

ASSESSMENT

GEOLOGICAL

REPORT

CORE LOG

OF

D.D.H.: ERIC 81 - 1

ON THE

ERIC 1(3008)[11] & ERIC 2(3009)[11]

mineral claims

GIBRALTAR MINE AREA

CARIBOO MINING DIVISION

93 B 9 W

52 3 19

FOR

GARTH JOHNSON

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INDEX MAP OF BRITISH COLUMBIA CANADA

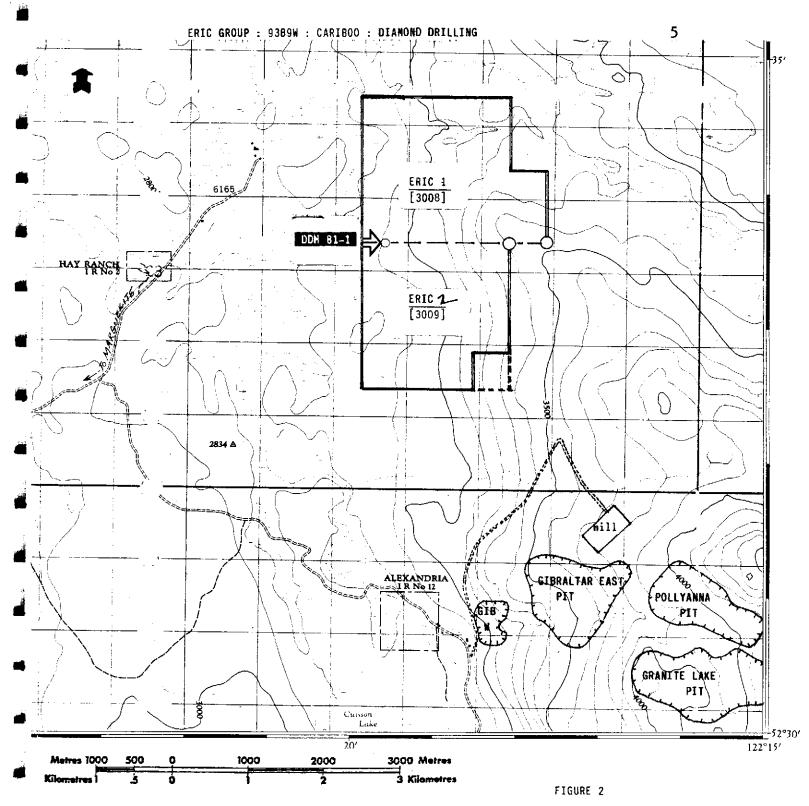
INTRODUCTION

The writer was commissioned by Mr. Garth Johnson of Hope, British Columbia, to prepare a geologic log of a diamond drill hole stored at his premises. The present report summarizes the findings for assessment purposes.

		CLAIMS						
NAME	RECORD #	UNITS	ANNIVERSA	<u> RY</u>				
ERIC 1	3008	20	November	12				
ERIC 2	3009	16	November	12				
CARIBOO MININ	G DIVISION				93	_ <u>B</u> _	9	W

LOCATION

The area covered by the ERIC claims extends from about 3 km north-northeast to 6.5 km north-northeast of the east pit of GIBRALTAR MINES. The diamond drill hole was positioned on the common boundary of ERIC 1 & ERIC 2, a distance of about 5 km northeast of the same pit area. Access roads exist from the mine site north, and from Marguerite, a rail siding of the British Columbia Railway. Gibraltar lies 60 km north of Williams Lake, B.C., and 557 km by road from Vancouver, B.C.



LOCATION MAP

ERIC 1 (3008)[11] & ERIC 2 (3009)[11]

mineral claims

GEBRALTAR MINE AREA

CARIBOO MINING DISTRICT

93 B 9 W

HISTORY OF THE AREA

The mining operation of the GIBRALTAR MINES LTD porphyry copper-molybdenum deposit is the culmination of many years of exploration by many companies. The Pollyanna group appears to have been staked in 1917. Much work was done in the area during the 1960's. Assessment reports exist for many holdings in the vicinity of the ERIC group, however it appears that only one such report covers a widely-spaced Induced Polarization Survey which encompassed much of the present claim holdings, but is difficult to relate to the present diamond drill hole position from the information available.

GEOLOGY OF THE AREA

The Granite Mountain Pluton, one of a 'string' of batholiths trending north-south on the eastern side of the Fraser River fault system, hosts the Gibraltar porphyry-copper deposits. This pluton intrudes Cache Creek group volcanics and meta-Regional metamorphism and structural deformation have impressed a 'grain' to these intrusive rocks resulting in a uniform foliation at 110 degrees dipping 20-30 degrees south. In the mine area the intrusive rocks are quartz diorite, consisting of quartz, altered plagioclase (saussuritized), and chlorite. Epidote alteration is The area to the west is covered by more recent basalts (late Tertiary). Most of the land north of the mine site is covered by recent overburden. Ore mineralization consists of leached zones above the supergene layer consisting of chalcocite and covellite. Chalcopyrite and bornite are primary hosted mainly by the quartz-diorite.

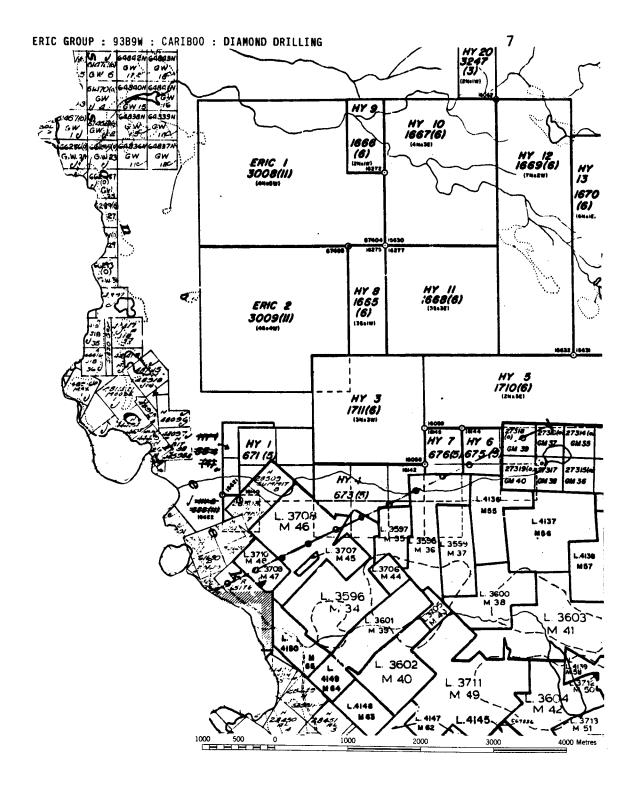


FIGURE 3

CLAIMS MAP

ERIC 1 (3008)[11] & ERIC 2 (3009)[11]

mineral claims

GIBRALTAR MINE AREA

CARIBOO MINING DIVISION

93 B 9 W

GEOLOGY OF THE PROPERTY

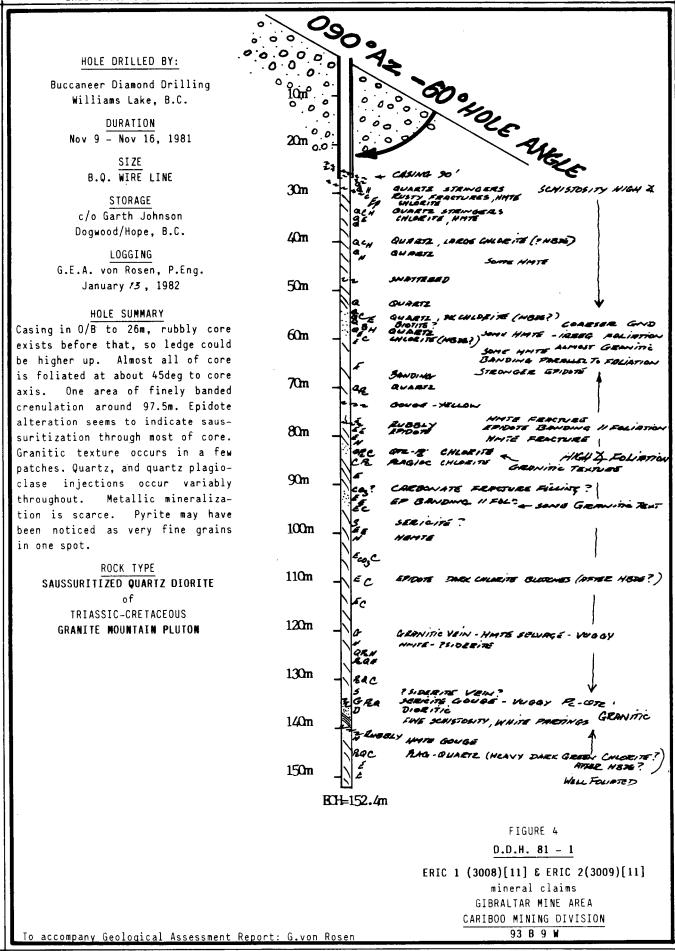
Very little is known about property geology, at least to this writer. Overburden covers all of it, therefore mapping is not existant. Extrapolation performed by the Geological Survey of Canada, as shown on their sheet 93/Parsnip River Map 1424A, it appears that the contact between the pluton intrusive into Cache Creek rocks may pass underneath the ERIC property. Hence it is reasonable to expect to core either of these, or a contact phase of the diorite.

PURPOSE OF DIAMOND DRILL HOLE

The property was staked for its proximity along the strike of the favourable host assemblage northward from the Gibraltar mine. The hole was spotted and cored to gain information about the rock type, its alteration, and possible mineralization, lying underneath the appreciable thickness of overburden.

DIAMOND DRILL OPERATION

Reconnaissance of the claim holdings was made October 13-15, 1981. Buccaneer Diamond Drilling, Williams Lake, B.C. mobilized their machinery in on November 9, 1981, and drilled the hole at -60 degrees-east from a location 250 meters east of the common western most corner of ERIC 1 & 2. By November 12 they had reached minus 64 meters. The hole was finalized on the 15th of November, and mobilization out was November 16, 1981, having drilled to 152.4 m.



GEOLOGIC LOG

OF

DIAMOND DRILL HOLE

ERIC 81 - 1

[collared 210m E of corner post: SW/ERIC 1 & NW/ERIC 2 //@ -60E]

BOX 1 000.00-026.20m Ledge, 27m of casing 25.9- 26.2 Grey granular fault gouge, but good recovery 26.2- 27.1 More gouge? or clay material between boulders 27.1- 30.8 Again gougy sections filling-in around lithic fragments @28.96 2½cm of quartz aggregation @29.9 Some quartz aggregation, some hematite, some chlorite fracture-filling at low angle to core axis, also some lighter green alteration Box 1 consists of schistose granitic rocks with chlorite foliation and light green epidote alteration BOX 2 31.09-31.7 Some rusty fractures at angle to core axis, mostly parallel to schistosity which is at steep angle to core axis @ 33.8 5cm aggregation of quartz, irregular intergrowth of quartz, chlorite blotches, and dark brown hematite @ 35.97 5cm of quartz with intergranular light colored epidote @ 36.9 quartz-rich zone generally darker due to more closely spaced Box 2 chlorite fractures BOX 3 @40.8 2½cm quartz with dark-brown greenish chlorite (?some hematite) with some epidote, also large dark grey (1½cm) chlorite crystals intergrown with ?quartz @42.37 8cm quartz vein, some grey brown fine grained chlorite Box 3 similar to before, some low angle slips with brown hematite paint, some low-angle dry fractures with gouge, also scant fine grained sericite grains

BOX. 4	
<u>@48.16</u>	rock is shattered with gougy fractures
@52.7	2.5cm quartz vein, vuggy
Box 4	similar to before, foliation @45deg to core
	axis near end of box, also some brownish
	clusters near quartz vein, parallel to foliation
BOX 5	quality production of the control of
@55.17	1.3cm quartz veinlet
@ 56.99	6cm quartz vein, thin dark chlorite parallel
030077	to vein parallel to foliation at 45deg to
	core axis, some brown mica? (biotite)
@55.78	1.8cm quartz vein aggregate
@56 . 85	some lighter brown epidote vein-filling para-
@J0.0J	llel to foliation
@58.22	some quartz with ?biotite
@58.52	hematite slip along core axis
@59.44	irregular foliation with light colored epi-
-	dote
60.05- 60.66	coarser grained, more irregular foliation,
	some large quartz and intercrystalline angu-
	lar chlorite
Box 5 .	generally darker, more quartz, + almost gran-
	itic texture near end
$\frac{BOX \ 6}{59.7} - 62.48$	
59.7 - 62.48	coarser grained, irregular foliation contin-
	ues, some larger blotches of light colored
	green epidote
62.79- 70.00	losing dark aspect as more mafics alter to
	epidote, which shows up as lighter green yellow
65.84- 70.00	banding parallel to foliation (45deg to CAx)
	of darker milky-grey sections, which are more
	coarsely granular than fine grained bands of
	light green epidote coloration
Вож б	few low angle hematite slips, generally the
	same as before, with lighter color due to
	epidote alteration
BOX 7	opidote dicelación
70.10- 70.41	quartz vein, milky white plagioclase, minor
70110 70141	clear quartz
@73.46	8.5cm green yellow gouge
75.26- 77.00	hematite coated fracture parallel to core,
73.20 77.00	partly rubbly core
Box 7	several (1per meter) 6cm zones of yellow-green
DOX /	epidote, sometimes finely intergrown with
	quartz-plagioclase, ?micrographic, foliation
	generally as before

DOV 0	
BOX 8 077.1-081.08	dark brown hematite filling fractures
@77.42	slightly rubbly zone, slight bleaching, 15cm
@77.72	epidotized zone 8cm
@78 . 33	epidotized zone 8cm
@78 . 94	10cm rubbly, bleached, epidote, hematite, feldsp
@80.16	bleached, irregular zone, feldspar and epidote
@80.77	8cm epidotized
@81.08	hematite filled fractures in several directions
@83.52	30cm quartz-feldspar, large chlorite 'blotches'
	with some very fine pyrite?
Box 8	high angle foliation, stronger development of
	sections with fine grained epidote, quartz-feld-
	spar vein near end of box, hematite slips common
BOX 9	
@85.04	3cm high percentage dark green chlorite
85.04-085.65	granitic texture
@85.95	3cm white plagioclase vein
@88.39	8cm epidote, yellow-green
Box 9	some sections are granitic, rather than foliated
	somewhat coarser grained?, some 'blotchy' epi- dotes, some hematite fracture fillings, some
	very fine fractures showing rust (limonite)
BOX 10	very line fractures showing rust (limonite)
<u>®91.14</u>	3mm fracture fillings of light brown ?calcite
67111	at low angle to core axis but 90deg to foliation
	(which is high angle to core axis)
@92.35	6-8cm bleached, epidotized zone
92.35-93.57	several blotchy zones of epidote tending to fol-
	low foliation
@94.49	intercrystal black chlorite with epidote and
	some biotite
@94.79	30cm granitic, granular zone
94.79-96.01	granitic zones, remaking of foliation, coarser
	grained than before
@95 . 40	blue green (almost turquoise colored) mineral
@96.62	10cm graphic intergrowth of epidote and ?quartz
@97.54	some sericite alteration, foliation less even
Box 10	and more wavy alteration is more prominent in bands parallel
DOX TO	to foliation, some sections are more granitic
BOX 11	to forfaction, some sections are more grantere
<u>@</u> 99.06	8cm epidote
@99 . 67	8cm epidote
99.67-end	to end of box there are several sections of
	light green epidote alteration
@101.5	3cm chocolate brown hematite vein in-filled with
	lithic fragments, - 45deg to core axis
Box 11	blotchy granitic texture, some foliation, coarse
	grained diorite, large 8mm chlorite crystals,
	epidote schlieren, low angle to CAx

BOX 12 Box 12 more strongly altered to epidote which occurs in blotches and in foliations which still trend at about 45 degrees to core axis, blotchy growth of crystals, (epidotized), few hematite fractures, few white powder-filled fractures, (?carbonates?) BOX 13 Box 13 similar to last box, very evident light green epidote alteration against blotchy dark green chlorites and sometimes plagioclases, in granitic texture, other sections are foliated, thinner foliation starts near the end of box where different textures occur, also brown biotite, in some sections there are parallel bands of 8mm quartz-flooded greyer colored sections BOX 14 8mm darker granitic vein with hematite selvage, <u>@</u>120.7 some powdery ?carbonate, partly vuggy, dark chlorite @121.31 6cm coarse grained white plagioclase-quartz vein with dark chlorite @122.22 brown powdery hematite, ?carbonate, ?siderite, for 1 cm @124.05 thin hematite slip with some coarse grained plagioclase-quartz patches @126.49 1cm plagioclase-quartz + hematite veinlet Box 14 same as before, still foliation of dark green bands and light green epidote BOX 15 <u>@</u>130.76 6cm plagioclase-quartz vein with black foliated chlorite which is parallel to foliation @45 CAx @133.5 3cm vein of brown ?carbonate @134.11 30cm white gouge, ?sericite, with 10cm coarse plagioclase-quartz which is vuggy 134.11-135.03 hole follows plagioclase-quartz vein Box 15 granitic sections interspersed with thinly foliated bands, much less epidote than before BOX 16 @135.03 end of quartz vein with gougy selvage to 138.99 generally granitic but dark, ?diorite 138.99-139.90 very finely black schistose rock with some white when broken get slippery surface, partings ?clay alteration, 139.9-140.6 60cm rubbly slippery fault? 141.43-141.73 hematite gouge zone follows core Box 16 quite dark, granitic at first, schistose with schlieren later in box

BOX 17

144.48 13cm white plagioclase-quartz vein with heavy dark green blotches of chlorite

144.78 8cm the same as above

Box 17 lighter colored due to epidote, but generally well foliated

BOX 18

Box 18 very similar to the above

END OF DIAMOND DRILL HOLE = 500 ft = 152.4 m.

HOLE SUMMARY

Most of the rock cored in the diamond drill hole is foliated, if not well schisted, and banded, saussuritized quartz diorite. Foliation is generally at higher angles than 45 deg to the core axis. In the upper portion of the hole, quartz patches occur frequently, while lower down, the change is towards quartz-plagioclase, and then plagioclase-quartz. A few instances of micrographic texture exist. The plagioclase-quartz injections often are strikingly accompanied by angular shapes of dark green chlorite which fill-in between existing plagioclase-quartz. (in retrospect it may be chloriized hornblende.) Some sections are evidently granitic textured and trend into diorite. Epidote alteration, as evidenced by light green tints of the finer grained rock, is strongest in the central portion of the hole apparently ? surrounding? the more granitic textured zones. bottom of casing is a well-cored section of white-grey fault gouge. Mineralization is scarce.

RESULTS

It is evident from the geologic log that a strongly, and uniformly foliated rock was cored, which in some sections showed granitic texture and could be classed a quartz-diorite. Much of the core was finely layered, not always exhibiting texture reminiscent of intrusive rocks. It is possible that the hole cored rock near the contact of the Cache Creek greenstones, and intrusive quartz-diorite.

CONCLUSIONS

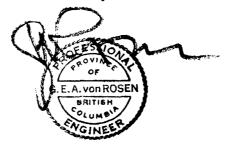
Under about 25 meters of overburden at the collar of DDH ERIC 81-1 exists an environment possibly related to the contact of intrusive rocks with greenstones. No metallic mineralization was encountered.

RECOMMENDATIONS

Further work in this vicinity of the property is not recommended at this time.

Respectfully submitted,

G.E.A. von Rosen, P.Eng. February 9, 1982



QUALIFICATIONS

1, Gerhard von Rosen, reside in Mission British Columbia, at 33176 Richards Ave.

I have been practicing my profession of consulting geologist since my graduation from the University of British Columbia in 1962 with a B.Sc., and in 1966 with an M.Sc. degree in Honours Geology.

I logged the core in the garage of Garth Johnson, Hope, B.C. on January 13, 1982.

I have been involved with this kind of work many times before and I am qualified to compile and interpret this information.

Respectfully submitted,

Gerhard von Rosen, M.Sc., P.Eng.

February 9, 1982



ITEMIZED COST STATEMENT

RECONNAISSANCE

October 13, 14, 15, 1981

G. Johnson 3 days @ \$150	\$450
E. Bush 1½ days @ \$100	\$150
P. Harrison 1½ days @ \$100	\$150
Gas-food-lodging 3 @ \$75	\$225
4X4 3 @ \$60	\$180

DRILLING OPERATION

November 9 - 16 inclusive

G. Johnson 5 @ \$150	\$750
4X4 5 @ \$60	\$300
Gas-food-lodging 5 @ \$75	\$375
Buccaneer: 500 ft @ \$18	\$9,000

REPORTING

G. vor	Rosen:	core logging	\$350
G. vor	Rosen:	assessment report	\$700
Report	prepar	ation	\$250

TOTAL COSTS \$12,880

UNIT COSTS

Length drilled	500 ft = 152	meters
Cost per foot		\$25.76
Cost per meter		\$84.74