DIAMOND DRILL REPORT

ON THE

YELLOW GROUP

Cariboo Mining Division

93 B/6 GW

(Latitude 52 31', Longitude 122 17')

OWNER AND OPERATOR

GIBRALTAR MINES LIMITED

McLEESE LAKE, B.C.

AUTHOR: M. R. Thon

Submitted: September 5, 1984

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1.0 INTRODUCTION

The Yellow Mineral Claim Group is part of the Gibraltar Mines Limited permanent property. It is accessed along a mine haul road and lies approximately 1.75 miles (2.8 Km.) from the plant site. The general location is shown in Figure 1.

Diamond drilling took place on this group in May of 1984 and a report on these results was submitted for assessment work on June 6, 1984. A second drill program was carried out in June of 1984 and the results of this program will be reported here. These holes serve to fill in the drill spacing between holes drilled by Canex in 1969 to 1971, and Gibraltar Mines Limited in 1979, 1982, and 1984. The drill locations are shown in Figure 3.

Drilling was carried out by J. & D. Diamond Drilling of 5425 Dallas Drive, Kamploops, B.C. during the period June 16 to June 23,1984. Four vertical N.Q. wireline diamond drill holes were completed for a total of 2,076 feet (632.75 m.). Core was not split. The whole core was sent to the assay lab for analysis. The ground core is stored at Gibraltar Mines plant site for a period of one year.

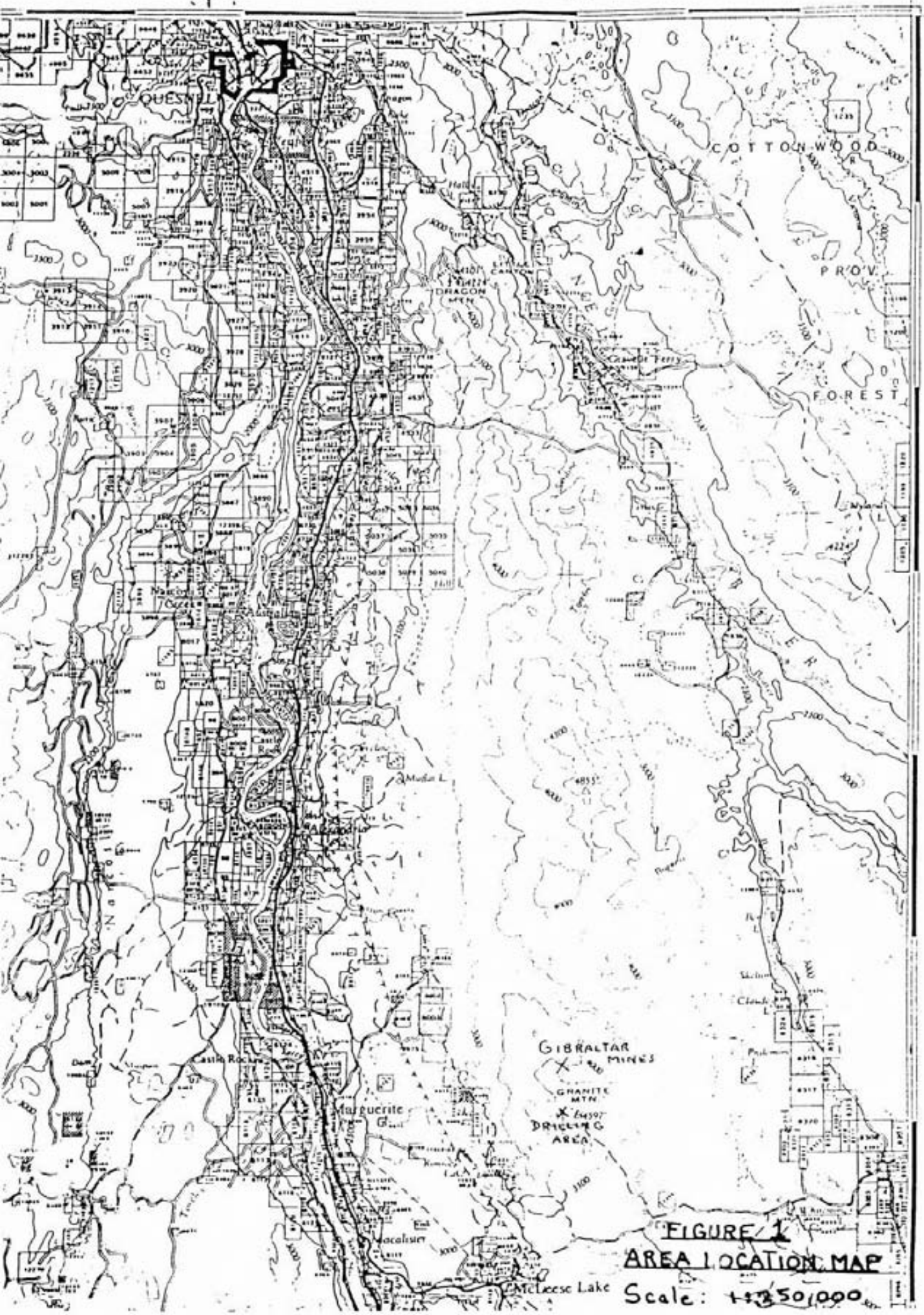

FIGURE 1
AREA LOCATION MAP

2.0 MINERAL CLAIMS

The Yellow Claim Group has mineral leases grouped with mineral claims. Particulars of each claim are listed below. Some of the claims are owned by Cuisson Lake Mines Limited but Gibraltar Mines Limited has full administrative rights over all of these claims. Mineral Claim locations are shown in Figure 2 (in pocket).

G I B R A L T A R M I N E S L I M I T E D
11-JUN-84

C L A I M G R O U P S

YELLOW GROUP MINERAL CLAIMS

NAME	RECORDED DDMMYY	RECORD NUMBER	UNITS	MINERAL LEASE	OPTIONED FROM
BUD #1	230574	71611	1		
BUD #2	230574	71591	1		
BUD #3	230574	71599	1		
BUD #4	230574	71608	1		
CAROL #4FR	120768	46104	1		CLM
CAROL #6FR	120768	46106	1		CLM
CAROL #7FR	120768	46107	1		CLM
EV # 1	230574	71594	1		
EV # 2	230574	71593	1		
EV # 3	090174	71588	1		
EV # 4	230574	71614	1		
FFE #13	160566	35766	1		CLM
FFE #14	160566	35767	1		CLM
FFE #15	160566	35768	1		CLM
FFE #16	160566	35769	1		CLM
FFE #17	160566	35770	1		CLM
FFE #19	160566	35772	1		CLM
FI #2 FR	230574	71601	1		
FI #4 FR	230574	71602	1		
FLO #1 FR	230574	71603	1		
GIB #15FR	030971	64566	1		
GIB 20FR	210672	66782	1		
GJ 20FR	090174	71323	1		CLM
HAS 2	161068	48026	1		CLM
HAS 12	161068	48031	1		CLM
HAS 13	161068	48032	1		CLM
HAS 14	161068	48033	1		CLM
HAS 15	161068	48034	1		CLM
HAS 16	161068	48035	1		CLM
HAS 17	161068	48036	1		CLM
HAS 18	161068	48037	1		CLM
HAS 19	161068	48038	1		CLM
HAS 20	161068	48039	1		CLM
HD # 5	051066	37784	1		CLM
HD # 6	051066	37785	1		CLM
HD # 7	051066	37786	1		CLM
HD # 8	051066	37787	1		CLM
HD #20	051066	37797	1		CLM
SAP #2 FR	030971	64568	1		CLM
SAP #3 FR	030971	64569	1		CLM
SAP #5 FR	210672	66783	1		CLM
VE 21	280469	50693	1		CLM
VE 22	280469	50694	1		CLM
ZIP 1FR	120276	00138	1		
EST NO3 FR	200571	62401	1	3604 M42	
LYNNE #3	130766	36699	1	3604 M42	
RUM #80 FR	031270	61406	1	3604 M42	
VE NO 1	140266	34947	1	3604 M42	
VE NO 2	140266	34948	1	3604 M42	
VE NO 3	140266	34949	1	3604 M42	

C L A I M G R O U P S

YELLOW GROUP MINERAL CLAIMS

NAME	RECORDED DDMMYY	RECORD NUMBER	UNITS	MINERAL LEASE	OPTIONED FROM
VE NO 5	140266	34951	1	3604 M42	
VE NO 7	140266	34953	1	3604 M42	
VE NO10	140266	34955	1	3712 M50	
VE NO 4	140266	34950	1	3713 M51	
VE NO 6	140266	34952	1	3713 M51	
VE NO 8	140266	34954	1	3713 M51	
HD #18 FR	051066	37795	1	4139 M58	CLM
HD #19	051066	37796	1	4139 M58	CLM
LINDA #1	211169	55049	1	4139 M58	CLM
LINDA #2	211169	55050	1	4139 M58	CLM
LINDA #3	211169	55051	1	4139 M58	CLM
LINDA #4	211169	55052	1	4139 M58	CLM
SAP #4 FR	030971	64570	1	4139 M58	CLM
VE NO15	140266	34961	1	4142 M61	
VE NO16	140266	34962	1	4142 M61	
VE NO17	140266	34963	1	4142 M61	
VE NO18	140266	34964	1	4142 M61	
VE NO19	140266	34965	1	4142 M61	
VE NO20	140266	34966	1	4142 M61	
HAS 4	161068	48028	1	4143 M59	CLM
HAS 6	161068	48029	1	4143 M59	CLM
SAP #1 FR	030971	64567	1	4146 M60	CLM
		TOTAL UNITS	72		TOTAL 8

3.0 DRILL PROGRAM

3.1 OBJECTIVE.

Drill results of the May 1984 program confirmed the faulted nature of the Granite Lake orebody showing that ore is cut-off abruptly along strike by numerous faults. This program was designed to test the projectability of ore found by previous drilling within the various fault blocks.

3.2 RESULTS.

The drill hole locations are shown in Figure 3. The locations were surveyed with an C.D.M. AGA survey instrument. Drill logs are included in the pocket of this report. All copper values reported here and in the logs are for total copper. All molybdenum reported is MoS .

All holes intersected a typical "Mine Phase Quartz Diorite." This is a medium grained rock comprised of about 30% dark grey quartz, 20% green chloritized mafics, and 50% light green saussuritized feldspar. "Dark Alteration Zones" mentioned in the drill logs are zones of further alteration in which the epidote content of the saussurite has been re-mobilized out of the dark zones to form clots and veins of epidote near the borders of the dark zones. The feldspar in these dark zones is a grey color and there is often a higher concentration of chlorite and sericite associated with these zones. These dark alteration zones were encountered in all of the drill holes in this drill program along with narrow intersections of quartz-chlorite-sericite shear zones. A "Leucocratic Phase" was also intersected in places. This is a high quartz, low chlorite rock sometimes showing a seriate texture.

Hole 84-16 was drilled south of the Granite Lake pit near the eastern edge of the fault block. Overburden was sixty-five feet deep but no leach cap, oxide or supergene were intersected. An ore zone was encountered from 120 feet to 240 feet to give 120 feet of 0.45% copper and 0.006% MoS . A small fault was intersected at 381 feet and drilling water was lost. The hole was abandoned at 393 feet.

Hole 84-17 was drilled on the western side of the same fault block south of the pit. The bounding fault of this zone was intersected at 129 to 165 feet and a weak ore zone started below this. Chalcocite was present in the fault zone and is believed to have been channeled down the fault and is not a true supergene blanket. There is evidence for more faulting deeper in the hole with soft gouge, broken core. RQD's were very low in places. The ore zone extends from 180 feet to 320 feet for 140 feet of 0.32% copper and 0.011% MoS . Rods and equipment were lost down the hole.

Hole 84-18 also intersected the major fault on the western edge of the fault block. This fault is striking 030 degrees and dipping 30 degrees to the northwest. Ore is found only beneath this fault. In this hole a weak ore zone was intersected from 130 feet to 230 feet for 100 feet of 0.23% copper, 0.013% MoS . A second fault was intersected at 185 feet to 212 feet. This is thought to be a northerly trending fault dipping at 55 degrees to the west. The recoveries and RQD's were very low throughout most of the hole. The hole was lost at 235 feet due to loss of drill water. Some equipment was lost down the hole.

Hole 84-19 was drilled into the fault that forms the eastern boundary of this block. This hole was abandoned at 182 feet. Grades intersected in this hole should not be projected into the ore zone within the fault block as they represent a northerly trending low grade zone associated with the fault. The fault is believed to strike due north and be virtually vertical.

Hole 84-20 was also drilled down a fault zone, this one in the center of the "fault block". This fault also strikes northerly and dips steeply to the west. It was known to exist in this "block" but because it does not appear to cause a major ore off-set, this southern area is still thought of as one major block between the fault on the west at 030/30 degrees NW and the one intersected by 84-19 striking 000 degrees, dipping 90 degrees. Holes 84-19 and 84-20 were moved from the proposed locations in the field due to access problems. Unfortunately these moves into fault systems made the reliability of assays in these holes very low. Recoveries in 84-20 were very low and RQD's average less than 2% for the entire hole. This hole was abandoned at 183 feet.

Holes 84-21, 84-22, and 84-23 were drilled on the north-eastern edge of the pit. This area too is badly faulted with the two major bounding faults being a second 000/90 degree fault on the western edge and a 004/58 W fault on the eastern boundary. It was also thought that cross-structures existed between these two faults forming wedges. These three holes give a bit more evidence for a fault striking approximately 355 degrees dipping 61 degrees to the west within the block.

Hole 84-21 was drilled to a full proposed depth of 300 feet despite bad ground. Recoveries were poor and RQD's were low. No leach cap was intersected but oxide ranged from the top of the hole to 125 feet. A weak supergene zone continued down to 150 feet. The entire hole had good copper mineralization averaging 0.34% copper over 260 feet. MoS averaged 0.013% over the hole. A fault zone was intersected at 244 feet to 252 feet.

Hole 84-22 was abandoned at 140 feet in badly broken ground though no major gouge zones were intersected. A weak limonite zone extended down to 70 feet and supergene continued to the bottom of the hole. No strong consistent ore zones were intersected. An average grade of 0.20% copper, 0.005% MoS was intersected between 20 feet and 110 feet.

Hole 84-23 was drilled near the eastern edge of the "fault block". A limonite zone was present to 38 feet and a supergene zone continued down to 198 feet. An ore zone 56 feet thick, averaging 0.31% copper and 0.012% MoS , was intersected from 240 feet to the bottom of the hole. A few small faults were intersected. The hole was drilled to 296 feet.

3.3. INTERPRETATION.

This drill program confirmed many of the faults proposed in this area. It has demonstrated that care must be taken with ore projections to ensure that ore is not placed across a fault which, in fact, cuts off the ore. A good understanding of the structure is essential.

4.0 STATEMENT OF EXPENDITURES

June 1984 Diamond Drilling, Yellow Group

(a) Drilling costs

i) Direct footage charges

84-16	393'	@ $13.50/ft.	$5305.50
84-17	347'	@ $13.50/ft.	$4684.50
84-18	235'	@ $13.50/ft.	$3172.50
84-19	182	@ $13.50/ft.	$2457.00
84-20	183	@ $13.50/ft.	$2470.50
84-21	300	@ $13.50/ft.	$4050.00
84-22	140	@ $13.50/ft.	$1890.00
84-23	296	@ $13.50/ft.	$3996.00

			$28026.00

ii) Equipment and Materials Lost

84-17	$4135.58	
84-18	$ 603.48	

	$4739.06	
		$32,815.06

(b) Vehicle

4x4 1980 Suburban, May 3, 5-12
9 days @ $20/day $ 180.00

(c) Assay Costs

104 Cu - MoS2 assays @ 4.40/assay $ 457.60

(d) Supplies

Core boxes,
104 boxes @ $6/box = $624.00
Tags, bags, etc. = 62.40

$686.40 $ 686.40

(e) Personnel Costs

(1) Core Logging and Supervision
G. Sysouth
June 29 8hrs.
July 2-5 28hrs.

36hrs. @ $31.55 $1135.80

(2) Core Logging, Interpretation, Sample Prep.
*M. R. Thon

June 22-26	20hrs.		
July 5-10	16hrs.		
July 11-13	20hrs.		
Sept 3	8hrs.		
	64hrs.	@ $22.02	$1409.28

(3) Field Work and Sample Preparation
E. Oliver

June 5-11	20hrs.		
June 25-27	20hrs.		
	40hrs.	@ $19.64	$ 785.60

(4) Field Work
G. E. Barker

June 15	4hrs.		
June 18-22	12hrs.		
	16hrs.	@ $21.43	$ 342.88

	$3,673.56	3,673.56
TOTAL DRILLING COST		$37,812.62

*Married name of M. R. Schaumberger

5.0 CONCLUSIONS

Because of the faulted nature of the orebody it is necessary to have relatively close-spaced drilling to test for the continuity of the ore projections. It is recommended that future drill programs decrease the drill spacing to about 200' x 200'. It is also recommended that ore projections be restricted by fault boundaries where these are thought to exist.

SUBMITTED BY:

GIBRALTAR MINES LIMITED

Madeline R. Thon

Madeline R. Thon
Mine Exploration Geologist

ms

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Garry J. 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 J. Bysouth

Garry J. Bysouth
Senior Geologist

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Madeline R. Thon, 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 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 logging of the core and the assessment of the results of this drill program.

Madeline R. Thon

Madeline R. Thon

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

Wt. Q.D.....white Quartz Diorite
= Leucocratic Phase

RQD.....Rock Quality
Determination

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-16
SHEET No. 1 of 6

LOCATION S. of Granite Lake Pit	BEARING 0.0°	LATITUDE 45118.19N	CORE SIZE NQ Wireline
DATE COLLARED June 16, 1984	LENGTH 373'	DEPARTURE 59,009.55E	SCALE OF LOG 1" =
DATE COMPLETED June 17, 1984	DIP -90°	ELEVATION 3938.04'	REMARKS Hole lost at 302' due to loss of drilling water - in fracture zone (or in a fault). Poor rec. LOST RGD

LOGGED BY M.R.S.
DATE June 22, 1984

BOTTOM DEPTHS	
LEACH CAP	—
LIM. ZONE	—
SUPERGENE	—

ROCK TYPES & ALTERATION			∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	Footage	Strength	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	REMARKS	Footage Diesel	Estimated Core Recovery %	R.Q.D.	ASSAY RESULTS Sample Number	% Cu	% Mo		Estimated Grade
		Cased to 61' O.B. to 65'																		
				61' 65'					Geological, no drill				61 64½		65					
		Mine Phase Quartz Diorite	60° Mod.		70	70° 30 50 40-60	½ ½ ½ ½	qtz-ep qtz-ep qtz-ch hem-carb		.2%		Carb. common		9%	84%	99301	.03 <.01 ox	.008		.01%
		30% qtz, 20% Chl. 50% Fp 65-93' Suss Alt'n Q.D. (Suss is a zone other than normal) Zones of Dark	60 Mod.		70	60×2 70 70 70 10° 70° 75°	1/16 1/8 1/4 1/2	qtz-chl-py ×3 qtz-carb hem-carb ×2 qtz-chl-carb-py qtz-carb qtz-chl-carb-sulphs		.8%		Suss Alt'n QD Dark Zones Leucocratic Suss Stringers	74	80%	23%	99302	.05 <.01 ox	.009	.09 3560	.13%
		Chl.-rich Alt'n	70° v. wk.		90	30 20×2 60 60×2 45° 80° 60×2	1/2 1/4 1/2×2 3/4 1/20 1/20×2	qtz-chl-carb qtz-chl-carb-py×2 qtz-chl-carb-nosulphs-Lpy qtz-chl-carb-(ep) qtz-carb-hem qtz-chl-carb-py×2		.5%			82 94	48% 85%	49%	99303	.02 <.01 ox	.006		.03%
		35-107 A Dark Alt'n Zone approaching a Qtz-Chl-Ser Shear in places.	70° wk. Mod. 60° Mod to Str.		100	70 70×2 45° 10° 60° 35°	1/16 1/4×2 1/16 1/4 1/16	qtz-chl-py-cp qtz-chl-py×2 qtz-chl-py qtz-chl-carb qtz-chl-ser-carb shear zone		.7%			94 100	43%	36%	99304	.09 <.01 ox	.009		.09%

GRID ____ GIBRALTAR MINES LTD. HOLE No. 89-16 SHEET No. 2 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	Graphic Log Footage	Veins ∠ to Core Axis	Width of Vein	Mineralization	Estimated % Pyrite	Remarks	Footage Blocks	Estimated Core Recovery %	R.Q.D.	Sample Number	% Cu	% Mo		Calculated Grade
107 – 119 Leucocratic Phase	60° Str.	110	60° 7. 1	7" 1 1	Qtz-chl-ser Shear Zone w/carb. (mod) py Some py-cp on breaks	.3%	v. Poor Rec. Badly broken core Some grvg. Driller's Comment "Large Fault"	107	14%	5%	99305	.05 <.01 ox	.004		.09% ?
	70° "5" wk ~ mod	120	60° 70x2 70 75x2 80 70x2 80 70°	hl 1/10 x2 1/4 hl x2 1/4 hl x2 1/8 hl	qtz-ser-chl-py qtz-chl-py x2 qtz-chl-(carb)-py-(mo?) qtz-chl-ser-cp x2 qtz-ser-cp qtz-chl-cp qtz-chl-cp qtz-ser-py	1%	Poor Rec. Badly broken Core	117	18%	0%	99306	.12 <.01 ox	.006		.23%
119 – 125 OK Alt" 125 – 155 Saus. Alt'd Q.D.	70° wk ~ mod	130	70° 80°		qtz-ser-chl-py qtz-ser-chl-cp Shear Zone qtz-chl-carb-cp qtz-chl-cp qtz-chl-py [illegible] qtz-chl-carb-cp-mag. qtz-chl-cp qtz-chl-carb-cp	.7%	Badly Broken Core.	124½ 129	60% 44%	9%	99307	.49 <.01 ox	.008	.24 305	.4%
v. Cp Rich [illegible] Epidote OK Lin.	~70° WK	140	60x2 70x2 50° 50x3	1/4 + 1/20 1/10 x2 1/16 1/6 1/4 x3	qtz-chl-cp x2 qtz-chl-carb-cp x2 qtz-chl-carb-py-cp qtz-chl-(cp)-mag qtz-chl-ser-(carb)-cp-py carb qtz-chl-cp qtz-chl-cp-[illegible]	.5%	Badly Broken Core	137	40%	10%	99308	.59 <.01 ox	.004		.33%
	70° ~ WK	150			qtz-chl-cp carb-hem carb py qtz-chl-carb-cp [illegible] qtz-chl-carb-cp-py	.7%	Badly Broken Core	147	37%	6%	99309	.93 <.01 ox	.006		.29%
155 – 1?? Mic. Dior Q.D. – [illegible] Same [illegible] Epidote [illegible] more altered – Carb common	WK	160			[illegible] qtz-chl-cp brecciated core [illegible] Extremely [illegible] zone of bleaching & healed shear zone	1%	Badly Broken Core	157	33% 18%	7%	99310	.75 <.01 ox	.012		.27%

GRID ______

GIBRALTAR MINES LTD.

HOLE No. 84-16
SHEET No. 3 of 6

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	Corrected Core Recovery %	R.Q.D.	Sample Number	% Cu	% Mo		Calculated Grade
167 - 176' Seriate [illegible]	60 Mod	170	90 x 2 60 x 2 30° [illegible] 45 x 4 80° 60 x 10	1/4 x 2 1/16 x 2 1/20 1/4 1/20 x 9 1/4 1/32 x 2	qtz-chl-carb-cp x 2 qtz-chl-carb-cp x 2 qtz-chl-py-cp? qtz-carb-cp-(moly)? qtz-ser-chl-cp x 4 gg qtz-chl-py x 2		.7%		162 166	45%	10%	99311	.50 <.01 OX	.014	.55 5270	.23%
Leuc. Zones inter-layered w/ mak Dk. Alt'n Zone ?or SEGREGATED RED ?? 176 - 189 Same AH'd QD	WD 60° Mod.	180	50° 20° 70° 5° 86 x 2 55° 60 x 4 60	1/8 1/16 1/16 1/4 1/8 x 2 1/30 1/8 + 1/32 x 8 1/8	qtz-chl-carb-cp-cp? hem-carb qtz-chl-py qtz-chl-carb-cp-cp qtz-carb-cp x 2 qtz-chl-cp qtz-chl-py x 4 qtz-chl-py-cp		1%		176	49%	21%	99312	.49 <.01 OX	.004		.28%
184-189 A much finer grained Same AH'd "Diorite"?? or Granite Breccia?? [illegible] Fault Gouge 189 - 225	60 70 WK 60 Mod	190	60° 60° 5° 70 60 x 2 70 60	1 1/20 1/20 1/8 1/2 x 2 2" 2"	qtz-chl-(py?)-cp? qtz-chl-cp-cp? qtz-chl-cp qtz-chl-cp-cp-cpy?-(mo) qtz-chl-(py) cp/py Zone of qtz-ser-chl-cp-py Fault gg-broken core-cp-py? hem-carb		1%		185	70%	23%	99313	.49 <.01 OX	.006		.33%
Same AH'd QD.	70 WK	200	70°/30° [illegible] 80° x 2 [illegible] [illegible] 30 20° [illegible]	1/16 x 2 1/4 1/2 x 1/4 1/8 1/8 1/8 1 1/16	hem-carb x 2 qtz-ser-chl-py qtz-chl-ser-py-cp? x 2 carb-hem? carb-hem-py qtz-carb-chl-py-cp? qtz-chl-carb-cp-py-cp? qtz-chl-carb-cp		1½%		195	70% 87%	25%	99314	.17 <.01 OX	.009		.19%
	80° WK	210	80° [illegible] 40° x 30 50 x 2 30 x 2 75	1/8 1/8 1/16 x 2 1/16 x 2 1/4 x 2 1/2	qtz-chl-carb-hem-py-cp qtz-chl-py-cp qtz-chl-carb-cp x 2 qtz-chl-cp-py qtz-ser-chl-cp-carb qtz-ser-chl-py		1%		203	75%	47%	99315	.18	.005		.19%
	WK	220	[illegible] 30° x 2 60° 10°	[illegible] 1/4 x 2 1/10 1/16	qtz-chl-py-cp [illegible] qtz-chl-cp x 2 qtz-ser-chl-py-cp qtz-chl-carb-[illegible]-py		1%		211 217 220	75% 60%	38%	99316	.14	.009	5725	.17%

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-16
SHEET No. 4 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Alteration Intensity	Footage	Sulphides	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 Drilled	Core Recovery %	R.Q.D.	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
225 - 250' Dk. Alt'd. No Sulf. left but no incr. in chl.	70° WK.	230			30° x2 20° 10° 30° x2 60 30° 20° 60° 5°	1/4 x2 1/4 1/2 1/8 + 1/4 3/4 1/16 1/4 1/4 1	qtz-chl-py-cp x2 qtz-ep-chl-py-cp qtz-sericite-carb-chl-ep-py qtz-chl-ser-py-cp-carb x2 qtz-ser-carb-epp-chl-py-cp qtz-chl-ep-carb-gg-py-cp qtz-ser-carb-cp-py-mo qtz-ser-py-cp qtz-ser-carb-chl-cp	0 10 20 30 40 50 60 70 80 90	12%		227	60%	20%	99317	1.05	.026		.34%
	RD.	240			60° 5° x2 10 20° 30 50° 20°	1 1/2 x3 1/16 1 1/32 1/4 1/16	qtz-chl-ser-cp-carb gg carb gg qtz-carb-chl-py-cp qtz-chl-carb-carb gg hem qtz-chl-carb-py qtz-chl-carb-py qtz-chl-carb-py qtz-carb-chl-py-cp-carb gg	0 10 20 30 40 50 60 70 80 90	2%	Rusty hematite core. 225 - 237' Pink hem. stain Abund. carb-gg	232½	47% 58%	14%	99318	.25	.004		.17%
	RD.	250			30° 5° 60° 40 45° 30° x2 15°	1/16 1 1/16 1/8 1/8 1/8 x2 1/10	qtz-chl-carb-py-ccp qtz-chl-carb-hem-gg qtz-chl-ser-py-cp qtz-chl-carb-cp py qtz-chl-ser-carb-py qtz-chl-py x2 qtz-chl-carb-chl	0 10 20 30 40 50 60 70 80 90	1.3%	Pink hem stain Abund. carb-gg.	241 246	44%	13%	99319	.19	.006		.11%
250 - 268' Sans. Alt'd Q.D.	70° WK	260			45° 30 5 x2 55 x2 5° x2 80° 60°	1/20 1/16 1/16 x2 1/8 x2 1/16 x2 1/8 1/20	qtz-carb-py-chl carb-chl-hem gg qtz-chl-carb-ep-py-cp x2 qtz-chl-carb-ep-py x2 carb-hem x2 qtz-chl-carb-py qtz-chl-ep-carb-hem-py	0 10 20 30 40 50 60 70 80 90	2%		256	68%	46%	99320	.07	.002	35 3680	.07%
268 - 275	RD	270			80 45 K 5° 60 60 60°	1/16 1/8 1/20 1/20 1/4 1/4 1/4	qtz-chl-ep-carb-hem-py qtz-chl-carb-py qtz-chl-ser-carb-py qtz-chl-ep-py-carb-hem qtz-chl-py-ccp chl-carb-hem gg qtz-chl-carb-cp	0 10 20 30 40 50 60 70 80 90	17%		265	62	18%	99321	.13	.005		.08%
275 - 280 Sans. alt'd. QD. Incr in qtz. approach. SEIAB test.	RD	280			5° x3 25° x2 10° 30° 30 30 2° 30 x4 30 x2	1/16 x3 1/4 x2 1/2 1/4 1/4 1/4 1/4 x4 1/4 x2	carb-hem x2 qtz-chl-carb-cp x2 qtz-chl-ser qtz-py-cp-carb-mo qtz-chl-cp-mo qtz-chl-ep-py-cp x4 qtz-chl-py x2	0 10 20 30 40 50 60 70 80 90	1.4%		275	68 56%	30%	99322	.43	.007		.29%

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-16
SHEET No. 5 of 6

ROCK TYPES & ALTERATION	∠ to Core Fracture	GRAPHIC LOG Fracture Alteration	Footage	Sketch	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 Drilled	Estimated Core Recovery %	P.O.D.	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
280-301' Alt'd QD. Qtz & qz. veins w/ ep. blebs & stringers into jn. & fracture rock & into zones of seams alt'd QD	N.D.	290		5°×2		1/8	qtz-ser-py-chl		2%		283 / 287	78%	38%	99323	.12	.004		.12%
*Serialite Alt'd QD - incr. in qtz. veins & fracs	N.D.	300					qtz-chl-ser-py		2%		293	73% / 69%	28%	99324	.12	.002		.15%
301-324 Sericite Alt'd QD - Ep. in blebs & stringers. Few narrow zones of DK Alt'd + leucocratic. Fracs 309-310 Sericite	60° cut to N.D.	310		45°×5		1/20	qtz-chl-ser-py×5		2%	Good sericite w/ qtz veins	303 / 308	76%	46%	99325	.09	.002	.19 .035	.07%
Tension fracs.	60° wk.	320		45×3		1/20	qtz-chl-ep×3		1%		317	80%	75%	99326	.11	.002		.18%
320-341 DK Alt'd QD - Few tension breaks w/ ep. seams alt'd - mostly gray qtz & ep. stringers	N.D.	330		60°		1/4	qtz-chl-carb-ep		1%		325	60%	30%	99327	.21	.016		.16%
The alt'd QD is darker w/ in places. 375-376 qtz-chl-ser carb. Shear Zone	N.D.	370		30°		1/2	qtz-chl-carb-py-ep		.7%		335	64% / 78%	62%	99328	.31	.020		.30%

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 89-16
SHEET No. 6 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: 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 Drilled	Estimated Core Recovery %	P.O.D.	ASSAY RESULTS: Sample number	% Cu	% Mo		Estimated Grade
241-349' Sons AlO QD Nil [illegible]	ND 45°	250		85° x2 75° 80° 40° 30° 20° 30° 20°	1/4 x2 1/20 1/8 1/4 1/20 1/20 1/16	qtz-ch-ca-b-py-cp x2 qtz-ch-carb-bo py qtz-ser-chl-carb-py cpy-mo-cpy qtz-chl-carb-py-cp qtz-ch-py qtz-chl-py qtz-chl-carb-bom		1.2%		355		70%	99329	.12	.030	.18 3590	.25%
	ND	260		50° 30 50 x2 20 x2 30° 50° x2	1/8 1/16 1/16 x2 1/16 1/20 1/16 x2 1/20	carb-cp qtz-chl-py-cp carb-cp qtz-chl-carb-py x2 qtz-chl-carb-py x2 qtz-chl-carb-cp-py qtz-chl-carb-py x2 qtz-chl-carb-cp-cp		1.5%		365	78%	23%	99330	.10	.006		.10%
	ND	270		5° 40° 45° 30 40° 5° x2	1/8 1/8 1/6	carb-cp qtz-chl-py-cp qtz-chl-carb-py-cp qtz-carb-cp chl qtz-chl-ca-carb-py qtz-chl-carb-py x2		1%		375	75% 22%	16%	99331	.09	.004		.16%
369-380' DK alt Zone?? - [illegible]	ND	380		20 5° 45° x30 30 5° x2 45°	1/20 1/4 1/20 x2 1/4 1/20 x2 1/20	qtz-chl-carb-py qtz-chl-carb-py x2 qtz-chl-carb-py-cp qtz-chl-py x2 qtz-chl-ca-py		1%		377	27% 42%	4%	99332	.08	.008		.07%
380.5-383' Fault Zone ?? 383-393' Mainly Sons AlO QD (Mine Phase) w/ zones of dk alt w/ cp stringers		390		60 60° 70 30 45° 20 x60	1/2 1/4 1/2 1/20 2 1/8 x2	qtz-chl-py-cp-mo-mag qtz-chl-carb-py-cp qtz-chl-py-cp qtz-chl-py-cp		1%	"No Return" → 392		23% 65%	25%	99333	.09	.009	.9 .69%	.17%
		393	393			qtz-chl-carb-py-cp x3		1%	"Dry H.L." → 393								-10%
EOH @ 393																	

M.R. Shaw

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-17
SHEET No. 1 of 6

LOCATION: GRANITE LAKE | BEARING: — | LATITUDE: 45,252.32 N | CORE SIZE: N.Q.W. | LOGGED BY: G.D.B.
DATE COLLARED: June 17, 1984 | LENGTH: 347' | DEPARTURE: 53,431.49 E | SCALE OF LOG: 1" = 10' | DATE: June 29, 1984
DATE COMPLETED: June 18, 1984 | DIP: -90° | ELEVATION: 3972.33' | REMARKS:

BOTTOM DEPTHS: LEACH CAP —; LIM. ZONE —; SUPERGENE *150; 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 Drilled	Estimated Core Recovery %	R.Q.D.	Sample Number	% Cu	% Mo		Estimated Grade
Casing To 20'			20							20'						BPSD	
MINE PHASE QUARTZ DIORITE (20' -) - 45% sous qtz	70-80 Mod		30		80	3" 1/4"	Erratic Core chl-ep zone		<.5	25	80	17	99401	.08 <.01 ox	.008		.25
- 20% qtz - 20% chl - lower qtz and higher mafic, flow banded	70 Mod		40		60 60+2 30 30	10" 1/4+2 1/2 1"	chl-ep-(py) zone qtz+2 qtz qtz		<.5	35 37	65 100	37	99402	.02 <.01 ox	.004		.05
- med grn - sous alt'n phase	60 Mod		50		30-10+2 30+2	1/4+2 1/4+1/4	qtz-chl+2 qtz+2		<.5	47	95	50	99403	.06 <.01 ox	.006		.05
—	60		60		60 70 80 70	1/4 1/4 3" 1/4"	qtz-pyd qtz — qtz-chl(avg) chl (py) zone		<.5	57	95 90	47	99404	.01	.005		.05

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-17
SHEET No. 2 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Symbols	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 %	P O D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60-80 Mod	70			80 20 20	2" 2" ½	chl(ep) qtz qtz		<.5		62 67	95	45	99405	.01	.005	.05	.05
	NO	80			5×3 60×2	hlex3 hlex3	qq-tem×2 tem×2		<.5		74 79½	85 80	7	99406	.01	.009		.05
dark silt chocc	NO	90			60	24 ½	broken core qtz		<.5		86½	50	10	99407	.02	.009		.10
	40 Mod	100			60 60 10 20×2	6" 2" 4" 2"+1%	chl-carb (qtz) qtz-carb chl-carb ep(qtz)×2		<.5		94½	95	40	99408	.02	.012		.08
	50 Mod	110			35 45 40×2 40	1" ½ ½+½ ½	ep(qtz) qtz qtz ×2 qtz		<.5		105	85	37	99409	<.01	.009	.01	.05
	60 Mod	120			40×2 40 5	1"+½ ½ ½	qtz ×2 qtz+chl(ang) lmen		<.5		115	95 100	47	99410	.01	.001		.05

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-17
SHEET No. 3 of 6

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	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Blocks	Estimated Core Recovery %	P.O.D.	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60 / 70-75	150	80 / 50	½ / ¼	qtz / qtz		<.5		120½ / 126½	80	27	99411	<.01	.001		.05
MAJOR FAULT ZONE (129-145') - main dislocation occurs @ 148' as shown by dark altn and abrupt incr. in sulfides - 148'-157	45 ?	150	?	?	qz-bx + lost core		<.5		137	35 / 50	7	99412	.02	.006		.05
	?	60	2"	qtz-ser-py-cp-cc	qz-bx + lost core		.5		145 / 149½	50 / 50	3	99413	.07	.008		.14
should be taken as the fault zone central axis - marked dk altn	?	162	60	2"	qz-bx + lost core - veins qz contain much ground sulfide		4.0		157	40	0	99414	.13	.007	.04 / 3.15	.16
	40-50 / Crsh. Str.	170	60 / 20	2" / 1" / 1" / 2"	qz-bx / qz-bx / qtz (<cp) / qtz-chl-py		1.0		165 / 175½	70 / 75	7	99415	.08	.006		.12
		60 / 60×8 / 60-70×9 / 70 / 70×6 / 50	5" / ½-⅛×8 / ⅛×9 / ½-¼×6 / ½×2 / ½	qtz-py (cp) (<2) / qtz-carb-py (cp) <2 / qtz-carb-py (cp) <9 / qtz-ser-py / qtz-carb-py (cp) <6 / qtz-ser-py (cp)			5.0		177	80	7	99416	.15	.008		.20

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-17
SHEET No. 4 of 6

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	BOTTOM DEPTHS LEACH CAP / LIM. ZONE / SUPERGENE / REMARKS	Footage Drilled	Estimated Core Recovery %	P.O.D.	ASSAY RESULTS Sample Number	% Cu	% Mo		Calculated Grade
	70 Mod	190	80 80 60+2 50 70 60+2 70+2 70+2 60	1" 1" 2½ + 1/16" 1" 1/16 1/16+1/8+1" 1/16+1/8 1" 1/16+1/8 1/16	q¹/₃-fer-ox q¹/₃-ch-py q¹/₃-ser-ch-py q¹/₃-ser-chl-py (cp) q¹/₃-fer q¹/₃-ser-py+2 q¹/₃-(ser)-py+2 q¹/₃-ser-py q¹/₃-ch-ep-py (cp)	0 10 20 30 40 50 60 70 80 90	5.0		184½ 190	75 70	7	99417	.25	.008		.25
	?	200	?	10"	[illegible]	0 10 20 30 40 50 60 70 80 90	?		189 198	40 40	0	99418	.19	.006	.15 3770	?
	70 Mod	210	70 60 5a-60+2 20+2 60-70 60	1/16 1/16 3" 1/16+2 1/16+2 1/16+1/2 1"	q¹/₃-fer-ep q¹/₃-ch-ep [illegible] q¹/₃-ch-py+2 q¹/₃-ch-ser-(ep)+2 q¹/₃-ch-ser-(ep)+2 q¹/₃-ch-ep (cp)	0 10 20 30 40 50 60 70 80 90	2.0		205	60 70	7	99419	.29	.009		.15
	80 Mod	220	70 60 60-70+2 60	3" 1" 10" 1/16+2 1/16	(ep) [illegible] q¹/₃-ch-ser-fer-ep [illegible] q¹/₃-ser-ch+2 q¹/₃-ch-ep	0 10 20 30 40 50 60 70 80 90	2.0	Soft, gouge broken core but no well-defined fault	213	80	0	99420	.27	.006		.15
	80 Mod	230	80 70 60 80	2" 12" 1/16 2" 20"	q¹/₃-ser-py q¹/₃-ch q¹/₃-(ser) q¹/₃-carb-ser-ep q¹/₃-ser-chl-carb-ser	0 10 20 30 40 50 60 70 80 90	1.5		225	80	13	99421	.20	.006		.12
mainly leucocratic tc.	70 Mod	240	70 60+2 70 5	3" 1/16+2 1" 2"	q¹/₃-ser-carb (cp) q¹/₃-ser-ep (ep)+2 q¹/₃-ser-py q¹/₃-ch	0 10 20 30 40 50 60 70 80 90	1.5		233½	65	3	99422	.21	.005		.16

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-17
SHEET No. 5 of 6

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG (Foliation Alteration Footage Sulphides)	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 %	RQD	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
	60 Bx Mod	250	70 20 50	2" 2½ 1/16	chl qtz-sh qtz-chl-sh		1.0		245 247	75	10	99423	.19	.009	.24	.30
	50 Bx Mod	260	80 60 70	6" 1" 1"	RE-lox qtz-carb-py qtz		.5		250	85	5	99424	.16	.009		.08
	60 Mod	270	20 30 5 5	1/16 1/4 1/16 1/16	qtz-chl-cp qtz-chl-(mo)		.5	Sect. Broken Core with [illegible]	265.0	70	10	99425	.23	.007		.10
	50 Mod	280	70 40 60+5 60+5	1/16 6" 1/16+1/2 1/2+2	qtz-chl-cp qtz-chl-cp+5 qtz-chl-cp+5		.5		272 277	65	33	99451	.28	.022		.18
	50 Mod	290	40 60+2 70+40 60+20 60-50-5 40+20 70 40+20+20	1/16 1/16+1/8 1/4+3" 2"+1/2 1/16+1/8+2" 2"+2 1"+1/8+1/2	qtz-chl-cp qtz-chl-cpy+2 qtz (cpy) qtz-chl-cp+2 qtz-chl-cp qtz-chl-cp qtz-chl-cp(py)+3		.5		287	95	37	99452	.62	.028	.31 3650	.40
	50	300	60 40 5 5 10 20	1/2 1" 1/4 1/2 1/2 1/2	qtz-chl-carb-Mt qtz-ser-py (cp) qtz-chl-carb-cp qtz-chl-carb-cp (Mo) qtz-chl-carb-py-cp qtz-chl-carb-cp		1.5		293 295.75	90 90	20	99453	1.17	.028		.50

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-17
SHEET No. 6 of 6

ROCK TYPES & ALTERATION			∠ to Core Foliation	GRAPHIC LOG 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 Drilled	Estimated Core Recovery %	P.O.D.	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
			NS		510	25+10 45 5 45+A 5	1/4 1" 1/2 1/4+ 2"			1.5		307	85	10	99454	.32	.018		.25
			NS		520	20 15 20+12 30+12 25+5-12	1/4 1/2 1/8+ 1/4+1/8 1/8+3			2.0		315	90	27	99455	.18	.003		.25
			NS		530	15+2 20+2 5+2 5	1/8+3 1/8-1/4+7 1/4+2 1"			.5		325	90	30	99456	.10	.005		.15
			NS		540	5-20+2 20	1/8 1/8			2.0		335	90		99457	.16	.005	.21 .35	.16
		EOH 347'	NS		550	50+3 50 50 5+2	1/8+3 1" 1" 1/8+2			1.5		345 347	95 85		99458	.15	.011		.14

G.D. Bysouth

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-19
SHEET No. 1 of 2

LOCATION: GRANITE LAKE
DATE COLLARED: June 19 1984
DATE COMPLETED: June 20, 1984
BEARING: –
LENGTH: 182'
DIP: -90°
LATITUDE: 45204.38 N
DEPARTURE: 54158.85 E
ELEVATION: 3932.42'
CORE SIZE: N.Q.W.
SCALE OF LOG: 1" = 10'
REMARKS: hole was abandoned due to fault (see remarks.)
LOGGED BY: G.D.B.
DATE: July 3, 1984

BOTTOM DEPTHS: LEACH CAP –; LIM. ZONE –; SUPERGENE –

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 %	R.Q.D.	ASSAY RESULTS Sample Number	% Cu	% Mo		Estimated Grade
Casing To 84'											84							
MAJOR FAULT ZONE			90									10		99459 (note contains assays)	.02	.002		?
(84'-138') - Consists mainly of highly broken rock with frags	?		120		50	3"	95		?	This hole was located within a fault system, the center of which lies at about 184'-138'. - The entire zone has been affected by the faulting - due to the very low recoveries, assay results should be used with caution.	94	25	0	99459	.02	.002		?
rarely over 2' in dia. - This fault may characterized by shattered rock rather than	?		150	?		3" 10"	99 99		?		102 107	10	0	99460	.08	.003		?
extensive gouge zones. - all rock frags are Mine Phase Q.D. - none show any significant	?		170						?		115 117	20 70	0	99461	.08	.001	.05 3ppb	?
sulfide mineralization —	?		180		50 x 6	1/8-1/2 x 6	93-Chl-Ser-Py (cp) x 6		?		123 128	15	0	99462	.24	.005		?

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-19
SHEET No. 2 of 2

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	Fractures 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 Drilled	Estimated Core Recovery %	P.O.D.	Sample number	% Cu	% Mo		Estimated Grade
138		140								134	50	0	99463	.15	.006		
										139	20						
										141	30						
MINE PHASE QUARTZ DIORITE (138'-182')	70 WK	150	70 / 70 / 90 / 90	1/2 / 1/2 / 1/2 / 1/20		qtz-ch-py / qtz-ser-py / qtz-ch-py / qtz-ch-py		.5		147	70	0	99464	.13	.004		.08
	80 WK	160	80 / 60-70 / 50 / 80	1/8 / 1/20-1/2 / 1" / 1/2		qtz-ch-py / qtz-ch-py-(cp) / qtz-ch-ser-py-(cp) / qtz-ch-py		.5		157	80	0	99465	.10	.003	.15 / BTD	.12
	NC	170	50 / 50-70 / 70-75-45 / 80 / 45	1/2 / 1/20-1/2 / 1/20-1/20-1/3 / 1/8 / 1/8		qtz-ch / qtz-ch-py / qtz-ch-py-cp / qtz-ch-py / qtz-ch-py-cp		.5		168	50	0	99466	.08	.004		.10
	NC	180		12"		lost core and broken up with frags less than 2" in diam.				177	50 / 10 / 20	0	99467	.12	.003	.10	?
E.O.H. 182'										182							

J. D. Bysouth

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-20
SHEET No. 1 of 3

LOCATION: GRANITE LAKE	BEARING: -	LATITUDE: 45,233.174	CORE SIZE: N.Q.W.	LOGGED BY: G.D.B
DATE COLLARED: June 20, 1984	LENGTH: 183'	DEPARTURE: 53,917.176	SCALE OF LOG: 1" = 10'	DATE: July 2, 1984
DATE COMPLETED: June 20, 1984	DIP: -90°	ELEVATION: 3932.14'	REMARKS: Hole abandoned at 182' due to fault (see remarks)	

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	BOTTOM DEPTHS: LEACH CAP / LIM. ZONE / SUPERGENE — REMARKS	Footage Blocks	Estimated Core Recovery %	R.Q.D.	ASSAY RESULTS: Sample Number	% Cu	% Mo	PPGo	Estimated Grade
Casing To 80'		80								80							
MINE PHASE QUARTZ DIORITE (80'-127') 45% chl. sericite, py	N.D.	90	45 60 60 x 3 45	1/4" 5" 1/4 - 1/2 - 1" 3"	q t3-ser-chl-py (cp) q t3-ser-py (cp) q t2-ser-py x 2 q t3-ser-py	4.0	∴ this hole was located within a fault system	87	60	0	99440	.16	.001		.15
20% chl. 30% q t3. - Sericite alt. chlorite	N.D.	150	45 60 70 50 + 60	1/4 2" 1/4 1/4 - 2	q t3-ser-py q t3-ser-chl (py) q t3-ser-chl q t3-chl-py-cp	1.5	- The center of the fault appears to lie at 127'-168' but the entire hole has been affected.	97	50	7	99441	.10	.001		.10
		110	40 45	1/2 2"	q t3-chl-py (cp) q t3-ser-py	1.5	- due to the low recoveries assay results should be used with caution	104	70 40	0	99442	.06	.001		.12
		120	45 45 60 +	1/4" 2" 3"	q t3-chl-carb-py q t3-ser-py q t3-ser-py (cp)	2.5		113 119	80	7	99443	.11	.002	.11 3.85	.14

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GIBRALTAR MINES LTD.

HOLE No. 84-29
SHEET No. 2 of 3

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
			ND		50 50 45	1/8 1/4 3"	qtz-chl-carb-py(cp) qtz-carb-py(cp) qtz-ser-py		1.0		127	60	3	99444	.07	.001		.18
				130	?	3"	lost core and re frags under 2" dia											
		MAJOR FAULT ZONE (127'-168')	?		60°	4½"	"solid" qq		?		134½	50	0	99445	.21	.009		?
				140	40 ?	10" 12"	qtz-ser-carb-py(cp) qq(bx)					30						
			?	150		10"	lost core and re frags under 2" dia.		?		142 146	15 20	0	99446	.16	.003		?
			?	160		10"	lost core and re frags under 3" dia		?		151 157	15 40	0	99447	.15	.003	.10 372	?
		168	?		? ?	3" 4'	"solid" qq lost core and frags under 2" dia		?		161½ 167	20	0	99448	.54	.019		?
				170	30	1"	qtz-py-cp					30						
		MINE PHASE (168'-185')	ND		20	6"	qtz-chl-ser(cp)		<.5		175 177	50		99449	.16	.019	.7	.10
				180	20	6"	qq				179	70						

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GIBRALTAR MINES LTD.

HOLE No. 84-20
SHEET No. 3 of 3

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 Drilled	Estimated Core Recovery %	P.O.D.	ASSAY RESULTS: Sample number	% Cu	% Mo		Estimated Grade
		E.O.H. 183'						3	[illegible]					183	12		[illegible]	.16	.009		

H. D. Bepworth

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GIBRALTAR MINES LTD.

HOLE No. 84-21
SHEET No. 1 of 5

LOCATION: GPUK Pit - East Wall
DATE COLLARED: June 21, 1984
DATE COMPLETED: June 22, 1984
BEARING: 0°
LENGTH: 300'
DIP: -90°
LATITUDE: 46665.32 N
DEPARTURE: 59127.77 E
ELEVATION: 3990.51'
CORE SIZE: N.Q. Wireline
SCALE OF LOG: 1" = 10'
REMARKS: Bad Ground - Poor recoveries, low RQD's
LOGGED BY: MRS
DATE: July 5, 1984

BOTTOM DEPTHS: LEACH CAP —; LIM. ZONE 125'; SUPERGENE 160 (est)

ROCK TYPES & ALTERATION	∠ to Core Foliation	Graphic Log: Foliation Alteration	Footage	Sketches	Veins ∠ to Core Axis	Width of Vein	Mineralization	Fracture Angle to Core Axis - Frequency -	Estimated % Pyrite	Remarks	Footage Discr.	Estimated Core Recovery %	R.Q.D.	Sample Number	% Cu	% Mo		Estimated Grade
Cased to 40' O.B. 41'			40'								40		40				3950	
40-41							Cased as boulders											
41-65' DK Alt'n Zone	40°		50		10°×2 5° 5° 5°	1/8×2 1/20 1/16 1/16	qtz-ser-py ×2 qtz-ser-py qtz-ser-py fum		1%	Note fresh analysis do not include core surfaces - there may be a bias towards steep fractures.	46 50	25% 20%	8%	99334	.26 .03 0%	.008		.03%
	40°		60		5° 10° 20° 10°×2 10°	1/16 2" 1/16 1/16 1/16 ×2 1/16	qg-lim qtz-chl-py-cp qtz-ser-chl-py-cp qtz-ser-chl-cp-py qtz-chl-cp-py qtz-chl-cp-py (cp)		1%	Badly broken core Poor	56½	34%	8%	99335	1.41 .04 0%	.022		.17%
65-70' Qtz-rich zone Qtz-chl-ser-py-chl-cp	40°		70		5° 5° 5×3	1/16 1/16 1/16×3 2"	qtz-chl-py-cp qtz-chl-py-cp qtz-ser-py-cp ×3		3%	Badly broken core	65	41% 61%	20%	99336	.52 .02 0%	.010		.12%
70-80' Sericite zone - some hornfels of DK Alt'n			80		5° 15 15 15 15 15 ×2 15 ×2 15° 15°	1/16 1/16 1/16 ×5 1/2 1/2 1/16 1/16 1/16	qtz-ser-py qtz-ser-py qtz-ser-py-cp		2%		74½ 77 78	68% 20% 75%	24%	99337	.40 .03 0%	.004		.05%

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GIBRALTAR MINES LTD.

HOLE No. 84-21
SHEET No. 2 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Lithologic Alteration	Footage	Strike/Dip	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 Drilled	Estimated Core Recovery %	R.Q.D.	Sample number	% Cu	% Mo		Estimated Grade
	40		90		10° 20 30±2 40° 10° 20 5±3	9/16 1/20 1/20 + 1/10 1/20 1/8 1/20 1/16 x 3	qtz-chl-py-lim. qtz-chl-py qtz-chl-py-cp ×2 qtz-cp qtz-chl-py-cp-cc qtz-chl-py-(lim) lim ×3	0 10 20 30 40 50 60 70 80 90	1%	Badly broken 95-124' - Poor recovery - low R.Q.D.	92 95 87½	57% 48%	14%	99328	.23 .03 nil	.02	.60 3905	.13%
	40				30° 30° 5° 70°	1/4 1/4 1/4 1½"	qtz-chl-(cp)-(cp) qtz-chl-py qtz-chl-ser-py-(cc) qtz-ser-(chl)-py-cp-(cc)	0 10 20 30 40 50 60 70 80 90	1%		95	40% 13%	4%	99339	.70 .056 nil	.010		.11%
105' - 125' Mine Phase QD - -110 Sooo alt - not real clear alt.	40		110		5° 5° 5° 20° ±2	1/16 1/16 1/12 1/16 ×3	lim qtz-chl-py-(cp) qtz-ser-py-(cp) qtz-ser-chl-py ×3	0 10 20 30 40 50 60 70 80 90	1%		103 107	20% 25%	0%	99340	.40 .026 nil	.010		.12%
	40		120		20° 5° 30° ±2 10°	1/20 1 1/16 ±2 1/20	qtz-chl-ser-py-(cp) qtz-ser-cp-py qtz-chl-py ×2 qtz-chl-cp-py (cp) (cc) on rubble	0 10 20 30 40 50 60 70 80 90	1%		111 117	20%	0%	99341	.13 .015 nil	.014		.16%
126 - 155' OR Alt'n w/ E. Stringers - Lost	40		130		55° ±2 30 ±3 20° 10°	1/16 ×2 1/20 ±3 1/20 1/16	qtz-chl-ser-cp-py ×2 qtz-chl-(cp)-(cb) ×3 qtz-chl-carb-hem-py-(cp) carb-hem qtz-chl	0 10 20 30 40 50 60 70 80 90	.8%		124 129½	30% 51%	0%	99342	.18 .005 nil	.014	.41 2860	.15%
w/ chlor alt'n	40		140		10° ±2	1/16 1/20 1/16 1/20	qtz-chl-(cp) qtz-chl-carb-hem qtz-chl-cp qtz-chl-cp-mox ×2	0 10 20 30 40 50 60 70 80 90	.7%		133½ 137	30% 23% 78%	20%	99343	.18 .005 nil	.038		.14%

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GIBRALTAR MINES LTD.

HOLE No. 84-21
SHEET No. 3 of 5

ROCK TYPES & ALTERATION			∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	Footage	Strength	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS / REMARKS	Footage Blocks	Estimated Core Recovery %	R.Q.D.	ASSAY RESULTS Sample number	% Cu	% Mo		Estimated Grade
							5°	1/16	qtz-chl-py-cpy-cmoz.	0										
							25°			10										
							6° x 2	1/20	qtz-chl-carb-hem-cpy	20			193							
			ND					1/8 x 2	qtz-chl-ser-cp-py x2	30	1%									
							30°			40										
								1/16	qtz-chl-ser-py-Lep.	50				40%	14%	99344	.17	.018		.18%
							5°			60							.005 oz			
							5°	1/20	qtz-chl-(carb)-py	70										
							5°		qtz-ser-chl-cp	80			199							
					150		60°	4	qtz vein w/ minor chl-cp-py-mo	90					150					
							10°		qtz-ser-chl-cp-mo.	0			152	50%						
							45°	2	qtz-ser-chl-cp-py Zone	10										
							30°	1/16	qtz-chl-cp-mo	20										
							7	> 1/2" ?	Pieced qtz vein w/ cp-mo	30			155	13%	17%	99345	.27	.010		.22%
		155'-163' Sans Alt'd Mine Phase QD w/	ND				10x2	1/2 x 2	qtz-chl-cp x 2	40							.005 oz			
							60°	1/12	qtz-chl-cp	50				76%						
					160		10°+30°	1/16 x 2	qtz-chl-cp-carb-hem x2	60			160		160					
							30°	1/16	qtz-chl-(cp) - carb-hem-py	70										
		narrow zones of DK. Alt'n					50°	2"	qtz-chl-carb-py-cp.	80										
							5°+10°	1/12 x 2	qtz-chl-carb-(cp) x 2	90				77%						
		163-175	ND.				60°	1/16	qtz-chl-cp	0	1%		166½		33%	99346	.22	.030		.27%
		DK Alt'n - chl and cp-stringers + blebs.					10°	1/8	qtz-ser-mo	10							.005 oz			
							30°	3/4	qtz-chl-carb-mo	20										
					170		30°	1/16	qtz-chl-carb-py-cp	30			170							
							5°	1/16	qtz-chl-cp-py	0				78%				.22		
							30 x 2	1/16 x 2	qtz-chl-cp x 2	10										
							45°	5"	Zone of qtz-ser-chl-mag (-cp (py as obscure veining)	20			173½					38%		
		175-221' Sans Alt'd Mine Phase QD w/ a	ND to 50° v. wk				25	1/8	qtz-chl-ser-py-cp	30	1.3%				38%	99347	.28	.010		.40%
							30°+30°	1/20 x 3	qtz-chl-py-cp x 3	40							.006 oz			
							5°	1/2	qtz-chl-mag-py-(cp)	50										
					180		25°-x2	1/16 x 2	qtz-chl-py x 2	60				84%	180					
							2°-120	1/16 x 2	qtz-chl-py-cp x 2	70										
		few narrow zones of dk. alt'n.					70°	1/16	qtz-ser-cp-py	80			184							
			50°				30 x 3	1/8 + 1/4 x 2	qtz-chl-ser-py-cp-mo x 3	90					58%	99348	.23	.020		.23%
										0							.006 oz			
			V. wk				3°	1/20	qtz-chl-ser-py-cp-cmo	10			187	83%						
			V. wk				30°	1/4	qtz	20										
					190		10°	1/10	qtz-chl-py	30					190					
										40				80%						
							10°	1/8	qtz-chl-py	50										
							5°	1	qtz-chl-ser-py-cp	60			193							
							70	1/2	Leucocratic Rx	70		Leucocratic Rx are x-cut by the 5° mineralized vein			40%	99349	.25	.012		.30%
			ND				10°	.1	qtz-ser-chl-cp-(py)	80	1%									
							5°	1	qtz-ser-chl-cpp-(cp) folded	90				78%			.005 oz			
							10°	1/16	qtz-chl-py	0										
					200		30 x 3	1/16 x 3	qtz-carb x 3	50			200		200					

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GIBRALTAR MINES LTD.

HOLE No. [illegible]
SHEET No. 4 of 5

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG	Veins ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS / LEACH CAP / OX. ZONE / SUPERGENE / REMARKS	Footage Blocks	Core Recovery %	R Q D	Sample Number	% Cu	% Mo		[illegible] Grade
	P.D.	210	60° 20° [illegible] [illegible] 10° 25° 5°	1/16 1/4 [illegible] 1/8 1/8 1/16 1/16	gte-carb-chl-cp carb-hem. gte-chl-cp gte-mag-py-cp py-carb-cp gte-ser-py gte-chl-(cp)	[illegible]	.15%	} cp stringers & blebs	205 210	76% 83%	30%	99350	.15 [illegible]	.006		.21%
	30° V.WK P? W.D.	220	5° 45° 45 50° 20° x2 20°+30° [illegible] 5°	1/16 1/16 1/4 1/4 1/16 x2 [illegible] 1/2 1/16	gte-chl-(py)-(cp) chl-gte-(cp) gte-chl-py-cp gte-ser-chl-carb-py gte-chl-py x2 gte-ser-chl-cp-py x2 gte-mag-chl-cp [illegible]-carb-cp-py	[illegible]	.8%		212 217	81% 77%	42%	33813	.10	.018	.26 37%	.38%
229-229.5 Dk Alt Phase [illegible] in chl 229-230 [illegible] carb	60° V.WK	230	25° [illegible] 20° 10° 30° [illegible] [illegible]	3/8 1/4 1/4 1/20 1/4 [illegible] 1/20	gte-chl-cp-carb-py gte-chl-carb-(cp) gte-chl-carb-cp-mag-py gte-chl-carb-py gte-chl-carb-cp gte-chl-carb gte-chl-carb-py	[illegible]	1%		223 230	77% 79%	30%	33819	.20	.016		.18%
? Gte-ser-chl zone Py or ser looks a waxy lt-green Few zones of Dk Alt 238.5-241 - [illegible]	50° Mod	240	70° [illegible]	1/4 3/8 1/4	gte-carb-mag-py-cp-mo gte-chl-carb-cpy-cp gte-carb [illegible]-carb-py-cp-mo py stringer [illegible]-carb-py-cp-mo	[illegible]	1%		232 234 237	90% 70% 80%	20%	33815	.44	.010		.12%
	60° WK		[illegible]	[illegible]	[illegible] breccia gte-chl-carb-cp-py gte-chl-carb-py gte-chl-carb-[illegible]	[illegible]	1%		242 [illegible]	34% 80% 77%	16%	33816	.19	.010		.16%
	R.D.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 21%	[illegible]	3381[illegible]7	.19	[illegible]		[illegible]

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GIBRALTAR MINES LTD.

HOLE No. 84-21
SHEET No. 5 of 5

ROCK TYPES & ALTERATION	∠ to Core Fractures	GRAPHIC LOG: Fracture Alteration	Footage	Sketch	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 Diamond Drill	Estimated Core Recovery %	R.Q.D.	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
260 - 285 DK AH -incr in cll -incr sur well foliated in places	∠0 to 60° Str.	270		20° 45 x2 60 x2	? 1/2 1/2 x2 1/2 x2	qtz-carb-chl-py-cp qtz-mag-carb-cp x2 qtz-carb-chl-cp x2		-6%			263 270	27%	0% 270	33818	.19	.008	.25 3.75	.28%
	60° Str.	280		20° 60° 30 60° 45° 60	1/2 2" 1 1/2 1/4 1/2	qtz-chl-carb-cp qtz-chl-carb-cp qtz-chl-carb-cp qtz-chl-carb-cp qtz-chl-carb-cp qtz-chl-carb-cp		.6%			278 280	55% 65%	1% 280	33819	.47	.018		.36%
285 - 300' Sam. AH'd Mine Phase Q.D. w/ narrow zones of DK. AH'n	60° Str.	290		30° 30 18 50 50 60°	1/16 hair 1/2 hair 1/2 1/2	qtz-chl-carb-py qtz-chl-carb-py qtz-chl-carb-<<py>> carb qtz-chl-py-cp qtz-chl-py-cp		1%			286½	45% 60%	12% 290	33820	.16	.008		.10%
	Lo. to med	300		30° 70° 60° 45 70	3/4 1/20 1/16 1/4 1/6	qtz-chl-carb-cp-<<cp>> qtz-chl-cp qtz-chl-cp qtz-chl-carb-py-cp-cpy qtz-carb-chl-mag-<<cp>> qtz-chlorite		.7%			292 296 300	20% 45%	11% 300	33821	.20	.014	.4	.17%
E.O.H @ 300'																	3.0	

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GIBRALTAR MINES LTD.

HOLE No. 84-22
SHEET No. 1 of 3

LOCATION: GRANITE LAKE
DATE COLLARED: June 22, 1984
DATE COMPLETED: June 22, 1984
BEARING: -
LENGTH: 140'
DIP: -90°
LATITUDE: 46,346.96 N
DEPARTURE: 54,492.36 E
ELEVATION: 3974.06'
CORE SIZE: N.Q.W.
SCALE OF LOG: 1" = 10'
REMARKS: Hole abandoned at 140' in broken ground
LOGGED BY: G.D.B. & HRS
DATE: July 5, 1984

BOTTOM DEPTHS
LEACH CAP: —
LIM. ZONE: 70 (weak)
SUPERGENE: 140

ROCK TYPES & ALTERATION	∠ to Core Foliation	Foliation Alteration	Fractures	Veins ∠ to Core Axis	Width of Vein	Mineralization	Fracture Angle to Core Axis - Frequency -	Estimated % Pyrite	Remarks	Footage Discs.	Estimated Core Recovery %	R.Q.D.	Sample Number	% Cu	% Mo		Estimated Grade
Casing To 5'							0, 10, 20, 30, 40										
MINE PHASE QUARTZ DIORITE (5'-75') 20% chl 35% qtz 10-15% saus. plag	N.D.		10	5°, 10°, 30°, 15°	n/a, n/a, 1/20, n/a	qtz-chl-ser-py-(cp)-(cc) ? qtz-chl-py-lim qtz-ser-chl-py-(lim) qtz-chl-py-lim-(cp)-(cc) ?	50, 60, 70, 80, 90	.9%	Some coring. But may be a tarnish	5, 10	50	30%	99551	.09	.010		.08%
				30°, 10°, 10°, 20°, 10+20°, 30°, 20	1/20, 1/16, 1/4, n/a, 1/8 + n/a, n/a, 1/16	qtz-chl-py-lim-(cp)-(cc) ? qtz-chl-ser-py-lim qtz-chl-py-lim qtz-chl-py qtz-chl-ser-py-lim qtz-chl-ser-py-lim qtz-chl-py-lim-(cc) ?	0, 10, 20, 30, 40, 50, 60, 70, 80, 90	1%		20	80	30	99552	.11	.002		.07%
-sl. finer grn than normal in places - few narrow zones of Dark Alt^n w/ Ep. stringes.	N.D.		20	20°, 20°, 30°, 30°, 20×2, 10°, 20°	1/20, 1/16, 1/8, 1/20, 1/16×2, 1/2, 1/8	qtz-chl-py-(cp)-(cc) qtz-chl-ser-py-lim qtz-chl-py-lim qtz-chl-py-lim qtz-chl-ser-py-(cc)×2 qtz-chl-py-lim qtz-chl-ser-py-lim-cc	0, 10, 20, 30, 40, 50, 60, 70, 80, 90	1%		25, 30	100, 85	17	99553	.18	.002	.12 3950	.07%
	N.D.			20°, 5°, 20°, 45°, 30°, 10°, 20°, 15°	1/2, 1/2, 1/16, n/a, 1/8, n/a, 1/20, 1/20	qtz-chl-ser-py-lim qtz-chl-py-lim qtz-ser-chl-py-lim qtz-chl-ser-py-lim qtz-chl-py-lim qtz-chl-ser-py-lim qtz-chl-py-cc qtz-chl-py	0, 10, 20, 30, 40, 50, 60, 70, 80, 90	1%		31, 37	100	47	99554	.19	.005		.05%
	N.D.		50	30°, 5°, 5°, 10°, 20°, 15°	1/16, 1/4, 1/2, 1/4, 1/16, 1/20	qtz-chl-ser-py-lim qtz-chl-ser-py-lim qtz-chl-ser-py-lim qtz-chl-py qtz-chl-py-cc qtz-chl-py	0, 10, 20, 30, 40, 50, 60, 70, 80, 90	3%		43, 46	95, 90	43	99555	.13	.009		.10%

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-22
SHEET No. 2 of 3

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG Foliation Alteration Fractures 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 Diamond	Estimated Core Recovery %	200	Sample Number	% Cu	% Mo		Estimated Grade
	80	60	30° 45° 5° 30° 10° 20° 30°x5 80°	1/2x3 1/2 1/16 1/2 1/2 1/2 1/2 1/2	qtz-chl-py x3 qtz-chl-py qtz-chl-ser-py-lim qtz-chl-py-lim-cc(?) qtz-chl-ser-py-lim qtz-chl-ser-py-cc x5 qtz-chl-ser-py-lim-cp-cc	10 10 20 30 40 50 60 70 80 90	1%		52 65 58½	70 85	17	99556	.18	.006		.08%
fg. chl-shear	45° var.	70	45° 45° 30° 20° 45° 60° 45°	1/2x9 1/2+1/8 1/2+1/16 1/2 1/2+30 1/8 2	qtz-chl-py-cp-cc x9 qtz-chl-ser-py-cp-cc x2 qtz-chl-ser-py x2 qtz-chl-py-lim-cc qtz-chl-py x2 qtz-ser-chl-py-cp-cc Lamprophyre Dyke	0 10 20 30 40 50 60 70 80 90	1%		65 69 70	85 90 95	30	99557	.35	.002	.21 3905	.14%
75-83' Banded DK Alt'n w/ cp. stringers and	60° var.	80	30° 55° 45°x3 30°x2 60° 30° 80	1/8 1/16 1/2x3 1/2+1/16 1 1/10 1/20	qtz-ser-chl-py-cp qtz-chl-ser-py qtz-chl-ser-py-cp qtz-chl-ser-py-cp-cc x2 qtz-chl-ser-py-lim qtz-chl-cp qtz-chl-py-cp-cc	0 0 20 30 40 50 60 70 80 90	1%		75 79	85 90	50	99558	.14	.002		.10%
83-96 Sees Alt'd Mine Phase DD (-fine grain in places) -w/ narrow bands of DK. Alt'n w/ cp. stringers	ND	90	45° 45° 30° 30° 30°	1 1/16 1/16 1/10 1/16	qtz-cp qtz-ser-chl-py qtz-chl-py-cp-cc qtz-chl-(py)-(lim) qtz-chl-py-(cp)-(cc)	0 10 20 30 40 50 60 70 80 90	.7%	Lim strong here	84 88	90 85	29	99559	.09	.002		.11%
96-105 DK Alt'n w/cp stringers + qtz veining	ND	90	30 30x2 10° 20° 30° 30 30	1/16 1/20x2 1/16 1/20 1/20 1/10 1/16	qtz-chl-py-cp qtz-chl-py-cp x2 qtz-chl-py-lim-cp qtz-chl-py-cp-cc qtz-chl-ser-py-lim-cp-cc qtz-chl-py-cp qtz-chl-cp-mo	0 10 20 30 40 50 60 70 80 90	.8%		96	100	57	99560	.26	.008		.16%
105-113 See Alt'd M.P.DD where 2 mts of DK Alt'n	60° var.	110	30° 30 30° 60° 60°	2 1/16 1/16 1 1/16	qtz-chl qtz-chl-cp-mo qtz-chl-cp-py-cc qtz-chl-(cp) qtz-chl-ser-py-cp-lim	0 10 20 30 40 50 60 70 80 90	1%		104	85	33	99561	.25	.016		.23% MoS_2

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-22
SHEET No. 3 of 3

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 / REMARKS	Footage Diesels	Estimated Core Recovery %	R.Q.D.	Sample Number	% Cu	% Mo		Estimated Grade
113-123 DKAlm - no sams - ep. stringers	60-70° Wk	120	60	15 30° 25° 30° 5° 5° 30°	1/8 1/20 1/20 hle 1/20 1/16 1/20 2	qtz-chl-ser-py-cp-cc qtz-chl-ser-py qtz-chl-py-cp-<<<c>>> qtz-chl-py-<cp> qtz-chl-py-lim-<cp>-<cc> qtz-ser-chl-py-<cp>-<<<> qtz-chl-py-cp Leuc. Dyk. 1.05 qtz-chl-py-<<<c>>-<<<>	0 10 20 30 40 50 60 70 80 90	.9%	lim	114	98 98	33	99562	.13	.002	.18 3860	.12%
123-140' Mainly Suis alt'd Mine Phase QD. W/ narrow zones	60° Wk	130	60°	20° 20° 70° 15 60 60°	hle 1/20 1/20 1/20 1/16 1½	hem. qtz-chl-py-<<<> qtz-chl-ser-py-<cp>-<<<> qtz-chl-ser-py-cc qtz-chl-ser-py<cp> qtz-mon-py-cp-chl	0 10 20 30 40 50 60 70 80 90	.9%	film on some fractures	122 126 130	90 60	17	99563	.16	.004		.19%
6 FDKAlm	60° v. Wk	140	60°	30 70° 30° 30 10° 30° 60°	1/16 1/16 1/16 1/8 1/20 1/9 1	qtz-chl-ser-py-cp qtz-chl-py-cp-<<<> qtz-ser-chl-cp-py qtz-chl-cp-py-cc-lim carb-horn- qtz-chl-carb-hem-py qtz-carb-<hem>	0 10 20 30 40 50 60 70 80 90	.7%	Hem. on most fractures <lim> Carb common Badly Broken	134 140	65 55	13	99564	.08	.002	.12	.24%
E.O.H. @ 140' Hole abandoned in broken ground																		

M. R. Lyon
S. D. Bysouth

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-23
SHEET No. 1 of 5

LOCATION: GRANITE LAKE - NE	BEARING: 00°	LATITUDE: 46,504.86 N	CORE SIZE: NQ Wireline
DATE COLLARED: June 22 '84	LENGTH: 296'	DEPARTURE: 54,618.57 E	SCALE OF LOG: 1" = 10'
DATE COMPLETED: June 23 '84	DIP: -90	ELEVATION: 4,012.55'	REMARKS:

LOGGED BY: MRS
DATE: July 11, 1984

BOTTOM DEPTHS: LEACH CAP ← ; LIM. ZONE 38' ; SUPERGENE 198'

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	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
Casing to 20'			20							20		20				3995	
MINE PHASE QUARTZ DIORITE - sans alt^n - few narrow bands of dk alt^n +	ND		30	20° / 30° / 30° / 10 x 2	1/16 / 1/2 / 1/20 / 1/8 x 2	qtz-ser-chl-py-lim / qtz-lim / qtz-chl-ser-py / qtz-ser-py x 2		1%	Weak lim continues below 38' along some fracture planes - also some mal. in places down to 210'.	24	52% / 60%	20%	33822	.08 <.01 ox	.004		.02%
Leucocratic rx. - Rock is finer grained than normal w/less qtz (qtz ~ 15-20%)	ND		40	20 x 2 / 30° / 10° / 15° / 30° / 20°	1/4 + 1/16 / 1/20 / 1/2 / 1/2 / hle / 1/8	qtz-ser-chl-py-lim / qtz-ser-chl-py / qtz-ser-py-lim-cp-cc-bp / qtz-ser-chl-py-lim / qtz-chl-py-lim. / qtz-ser-chl-py-(cp)-(cc)		1%	← Leucocratic Rx	31 / 37	75%	30%	33823	.05 <.01 ox	.004		.14%
fsp ~ 65-70% Chl. ~ 5%	ND		50	10° / 30° / 70° / 40° / 70° / 15° / 80° / 30°	1/8 / 1/2 / 1/2 / hle / hle / hle / 1/2 / 1/8	qtz-ser-chl-py-(cc) / qtz-ser-py-(cc) / qtz-ser-cp-cc-py / qtz-chl-ser-py-α-qg / qtz-chl-ser-py / qg lens / qtz-chl-ser-py → → / qtz-chl-ser-cp-sp-gy-cc		1.5%	→ alt grey wavy rock w/ marked needle-like mag?	47	91%	38%	33829	.23 <.01 ox	.006		.18%
	ND		60	5' / 30° / 20° / 30°	1/8 / hle	Small zone - poor Rx. Badly broken core - qg hem stain / qtz-chl / chl-chl-ser-py-(cc)-(mal) / qtz-ser-py-mal		2%		55	40% / 44%	8%	33825	.12 .01 ox	.004		.09%

Casing to 20' — 3995

Estimated Grade: .02% ; .14% ; .18% ; .09%

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-23
SHEET No. 2 of 5

ROCK TYPES & ALTERATION			∠ to Core Foliation	GRAPHIC LOG Foliation Alteration	Footage	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 Diesel.	Estimated Core Recovery %	R.Q.D.	ASSAY RESULTS Sample Number	% Cu	% Mo		Estimated Grade
		Sans. GD is consist fine ie. normal.	N.D				70° 50° 10° 20°	1/9 hla 21 1/10 1/8	qtz-chl qtz-chl-ser-py mable qtz-ser-chl-py-<cp> qtz-chl-<ep> - <<py>>	0 10 20 30 40 50 60 70 80 90	.6%			65½	60%	15%	33745	.11 .01 ot	.008	.12 3950	.07%
			N.D		70		30° 30x2 45° 30° 30°x2 60°	1/8 hla x2 1/3 1/4 1/20 x 2 3/4	qtz-ser-chl-py-lim-<cc> qtz-chl-pyx2 qtz-chl-<cp> qtz-ep-qi(ei) - ser-py(cc)-mal qtz-chl-ser-py-<cc>x2 qtz-ser-py-mo-<cp>	0 10 20 30 40 50 60 70 80 90	1.2%			71½ 77	73%	38%	34746	.07 .01 ot	.012		.15%
			N.D.		90		20° 40° 5° x2 10° 20° 10° 30°	1/2 1/8 1/20 x2 1/20 1/16 1/4 1/4	qtz-ser-chl-py qtz-ser-chl-py-cp?(tarnished py?) qtz-chl-py x2 qtz-chl-ser-py qtz-chl-ep-py-<cp> qtz-ser-chl-ep ? → qtz-chl	0 10 20 30 40 50 60 70 80 90	1.5%		qtz-ser-chl-ep vein cut by qtz-chl vein ← 1/8" displacement	83	53% 84%	29%	33747	.08 .01 ot	.004		.09%
			80° V. WK.		100		5 10° 70° 5° 80° 60° 10°	1 1/3 1/2 1/16 hla 2 1/4	qtz-chl-ser-py-cc-<lim> qtz-chl-ser-py qtz-chl qtz-ser-chl-py-cp-<lim> qtz-chl-ser-py-<cp>?(tarnished py) qtz-ser-<chl>-<ep> - <cc> qtz-ser-chl-py-cp-cc	0 10 20 30 40 50 60 70 80 90	2%			92 97	96%	60%	33748	.10 .01 ot	.006		.16%
		101.5 - 104.5 Leucocratic Phase.	N.D.		110		70° 50° 80° 20° 5° 10° 50°	1/2 1/16 1/4 1/16 1/8 1/4 hla	qtz-chl-ep-py-cp-mo qtz-ser-chl-py-<cp>-cc qtz-chl-ser-py-lim-<cc> qtz-ser-chl-py-lim-<cp>-<cc> qtz-chl-ser-py-<cp>-<cc> qtz-ser-py-cp-cc-lim qtz-ser-chl-py-lim-cc	0 10 20 30 40 50 60 70 80 90	2%			107	77%	28%	33749	.10 .01 ot	~~.002~~ .006	.09	.29%
		We = 126 cc alte'. We sus t dey, ox chl. Abund. ep chls Fstringers Inc. Qz	N.D.		120		80° 20° 10° 60°	1/8 1/16 1/20 1/20 hla	qtz-ser-py-lim-mal-cc qtz-chl-ser-py-gnac qtz-ser-chl-py-cc qtz-chl-py-cc	0 10 20 30 40 50 60 70 80 90	1%			113 118	60% 80%	32%	33750	.09 .01 ot	.004		.22%

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-23
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 Blocks	Estimated Core Recovery %	RQD	ASSAY RESULTS: Sample Number	% Cu	% Mo		Calculated Grade
							10°	1/8	qtz-ser-chl-py-<<ep>-<<cc>	0 10 20 30 40 50 60 70 80 90			Abundant Epidote		70%						
							80°	1/2	qtz-chl (open-space filling)				open space filling of qtz-chl								
							5°	1	qtz-ep					129							
			N.D.				10°	1/16	qtz-chl-py-lim		2%				85%	38%	99362	.06 <.01 ox	.004		.13%
		126-176 Sans Alt'd Mine Phase G.D. w/ few narrow zones of DK Alt'n w/ ep stringers.					5°	1/8	qtz-ser-chl-py-<<ep>-<<cc>					128							
					130		5°	1/16	qtz-ser-chl-py-ep-<<ep>-<py>							130					
							90°	1/4	qtz-chl.	0 10 20 30 40 50 60 70 80 90					84%						
							5°	hle	qtz-chl-py-<lim>					133½							
			ND				60°	1 1/4	qtz vein w/ <chl> - <<ep>		1%					60%	99363	.07 <.01 ox	.004		.03%
							30 x 2	1/20 x 2	qtz-chl-py x 2												
							5° x 2 + 10°	1/20 x 3	qtz-chl-py x 3												
					140		10°	1/16	qtz-chl-py						86%	140					
							10°	1/4	qtz-chl-py-lim-cc	0 10 20 30 40 50 60 70 80 90											
							5°	1/10	qtz-chl-py-cc												
							5°	1/2?	qtz-chl-py-lim-cc		1%		cc coats py not ep	144		40%	99364	.10 <.01 ox	.002		.19%
			N.D.				20	1	qtz-ser-<chl> - py-lim-<<ep>												
							10°	1/16	qtz-chl-ser-py-lim-<ep>						82%						
							10°	1/8	qtz-chl-py-lim-<<cc>					149½							
					150		90°	2	Leucocratic Dyke							150					
							60	1/2	Leucocratic Dyke cut by Q	0 10 20 30 40 50 60 70 80 90									.08		
							10°	1/20	qtz-chl-py												
							60	1/2	qtz-chl-ep		1%		Leucocratic Dyke; qtz-chl-py Vein		96%	50%	99365	.09 .020 ox	.002	3860	.19%
			N.D.				10° 5° 20°	1/16 1/16 1/8	qtz-chl-py-<<<cc>> / qtz-chl-py-lim-<ep> / qtz-chl-py-cc-<<<ep>>					157							
					160		10°	1/20	qtz-chl-py-cc					160	87%	160					
							20°	1/16	qtz-chl-py-lim	0 10 20 30 40 50 60 70 80 90											
							20°	1/16	qtz-chl-py-<<cc>												
			N.D.				10°	free	carb.		1%				88%	48%	99366	.20 .020 ox	.006		.21%
							20°	1/16	qtz-chl-py-cc					167							
							10°	1/16	qtz-chl-py-cc												
					170		5°	1/4	qtz-chl-py-<<ep>						74%	170					
							50°	1/2	qtz-ser-chl-py					172							
							20	1/16	qtz-ser-chl-py												
							5°	1/20	qtz-chl-py-cc-<lim>		1.5%				68%	37%	99367	.20 .020 ox	.002		.17%
		175-198 DK Alt'n w/ narrow zones of sans Alt'd GD					20 x 3	4 in + 1/16 x 3	qtz-chl-ser-py-<<cc> x 4					177							
								1/4	99 + rubble												
							10	1/4	qtz-chl-py-lim-cc	0 10 20 30 40 50 60 70 80 90											
					180		20 x 2	1/16 + 1/4	qtz-chl-ser-py-<ep-<cc>					180	90%	180					

Lep stringers in DK. Alt'n

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GIBRALTAR MINES LTD.

HOLE No. 84-23
SHEET No. 1 of 5

BOTTOM DEPTHS	
LEACH CAP	
LIM. ZONE	
SUPERGENE	

ROCK TYPES & ALTERATION	∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Structure	Veins ∠ to Core Axis	Width of Veins	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
	~60° WK	190			30° X2 70 60° 50 20° 10° 25 X3 10 X2 10	1/16 + 1/20 1/16 1/16 1/8 1/8 1/20 1/16 X 3 1/20 X 2 1/4	qtz-ser-chl-py-lim-cc qtz qtz-chl-ser-py-lim (cc) qtz-chl-ser-py-cc qtz-chl-py-cc-(cp)-(lim) qtz-chl-py-cc-lim qtz-chl-carb-py-lim-cc X3 qtz-chl-carb-py-lim-cc X2 qtz-chl-carb-py-cc-lim	0 10 20 30 40 50 60 70 80 90	1.3%	Carbonate in veins now	185½	51% 44%	10%	99368	.13 .020%	.004		.26%
	~60° WK	200			20° 10° 20 + 30° 30° 5° 10° 50 + 5	1/16 1/10 1/10 X 2 1/16 1/8 1/8 1/20 X 2	qtz-chl-ser-py-cc qtz-carb-chl-py qtz-chl-py-lim-cc X 2 qtz-chl-py-cc qtz-carb-chl-py qtz-chl-py-lim-cc cc X 2	0 10 20 30 40 50 60 70 80 90	1.5% arsenic		190 ½ 195	38% 83%	15%	99369	.13 .01%	.008	.16 3815	.28%
198-					20 X 4 80 5° 50 30° 20° 10° ?	1/8 + (1/16 X 3) 1/8 1/8 1/16 1/8 1/10 ?	qtz-chl-py-carb X 4 mal qtz-carb-chl-py qtz-chl-carb-py (mal in qtz-chl-carb-py veins) qtz-chl-carb-py qtz-chl-carb-py carb, gg - Broken core	0 10 20 30 40 50 60 70 80 90	2%	Driller's grease on core Badly broken Hard. mal.	201 207	68% 60%	30%	99370	.13 .01%	.010		.10%
DK Alt^n w/ no sauß, abund carb + ser. grades to a qtz-ser-chl-carb shear @ 212'	60° WK to Mod	210			70° 40 X 4 10° 40° 15 X 4 60 15 + 30°	1/20 X 4 1/20 1/20 1/20 X 4 1/8 1/8 X 2	Broken core - gg - (py) - (cp) gg + broken core w/ py-cp-mo qtz-ser-chl-carb-py X 4 qtz-ser-carb-py-cp qtz-chl-carb-py X 4 qtz-carb-chl-py	0 10 20 30 40 50 60 70 80 90	1½%		211 215	80% 78%	40%	99371	.22 .02%	~~.004~~ .024		.12% Hi MoS_2
212-220' qtz-ser-chl-carb Shear - has alt. green waxy appearance	60° Str	220			60 10 60° 60° 17 60	1/16 1/16 1/16 1/8 1/16 1/16	qtz-carb-chl-py (cp) X 2 qtz-chl-carb-py qtz-carb-chl-py carb gg - 4097 carb gg qtz-carb-chl-py-(cp)	0 10 20 30 40 50 60 70 80 90	1%		222 227	60% 76%	27%	99372	.08 .01%	.030		.07%
220'- DK alt^n - qtz ser-chl-(carb) w/ mod foliation	60° Mod	230			20° 15 50° 60° 30 X 2 15 30 X 2	1/16 1/16 1/16 1/16 1/16 X 2 1/8 1/10 X 2	qtz-carb-chl-py qtz-carb-chl-py-cp qtz-chl-carb-py qtz-chl-carb-py qtz-chl-carb-py qtz-chl-ep qtz-carb-chl-py X 2	0 10 20 30 40 50 60 70 80 90	1½%		232 237	24% 88%	38%	99373	.10 .01%	.006		.05%
Phase Chl-Hem	60° Mod	240			20° 15 50° 60° 30 X 2 15 30 X 2	1/16 1/16 1/16 1/16 1/16 X 2 1/8 1/10 X 2	qtz-carb-chl-py qtz-carb-chl-py-cp qtz-chl-carb-py qtz-chl-carb-py qtz-chl-carb-py qtz-chl-ep qtz-carb-chl-py X 2	0 10 20 30 40 50 60 70 80 90	1½%									

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GIBRALTAR MINES LTD.

HOLE No. 84-23
SHEET No. 5 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 Diesel	Estimated Core Recovery %	RQD	ASSAY RESULTS Sample Number	% Cu	% Mo		Estimated Grade
					60x2	1/16 x 3	Broken sed, shear zone - serp?	0									.16	
					50 x 2	1/16 x 2	carb qq x 3	10										
			80°		60°	1/16	carb - py x 2	20			243							
					30°	2	gm - chl - cp - py	30										
					30°	1/8	qtz - ser - <cp>	40										
					30°	2	qtz - chl - cp	50										
					30x3	1/8 x 3	Qtz Vein w/ py - cp - mo	60	.6%	Ep stringers		81%	17%	99374	.39 .01 ox	.004	3770	.20%
				250	80°	1/20	qtz - chl - py - cp x 3	70										
							qtz - chl - py - cp	80			250		250					
					60°	1/2	Vearb qq	90										
					10°	1/20	qtz - chl - cp	0										
					30 x 6	1/16 + 1/20 x 5	qtz - chl - py - cp x 6	10										
			ND		40°	1/8	qtz - chl - cp	20										
					10° x 2	1/16 x 2	carb x 2	30			255							
					30°	1/16	qtz - chl - carb - py	40					21%	99375	.26 .01 ox	.020		.24%
				260	80 x 2	1/20 + 1/16	qtz - chl - carb - py x 2	50				97%						
								60										
								70			259½							
								80					260					
								90										
					5°	1/16	carb	0										
					60	1/20	qtz - chl - cp	10										
					5°	1/20	carb qq	20										
			N.D.		80	1/16	qtz - chl - carb - py - cp	30	1%	5° fract w/ broken core & qq.		83%	30%	99545	.37 .01 ox	.010		.17%
					30	1/8	qtz - chl - py	40										
					45		qtz - chl - mag - <cp>	50			267							
				270	20	1/8	qtz - chl - cp	60										
								70										
								80				90%	270					
								90										
					15°	1/80	Carb	0										
					60°	1/20	qtz - carb	10										
					30	1/8	qtz - chl - py - cp - mo	20			272							
					50	1/16	qtz - chl - carb - py	30										
					70°	1/16	carb qq - rubble, broken	40				77%						
					30 x 3	1/16 x 3	qtz - chl - carb - py - cp	50	1%	Badly broken core + carb qq	275		30%	99546	.26 .01 ox	.006		.12%
				280		1"	carb x 3	60										
							Broken core - carb qq	70				68%						
								80			279							
								90					280					
					20°	1/2	qtz - carb - chl - py - <cp>	0				32%						
					70	hle	chl - mo ? slip plane	10			281½							
					5°	hle	carb qq	20										
					10°	1/20	qtz - carb - chl - hem - <py>	30	.5%	Badly broken core tqq (carb		69%	6%	99547	.25 .01 ox	.018	.30	.03%
								40										
								50										
						4'	Broken core - carb qq	60			287							
				290			qq - rubble	70									3725	
								80					290					
					15°	1/8	qtz - chl - py - cp	90				19%						
					5	hle	carb - hem	0										
					60°	1/4	qtz - chl - cp	10		Badly broken core	292		0%	99548	.29 .01 ox	.016		.17%
				296	5°	1/4	qtz - chl - carb - cp	20	5%			75%						
								30										
								40										
								50			296		296					
@ E.O.H								60										
								70										
								80										
								90										

M.R. Shaw

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-18
SHEET No. 1 of 4

LOCATION: GRANITE LAKE	BEARING: 0°	LATITUDE: 45,089.78 N	CORE SIZE: N.Q.W.
DATE COLLARED: June 18, 1984	LENGTH: 235'	DEPARTURE: 53,563.24 E	SCALE OF LOG: 1" = 10'
DATE COMPLETED: June 19, 1984	DIP: -90°	ELEVATION: 3959.74	REMARKS: hole abandoned at 235' due to no return water

LOGGED BY: G.D.B.
DATE: July 3, 1984

BOTTOM DEPTHS: LEACH CAP —; LIM. ZONE —; SUPERGENE —

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 %	R Q D	ASSAY RESULTS: Sample Number	% Cu	% Mo		Estimated Grade
Casing To 49'			50								49							
MINE PHASE QUARTZ DIORITE (49' - 102') 45 o/o plag.	30-Mod		60		40 40 20 5	3" 6" ½ ½	qt3 qt3-chl. carb zone qt3 qt3		<.5		55 59	85 60	0	99526	.02 <.01 0%	<.002	3905	.05
25 o/o chl 25 o/o qt3 Dark Alt'n Phase	30 Mod		70		7	12"	qq-bx-hem		<.5		67	35 20	0	99527	.08 <.01 0%	.002		.05
	40 Mod-Str.		80		20 15 35	2" 5" 14"	qt3-chl-vug qt3-chl-vug qt3-chl-carb ((ep)) zone		<.5		72 77 80	40 80	3	99528	.02 <.01 0%	<.002		.08
	30 WK		90		45 60 x 5 50 x 2	1" hie x 5 1/10 x 2	ep hem x 5 qq-hem x 2		<.5		87	85	0	99529	.01 <.01 0%	.002		.05

Estimated Grade: 3905

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GIBRALTAR MINES LTD.

HOLE No. 84-18
SHEET No. 2 of 4

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 %	RQD	ASSAY RESULTS Sample Number	% Cu	% Mo		Estimated Grade
small fault.	?	100		?	3½'	qq	0 10 20 30 40 50 60 70 80 90	<.5		94 97	60 90	0	99530	.04	.002	.04 3860	.05
102' MAJOR FAULT ZONE (102'-144') zone of broken	?	110		40 x 3 30 x 3 5 30	hem x 2 3' 2'	hem x 2 qq-bx-hem qq-bx	0 10 20 30 40 50 60 70 80 90	<.5		105	85 40	0	99531	.01	.006		.05
gouge core and narrow gouge seams - core frags all under 2" dia.	?	120		?	8'	qq	0 10 20 30 40 50 60 70 80 90	<.5		113 118	30	0	99532	.03	.002		.05
	?	130			2'	qq	0 10 20 30 40 50 60 70 80 90	<.5		125 130	15 20	0	99533	.07	.008		.05
	?	140			8'	qq	0 10 20 30 40 50 60 70 80 90	1.0		137 140	25 80	0	99534	.21	.009		.14
144'						some qtz-ser-py (cp) veins in frags	0 10 20 30 40 50 60 70 80 90			143	20					.09 3815	
MINE PHASE (144'-185') (Saus. Alt'n Phase)	45 Mod	150		20 x 3 55	½ x 3 ¼	qtz-chl (cp) x 3 qtz-cp	0 10 20 30 40 50 60 70 80 90	1.0		147½	80	0	99535	.19	.006		.18

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GIBRALTAR MINES LTD.

HOLE No. 84-18
SHEET No. 3 of 4

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
	50-60 Mod	160			45 45 x 4 50 45 5 45 70	1/2 1/2 x 2 1/2 1/8 1/2 4"	qtz-chl-cp qtz-chl-cp x 4 qtz-chl-ser-cp qtz-cp qtz-cp qtz-cp(Ms)		.5		155	75	40	99536	.23	.014		.30
	50 Mod	170			60+50 30 40 45 50	1/4 x 2 1/2 1/8 1/2 12"	qtz-chl-py x 2 qtz qtz-ser-cp qtz-cp qtz-chl(cp) zone		1.0		165	95	29	99537	.16	.002		.16
	50 Mod	180			40 x 3 - 50 60 60 50 45 60 20	1/20 x 2 1/2 3" 15" 6" 2" 1/2	qtz-chl-py x 2 qtz-ser-py(cp) qtz-ser-chl-cp qtz-ser-py-cp qtz-ser-py-cp qtz-ser-py-cp		1.5		174½	80	10	99538	.21	.002		.25
185 FAULT ZONE (185-212)		190			50 5 20	12" 1" 3" 14"	qtz-ser-py-cp-Mo qtz qq qq(br)		1.5		185	85 70	0	99539	.26	.060	.21 .570	.18
- broken gouge core and minor gouge seams - over 80% of rx frags are under 2" dia. - this may be a small steep fault with a wide shatter zone.		200 210			5	3"	qq		<.5 <.5		193 199 207	20 40	0 0	99540 99541	.37 .25	.018 .008		? ?

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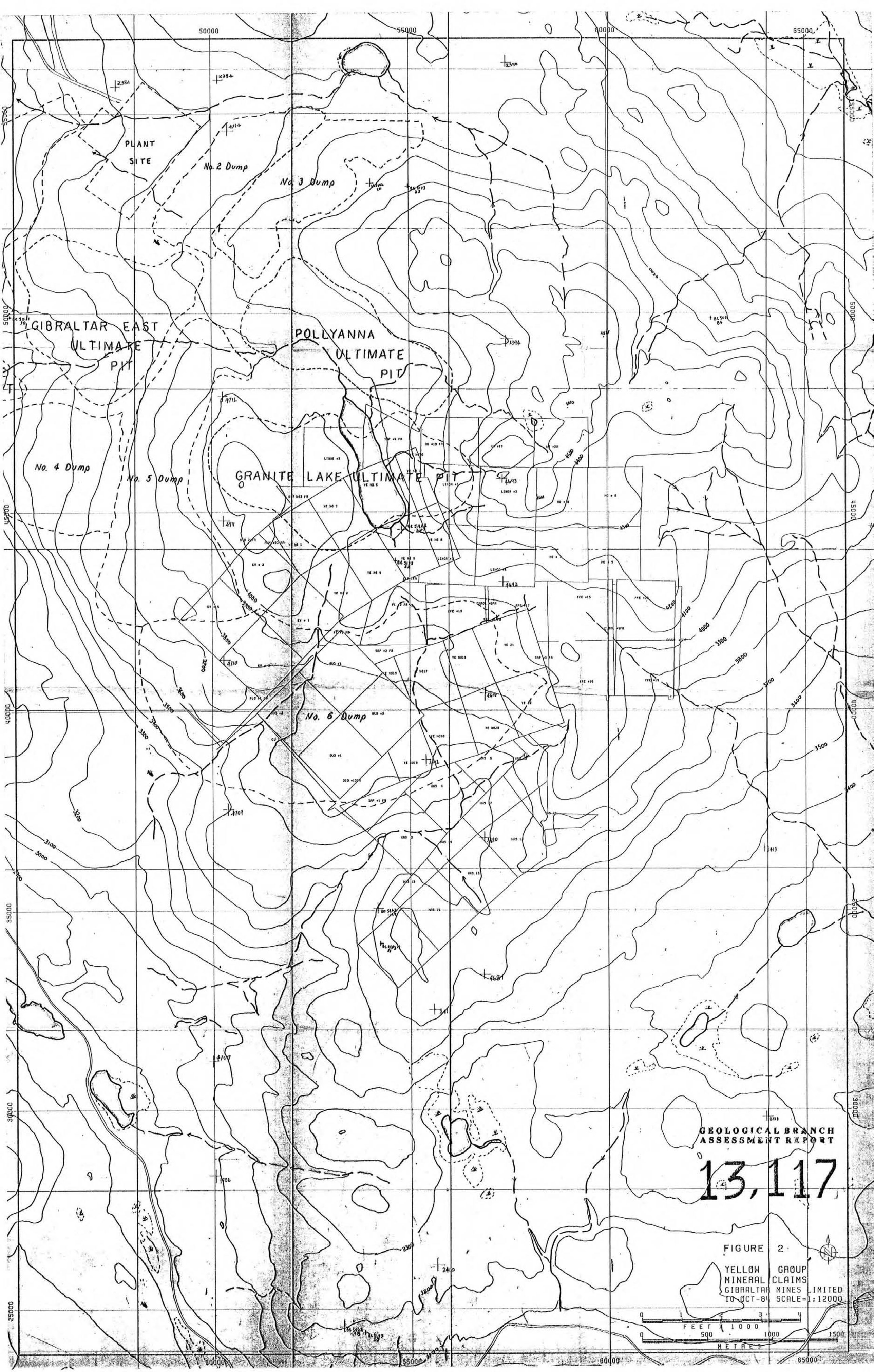
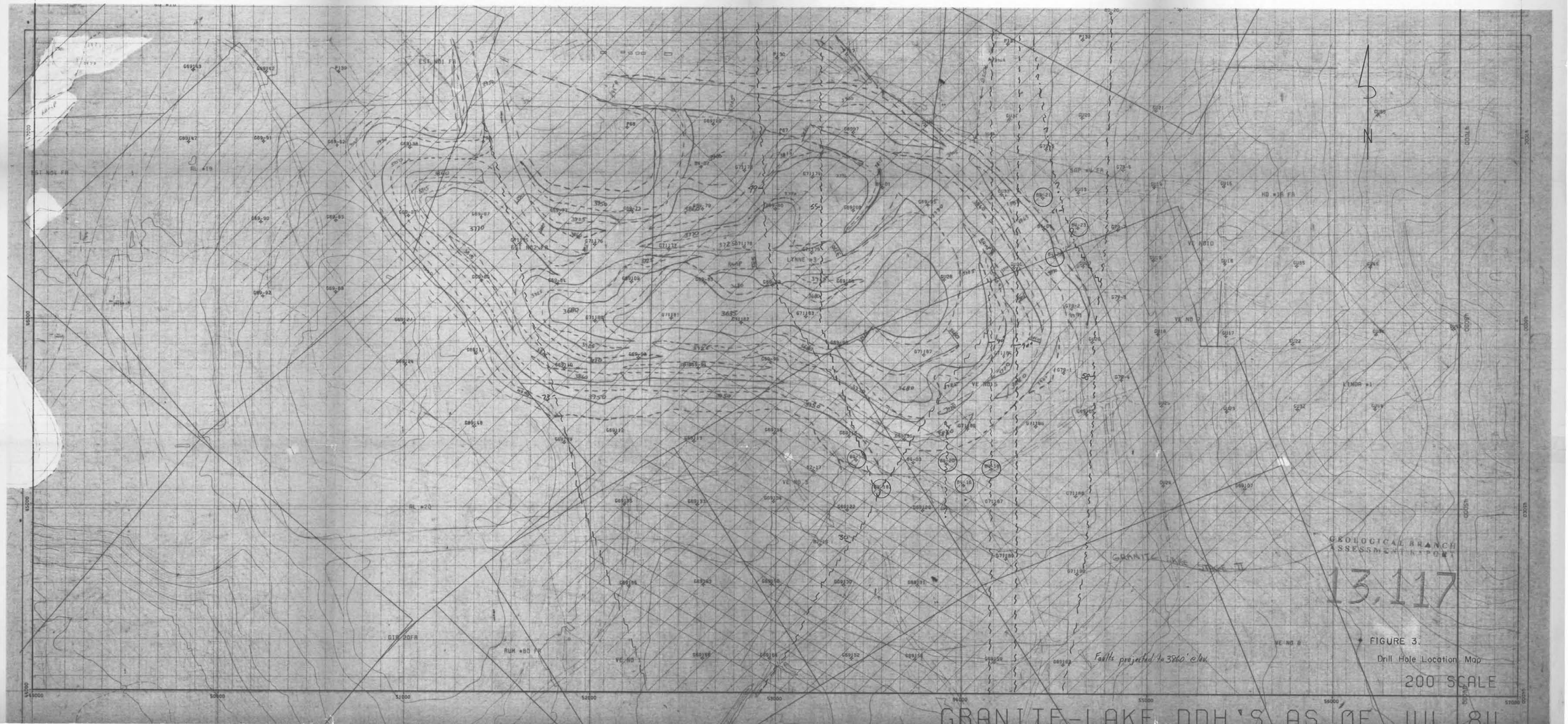
GIBRALTAR MINES LTD.

HOLE No. 84-18
SHEET No. 4 of 4

ROCK TYPES & ALTERATION			∠ to Core Foliation	GRAPHIC LOG: Foliation Alteration	Footage	Sketch	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
		215					60 x 2	1/16 - 1/8	qtz-core x 2	0, 10, 20, 30, 40, 50, 60, 70, 80, 90	.5		215	85	23	99543	.17	.006		.18
			NC				60 x 2	1/2 x 2	qtz + qtz-chl-cp											
							4 x	1/4	qtz-chl-cp											
							50	1/4	qtz-chl-cp											
					220		45 x 4	1/20 x 4	qtz-chl-py(cp) x 4					75						
							50	1/10	qtz-chl-cp	0, 10, 20, 30, 40, 50, 60, 70, 80, 90										
							40	1/2	qtz-chl-cp											
							50-60 x 4	1/8-1/16 x 4	qtz-chl-cp x 4											
							40	2"	qtz-chl-(cp)		.5		225		23	99545	.23	.012		.16
							20	1/4	qtz-cp											
					230		45-10	1/10 x 2	qtz-chl-cp x 2					70					.25	
							20	1/4	qtz-chl-carb-cp	0, 10, 20, 30, 40, 50, 60, 70, 80, 90		drilling terminated - hit fault, no water								
							70 ?	1/10	qtz-chl-cp											
		E.O.H. 235'					30	1/10	qtz-chl-py(cp)				235			99544	.11	.002	.25	.12
										0, 10, 20, 30, 40, 50, 60, 70, 80, 90										
									S. D. Bypoulth	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										


PLANT SITE
No. 2 Dump
No. 3 Dump
GIBRALTAR EAST ULTIMATE PIT
POLLYANNA ULTIMATE PIT
No. 4 Dump
No. 5 Dump
GRANITE LAKE ULTIMATE PIT
No. 6 Dump
GEOLOGICAL BRANCH
ASSESSMENT REPORT
13,117
FIGURE 2
YELLOW GROUP
MINERAL CLAIMS
GIBRALTAR MINES LIMITED
10 OCT-84 SCALE=1:12000
FEET X 1000
METRES


N
LYNNE #3
VE NO 5
VE NO 7
VE NO 8
LINDA #1
GRANITE LAKE
Faults projected to 3860' elev.
GEOLOGICAL BRANCH
ASSESSMENT REPORT
13,117
FIGURE 3.
Drill Hole Location Map
200 SCALE
GRANITE-LAKE DDH'S AS OF JUL 84