

ASSESSMENT REPORT

GEOCHEMICAL SAMPLING

OF

MARE GROUP

Liard Mining Division

Longitude 129° 57'W

Latitude 59° 32'N

NTS 104P/12W

OWNER: FALCONBRIDGE LIMITED

OPERATOR: FALCONBRIDGE LIMITED

AUTHOR: TOR BRULAND

Date Submitted: September 28, 1983

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,355

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INTRODUCTION

The MARE Group of mineral claims consists of:

MARE 1 (20 units), MARE 2 (8 units),

MARE 3 (6 units), MARE 4 (15 units).

All recorded September 28, 1981.

The property is located 32km north of Cassiar Townsite between Black Friday Lake and the Blue River (Figure 2). The property is located in alpine county in the Cassiar Mountains. The LCP for MARE 1 to MARE 4 is located at 1770 m elevation with the main outcrops located in the cliff of the valley at elevations between 1850 m and 2200 m (Figure 1 and Figure 3). The only access to property is by helicopter from Watson Lake.

The property was staked by Canadian Superior Exploration Ltd. in September 1981 after a regional exploration of the area. Falconbridge Ltd. acquired the property from Canadian Superior Exploration Ltd. on September 21, 1982.

The purpose of the present program was to test the extent of gold and silver mineralization in silicious pyritized sedimentary - volcanic rocks found by Canadian Superior Exploration Ltd. for a possible epithermal precious metal model.

135 rock samples were collected from accessible gossans on the property and fine assayed for Au and Ag.

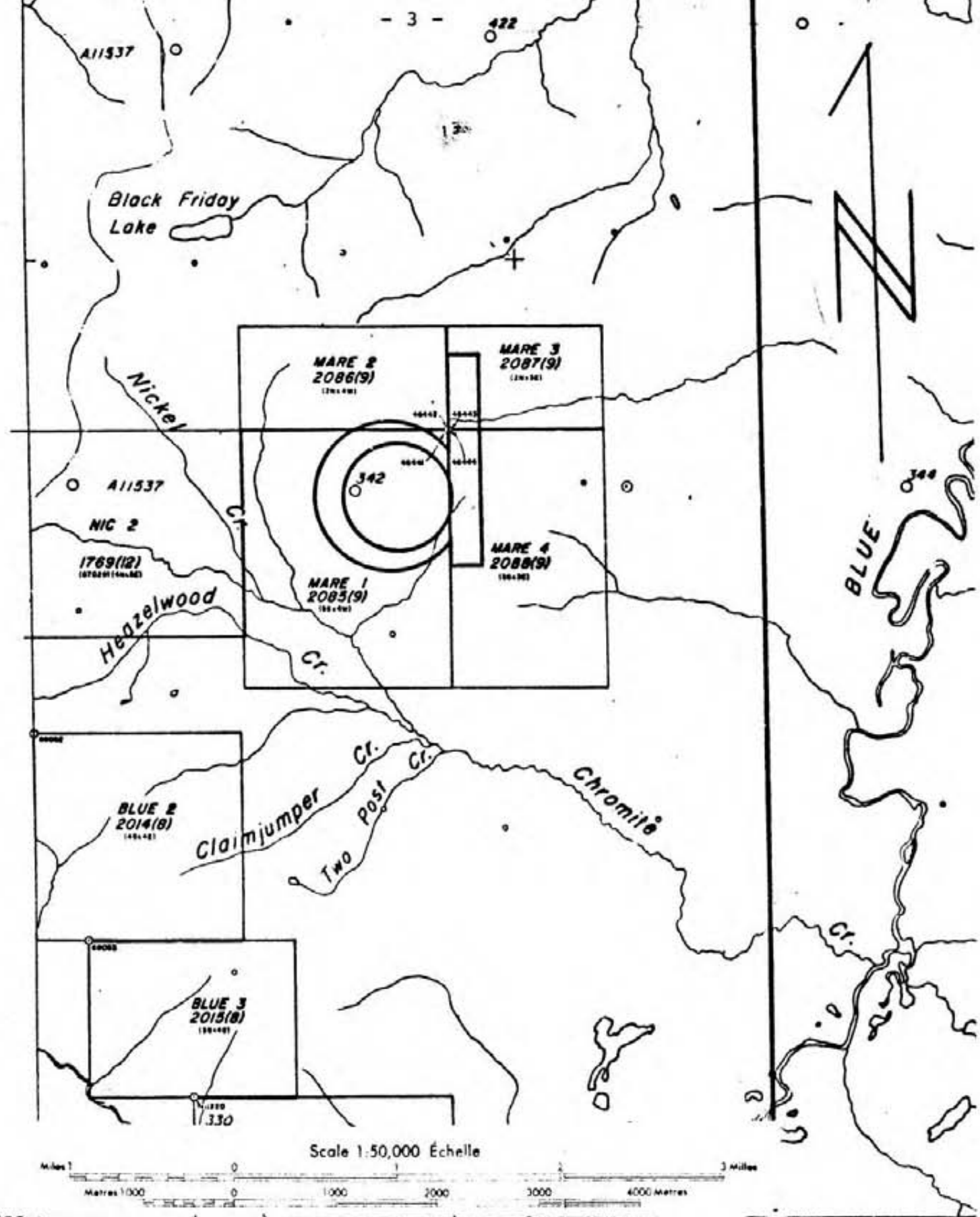
GENERAL GEOLOGY

The property covers a volcanic-sedimentary sequence within the Lower Sylvester Group. Composition of the volcanic rocks ranges from plagioclase feldspar, porphyritic andesite to fine grained andesite, to augite-olivine porphyritic basalt with intrabedded sediments. The intrabedded sediments include bedded chert, limestone and argillites trending at approximately N 140° E and dipping 50-60° SW. The volcanic and sedimentary rocks contain 2-5% disseminated pyrite over a strike length of approximately 1500 meters. Minor chalcopyrite and malachite are locally isolated in both sedimentary and volcanic rocks.

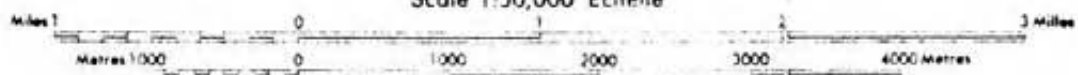
Figure 1

Location map for the
Mare group
Scale 1:7,600,000





Scale 1:50,000 Échelle



59°30' 130°00' LIARD MINING DIVISION

- Mining Division Boundary
- Indian Reservation
- Mineral and Placer Reserve
- Ecological Reserve

Figure 2
 Claim map 104P/12W of the
 Mare Group Falconbridge
 Limited Claims.

Figure 3

Topographic map 104P/12W of
Mare Claim Group Falconbridge
Limited Claims.

12

11

10

09

08

07

06

05

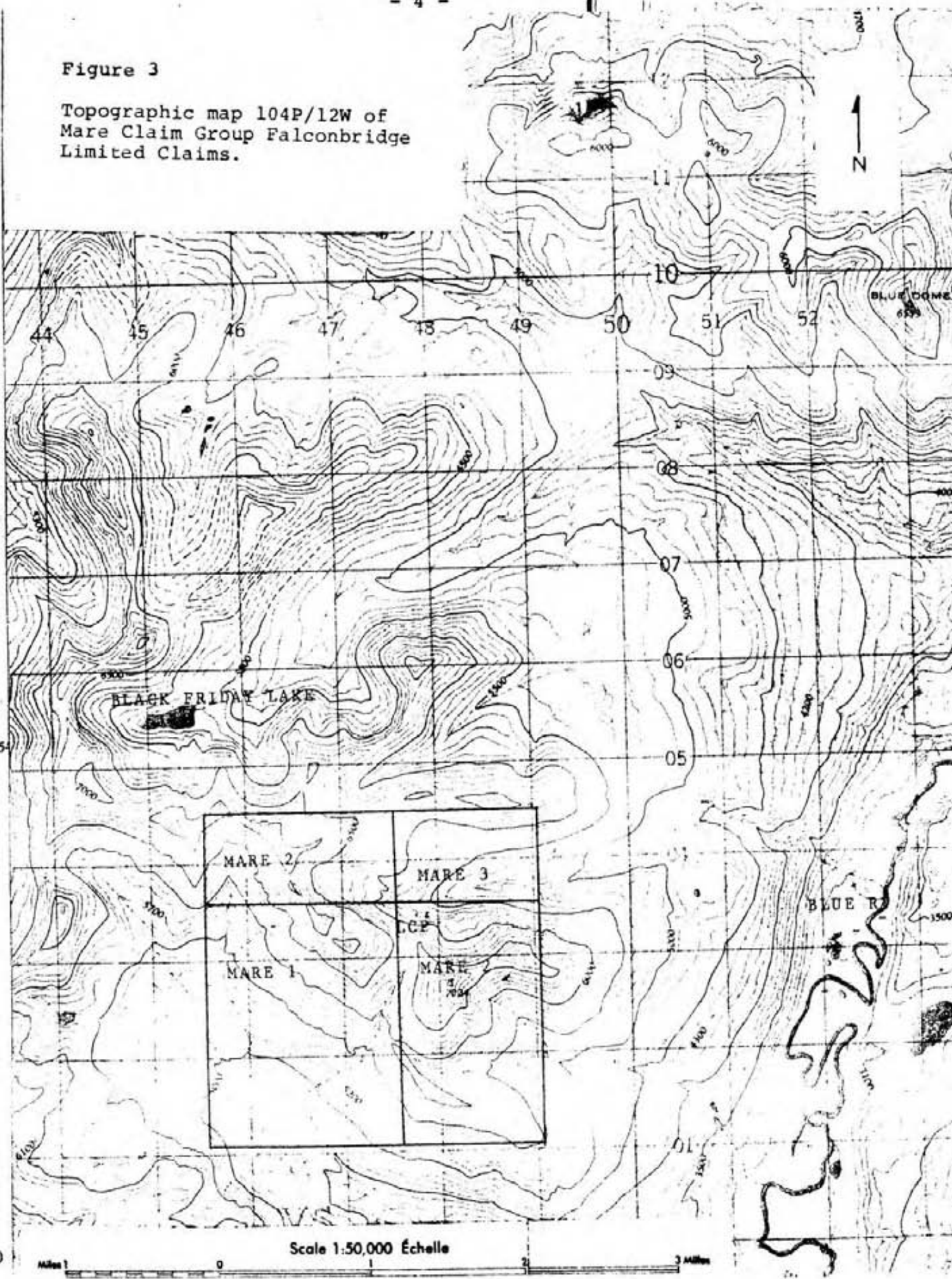
04

03

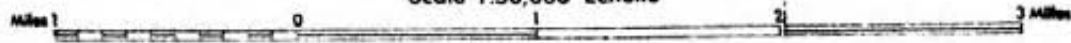
02

01

6600



Scale 1:50,000 Échelle



SAMPLING AND RESULTS

Chip samples were collected from the cliffs on the south and west slope of the cirque in the northern part of the property. A total of 135 samples were collected; there were 130 chip samples and 5 float samples. Sampling was concentrated on accessible gossans in the cliffs. Two units were sampled.

104 samples were collected from bedded sediments. The sediments varied from chert to sandstone. Grain size varied from aphanitic to medium. The beds have thickness of 1-10 cm white, light grey and grey, equigranular. The sediments are minor to intense silicified with minor chlorite and calcite in veins 1-5 mm. 1-5% disseminated pyrite and limonite on fractures. Isolated beds have minor malarcite staining. Two samples of a sedimentary breccia was found in the western slope of the cirque. The fragments are angular to subrounded 3-10 cm light grey and intense silicified. The Breccia has only minor matrix. Local variation in disseminated pyrite between 1 and 10%, minor hematite disseminated or as halos around isolated fragments, up to 5 mm.

Twenty samples were collected from the volcanics which vary in composition between andesite and augite-olivine basalt. The volcanics are fine grained light to dark green equigranular or porphyritic with 1-15% subhedral and euhedral hornblende ± augite phenocrysts 3-8 mm. Locally the volcanics contain minor to moderate epidote, disseminated or in lenses up to 5 cm, and 3-5% disseminated pyrite. Isolated outcrops have minor chalcopyrite and malarcite staining. The volcanics are parallel bedding of the sedimentary unit.

Both the sedimentary and the volcanic units are cut by quartz veins. Four samples of the quartz veins were collected. The quartz are fine to medium grained white to light grey with minor to 5% disseminated pyrite.

Five float samples were collected, 4 from the sedimentary unit, one from the volcanics.

All the samples were sent to CDN Resource Laboratories Ltd. #8-7550 River Road, Delta, where they were crushed and assayed for Au and Ag by a standard fire assay.

The assay results gave minor gold and silver values. Gold varied between .001 oz/ton and .093 oz/ton with an average of .003 oz/ton. Silver varied between .001 oz/ton and .24 oz/ton with an isolated high of 6.48 oz/ton. The average of silver is .01 oz/ton.

High gold values found by Canadian Superior Exploration Ltd. were from float and there are three additional gossans in the cliff that must be sampled by mountaineers.

STATEMENT OF COSTS -

A - TRAVEL

CP Air, round trip Vancouver - Watson Lake.
2 man @ \$451.00 \$ 451.00

B - CAMP AND SAMPLING

Room and board, Watson Lake Hotel
2 man for 2 days 182.70

Helicopter charges for mobilization and
demobilization of flycamp and local crew moves 6,129.50

Groceries for fly camp 271.47

Project geologist, August 25/83 to
September 5/83, 12 days @ \$130.00 1,560.00

Geologist, August 25/83 to September 5/83,
12 days @ \$80.00 960.00

Room and board, Watson Lake Hotel
2 man for 2 days 186.70

C - ASSAYING

Assay of 135 rock samples
135 sample preparation @ \$3.00 405.00
135 sample fire assay @ \$8.50 1,147.50

D - REPORT

Project geologist 2 days
September 22/83 and September 23/83 @ \$130.00 260.00

TOTAL \$11,553.87

STATEMENT OF QUALIFICATIONS

FOR

MR. TOR BRULAND

Mr. Tor Bruland graduated from the University of Bergen, Norway in 1977 with a Cand. Mag. (B. Sc.) and in 1980 with a Cand. Real (M. Sc.), and has worked and an exploration geologist in B.C. and Yukon since 1980. He is a member of the Geological Association of Canada.

Yours truly,

A large, stylized handwritten signature in cursive script, appearing to read 'Tor Bruland', written in black ink.

Tor Bruland

A P P E N D I X A

ASSAY RESULTS

To: Falconbridge Limited
 6415 64th St.
 Delta, B.C.
 V4K 4E2

File No.: 83-139
 Date: September 16, 1983
 Samples: rock
 page 1 of 5

CDN RESOURCE LABORATORIES LTD.
 #8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

ASSAY REPORT

Attention: Mr. J.B. Gammon

L < .01 Ag (oz/ton)

Sample No.	Au (oz/ton)	Ag (oz/ton)
MM001	.002	L
2	.002	L
3	.002	L
4	.002	L
5	.002	.03
THALUS MM005	< .001	L
MM006	< .001	L
7	< .001	L
8	< .001	L
9	< .001	L
10	< .001	L
THALUS MM011	< .001	.01
MM011	< .001	L
12	< .001	L
13	.002	L
14	.002	L
15	.003	L
16	.015	L
THALUS MM016	.002	L
MM017	.023	L
18	< .001	L
19	< .001	L
20	< .001	L
21	.002	L
22	.002	.05
THALUS MM022	.002	.11
23	.002	.01
24	.006	6.48
25	.015	.24
26	.002	.09
27	.002	L
28	.002	L
29	< .001	.04
30	< .001	.01
31	< .001	.02
32	< .001	.01

Rejects retained one month.
 Pulps retained one month
 unless specific arrangements
 made.

[Signature]
 Licensed Assayer of British Columbia

To: Falconbridge Limited
6415 64th St.
Delta, B.C.
V4K 4E2

File No. 05 197
Date: September 16, 1983
Samples: rock
page 2 of 5

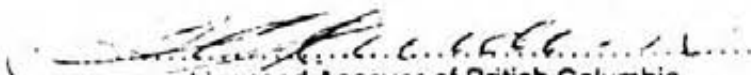
CDN RESOURCE LABORATORIES LTD.
#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

ASSAY REPORT

L < .01 Ag (oz/ton)

Sample No.	Au (oz/ton)	Ag (oz/ton)
MM 033	<.001	L
34	<.001	L
35	<.001	L
36	<.001	L
37	<.001	L
38	.009	L
39	.002	L
40	<.001	L
41	.003	L
42	.002	.01
43	<.001	L
44	<.001	L
45	<.001	L
46	.006	L
47	.002	L
48	<.001	L
49	<.001	L
50	<.001	L
51	<.001	L
52	<.001	L
53	<.001	L
54	<.001	L
55	<.001	L
56	<.001	L
57	<.001	L
58	<.001	L
59	.006	L
60	<.001	L
61	<.001	L
62	.011	L
63	<.001	L
64	<.001	.01
65	<.001	L
66	<.001	.14

Rejects retained one month.
Pulps retained one month
unless specific arrangements
made.


Licensed Assayer of British Columbia

To:

Falconbridge Limited

6415 64th St.

Delta, B.C.

V4K 4E2

File NO.: 83-139

Date: September 16, 1983

Samples: rock

page 3 of 5

CDN RESOURCE LABORATORIES LTD.


#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

ASSAY REPORT

L < .01 Ag (oz/ton)

Sample No.	Au (oz/ton)	Ag (oz/ton)
MM 067	.003	L
68	<.001	.05
69	<.001	L
70	<.001	.02
71	<.001	L
72	<.001	L
73	<.001	L
74	<.001	L
75	<.001	L
76	<.001	L
77	.006	L
78	<.001	L
79	<.001	L
80	<.001	L
81	<.001	L
82	<.001	L
MB 001	<.001	L
02	<.001	L
03	.002	L
04	.002	L
05	<.001	.02
06	<.001	L
07	.011	.02
08	.011	L
09	.009	L
10	.006	L
11	.093	.01
12	.014	L
13	.002	L
14	.006	L
15	.002	L

Rejects retained one month.
Pulps retained one month
unless specific arrangements
made.



Licensed Assayer of British Columbia

To: Falconbridge Limited
 6415 64th St.
 Delta, B.C.
 V4K 4E2

Date: September 15, 1983
 Samples: rock
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CDN RESOURCE LABORATORIES LTD.
 #8, 550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

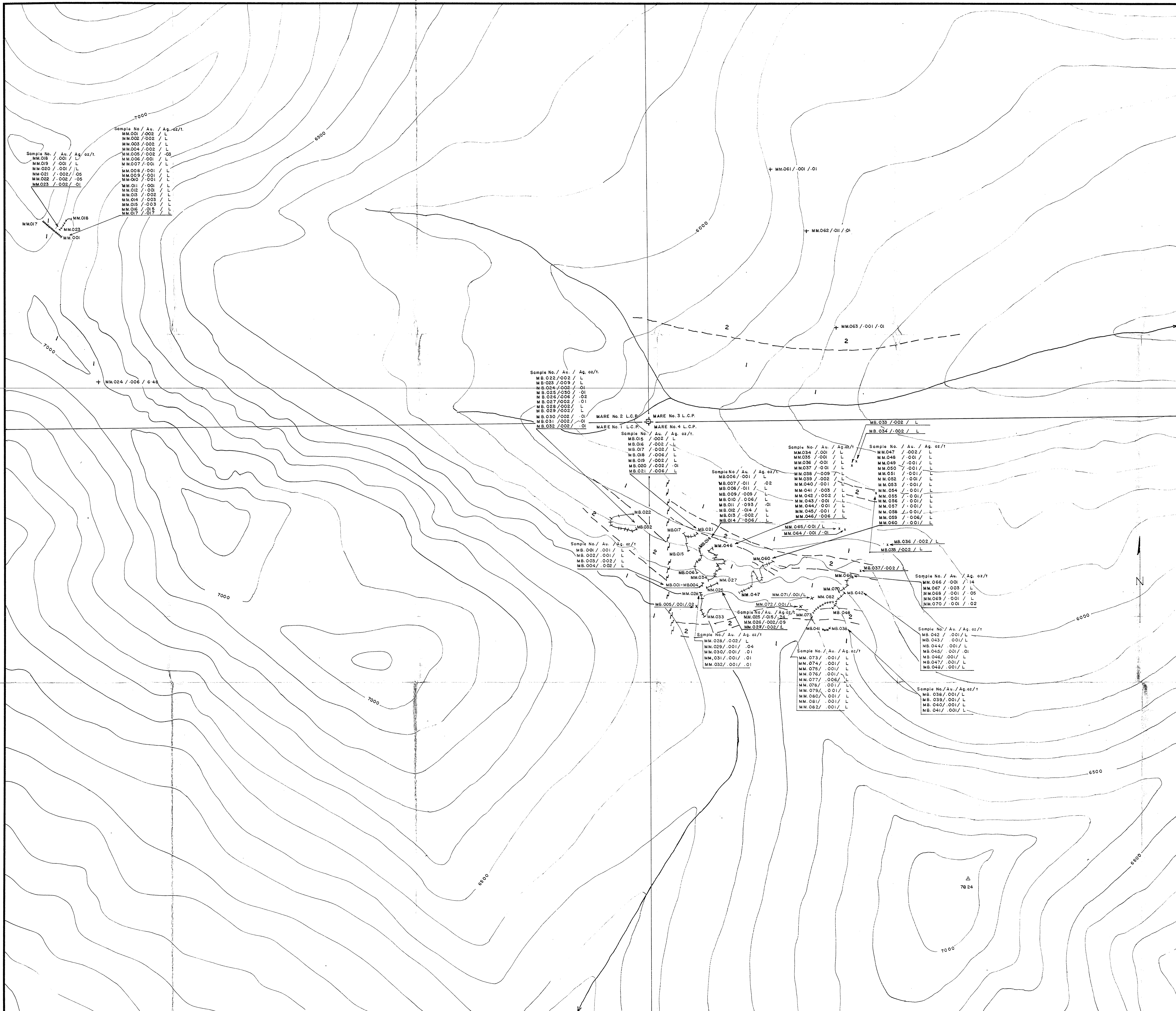
ASSAY REPORT

L < .01 Ag(oz/ton)

Sample No.	Au (oz/ton)	Ag (oz/ton)
MB 016	.002	L
17	.002	L
18	.006	L
19	.002	L
20	.002	.01
21	.006	L
22	.002	L
23	.009	L
(float) 23	.004	.01
24	.002	.01
25	.030	.01
26	.006	.02
27	.002	.01
28	.002	L
29	.002	L
30	.002	.01
31	.002	.01
32	.002	.01
33	.002	L
34	.002	L
35	.002	L
36	.002	L
37	.002	L
38	< .001	L
39	< .001	L
40	< .001	L
41	< .001	L
42	< .001	L
43	< .001	L
44	< .001	L
45	< .001	.01
46	< .001	L
47	< .001	L
48	< .001	L

Rejects retained one month.
 Pulps retained one month
 unless specific arrangements
 made.


 Licensed Assayer of British Columbia

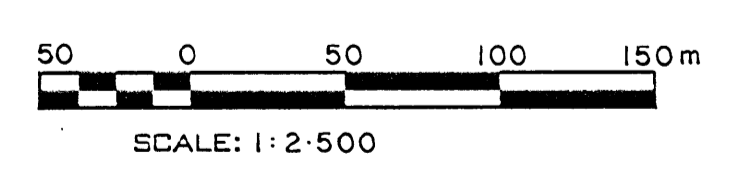


LEGEND

- 1 Sediment
- 2 Volcanics
- Chip Sample Location
- L <.01 Ag.

GEOLOGICAL BRANCH ASSESSMENT REPORT

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FALCONBRIDGE LIMITED		
PROPERTY:	PROJECT NO.:	
Mare Claim Group		
LOCATION:	McDame Area B.C.	
TYPE OF MAP:	Geology & Chip Sampling Location and Assays	
WORKING PLACE:		
BASED ON:	Fieldwork by T.B. & C.B.	
DATE OF WORK:	Sept. 1983	MAP REF. NO.:
DRAWN BY:	G.T.	FIG. NO.:
DATE:	Jan. 1984	N.T.S. NO.: 104-P-12
		083-83-4