

DIAMOND DRILL REPORT

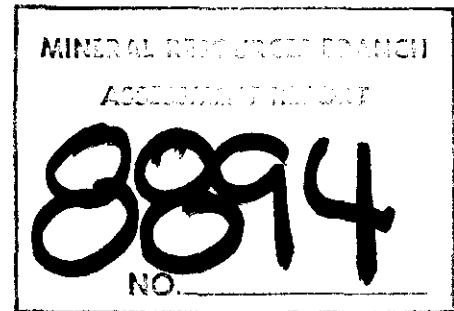
ON THE

BROWN GROUP

CARIBOO MINING DIVISION

93 B 8W, 9W

(LATITUDE 50°30', LONGITUDE 122°18')



OWNER AND OPERATOR

GIBRALTAR MINES LIMITED

MCLEESE LAKE, B.C.

Author: G.D. Bysouth

Submitted: 26 March 1980

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1.0 INTRODUCTION

"The Brown Group lies approximately 1 mile (1.61 km) south-south-west of the Gibraltar Mines concentrator. It lies mainly to the east of Cuisson Lake and extends approximately 1.5 miles (2.4 km) northeast of the northern tip of the lake. Elevations range from 2900 feet to about 3700 feet. Access is via a two-wheel drive road which links the claims to the Gibraltar Mines Road at a point about 3 miles (4.8 km) by road from the plant site. The general location of the group is shown in Figure 1.

This group shares a common history with the adjacent "Pink Group" which lies on its western boundary. The following is quoted from a "Diamond Drill Report of the Pink Group" submitted by G.D. Bysouth on July 11, 1980.

"The property was first staked in 1928 by the Hill Brothers. Mineralization found in a shear zone was tested with a trench and open cut 75 feet in length. A chip sample across the heaviest mineralization gave 25 feet of 2.0% copper, but no gold or silver.

From 1954 to 1956, Sunset (Kimacllo Mines Limited) staked 100 claims in this area and in the Pollyanna area on Granite Mountain. They drove the "Sunset Adit" into the shear zone along Granite Creek at a point about 1 mile (1.6 km) east of the north end of Cuisson Lake. The adit ran for a distance of 110 feet at S35°E. They tested the area around the adit with a pack sack diamond drill. Chip sampling of open cuts west and east of the portal yielded 23 feet of .87% copper and 23 feet of .20% copper respectively. A sample taken of the hanging wall above the shear assayed 12.5 feet of 1.43% copper, and one across the shear yielded 2 1/3 feet of 1.96% copper.

In 1958, Sunset (Major Mines Limited) took over 72 claims in this area. They did 3,000 feet (937.5m) of diamond drilling in 10 holes and carried out a geological mapping program over the area.

In 1967, McPhar Geophysics Limited carried out an I.P. Survey for Cominco Limited which outlined a small anomaly at the northern end of the Pink Group¹ and the Brown Group.

"Gibraltar Mines have held some claims in the area since 1962. In 1969 they drilled 15 N.Q. wireline holes as part of a larger program designed to test the extensions of the Granite Lake and Gibraltar East orebodies. Gibraltar Mines Limited was working under an agreement with Duval Corporation and Canadian Exploration Limited until 1971 when all interests reverted to Gibraltar."¹ The claims presently in the Brown Group were grouped in 1971 and some of them have been taken to lease. Figure 2 shows a detailed location map of claims and leases in the Brown Group, all of which are owned by Gibraltar Mines Limited."²

On July 31, 1980, a report was submitted covering a drill program designed to test the southerly extension of the mineralized zone indicated by 1969 drilling in the Pink Group and the adit and to test for a possible peripheral porphyry system.

1. G.D. Bysouth, Gibraltar Mines Ltd., Diamond Drill Report on the Pink Group, Cariboo Mining Division 93B8, July 11, 1980.

2. G.D. Bysouth, Gibraltar Mines Ltd., Diamond Drill Report on the Brown Group, Cariboo Mining Division 93B8W, 9W, July 31, 1980.

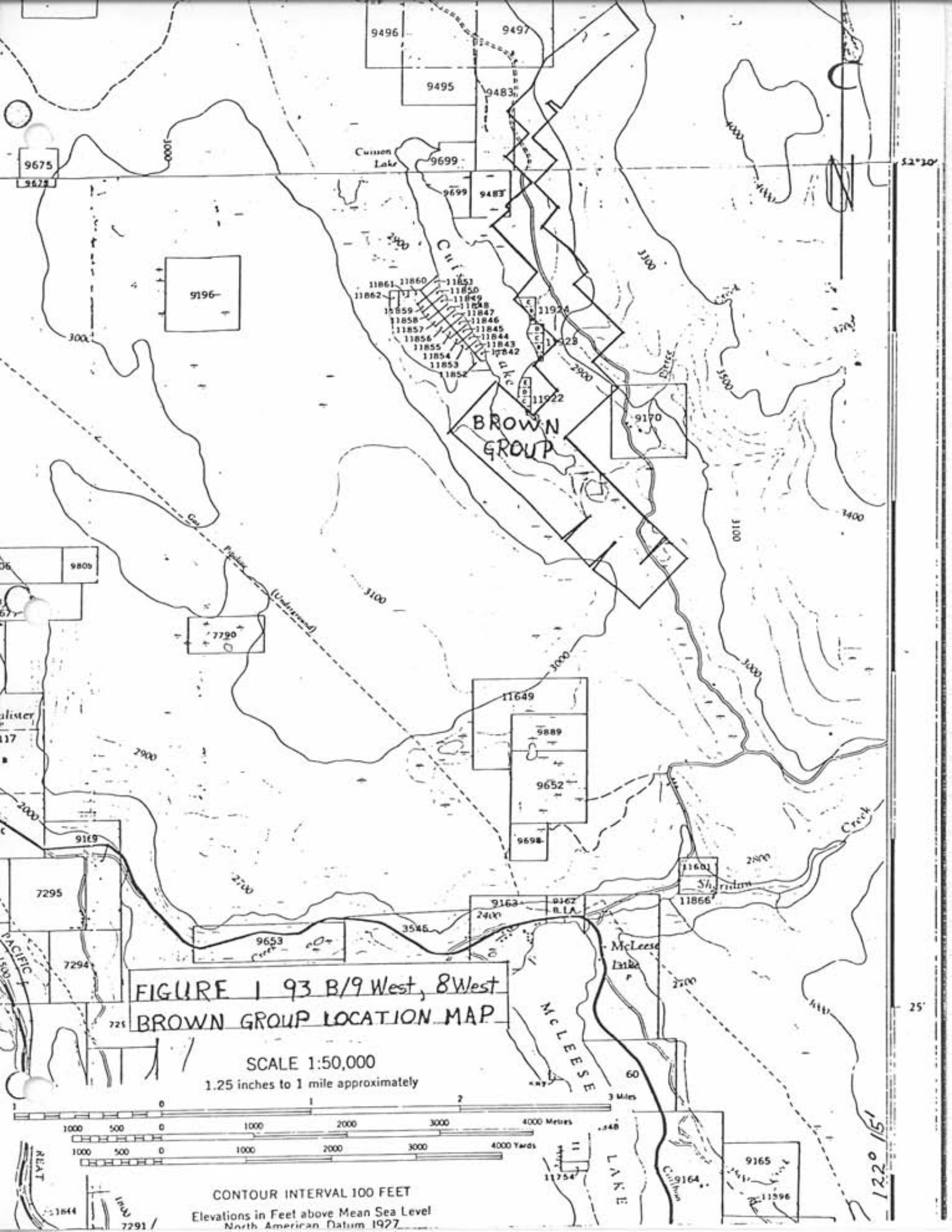
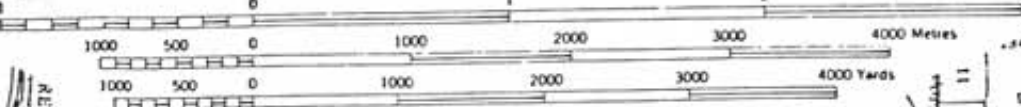


FIGURE 1 93 B/9 West, 8 West
BROWN GROUP LOCATION MAP

SCALE 1:50,000
1.25 inches to 1 mile approximately



CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927

122° 15'

This report covers a second "follow-up" diamond drill program. G & D Diamond Drilling Co. Ltd. was contracted during the period December 17 to December 20, 1980 to drill two vertical N.Q. wireline diamond drill holes totalling 717 feet (218.54 m). Core is stored at Gibraltar Mines Plant site.

2.0 MINERAL CLAIMS

Claims and leases of the Brown Group are shown in Figure 2. Information on them is tabulated below.

CLAIM NAME	RECORD NO.	LOT NO.	LEASE	ANNIVERSARY DATE
AL 5	28451	-	-	July 2, 1990
8	28454	-	-	"
EV 13	31066	-	-	October 19, 1990
14	67	-	-	"
15	31739	-	-	January 17, 1990
16	40	-	-	"
18	42	-	-	"
20	44	-	-	"
PAN 2	25792	4149	M-64	October
STU 2 FRACTION	52929	-	-	July 18, 1990
3 "	30	-	-	"
4 "	31	-	-	"
6 "	53211	-	-	August 12, 1990
Z 2 FRACTION	34969	3601	M-39	July
ZEPHYR 2	25575	3601	M-39	"
4	77	3601	M-39	"
6	79	3601	M-39	"
8	81	3601	M-39	"
FLO 2 FRACTION	43173	-	-	August 3, 1990
VAL 3	33851	-	-	March 18, 1985
5	53	-	-	"
6	54	-	-	"
VAL 35	53212	-	-	August 12, 1990
36	53213	-	-	"
37	52917	-	-	July 18, 1985
38	53214	-	-	August 12, 1990
39	52918	-	-	July 18, 1985
40	53215	-	-	August 12, 1990
41	52919	-	-	July 18, 1985
42	53216	-	-	August 12, 1990
43	52920	-	-	July 18, 1985
44	53217	-	-	August 12, 1990
45	52921	-	-	July 18, 1985
46	53218	-	-	August 12, 1990
47	52922	-	-	July 18, 1985
48	53219	-	-	August 12, 1990
49	52923	-	-	July 18, 1985
50	53220	-	-	August 12, 1990

All of these claims belong to Gibraltar Mines Limited and adjoin to the north, east and west, two-part claims and unit claims, all owned by Gibraltar Mines Limited. The southern edge of the property is bounded by Crown land.

3.0 DRILL PROGRAM

3.1 OBJECTIVE

The purpose of this drill program was to follow-up drilling done in March of 1980 and to further test the southerly extension of a mineralized zone indicated in the adjoining Pink Group and by the adit zone.

3.2 RESULTS

The drill hole locations are shown in Figure 3. Results from the 1980 spring drill program in the adjacent Pink Group, submitted in a "Diamond Dill Report" for assessment purposes on July 11, 1980, suggest a narrow (approximately 180' wide) zone of mineralization, striking 304° azimuth and dipping 60° NE. Holes 80-56 and 80-57 were designed to cut this zone.

Limonite is noted to 70' and 130' in holes 80-56 and 80-57 respectively. Copper oxides are present in minor amounts in hole 80-57.

Diamond drill logs are included in the pocket of this report. All copper values reported here and in the logs are for total copper; all molybdenum values reported are MoS₂; silver is given as ounces per ton.

Hole 80-56 was cased to 10 feet. Between 30 and 190 feet, a 160 foot zone of .65% copper, .004% MoS₂, was intersected. Silver assays reported from 10 feet to 150 feet averaged .111 oz/ton.

Hole 80-57 was cased to 10 feet. It showed spotty low-grade mineralization. A zone 156 feet thick from 250 to 406 feet, averaged .22% copper, .012% MoS₂. Silver assays were done for only those intersections with copper values of greater than .20%. A 50 foot zone from 300 to 350 feet averaged .043 ounces per ton.

3.3 INTERPRETATION

According to other drill results, the adit zone strikes 304° azimuth and dips 60° north-easterly. The assay results from 80-56 and 80-57 suggest that the mineralized zone dips somewhat more steeply at about 68° north-easterly and appears to die-out with depth.

Most of the mineralization is associated with quartz-sericite zones, quartz-chlorite zones and dark chlorite-altered rocks. Intersections with abundant saucerite-altered rock are generally barren.

4.0 STATEMENT OF EXPENDITURES

DECEMBER, 1980 DIAMOND DRILLING, BROWN GROUP

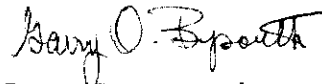
a) Site Preparation					
TD 15 Bulldozer	Sept. 15	3 hrs. @ \$50.00	\$150.00		
Drill Company Charges		5 hrs. @ \$40.00	<u>\$200.00</u>		
			\$350.00	\$	350.00
b) Drilling Costs					
Moving: Drill Company Charges		10 hrs. @ \$20.00	\$200.00		
Drilling: 80-56			\$4,354.00		
80-57			<u>\$5,684.00</u>		
			\$10,038.00	\$10,038.00	
Materials			<u>219.00</u>		
			\$10,457.00	\$	10,457.00
c) Vehicle Costs					
4x4 1980 Suburban	Dec. 17 - 20	4 days @ \$17.20/day		\$	68.80
d) Assay Costs					
103 assays @ \$4.40/assay				\$	453.20
e) Miscellaneous Costs					
36 coreboxes @ \$4.60/box			\$165.60		
Sample bags, tags, etc.			<u>30.00</u>		
			\$195.60	\$	195.60
f) Personnel Costs					
<u>Core Logging and Supervision</u>					
G. D. Bysouth	Dec. 22	8 hours			
	Dec. 30	<u>8 hours</u>			
		16 hours @ \$19.60/hr.	\$313.60		
<u>Field Work and Organizing</u>					
E. Oliver	Nov. 10	2 hours @ \$13.23/hr.	\$ 26.46		
C. Johnston	Nov. 7	2 hours @ \$10.87/hr.	\$ 21.74		
<u>Core Splitting</u>					
R. Riedel	Dec. 23-24	16 hours			
	Dec. 29	2 hours			
	Dec. 31	8 hours			
	Jan. 2	<u>8 hours</u>			
		34 hours @ \$ 6.67/hr.	<u>\$226.78</u>		
			\$588.58	\$	<u>588.58</u>
		TOTAL DRILLING COSTS			<u>\$12,113.18</u>

5.0 CONCLUSIONS

Hole 80-56 suggests a small rich surface pod of mineralization, the southward extent of which should be further tested.

Hole 80-57 suggests that the mineralization is becoming weaker down dip.

Submitted by,



Garry D. Bysouth
Senior Geologist

Gibraltar Mines Ltd.

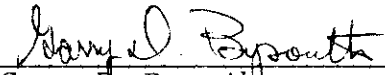
GDB:ab

APPENDIX I

STATEMENT OF QUALIFICATION

I, Garry D. Bysouth of Gibraltar Mines Limited, McLeese Lake, B.C., do certify that:

1. I am a geologist
2. I am a graduate of the University of B.C., with a B.Sc. degree in geology in 1966.
3. From 1966 to the present I have been engaged in mining and exploration geology in B.C.
4. I personally supervised this drill program, logged the core and assessed the results.



Garry D. Bysouth

APPENDIX II

ABBREVIATIONS USED IN DRILL LOGS

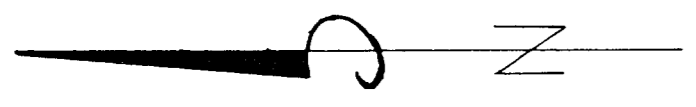
cal	calcite
carb.	carbonate
chl.	chlorite
cp	chalcopyrite
cren.	crenulated
dissem.	disseminated
ep	epidote
foln.	foliation
gm.	grained
lim.	limonite
mal.	malachite
mag.	magnetite
py	pyrite
QSP	quartz-sericite-py
qtz	quartz
rx.	rock
ser.	sericite
str.	strong
stkwk	stockwork
wk	weak

BIBLIOGRAPHY

G. Bysouth, Gibraltar Mines Ltd., Diamond Drill Report, Brown Group, Cariboo Mining Division 93B8W9W, July 31, 1980.

G. Bysouth, Gibraltar Mines Ltd., Diamond Drill Report, Pink Group, Cariboo Mining Division 93B8, July 16, 1980.

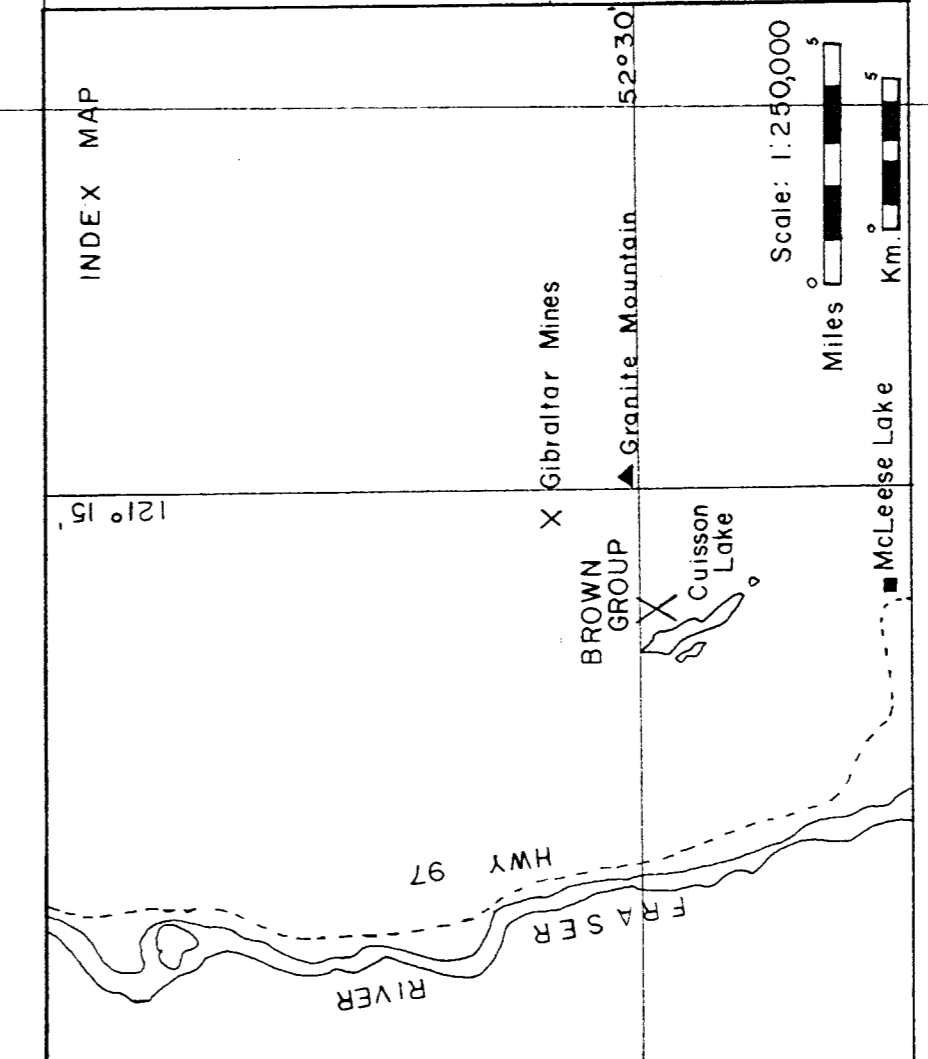
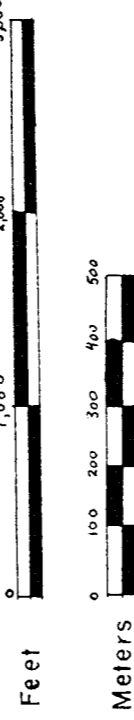
MC 211 - G.M.L.



L E G E N D

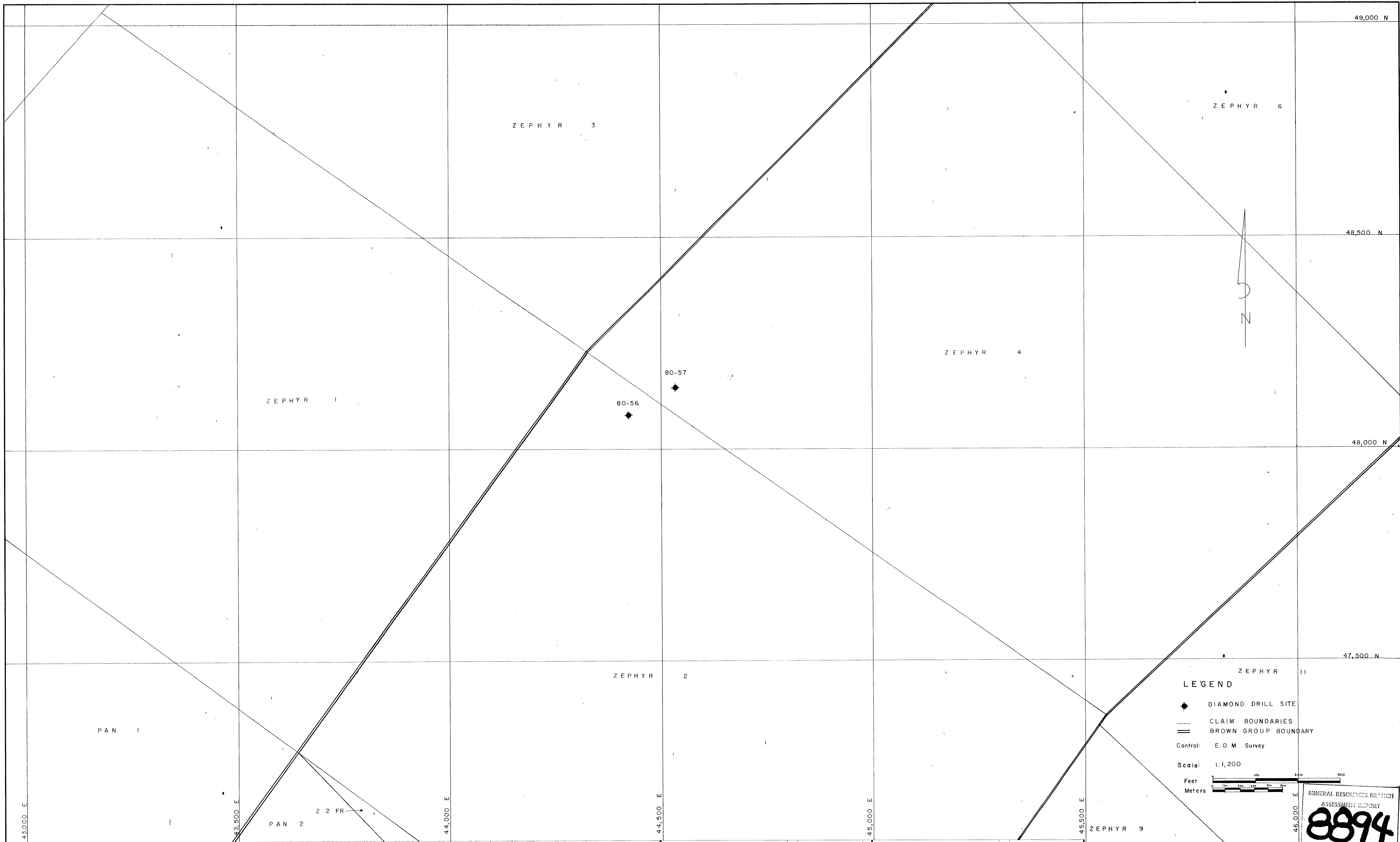
- Brown Group Boundary
- Control Survey by B.C.L.S.
- Control: Chain, compass and topographic map

Scale: 1:12,000 (1" = 1,000')



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8894
NO.

DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	REFERENCE	No.	DWG. No.	SCALE	GIBRALTAR MINES LIMITED		
																		BROWN GROUP	CLAIM LOCATIONS	
																		FILE No.	FIGURE 2.	



GIBRALTAR MINES LIMITED				DIAMOND DRILL HOLE LOCATIONS			
BROWN GROUP				FILE No. FIGURE 3.			
DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	REFERENCE
DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	REFERENCE
No.	DWG. No.	SCALE	No.	DWG. No.	SCALE	No.	DWG. No.