

DIAMOND DRILL REPORT

ON THE

ZE GROUP

CARIBOO MINING DIVISION

93 B 9

(LATITUDE 52° 35', LONGITUDE 122° 17')

OWNER AND OPERATOR

GIBRALTAR MINES LIMITED

MCLEESE LAKE, B. C.

Author: G. D. Bysouth

Submitted: 2 July, 1981

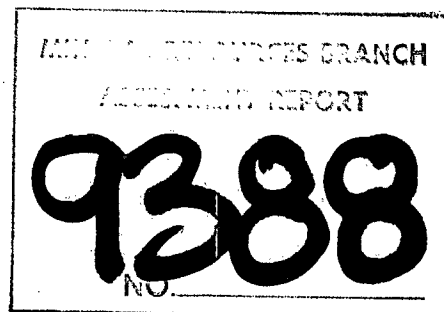


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1.0 INTRODUCTION

The Ze Group lies about four miles north of the Gibraltar Mines plant site at an elevation of 3300 to 4000 feet. Access is via a 4-wheel drive road which joins the Gibraltar Mines tailings road just north of the tailings pond. The claims and drill hole locations are shown in Figure 2.

The main focus of this project was a large I.P. anomaly located within an area now covered by the Ze claims. This anomaly was outlined by Canex Aerial Exploration Ltd. in 1969 as part of a larger project involving I.P. surveys and diamond drilling over the BIT, GMM, BREN, BUN, HL, RUM and RYE claims. The Ze claims were staked in 1977, mainly over ground originally held by the BREN claims.

In 1978, the Ze claims were explored by ten Napco drill holes totalling 602 feet. All holes encountered a black graphitic shale, and graphite was, therefore, assumed to be the cause of the anomaly. This work is covered in an assessment report titled, 'Percussion Drilling Report, Ze Mineral Claims, July 18, 1978'.

This report covers a minor diamond drill program designed to further test the I.P. zone and to gain further geological information on rock types underlying the Ze claims. G. & D. Diamond Drilling Co. Ltd. was contracted during the period May 16 to May 21, 1981. Two vertical N.Q. wireline diamond drill holes totalling 626 feet (190.80 m) were completed. Core is stored at Gibraltar Mines plant site.

2.0 MINERAL CLAIMS

The claims are shown in Figure 2. Pertinent information is shown below:

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>ANNIVERSARY DATE</u>
ZE 1	458	20	July 22
ZE 2	459	15	July 22
ZE 3	460	20	July 22
HY 9	1666	2	June 10
HY 10	1667	12	June 10
HY 11	1668	9	June 10
HY 12	1669	14	June 10
HY 13	1670	6	June 10
HY 20	3247	2	March 24

All claims belong to Gibraltar Mines Ltd.

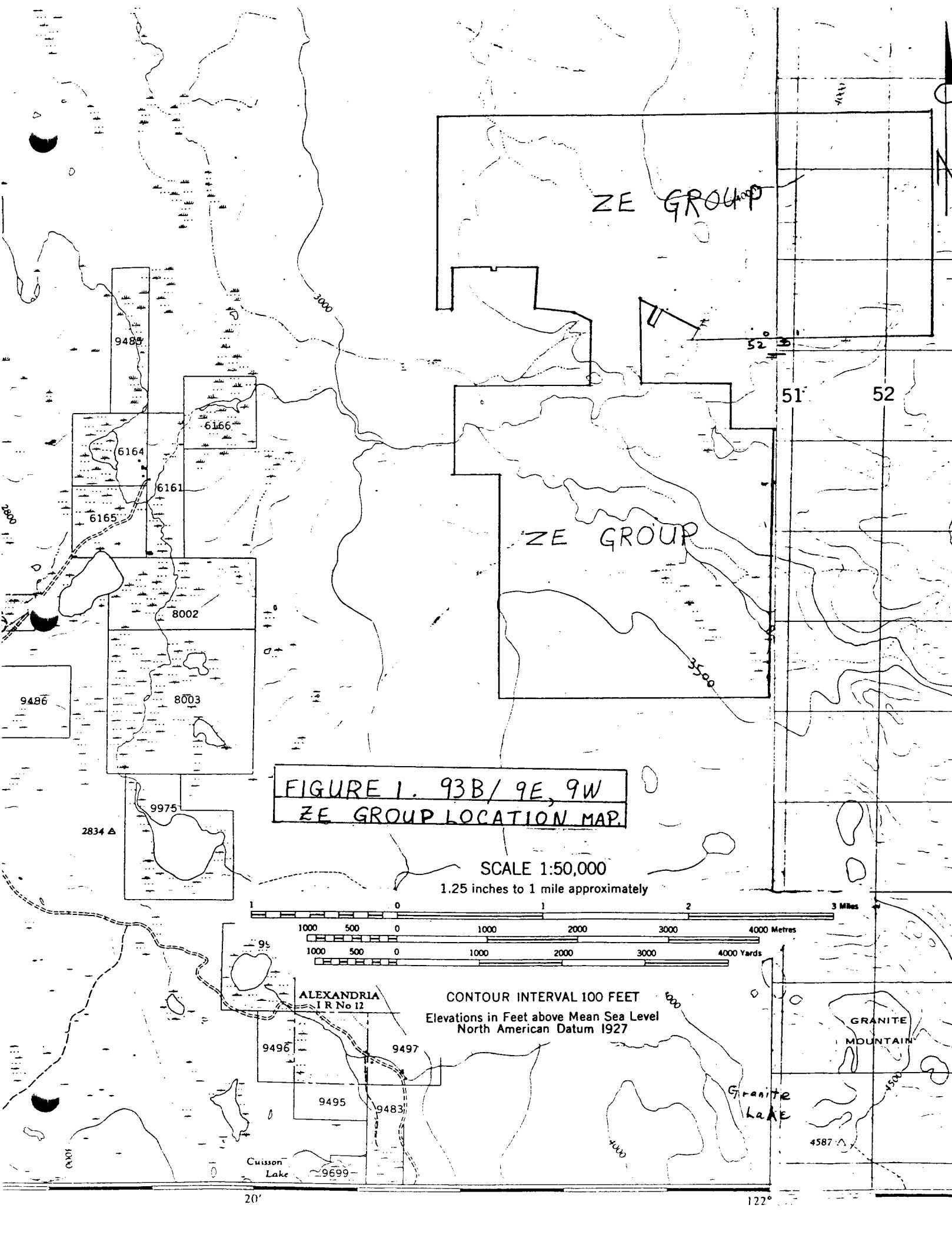
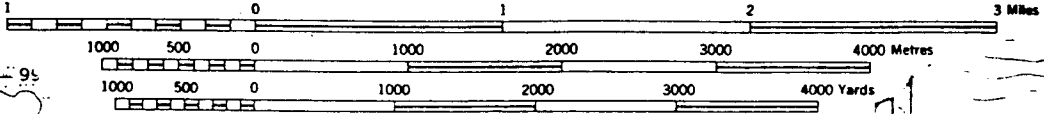


FIGURE 1. 93B/9E, 9W
ZE GROUP LOCATION MAP.

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



ALEXANDRIA
I R No 12

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

GRANITE
MOUNTAIN

Granite
Lake

Cuisson
Lake

3.0 DRILL PROGRAM

3.1 OBJECTIVE

The purpose of this drill program was to thoroughly evaluate the I.P. zone, and at the same time, obtain geological information on the poorly exposed rock underlying the Ze claims.

3.2 RESULTS

The drill locations are shown in Figure 2. Drill logs are included in the pocket. The rock was not assayed due to its almost total lack of visible ore minerals.

Hole 81-32 was cased to 20 feet. Due to adverse drilling problems it was terminated at 140 feet. A medium-fine grained diorite (Border Phase?) was encountered to 50 feet and the remainder of the hole was in a folded and crenulated quartz-sericite-chlorite-carbonate zone. The last 40 feet of core was extremely broken (R.Q.D. = 0) and hematite-stained, indicative of a large fault zone.

Hole 81-33 was cased to 20 feet. A black graphitic schist was encountered to 245 feet, cut by several fine grained, medium green dykes (dacite?). Below this was a sequence of pale grey calcareous siltstones, dark grey argillite and green volcanoclastic sediments. Crenulation, folding, and strong shearing were noted throughout the hole. Finely disseminated pyrite (.5 to 1%) was noted down to 260 feet.

3.3 INTERPRETATION

Drill results support an earlier indication that the anomaly was caused mainly by a graphitic conductive source. The crenulation and folding found in the core is identical to the deformation evident in the Gibraltar ore zones; this suggests the rocks underlying the Ze claims are of some pre-ore age rather than being younger as was originally supposed.

4.0 STATEMENT OF EXPENDITURES

MAY, 1981 DIAMOND DRILLING, ZE GROUP

a) Drilling Costs

Site Preparation: Cat	20 hrs. @ \$40.00/hr.	\$	800.00	
Drilling: 81-32	140'	\$2,058.00		
81-33	486'	7,144.20		
		<u>\$9,202.20</u>	9,202.20	
Man Hours (hole stabilizing, reaming, mixing mud, etc.)				
46 hrs. @ \$20.00/hr.		\$ 920.00		
12 hrs. @ \$65.00/hr.		<u>780.00</u>		
		\$1,700.00	1,700.00	
Materials			<u>1,484.70</u>	
			\$13,186.90	\$ 13,186.90

b) Vehicle Costs

4x4, 1980 Suburban	May 15-20	3 days @ \$17.20/day		51.60
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c) Personnel Costs

Core logging and supervision

G. D. Bysouth	May 22	4 hrs.		
	May 26-28	<u>16 hrs.</u>		
		20 hrs. @ \$19.60/hr.	\$	392.00
M. R. Schaumberger	May 22	4 hrs.		
	May 26-28	<u>16 hrs.</u>		
		20 hrs. @ \$10.67/hr.		213.40

Field Work and Organizing

E. Oliver	May 15	8 hrs.		
	May 19-21	<u>6 hrs.</u>		
		14 hrs. @ \$13.23/hr.		185.22
C. Johnston	May 15	8 hrs.		
	May 19-21	<u>6 hrs.</u>		
		14 hrs. @ \$10.87/hr.		<u>152.18</u>
			\$	942.80
				<u>942.80</u>

TOTAL DRILLING COST \$14,181.30

5.0 CONCLUSION

Drill results indicate graphite was the cause of the I.P. anomaly within the area drilled - the possibility of a sulfide source still exists in other parts of the anomaly.

Submitted by,




G. D. Bysouth,
Senior Geologist,
Gibraltar Mines Ltd.

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 British Columbia, 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 British Columbia.
4. I personally supervised this drill program and assessed the results.


Garry D. Bysouth

APPENDIX I

STATEMENT OF QUALIFICATION

I, Madeline Schaumberger, of Gibraltar Mines Limited, McLeese Lake, B.C., do certify that:

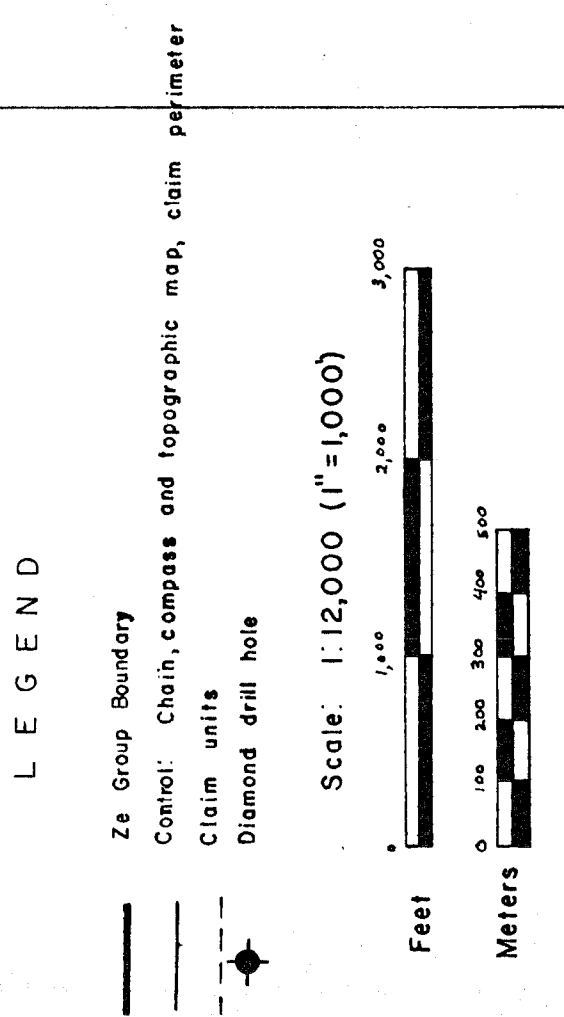
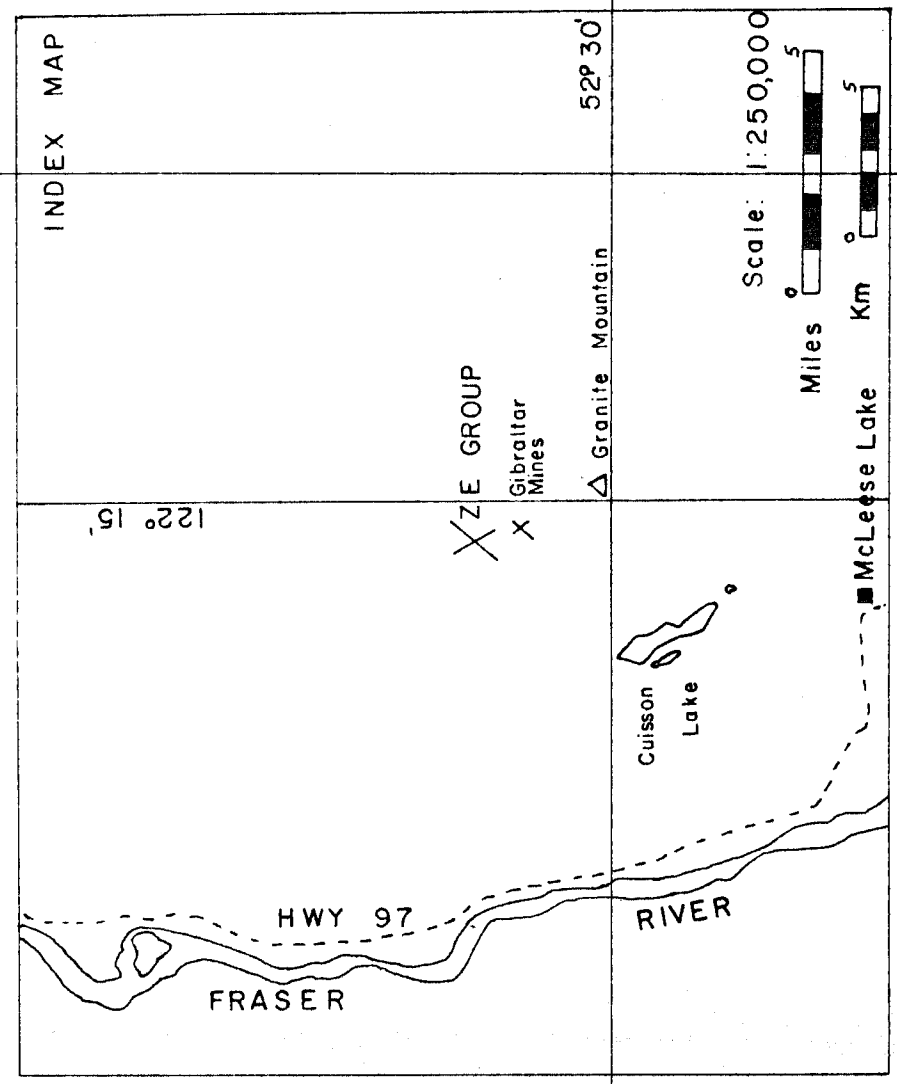
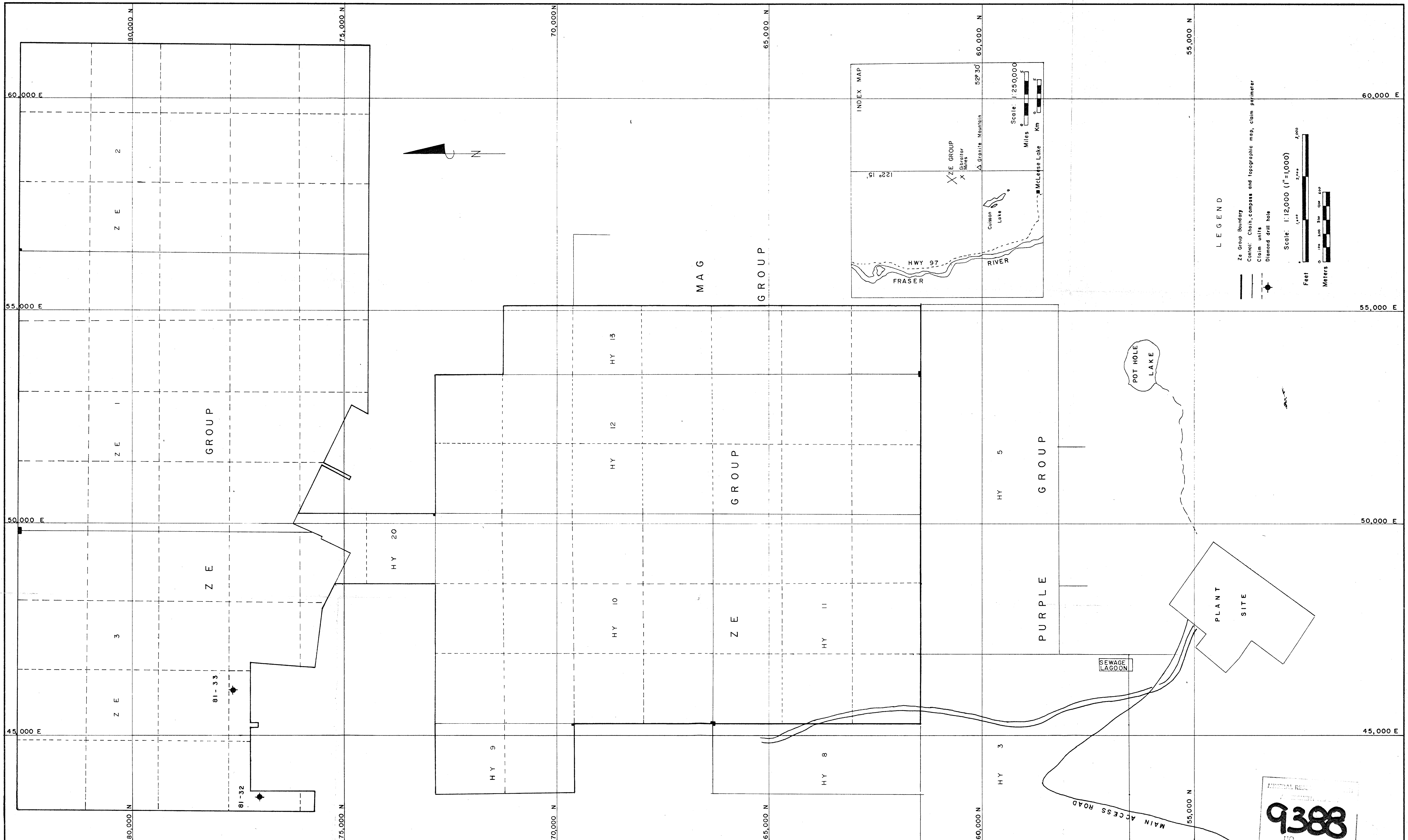
1. I am a geologist.
2. I am a graduate of the University of British Columbia with a B. Sc. in Geological Sciences in 1978.
3. From 1978 to the present I have been engaged in mining and exploration geology in British Columbia and the Northwest Territories.
4. I personally logged the core of this drill program.

Madeline R. Schaumberger
Madeline R. Schaumberger

APPENDIX II

ABBREVIATIONS USED IN DRILL LOGS

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



POT HOLE LAKE

PLANT SITE

SEWAGE LAGOON

MAIN ACCESS ROAD

MINERAL RIGHTS
 9388
 NO.

G D B										09/06/81										GIBRALTAR MINES LIMITED		CLAIM BOUNDARIES AND DIAMOND	
DWN. CHECK APPR.										ISSUED FOR										Z E GROUP		DRILL HOLE LOCATIONS	
DATE REV.										DESCRIPTION										SCALE 1" = 1,000'		FILE No. FIGURE 2	
DWN. CHECK APPR.										ISSUED FOR										No.		DWG. No.	
DATE REV.										DESCRIPTION										REFERENCE		No.	

NO. 271 - G.M.L.