GEOLOGICAL AND GEOCHEMICAL REPORT

- on the -

MS PROPERTY
KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

- for -

GOLD COMMISSIONER

DEC 12 1983

KAMLOOPS
BRITISH COLUMBIA

BARRIER REEF RESOURCES LTD.
904 - 675 WEST HASTINGS STREET
VANCOUVER, B.C. V6B 1N2

Covering: MS #1 (20 units), MS #2 (16 units), MS #3 (20 units)
Work Performed: August 1, 1983 to October 11, 1983.
Location: (1). 51° 27'N, 120° 04'W
(2). NTS MAP 92P/8E
(3). 20 km. east of Little Fort, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,769

Prepared By:

KERR, DAWSON AND ASSOCIATES LTD.
#206 - 310 Nicola Street,
Kamloops, B.C. V2C 2P5

JAMES M. DAWSON, P. ENG.
November 30, 1983.

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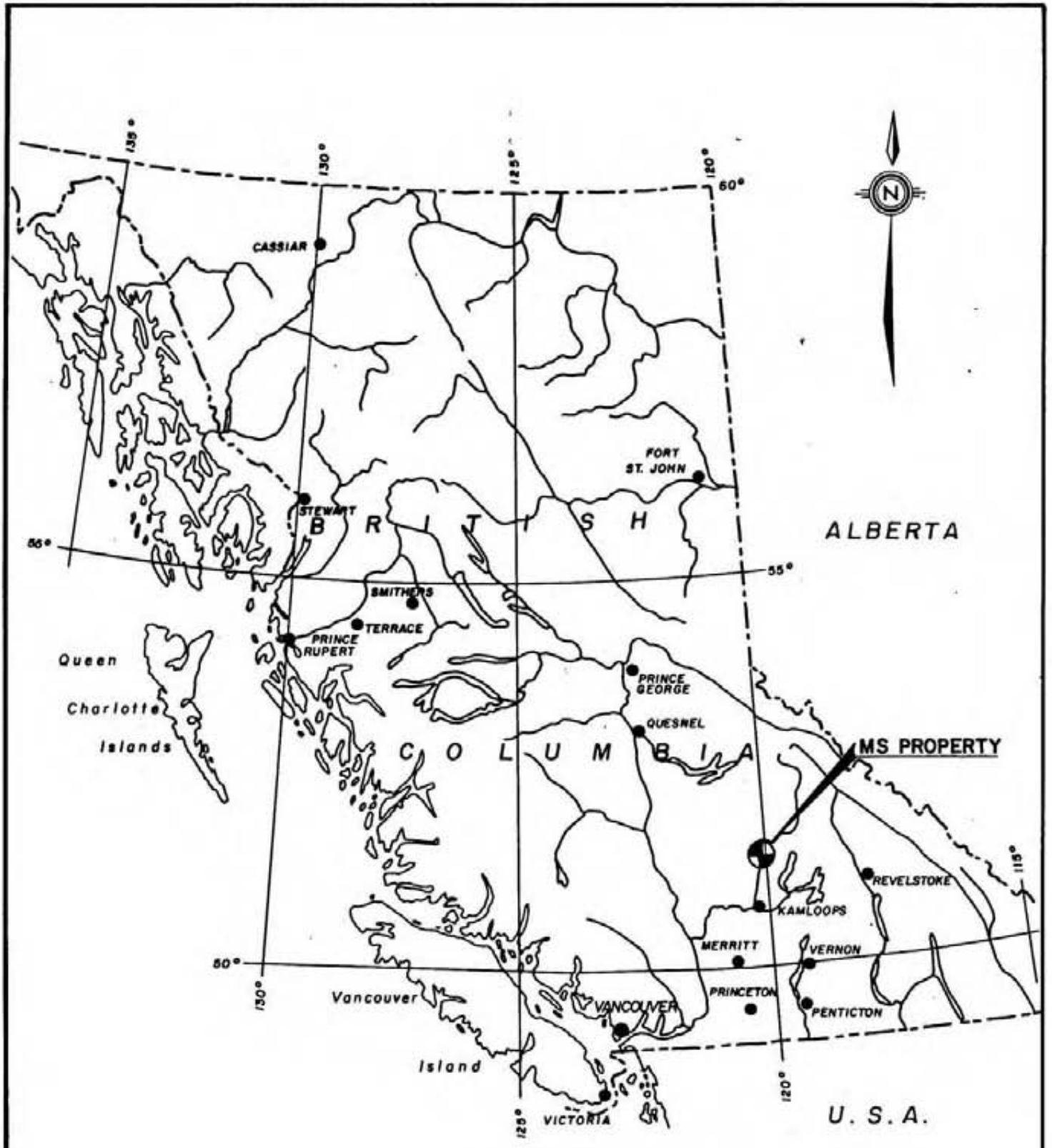


BARRIER REEF RESOURCES LTD.	
LOCATION MAP **MS PROPERTY** KAMLOOPS MINING DIVISION BRITISH COLUMBIA	
Technical Work by : Kerr, Dawson & Assoc. Ltd.	Date : Nov., 1983
Scale : 1cm. = 87 km.	Dwg No. 208-1A

INTRODUCTION:

This report describes the results of a reconnaissance geological and geochemical exploration programme carried out on the MS property during September and October, 1983.

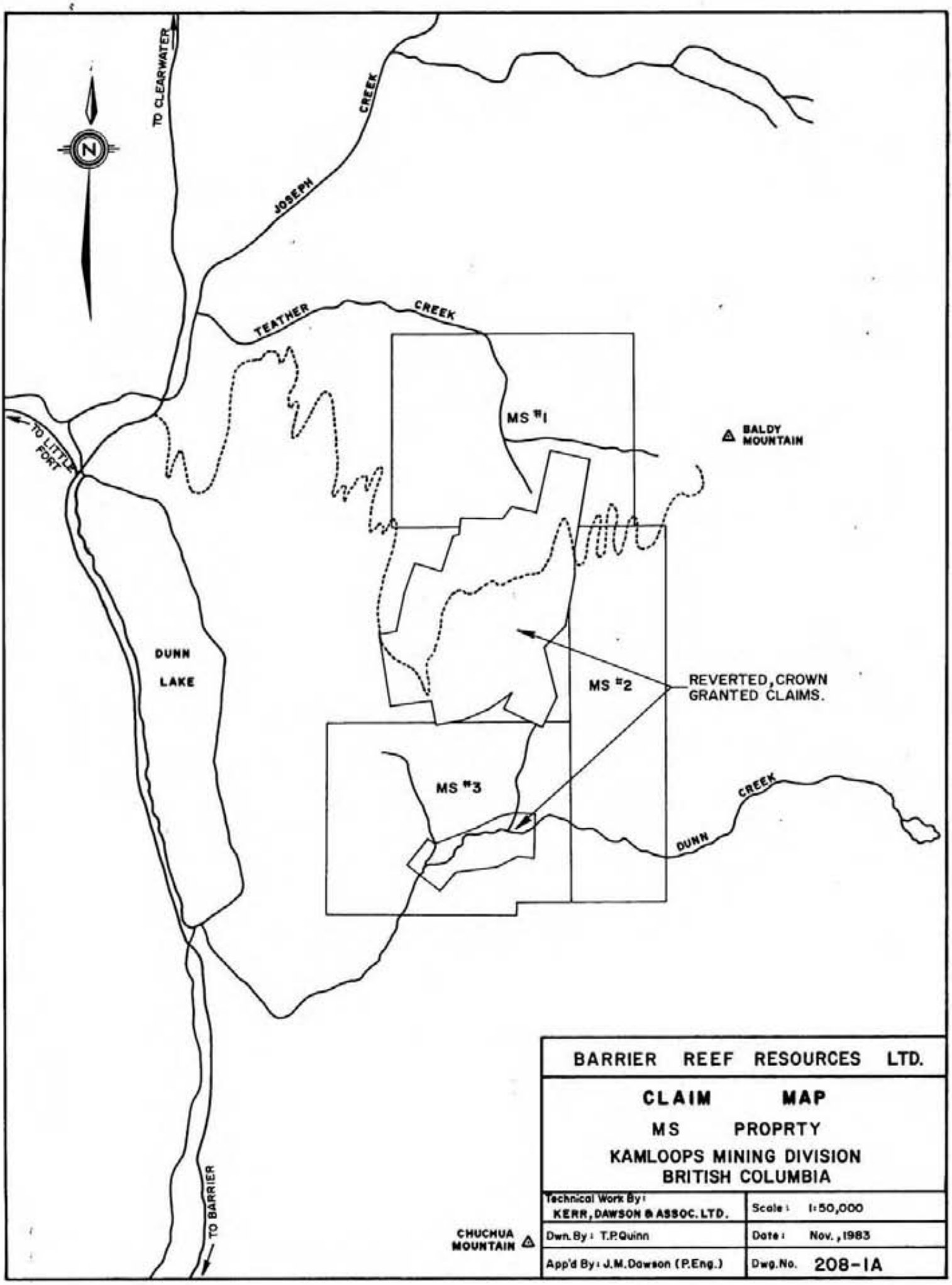
Results of this work were interpreted and are presented on a series of maps accompanying this report.

SUMMARY AND CONCLUSIONS:

(1). The MS property consists of 3 metric claims comprising 56 units located in the North Thompson area of south central British Columbia. It is located in moderate to steep terrain but is road accessible.

(2). This claim block was staked in 1978 and an extensive programme of magnetic and electromagnetic surveying was carried out on the northern part of the property in 1979. In 1980, a total of 377.6 meters of diamond drilling in 3 holes was completed on the main EM conductor. No further work was performed until the current programme. Extensive exploration work including limited production has taken place on the nearby Windpass and Sweethome gold occurrences. Extensive drilling has outlined a small massive sulphide copper deposit about 6 km. south of the southern boundary of the MS property.

(3). The property is underlain primarily by greenstones and lesser sediments of the Fennell Formation. These rocks are intruded by granitic rocks of the Baldy Batholith. At least two dioritic to gabbroic bodies intrude the Fennell rocks locally and are in part the host rocks for the Windpass and Sweethome gold occurrences.



BARRIER REEF RESOURCES LTD.

CLAIM MAP

MS PROPRTY

KAMLOOPS MINING DIVISION
BRITISH COLUMBIA

Technical Work By: KERR, DAWSON & ASSOC. LTD.	Scale: 1:50,000
Dwn. By: T.P.Quinn	Date: Nov., 1983
App'd By: J.M.Dawson (P.Eng.)	Dwg.No. 208-1A

(4). A few quartz pyrite veins were noted in places in the southern part of the property. In one case minor malachite and pyrite were seen.

(5). Geochemical soil sampling has outlined a few very small clusters of anomalous gold values in the southern part of the property. These may represent limited vein type occurrences. Several larger clusters of weakly anomalous copper values were outlined by soil sampling. These may represent scattered vein type copper occurrences or more pervasive disseminated low grade mineralization.

PROPERTY:

The property consists of 3 contiguous metric claims comprising 56 units which partly surround and overlap, reverted crown granted claims of the Windpass-Sweethome gold occurrences. Claim data is as follows:

Claim Name	Record No.	Tag No.	Expiry Date
MS #1	1429	43796	October 13, 1983.
MS #2	1430	43797	October 13, 1983.
MS #3	1438	43798	October 16, 1983.

LOCATION AND ACCESS:

The property is located in south central British Columbia about 85 km. north of Kamloops and approximately 10 km. east of the village of Little Fort. The center of the claims is located at approximately 51° 27' north latitude and 120° 04' west longitude.

The property is accessible by road from Barriere as follows: drive north from Barriere on the main gravel road which follows the east side of the North Thompson River to a point 1 km. north of Dunn Lake. At this point the Baldy Mountain Fire Tower road leads off to the east. This road is followed for about 8 km. to the vicinity of the Windpass mine workings. Various trails lead off to the MS #1 and #2 claims. The MS #3 claim is reached by a now impassible road which leads up Dunn Creek from a point about one km. south of Dunn Lake.

PHYSIOGRAPHY AND VEGETATION:

The property covers parts of the western and southwestern slopes of Baldy Mountain as well as a portion of the valley of Dunn Creek. Slopes are moderate to very steep with elevations varying from 5,500 feet (a.s.l.) down to less than 2,700 feet (a.s.l.).

Most of the property is heavily tree covered with mature stands of pine and spruce in the higher elevations and spruce, fir and cedar in the valley of Dunn Creek.

HISTORY:

The subject property was staked by Barrier Reef Resources Ltd. in 1978, soon after the discovery of the Chu Chua volcanogenic massive sulphide deposit by Craigmont Mines Ltd. on ground lying immediately to the south.

In 1979, the property was optioned to Canadian Nickel Co. Ltd. and an extensive programme of geophysical surveys was carried out. Approximately 120 km. of grid lines were cut and magnetometer and VLF-electromagnetic surveys were performed on all grid lines.

Several magnetic and electromagnetic anomalies were outlined and in 1980, a total of 377.6 meters of diamond drilling was completed on the major EM conductor. No significant mineralization was encountered and the option was terminated in 1980.

The MS property surrounds and partly overlaps two areas of reverted crown granted claims presently owned by Kamad Silver Ltd. The larger of these blocks covers the old Windpass and Sweethome gold showings. The southern block of four old reverted crown grants has no record of previous work.

The Windpass showing was discovered in 1916 and over the next five years was explored by a series of open cuts and a shaft. In 1921, the Sweethome shear-vein system was found and explored by open cuts.

Over the next 12 years, several groups explored the property by underground workings and diamond drilling. Finally in 1933 the property was brought into production at a rate of 50 tons per day and produced until 1939. Total production is recorded as 102,996 tons from which 34,456 oz gold, 1719 oz silver and 173,939 lbs of copper was produced. Minor production from leasors was carried out until 1944.

Minor exploration was performed by a number of companies until 1968 when the property was acquired by Kamad Silver Mines Ltd. Since that time Kamad has carried out a number of exploration programmes including surface and underground mapping and sampling and limited surface diamond drilling.

GEOLOGY AND MINERALIZATION:

The regional geology of the MS property area is described in a paper by Paul Schiarizza (Ministry of Energy, Mines and Petroleum Resources, 1981). In summary, the MS property is underlain by members of the Upper Paleozoic Fennell Formation and part of the Cretaceous Baldy Batholith. (See figure 208 A-3).

The Fennell Formation is divided into an upper and lower formation, several members of which are found on the MS property. The upper Fennell formation (Unit 3) consists predominantly of fine grained, massive greenstone and minor chert. This part of the Fennell formation is inferred to lie in the western portion of the claim block. Abundant exposures of this rock unit are seen on the steep slopes in the western portion of the MS #3 claim.

The lower Fennell formation is described as consisting of limestone, sandstone, argillite, phyllite, conglomerate, quartz feldspar porphyry, bedded chert and greenstone. The latter rock type designated as Unit 1A,B underlies much of the central portion of the claim block.

The most commonly observed rock type in this area is a fine grained, light to dark green, massive greenstone. Both intrusive and extrusive greenstones were observed, however, the two are for the most part indistinguishable. Contained within Unit 1A,B are andesitic, basaltic, dioritic and gabbroic rock types along with minor cherty interbeds. These local variations are generally discontinuous and pod-like and thus not indicated on the accompanying geological plan.

Medium to coarse grained dioritic to gabbroic bodies (Unit 2) are found as sill and dike-like bodies in the central portion of the claim block. These intrusives were observed in the field and are largely extrapolated from geophysical data. The largest such intrusive body is inferred to trend northerly through the Sweethome and Windpass properties. A second such basic intrusive body in the northeastern portion of the property is inferred from geophysical data (magnetic, electromagnetic surveys).

Small scale shearing was observed in several localities in the greenstone and gabbroic units. Occasionally these narrow shears contain minor quartz $\pm$ pyrite veins and in one locality minor chalcopyrite and malachite. With the exception of a few weakly mineralized shears and pyritic/limonitic pods in gabbros and greenstones no mineralization of any significance was observed on the MS property.

GEOCHEMISTRY:

The purpose of this programme was to rapidly assess geochemically parts of the subject property where mineralization of either the Chu Chua or Windpass type might occur.

In the northern part of the property, three known EM 'conductors' were sampled using the pre-existing grid. Here samples were collected at 30 meter intervals on grid lines which were usually 100 meters apart. In the area of MS #3 claim steep terrain makes grid establishment very difficult. Therefore in this area contour sampling was performed. Samples were collected at 50 and/or 100 meter intervals along contour traverses verying from 300 to 500 feet elevation difference.

Samples were collected from the 'B' horizon where possible (approximately 15 to 45 cm. deep). Sample stations were marked by flagging with the appropriate sample numbers. After collection samples were stored and shipped in waterproof kraft envelopes.

A total of 548 soil samples were collected and analysed for gold, silver and copper in the Vancouver laboratories of Acme Analytical Ltd. For gold, laboratory methodology involved fire assay extraction with analysis by atomic absorption. For silver extraction was accomplished by hot dilute aqua regia with analysis by atomic absorption. Copper extraction was obtained using hot nitric acid with analysis by atomic absorption.

Statistical analyses for all three metals were performed similarly by calculation the mean and standard deviation and classifying the data into the following categories:

Background	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 1:5000 scale basemaps and the appropriate categories of anomalous results were outlined.

Weakly anomalous silver values are scattered over the two largest 'EM' conductors as well as being irregularly dispersed through most of the MS #3 claim. There seems to be no pattern or obvious clustering and the anomalous values probably only represent higher background content in the Fennell greenstones as opposed to other rock types.

Gold values are mostly very low with practically no anomalous values in the northern part of the claim block. There are several small clusters of weakly anomalous values in the central and western parts of MS #3 claim. In one of these areas a value of 1800 PPB was returned. Several other weakly anomalous values are located nearby. These samples could reflect a local vein type gold source.

Copper values are uniformly low in the area of the three EM 'conductors', however there are several scattered clusters of anomalous values on the MS #3 claim. In particular, near the western edge of the area sampled there is a fairly large area (approximately 400 x 600 meters and open to the west) with low but consistent anomalous copper values. There is undoubtedly some downslope "smearing" effect here but still the anomaly may represent significant copper mineralization.

EXPLORATION POTENTIAL:

The three areas of EM conductors in the northern part of the MS property do not appear to have much potential for either copper or precious metal occurrences. There are other weaker geophysical targets in this area which were not sampled and either or both types of mineralization may be associated with them (particularly the magnetic anomalies).

In the southern part of the property a few small clusters of anomalous gold values in soil may represent local vein type gold sources. The several areas of anomalous copper values may represent vein and/or disseminated copper mineralization in the Fennell greenstones.

Respectfully Submitted:
KERR, DAWSON & ASSOCIATES LTD.

James M. Dawson, P. Eng.
GEOLOGIST.

November 30, 1983.

KAMLOOPS, B.C.

Appendix A

Personnel

PERSONNEL

J.M. Dawson, P. Eng.	Geologist	Sept 1, ½ day
W. Gruenwald, B. Sc.	Geologist	Sept 27-30, 4 days
R. Henderson	Prospector	Sept 1-6, 6 days
J. Whist	Field Tech.	Sept 1-6, 6 days
B. Cross	Prospector	Oct 5-9, 5 days
D. Gordon	Field Tech.	Oct 5-9, 5 days

Appendix B

Statement of Expenditures

PROGRAMME COSTS:

LABOUR:		
J.M. Dawson, P. Eng. ½ day @ $300/day	$150.00	
W. Gruenwald 4 days @ $250/day	1,000.00	
R. Henderson 6 days @ $200/day	1,200.00	
B. Cross 5 days @ $200/day	1,000.00	
J. Whist 6 days @ $150/day	900.00	
D. Gordon 5 days @ $150/day	750.00	
		$5,000.00
EXPENSES AND DISBURSEMENTS:		
Truck Rental	1,024.00	
Room and Board	937.45	
Geochemical Analyses	3,869.10	
Drafting	50.35	
Miscellaneous Field Equipment and Supplies	331.90	
Telephone	44.15	
Freight	57.60	
Blueprints & Enlargements	34.43	
		6,348.98
TOTAL:		$11,348.98

Appendix D

Writer's Certificate

JAMES M. DAWSON, P. ENG.
Geological Engineer

#206 - 310 NICOLA STREET • KAMLOOPS, B.C. V2C 2P5 • 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 206, 310 Nicola 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 20 years.

(3). I am the author of this report which is based on an exploration programme carried out on the MS property under my direct supervision.

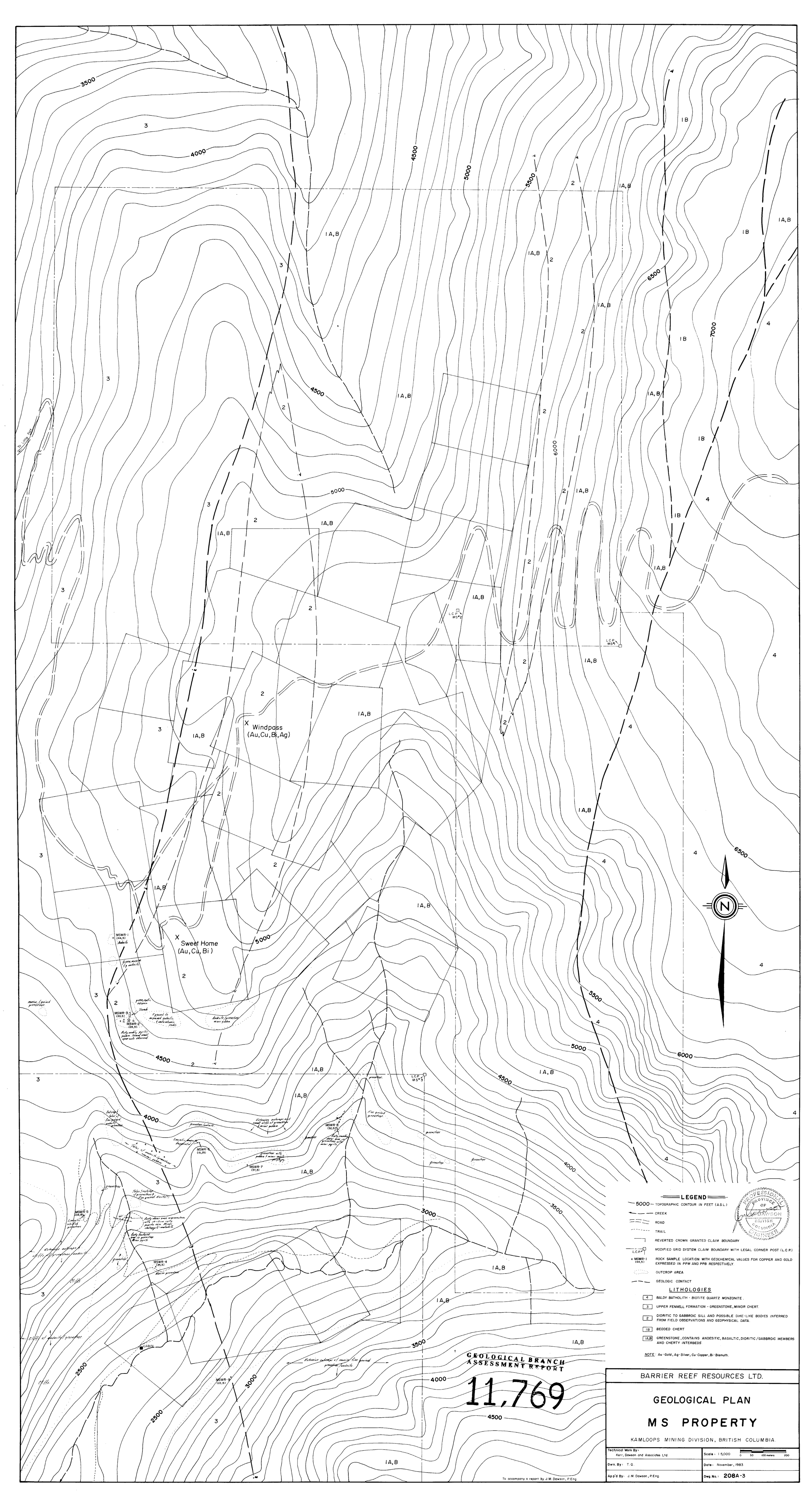
KERR, DAWSON AND ASSOCIATES LTD.

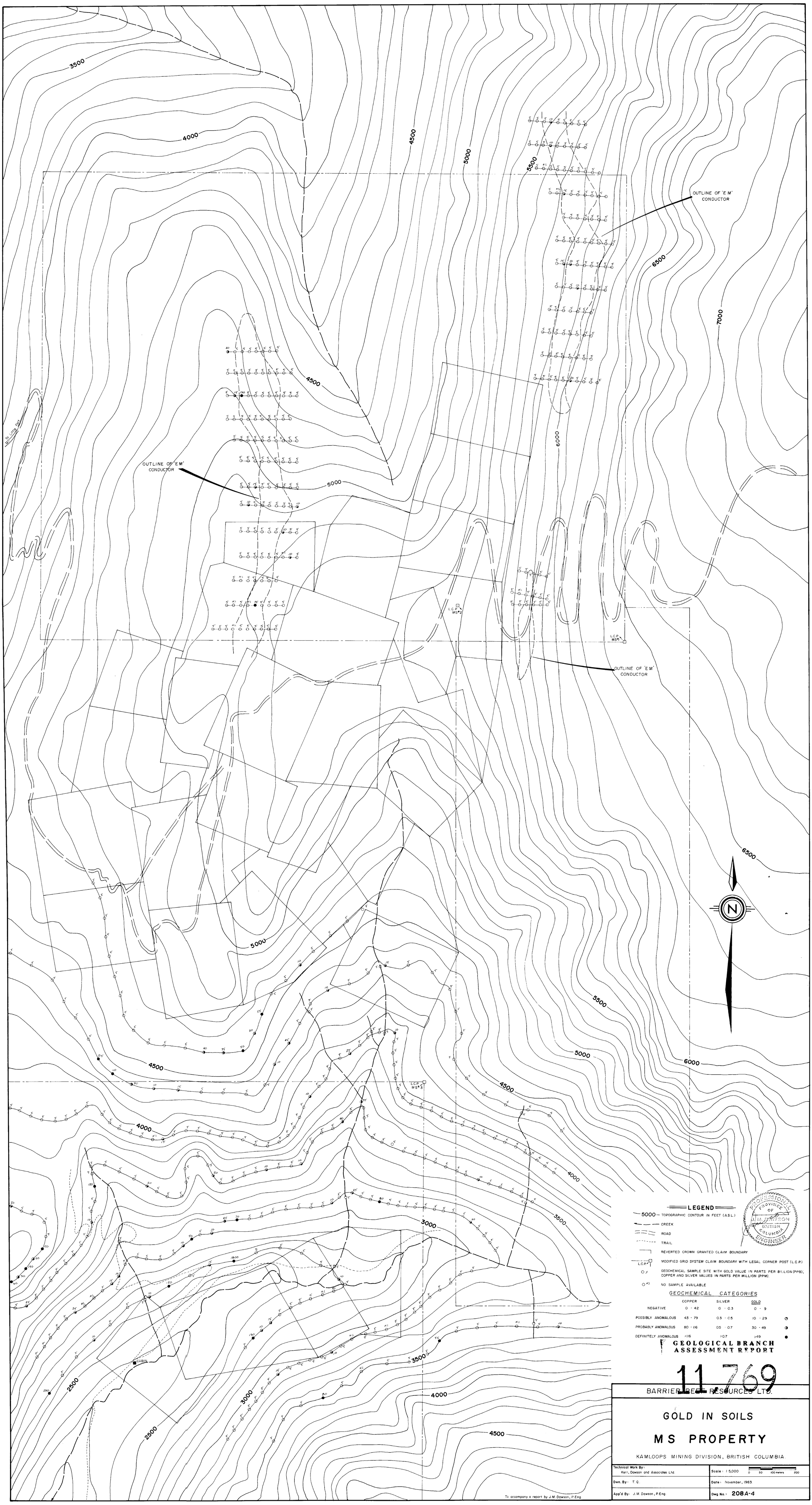
James M. Dawson

James M. Dawson, P. Eng.
GEOLOGIST

November 30, 1983.

KAMLOOPS, B.C.


Windpass
(Au,Cu,Bi,Ag)
Sweet Home
(Au, Cu, Bi)
LEGEND
5000 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
CREEK
ROAD
TRAIL
REVERTED CROWN GRANTED CLAIM BOUNDARY
L.C.P. MODIFIED GRID SYSTEM CLAIM BOUNDARY WITH LEGAL CORNER POST (L.C.P.)
MSWR-1 (44,5) ROCK SAMPLE LOCATION WITH GEOCHEMICAL VALUES FOR COPPER AND GOLD EXPRESSED IN PPM AND PPB RESPECTIVELY
OUTCROP AREA
GEOLOGIC CONTACT
LITHOLOGIES
4 BALDY BATHOLITH - BIOTITE QUARTZ MONZONITE.
3 UPPER FENNELL FORMATION - GREENSTONE, MINOR CHERT.
2 DIORITIC TO GABBROIC SILL AND POSSIBLE DIKE-LIKE BODIES INFERRED FROM FIELD OBSERVATIONS AND GEOPHYSICAL DATA.
1B BEDDED CHERT.
1A,B GREENSTONE, CONTAINS ANDESITIC, BASALTIC, DIORITIC/GABBROIC MEMBERS AND CHERTY INTERBEDS.
NOTE: Au-Gold, Ag-Silver, Cu Copper, Bi-Bismuth.
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
GEOLOGICAL BRANCH ASSESSMENT REPORT
11,769
BARRIER REEF RESOURCES LTD.
GEOLOGICAL PLAN
MS PROPERTY
KAMLOOPS MINING DIVISION, BRITISH COLUMBIA
Technical Work By: Kerr, Dawson and Associates Ltd
Scale: 1:5,000
Dwn. By: T.Q.
Date: November, 1983
App'd By: J.M. Dawson, P.Eng.
Dwg. No.: 208A-3
To accompany a report by J.M. Dawson, P.Eng.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,769

BARRIER REEF RESOURCES LTD.

GOLD IN SOILS

MS PROPERTY

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA

Technical Work By: Kerr, Dawson and Associates Ltd.	Scale: 1:5,000 (0 50 100 meters 200)
Dwn. By: T.C.	Date: November, 1963
App'd By: J.M. Dawson, P.Eng.	Dwg No.: 208A-4

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

OUTLINE OF 'E M' CONDUCTOR

OUTLINE OF 'E M' CONDUCTOR

OUTLINE OF 'E M' CONDUCTOR

To Little Fort

L.C.P. MS#2

L.C.P. MS#1

L.C.P. MS#3

CABIN

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

LEGEND

- 5000 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- CREEK
- ROAD
- TRAIL
- REVERTED CROWN GRANTED CLAIM BOUNDARY
- L.C.P. MODIFIED GRID SYSTEM CLAIM BOUNDARY WITH LEGAL CORNER POST (L.C.P.)
- O 5 GEOCHEMICAL SAMPLE SITE WITH GOLD VALUE IN PARTS PER BILLION (PPB); COPPER AND SILVER VALUES IN PARTS PER MILLION (PPM).
- O N/S NO SAMPLE AVAILABLE

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — J. M. DAWSON

GEOCHEMICAL CATEGORIES

	COPPER	SILVER	GOLD	
NEGATIVE	0 - 42	0 - 0.3	0 - 9	
POSSIBLY ANOMALOUS	43 - 79	0.3 - 0.5	10 - 29	◔
PROBABLY ANOMALOUS	80 - 116	0.5 - 0.7	30 - 49	◑
DEFINITELY ANOMALOUS	>116	>0.7	>49	●

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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BARRIER REEF RESOURCES LTD.

SILVER IN SOILS

MS PROPERTY

KAMLOOPS MINING DIVISION, BRITISH COLUMBIA.

Technical Work By: Kerr, Dawson and Associates Ltd.	Scale: 1:5,000 (0 50 100 meters 200)
Dwn. By: T.Q.	Date: November, 1983.
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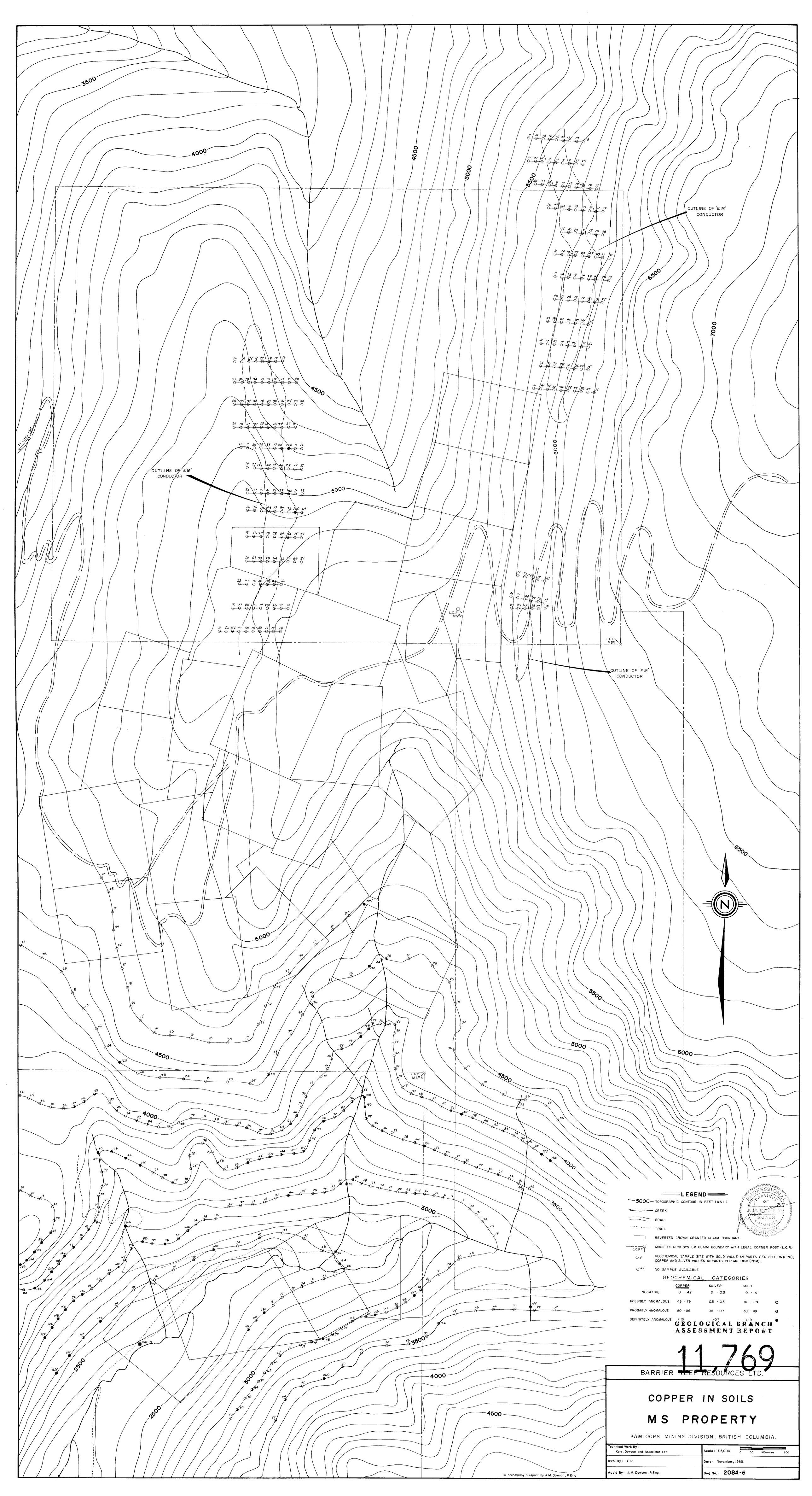
OUTLINE OF 'E M' CONDUCTOR
OUTLINE OF 'E M' CONDUCTOR
OUTLINE OF 'E M' CONDUCTOR
L.C.P. M5-1
L.C.P. M5-2
L.C.P. M5-3
CABIN
N
LEGEND
5000 TOPOGRAPHIC CONTOUR IN FEET (ASL)
CREEK
ROAD
TRAIL
REVERTED CROWN GRANTED CLAIM BOUNDARY
L.C.P. MODIFIED GRID SYSTEM CLAIM BOUNDARY WITH LEGAL CORNER POST (L.C.P.)
GEOCHEMICAL SAMPLE SITE WITH GOLD VALUE IN PARTS PER BILLION(PPB), COPPER AND SILVER VALUES IN PARTS PER MILLION (PPM).
NO SAMPLE AVAILABLE
GEOCHEMICAL CATEGORIES
COPPER SILVER GOLD
NEGATIVE 0 - 42 0 - 0.3 0 - 9
POSSIBLY ANOMALOUS 43 - 79 0.3 - 0.5 10 - 29
PROBABLY ANOMALOUS 80 - 116 0.5 - 0.7 30 - 49
DEFINITELY ANOMALOUS 116 0.7 49
GEOLOGICAL BRANCH ASSESSMENT REPORT
11,769
BARRIER REEF RESOURCES LTD.
COPPER IN SOILS
M S PROPERTY
KAMLOOPS MINING DIVISION, BRITISH COLUMBIA
Technical Work By: Kerr, Dawson and Associates Ltd
Scale: 1:5,000 0 50 100 meters 200
Dwn. By: T.Q.
Date: November, 1983
App'd By: J.M. Dawson, P.Eng.
Dwg. No.: 2084-6
To accompany a report by J.M. Dawson, P.Eng.