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9101

DIAMOND DRILL REPORT

ON THE

PURPLE GROUP

CARIBOO MINING DIVISION

93 B 9

(LATITUDE $52^{\circ} 32'$, LONGITUDE $122^{\circ} 17'$)

OWNER AND OPERATOR

GIBRALTAR MINES LIMITED

McLEESE LAKE, B.C.

Author: M. R. Schaumberger

Submitted: 20 April, 1981

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1.0 INTRODUCTION

The Purple Group lies immediately southeast, east and north of the Gibraltar Mines plant site. Elevations within the group range from 3700 to 4100 feet. Access is via the Pollyanna Pit haul road from the plant site. The general location of the group is shown in Figure 1.

The early history of this claim area is somewhat sketchy. It was first described as the Rainbow Group in 1918. A 1925 B.C. Ministry of Mines Report states that "T. H. Jackson holds or held 40 claims in this region, either under option or in virtue of ownership by himself and associates."

In 1925 the area was staked by the Hill brothers as the Pollyanna claims. A 60-foot wide shear system in "granodiorite", showing malachite and azurite mineralization, was exposed by a series of open cuts. An eight foot deep trench exposed a quartz vein 15 feet wide striking N 60° W (magnetic). A grab sample from the dump of this material assayed: gold - trace, silver - trace, copper - 3.5%. Copper mineralization was in the form of azurite, malachite, and chalcopyrite.

The 1928 report indicates five claims being held by F. Conway, Mrs. Conway, T. Thompson, H. B. Hill, and H. F. Hill. The shear system was expanded to a 75-foot width and given a strike and dip of N 55° W (magnetic)/45° NE. A trench 15 feet deep and 20 feet long was dug to expose a quartz vein 15 feet wide with a flat dip to the northeast. Mineralization consisted of azurite, malachite and chalcopyrite. A vertical shaft was sunk to a depth of 33 feet. Copper stains and chalcopyrite were visible above the level of water in the shaft and the top three feet showed 2.00% copper, but no gold or silver. Minor cuprite was noted.

In 1949 the claims were relocated by C. E. Johnson and R. R. Moffat as the Copper King claims. Copper mineralization was reported in irregularly placed quartz lenses between shear planes oriented at N 30° W/45° E and on noses of folds in a 170-foot wide zone of sheared "granodiorite".

The 1950 report states that three shafts had been sunk previously, running along a north-south line. These were 25 feet apart. The northernmost one was 10 feet deep and showed no mineralization. The middle shaft showed good mineralization and in 1949 was drained and mined. Half a ton of ore averaging 10.5% copper was shipped to Tacoma, Washington. A grab sample from their dump assayed: gold - nil, silver - 0.1 oz. per ton, copper - 3.3%. The southernmost shaft was filled with water but dump material showed malachite staining.

In 1949 an attempt was made at trenching thirty feet north of the north shaft to cross-cut the shear zone. This, however, was abandoned because the overburden was too deep.

In 1950 they sank a 28-foot deep shaft 120 feet south of the most southerly shaft. It exposed a light malachite staining on sheared "granodiorite" and a small amount of crushed barren quartz. A grab sample from the dump assayed: gold - trace, silver - nil, copper - 0.3%.

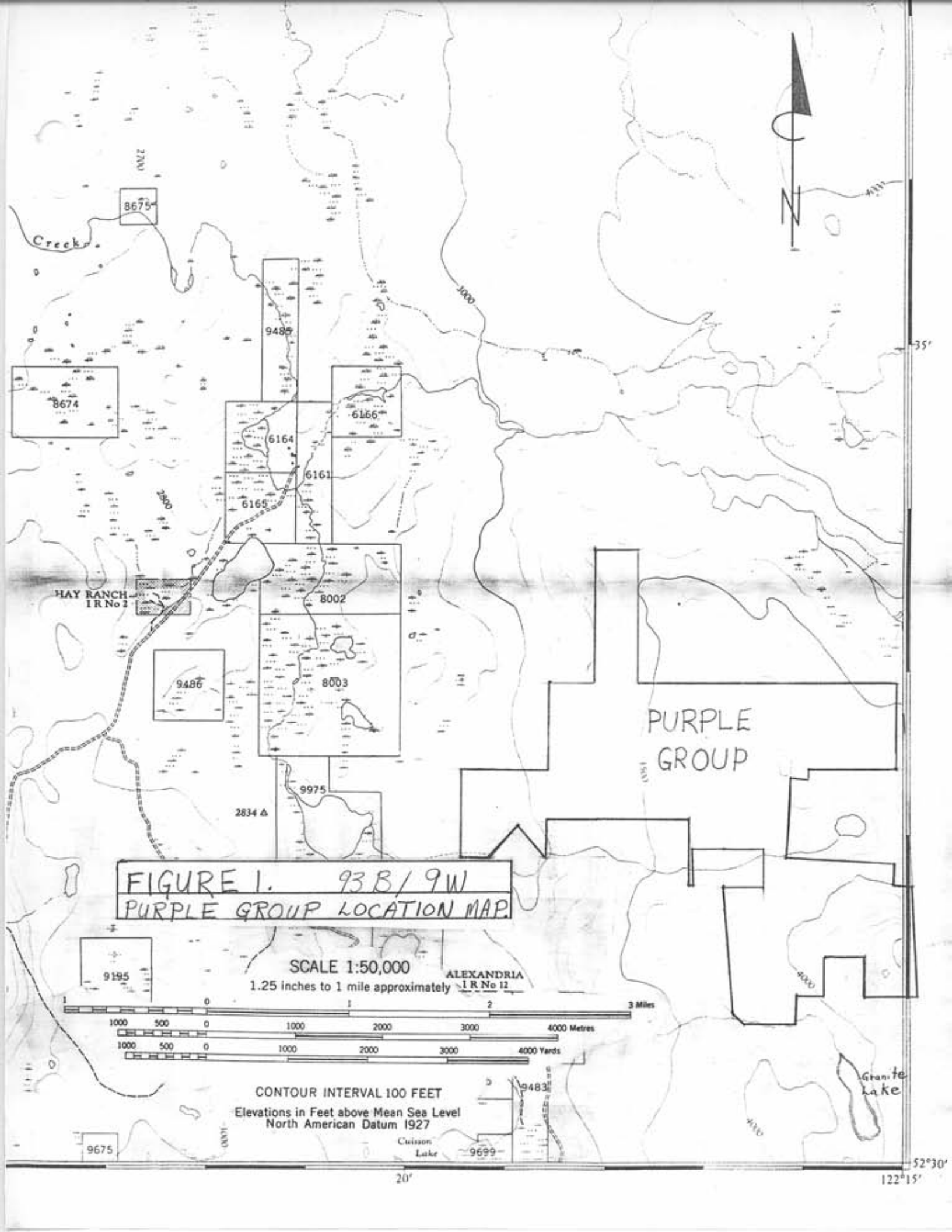
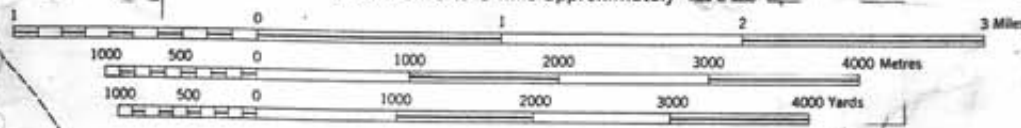


FIGURE 1. 93 B / 9 W
PURPLE GROUP LOCATION MAP

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

Cuisson
Lake

20'

122°15'

52°30'

From 1954 to 1956 the claims were restaked as the Pollyanna claims by Kimaclo Mines Ltd. They reported the same orientation for the shear system and expanded its width to 230 feet. Mineralization in the form of malachite-azurite- chalcopyrite and traces of cuprite occurs in small and irregular quartz veins which run approximately parallel to the shearing. Another grab sample from the Copper King dump mentioned above assayed 0.6% copper.

Kimaclo Mines Ltd. allowed their claims to lapse and the property was staked by Mr. Robert Glen in early 1963. Keevil Mining Co. held an option on this property in 1963 during which time they performed geochemical and induced polarization surveys and drilled two holes. In 1964, Duval Corporation optioned the property from R. Glen and partially defined 20 to 30 million tons of low grade copper mineralization.

In 1967 the area was restaked as the GG claims by Canex Aerial Exploration Ltd. and Duval Corporation. They describe the mineralized system differently, giving it an orientation of N 35° W/50 to 70° SW. They described the system as a central vein zone, two to five feet thick, flanked by quartz-muscovite schist grading into a foliated quartz-diorite. Streaks and bands of pyrite and chalcopyrite exist in the schist zone.

Stripping of overburden exposed 30 feet of schist and 30 feet of bleached, schistose quartz-diorite. A hand trench 100 feet northeast of the stripping exposed rubble of vein quartz and quartz-muscovite schist. The Copper King shaft was covered by the bulldozing.

The 1969 report gives the reserves as 61,000,000 tons at 0.36% copper. 44,105 feet of N.Q. diamond drilling was done in 81 holes and 200 feet of 5 7/8" diameter rotary drilling was done in two holes.

In 1970 a topo-mapping survey was completed. Stripping was done to clear the millsite and 32 diamond drill holes, totalling 13,783', were drilled. Four underground diamond drill holes, totalling 1,174', were drilled on the GG claims.

By 1971 the Canex Aerial claims were transferred to Gibraltar Mines Limited.

This report covers a drill program designed to test the westerly extension of the Pollyanna Pit ore systems. G & D Diamond Drilling Co. Ltd. was contracted during the period January 5 to January 11, 1981 to drill three vertical N.Q. wireline diamond drill holes totalling 1,167 feet (355.7 m.). Core is stored at Gibraltar Mines plant site.

2.0 MINERAL CLAIMS

Claims and leases of the Purple Group are shown in Figure 2. Pertinent information is tabulated below.

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>LOT NO.</u>	<u>LEASE</u>	<u>ANNIVERSARY DATE</u>
GG 1	29233	4136	M-55	OCTOBER
GG 2	29234	3599	M-37	JULY
GG 3	29235	4136	M-55	OCTOBER
GG 4	29236	3599	M-37	JULY
GG 5	29237	3600	M-38	JULY
GG 6	29238	3599	M-37	JULY
GG 7	29239	3600	M-38	JULY
GG 8	29240	3600	M-38	JULY
GG 11	29243	4137	M-56	JUNE
GG 12	29244	4137	M-56	JUNE
GG 13	29245	4137	M-56	JUNE
GG 14	29246	4137	M-56	JUNE
GG 16	29248	3600	M-38	JULY
GG 21	29253	4137	M-56	JUNE
GG 23	29255	4138	M-57	OCTOBER
GG 24	29256	4137	M-56	JUNE
GG 25	29257	4138	M-57	OCTOBER
GG 26	29258	4138	M-57	OCTOBER
GG 27	29259	4138	M-57	OCTOBER
GG 28	29260	4138	M-57	OCTOBER
GG 30	28871	4136	M-55	OCTOBER
GG 31	28872	4137	M-56	JUNE
GG 41	28882	4136	M-55	OCTOBER
RUM 41 Fraction	57295	4137	M-56	JUNE
HY 1	671			May 1
HY 3	1710			May 1
HY 5	1711			May 1
HY 6	675			May 1
HY 7	676			May 1
HY 8	1665			June 10

All of these claims belong to Gibraltar Mines Ltd. and adjoin to the south and west, 2-post claims of the Gibraltar Mines permanent property. New claims of the ZE and MAG groups adjoin to the north and the Keevil claims adjoin to the west.

3.0 DRILL PROGRAM

3.1 OBJECTIVE

The purpose of this drill program was to test the westerly extension of the Pollyanna Pit ore systems.

3.2 RESULTS

The drill hole locations are shown in Figure 3. All holes intersected ore grade mineralization. There was a strong oxide effect in hole 81-3 but it was negligible in the other two holes. The supergene effect was negligible. Drill logs are included in the pocket of this report. All copper values reported here and in the logs are for total copper, except where noted as oxide copper. All molybdenum reported is MoS_2 and silver is given as ounces per ton.

Hole 81-1 was cased to 10 feet. Between 70 and 310 feet, a 240-foot zone of 0.241% copper and 0.013% MoS_2 was intersected. Silver assays run for those samples over 0.20% copper in this intersection averaged 0.033 oz. per ton. This hole was lost at 326 feet due to drilling problems.

Hole 81-2 was drilled 32 feet east of 81-1. It was cased to 20 feet. Between 60 and 500 feet, a 440-foot zone of 0.314% copper and 0.020% molybdenum was intersected. Silver assays run for those samples over 0.20% copper in this intersection averaged 0.038 oz/ton. The hole was drilled to 500 feet.

Hole 81-3 was cased to 50 feet, however, overburden was still being cored to 117 feet. Between 117 and 320 feet, a 203-foot zone of 0.297% copper and 0.014% molybdenum was intersected. Oxide copper is high from 117 to 230 feet. Silver assays run for those samples over 0.20% copper in this intersection averaged 0.027 oz/ton. The hole was abandoned at 341 feet in fault material.

3.3 INTERPRETATION

The mineralization defined by this drilling appears to be of a porphyry-type and is hosted by epidote-chlorite altered "Mine Phase" quartz-diorite, quartz-sericite-chlorite schist and a white quartz-porphyry rock. The ground appears to be highly faulted and fractured.

Drill results indicate that the Pollyanna ore systems extend west and southwest of the known limits.

4.0 STATEMENT OF EXPENDITURES

JANUARY, 1981 DIAMOND DRILLING, PURPLE GROUP

a) Site Preparation					
D-8 Caterpillar	Jan. 2	2 hrs. @ \$75.90/hr.	\$151.30		
Drill Co. Cat charges	Jan. 7	1 hr.			
	Jan. 10	<u>1 hr.</u>			
		2 hrs. @ \$40.00/hr.	<u>80.00</u>		
			\$231.80	\$	231.80
b) Drilling Costs					
Moving: Flatbed Rental		\$270.00	\$	270.00	
Drilling: 81-1		\$4,564.00			
81-2		7,000.00			
81-3		<u>4,774.00</u>			
		\$16,338.00	\$16,338.00		
Man Hours (Set-up, tear-down, hole stabilizing, stand-by, etc.)					
		110 hrs. @ \$20.00/hr.	2,200.00		
Materials			<u>6,939.00</u>		
			\$25,747.00		\$25,747.00
c) Vehicle Costs					
4x4 1980 Suburban	Jan. 2	1 day			
	Jan. 5-9	5 days			
	Jan. 12	<u>1 day</u>			
		7 days @ \$17.20/day			120.40
d) Assay Costs					
165 assays @ \$4.40/assay					726.00
e) Miscellaneous Costs					
60 core boxes @ \$4.60/box		\$276.00			
Sample bags, tags, etc.		<u>150.00</u>			
		\$426.00			426.00
f) Personnel Costs					
<u>Core logging and supervision</u>					
G. D. Bysouth	Jan. 12-13	16 hrs. @ \$19.60/hr.			313.60
M. R. Schaumberger	Jan. 7-8	16 hrs.			
	Jan. 12-13	<u>16 hrs.</u>			
		32 hrs. @ \$10.67/hr.			341.44
<u>Field Work and Organizing</u>					
E. Oliver	Jan. 5-9	20 hrs. @ \$13.23/hr.			264.60
C. Johnston	Jan. 2	8 hrs.			
	Jan. 5-9	40 hrs.			
	Jan. 11	<u>8 hrs.</u>			
		56 hrs. @ \$10.87			608.72

Core Splitting
R. Riedel

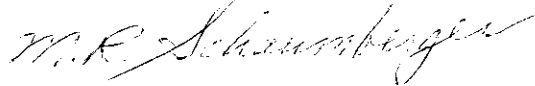
Jan. 7-9	20 hrs.	
Jan. 12-14	<u>28 hrs.</u>	
	48 hrs. @ \$6.67/hr.	<u>320.16</u>

TOTAL DRILLING COST	<u>\$29,099.72</u>
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5.0 CONCLUSIONS

Drill results have extended the Pollyanna ore structures to the west and southwest and further drilling is required to establish the limits of this zone.

Submitted by,



M. R. Schaumberger
Mine Exploration Geologist

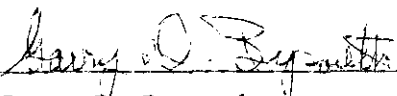
GIBRALTAR MINES LIMITED

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, logged the core and assessed the results.



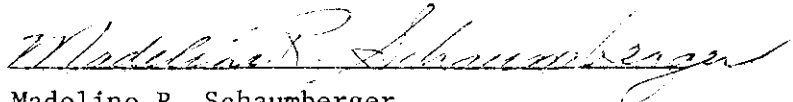
Garry D. Bysouth

APPENDIX I

STATEMENT OF QUALIFICATION

I, Madeline R. 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 Science in 1978.
3. From 1978 to the present I have been engaged in mining and exploration geology in British Columbia.
4. I personally assisted in the supervision of this drill program, logging of the core and assessment of the results.


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-py
qtz	quartz
rx.	rock
ser.	sericite
str.	strong
stkwk	stockwork
wk	weak

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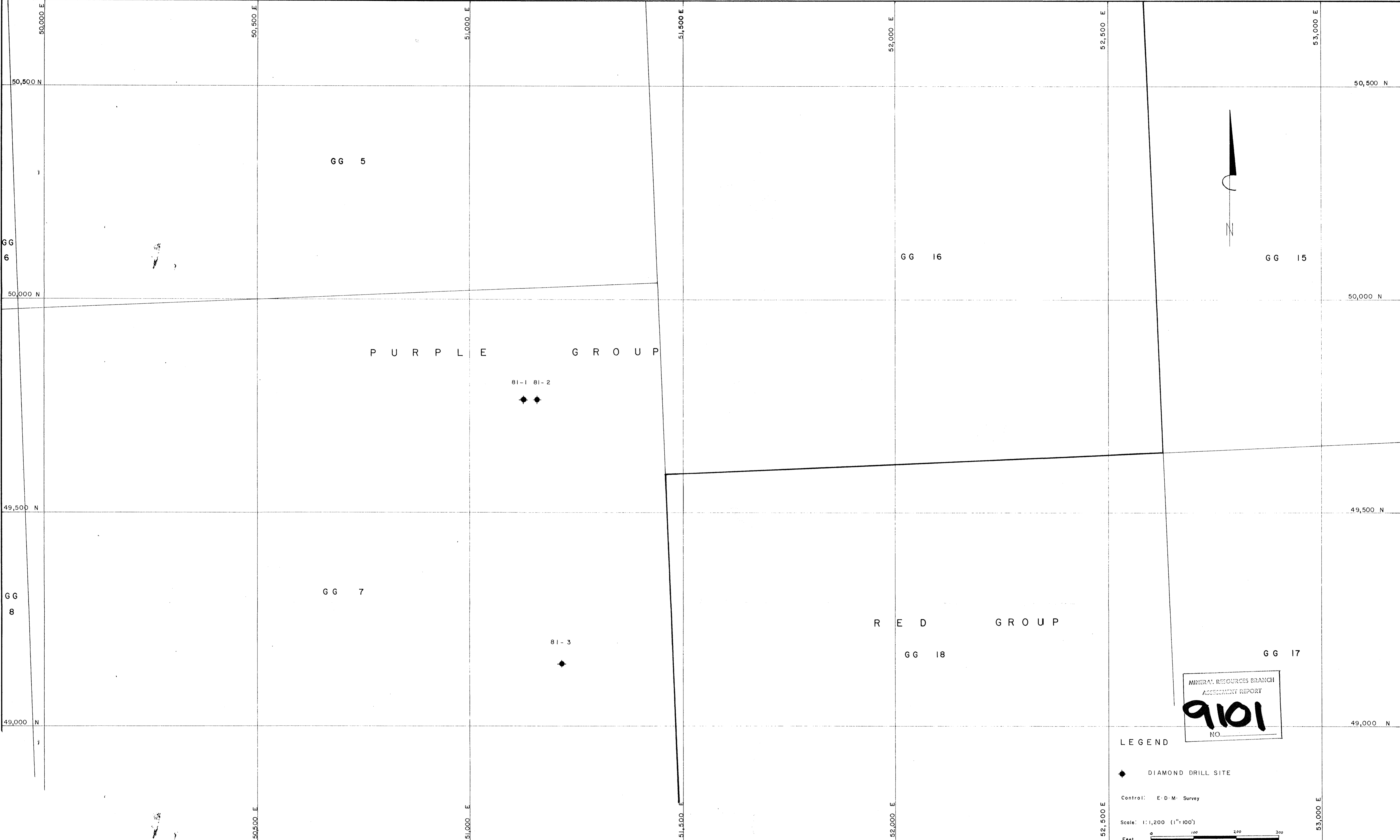
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ISSUED FOR	DATE	REV.	DESCRIPTION	DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	REFERENCE	No.	DWG. No.	SCALE

GIBALTAR MINES LIMITED
PURPLE GROUP

DIAMOND DRILL HOLE LOCATIONS
 FILE No. **FIGURE 3-**