83-#306 - #11577

DIAMOND DRILL REPORT

ON THE

PINK GROUP

Cariboo Mining Division

93 B/8

(Latitude 52 30', Longitude 122 19')

OWNER AND OPERATOR

GIBRALTAR MINES LIMITED

McLEESE LAKE, B.C.

AUTHOR: M. R. Schaumberger

Submitted: May 16, 1983

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1.0 INTRODUCTION

"The Pink Group lies approximately 1.5 miles (2.42 km.) southwest of the Gibraltar Mines concentrator. It covers much of Cuisson Lake and extends north about 2 miles (3.33 km.) from the northern tip of the lake. Elevations within the group range from about 2900 feet to 3500 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.) from the plant site. The general location of the group is shown in Figure 1.

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 (Kimaclo 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 one 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 1.95% copper.

In 1958, Sunset (Major Mines Limited) took over 72 claims in this area. They did 3,000 feet (937.5 m.) of diamond drilling in ten 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 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. The claims presently in the Pink Group were grouped in 1972 and some of them have been taken to lease. Figure 2 shows a detailed location map of claims and leases in the Pink Group, all of which are owned by Gibraltar Mines Limited."1.

A further drill program was carried out by Gibraltar Mines in 1980 in which 14 vertical N.Q. wireline diamond drill holes, totalling 6,473 feet (2,022.81 m.) were used to test the extension of the adit zone ore. A narrow sulphide zone 1,150 feet in strike length was proven up.

This report covers a drill program designed to test for near-surface parallel ore zones on the northerly edge of the main zone as indicated by the previous drill holes. G. & D. Diamond Drilling was contracted during the period March 23 to March 29, 1983 to drill three vertical N.Q. wireline diamond drill holes totalling 984 feet (299.9 m). Core is stored at Gibraltar Mines plant site.

1. G. D. Bysouth, Diamond Drill Report on the Pink Group, July 3, 1980

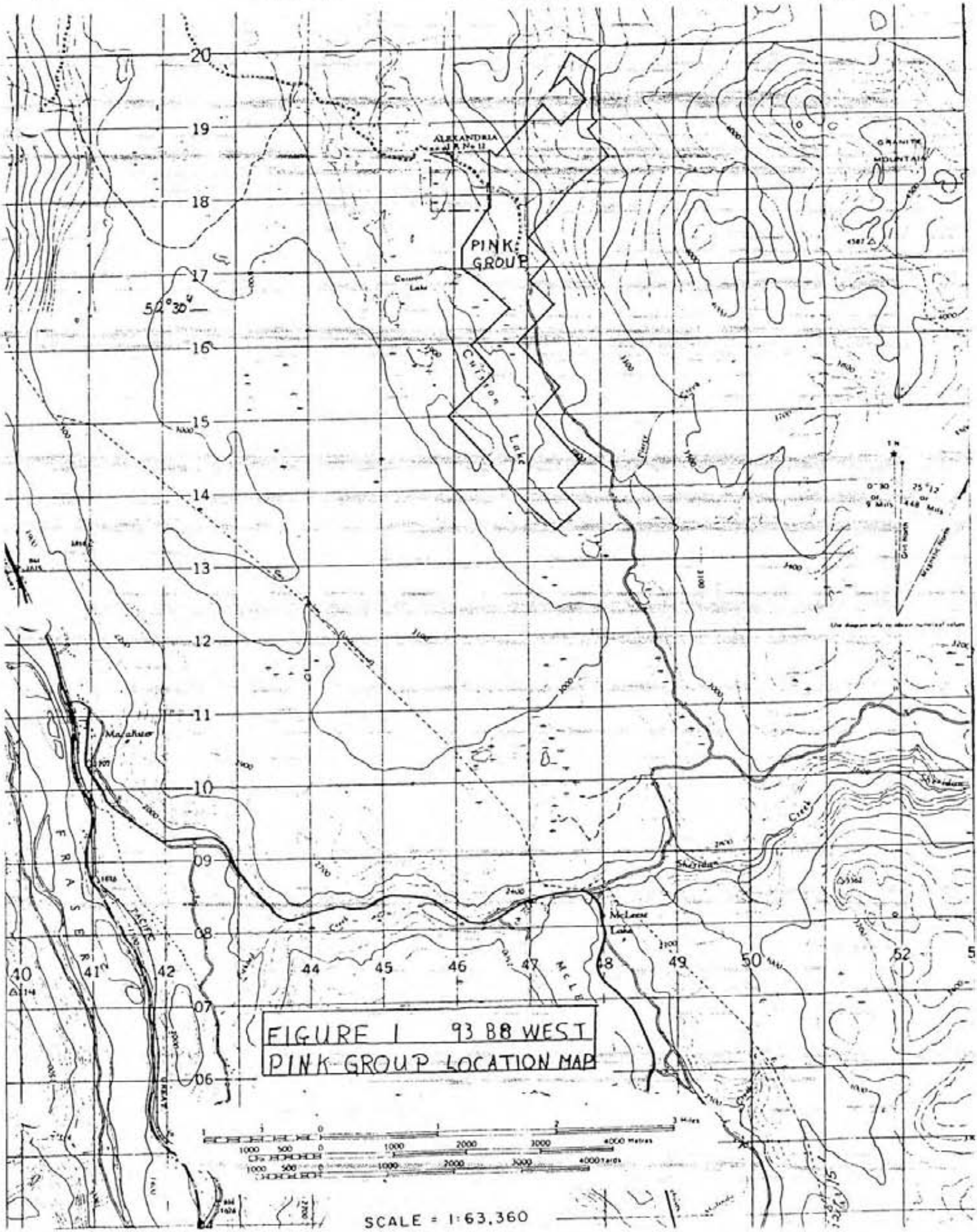

FIGURE 1 93 B8 WEST
PINK GROUP LOCATION MAP

2.0 MINERAL CLAIMS

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

G I B R A L T A R M I N E S L I M I T E D
17-MAY-83

C L A I M G R O U P S

PINK GROUP MINERAL CLAIMS

NAME	RECORDED DDMMYY	RECORD NUMBER	UNITS	MINERAL LEASE	OPTIONED FROM
AL # 1	020764	28447	1		
AL # 2	020764	28448	1		
AL # 3	020764	28449	1		
AL # 4	020764	28450	1		
AL # 6	020764	28452	1		
EV #17	170166	31741	1		
EV #19	170166	31743	1		
EV 21	140666	36364	1		
EV 22	140666	36365	1		
PINETREE#1	040767	43029	1		
PINETREE#2	040767	43030	1		
PINETREE#3	060967	43488	1		
PINETREE#4	060967	43489	1		
PINETREE#5	060967	43490	1		
PINETREE#6	060967	43491	1		
STU #5 FR	180769	52932	1		
VAL NO 1	180366	33849	1		
VAL NO 2	180366	33850	1		
VAL NO 4	180366	33852	1		
DOT NO2	030366	34978	1	3596 M34	
DOT NO3	030366	34979	1	3596 M34	
DOT NO4	030366	34980	1	3596 M34	
DOT NO5	030366	34981	1	3596 M34	
EST #5 FR	200571	62403	1	3596 M34	
PAN NO4	040562	25794	1	3596 M34	
PAN NO5	040562	25795	1	3596 M34	
RUM #79 FR	010670	52239	1	3596 M34	
ZEPHYR 1	090162	25574	1	3596 M34	
ZEPHYR # 3	090162	25576	1	3596 M34	
ZEPHYR # 5	090162	25578	1	3596 M34	
EST #6 FR	200571	62404	1	4150 M65	
GIB 21FR	210672	56784	1	4150 M65	
JAN #2 FR	220171	61461	1	4150 M65	
PAN NO1	040562	25791	1	4150 M65	

TOTAL UNITS 34

All of these claims belong to Gibraltar Mines Limited and adjoin to the south, east and north, 2-post claims of the Gibraltar Mines permanent property. The western edge of the group is bounded by Indian Reserves and private sub-divisions.

3.0 DRILL PROGRAM

3.1 OBJECTIVE

The purpose of this drill program was to test for near-surface mineralization parallel to the known ore. Three holes were drilled on the northerly edge of the previously defined body.

3.2 RESULTS

The drill locations are shown in Figure 2. No assays are available for the drill core at this time but visual estimates indicate a narrow low grade copper zone around 150 to 200 feet deep in these holes. The estimates reported here and in the logs are for total copper.

Hole 83-01 was cased to 32 feet. A narrow zone from 170 to 210 feet was estimated to contain an average of 0.28% copper. At 280 feet the main zone was intersected and the hole was stopped at 377 feet still in this zone.

Hole 83-02 was cased to 11 feet. An average grade of 0.19% Cu was estimated for the zone from 160 to 200 feet. A lower zone from 280 to 300 feet was estimated at 0.55% copper. This is likely associated with the main zone ore. The hole was drilled to 307 feet.

Hole 83-03 was cased to 33 feet. The zone from 150 to 200 feet was estimated to be 0.22% copper. This hole was drilled to 300 feet.

3.3 INTERPRETATION

Drill results from this report are thought to support a slight extension of the southwesterly dipping cross-structure of the main ore zone. No parallel north-east dipping structures were encountered. Narrow bands of Quartz-Chlorite and Quartz-Sericite Schists appear to be the hosts of the mineralization within a barren Quartz Diorite rock showing either saussurite or chlorite alteration.

4.0 STATEMENT OF EXPENDITURES

MARCH, 1983 DIAMOND DRILLING, PINK GROUP

a) Site Preparation

D-8 Cat Tractor	March 21	$ 226.63

b) Drilling Costs

83-01	377' @ $13.00/ft.	$4,901.00	
83-02	307' @ $13.00/ft.	3,991.00	
83-03	300' @ $13.00/ft.	3,900.00	
		$12,792.00	12,792.00

c) Vehicle Costs

4x4 1980 Suburban	March 21-25	5 days		
	March 23-29	2 days		
		7 days	@$20.00/day	140.00

d) Miscellaneous Costs

50 Coreboxes @ $4.90/box	245.00

e) Personnel Costs

Core Logging & Supervision

G. D. Bysouth	March 31	8 hrs.		
	April 4	8 hrs.		
	April 6	8 hrs.		
		24 hrs.	@ $31.25	$750.00
M. R. Schaumberger	March 31	8 hrs.		
	April 4	8 hrs.		
	April 6	8 hrs.		
		24 hrs.	@ $21.88	$525.12

Field Work and Organizing

E. M. Oliver	March 21-23	12 hrs.	@ $20.00	$240.00
G. E. Barker	March 24-25	4 hrs.		
	March 28-29	6 hrs.		
		10 hrs.	@ $20.00	$200.00
M. R. Schaumberger	March 21	4 hrs.	@ $21.88	$ 87.52
			$1,802.64	$1,802.64

Total Drilling Cost	$15,206.27

5.0 CONCLUSIONS

No parallel ore zone was found by this drilling. No further drilling is recommended on the northesterly side of the main zone.

Submitted by,

Madeline R. Schaumberger

Madeline R. Schaumberger
Mine Exploration Geologist

GIBRALTAR MINES LIMITED

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Garry D. Bysouth, of Gibraltar Mines Limited, McLeese Lake, British Columbia, 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

Garry D. Bysouth

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Madeline R. Schaumberger, of Gibraltar Mines Limited, McLeese Lake, British Columbia, 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

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

BIBLIOGRAPHY

G. D. Bysouth, Diamond Drill Report on the Pink Group, Cariboo Mining Division, 93 B/8, July 3, 1980.

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-01
SHEET No. 1 of 7

LOCATION GIB. WEST - North Wall
DATE COLLARED March 23, 1983
DATE COMPLETED March 25, 1983
BEARING _____
LENGTH 377'
DIP -90°
LATITUDE 49,075.95 N
DEPARTURE 93,253.36 E
ELEVATION 3,095.53'
CORE SIZE N.Q. Wireline
SCALE OF LOG 1" = 10'
REMARKS _____
LOGGED BY G.R.B. M.R.S.
DATE March 31, 1983

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Footage	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE; REMARKS	Footage Discr.	Estimated Recovery	RQD	ASSAY RESULTS: Core Number	% Cu	% Mo	Au	Estimated Grade
Cased to 32'							O.B.											
			32								32							
MINE PHASE QUARTZ DIORITE (32-228)	40 Mod		40		5	1/8	qt3-chl-py-vn-oz		<.5	~5' core lost	37	40%	20%					.05
					30×2	1/20×2	qt3-chl (lim)											
Sauss. altn hem staining to 49' - 25% qt3 to 49' then 30-35% as large elvish talc Sauss is light green	40 Mod. Str		50		25-30	9'	qt3-chl-(py)(lim) zone		<.5	fracturing mainly along foln planes of shear zone - ~6-7' core lost	47	27%	7%					.05
	45 Mod Str.		60		40×30	1" × 1/2	qt3-chl-carb		<.5	~4' core lost	57	62%	10%					.05
					30	1/16	qt2-chl											
	45 Mod.		70		40	1/16	qt3-chl		<.5	~3' core lost fracture coatings were qz. hem. carb lim	67	58%	18%					.05
					15	1/8	qt2-chl											
					5×4	hle×2	hem×4											
					60	12"	qt3-chl-ep zone											

1,577

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HOLE No. 83-01
SHEET No. 2 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Fractures	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	45-50 Str.	80		35 50 x 2 40 x 3 60 50 45 x 2	hle x 3 ⅛ + ¼ hle x 3 ½ ¾ nle x 3		hem + 3 qtz-chl-hem x 2 hem x 2 ep qtz-cal-chl hem x 3		<2.5	hem-qq-chl + hem-carb coatings	77	88%	65					.05
	45-50 Str.	90			28"		qq-bx		<2.5	highly broken core ~ 4' core loss carb-hem-qq coatings	37	58%	7					.05
Poss. fault; bore - steep fractures and numerous qz veins	50 Mod	100	?	? ?	4" 3" 2"		qq qq qtz-chl		<2.5	highly broken core qq-carb coatings	95	42% 73%	5					.05
	70-60 Mod.	110							<2.5	60-80° fract. have chl (qq) coatings	101 107	80%	30					.05
Fault Zone 116-122	70 Mod	120		5 50 ?	½0 ½0 6'		qq qtz-chl-carb qq + bx (2' solid qq)		<2.5	highly broken core 114-120 qq-carb coatings	116	90% 50%	20					.05
	60 Wk-Mod	130		5 x 4 40 x 3 35	½0-hle x 4 ½0 x 2 ⅛		qq x 4 qq-ep chl x 2 qtz-chl		<2.5	carb-qq coatings carb-qq coatings	122 127	70%	48					.05

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HOLE No. 83-01
SHEET No. 3 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration Footage Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE	REMARKS	Footage Discrep.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	50-60 WK-Mod	140	50 x 2 30 x 2 35 x 2 = 50	1/10 x 2 1/8 + 1/10 1/20 x 3	qtz-chl-cp x 2 qtz-chl-carb x 2 hem.	0 10 20 30 40 50 60 70 80 90	<2.5%			137	100%	83%					.05
	70 WK-Mod	150	70 x 3 70 x 2 60 x 3 70 x 3 70 30 x 2	1/20 x 3 1/8 + 1/10 1/20 x 3 1/20 x 3 1/4 clr x 2	chl. (trem) x 3 qtz-chl x 2 qtz-chl (py) x 3 chl x 3 qtz-chl (py) hem x 3	0 10 20 30 40 50 60 70 80 90	<2.5%			147	95%	45%					.05
	70-80 WK	160	80 60 ? ? ?	2" 1/8 2" 10' 3"	qtz-chl-cp zone qtz-chl-cp zone (+ pink spar) ?? qtz-chl-py zone qq+ox	0 10 20 30 40 50 60 70 80 90	<2.5%			157	98%	25%					.10
	70 WK	170	70 80 90 45 60	3" 2" 8" 1/2" 4"	qtz-ep-chl zone qtz-chl zone qtz-chl-carb ((cp)) zone cp-chl-cp qtz-chl-carb-cp zone	0 10 20 30 40 50 60 70 80 90	<2.5%			163	80% 95%	80%					.12
	80 WK-Mod	180	60 45 60 x 3 70 85 45 70 ?	2" 2" 1/20 x 3 8" 2 1/2" 8" 5"	qtz-chl (cp) zone qtz-chl (py) zone chl (cp) x 3 qtz-chl (cp) zone qtz-chl-cp qtz-chl-py (cp) zone qtz-chl-cp-py zone	0 10 20 30 40 50 60 70 80 90	<2.5%			173	85%	65%					.20
	80 WK	190	80 80 5 x 2 25 x 2	2" 2 1/2" 1/16 x 2 1/10 x 3	chl qtz-ser-chl-cp zone trem x 2 qtz-chl-ep x 2	0 10 20 30 40 50 60 70 80 90	<2.5%			181 187	70%	15%					.25

GRID______ GIBRALTAR MINES LTD. HOLE No. 83-01
SHEET No. 4 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	Foliation Alteration Footage Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE — REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	Sample Number	% Cu	% Mo		Estimated Grade
[illegible] do not [illegible] [illegible] grade [illegible] into definite zones.	80 wx	200	70; 70; 50; 30x2	6"; 2"; 2"; 1/2"x2	qtz-cl-cp zone; qtz-chl (cp)(...)-gg zone; qtz-[illegible]-(py) zone; chl-cp	0; 10; 20 II; 30 I; 40 I; 50 II; 60 HH IIII; 70 HH HH II; 80 HH HH III; 90	<.5	highly broken core. Chl-Carb-Gg on fractures	197	65%	32%					.35
	80 wx	210	70; 80; 80; 80; 80; 80; 80x2-60	2"; 5"; 1"; 3"; 12"; 4"; 3"+2"x2	chl-cp(py); qtz-chl-(garnet)-py-cp zone; chl-carb-cp; qtz-chl-cp zone; qtz-chl-(py)(cp) zone; qtz-chl-carb-garnet-py-cp; qtz-chl (py) breccia	0; 10; 20; 30; 40 I; 50; 60 I; 70 HH II; 80 HH I; 90	1.0%	Chl-carb ... on some fractures, most are open.	207	100%	100%					.30
	80 wx	220	80; 80	2"; 2"	chl-py; qtz-cp (vug)	0 I; 10 I; 20 I; 30 III; 40 IIII; 50; 60 IIII; 70 HH I; 80 HH HH III; 90	<.5	Chl (carb-gg) on some fractures; most are open.	217	100%	73%					.05
	ND + very wk 15° [illegible]	230	45	1"	chl-carb.	0; 10; 20 II; 30; 40; 50 III; 60 IIII; 70 I; 80 HH HH I; 90 IIII	<.5	Chl on some fractures; most are open	227	100%	84%					.05
DARK ALTERATION ZONE (228-288) — Fault	80 with minor foln. & cren. str.	240	70-80; 30°; 80	6'; 3'; 1/2	qtz-chl-ep-garnet (py)(cp) zone; qq+bx (12' solid qq); chl-cp	0 III; 10 I; 20 II; 30 I; 40; 50; 60 HH I; 70 HH HH II; 80 HH HH HH HH III; 90	1.0%		237	86%	40%					.20
this zone is mineralogically similiar to the smaller zones noted above - cp & py. lie along foln. planes and in massive veinlets - only the larger veinlets are noted.	80 minor foln & cren str	250	80	1"	chl-cp	0 HH; 10 I; 20 II; 30 III; 40 I; 50; 60 HH IIII; 70 HH IIII; 80 HH HH III; 90 HH HH I	1.0%	[illegible] gg	247	96%	40%					.25

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GIBRALTAR MINES LTD.

HOLE No. 82-91
SHEET No. 5 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE — REMARKS	Footage Discs.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
DARK ALTERATION ZONE (228'-288') this zone contains chl-qtz-ser-carb-cp-garnet in varying concentrations — crenulation appears to incr with sericite (incr ser-carb)	70 + Cren Str.	260		70 x 3	½+1/10 x 2	cp	0 10 20 30 40 50 60 70 80 90	<.5	chl < carb? on fractures.	257	92%	38%					.15
	80 + Cren Str	270		45	½	qg	0 10 20 30 40 50 60 70 80 90	<.5	Chl-carb?-(qg?) on fractures	267	90%	16%					.12
	80 + Cren Str.	280		??	12"	qg	0 10 20 30 40 50 60 70 80 90	<.5	~½ of the core is in <2" dia. frags. chl-ser-qz carb? on fractures.	277	95%	0%					.10
288 QUARTZ SERICITE	Complex Cren - mainly 30° Str.	290		45 30 20 45 40 50 x 2	8" ½ 1" 1/10 1/8 x 2 ¼ + ¾	qtz-cp (+ pulverized blk mineral) qtz-carb-cp qtz-carb-garnet-cp chl-py cp x 2 cp x 2	0 10 20 30 40 50 60 70 80 90	1.0 %	ser. on fract.	287	75%	38%					.50
PYRITE ZONE (288-304)	50-60 Str.	300		60+50 50 x 2 60-50 x 5 50 50 x 4 50+5x2+45	¼ x 2 ¼ x 2 1/10-¼ 2" 1/10 x 4 ¼ + ⅛ + ?"	cp x 2 cp x 2 py x 5 qtz-py py x 4 carb-cp + qg x 2 + ser-cp	0 10 20 30 40 50 60 70 80 90	3 %	chl-ser on fract.	297 300	98% 92%	40%					.50
Fault Con.? 304		310		5? x 3 50? 5	⅛ x 3 2" 2"	cp x 3 qtz-cp qg	0 10 20 30 40 50 60 70 80 90	1.0 %	chl-ser-<Carbon fract.	307	60% 70%	23%					.80
DARK ALTERATION ZONE (304-377') as above	Complex prob steep 20°-40°			40 25 15 80	2" 3" ⅛ ⅛	qtz-ser-cp qtz-ser-cp ser-cp ser-cp												

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GIBRALTAR MINES LTD.

HOLE No. 83-01
SHEET No. 6 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration Footage Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE — REMARKS	Footage Diesel.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
DARK ALTERATION ZONE (304-377')	60-80	320	5 60 x2 5 70 60 60?	3" ¼ x2 ½ ¼ 3 8"	qq chl-py x2 qq carb-py qt3-ser-py qt3-ser-py-cp	Fine diss. py(cp)	1.0%	chl-ser, qq, carb	313 317	97%	20%					.20
	60? Mod	330	70? x3 50 60 80	⅛ x3 6" 2" ¼	chl-cp x3 qt3-ser-py-cp zone qt3-ser-py-cp qt3-ser-py-cp	Silty foln. planes	1.0%	qq-ser-(carb)	327	78%	4%					.25
	70 Mod-Str.	340	70 80 x3 20+40 70? 30? 70	1" ⅛ x3 ¼+⅛ 1" 1" 24"	qt3-ser-carb-cp chl-py x3 qt3-carb-cp x2 qt3-carb-cp qq qt3-ser-py(cp) zone		1.0%	chl, ser, carb	337	83%	27%					.30
	70 Mod	350	70 x3 60 x2 80+45 80+60 70 60 50 x2 45?	⅛ x3 ⅛ x2 ⅛ or ⅛ ¼+⅛ N/e-⅛ x5 ⅛ ⅛ x2 ¼	chl-py-cp x3 chl-py x2 chl-cp x2 chl-cp x2 chl-cp x5 py-cp py x2 cp	Strong Py(cp) dissem.	4.0%	ser, chl.	347	75%	36%					.45
	70-80 Str.	360	5 80 70 80-70 x 10 45 45 45x2+80 80+70x2	½ ½ 2" ⅛-⅛ x10 2" 6" ⅛+⅛+¼ ⅛-⅛x3	qq qt3-carb-cp qt3-chl-cp-py chl-py(cp) x10 qt3-ser-py-cp qt3-ser-py-cp cp x3 chl-cp x3		2.0%	ser, chl, (carb) (hem)	357	63%	42%					.45
	70-80 Str.	370	70 80 x5 70x2 60+70 50 50+70+70 70-80x5	½ ⅛ x5 ⅛ x2 ⅛ x2 ⅛ ⅛x2+⅛ ⅛-⅛x5	qt3-carb-cp-py qt3-chl-py-cp x5 qt3-chl-py-cp x2 qt3-chl-py-cp x2 qt3-(chl)-cp qt3-chl-cp x2 qt3-chl-py-cp x5		3.0%		367	80%	98%					.40

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GIBRALTAR MINES LTD.

HOLE No. 83-01
SHEET No. 7 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation / Alteration / Footage / Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY- (0, 10, 20, 30, 40, 50, 60, 70, 80, 90)	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number / % Cu / % Mo / / Estimated Grade
	70-85 Sts.		80-75 x 7 75 80-70 x 15 40-50 At EOH 70 80	1/40 x 7 6" 1/20 + 1/32 + 1/8 2" 1/8 1/8	Cpx 7 qtz-ser-py(cp) zone Cpx 3 qtz-carb-py carb-cp cp chl-py		3.00%		377	100%	98%	.80
	E.O.H @ 377'		377									
								M.R. Schaumberger G.D. Bysouth				

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 1 of 6

LOCATION GIBRALTAR WEST (N. Wall) | BEARING - | LATITUDE 18,915.25 N | CORE SIZE N.Q.W | LOGGED BY G.D.B., M.R.S.
DATE COLLARED March 25, 1983 | LENGTH 307 | DEPARTURE 43,475.22E | SCALE OF LOG 1" = 10' | DATE April 4, 1983
DATE COMPLETED March 27, 1983 | DIP -90 | ELEVATION 3,088.84 | REMARKS

BOTTOM DEPTHS: LEACH CAP 0 | LIM. ZONE 50 (weak) | SUPERGENE 0

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Blocks	G.E.O.L.O.G.I.C.A.L. B.R.A.N.C.H. ASSESSMENT REPORT	ASSAY RESULTS: Sample	Estimated Grade
Casing to 11'								0 10 20 30 40 50 60 70 80 90				11,577		
11' MINE PHASE QUARTZ DIORITE (11'-175')	45-55 Mod		20	c / c	15-20 x 3 10 60 x 3	hlet ½ or ⅛ ⅛ ⅛ x 3	chl-lim x 3 chl chl-lim (mal) x 3	0 10 20 30 40 50 60 70 80 90	<.5	chl, ser, lim, MnO2 — good fresh rx. @ surface.	11 14 17	60 55	8	.05
Saus. Alt'n with numerous dark bands	45-70 Mod		30		50 x 4 50 40 50	hle x 4 ½ ⅛ ⅛	lim-MnO2 x 4 qt3-chl-ep qt3-chl- qt3-chl-py	0 10 20 30 40 50 60 70 80 90	.5	hem; ← no coats or gg; chl.	25	95 70 100	70	.05
Avg comp.: 30% qtz, 15% chl., 50% Saus. Med.-Coarse grained	50-60 Mod		40		80 50+55 50	⅛ ⅛+⅛ 1"	qtz (chl) qt3-chl-py x 3 qt3-chl-lim zone	0 10 20 30 40 50 60 70 80 90	.5	hem; mainly chl-ser - a few 45° have no coats or w/ gg.	35	100	90	.05
Some finer grn. mafic-rich inclusions (Xenoliths?)	60 Mod		50		20 60 45 45	⅛ 6" ½ 1"	chl-ep-qt3 qt3-chl-ep zone qt3-chl-ep qt3-chl-py (cp)	0 10 20 30 40 50 60 70 80 90		chl - no coats or hem - most 45° have no coats or lim; chl, ser	45	100	80	.05

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 2 of 6

BOTTOM DEPTHS
LEACH CAP
LIM. ZONE
SUPERGENE
REMARKS

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Blocks	Estimated Core Recovery %	RQD	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	45-50 Mod		60		30 45 45 70 50	1/8 1/2 1/2 1/4 6"	qtz-chl-cp qtz-chl-ep qtz-chl-cp qtz qtz-chl-cp (vug) ((cc))	0-90	.5	carb. hem. lim. large qtz vein cuts across Poln.	55	100	93					.10
	50-60 Mod-Str.		70		10-20 x 3 15 90 45 50 55	hle x 2 1/10 2 1/2" 8" 1/8 10"	hem x 3 qtz-chl-py qtz-chl-ser-cp dark zone + qtz-ser-cp veins qtz-chl-py dark zone + qtz-carb-chl-cp	0-90	.5	carb hem	65	100	63					.20
	50-60 Mod		80		45 20 x 2 45 50 ?	1/4 1/10 x 2 1/10 x 2 14" 4'	qtz-chl-carb-cp hem-carb x 2 (+ pink stained core) qtz-chl-py x 2 qtz-chl-carb-py-cp zone zone of broken + ground core - hem (lim) stains	0-90	.5	carb hem	75.5	80 45	23					.15
Fault Zone 75'-87'	60-70 Mod		90		5 ? 5-15 ° 5 x 2	7' 1/20 x 2	qq-bx-hem hem-qq x 2	0-90	<.5	carb hem ~4' core lost @ 80-87'	81 87	30	22					.10
	50-60 Mod-Str.		100		45 60 5 60 35 40 50 30+50	1/4 1" 3/4 1" 2" 1/10 6" hle-1/10 x 2	qtz (@ rt ∠'s to foln) qtz qtz with hem on walls" qtz-chl-cp qtz-chl-ep-py-cp qtz-chl-py dark zone (cpy) qtz-chl-cp-py	0-90	.5		97	94	73					.15
	45-50 Mod		110		20 30 50 45 55 60 5	12" 2" 1/4 1" 6" 1" hle	dark zone + qtz-cp dark zone + qtz-chl-cp-py qtz-chl-cp qtz-chl-carb-cp qtz-chl-carb-cp qtz-chl-carb-cp hem	0-90	.5		107	100	75					.40

GRID _____

GIBRALTAR MINES LTD.

HOLE No. B3-2
SHEET No. 3 of 6

BOTTOM DEPTHS
LEACH CAP
LIM. ZONE
SUPERGENE
REMARKS

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration Footage Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	Footage Discrs.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60 Mod	120	40 ? 50 35+	1/10 10" 3" 2"+	chl-cp dark zone + (qt3-py-cp) dark zone + qt3-py-cp py-chl-cp (cp, cpy)	0 11 10 1 20 30 40 IIII 50 II 60 IIIIII 70 IIIIIIIIII 80 IIIIIIIIII 90	.5	117	98	60					.15
	30-45 60 70 Mod Str	130	50 70 80 50 90 5 5	1/2 2" 1/4 2+ 2" 1" 1/2 12"	chl-py qt3-chl-py (cp) qt3-chl-cp-py qt3-chl-cp qt3-chl-py-cp qt3-chl-cp-py qt3-cp dark zone + (dissem py)	0 10 20 30 II 40 50 I 60 IIIII 70 IIIII 80 IIIIIIII 90	.5	127	98 100	85					.12
	60-80 Wk-Str.	140	80 90 20 45	12" 2" 1/2 12"	qt3-chl (ser) carb-py zone qt3-chl-(cp) hem-carb qt3-chl-cp (py)(cp) zone	0 IIIII 10 20 30 III 40 IIIIII 50 IIIIII 60 IIIIIIIIII 70 IIIIIII 80 IIIIIII 90	1.0	135	100	48					.10
	45-70 Wk Mod	150	55+65 15 70+45 55 x2 15+30x2	2" x2 1/10 1/10 x2 1/4 x2 hle x3	qt3-chl-cp (cp) py x2 chl-cp qt3-chl-cp x2 qt3-chl-carb-cp x2 hem x3	0 II 10 II 20 II 30 III 40 II 50 II 60 IIIIII 70 IIIIIIII 80 IIII 90	.5	145	100	72					.15
	70-80 Wk-Mod	160	70 80 x2 70	6" 2½" x2 1/2	qt3-chl-cp-py qt3-chl-cp-cp x2 qt3-chl-cp-cp-py	0 10 20 30 I 40 III 50 I 60 IIIII 70 IIIIII 80 IIIIIIIII 90	<.5	155.5	97	90					.10
	60-80 Wk-Str.	170	50 60 ? 80 80 60	14" 12" 2" 2" 25"	qt3-chl-cp (py) zone dark zone + (qt3-carb-py-cp) qt3-chl-py qt3-(chl) (cp) qt3-chl-(py)(cp) zone	0 10 20 I 30 40 50 60 IIIII 70 IIIIII 80 IIIIIIII 90	1.0	166	95	83					.20

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 4 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
175 DARK ALT'N ZONE (175-230') - grades to a chl-garnet alt'n and over ½ of the zone is med-fine grn.	80 WK-Mod	180	80 x 4 80 70 60-70 x 5 80 ? 40 40 90		⅛ x 4 ½" 1" ⅛ x 5 30" 1" ⅛ ¼ c ⅛ x 2		qtz-chl-py x 4 qtz-chl-py qtz-chl-cp qtz-chl-py x 5 dark zone+ diss. py (cp) qtz-py-cp chl-cp cn-cp qtz-chl-garnet-cp-py		.5	chl-carb-qg chl (carb), (ser)	176.5	93	65				.15
- grades to a chl-garnet alt'n and over ½ of the zone is med-fine grn.	80-90 Mod	190	75 55 70 70		½ ¼ ⅛ 2½"		chl-garnet-cp qtz-chl-garnet-cp qtz-py (cp) qtz-(chl)-mag-py-cp		1.0	chl-ser (carb)	187	90	80				.20
- a few narrow (1-3') zones of ser. and chl-ep-bx.	80-90 Mod	200	70 65 45 x 2		1" 1" ½ x 2		qtz-chl-cp qtz-chl-py chl-cp x 2	fine dissem. py (cp) along foln & scattered	1.0	carb chl (rare)	197	98	83				.20
	90 Mod-Str	210	50 ?		2" 36"		qtz-ser-py chl-ep-bx zone	coarse blebs	1.0	chl-carb	207	100	80				.12
	70-90 Mod-Str	220	80 x 2 90 80 90 x 2		⅛ x 4 20" ¼ ⅛ x 2		qtz-chl-ep-py x 4 chl-py-cp zone qtz-chl-py chl-py x 2		1.0	chl-carb chl (carb)	217	100	82				.15
Small steep fault?	90 WK-Mod	230	90 90 70 80 5 30 5		½ 10" 2" 7" 3'		chl-carb-cp chl-ep-bx chl-(carb-qtz) cp banded-chl-ep-qtz-py zone bx hem stained core		.5	carb hem chl-carb	227	98	54				.12

GRID ______

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 5 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	Footage	Veins ∠ to Core Axis	Width of Vein	Mineralization	Estimated % Pyrite	Remarks	Footage Blocks	Estimated Core Recovery %	RQD	Sample Number	% Cu	% Mo	Estimated Grade
MINE PHASE Saus [illegible] very weak to 245' (ie, as phase cut off not distinct)	60-85 Wk-Mod	240	20 x2 15 x2	1/16 x3 h/l x2	carb-hem x2 hem x2	.5	hem chl-carb	237	94	55				.10
(230 - 275')	60-90 Wk-Mod	250	60 5 80 70-80 40+30 50 5+15	30" h/c 1/2 15" 1/2-1/6 1/2 1/2 x2	banded qtz-chl-cp zone hem qtz-chl-py qtz-chl-py-cp qq-hem x2 chl-cp carb-hem x2	.5	hem-qz [illegible]	247	97	58				.15
Small fault (poss steep)	90 Wk-Mod	260	70 5 [illegible] 80 85 80 ?	2" h/c x3 1/2 30" 5" 5'	chl-carb-cp hem x5 qtz-chl-carb-cp qtz-chl-cp (py) zone qtz-[illegible]-cp zone bx-qq-hem	.5	carb-hem chl-carb chl-carb	252 256	80 99 40	66				.20
re [illegible] [illegible] ser-carb [illegible]	60-80 Mod	270	70 65 35 80 50	2" 8" [illegible] 1/2 2"	chl-ep-carb-py-cp zone qtz-chl-ep-carb-py-cp zone [illegible]-carb carb-py(cp) chl-carb-cp	.5	hem-chl-carb	261 267	100	60				.15
275 CARBONATE - SERICITE-CHLORITE	60-90 Mod-Str.	280	30 80	h/c 6"	hem qtz-chl-zone	2.5	chl-carb	277	90	45				.10
ALT'N PHASE (275 - 307') not quite a dark zone as weak saus is still present	90 Cren. Str	290	10-90 (cren) 50 70 (mainly but cren.)	24" 1/2 5'	qtz-chl-ser-carb-py-cp zone qtz-carb-py-cp qtz-ser-carb-chl-cp(py)	1.0	chl-ser-(carb)	287	99	68				.70

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 6 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation, Alteration, Footage, Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Discr.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60-90 Mod	300	70 60 80 80 45	12" ½ 1" ½ 4"	q+q3-ser-carb-cp q+q3-ser-cp q+q3-ser-cp cp-cp q+q3-carb-ser	0 11 10 1 20 11 30 11 40 11111 50 60 111 70 1 80 1111111 90 111111	.5	- chl-carb ·99 chl-carb.	297	99	96					.40
EOH 307	90 wk-Mod		20	2	chl-carb (q+q3)	0 11 10 20 30 111 40 111 50 60 1111 70 1 80 11 90 111111	.5	hem-carb chl-carb	307	99	87					.10
						0 10 20 30 40 50 60 70 80 90		M.R. Schaumberger A.C. Bysouth								
						0 10 20 30 40 50 60 70 80 90										
						0 10 20 30 40 50 60 70 80 90										
						0 10 20 30 40 50 60 70 80 90										

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 1 of 5

LOCATION GIBWEST North Wall
DATE COLLARED March 27, 1983
DATE COMPLETED March 28, 1983
BEARING _____
LENGTH 300'
DIP -90°
LATITUDE 49,049.02' N
DEPARTURE 43,416.98 E
ELEVATION 3,103.87
CORE SIZE NQ Wireline
SCALE OF LOG 1" = 10'
REMARKS _____
LOGGED BY GDB & MRS
DATE April 6, 1983

GEOLOGICAL BRANCH
A.S.S. REPORT
11,577

BOTTOM DEPTHS
LEACH CAP 0
LIM. ZONE 110' (WK)
SUPERGENE 0

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Footage	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Glacial	ASSAY RESULTS: Recovery %	Sample Number	Cu %	Mo %	Estimated Grade
Cased to 33'								0 10 20 30 40 50 60 70 80 90								
		33					MnO2	0 10 20		MnO2 stn	33					
MINE PHASE QUARTZ DIORITE	80-90° WK.		40	ε 4< 30 70>< 45	hle ⅛" nle hle x 5 ⅛	MnO2 MnO2 MnO2 x4 chl-py		30 40 50 60 70 80 90	<.3	Weak hem staining to 37'- below that rx. is fresh	37	68%		19%		.05
(33-) - Sauss Altn - 30% qtz - 20% chl - 45% Saus	70° WK to Mod.		50	? 5+90	8' 2"+3"	broken core minor qtz qtz-chl-carb zone <2		0 10 20 30 40 50 60 70 80 90	<.5	carb, lim, chl qtz	47	50%		17%		.08
- med grn.	70-90° WK to Mod.		60	50+70 5+ 70-60 x 5+80	1"+2 2" ⅛-1/16 x 2 3"+2	qtz-chl-ep-cp vn chl-ep(cp) chl (py)(cp) qtz-chl-(py)(cp) zone <2		0 10 20 30 40 50 60 70 80 90	.5	? carb-lim. open fractures or chl <lim?	57 62	90% 77%		85%		.10
	80-90 WK.		70	4 5 50 80 80	10° hle 3" ⅛	10% core + minor qtz lim qtz-chl-carb(py) chl		0 10 20 30 40 50 60 70 80 90	<.5	- carb-lim. - (qtz-carb)	67	93%		68%		.08

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 2 of 5.

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Footage	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Discrt.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	80-90 WK to Mod.		80		80	2"	qtz-chl-carb	0 10 20 30 40 50 60 70 80 90	.5	carb-lim. / chl-Ser Partings	77	97%	86%					.10
					70 + 80	3" + 2"	qtz-chl-carb (ep) - py (cp) x 2											
					80	4"	qtz-chl-ep (py) zone											
			80		70	2"	qtz-chl-(py)(cp)											
	80-90 WK. to Mod.		80		80	2½"	qtz-chl-ep zone	0 10 20 30 40 50 60 70 80 90	.5	chl-carb. / chl. Partings.	87	108%	100%					.15
			65		65	6"	qtz-chl-ser-cp zone											
			40		40	3"	qtz-chl-ep											
			40		40	½"	qtz ((cp)) (across Foln)											
			90 60-70		60-70	10"	qtz-chl-carb)(ep)(py) zone											
	70-90 WK to Mod. approaching dik alt'n zone		35-60		35-60	3"	qtz-chl-ep zone	0 10 20 30 40 50 60 70 80 90	.5	lim / carb / carb-lim. / chl Partings.	97	100%	80%					.15
			60		60	¼	qtz-ser-cp											
			70		70	6"	qtz-ser-chl-ep (py)(cp)											
			100 60 80± 5		60 80± 5	3" hle x 2	chl-cp lim x 2											
	80-90 WK to Mod. numerous zones of shearing & cataclastic deform. without much metasomatic alt'n.		15-70		15-70	hle + ⅛	lim + qtz-lim	0 10 20 30 40 50 60 70 80 90	<.5	<lim><carb> / one has lim. / chl Partings.	107	96%	68%					.05
			70		70	7"	qtz-chl-carb zone											
			110 55		55	hle	lim											
	70-90° WK to Mod.		70 x 2		70 x 2	⅛ x 2	qtz-chl-lim x 2	0 10 20 30 40 50 60 70 80 90	<.5	carb-lim. / one has <lim> / chl-Ser Partings.	117	100%	92%					.05
			5		5	¼	chl-lim											
			120 80		80	⅛	chl-lim											
	70-90° WK to Mod.		65		65	12"	chl-qtz-carb zone	0 10 20 30 40 50 60 70 80 90	<.5	carb-lim / chl-(Ser) Partings / few have <lim>	127	100%	95%					.10
			5+80		5+80	hle x 2	lim x 2											
			70		70	2"	qtz-chl-py											
			65		65	1"	qtz-ser-chl-py-cp											
			130 70		70	2"	qtz-cp-garnet?											

GRID ______

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 3 of 5

Rock Types & Alteration	∠ to Core Foliation	Graphic Log – Footage	Veins ∠ to Core Axis	Width of Vein	Mineralization	Fracture Angle to Core Axis – Frequency	Estimated % Pyrite	Bottom Depths: Leach Cap / Lim. Zone / Supergene – Remarks	Footage Blocks	Estimated Core Recovery %	R Q D	Sample Number	% Cu	% Mo		Estimated Grade
Fine grn diorite (inclusion?) →	70-90° wk. to str.	140	80 70 65 10?	16" ½" ½" ½"	diorite qtz-chl-ser qtz-chl-ser qtz-carb	0; 10; 20; 30 I; 40 III; 50; 60 III; 70 IIII; 80 IIIII; 90 III	<.5	carb-<hem> carb<hem> in 2 of them Mostly clear fractures; some w/ chl-<carb>	137	100%	93%					.05
	60-90° Mod.	150	45 x 2 45 30 45	8" + 2½" 14" 3½" 6"	qtz-py(cp) (grey-blk qtz) x 2 qz + bx + hem (6+3" solid qz) qtz-chl-py-carb zone qtz-chl-carb-py(cp) zone	0; 10; 20; 30; 40 IIIII II; 50 I; 60 IIIII IIIII I; 70 IIIII; 80 I; 90 IIII	.5	145-147 Mostly qz-hem-carb. chl-ser-carb hem-coatings	147	98%	72%					10
	60-80° Mod	160	40 30 60+70+80 60 70 30 x 2 70	1/10 1" 1" - ½ x 2 h/e 3" ½ + 1 6"	carb-lim-hem qtz-chl-cp-py qtz-chl-py(cp) x 3 hem qtz-chl(cp) (py)(cp) qtz-chl(cp) x 2 qtz-chl-cp-py	0; 10; 20; 30 II; 40 I; 50 I; 60 III; 70; 80 IIII; 90 III	.5	carb-hem. chl-ser-carb-hem.	157	114%	108%					.18
	70-90 Wk to Str.	170	40 70 x 2 70 70 70-80	4" 30" + 3" 32" 1" 4'	qtz-chl-carb (vug) qtz-chl-ser-garnet-py-cp zone qtz-chl-ser-garnet-py-cp zone x 2 qtz-chl-ser-garnet-py-cp zone chl-garnet-py-cp zone	0; 10; 20; 30; 40; 50; 60 II; 70 III; 80 IIIII III; 90 IIIII II	1.5	chl-<Ser>-<carb>	167	100%	95%					.25
	60-90° Wk to Str.	180	80 45 45 x 2 45 50 30	2" 1" 1" + 3" 2" 3" –	chl-cp-py qtz (across foln) qtz-chl-cp x 2 qtz-chl-py-cp chl-py-cp chl-cp	0; 10 I; 20; 30; 40; 50 II; 60 I; 70 III; 80 III; 90 IIIII IIIII I	1.0	Chl. Partings + clear fractures.	177	100%	105%					.20
	80-90° Str.	190	70-80 80	7" 10"	chl(qtz)(cp) py-cp qtz-chl-ser-carb-py-cp	0; 10; 20; 30; 40; 50; 60; 70 I; 80 IIIII II; 90 IIIII IIIII I	1.0	Chl. Partings.	187	100%	107%					.20

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 4 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	GRAPHIC LOG Footage	GRAPHIC LOG Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE — REMARKS	Footage Discrep.	Estimated Core Recovery %	R O D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	80-90° Mod to Str.	200			80 60+80 70 50+60+70	1/4" 2"+2½" 2" 2+3"x2	(qt3)chl-py-cp zone qt3-chl-cp x2 qt3-chl-cp zone qt3-chl-cp(py) zone	0 10 20 30 40 50 60 70 80 90	1.0	Some chl. Partings	197	114%	93%					.25
	80-90° WK.	210			40 80 ?	2" 3" 2'	qt3 chl-cp(py) zone qt3-cp Dx zone	0 10 20 30 40 50 60 70 80 90	.5	Chl-Ser Partings	207	98%	87%					.05
217 CHLORITE	60-90 WK to Str.	220			70 50-70 ?	2½" 12" 1"	(pass. silicification) qt3 (chl) vug - with talc qt3-chl-cp (py) zone qt3	0 10 20 30 40 50 60 70 80 90	.5	Chl-Ser Partings.	217	100%	99%					.05
EPIDOTE ZONE (217-250) - minor disseminated garnet in high chl. bands - mainly a banded alt'n zone with some bx'n	80-90° Str.	230			80	8"	chl. garnet-py-cp	0 10 20 30 40 50 60 70 80 90		Chl. Partings.	227	99%	85%					.10
	80-90° Str.	240			70-80° 80	2"	chl-cp py-cp	0 10 20 30 40 50 60 70 80 90		Chl ± (carb) Ptgs.	237	95%	40%					.10
	80-90° Str.	250						0 10 20 30 40 50 60 70 80 90		Chl-Ser	247	75%	30%					

GRID ______

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 5 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	Foliation Alteration	Footage	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS (LEACH CAP / LIM. ZONE / SUPERGENE) REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	Sample Number	% Cu	% Mo		Estimated Grade
CHLORITE-SERICITE -CARBONATE ZONE (250-278)	80-90° Str.		260	80x2; 80x2; 70; 80+ minor Cren	1/10 x2; 3"-2"; 2"	chl-cp x2; chl-ser-py-cp x2; qtz-ser-cp; fine dissem py-cp along foliation mainly [illegible]	0–90	1.0	chl	257	106%	77%					.25
at 262-276 ser+carb >> chl and cren. increases + decrease in dissem. py-cp	80-90° Str. to 264; 264-278 Cren. 0°-90°		270	80x2; 5-80 Cren; 30; 10-80; 80	1"x2; 2"; 24"; 2"	chl-py-ser-py; chl-rich bands; qtz-cp; qtz-carb; qtz-carb; w/ dissem py-cp	0–90	.5	qtz flooded. Ser. Chl on partings or open.	267	100%	106%					.15
	278			30x3; 70	1"x3	qtz-carb x3; dissem py	0–90	.5	No Coatings	277	98%	78%					.10
278-300' Mainly Sauc. Alt'd MINE PHASE QUARTZ DIORITE - Coarse to Med. Grained, greyish to a bright	90° Str.; V.WK { Var.		280; 290	20; 5°; 5°; 45+60°; 60; 20° 12; 50°; 80°	1"; 1/5; hle; 1/16; 1/8; 1/4-2'; 1/4; 1/8	qtz-chl-py; qtz carb-chl; carb-hem.; qtz-carb-chl.; qtz-carb-chl.; [illegible] -cp; DK Alt'n - qtz- chl -py; qtz-carb-chl	0–90		Most fractures are clear - a few have chl.	287	97%	83%					.05
light green sauc. alt'n	V.WK. { Var.		300	15°; 70°; 16; 40°; 30°; 10°; 70°	1/4; 1/8; 1; 1/2; 2; 1/2; 1/4	qtz-ep-pied-carb.; qtz-carb.; qtz-chl-ep-carb-(cp)py; qtz-chl-ep-(cp); qtz-chl-ep-carb-sphal-cp; qtz-chl-py-cp; qtz-chl-carb.	0–90		Most fractures are clear - a few have chl. Sphal fairly abund. in vein.	297; 300	100%; 93%	97%					.12
End of hole at 300'.							0–90										

M.R. Schaumberger
K.D. Bysouth

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 1 of 5

LOCATION GIBWEST North Wall
DATE COLLARED March 27, 1983
DATE COMPLETED March 28, 1983
BEARING _____
LENGTH 300'
DIP -90°
LATITUDE 49,049.02' N
DEPARTURE 43,416.98' E
ELEVATION 3,103.87
CORE SIZE NQ Wireline
SCALE OF LOG 1" = 10'
REMARKS _____
LOGGED BY GDB & MRS
DATE April 6, 1983

BOTTOM DEPTHS: LEACH CAP 0 | LIM. ZONE 110' (wk) | SUPERGENE 0

GEOLOGICAL BRANCH
ASSESSMENT REPORT
11,577

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Blocks	ASSAY RESULTS: Core Recovery %	Sample Number	Cu %	Mo %	Estimated Grade
Cased to 33'								0 10 20 30 40 50 60 70 80 90								
			33					0 10 20		MnO2, lim	33					
MINE PHASE QUARTZ DIORITE	80-90° WK.		40	5 4± 30 70 x ± 45	hlc 1/20 hle hle x 4 1/8		MnO2 MnO2 MnO2 x 4 chl-py	30 40 50 60 70 80 90	<.5	Weak hem staining to 37' - below that rx. is fresh	37	68%		19%			.05
(33-) - Saus Alt'n - 30% qtz - 20% chl. - 45% Saus	70° WK to Mod.		50	? 5+90	8' 2"+3"		broken core minor gg qtz-chl-carb zone x 2	0 10 20 30 40 50 60 70 80 90	<.5	carb, lim, <MnO2>	47	50%		17%			.08
- med grn.	70-90° WK to Mod.		60	50+70 50 70-60 x 6 5+80	1"x2 2" 1/8-1/10 x 6 2"x2		qtz-chl-py-cp x 2 chl-ep(cp) chl (py)(cp) qtz-chl-(ser.)(py)(cp) zone x 2	0 10 20 30 40 50 60 70 80 90	.5	? carb-lim. open fractures or chl. <lim>	57 62	90% 77%		85%			.10
	80-90 WK.		70	50 80 30	10" hlc 3" 1/8		1/10x core + minor gg lim qtz-chl-carb(py) chl	0 10 20 30 40 50 60 70 80 90	<.5	carb-lim. <gg-carb>	67	93%		68%			.08

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 2 of 5.

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Footage	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE	REMARKS	Footage Distance	Estimated Core Recovery %	R O D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	80-90 WK to Mod.		80		80	2"	qtz-chl-carb		.5		carb-lim.	77	97%	86%					.10
					70 + 80	3" - 2"	qtz-chl-carb (ep) - py (cp) x 2												
					80	4"	qtz-chl-ep (py) zone				Chl-Ser Partings								
			80		70	2"	qtz-chl-(py)(cp)												
	80-90 WK to Mod.				80	2½"	qtz-chl-ep zone		.5		chl-carb.	87	108%	100%					.15
					65	4"	qtz-chl-ser-cp zone												
					40	3"	qtz-chl-ep												
					40	½"	qtz ((ep)) (across foln)				chl. Partings.								
			90		60-70	10"	qtz-chl-carb) (ep)(py) zone												
	70-90 WK to Mod. approaching dk alt'n zone				35-60	2"	qtz-chl-cp zone		.5		lim carb carb-lim. chl Partings.	97	100%	80%					.15
					60	¼	qtz-ser-cp												
					70	6"	qtz-ser-chl-ep (py)(cp)												
			100		60 80± S	3" h(e x 2	chl-cp lins x 3												
	Numerous zones of shearing & cataclastic deform without much metasomatic alt'n. 80-90 WK to Mod.				15 + 20	hle + ½0	lim + qtz-lim		<.5		<lim> <carb> one has lim chl Partings.	107	96%	68%					.05
			110		70 50	7" hle	qtz-chl-carb zone lins												
	70-90° WK to Mod.				70 x 2	½0 x 2	qtz-chl-lin x 2		<.5		carb-lim. one has <lim> chl-Ser Partings.	117	100%	92%					.05
			120		15 80	¼ ½0	chl-lim chl-lim												
	70-90° WK to Mod.				65 5+80 70 40	12" hle x 2 2" 1" 2"	chl-qtz-carb zone lins x 2 qtz-chl-py qtz-ser-chl-py-cp qtz-cp-garnet ?		<.5		carb-lim. chl-(Ser) Partings + few have <lim>	127	100%	95%					.10
			130		70														

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 3 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Discr.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
fine grn diorite (inclusion?) →	70-90° Wk. to Str.		140	80 70 65 70	16° ½ ½ ½	diorite qt₃-chl-ser qt₃-chl-ser qt₃-carb.		<.5	carb-⟨hem⟩ carb⟨hem⟩ in 2 of them Mostly clear fractures; some w/ chl-⟨carb⟩	137	100%	93%					.05
	60-90° Mod.		150	45 x 2 45 30 45	8" + 2½" 14" 3½" 6"	qt₃-py(cp) (grey-blk qt₃) x2 qq+bx+hem (6"-3" solid qq) qt₃-chl-py-carb zone qt₃-chl-carb-py(cp) zone		.5	145-147 Mostly qq-hem-carb. chl-ser-carb hem. coatings	147	98%	72%					.10
	60-80° Mod		160	40 30 60+70+80 60 70 80 x 2 70	½0 1" 1"+¼ x2 hle 3" ½+1 6"	caro-lim-hem qt₃-chl-cp-py qt₃-chl-py(cp) x3 hem qt₃-chl(ep) (py)(cp) qt₃-chl(cp) x2 qt₃-chl-cp-py		.5	carb-hem. chl-ser-carb-hem.	157	119%	100%					.18
	70-90 WK to Str.		170	40 70 x 2 70 70 70-80	4" 30"+3" 32" 1" 4'	qt₃-chl-carb (vug) qt₃-chl-ser-garnet-py-cp 30ne. qt₃-chl-ser-garnet(py-cp 30ne x2 qt₃-chl-ser-garnet-py-cp 30ne chl-garnet-py-cp 30ne		1.5	chl-⟨ser⟩-⟨carb⟩	167	100%	95%					.25
	60-90 WK to Str.		180	80 45 45 x 2 45 50 50	2" 1' 2"+8" 2" 3" ½"	chl-ep-py qt₃ (across foln) qt₃-chl-cp x2 qt₃-chl-py-cp chl-py-cp chl-ep		1.0	chl. Partings + clear fractures.	177	100%	105%					.20
	80-90° Str.		190	70-80 80	7' 10'	chl(qt₃)(ep) py-cp qt₃-chl-ser-carb-py-cp		1.0	chl. Partings.	187	100%	102%					.20

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 4 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Geology Structure	Vein ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Geology Discr.	Estimated Core Recovery %	R O D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	80-90° Mod to Str.	200		80 60 + 80 70 50 + 60 + 70	14" 2" + 2½" 2" 2" + 3" x 2	(qt3) chl-py-cp zone qt3-chl-ep x 2 qt3-chl-ep zone qt3-chl-ep (py) zone x 2	0 10 20 30 40 50 60 70 80 90	1.0	} some chl. Partings	197	114%	93%					.25
	80-90° WK.	210		40 80 ?	2" 3" 2'	qt3 chl-ep (py) zone qt3-ep Dx zone	0 10 20 30 40 50 60 70 80 90	.5	} chl-Ser Partings	207	98%	87%					.05
217 CHLORITE	60-90 WK to Str.	220		70 5-70 ?	2½" 12" 2'	(poss. silicification) qt3 (chl) vug - with fols qt3-chl-ep (py) zone qt3	0 10 20 30 40 50 60 70 80 90	.5	} chl-Ser Partings.	217	100%	99%					.05
EPIDOTE ZONE (217-250) - minor dissem garret in high chl bands. - mainly a banded alt'n zone with some bx'n	80-90° Str.	230		80	8"	chl-garret-py-cp	0 10 20 30 40 50 60 70 80 90		} chl. Partings.	227	99%	85%					.10
	80-90° Str.	240		70-80° 80	1"	chl-ep / only wk dissem py-cp	0 10 20 30 40 50 60 70 80 90		} chl ± (carb) Plys.	237	95%	40%					.10
	80-90° str.	250					0 10 20 30 40 50 60 70 80 90		} chl.-Ser	247	75%	30%					

GRID ______

GIBRALTAR MINES LTD.

HOLE No. 83-03
SHEET No. 5 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	Graphic Log Footage	Veins ∠ to Core Axis	Width of Vein	Mineralization	Fracture Angle to Core Axis - Frequency -	Estimated % Pyrite	Bottom Depths / Leach Cap / Lim. Zone / Supergene / Remarks	Footage Blocks	Estimated Core Recovery %	RQD	Sample Number	% Cu	% Mo	Estimated Grade
CHLORITE - SERICITE - CARBONATE ZONE (250 - 278)	80-90° Str.	260	80x2, 80x2, 70; 80+ minor Cren	1/10 x2, 3"x2", 2"	chl-cp x2, chl-ser-py-cp x2, qtz-ser-cp; fine dissem py-cp along folia mainly unit	0–90	1.0	cle.	257	106%	77%				.25
at 262-276 ser+carb >> chl and cren. increases + decrease in dissem. py-cp	80-90° Str. to 264; 264-278 Cren. 0°-90°	270	80x2; 5-80 Cren; 30, 10-80, 80	1"x2, 2", 24", 2"	chl-py + ser-py; chl-rich bands; qtz-cp, qtz-carb, qtz-carb; wk dissem py-cp	0–90	.5	qtz flooded. ser-chl on partings or open.	267	100%	106%				.15
	278		30 x 3; 70	1"x3	qtz-carb x3; dissem py	0–90	.5	No Coatings	277	98%	78%				.10
278-300' Mainly Sauc. Alt'd	90° Str.	280	20	1"	qtz-chl-py										
MINE PHASE QUARTZ DIORITE - Coarse to Med. Grained, greyish to a bright	V.WK to Var.	290	5°, 5°, 15°+60°, 60, 20° x2, 50°, 80°	1/8, hle, 1/16, 1/8, 1/4 - 2", 1/4, 1/8	qtz carb-chl, carb-hem, qtz-carb-chl, qtz-carb-chl, qtz-... -py-cp, DK Alt'n - qtz-chl-py, qtz-carb-chl	0–90		Most fractures are clear - a few have chl.	287	97%	83%				.05
light green sauc. alt'n	V.WK to Var.	300	15°, 70°, 15, 40°, 30°, 10°, 70°	1/4, 1/8, 1, 1/2, 2, 1/2, 1/4	qtz-ep-pied-carb, qtz-carb, qtz-chl-ep-carb-(cp-py), qtz-chl-ep-(cp), qtz-chl-ep-carb-sphal-cp, qtz-chl-py-cp, qtz-chl-carb	0–90		Most fractures are clear - a few have chl. Sphal fairly abund. in vein.	297 / 300	100% / 93%	97%				.2
End of hole at 300'.															

M.R. Schaumberger
G.D. Bysouth

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 1 of 6

LOCATION GIBRALTAR WEST (N. Wall) | BEARING - | LATITUDE 48,915.25 N | CORE SIZE N.Q.W | LOGGED BY G.D.B, M.R.S.
DATE COLLARED March 25, 1983 | LENGTH 307 | DEPARTURE 43,475.22E | SCALE OF LOG 1" = 10' | DATE April 4, 1983
DATE COMPLETED March 27, 1983 | DIP -90 | ELEVATION 3,088.84 | REMARKS

BOTTOM DEPTHS: LEACH CAP 0 | LIM. ZONE 50 (weak) | SUPERGENE 0

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Blocks	GEOLOGICAL BRANCH ASSESSMENT REPORT	ASSAY RESULTS: Sample	Estimated Grade
Casing to 11'								0 10 20 30 40 50 60 70 80 90				11,577		
11' MINE PHASE QUARTZ DIORITE (11'-175') Saus. Alt'n with numerous dark bands: Avg comp.: 30% qtz, 15% chl., 50% Saus. Med.-Coarse grained. Some finer grn. mafic-rich inclusions (3 enclaves?)	45-55 Mod; 45-70 Mod; 50-60 Mod; 60 Mod	20; 30; 40; 50	15-20 x 3; 10; 60 x 3; 50 x 4; 50; 40; 50; 80; 50+55; 50; 20; 60; 45; 45		hlet ½ of ⅒; ⅒; ⅒ x 3; hlet x 4; ½; ⅛; ⅛; ⅒; ⅛+⅒; 1"; ⅒; 6"; ½; 1"	chl-lim x 3; chl; chl-lim (mal) x 3; lim-MnO₂ x 4; qtz-chl-ep; qtz-chl-; qtz-chl-py; qtz (chl); qtz-chl-py x 2; qtz-chl-lim zone; chl-ep-qtz; qtz-chl-ep zone; qtz-chl-ep; qtz-chl-py (ep)	0 10 20 30 40 50 60 70 80 90	<2.5; .5; .5;	chl, ser, lim, MnO₂ good fresh rx. @ surface.	11; 14; 17; 25; 35; 45	60; 55; 95; 100; 100	8; 70; 90; 80	.05; .05; .05; .05

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 2 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Footage	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	45-50 Mod		60		30 45 45 70 50	1/8 1/2 1/2 1/4 6"	qtz-chl-ep qtz-chl-ep qtz-chl-cp qtz qtz-chl-cp (vug) ((cc))	0 10 20 30 40 50 60 70 80 90	.5	carb. hem. lim large qtz vein cuts across foln.	55	100	93					.10
	50-60 Mod-Str.		70		10-20 x 3 15 90 45 50 50	hle x ? 1/10 2½" 8" 1/8 10"	hem x 3 qtz-chl-py qtz-chl-ser-cp dark zone + qtz-ser-cp veins qtz-chl-py dark zone + qtz-carb-chl-cp	0 10 20 30 40 50 60 70 80 90	.5	carb hem 1e	65	100	63					.20
	50-60 Mod		80		45 20 x 2 45 50 ?	1/4 1/10 x 2 1/10 x 1 14" 4'	qtz-chl-carb-cp hem-carb x 2 (+ pink stained core) qtz-chl-py x ? qtz-chl-carb-py-cp zone zone of broken + ground core - hem(lim) stains	0 10 20 30 40 50 60 70 80 90	.5	carb hem	75.5	80 45	23					.15
Fault Zone 75'-87'	60-70 Mod		90		5 ? 5-15 ? 5 x 2	7'	qq-bx-hem hem-qq x 2	0 10 20 30 40 50 60 70 80 90	<.5	carb hem ~4' core lost @ 80-87'	81 87	30	22					.10
	50-60 Mod-Str.		100		45 60 5 60 35 40 50 30+50	1/4 1" 3/4 1" 2" 1/10 6" hle-1/10 x 2	qtz (@ rt ∠'s to foln) qtz qtz with hem on "walls" qtz-chl-cp qtz-chl-ep-py-cp qtz-chl-py dark zone (cpy) qtz-chl-cp-py	0 10 20 30 40 50 60 70 80 90	.5		97	94	73					.15
	45-50 Mod		110		20 30 50 45 55 60 5	12" 2" 1/4 1" 6" 1" hle	dark zone + qtz-cp dark zone + qtz-chl-cp-py qtz-chl-cp qtz-chl-carb-cp qtz-chl-carb-cp qtz-chl-carb-cp hem	0 10 20 30 40 50 60 70 80 90	.5		107	100	75					.40

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 3 of 6

BOTTOM DEPTHS
LEACH CAP
LIM. ZONE
SUPERGENE
REMARKS

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	Footage Discr.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60 Mod	120		40 50 35 x 2 50		Y10 10" 3" 2" + 1 1"	chl-cp. dark zone + (qtz-py-cp) dark zone + qtz-py-cp qtz-chl-ep (cp, py) qtz-chl-ep (py)	0 11 10 1 20 30 40 IIII 50 II 60 IIIII 70 IIIIIIIIII 80 IIIIIIIIII 90	.5	117	98	60					.15
	30-45 60 70 Mod Str.	130		80 70 80 80 80 40 5 5		½ 2" ¼ 2" 2" 1 ½ 12"	chl-py qtz-chl-py (cp) qtz-chl-ep-py qtz-chl-cp qtz-chl-py-cp qtz-chl-cp-py qtz-cp dark zone + (disem py)	0 10 20 30 II 40 50 I 60 IIIII 70 IIIII 80 IIIIIIII 90	.5	127	98	85					.12
	60-80 Wk-Str.	140		80 90 20 45		12" 2" ¼ 12"	qtz-chl (ser) carb-py zone qtz-chl-(cp) hem-carb qtz-chl-cp (py)(cp) zone	0 IIIII 10 20 30 III 40 IIIIII 50 IIIIII 60 IIIIIIIIII 70 IIIIIII 80 IIIIIIII 90	1.0	135	100	48					.10
	45-70 Wk Mod	150		55+65 15 70+45 55 x 2 15+30 x 2		2" x 2 1/10 1/10 x 2 ¼ x 2 hlex 3	qtz-chl-ep (cp) py x 2 chl-cp qtz-chl-cp x 2 qtz-chl-carb-cp x 2 hem x 3	0 II 10 II 20 II 30 III 40 II 50 II 60 IIIIII 70 IIIIIIII 80 IIIII 90	.5	145	100	72					.15
	70-80 Wk-Mod	160		70 80 x 2 70		6" 2½" x 2 ½	qtz-chl-ep-py qtz-chl-ep-cp x 2 qtz-chl-ep-cp-py	0 10 20 30 I 40 III 50 I 60 IIIIII 70 IIIIII 80 IIIIIIIII 90	<.5	155.5	97 90	90					.10
	60-80 Wk-Str.	170		50 60 80 80 60		14" 12" 2" 2" 25"	qtz-chl-ep (py) zone dark zone + (qtz-carb-py-cp) qtz-chl-py qtz-(chl)(cp) qtz-chl-(py)(cp) zone	0 10 20 I 30 40 50 60 IIIII 70 IIIIII 80 IIIIIIII 90	1.0	166	95	83					.20

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 4 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
175 — DARK ALT'N ZONE (175-230') - grades to a chl-garnet alt'n and over ½ of the zone is med-fine grn. - a few narrow (1-3') zones of sauss. and chl-ep-bx.	80 WK-Mod		180	80	80 x 4 80 70 60-70 x 5 80 ? 60 40 70	½10 x 4 ½" 1" ½10 x 5 30" 1" ⅛ fine ½20 x 2	qt3-chl-py x 4 qt3-chl-py qt3-chl-cp qt3-chl-py x 5 dark zone + diss. py (cp) qt3-py-cp chl-cp chl-cp qt3-chl-garnet-cp-py	0 10 20 30 40 50 60 70 80 90	.5	chl-carb-qg chl (carb) (ser)	176.5	93	65					.15
- grades to a chl-garnet alt'n and over ½ of the zone is med-fine grn.	80-90 Mod		190		45 55 70 70°	½ ¼ ⅛ 2½"	chl-garnet-cp qt3-chl-garnet-cp qt3-py (cp) qt3-(chl)-mag-py-cp	0 10 20 30 40 50 60 70 80 90	1.0	chl-ser (carb)	187	90	80					.20
- a few narrow (1-3') zones of sauss. and chl-ep-bx.	80-90 Mod		200		70 65 45 x 2	1" 1" ½20 x 2	qt3-chl-cp qt3-chl-py chl-cp x 2	fine dissem. py (cp) along foln & scattered coarse blebs 0 10 20 30 40 50 60 70 80 90	1.0	carb chl (carb)	197	98	83					.20
	90 Mod-Str		210		50 ?	2" 36"	qt3-ser-py chl-ep-bx zone	0 10 20 30 40 50 60 70 80 90	1.0	chl-carb	207	100	80					12
	70-90 Mod-str		220		80 80 x 4 90 80 90 x 2	1" ½20 x 4 20" ¼ ½10 x 2	qt3-chl qt3-chl-ep-py x 4 chl-py-cp zone qt3-chl-py chl-pyx2	0 10 20 30 40 50 60 70 80 90	1.0	chl-carb chl (carb)	217	100	82					.15
Small steep fault?	90 WK-Mod		230		90 90 70 80 5 30 5	½ 10" 2" 7" 3'	chl-carb-cp chl-ep-bx chl-(carb-qt3) cp banded-chl-ep-qt3-py zone bx hem stained core	0 10 20 30 40 50 60 70 80 90	.5	carb hem chl-carb	227	98	54					.12

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 5 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Diesel.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
MINE PHASE Saus qtz very weak to 245' (ie, dk phase cut off not distinct!)	60-80 wk-Mod		240		20 x3 15+2	1/10 x3 hle x2	carb-hem x3 hem x2	0 10 20 30 40 50 60 70 80 90	<2.5	hem chl-carb	237	94	55					10
(230 - 275')	60-90 wk-Mod		250		60 5 80 70-80 40+30 50 5+15	30" hle 1/10 10" 1/2 + 1/10 1/2 1/2 x2	banded qtz-chl-cp zone hem qtz-chl-py qtz-chl-py-cp qg-hem x2 chl-cp carb-hem x2	0 10 20 30 40 50 60 70 80 90	.5	hem-qg carb	247	97	58					.15
Small fault (poss steep)	90 wk-Mod		260		70? 5+15+20 80 80 80 ?	2" hle x3 1/2 30" 8" 5'	chl-carb-cp hem x3 qtz-chl-carb-cp qtz-chl-cp (py) zone qtz-chl-ep zone ox-qg-hem	0 10 20 30 40 50 60 70 80 90	.5	carb-hem chl-carb chl-carb	253 256	80 99 40	66					.20
rx becoming sili - incr. ser-ca-i saus - wk	60-80 Mod		270		70 65 35 80 50	2" 8" 1/2 1/2 2"	chl-ep-carb-py-cp zone qtz-chl-ep-carb-py-cp zone qg-hem-carb carb-py (cp) chl-carb-cp	0 10 20 30 40 50 60 70 80 90	.5	hem-chl-carb	261 267	100	60					.15
275	60-90				30	hle	hem	0 10 20 30 40 50 60 70 80 90	2.5	chl-carb	277	90	45					.10
CARBONATE - SERICITE-CHLORITE	Mod-Str.		280		80	6"	qtz-chl-zone											
ALT'N PHASE (275 - 307') not quite a dark zone as weak saus is still present	90 Cren. Str		290		10-90 (Cren) 50 70 (mainly bx Cren)	24" 1/2 5'	qtz-chl-ser-carb-py-cp zone qtz-carb-py-cp qtz-ser-carb-chl-cp (py)	0 10 20 30 40 50 60 70 80 90	1.0	chl-ser-(carb)	287	99	68					.70

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-2
SHEET No. 6 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation, Alteration, Footage, Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Discr.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60-90 Mod	300	70 60 80 80 40	12" ½ 1" ½ 4"	q¹₃-ser-carb-cp q¹₃-ser-cp q¹₃-ser-cp cr-cp q¹₂-chl-ser	0: II 10: I 20: II 30: II 40: IIIII 50: 60: III 70: I 80: IIIIIII 90: IIIIIII	.5	- chl-carb .99 chl-carb.	297	99	96					.40
EOH 307	90 wk. Mod		20	2"	chl-carb (q¹₃)	0: II 10: 20: 30: III 40: III 50: 60: IIII 70: I 80: II 90: IIIII	.5	hem-carb chl-carb	307	99	87					.10
						0 10 20 30 40 50 60 70 80 90		M.R. Schaumbergen A.O. Bysouth								
						0 10 20 30 40 50 60 70 80 90										
						0 10 20 30 40 50 60 70 80 90										
						0 10 20 30 40 50 60 70 80 90										

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-01
SHEET No. 1 of 7

LOCATION GIB. WEST - North Wall
DATE COLLARED March 23, 1983
DATE COMPLETED March 25, 1983
BEARING _____
LENGTH 377'
DIP -90°
LATITUDE 49,075.95 N
DEPARTURE 43,253.36 E
ELEVATION 3,095.53'
CORE SIZE N.Q. Wireline
SCALE OF LOG 1" = 10'
REMARKS _____
LOGGED BY G.D.B., M.R.S.
DATE March 31, 1983

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Footage	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE; REMARKS	Footage Blocks	Estimated Core Recovery	GEOLOGICAL ASSESSMENT REPORT 11,577	ASSAY RESULTS: Sample Number	% Cu	% Mo	Estimated Grade
Cased to 32'							O.B.										
		32									32						
MINE PHASE QUARTZ DIORITE (32-228)	.40 Mod	40	1/1	5	1/8	qt3-chl-py-xlnD2		<.5	~5' core lost		37	40%	20%				.05
				20 x 2	1/20 x ~	qt3-chl (lim)											
Saus Altn hem staining to 49' - 25% qt3 to 49' then 30-35% as large bluish xtals. Saus is light green	40 Mod. Str	50		25-30	1'	qt3-chl-(py)(lim) zone		<.5	fracturing mainly along foln plates of shear zone - ~6-7' core lost		47	27%	7%				.05
	45 Mod Str.	60		40+30	1" + 1/2	qt3-chl-carb		<.5	~4' core lost		57	62%	10%				.05
				20	1/10	qt3-chl											
	45 Mod.	70		40	1/10	qt3-chl		<.5	~3' core lost fracture coatings were ag. hem. carb lim		67	58%	18%				.05
				15	1/n	qt2-chl											
				5 x 4	hle x 4	hem x 4											
				60	12"	qt3-chl-ep zone											

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-01
SHEET No. 2 of 7

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Widths of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE — REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	45-50 Str.	80			35 50 x 2 40 x 3 60 50 45 x 2	hle x 3 1/8 + 1/2 hle x 2 1/2 1/4 hle x 3	hem x 2 qtz-chl-hem x 2 hem x 4 ep qtz-cal-chl hem x 3	0 10 20 30 40 50 60 70 80 90	∠.5	hem-qq-chl + hem-carb coatings	77	88%	65					.05
	45-50 Str.	90				24"	qq-bx	0 10 20 30 40 50 60 70 80 90	∠.5	highly broken core ~ 4' core lost carb-hem-qq coatings	87	58%	7					.05
Poss. fault zone - steep fractures and numerous qz zones	50 Mod	100		? ? ?		1" 3" 2"	qq qq qtz-chl	0 10 20 30 40 50 60 70 80 90	∠.5	highly broken core qq-carb coatings	95	42% 73%	5					.05
	70 60 Mod.	110						0 10 20 30 40 50 60 70 80 90	∠.5	60-80° fract. have chl (qq) coatings	101 107	80%	30					.05
	70 Mod	120		5 30 ?	1/10 1/10 6'	qq qtz-chl-carb qq + bx (2' solid qq)	0 10 20 30 40 50 60 70 80 90	∠.5	highly broken core 114-122 qq-carb coatings	116	90% 50%	20					.05
Fault Zone 116-122	60 Wk-Mod	130		5 x 3 40 x 2 35	1/10 hle x 4 1/10 x 2 1/8	qq x 4 qq-cp-chl x 2 qtz-chl	0 10 20 30 40 50 60 70 80 90	∠.5	core qq coatings core qq coatings	122 127	70%	48					.05

GIBRALTAR MINES LTD.

GRID ______

ROCK TYPES & ALTERATION	∠ to Core Foliation	Graphic Log Footage	Vein ∠ to Core Axis	Width of Vein	Mineralization	Fracture Angle to Core Axis -Frequency-	Estimated % Pyrite	Bottom Depths (Leach Cap / Lim. Zone / Supergene) Remarks	Footage Blocks	Estimated Core Recovery %	RQD	Sample Number	% Cu	% Mo		Estimated Grade
	50-60 Wk-Mod	140	50 x 2 30 x 2 35 x 2 + 30	1/10 x 2 1/8 + 1/10 1/20 x 3	qtz-chl-cp x 2 qtz-chl-carb x 2 hem	30: 6; 40: 2; 60: 5; 70: 2; 80: 6	<.5%	[illegible]	137	100%	88%					.05
	70 Wk-Mod	150	70 x 3 70 x 2 60 x 3 70 x 2 70 30 x 2	1/20 x 3 1/8 + 1/10 1/10 x 3 1/20 x 2 1/4 hle x 2	ch. (hem) x 3 qtz-chl x 2 qtz-chl (py) x 3 chl x 2 qtz-chl (py) hem x 2	0: 2; 10: 3; 20: 2; 30: 5; 40: 3; 50: 2; 60: 4; 70: 10; 80: 12	<.5%	Chl-[illegible] Some fractures Some [illegible]	147	95%	45%					.05
	70-80 Wk	160	50 60 ? ? ?	2" 15" 2" 10" 3"	qtz-chl-cp zone qtz-chl-cp zone (+ pink spar) qz qtz-chl (py) zone qz + ox	0: 1; 30: 1; 40: 2; 60: 1; 70: 6; 80: 22	<.5%	[illegible]	157	98%	65%					.10
	70 Wk	170	70 80 90 45 60	3" 2" 8" 1/2 4"	qtz-ep-chl zone qtz-chl zone qtz-chl-carb ((cp)) zone chl-cp qtz-chl-carb-cp zone	30: 2; 40: 1; 50: 2; 60: 4; 70: 4; 80: 9	<.5%	[illegible]	163	80%	80%					.12
	80 Wk-Mod	180	60 45 60 x 3 70 80 45 70 ?	2" 2" 1/20 x 3 8" 2 1/2" 8" 5"	qtz-chl (cp) zone qtz-chl (py) zone chl (cp) x 3 qtz-chl (cp) zone qtz-chl-cp qtz-chl-py (cp) zone qtz-chl-cp-py zone	0: 1; 40: 2; 50: 3; 60: 3; 70: 8; 80: 19	<.5%	[illegible]	173	95%	65%					.20
	80 Wk	190	80 80 5 x 2 25 x 2	2" 28" hle x 2 1/10 x 2	chl qtz-ser-chl-cp zone hem x 2 qtz-chl-ep x 2	0: 7; 30: 2; 40: 1; 50: 5; 60: 9; 70: 4; 80: 21	<.5%	[illegible] Core [illegible] coating [illegible]	181 187	85% 70%	15%					.25

GRID

GIBRALTAR MINES LTD.

ROCK TYPES & ALTERATION	∠ to Core Foliation	Footage	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	Sample Number	% Cu	% Mo		Estimated Grade
[illegible] zone - do not have sharp boundaries [illegible] grade [illegible] into definite zones.	80 wk	200	70 70 80 80×4	6" 2" 2" 1/20"×2	qtz-chl-cp zone qtz-chl (cp)(py)-qq zone qtz-chl-(py)(cp) zone chl-cp	0 10 20 II 30 I 40 I 50 II 60 ++++ IIII 70 ++++ ++++ II 80 ++++ ++++ III 90	<.5	highly broken core Chl-carb-qq on fractures	197	65%	32%					.35
	80 wk	210	70 80 80 80 80 80 80×2-60	2" 5" 1" 3" 12" 4" 3"+2"×2	chl-cp(py) qtz-chl-(garnet)-py-cp zone chl-carb-cp qtz-chl-cp zone qtz-chl-(py)(cp) zone qtz-chl-carb-garnet-py-cp qtz-chl (py) zones ×2	0 10 20 30 40 I 50 60 I 70 ++++ II 80 ++++ I 90	1.0%	Chl-[illegible] on some fractures, most are open.	207	100%	100%					.30
	80 wk	220	80 80	2" 2"	chl-py qtz-chl (vug)	0 I 10 I 20 I 30 III 40 IIII 50 60 IIII 70 ++++ I 80 ++++ ++++ III 90	<.5	Chl <carb>-<qq> on some fractures; most are open.	217	100%	73%					.05
	ND + very wk 15° foln.	230	45	1"	chl-carb.	0 10 20 II 30 I 40 50 III 60 IIII 70 I 80 ++++ ++++ I 90 IIII	<.5	Chl on some fract; most are open	227	100%	84%					.05
DARK ALTERATION ZONE (228-288) Fault	80 with minor foln. & cren. str.	240	70-80 30° 80	6' 3' 1/2"	qtz-chl-ep-garnet (py)(cp) zone qq+bx (12" solid qq) chl-cp	0 IIII 10 I 20 II 30 I 40 50 60 ++++ I 70 ++++ ++++ II 80 ++++ ++++ ++++ ++++ III 90	1.0%		237	86%	40%					.20
This zone is mineralogically similiar to the smaller zones noted above - cp & py. lie along foln. planes and in massive veinlets - only the larger veinlets are noted.	80 minor fold & cren str	250	80	1"	chl-cp	0 ++++ 10 I 20 II 30 III 40 I 50 60 ++++ IIII 70 ++++ IIII 80 ++++ ++++ III 90 ++++ ++++ I	1.0%	[illegible] [illegible] qq	247	96%	40%					.25

Header fields also printed in the Bottom Depths box: LEACH CAP, LIM. ZONE, SUPERGENE (blank).

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 82-91
SHEET No. 5 of 7

BOTTOM DEPTHS: LEACH CAP | LIM. ZONE | SUPERGENE

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation, Alteration, Fracture, Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
DARK ALTERATION ZONE (228'-288') ∴ this zone contains chl-qtz-ser-carb-	70 + Cren Str.	260	70 x 3 5 ?	¼ + ¼₀ x 2 2"	cp py		<.5	chl < carb? in fractures.	257	92%	39%					.15
cp-garnet in varying concentrations - crenulation appears to interfere with sericite (incr ser-carb)	80 + Cren Str	270	45	½	99	Strong along fold planes	<.5	Chl-Carb?-Lgg? in fractures	267	90%	16%					.12
	80 + Cren Str.	280	??	12"	99		<.5	~ ½ of the core is in < 2" dia. frags. chl-ser-gg, carb? on fractures	277	95%	0%					.10
288	Complex Cren - mainly 30° Str.	290	45 30 20 45	8" ½ 1" ¼₀	qtz-cp (+ pulverized blk mineral) qtz-carb-cp qtz-carb-garnet-cp chl-py		10%	ser. on fract	287	75%	38%					.50
QUARTZ SERICITE PYRITE ZONE (288-304)	50-60 Str.	300	40 50 x 2 60+50 50 x 3 60-50 x 5 50 50 x 4 50+5<∠+45	¼₀ x 2 ¼ + ¾ ¼ x 2 ¼ x 2 ¼₀ - ¼ 2" ¼₀ x 4 ¼ + ⅛ + 2"	cp x 2 cp x 2 cp x 2 cp x 2 py x 5 qtz-py py x 4 carb-cp + gg x 2 + ser-cp	Strong diss-py.	3%	chl-ser on fract.	297 300	98% 92%	40%					.50
Fault Cor? 304			? x 3 50?	⅛ x 3 2"	cp x 3 qtz-cp			chl-ser-< carb on fract		60%	23%					.80
DARK ALTERATION ZONE (304-377') as above	complex prob steep 20°-40°	310	40 25 15 80	2" 3" ⅛ ⅛	qtz-ser-cp qtz-ser-cp ser-cp ser-cp		1.0%		307	70%						

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GIBRALTAR MINES LTD.

ROCK TYPES & ALTERATION	∠ to Core Foliation	Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	R Q D	Sample Number	% Cu	% Mo		Estimated Grade
DARK ALTERATION ZONE (304-377')	60-80		320		5 60 x2 5 70 60? 60?	3" 1/4 x2 1/2 1/4 3 8"	qq chl-py x2 qq carb-py qtz-ser-py qtz-ser-py-cp fine diss. py(cp)	0 IIIII I 10 II 20 IIII 30 IIIII I 40 I 50 II 60 IIIII IIIII II 70 IIIII III 80 IIIII II 90	1.0%	chl-ser, qq, carb	313 317	97%	20%					.20
	60? Mod		330		70? x3 50 60 80	1/10 x3 6" 2" 1/4	chl-cp x3 qtz-ser-py-cp zone (along fol. planes) qtz-ser-py-cp qtz-ser-py-cp	0 IIII 10 20 III 30 IIIII I 40 I 50 III 60 IIIII IIIII IIIII II 70 IIIII IIIII IIIII IIII 80 IIIII IIII 90	1.0%	qq-ser-(carb)	327	78%	4%					.25
	70 Mod-Str.		340		70 60 x3 20+40 70? 30? 70	1" 1/10 x3 1/4+1/10 1" 1" 24"	qtz-ser-carb-cp chl-py x3 qtz-carb-cp x2 qtz-carb-cp qq qtz-ser-py(cp) zone	0 10 II 20 II 30 I 40 II 50 I 60 IIIII IIIII III 70 IIIII IIIII IIIII 80 IIIII 90	1.0%	chl, ser, carb	337	83%	27%					.30
	70 Mod		350		70 x3 60 x2 80+45 80+60 70 60 50 x2 45?	1/10 x3 1/10 x2 1/10+1/8 1/4+1/8 hle-1/10 x5 1/4 1/10 x2 1/4	chl-py-cp x3 chl-py x2 chl-cp x2 chl-cp x2 chl-cp x5 py-cp py x2 cp Strong py(cp) dissem.	0 II 10 I 20 II 30 I 40 II 50 60 IIIII IIII 70 IIIII 80 IIII 90	4.0%	ser, chl.	347	75%	36%					.45
	70-80 Str.		360		5 80 70 80-70 x 10 45 45 45x2+80 80+70x2	1/2 1/2 2" 1/10-1/8 x 10 2" 6" 1/10+1/20+1/4 1/10-1/20 x3	qq qtz-carb-cp qtz-chl-cp-py chl-py(cp) x 10 qtz-ser-py-cp qtz-ser-py-cp cp x3 chl-cp x3	0 I 10 II 20 II 30 I 40 III 50 IIII 60 IIII 70 IIIII II 80 IIII 90	2.0%	ser, chl, (carb) (hem)	357	63%	42%					.45
	70-80 Str.		370		70 80 x5 70 x2 [illegible] [illegible] [illegible] [illegible]	1/2 1/10 x5 1/10 x2 1/8 x2 1/2 [illegible] [illegible]	qtz-carb-cp-py qtz-chl-py-cp x5 qtz-chl-py-cp x2 qtz-chl-py-cp x2 qtz (chl)-cp [illegible] [illegible]	0 10 20 30 40 50 60 70 [illegible] 80 [illegible] 90	3.0%		367	80%	98%					.40

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 83-01
SHEET No. 7 of 7

ROCK TYPES & ALTERATION			∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	GRAPHIC LOG: Fractures	GRAPHIC LOG: Structure	Veins ∠ to Core Axis	Width of Veins	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Direct.	Estimated Core Recovery %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
			70° 85 Alt.				50-70 x 7 70	⅛ x 7 6" ⅛ 50+ 100 ⅛ 3" ⅛ ⅛	Cp x 7 qtz-serp-py(Cp) zone Cp x 3 qtz-Cp-Cp Sp Chl-py	0 10 20 30 40 50 60 70 80 90	3.0%			100%	98%					.80
		E.O.H @ 377'			377								377								
										0 10 20 30 40 50 60 70 80 90		M.R. Schaumberger G.D. Bysouth								
										0 10 20 30 40 50 60 70 80 90										
										0 10 20 30 40 50 60 70 80 90										
										0 10 20 30 40 50 60 70 80 90										
										0 10 20 30 40 50 60 70 80 90										

41,500 E | 42,000 E | 42,500 E | 43,000 E | 43,500 E | 44,000 E | 44,500 E

50,000 N

49,500 N

49,000 N

48,500 N

G B
I FR

PAN 4

PAN 5

ZEPHYR 3

83-01
ZEPHYR 1
83-03

83-02

EST 6 FR

GIB 21 FR

PAN 1

ZEPHYR 2

ZEPHYR 4

N

LEGEND

DIAMOND DRILL SITE

Control: E.D.M. Survey

Scale: 1"=1,200

Feet 0 100 200 300

Meters 0 100 200 300 400

DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION

DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION

REFERENCE	No.	DWG. No.

SCALE	REFERENCE	No.	DWG. No.

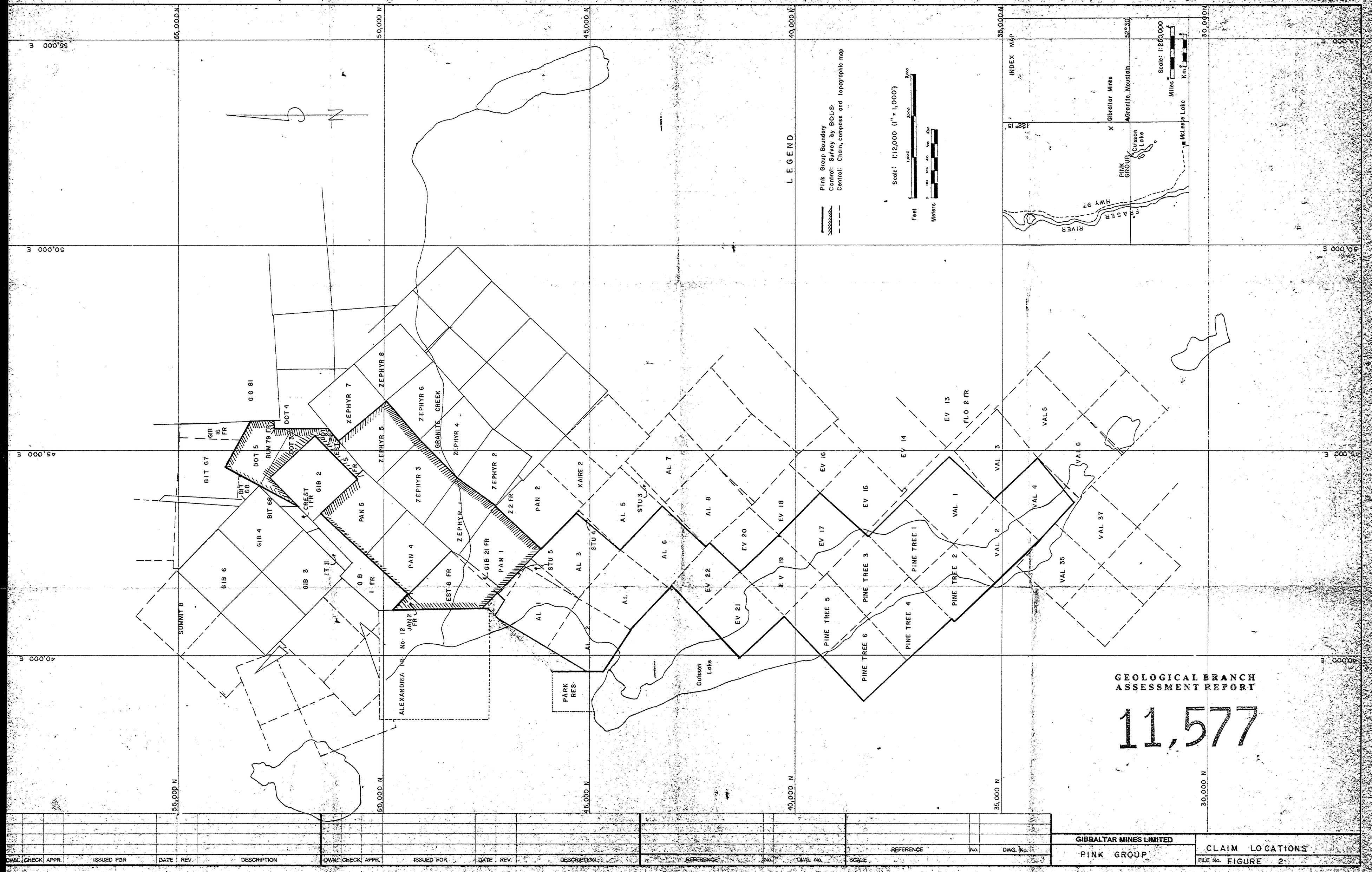
GIBRALTAR MINES LIMITED

PINK GROUP

DIAMOND DRILL HOLE LOCATIONS

FILE No. FIGURE 3.

NO - 211 - G.M.1



GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,577

DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION

DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION

REFERENCE	No.	DWG. No.
SCALE		

GIBRALTAR MINES LIMITED

PINK GROUP

CLAIM LOCATIONS

FILE No. FIGURE 2