPHYSICS

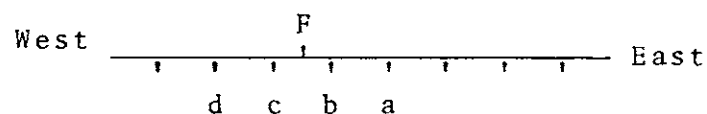
The airborne Dighem II survey outlined a prominent low resistivity zone conforming in part to the north-northeasterly linear about which the grid was oriented. This zone swings north-westerly just south of Line O (NW-SE) on the grid so that its overall pattern is arcuate. There is no response over the northern half of the grid where the known mineralization is located.

A VLF-EM survey was carried out over a grid oriented NNE and covering the known vein-type mineralization and a portion of the area of low resistivity. All grid lines were surveyed with a Sabre Electronics VLF-EM unit - Model #27. Readings were taken at 25 meter intervals. Since the direction of grid lines was ESE-WNW, Seattle frequency (18.6 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 (Seattle) 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 left (-).

Data were recorded in field notes as if all lines had been surveyed from east to west (the same orientation was used at each station irrespective of whether the traverse was run EW or WE). 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 strength 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 on the orientation of the hill. Consequently ridges will be displayed as apparent crossovers. The Fraser Filter Method smooths out some of this topographic effect, consequently resulting apparent anomalies are not as significantly displayed as if they had been shown as profiles of the raw data.
- (3). For the same topographic reasons, strong anomalies may not produce an actual cross-over in steep terrain. The Fraser Filter Method enhances these anomalies to their proper perspective.

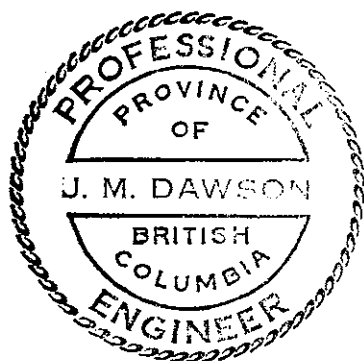
For the present survey, all readings were plotted on a 1:5,000 scale base map (see figure 193-9). Filtered values are displayed above station readings and are plotted midway between reading stations. Contours have been drawn at 10°, 20°, and 40° to illustrate interpreted anomalies.

The data outline two linear conductive zones which lie on either side of the prominent NNE trending linear (fault). The conductive zones conform grossly to the soil geochemical patterns as outlined in the southern half of the grid area. There is no electromagnetic response over the area of known, vein-type mineralization.

EXPLORATION POTENTIAL

The geological setting on the subject claims suggests an environment favorable for the development of volcanogenic massive sulphide deposits. The known zone of narrow, high grade polymetallic veins is not considered to be of economic significance in its own right; however, the writer believes that it could be remobilized from larger lenses of massive or submassive sulphides. Near the boundary of the Foggy claims, just west of the present grid a large gossan partly covers a significant Dighem II anomaly. This anomaly is continuous with the airborne and ground EM anomalies outlined on the southern half of the Foghorn grid. Several diamond drill holes were recently bored in this area by Craigmont Mines and significant sulphides were encountered.

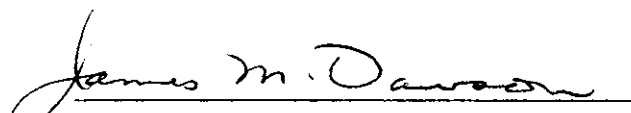
It is the writer's opinion, therefore, that these factors indicate a favorable environment on the southern part of the present grid and further exploration work is warranted.



January 4, 1980,
KAMLOOPS, B. C.

RESPECTFULLY SUBMITTED BY:

KERR, DAWSON AND ASSOCIATES LTD.,


James M. Dawson, P. Eng.,
GEOLOGIST

APPENDIX A

ROCK GEOCHEM AND ASSAY DATA

ROCK GEOCHEMISTRY DATA

<u>Sample No.</u>	<u>Description</u>	<u>ANALYSIS (PPM)</u>		
		<u>Cu</u>	<u>Zn</u>	<u>Ag</u>
FH-1	Selected pieces of white vein quartz with minor pyrite from pits in area of gossan - heavily limonitic sericite schist.	1030	18	18.0
FH-2	Grab of gossanized sericite schist.	83	68	0.4
WG-1	Schistose, andesite tuff with minor scattered limonitic staining.	147	80	0.6
WG-2	Buff to green gray, chlorite-sericite schist or schistose tuff.	18	60	0.2
WG-4	Siliceous phyllite or quartz-sericite schist-minor limonitic zones.	65	29	0.8
WG-5	Buff to greenish, chlorite-sericite schist (schistose andesite tuff)-quartz stringers common.	60	68	0.2
WG-6	Greenish, chloritic tuff with minor, barren, quartz stringers.	28	82	0.2
WG-8	Greenish gray, schistose andesite or dacite agglomerate (mill-rock)	12	41	0.2

<u>Sample No.</u>	<u>Description</u>	<u>ANALYSIS (PPM)</u>		
		<u>Cu</u>	<u>Zn</u>	<u>Ag</u>
WG-9	Buff to orange-brown, altered tuffs (phyllite or quartz-sericite schist) in the zone of alteration and veining but contains no visible mineralization.	480	4,770	11.0
WG-10	Orange brown to limonite-stained phyllite-no visible mineralization.	93	1,630	1.2
WG-13	Breccia of altered tuff cemented by mixture of quartz, pyrite, galena and sphalerite.	1,550	>20,000	40.0
WG-15	Buff coloured sericite schist or phyllite with some scattered bright orange limonite - no visible mineralization.	50	1,020	0.5
WG-17	Limonite stained, altered tuff or quartz-sericite schist - some scattered blebs of pyrite.	22	1,970	0.4
WG-18	Buff coloured, foliated tuff; no mineralization.	20	176	1.2
WG-20	Buff coloured, slightly calcarious, sericite schist.	49	107	0.2
WG-21	Buff to orange brown, altered tuff; no mineralization.	21	105	0.2
WG-26	Grab of quartz vein material with scattered blebs of galena, chalcopryite, pyrite and sphalerite.	9,000	7,610	48.0

<u>Sample No.</u>	<u>Description</u>	<u>ANALYSIS (PPM)</u>		
		<u>Cu</u>	<u>Zn</u>	<u>Ag</u>
WG-28	Altered and heavily limonite - stained tuff; no mineralization.	218	470	7.6
WG-31	Heavily altered wall rock adjacent to high grade vein of galena; scattered grains of pyrite and galena in this wall rock.	615	7,200	14.0
WG-34	Partly silicified, orange brown, altered tuff with scattered, limonite-stained fractures and minor disseminated pyrite.	48	70	1.4
WG-35	Orange brown, altered and slightly calcareous tuff; minor limonite and pyrite.	47	215	1.3
WG-38	Grab of altered tuff with some quartz vein material containing blebs of galena, traces chalcopyrite.	33	1,210	1.7
WG-44	Grab of buff to light brown altered tuff with scattered quartz stringers; some of which contain minor galena.	235	10,720	2.2
WG-46	Buff coloured schistose tuff.	15	230	0.6
WG-47	White weathering, relatively fresh, dacite (?) tuff.	25	62	0.2
WG-50	Fine grained, dense chert, frequently stained yellow brown or reddish by limonite; scattered barren quartz veins.	25	35	0.7

<u>Sample No.</u>	<u>Description</u>	<u>ANALYSIS (PPM)</u>		
		<u>Cu</u>	<u>Zn</u>	<u>Ag</u>
WG-53	Pale yellowish brown, limonitic quartz sericite schist and chert; leached gossan?	7	11	0.3
WG-58	Heavily limonitic phyllite and quartz sericite schist, - in ? fault zone.	119	37	2.0
WG-62	Green gray, relatively unaltered schistose andesite tuff.	19	60	0.4
WG-64	Green gray, foliated andesite tuff and agglomerate.	31	47	0.2
WG-66	Altered, sheared and heavily limonitic sericite schist with abundant finely disseminated pyrite.	45	28	0.6

ASSAY DATA

<u>Sample No.</u>	<u>Description</u>	<u>Au oz/t</u>	<u>Ag oz/t</u>	<u>Cu(%)</u>	<u>Pb(%)</u>	<u>Zn%</u>
WG-11	Selected pieces of silicified and quartz vein material heavily mineralized with pyrite, galena and ? traces chalcopyrite.	0.008	1.81	0.12	6.80	6.50
WG-30	Selected sample of massive vein of galena and sphalerite - from 8 - 20 cm. wide.	0.010	10.65	1.06	36.45	12.55
WG-40	Selected pieces of massive galena from a 10-15 cm. wide quartz vein.	0.012	25.30	0.13	69.00	4.55
WG-42	Pieces of a breccia of altered tuff cemented by quartz and scattered to a more than 10% mixture of galena, pyrite and minor sphalerite and chalcopyrite.	0.002	0.63	0.02	2.43	1.63
WG-43	Selected pieces of best material on dump of old shaft - massive to semi-massive mixtures of galena, sphalerite; pyrite and lesser chalcopyrite.	0.010	10.86	1.32	9.30	21.60

APPENDIX B

PERSONNEL

PERSONNEL

J. M. Dawson, P. Eng. Geologist - July 22, 24, 29, 31
August 3, 8, 11, 18, 22
August 23 - 1/2 day
October 13
November 29, 30
December 14, 15, 19, 21
December 27, 28, 29, 31

- 20 1/2 days

W. Gruenwald, B. Sc. Geologist - December 8 - 1/2 day

S. Williams Fieldman - July 23 - 1/2 day
July 24 - 31

- 8 1/2 days

D. Dunford Fieldman - July 23 - 1/2 day
July 24 - 31

- 8 1/2 days

APPENDIX C

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

(1). Labour:

J. M. Dawson, P. Eng., 20 1/2 days @ \$175.00/day	\$3,587.50	
W. Gruenwald, B. Sc., 3 1/2 days @ \$125.00/day	437.50	
S. Williams, 8 1/2 days @ \$75.00/day	637.50	
D. Dunford, 8 1/2 days @ \$75.00/day	<u>637.50</u>	\$5,300.00

(2). Expenses and Disbursements:

(a). Truck Rental:

14 days @ \$25.00/day	\$350.00	
1,475 mi. @ 25¢/mile	<u>368.75</u>	718.75

(b). Room and Board 695.50

(c). Preparation of Base Maps 125.00

(d). Instrument Rental 60.00

(e). Assays and Geochemical Analyses . . 1,051.50

(f). Field supplies and maps 232.50

(g). Xerox, blueprints, telephone,
freight, secretarial, binding, etc. 245.60 3,128.85

TOTAL HEREIN \$8,428.85

APPENDIX D

WRITER'S CERTIFICATE

JAMES M. DAWSON, P. ENG.
GEOLOGIST

SUITE 1 - 219 VICTORIA STREET
KAMLOOPS, B.C.

PHONE (604) 374-6427

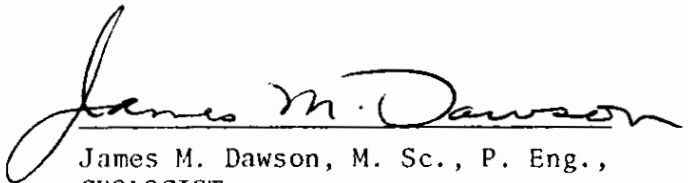
CERTIFICATE

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 16 years.
- (3). I am the author of this report which is based on an exploration carried out on the subject property under my supervision.

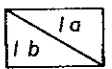
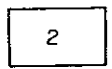
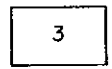

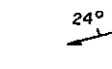


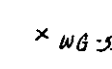
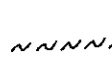
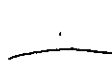
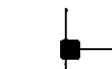
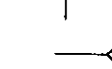

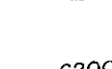


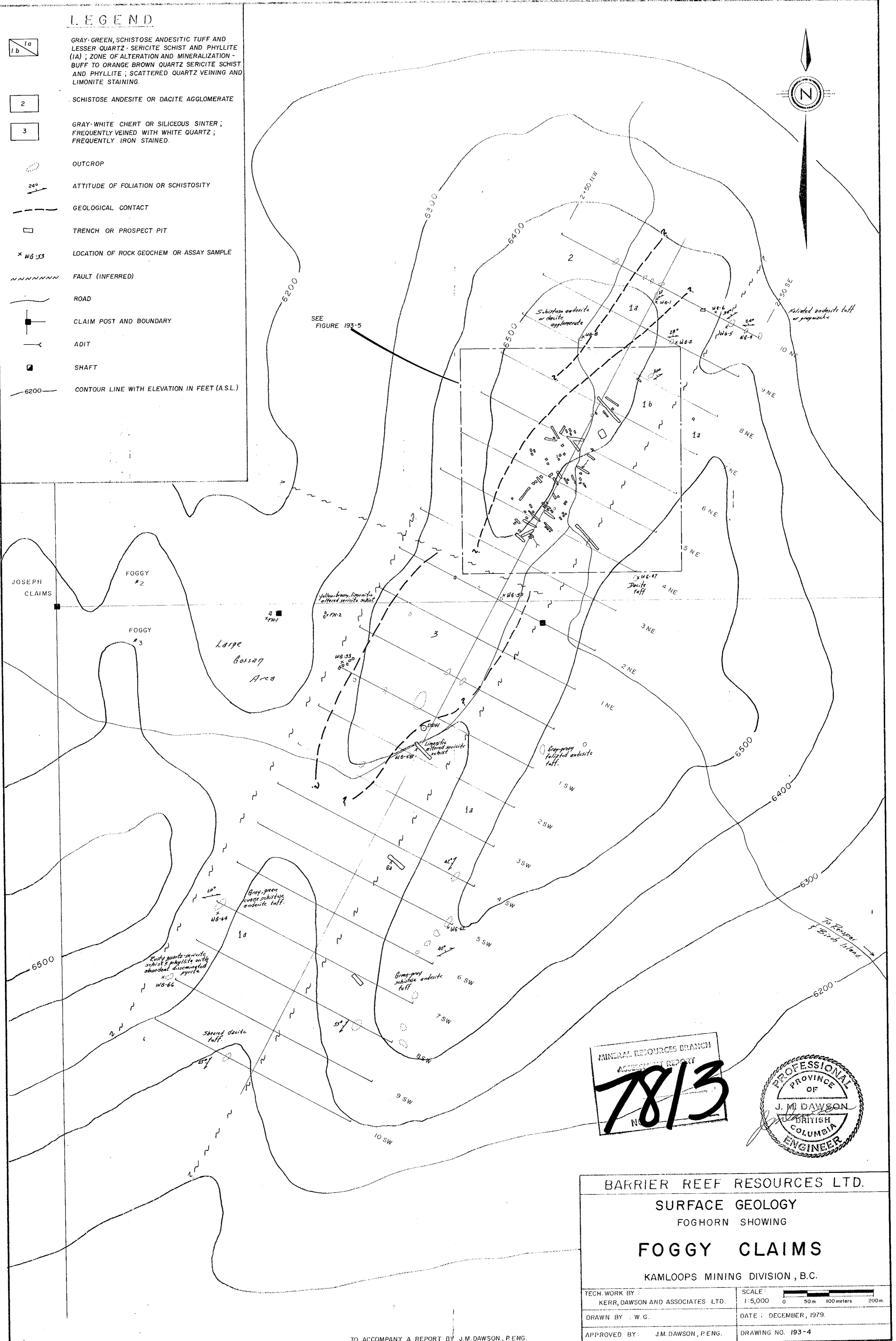
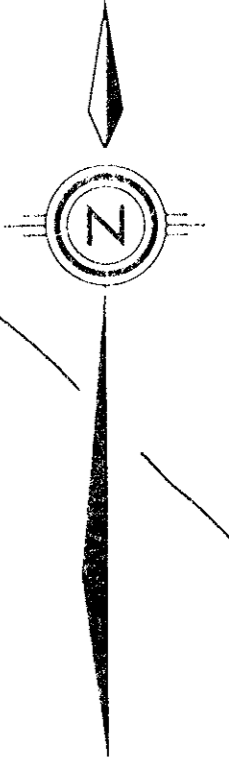
KERR, DAWSON AND ASSOCIATES LTD.,


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

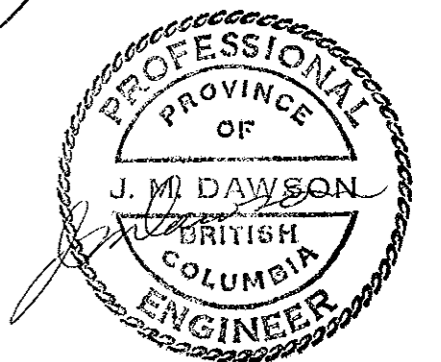
January 4, 1980,
KAMLOOPS, B. C.

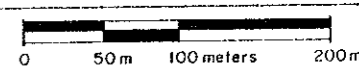
LEGEND

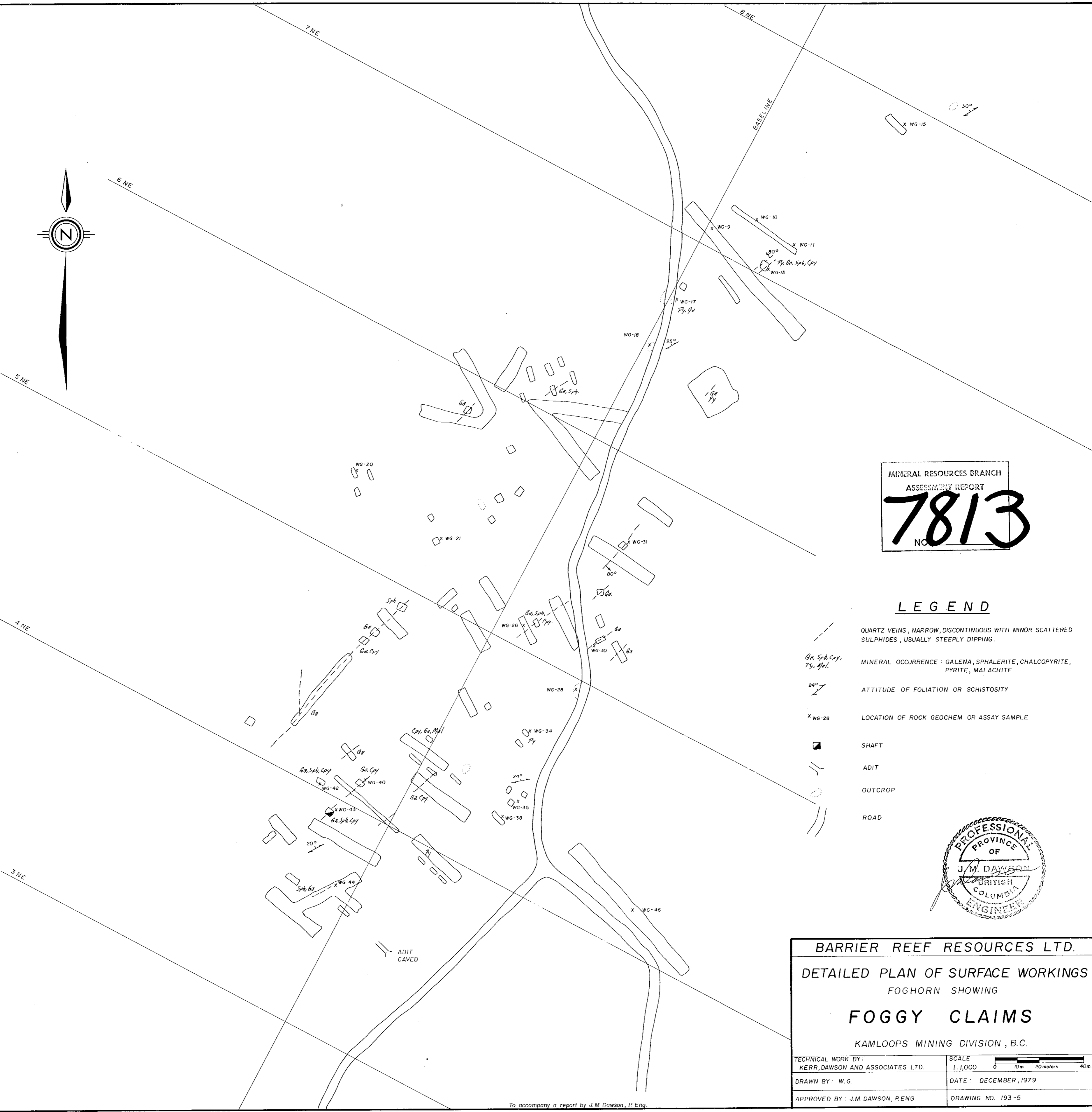
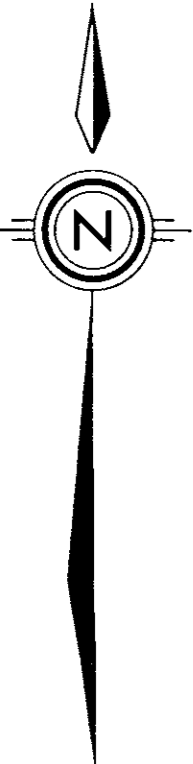
-  1a GRAY-GREEN, SCHISTOSE ANDESITIC TUFF AND LESSER QUARTZ-SERICITE SCHIST AND PHYLLITE (1A); ZONE OF ALTERATION AND MINERALIZATION - BUFF TO ORANGE BROWN QUARTZ SERICITE SCHIST AND PHYLLITE; SCATTERED QUARTZ VEINING AND LIMONITE STAINING.
-  2 SCHISTOSE ANDESITE OR DACITE AGGLOMERATE
-  3 GRAY-WHITE CHERT OR SILICEOUS SINTER; FREQUENTLY VEINED WITH WHITE QUARTZ; FREQUENTLY IRON STAINED.
-  OUTCROP
-  24° ATTITUDE OF FOLIATION OR SCHISTOSITY
-  GEOLOGICAL CONTACT
-  TRENCH OR PROSPECT PIT
-  X WG-53 LOCATION OF ROCK GEOCHEM OR ASSAY SAMPLE
-  FAULT (INFERRED)
-  ROAD
-  CLAIM POST AND BOUNDARY
-  ADIT
-  SHAFT
-  6200 CONTOUR LINE WITH ELEVATION IN FEET (A.S.L.)



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7813
NO.



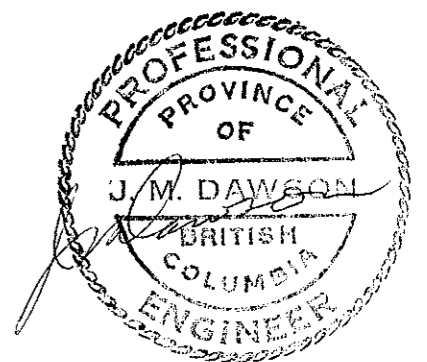
BARRIER REEF RESOURCES LTD.	
SURFACE GEOLOGY FOGHORN SHOWING	
FOGGY CLAIMS	
KAMLOOPS MINING DIVISION, B.C.	
TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000 
DRAWN BY: W.G.	DATE: DECEMBER, 1979.
APPROVED BY: J.M. DAWSON, P.ENG.	DRAWING NO. 193-4



MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
7813
 NO.

LEGEND

- QUARTZ VEINS; NARROW, DISCONTINUOUS WITH MINOR SCATTERED SULPHIDES, USUALLY STEEPLY DIPPING.
- MINERAL OCCURRENCE: GALENA, SPHALERITE, CHALCOPYRITE, PYRITE, MALACHITE.
- ATTITUDE OF FOLIATION OR SCHISTOSITY
- LOCATION OF ROCK GEOCHEM OR ASSAY SAMPLE
- SHAFT
- ADIT
- OUTCROP
- ROAD



BARRIER REEF RESOURCES LTD.
 DETAILED PLAN OF SURFACE WORKINGS
 FOGHORN SHOWING
FOGGY CLAIMS
 KAMLOOPS MINING DIVISION, B.C.

TECHNICAL WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:1,000
DRAWN BY: W.G.	DATE: DECEMBER, 1979
APPROVED BY: J.M. DAWSON, P.ENG.	DRAWING NO. 193-5

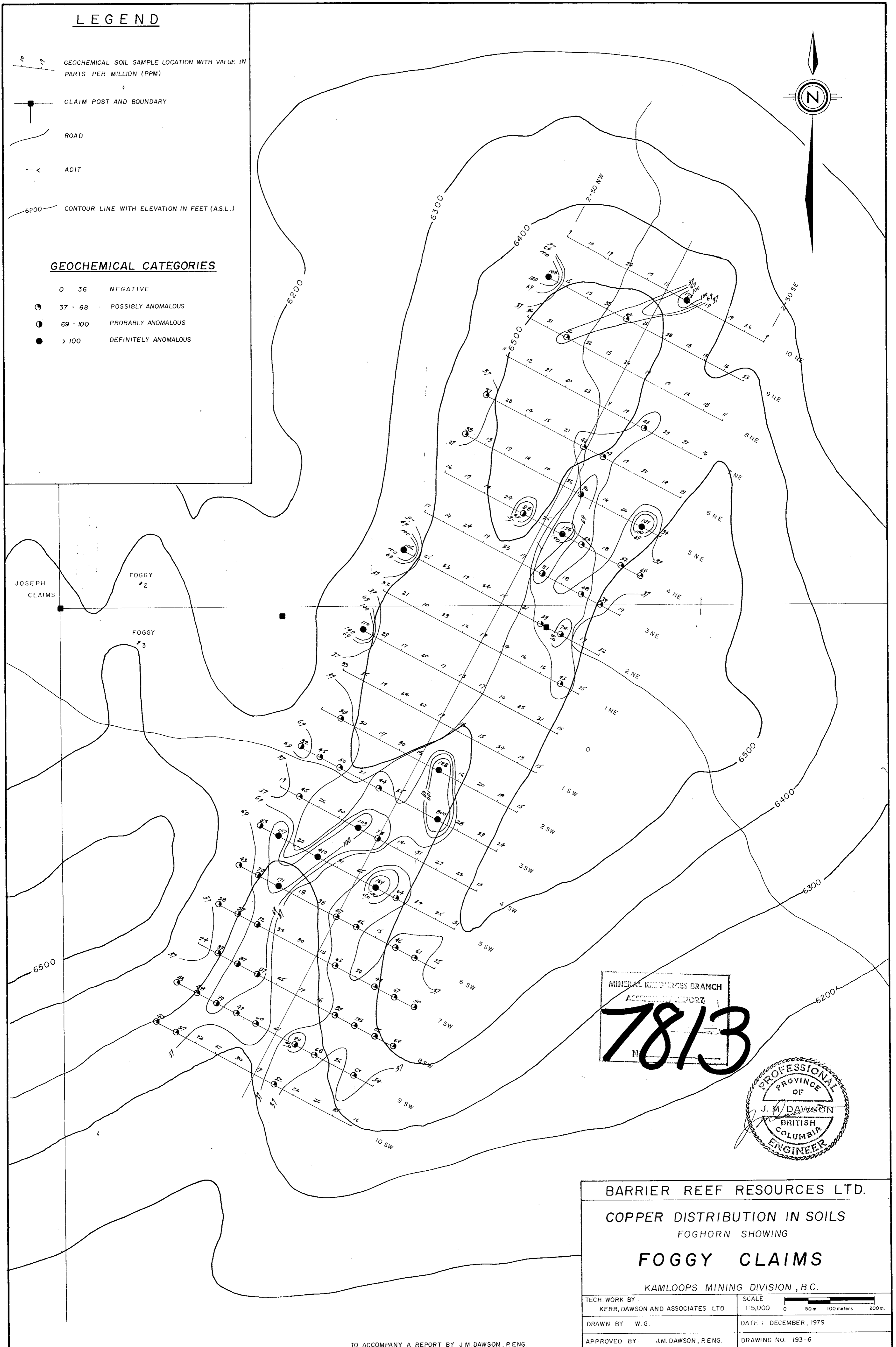
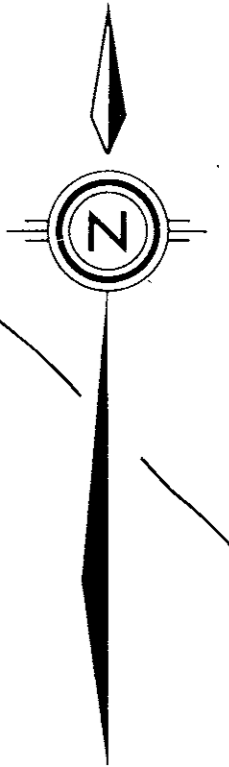
To accompany a report by J.M. Dawson, P.Eng.

LEGEND

- GEOCHEMICAL SOIL SAMPLE LOCATION WITH VALUE IN PARTS PER MILLION (PPM)
- CLAIM POST AND BOUNDARY
- ROAD
- ADIT
- 6200 CONTOUR LINE WITH ELEVATION IN FEET (A.S.L.)

GEOCHEMICAL CATEGORIES

- 0 - 36 NEGATIVE
- 37 - 68 POSSIBLY ANOMALOUS
- 69 - 100 PROBABLY ANOMALOUS
- > 100 DEFINITELY ANOMALOUS

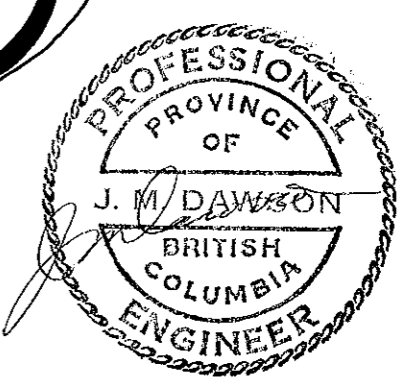


JOSEPH CLAIMS

FOGGY #2

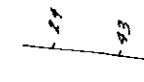



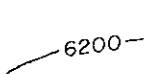
FOGGY #3

MINERAL RESOURCES BRANCH
ACCESSION REPORT
7813






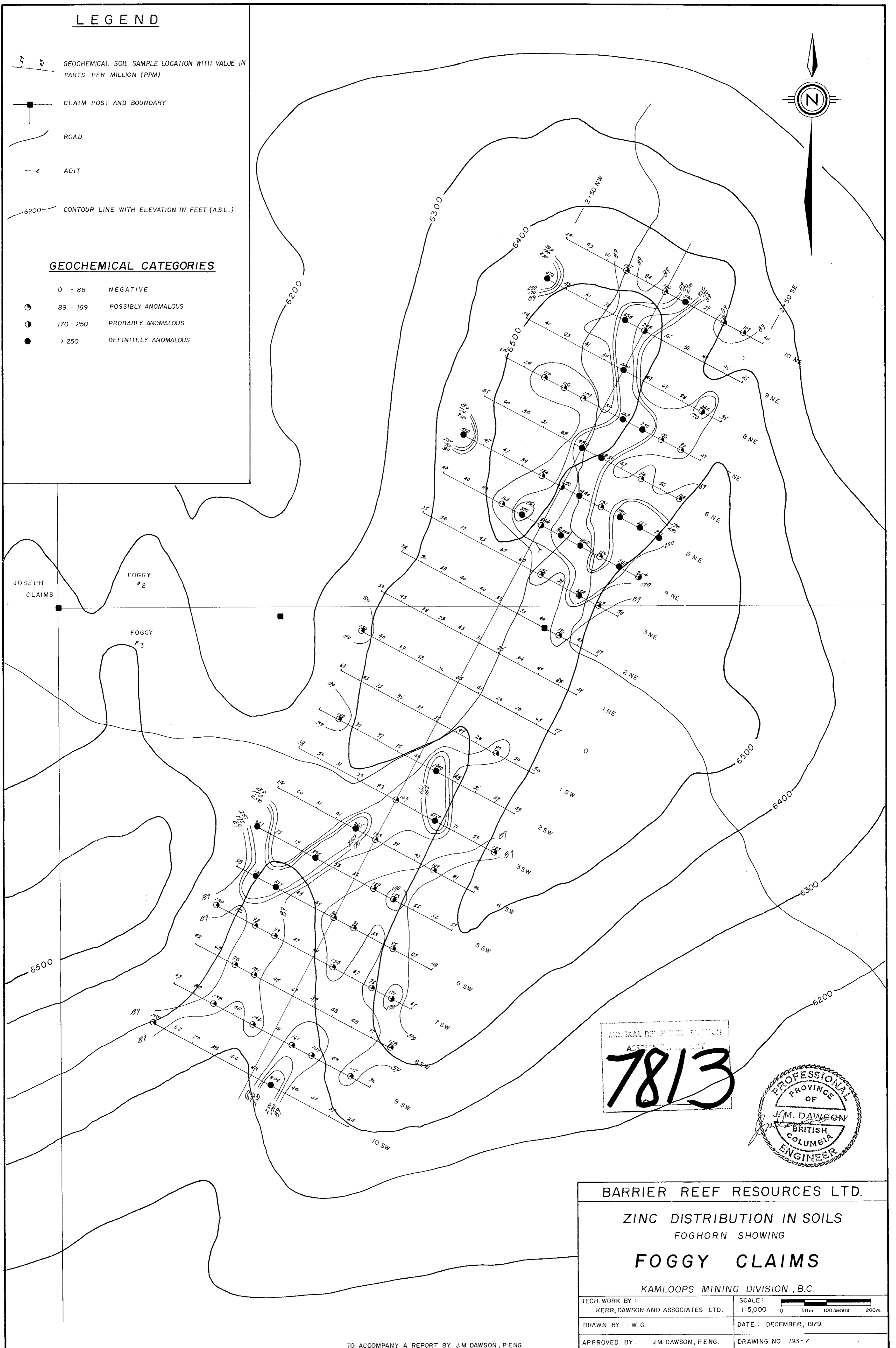
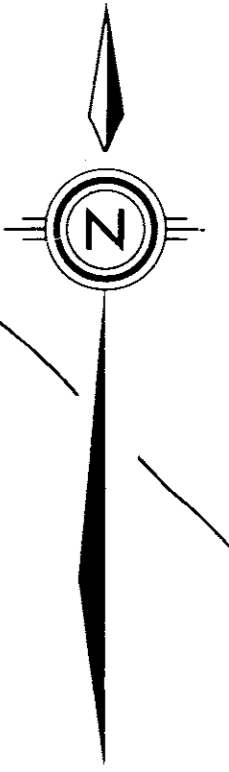
BARRIER REEF RESOURCES LTD.	
COPPER DISTRIBUTION IN SOILS	
FOGHORN SHOWING	
FOGGY CLAIMS	
KAMLOOPS MINING DIVISION, B.C.	
TECH WORK BY KERR, DAWSON AND ASSOCIATES LTD.	SCALE 1:5,000
DRAWN BY W.G.	DATE DECEMBER, 1979.
APPROVED BY J.M. DAWSON, P.ENG.	DRAWING NO. 193-6

LEGEND

-  GEOCHEMICAL SOIL SAMPLE LOCATION WITH VALUE IN PARTS PER MILLION (PPM)
-  CLAIM POST AND BOUNDARY
-  ROAD
-  ADIT
-  6200 CONTOUR LINE WITH ELEVATION IN FEET (A.S.L.)

GEOCHEMICAL CATEGORIES

- 0 - 88 NEGATIVE
-  89 - 169 POSSIBLY ANOMALOUS
-  170 - 250 PROBABLY ANOMALOUS
-  > 250 DEFINITELY ANOMALOUS



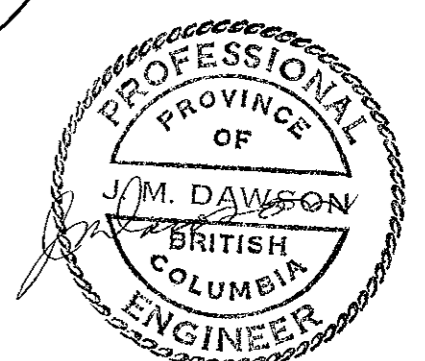
JOSEPH CLAIMS

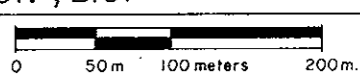
FOGGY #2

FOGGY #3

MINERAL REVENUE BOARD
ASSESSMENT DISTRICT

7813



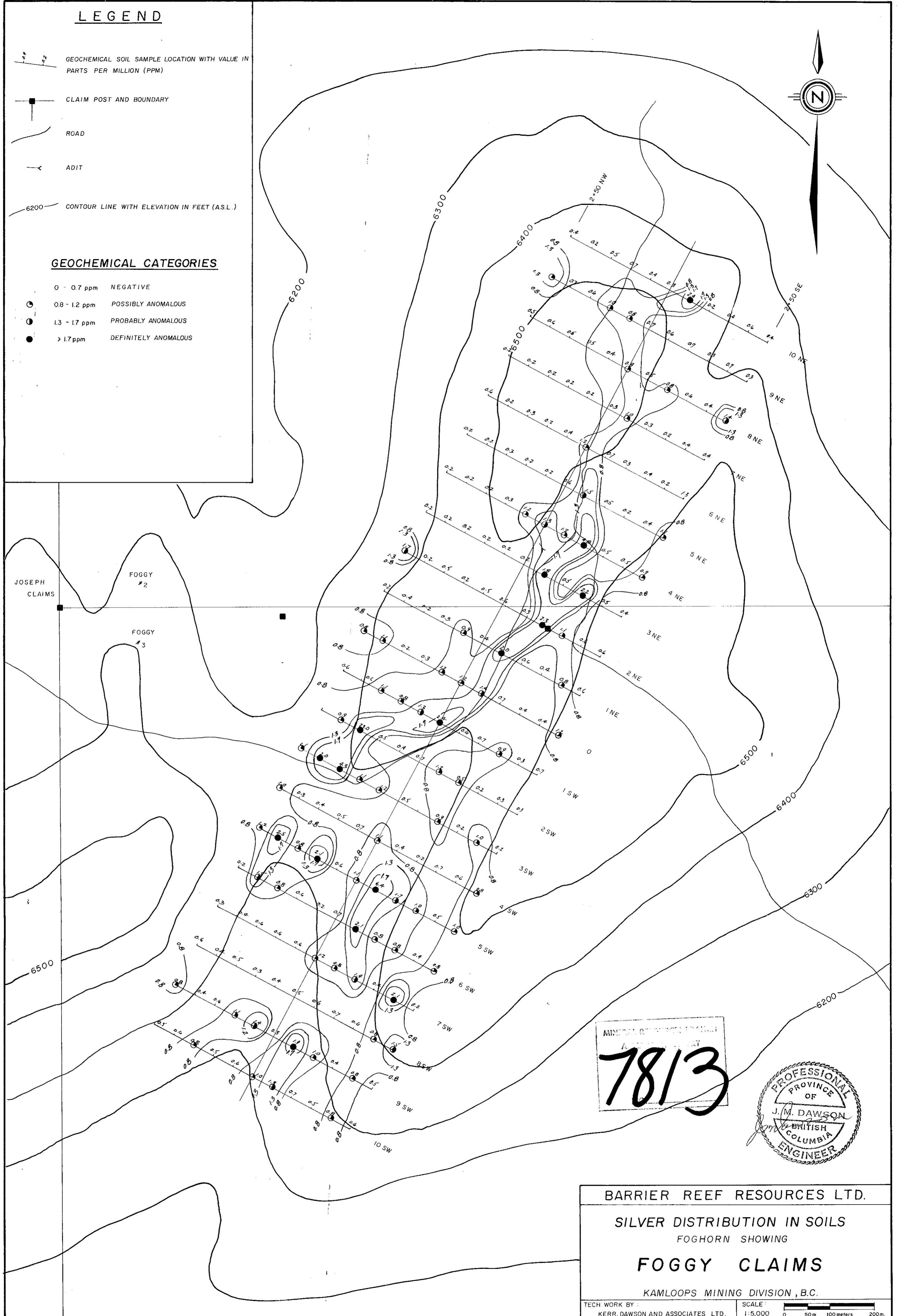
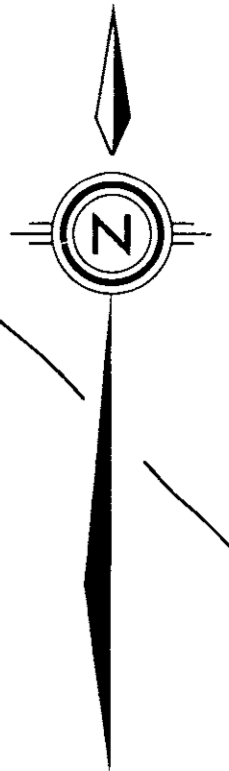
BARRIER REEF RESOURCES LTD.	
ZINC DISTRIBUTION IN SOILS FOGHORN SHOWING	
FOGGY CLAIMS	
KAMLOOPS MINING DIVISION, B.C.	
TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000 
DRAWN BY: W.G.	DATE: DECEMBER, 1979.
APPROVED BY: J.M. DAWSON, P.ENG.	DRAWING NO. 193-7

LEGEND

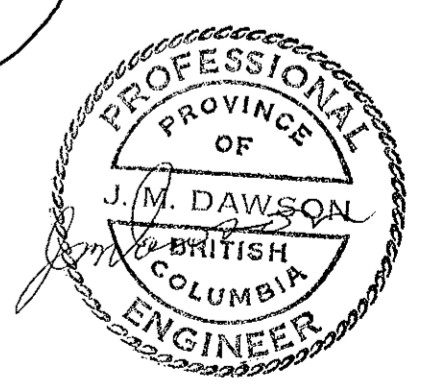
- GEOCHEMICAL SOIL SAMPLE LOCATION WITH VALUE IN PARTS PER MILLION (PPM)
- CLAIM POST AND BOUNDARY
- ROAD
- ADIT
- 6200 CONTOUR LINE WITH ELEVATION IN FEET (ASL.)

GEOCHEMICAL CATEGORIES

- 0 - 0.7 ppm NEGATIVE
- 0.8 - 1.2 ppm POSSIBLY ANOMALOUS
- 1.3 - 1.7 ppm PROBABLY ANOMALOUS
- > 1.7 ppm DEFINITELY ANOMALOUS



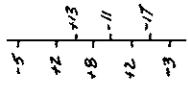
MINERAL RESOURCES BRANCH
 APPROVED
7813



BARRIER REEF RESOURCES LTD.	
SILVER DISTRIBUTION IN SOILS FOGHORN SHOWING	
FOGGY CLAIMS	
KAMLOOPS MINING DIVISION, B.C.	
TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000
DRAWN BY: W.G.	DATE: DECEMBER, 1979.
APPROVED BY: J.M. DAWSON, P.ENG.	DRAWING NO. 193-8

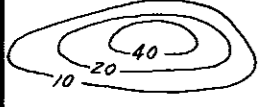
LEGEND

VLF - EM READINGS
 FILTERED READINGS (FRASER METHOD)
 GRID LINE STATIONS - READINGS AT 25m INTERVAL



INTERPRETATION OF FILTERED DATA

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

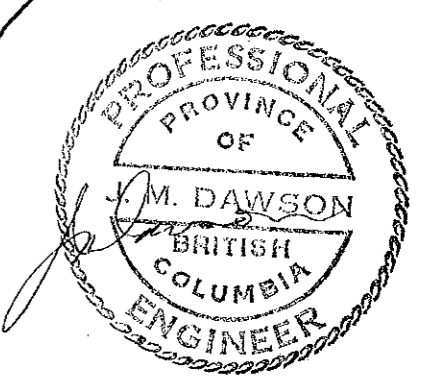
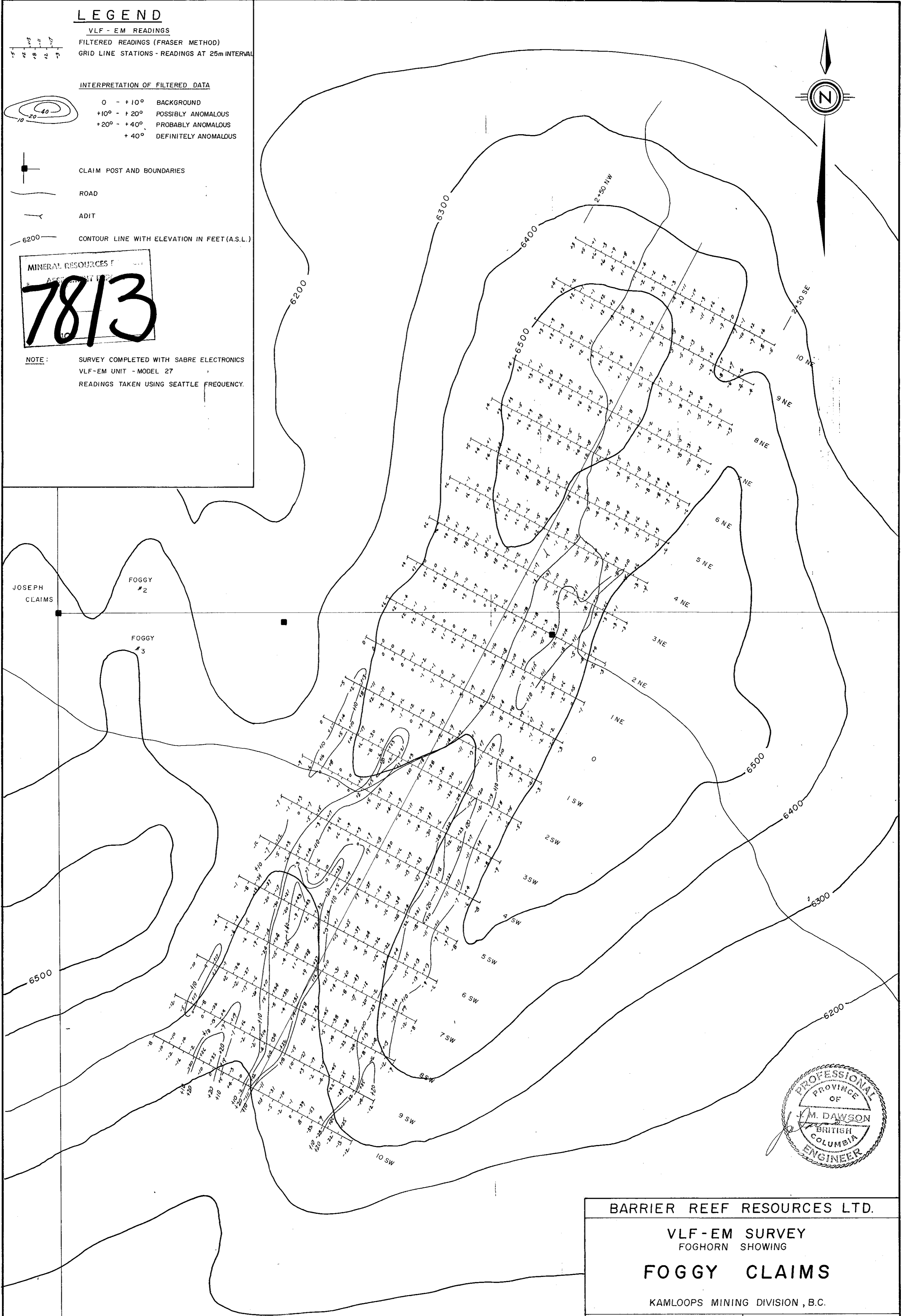
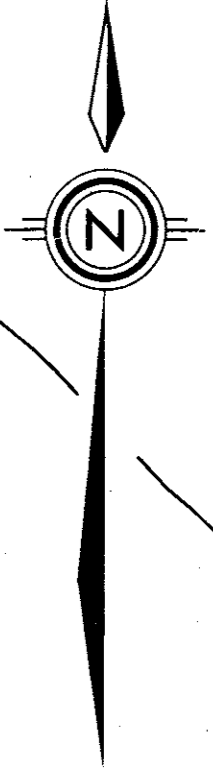


- CLAIM POST AND BOUNDARIES
- ROAD
- ADIT
- CONTOUR LINE WITH ELEVATION IN FEET (A.S.L.)

MINERAL RESOURCES I

7813

NOTE: SURVEY COMPLETED WITH SABRE ELECTRONICS
 VLF-EM UNIT - MODEL 27
 READINGS TAKEN USING SEATTLE FREQUENCY.



BARRIER REEF RESOURCES LTD.

VLF - EM SURVEY
 FOGHORN SHOWING

FOGGY CLAIMS

KAMLOOPS MINING DIVISION, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000
DRAWN BY: W.G.	DATE: DECEMBER, 1979.
APPROVED BY: J.M. DAWSON, P.ENG.	DRAWING NO. 193-9