

87-56-15798

DIAMOND DRILL REPORT

ON THE

SAWMILL GROUP

Cariboo Mining Division

93 B/8W

(Latitude 52° ^{30'}_{28.3'}, Longitude 122° ^{15'}_{16.4'})

OWNER AND OPERATOR

GIBRALTAR MINES LIMITED

McLEESE LAKE, B.C.

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,798

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Submitted: February 25, 1987

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1 INTRODUCTION

The Sawmill Group lies about 4.0 miles (6.44 km.) south of the Gibraltar Mines concentrator, along the southern flank of Granite Mountain at approximately the 3500-foot elevation. Access is via a network of old logging roads which link the property to the paved road leading to Gibraltar Mines. General location of the claims is shown in Figure 1.

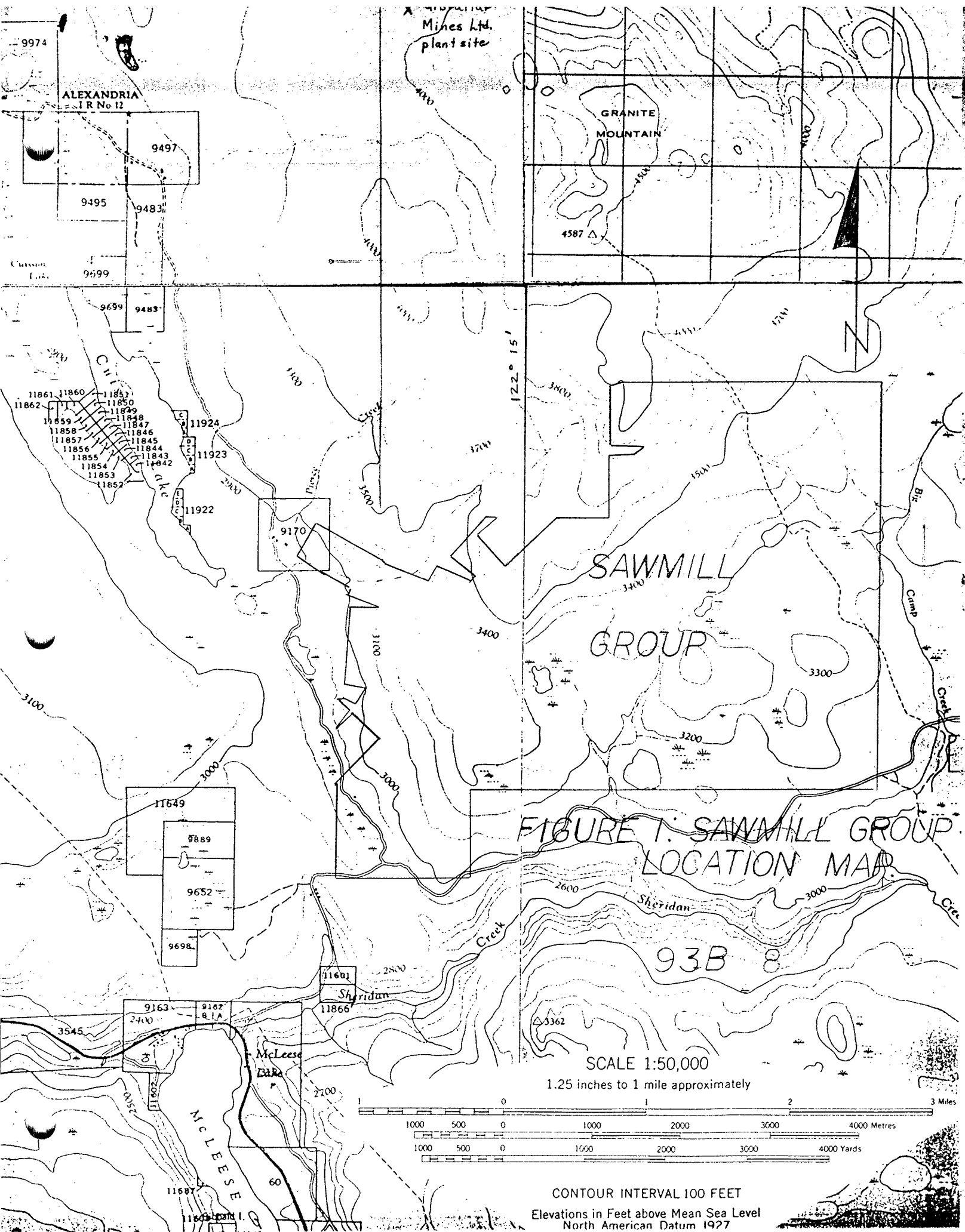
The first claims of the Sawmill Group were staked in 1978 to cover a large I.P. anomaly and several older copper prospects. Of the prospects, the most important was the Iron Mountain property on which the first recorded work dates back to 1925. The chief focus of work for Gibraltar Mines was the I.P. anomaly which was located west of Iron Mountain over an area of very limited rock exposure. The anomaly had been outlined in 1967 and was attributed to a graphitic source rather than sulfide mineralization. Diamond drilling in 1979 by Gibraltar Mines however, revealed that extensive pyrite and chalcopyrite mineralization occurred within the I.P. zone, and by 1981, approximately 30 million tons of open pit inventory had been outlined, which graded at 0.28% total copper and 0.022% molybdenite. More diamond drilling and I.P. surveys followed from 1982 to 1985, but little change was made in the inventory. Most of the above work is covered in Minister of Mines Reports and assessment work reports. (See attached bibliography.)

This report covers a diamond drill program conducted in 1986 within the main area of mineralization. Nine vertical N.Q. diamond drill holes, totalling 4,476-feet (1,364 meters) were completed on the Sawmill Group. Two other holes fell within the Red Group and the Green Group. Drilling was done by J. T. Thomas Diamond Drilling Ltd. of Smithers, B.C. during the period August 15 to August 28, 1986. The whole core was assayed except for a two-inch segment per ten-foot section which was retained and stored at Gibraltar Mines for future reference.

2 MINERAL CLAIMS

The mineral claims of the Sawmill Group are shown in Figure 4 (in pocket). Information on these claims is tabulated below:

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>NO. OF UNITS</u>	<u>ANNIVERSARY DATE</u>
Tim 1	815	2	28 Aug 78
Cole 1	816	9	28 Aug 78
Geoff 1	1009	9	29 May 79
Ryan 1	1048	1	26 Jul 79
Aaron 1	1049	1	26 Jul 79



Doug 1	1047	3	26 Jul 79
Brent 1	1330	6	14 Nov 79
Barb 1	1329	12	14 Nov 79
Janis 1	1331	3	14 Nov 79
Kate 1	3799	12	29 Jun 81
WD 1	3800	6	29 Jun 81
Bruce 1	3801	12	29 Jun 81
Paul 1	3802	12	29 Jun 81
Sheridan 1	4068	9	15 Sep 81

3 GEOLOGY

The Sawmill Group covers a broad contact zone formed between the Permian Cache Creek Group and the Upper Triassic Granite Mountain pluton. Within the claim area, the Cache Creek Group consists of volcanic flows, tuffs, breccia and sediments mainly of andesitic to dacitic composition, with minor interbeds of graphitic schist and impure limestone. These rocks have been regionally metamorphosed to the Greenschist Facies and have undergone a much higher grade of metamorphism along the contacts of the Granite Mountain pluton. The plutonic rocks underlying the Sawmill Group consist mainly of diorites of variable texture and composition which have been collectively referred to as the Border Phase Diorite. As the name implies, an assimilative origin is assumed for these rocks. The actual contact zone, which is about a mile wide, consists of a bewildering array of dioritic rocks and recrystallized andesitic and dacitic rocks of the Cache Creek Group, all having a similar composition and texture. To add to this complexity, two other plutonic rock types have been recognized along the northwestern side of the claim group. One is a white quartz porphyry which has been interpreted to be a hypabyssal intrusion related to some period of acidic vulcanism. It forms a small body along the northeast side of the Sawmill ore zone, and also occurs as small dykes scattered throughout the property. The other is a quartz diorite which forms a large body along the northern edge of the deposit. It is correlative with the Mine Phase Quartz diorite which is the host rock for the Gibraltar ore body, and is of particular interest because it is closely associated with the best grade mineralization of the Sawmill ore zone.

A large pyrite zone has been outlined within the Sawmill Group. It covers all rock types but appears strongest along the Cache Creek side of the contact. Chalcopyrite and molybdenite occur throughout the pyrite zone and in a general way the copper and molybdenite grades increase as pyrite concentrations decrease. In the Sawmill ore zone, which is located along the northwestern edge of the pyrite zone, the best grade ore occurs when the pyrite concentrations decrease to below three percent. This figure is taken as the boundaries of the pyrite zone.

The ore and gangue mineralogy of the Sawmill ore zone is very similar to that of the Gibraltar deposits. Pyrite, chalcopyrite and molybdenite occur in veins and shears accompanied by various combinations and concentrations of quartz, chlorite, carbonate, sericite and epidote. There is however, one ore type not found at Gibraltar. This has been referred to as a quartz-gypsum zone which is characterized by gypsum veins and often strong chalcopyrite mineralization accompanied by minor bornite. Pyrite is invariably weak or absent, and the zone is interpreted to represent the extreme low sulfide end of the pyrite-chalcopyrite zoning system.

Structural controls have not yet been worked out for the Sawmill ore zone. Much of the ore is confined to westerly and northwesterly striking shear zones which dip southerly, but the gross configuration of rock units and ore types also suggest fold structures have been operative. In a general way, the ore zone lies along the contact formed between the Mine Phase Quartz Diorite and the older rocks. The ore is not confined to any one rock type but is best developed in the Mine Phase and weakest in the Quartz Porphyry.

The Sawmill ore zone is cut off towards the northwest by a large fault system which has been referred to as the West Boundary Fault. This fault is considered to be a wide complex north trending system with numerous individual zones separating wedges and blocks of displaced rock.

4 DRILL PROGRAM

4.1 Objectives

1. Drill holes 86-21 and 86-22 were located to test the grade of a possible massive sulfide zone situated within the ore body.
2. Drill holes 86-23 to 86-29 were located to determine the westward extent of the outlined ore.
3. Drill holes 86-30 to 86-31 were located to define the northern boundary of the ore.

Note: 1 foot = 30.5 cm

4.2 Results

The drill hole locations are shown in Figure 2. An outline of the Sawmill ore zone is shown in Figure 3. All copper values reported here and in the logs are for total copper. All pyrite concentrations are visual estimates. An outline of pertinent results is provided in the following table and descriptions.

Hole No.	Collar Elev.	Depth	Casing	Ore Intersection From	To	Width	%TCu	%MoS ₂
86-21	2914'	507'	40'	300	507	207	.22	.013
86-22	2982'	504'	61'	100 340	180 504	80 164	.26 .31	.003 .013
86-23	2898'	506'	85'	280 400	350 506	70 106	.25 .37	.022 .022
86-24	2962'	597'	80'	80	140	60	.21	.010
86-25	2958'	507'	47'					
86-26	2903'	507'	66'	66	290	224	.37	.020
86-27	2895'	351'	131'					
86-28	2896'	503'	125'	440	503	63	.28	.010
86-29	2915'	501'	54'	300	430	130	.29	.020
86-30	2972'	497'	30'					
86-31	3001'	507'	65'	65	90	25	.60	.013

Drill hole 86-21 was confined entirely to metavolcanic rocks of the Cache Creek Group. The top of the pyrite zone was intersected at 90-feet and the bottom at 470-feet. The best grade ore occurred below the pyrite zone.

Drill hole 86-22 went through the same sequence of metavolcanic rocks but intersected the Mine Phase Quartz Diorite at 375-feet. The pyrite zone was encountered from the rock surface to 370-feet. The best copper grades were again located below the pyrite zone but in this case in a quartz Diorite host rock.

Drill hole 86-23 was in metavolcanic rocks of the Cache Creek Group down to 112-feet. From 112-feet to 265-feet it went through the West Boundary Fault Zone and into Mine Phase Quartz Diorite. From the base of the fault at 265 feet to the end of the hole at 506-feet, the quartz diorite showed the typical

quartz-gypsum mineral assemblage; that is, low pyrite, abundant chalcopyrite, minor bornite, strong quartz veining and abundant gypsum veins.

Drill hole 86-24 was confined to the pyrite zone but, except for 20-feet of oxide ore, did not indicate any significant ore grade rock. Quartz Diorite was encountered down to 300-feet and then a Border Phase Diorite to the end of the hole.

Drill hole 86-25 also intercepted barren pyrite mineralization. The hole was confined entirely to Border Phase Diorite which had been cut by numerous quartz-sericite-carbonate and quartz-chlorite-carbonate shear zones.

Hole 86-26 went through the West Boundary Fault Zone down to 91-feet and into the Mine Phase Quartz Diorite from 91-feet to the end of the hole. Strong chalcopyrite mineralization was intercepted down to 290-feet. A pyrite zone was encountered from 230- to 320-feet.

Hole 86-27 also went through the West Boundary Fault Zone and into the Mine Phase Quartz Diorite at 289-feet. Unfortunately, the hole was abandoned at 351-feet just as the quartz-gypsum zone was being intersected.

Hole 86-28 passed through a sequence of Cache Creek Group rocks, including limestone, and into the West Boundary Fault Zone from 390-feet to 468-feet. From 468-feet to the end of the hole at 503-feet, an ore-bearing quartz-gypsum zone was intersected in a Mine Phase host rock.

Hole 86-29 was confined entirely to Mine Phase Quartz Diorite. Two pyrite zones were encountered: one at 160- to 300-feet and the other at 410- to 503-feet. The ore zone was found between the two pyrite zones at 300- to 430 feet.

Hole 86-30 encountered quartz porphyry down to 405-feet and Cache Creek metavolcanics from 405-feet to the end of the hole at 497-feet. Chalcopyrite and molybdenite mineralization was noted throughout the hole but no significant ore grade sections were found.

Hole 86-31 encountered a fine grained diorite, or quartz diorite, down to 91-feet and Border Phase Diorite for the remainder of the hole. The fine grained rock is of particular interest since it contains the only ore grade mineralization found in the hole, and it may represent the outer "chilled" margin of the Mine Phase Pluton.

Oxide and supergene effects appeared negligible in most of the holes. Some supergene enrichment was noted in the upper ore zone of hole 86-22. The near surface ore grade zones found in 86-24 and 86-31 were due to oxide and supergene enrichment.

4.3 Interpretation

The 1986 diamond drill program has confirmed the basic geological model but has changed the previously projected ore configuration. Drill holes 86-21 and 86-22 both indicate an ore zone underlies the pyrite zone and hole 86-22 also indicates the Mine Phase Quartz Diorite lies beneath the pyrite zone. This supports original geological projections for the southern and southeastern side of the ore body which involves a south dipping pyrite zone and underlying ore zone being controlled by the south dipping Mine Phase contact. These holes, however, did not intersect the projected massive sulfide zone which may indicate it has a much steeper dip than originally predicted. Drill holes 86-30, 86-31, 86-24 and 86-25, along with earlier holes, define the north eastern boundary of the deposit, which now appears as a sharp, relatively straight, northwest trending ore cut-off. This interpretation negates some earlier northward ore projections. Drill hole 86-29 also removes some tonnage from the original inventory; this hole is particularly disappointing because it suggests a large area of waste lies between the main ore body and the northwest extension. Drill holes 86-23, 86-26, 86-27 and 86-28, serve to define and enlarge the northwest ore extension, which was discovered last year by hole 85-76. The new ore addition now appears to be about 1,000-feet long and 300-feet thick, with a northwest strike and 40- to 50-degrees southerly dip. The gain in tonnage here would more than compensate for losses experienced elsewhere in the ore body. These holes also delineate the West Boundary Fault Zone and indicate the ore body is cut off by the fault with a possibly large displacement. That is, no indication of the ore body has been found along the west side of the fault zone, neither in this program nor in previous drilling. The fault may be complex with numerous individual zones separating wedges of displaced rock. That part of the fault zone cutting off the ore body has a strike of 350-degrees and a dip of 40-degrees westerly.

5 STATEMENT OF EXPENDITURES

August, 1986 Diamond Drilling, Sawmill Group.

(a) Drilling Costs

Direct Footage Charges:

86-22	504'	@ \$13.25/foot	=	\$ 6,678.00
86-23	506'	@ \$13.25/foot	=	\$ 6,704.50
86-24	597'	@ \$13.25/foot	=	\$ 7,910.25
86-25	507'	@ \$13.25/foot	=	\$ 6,717.75
86-26	507'	@ \$13.25/foot	=	\$ 6,717.75
86-27	351'	@ \$13.25/foot	=	\$ 4,650.75
86-29	500'	@ \$13.25/foot	=	\$ 6,625.00
86-30	497'	@ \$13.25/foot	=	\$ 6,585.25
86-31	507'	@ \$13.25/foot	=	\$ 6,717.75
	<u>4,476'</u>			<u>\$59,307.00</u>

Machine Hours

Cat Hours: 11.5 hrs.	@ \$40.00	=	460.00
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Materials Lost

3 NQ Bit @ \$508.00	=	<u>1,016.00</u>
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Total Drilling Costs			\$60,783.00
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(b) Site Preparation

Aug 15 TD20C 7 hr.	@ \$80.25	=	561.75
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Aug 15 Lowbed 7 hr.	@ \$60.00	=	<u>420.00</u>	\$ 981.75
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(c) Vehicle Costs

Rental 4x4, 1986 Pick-up

Aug 14-29 6 days @ \$35.40			\$ 212.40
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(d) Assay Costs

338 Cu - MoS ₂ assays @ \$4.40/assay			\$ 1,707.20
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(e) Supplies

Core boxes: 167 boxes @ \$6.00	=	1,002.00
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Bags, tags, etc.	=	<u>100.00</u>	\$ 1,102.00
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e) Personnel Costs

Core Logging, Sample Preparation, Interpretation

G. D. Bysouth

Aug 20-22	16 hrs.
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Aug 26	4 hrs.
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Sep 08-09	16 hrs.
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Sep 12-16	24 hrs.
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Oct 27-31	40 hrs.
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Nov 14	8 hrs.
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Nov 17-19	20 hrs.
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Nov 26-27	16 hrs.
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Feb 11-13/87 24 hrs.
 168 hrs. @ \$31.00/hr. = \$5,208.00

Field Work and Sample Preparation

E. M. Oliver

Aug 14 2 hrs.
 Aug 20-22 10 hrs.
 Aug 25-29 16 hrs.
 Oct 6 2 hrs.
 30 hrs. @ \$19.64/hr. = 589.20

G. Warren

Aug 15 8 hrs.
 Aug 18-22 19 hrs.
 Aug 26-29 12 hrs.
 39 hrs. @ \$14.29/hr. = 557.31

B. Locke

Sep 03 4 hrs.
 Oct 06 2 hrs.
 Oct 27-31 40 hrs.
 46 hrs. @ \$14.29/hr. = 657.34

Total Personnel Charges

\$ 7,011.85

TOTAL COST

\$71,798.20

6 CONCLUSIONS

Although some additional reserves have been outlined, this drill program has not substantially changed the mining feasibility of the Sawmill Zone. It remains at this date, a sub-economic ore deposit.

More drilling is required west of the West Boundary Fault Zone to search for the displaced portion of the Sawmill Zone.

Submitted by:

G. D. Bysouth

G. D. Bysouth
Senior Geologist

7 BIBLIOGRAPHY

1. B.C. Minister of Mines Annual Reports
 - 1925, pp. 156
 - 1956, pp. 33
 - 1957, pp. 16
 - 1972, pp. 135
2. Assessment Reports - Gibraltar Mines Ltd., Cariboo Mining Division
 - (1) Bysouth, G. D., Diamond Drill Report on the Cole Claim, August 1979.
 - (2) Bysouth, G. D., Diamond Drill Report on the Cole Claim, April, 1980.
 - (3) Bysouth, G. D., Diamond Drill Report on the Ross Group, November, 1980.
 - (4) Walcott and Associates Limited, A Report on an Induced Polarization Survey, Sawmill Claims, February, 1982.

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 logged the core and assessed the results of this drill program.

Garry D. Bysouth
Garry D. Bysouth

APPENDIX II. List of Abbreviations

ank.....	ankerite
bo.....	bornite
cal.....	calcite
carb.....	carbonate
chl.....	chlorite
cp.....	chalcopyrite
dissem.....	disseminated
ep.....	epidote
foln.....	foliation
gg.....	gouge
grn.....	grained
gyp.....	gypsum
lim.....	limonite
mal.....	malachite
mag.....	magnetite
py.....	pyrite
qtz.....	quartz
rx.....	rock
ser.....	sericite
str.....	strong
stkwk.....	stockwork
wk.....	weak
Wt. Q.D.....	White Quartz Diorite = Leucocratic Phase

Note: 1 foot = 30.5 cm

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-21
SHEET No. 1 of 9

LOCATION <u>SAWMILL ZONE</u>	BEARINGS <u>-</u>	LATITUDE <u>~32,276.00 N</u>	CORE SIZE <u>N.O.W.</u>	LOGGED BY <u>G.D.B.</u>
DATE COLLARED <u>15-Aug-86</u>	LENGTH <u>507'</u>	DEPARTURE <u>~48,757.00 E</u>	SCALE OF LOG <u>1"=10'</u>	DATE <u>Nov. 4, 1986</u>
DATE COMPLETED <u>16-Aug-86</u>	DIP <u>-90°</u>	ELEVATION <u>~2914.00'</u>	REMARKS <u>Bottom of the pyrite zone occurs @ 470'</u>	

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	Veins L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Foliation Blebs	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	0				LIM. ZONE	0	SUPERGENE	—	REMARKS
		Casing To 40																	
		META VOLCANIC UNIT (10'-130')			35 x 45	1/10 x 2	carapay x 2					40	40						
-	This is interpreted to be a recrystallized sequence of volcanic rx's, chiefly of diorite and andesite comp.		fs Mod						0.5			42	40	13	96051	.09	.002	.09	.05
-	a typical type is a fine grn. med. gray equigranular rx consisting mainly of chl and sauss. plus - avg. grn size is 2 1/2" - interbedded with thin rx. are			50	50	1/5	qtz-tour.					45	40						
-	2-10' zones of pale grayish green siliceous zones (acid-diorite tuff?) and dk green chloritic zones (basalt?)		fs Mod						0.5			47	40						
-	it should be noted that this rx is quite common along the southern part of the Summit Zone											48	35						
-	in most respects, it resembles a diorite											51	70						
				60			highly broken core					54	55	3	96052	.06	.002		.05
									1.5			55	30						
												59	30						
												60	40						
						</													

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-21

SHEET No. 2 of 9

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Fracture Stress	GRAPHIC LOG	Veins L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feetage Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	LIM. ZONE				54 PERGENE	REMARKS	Sample Number	% Cu	% Mo
		- Py is dissem throughout this unit - only the larger, more distinct veins are reported - some of the veins appear to be breccia fillings rather than true veins (ie. angular changes in direction as it around large rx frags.)	ND	5-15 x 5 45 50 x 30 x 60 90 20 x 30 x 60 25 60 90	1/20 x 5 1/8 1/20 - 1/10 x 3 1/4 1/10 - 1/8 x 2 1/8 1/4	chl-py x chl-py chl-carb-py qtz-carb-py chl-carb-py x 2 qtz-chl-carb-py qtz-chl-carb-py	0 10 20 30 40 50 60 70 80 90	1.5			85	100	53	96055	.08	.002	.08 2825	.10	
			ND	80 90? 60 35 x 10 100 47 x 50 x 35 x 2	1/4 1" 12" 1/20 - 1/10 1/10 - 1/20 x 4	qtz-carb-py (cp) qtz-carb-py (cp) qtz-ser-carb-chl-py (cp) chl-carb-py (cp) x 10 chl-carb-py (cp) x 4	0 10 20 30 40 50 60 70 80 90	3.0			92 97	95	53	96056	.12	<.002		.14	
			ND	5 20-30 x 4 45 x 40 30 10 60 x 40 110	1/20 1/10 - 1/10 x 4 1/10 x 2 1/2 1/8 1/4 - 1/8	chl-py chl-carb-py x 4 chl-py (cp) x 2 ser-chl-py qtz-cp chl-carb-py	0 10 20 30 40 50 60 70 80 90	2.5			107	100	50	96057	.13	<.002		.10	
			ND	60 x 35 40 5? 35 40 120	1/10 x 2 1/8 1/2 1" 2" 1/20 x 1	chl-py x 2 chl-carb-py (cp) chl-carb-py (cp) zone of broken and lost care chl-carb-py chl-qtz-py	0 10 20 30 40 50 60 70 80 90	2.0			113 117	50	10	96058	.07	.002		.12	
			ND	20 x 30 50 x 30 5 60 20 30 x 40 x 30 130	1/20 x 1 2" 1/4 x 2 1/4 1/2 1/20 x 2	chl-carb-py x 2 zone of broken core qtz-carb-py chl-py (cp) qtz-chl-carb-py (cp) qtz-carb-py qtz-carb-py chl-py x 3	0 10 20 30 40 50 60 70 80 90	6.0			120 122 126	40 95	40	96059	.08	.002		.10	
		NEKA ANDESITE UNIT (130-200') mainly a dk green fine to med grn (X ₁₀₀ -X ₁₀) dioritic rx consisting of ~	45 wx	35 x 2 40 x 5 x 10 15 x 2 30 x 4 35 140	1/10 x 2 1/8 - 1/10 x 1/2 1/3 x 2 1/8 x 2 1/8	chl-py x 2 chl-carb-py x 3 chl-carb-py (cp) x 2 chl-carb-py x 2 chl-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	4.0			95 136	95	40	96060	.12	.002	.10 2780	.12	

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-21
SHEET No. 3 of 9

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	Foliation Alteration	Feeds Structure	Veins L to Core A to B	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
												LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade
		~ 20% ep as ragged clots upto 1/8" dia ~ 30% chl ~ 40% sauss. plag. ~ 10% interstitial qts	ND				40x3 20x2 10x2 5x2 10x2	1/10x3 1/8x1/8 1/10x1/8 1/10x1/8	chl-carb-py (ep)x3 qtsx2 chl-carb-py (ep)x2 chl-carb-py (ep)x2 chl-carb-py (ep)x2	0 10 20 30 40 50 60 70 80 90	3.5			197	95	47	96061	.09	.002	.10
		- grn size and tex. are variable but much of the rx grades to a typical Border Phase Diorite.	ND				5 60 40x3 5 35x2 30 20	1/10 1/8 1/10x2 1/10x2 1/10	chl-py (ep) chl-ep-py chl-py x3 qts-py (ep) chl-py x2 qts-ser-py chl-py	0 10 20 30 40 50 60 70 80 90	4.5			157	90	77	96062	.07	.004	.08
			ND				25x2 35x2 70 45 50 45x40 40x10x5 10 20 15	1/10x2 1/8 1/10 1/10x2 1/8 1/8 1/8	chl-py x2 ep-py (ep) chl-py (ep) qts-chl-py (ep) zone qts-chl-py (ep)x2 chl-py (ep)x3 ser-py chl-py chl-py	0 10 20 30 40 50 60 70 80 90	5.5			167	95	80	96063	.12	.002	.14
		quartz porp.	ND				15x15 20x2 20 35x2 30-35x2+20x4 40x2 10x3 60	1/8x2 1/8x2 1/8 1/8x1/8 1/8x1/8 1/10x2 1/10x3 1/8	qts-chl-py x2 chl-carb-py (ep)x2 qts-py-ep qts-chl-py (ep) qts-chl-py x4 chl-py-ep x2 chl-py x3 qts-chl-ep-py (ep) zone	0 10 20 30 40 50 60 70 80 90	5.0			177	98	80	96064	.09	.002	.16 .10 2735
			ND				10x20x40 20 20 15 60x15 10 15	1/10x2+1/8 1/3 1/8 1/8x1/8 1/8 1/8	chl-carb-py (ep)x3 qts-chl-carb-py qts-ser-py qts-ser-py chl-ser-py (ep)x2 qts-chl-py qts-chl-py	0 10 20 30 40 50 60 70 80 90	5.0			185	95	40	96065	.07	.004	.12
			ND				40 30x50 80x2 40 45x3	1/8 1/10x2 1/8x1/8 1/8 1/10x3	qts-chl-py (ep) qts-chl-py x2 ep-py x2 ep-py (ep) py-chl x3	0 10 20 30 40 50 60 70 80 90	2.0			195	95	73	96066	.12	.006	.08

ROCK TYPES & ALTERATION			L to Core	Foliation	GRAPHIC LOG	V. in Core	Width of V. in	Mineralization	FRACTURE ANGLE TO CORE AXIS	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
											LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Sample Number	% Cu
		<u>BRECCIA UNIT</u> (200'-279')	ND			35 30 15 50 45 45	1/2 1/10 1/3 1/4 1/3 1/6	chl-ser-py chl.py qtz-carb-py (cp) qtz-chl-py chl-carb-qtz-py-cp qtz-chl-py	0 10 20 30 40 50 60 70 80 90	2.0		205	98	40	96067	.12	.002	.12
		-this is a complex unit which may be a sheared and res. volcanic conglomerate, or a volcanic polymictic breccia. - in part, it is the typical ep-chl-bx found in other holes, consisting of ragged ep clots up to 1" dia in a swirled chl. matrix but also contains	ND			50x2 30x2 5 30x20 45 10x3	1/3x2 1/20x2 1/4 1/4x10 1/4 1/10x2	chl-carb-py (cp)x2 chl.py x2 qtz-carb-py (cp) qtz-chl-pyx= qtz-py qtz-chl-pyx2	0 10 20 30 40 50 60 70 80 90	3.0		215	60	53	96068	.14	.002	.10
		rounded Q.F.P. frags. and rounded diorite frags up to 6" dia. plus other v.x frags (ie qtz, pebbles)	ND			45 45-40x30 50 45 30 10x50	1' 1/10x2 1/2 1/2 1" 1/10x2	qtz-py qtz-chl-pyx3 qtz-ser-py qtz-chl-ser-py (cp) qtz-chl-carb-py (cp) qtz-chl-py (cp)x2	0 10 20 30 40 50 60 70 80 90	3.0		225	85	30	96069	.13	.004	.14
			ND			70 50x2 x 10 40 40 90x2x10 30x3x40 15x40	1/8 1/10x2 1" 1/10 1/10x2 1/8x3 1/10x2	qtz-chl-py qtz-chl-pyx2 qtz-py (cp) qtz-chl-py qtz-chl-py qtz-chl-py (cp)x2 qtz-chl-pyx2	0 10 20 30 40 50 60 70 80 90	3.0		235	90	67	96070	.12	.004	.12
			ND			30x45x60x4 90x2 35 20x40 40 35x10	1/10x2 1/10 1/3x1/10 1/4 2" x 1/2	chl-carb-py (cp) chl-carb-pyx= chl-py qtz-chl-carb-py (cp) x2 qtz-chl-py (cp) chl-ser-carb-py (cp) x2	0 10 20 30 40 50 60 70 80 90	3.5		245	95	53	96071	.12	.004	.14
			ND			10 10x15 10x5x2 10x2 15x35x20 45 30x40	1/8 1/2x1/2 1/3x1/2 1/10x2 1/8x3 1/10 1/10x2	qtz-chl-py (cp) qtz-chl-ser-py qtz-chl-carb-py (cp) + qtz-py (cp) qtz-chl-py (cp) x 3 qtz-chl-py (cp)x2 qtz-chl-py (cp)x2 qtz-chl-py (cp) qtz-chl-py	0 10 20 30 40 50 60 70 80 90	6.0		257	90	67	96072	.12	.004	.15

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GIBRALTAR MINES LTD.

HOLE No. 86-21
SHEET No. 5 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Values L to Core Axis	Width of Vail	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP				Sample Number	% Cu	% Mo	Estimated Grade
			L to Core Foliation Alteration Fracture Structure						LIM. ZONE							
									SUPERGENE							
									REMARKS							
			NO	20 40 60 80 20+50	1/8 1/4 2" 1" 1/4 x 2	chl-ser-py chl-ser-py py ep-py chl-carb-py (ep) x 2	0 10 20 30 40 50 60 70 80 90	3.0		261 267	90	40	96073	.14	.004	.12 -13 26.45
			80 Mod	10 60 40 x 2 + 30 x 2 10 15 x 3 50	1/8 1/4 1/8 x 4 1/8 1/8 x 3 1/4	qtz-chl-py qtz-carb-chl-py qtz-chl-pyx + qtz-carb-py chl-carb-py (ep) x 3 chl-carb-py	0 10 20 30 40 50 60 70 80 90	2.5		277	98	37	96074	.20	.006	.10
			70 str.	70-80	12'	qtz-carb-chl (py) (ep) zone (ep-py disse along folio planes and as massive diots within qtz-carb veins)	0 10 20 30 40 50 60 70 80 90	4.5	highly broken qtz zone but no def. Fault	284 287	100	3	96075	.14	.007	.16
			80 str.	80	10'	qtz-carb-chl-ser (py) ((ep)) (ep-py as above)	0 10 20 30 40 50 60 70 80 90	4.0		297	95	27	96076	.13	.005	.12
			80 str.	80	9'	chl-carb-ep (py) (ep)	0 10 20 30 40 50 60 70 80 90	3.5		307	95	33	96077	.30	.013	.18
			80 str.	50 x 2 45 x 3 60 x 2 + 30 50 x 4 60 x 3 + 45 30 60 30 - 45 x 5 40 x 20	1/8 x 3 1/8 x 3 1/8 x 4 1/8 x 3 1/4 1/4 1/8 x 5 1/4 x 2	chl-ser-carb-py x 2 qtz-chl-py-ep x 3 qtz-chl-py (ep) x 3 qtz-chl-pyx + qtz-chl-pyx chl-carb-py qtz-chl-carb qtz-chl-pyx + qtz-chl-carb-py (ep) x 2	0 10 20 30 40 50 60 70 80 90	5.0		317	95	70	96078	.17	.008	.19 2.600 .14

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GIBRALTAR MINES LTD.

HOLE No. 86-21

SHEET No. 6 of 9

ROCK TYPES & ALTERATION			L to Core Feathering	GRAPHIC LOG	Feathering Alteration	Feathering Alteration	Value L to Core Feathering	Width of Vail	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS			Estimated Core Recovery %	R O D	ASSAY RESULTS			
												LEACH CAP	LIM. ZONE	SUPERGENE			Sample Number	% Cu	% Mo	Estimated Grade
			ND				10+30+2 60 60+35+50 20-30+6 25 20-30+5	1/2+1/4+1/8 3" 1/2+1/4+1/8 1/20+1/8+6 1/2 1/10+1/8+5	qtz-chl-py (cp) x 3 qtz-chl-py (cp) qtz-chl-py (cp) x 3 qtz-chl-py x 6 chl-ep-py (cp) qtz-chl-py (cp) x 5	0 10 20 30 40 50 60 70 80 90	4.5			98	53	96079	.17	.005	.14	
			333				30+35 20 5+20 35 20+12 30+6 25+6 60	1/10+2 4" 1/10+2 1/8 1/10+2 1/10+2 1/10+2 1/10	qtz-chl-py x 2 qtz (chl)-py qtz-chl-py x 2 qtz-chl-py qtz-ep-py (cp) qtz-chl-py x 2 qtz-chl-py (cp) x 6 qtz-chl-py	0 10 20 30 40 50 60 70 80 90	4.0			98	50	96080	.15	.004	.10	
		CHL-EP BRECCIA (333'-383') rounded to angular clots at top up to 1 1/2" dia in a chl-rich matrix - in places this is a dioritic matrix - fairly typical rr. type.	ND				20+2 30+2 5+50 10+30 10+2	1/10+2 1/10+2 1/8+1/2 1/4	qtz-chl-py x 2 qtz-chl-py x 2 chl-carb-py (cp) x 2 qtz-chl-py (cp) x 2 chl-ep-py (cp)	0 10 20 30 40 50 60 70 80 90	5.5			95	53	96081	.31	.029	.14	
			ND				10-30 x 10 20 10 30+40 5+45 10+2 15 25	1/10+1/10+10 1/8 1/8 1/8+1/4 1/8+1/4 1/3+1/8+2 1/4 1/3	qtz-chl-py x 10 qtz-chl-py (cp) qtz-Hlo qtz-Hlo qtz-chl-py x 2 qtz-chl-py x 2 qtz-chl-py chl-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	4.0			95	70	96082	.29	.038	.18 .23 2555	
			ND				80 20+70 60 40+35+2 5+2 30+10+40 80+90 35+2 20+15+50	1/2 1/2+1/8 1/2 1/2+1/8+2 1/2+1/8 1/2+1/8 1/2+1/8 1/2+1/8+1/3	qtz-carb-chl-py-cp qtz-carb-py x 2 chl-carb-py (cp) 30+1 chl-carb-py (cp) x 2 qtz-carb-py (cp) x 2 qtz-carb-py (cp) x 3 qtz-carb-py (cp) x 2 qtz-chl-carb-py (cp) x 2 qtz-chl-carb-py (cp) x 3	0 10 20 30 40 50 60 70 80 90	5.0			95	73	96083	.22	.010	.22	
			ND				5+45+4 45 35 15 4+5 10 45	1/10 1/10 1/10 1/10 1/2+1/10+4 1/4 1/4	qtz-chl-py (cp) x 5 qtz-chl-py (cp) qtz (chl)-py qtz-chl-py (cp) x 3 mag-py nodules qtz-carb-py chl-carb-py	0 10 20 30 40 50 60 70 80 90	5.0			98	37	96084	.17	.008	.14	

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GIBRALTAR MINES LTD.

HOLE No. 26-21SHEET No. 7 of 9

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	Feetage Structure	Y-axis L to Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feetage Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
											LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu
		383				80 50+60 30 10 10 40x3 60 20 40	1/2 1/2 1/2 1/4 1/4x3 1/2 1/2 1/2	qtz-py qtz-carb-py x 2 qtz-chl-py qtz-chl-py qtz-py (ep) qtz-chl-py x 3 qtz-carb-chl-py qtz-chl-py carb-chl-py (ep)	0 10 20 30 40 50 60 70 80 90	3.5			387	95	57	96085	.08	.004	.12
		META ANDESITE UNIT (383-507) same as 380-280	ND			10 40 50+40x2 10+40x2 30	1/2 1/2 1/2 1/2 1/2	carb-chl-py (ep) ep-py (ep) carb-chl-py qtz-chl-ep-py x 3 qtz-chl-ep-py	0 10 20 30 40 50 60 70 80 90	4.5			377	95	30	96086	.12	.003	.10
			ND			10 5x3 20 20 15+10x2 20 5 40x2	1" 1/2 x 1/2 2" 2" 2" x 2" x 2" 1" 5" 1" - 1/4	qtz-py (Mo) qtz-chl-carb-py (ep) x 3 qtz-py (ep) (Mo) qtz-py qtz-chl (carb) py (ep) x 3 qtz-chl-ser-py-ep qtz (sil) qtz (chl)-py (ep) x 2	0 10 20 30 40 50 60 70 80 90	6.0			407	95	73	96087	.35	.035	.17 .25
			ND			7 40 5x2 5 10x2 10x10 30	1" 1/2 1/2 x 1/2 1" 1/2 x 2 1/2 x 1/2 1/2	qtz-py (ep) (Mo) qtz-chl-ep-py (ep) qtz-py x 2 qtz-py (ep) (Mo) ser-py (ep) qtz-chl-ser-py (ep) x 2 chl-carb-py (ep) qtz x 3	0 10 20 30 40 50 60 70 80 90	3.5			417	95	80	96088	.16	.022	.14
		meta. basalt? = 30x/2 with augite, 40x/2 and ~ 20-30 interstitial py.	ND			40x20 60 35 20 40x10x15	1/2 x 1/2 1/2 1/2 1/2 1/20-1/2 x 7	qtz x 2 ser-py ep-py-chl-py ep-py ep-py (ep) x 2	0 10 20 30 40 50 60 70 80 90	2.5			427	95	83	96089	.04	.003	.10
		as above	ND			10 60 5 5-10 x 3 70 40-45 45x2	1/2 3" 1/4 1/2 x 1/2 1/2 1/2 x 2 1/2 x 2	carb-chl-py qtz-carb-chl-py (ep) chl-carb-py ep-py (ep) x 2 ep-carb-py (ep) ep-carb-py (ep) x 2 ep-py x 2	0 10 20 30 40 50 60 70 80 90	3.0			437	95	83	96090	.19	.005	.10

HOLE No. 86-21
SHEET No. 8 of 9

ROCK TYPES & ALTERATION			L to Core	Foliation	GRAPHIC LOG	V. in Core	Width of V. in	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
											LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu
		there appears to be a progressive change with depth to a more plutonic-looking rx. -the rx also become harder with short siliceous sections	ND			40-50 5-10 30 45 10 70+45+35 60+30 45-60 x 10	12" 1/4 1/10 1" 1/2 1/8 x 1/16 1/2 x 1/8 x 10	qtz, chl-carb (cp) zone cr-carb-py (cp) qtz-ep-cp qtz-ep-py (cp) qtz-chl-py qtz-ep-py qtz-ep-py ep-py x 10	0 10 20 30 40 50 60 70 80 90	3.0		447	95	63	96091	.13	.028	.15 2465	.12
		-the rx at the bottom of the hole is a typical Border Phase Diorite - grn size ~ 1/16" - 1/8"	ND			80 35 x 2 x 10 15 2" 40 35 45	7/8 7/8 x 3 1/2 1/8 2" 1/4 1"	chl-carb-py ep-H x 3 ep-carb-py qtz-chl-py chl (cp) qtz-chl-py chl-py (cp)	0 10 20 30 40 50 60 70 80 90	3.0		456	100	80	96092	.14	.003		.10
			45 Mod			35+40 40+50 30 30 45 35 x 7 45 50	1/8 x 2 1/10 x 2 1" 2" 12" 1/2 x 1/2 2" 3"	chl-carb-py (cp) x 2 chl-carb-py (cp) x 2 qtz-carb-py-cp qtz-ser-chl-py qtz-chl-py-carb (cp) zone qtz (cp) x 6 + qtz-chl-carb-py (cp) qtz-chl-py (cp) chl-carb-py (cp) zone	0 10 20 30 40 50 60 70 80 90	4.5		466	90	23	96093	.25	.009		.20
		pale grn fine grn siliceous zone	50 Wx			80 10 50 60	2" 1/4 12" 3"	qtz-py qtz-py qtz-chl-py (cp) zone chl-carb-cp	0 10 20 30 40 50 60 70 80 90	2.5		471	95	27	96094	.44	.026		.16
			70 Wx			80 40 15 40+70 70 7 40 7	2" 8" 1/2 1/2 x 1/4 1/2 1/4 3" 1/4	chl-py (cp) chl-carb-py (cp) chl-carb-cp chl-carb-mag (cp) x 2 chl-carb-py (cp) chl-carb-py (cp) zone qtz-mag qtz-py	0 10 20 30 40 50 60 70 80 90	1.5		497	95	40	96095	.40	.015		.20
			80 Mod			10+2 70 30 20+2	1/10 x 2 1" 1/2 1/10 x 2	qtz-chl-py chl-carb-py qtz-py qtz-py x 2	0 10 20 30 40 50 60 70 80 90	1.5		497	95	17	96096	.23	.007	.30 2420	.15

HOLE No. 84-21
SHEET No. 9 of 9

[illegible]

HOLE No. 86-22
SHEET No. 1 of 8

[illegible]

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GIBRALTAR MINES LTD.

HOLE No. 86-22

SHEET No. 2 of 8

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Footage Start/End	GRAPHIC LOG	Veins L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Direct.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
		This is a common rock in the Sawmill Zone and is considered to represent a meta. volcanoclastic unit. prob. a volcanic conglomerate.	60 WK Mod	110	1/8 1/10 x 5 1/10 1/4 1/10 1"	qtz-carb-py-cp qtz-chl-carb-py-cpx qtz-sor-py-cp (ss) qtz-chl-py (ss) qtz-chl-py (cl) qtz-carb-py (ss) qtz-chl-py qtz-carb-py x 2	0 10 20 30 40 50 60 70 80 90		5.5	* This hole intersects a strong py. zone which has an erratic copper grade - the best grade occurs at the base of the py zone (py 5-20%) - ie uniform copper grade + higher Mo - the best ore occurs at the bottom 50' of the hole.	104		97	10780	.21 .010x	.002	.15 2870	.20	
		This unit contains finely dissem py throughout - only the larger x-cutting veins are recorded.	60 WK	120	1/4 1/10 x 2 1/10 1/4 2" x 1/4 x 2 1/4 x 3 1/2 x 1"	qtz-chl-py qtz-carb-chl-py (cp) x 2 qtz-carb-py (cp) qtz-chl-py (cp) x 2 qtz-chl-carb-py (cp) qtz-chl-py-cp x 3 qtz-chl-carb-py-cp qtz-chl-carb-py-cp x 2 qtz-carb-chl-py-cp	0 10 20 30 40 50 60 70 80 90		5.0		114		73	10781	.44	.002		.35	
		DARK GREEN META ANDESITE	60-70 WK	130	1/4 x 2 1/10 1"	chl-carb-py x 2 qtz-chl-carb-py-cp qtz-carb-py (ss) qtz-carb-py qtz-cp qtz-carb-py qtz-carb-chl-py	0 10 20 30 40 50 60 70 80 90		4.0		125		33	10782	.12	.002		.15	
		(125 - 170') - mainly a dense dark green fine grn to aphanitic rx of prob. andesitic composition. - also contains beads	60 WK	140	1/4 1/10 1/4 1/10 1/4 x 2 1/4 x 2 1" x 2	chl-carb-py (cp) chl-carb-py (cp) qtz-chl-carb-py (cp) chl-carb-py-cp qtz-chl-carb-py (cp) x 2 chl-carb-py (cp) x 2 chl-carb-py (ss) x 2	0 10 20 30 40 50 60 70 80 90		5.5		135		20	10783	.25	.002		.18	
		Similar to the ep-chl bx. above but not as coarse gr'd. - This rx is considered to be a fine grn volcanoclastic unit of chiefly andesitic comp.	55 WK	150	1/4 1/10 1/4 1" 1" x 2 1/4 x 1 x 3 1/4 x 2	chl-carb-py chl-carb-py x 2 chl-cp qtz carb-py (cl) carb-py (cp) x 2 carb-chl-py x 2 chl-carb-py (ss) x 2	0 10 20 30 40 50 60 70 80 90		4.5		146		17	10784	.28	.003		.12	
		- contact with overlying unit appears gradational over 30'	50 Mod.	160	1/4 x 2 1/4 1/4 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2	carb-py x 2 chl-carb-py qtz-carb-py carb-py (cp) x 2 qtz-carb-py x 3 qtz-sor-carb-py (cp) qtz-chl-py qtz-carb-py x 4	0 10 20 30 40 50 60 70 80 90		7.0		157		23	10785	.32	.002	.28 2825	.12	

HOLE No. 86-22
SHEET No. 3 of 8

ROCK TYPES & ALTERATION			L to Core Feiliche	GRAPHIC LOG	V. to Core Feiliche	Width of V. to Core	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Sample Number	% Cu
			50-70 Mod	170	60 x 3 80 60 x 7 50 10 20	1/2" x 7 1"	qtz-carb-py (G) chl-carb-py x 3 qtz-carb-py qtz-carb-py x 7 qtz-carb-py chl-carb-py chl-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	6.0	- a zone of highly broken rx and lost core occurs at 175-210 but no fault gouge is present - this may be a shatter zone rather than a fault.	162 167	80 98	D	10786	.24	.004	.10
	FINE-MED GRN META ANDERITE UNIT (170-285)	a complex unit consisting of several rock types all of andesite to dacite composition but varying in texture - most common are, (1) a cp-chl-bx similar to #1-125 but finer frags (~1/2") (2) a dk green andesite, some as 125-170 (3) a grey med. grn dacite? consisting of qtz+sp+chl (4) a med. green fine grn. andesite (1/2"-1/4" dia grn size) which in places approaches a diorite - contacts are generally obscure - units are ~1-10' thick - most common is Unit 4. This is considered to be an interbedded sequence of volcano-clastic rx.s	50 Not	180	10 x 2 5 70 20 30 + 20	1/2" x 6 1/2" 1" x 1/2"	qtz-chl-carb-py x 2 chl-py (sp) carb-py (cc) qtz-py qtz-carb-py x 2	0 10 20 30 40 50 60 70 80 90	5.5		176	80 95	3	10787	.20	.002	.12
			50-60 wk. Mod	190	10 x 5 40 30 10 x 30 40 x 2 25 5 30 + 15 + 60 x 2 20 + 5 45 10	1/2" x 1/2" 3" 1/4" 1/2" x 2 1/8" x 2 1/2" 1/2" 1/2" x 1/2" x 2 1/2" x 2 1/2"	chl-carb-py x 2 ser-chl-py (cp) qtz-py-cp qtz-py (cp) x 2 chl-carb-py (cp) x 2 qtz-py (cp) qtz-py qtz-chl-carb-py x 4 qtz-carb-py (cp) x 2 chl-carb-py (cp) chl-carb-py	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	7.0		183	90	10	10788	.19	.004	.10
			50 ?	200	10 x 2 xx x 2 25	1/2" x 2 1/2"	qtz-carb-py qtz-carb-chl-py x 2 qtz-chl-carb-py	0 10 20 30 40 50 60 70 80 90	6.0		194	65 55	3	10789	.13	.002	.08 .20 2780
			50 Mod	210	10 x 4 15 x 3 40 x 5	1/2" x 10 x 4 1/2" x 3 1/2" x 5	ser-py x 4 carb-chl-py x 3 qtz-chl-py x 5	0 10 20 30 40 50 60 70 80 90	6.0		201 203 206	50 50	3	10790	.10	.006	.08
				220	5 40 20 x 5 35 25 x 3 10 + 15 x 2 50 x 3	1/2" 1/2" x 1/2" 1" 1/2" x 3 1" x 1/2" x 2 1/2" x 3 1/2"	carb-py chl-carb-py chl-carb-py x 2 qtz-ser-py chl-carb-py (cp) x 3 chl-carb-py x 3 chl-py x 3 chl-carb-py	0 10 20 30 40 50 60 70 80 90	7.0		210 217	65 95	23	10791	.18	.003	.10

GRID _____

GIBALTAR MINES LTD.

HOLE No. 86-22
SHEET No. 1 of 8

ROCK TYPES & ALTERATION			GRAPHIC LOG	L to Core Foliation Alteration Footwall Sill Veh L to Core Alt	Width of Veh	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE			Sample Number	% Cu	% Mo		Estimated Grade
			ND	230	5x15x2 5x 50x2 5x3 15x5 50 5x10x2	1/4x2 3/8x2 1/2x3 2"x1/2 1" 1/8x3/2	qtz-chl-carb-py x2 ser-py (cp) qtz-ser-py (wls) x2 chl-carb-py x3 ser-py x2 ser-py (cp) chl-carb-py x3	0 10 20 30 40 50 60 70 80 90			95	20	10792	.32	.008		.10
			ND	240	15x2 15 20x50 20 15	1/2x2 1/2x2 1/2 1/2	chl-carb-py x2 chl-carb-py (cp) chl-carb-py x2 chl-carb-py chl-carb-py	0 10 20 30 40 50 60 70 80 90			95	13	10793	.20	.004		.12
			ND	250	25x3 5 18x2 5x2 50x2	1/10x3 1/10 3' 1/2x1 1/2x2 1/4x2	chl-py x3 carb-py gg-bc qtz-chl-carb-py x2 chl-carb-py x2 chl-carb-py x2	0 10 20 30 40 50 60 70 80 90			50	47	10794	.22	.006	.20 2735	.08
			ND	260	35 5x3 60x3 50x2 35x2 46 5x45	1/8 1/8x3 1/2x3+1/4 1/2x2 1/8x2 1/4 1/4x3	chl-py chl-carb-py x2 chl-carb-py x3 chl-carb-py x2 chl-carb-py (cp) x2 chl-carb-py (cp) chl-carb-py x2	0 10 20 30 40 50 60 70 80 90			95	43	10795	.12	.004		.12
			ND	270	20 20 40 5 20-40 5x2x10 60	2" 1/4 1/4 1/4 1/3 - 1/6 - 1/2 1/3 - 1/6 - 1/2	carb (qtz) py (cp) chl-carb-py (cp) chl-carb-py chl-carb-py chl-carb-py chl-carb-py (cp) chl-carb-py (cp) x2 chl-carb-py 3" x 6"	0 10 20 30 40 50 60 70 80 90			95	46	10796	.14	.004		.12
			ND	280	16x3 50x40x5 50x2 5 20x2 40x3 20x60	1/4 1/4x3 1/4x3 1/4x4 1/4 1/4x3 1/2x1/2	qtz-carb-py chl-carb-py x3 chl-py (cp) x5 chl-carb-py (cp) x2 carb-py-cp chl-carb-py (cp) x2 chl-carb-py (cp) x3 carb-py x2	0 10 20 30 40 50 60 70 80 90			90	47	10797	.22	.006		.14

HOLE No. 86-22
SHEET No. 5 of 8

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	L to Core Foliation	Values L to Core Alt.	Width of Vail	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
											LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
		285	70 Mod			20 40x2 5x2 20x5 3 15x3 5x2 5x4	3/2 1/3 + 1/4 1/4x2 1/4x2 1/6 1 1/2 1/4x2 1/3x2 1/10x4	chl-crb-py carb-qtz-chl-py-cp x2 carb-py x2 carb(chl)-py x2 carb-qtz-py(csp) qtz-carb(chl)py(csp)x3 carb(chl)-py x2 chl-py x4	0 10 20 30 40 50 60 70 80 90	4.5			90	37	10798	.19	.006	.17 2690	.12	
		FINE TO MED GRN META ANDESITE		296									287							
		UNIT (285-332) very similar to the above unit with no obvious contact between the units - this unit however, is more uniform in texture and comp.	60 Mod- Str.			20 5+45+30 5x2 15x2 10 45 15	1/5 1/8-1/10x3 1/6 1/8x2 1/10 1/10 1/2	qtz-chl-py carb-chl-pyx3 carb-chl-pyx2 qtz-chl-carb-pyx2 qtz-chl-py qtz-chl-py qtz-py	0 10 20 30 40 50 60 70 80 90	3.5			90	37	10799	.19	.006		.10	
		and grades in many places to a medium grain dioritic appearing rx. - a typical rx type of this unit is fine grn (1/2-1/6), contains ~ 40% chl 35% plag and ~ 20% epidote as stringers & clots - some qtz (10%+) can be seen with magnif. ∴ this unit is interpret- ed to be a metamorphosed Sequence of flows & volcanoclastic sed. of chiefly andesitic comp.	60 wa			60+30 50 5 45+5 60 20	1/10x2 1/2 1/10 1/10x2 1/10 1/8	chl-py x2 qtz-carb-py-cp chl-ep-py chl-ep-pyx2 chl-py qtz-chl-py	0 10 20 30 40 50 60 70 80 90	3.0			95	30	10800	.10	.004		.08	
				310									307							
			NO			10 60x3 45 45 80 5 20x5	1/10 1/10x2 1/6 1/6 1/10 1/10 1/2 + 1/4	qtz-chl-py chl-ep-py x3 qtz-carb-py chl-py carb-ep-py chl-ep-py chl-carb-py(csp) x2	0 10 20 30 40 50 60 70 80 90	3.5			98	47	10801	.23	.010		.08	
			NO			5+30 15 15 35x3 10x2 15	1/10x2 1/4 1/2 1/10x3 1/3 + 1/4 1/4	chl-ep-py x2 qtz-carb-py chl-carb-py chl-carb-pyx2 qtz-mag(csp) + qtz-chl-py carb-py chl-carb-py	0 10 20 30 40 50 60 70 80 90	4.0			95	27	10802	.10	.012		.06	
				330									325							
			NO			20x2 40x3 20+35 5 60x4 40x5 5+40+35 40	1/5x2 1/10x3 1/4 + 1/10 1/3 1/10x4 1/10x5 1/10x3 1/4	chl-carb-py(csp) x2 chl-ep-pyx3 chl-py(csp) x2 chl-carb-py chl-ep-py x4 qtz-chl-py x3 chl-pyx3 qtz-py(csp)(Mn)	0 10 20 30 40 50 60 70 80 90	3.5			90	37	10803	.14	.008	.17 2695	.08	
				340									333							
													337							

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GIBRALTAR MINES LTD.

HOLE No. 86-22
SHEET No. 6 of 8

ROCK TYPES & ALTERATION			L to Core Foliation Alteration	GRAPHIC LOG	Feet to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS					
										LEACH CAP	LIM. ZONE			Sample Number	% Cu	% Mo	Estimated Grade		
			ND		70+60 45 70 15 45 40 35x2 15x2 45 10x2	1" + 1/2 1/2 10" 1" 1/2 1/8 1/8x2 15x2 1/4x1 2" 10x2	qtz-cp + qtz-carb-py chl-py qtz-carb carb-cp qtz-py-cp (Hd) chl-carb-py (cp) qtz-chl-py (cp) x 2 qtz-chl-py (cp) x 2 qtz-chl-py (cp) carb-py (cp) x 2	0 10 20 30 40 50 60 70 80 90	3.5		345	98	33	10804	.34	.008		.16	
		352	ND		350	35+45+50 50x2 60	1/2 x 1/2 1/4 x 2 12"	chl-py x 2 carb-chl-py (cp) x 2 carb-chl-py (cp) zone chl-carb-py (cp) x 2	0 10 20 30 40 50 60 70 80 90	3.0		355	95	23	10805	.19	.006		.14
		FP-CHL BRECCIA AND DARK GREEN META ANDESITE	ND		360	60x3 70x2 45+40	1/10 x 1/2 1/16 x 2 1/10 x 1/4	chl-carb-py (cp) x 2 chl-carb-py x 2	0 10 20 30 40 50 60 70 80 90			359	90	23	10806	.26	.010		.25
		Similar to the breccia of 61-125' and the dk green andesite of 125-170'. Contacts are gradational. (352-375')	60-70 Mod		370	45+55x2 60+45 50 70x3 50x2 70 45 60x3 50x2	1/8 x 3 1/10 x 2 1/8 1/10 x 2 1/2 x 1/4 1/4 10" 1/10 x 3 1/4 x 2	chl-py (cp) x 3 chl-py (cp) x 2 carb-cp carb-chl-py-cp x 3 chl-carb-py-cp x 2 carb-py (cp) carb-qtz-py (cp) zone chl-carb-py (cp) x 3 chl-carb-cp x 2	0 10 20 30 40 50 60 70 80 90	3.0		367	98	23	10806	.26	.010		.25
						25 45 45 60 70x4 55 60 5	1/8 1/10 1/8 1/10 1/10 x 1/4 1/4 1/4 2"	chl-qtz-carb-cp chl-cp chl-py (cp) qtz-chl-cp chl-carb-py-cp x 4 chl-carb-cp chl-cp mag (carb)-cp	0 10 20 30 40 50 60 70 80 90	1.5		375	95	20	10807	.42	.012	.28 2600	.40
		FINE TO MED. GRN QUARTZ DIORITE	Mod		380	60 65 60 60 60	12" 3/4 2" 2" 5'	chl-carb-py (cp) zone carb-chl-py (cp) chl-carb-py (cp) zone chl-carb-py-cp zone	0 10 20 30 40 50 60 70 80 90	2.0		385	95	53	10808	.33	.054		.25
		this rx. is sheared and alt'd, making its identification diff. - The rel. unalt'd rx appears to be a diorite or quartz diorite - i.e grn size 1/16-1/8"	60 str		390	60	5'	qtz-chl-carb (py) (cp) zone	0 10 20 30 40 50 60 70 80 90				95						
		~ 20 % qtz ~ 20-30 % chl ~ 50 % sauss. plag ∴ this may not be Mine Phase. (375-504')	55-60 str		400	55-60		qtz-ser-chl-carb (py) (cp) zone (py-cp occur as fine dissem's along folg planes)	0 10 20 30 40 50 60 70 80 90	3.0		395	95	70	10809	.23	.016		.18

HOLE No. 86-22
SHEET No. 7 of 8

ROCK TYPES & ALTERATION			L to Core Feet	GRAPHIC LOG	L to Core Feet	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
		LEACH CAP									Sample Number			% Cu	% Mo	Estimated Grade	
			60-70 Str		60-70	9'	qtz, chl, carb. (py) (cp) zone		1.5			90	47	10810	.40	.010	.25
			60 Mod		35-60	3'	qtz, ser, chl, py (cp) (Mol)		1.5			85	40	10811	.48	.010	.35
			45-60 Mod		40-45	2'	7 vuggy core with lamina and clots of chl, cp, qtz, carb, cp chl, carb, cp, py x 4 chl, cp, py x 2 ep, chl, cp x 2 + qtz, cp cp, chl, py, cp x 2		1.0			90	13	10812	.34	.012	.25
			45-55 Mod		40-45	2'	qtz, chl, mag, cp chl, cp x 2 chl, carb (py) (cp) chl, carb, py, cp ep, chl, py zone		3.0			95	20	10813	.21	.018	.15
			60 Mod		40-45	2'	chl, carb, py zone		2.5			95	30	10814	.14	.006	.14
			50 Str		40-45	5'	qtz, carb, chl, py ((cp)) zone		2.0			95	17	10815	.14	.004	.15

HOLE No. 86-22
SHEET No. 8 of 8

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HOLE No. 86-23
SHEET No. 1 of 8

LOCATION <u>SAWMILL ZONE</u>	BEARING <u>-</u>	LATITUDE <u>~ 33,487.00N</u>	CORE SIZE <u>N. Q. W.</u>	LOGGED BY <u>G. D. B</u>
DATE COLLARED <u>18-Aug-86</u>	LENGTH <u>506'</u>	DENATURE <u>~ 47,812.00E</u>	SCALE OF LOG <u>1"=10'</u>	DATE <u>Oct. 30, 1986</u>
DATE COMPLETED <u>18-Aug-86</u>	DIP <u>-90°</u>	ELEVATION <u>~ 2,898.00</u>	REMARKS <u>*this hole intersects the West Boundary Fault</u>	

ROCK TYPES & ALTERATION			L to Core Feet	Feet	Feet	Values L to Core Feet	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
											LEACH CAP	—			LIM. ZONE	—	SUPERGENE	—	REMARKS
		Casing To 85'							0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200										
		DARK GREEN META ANDESITE (90-112)	?	90			5	gg-bx	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	<.05		85 87 90	90 70		96001				.05
		dense dk green andesite grading to a ep-chl-bc due to an increase of ep clots and stringers - med. grn diorite occurs between 97- 101	?	100			1/4 7" 2"	qtz qtz qtz-ch (vug)	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	<.05		97	90	10	96001	.01 <.01 x	.001	.05	
		-	?	110			1/4 1/8 1 1/2	carb-py carb-py carb-py	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	2.0		102	85	7	96002	.05 <.01 x	.001	.08	
		MAJOR FAULT ZONE (112-167')	?	120			2' 8'	chl-ep-carb-py-(sp) zone (scarn?) (gg)-bx - lost core	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	5.0		45	45	3	96003	.28 <.01 x	<.001	.25	
		consists mainly of broken gangue rx. with only minor gg bones - much of the broken rx is well mineralized with py.	?	130			10	bx (gg) ~ 4 1/2' core lost.	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200	3.0		120 123 127 130	40 40	n	96004	.04 <.01 x	.001	.10	

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GIBRALTAR MINES LTD.

HOLE No. 86-23
SHEET No. 2 of 8

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein ∠ to Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	REMARKS			Sample Number	% Cu	% Mo	Estimated Grade
		main dislocation prob occurs @ ~163 -167' as here the frag's change from meta-andesite to gypsum-bearing quartz diorite. This is also a zone of greatest gouge development.	?	?	10'	broken gg-y rx.	0 10 20 30 40 50 60 70 80 90	3.0			131 60 135 20 138	0	96005	.02	<.001	.08?
			?		10'	gg-bx ~ 7' core lost	0 10 20 30 40 50 60 70 80 90	6.0			25 197 40 149 0 151 50 153 25 155 50 157	0	96006	.16	<.001	.12?
			?		10'	(gg)-bx ~ 6' core lost	0 10 20 30 40 50 60 70 80 90	5.0			30 161 70 165 20 167 90 169	0	96007	.12	<.001	.08?
			?		7'	eg (bx)	0 10 20 30 40 50 60 70 80 90	3.0?			70 165 20 167 90 169	0	96008	.17	.006	.09 2735 ?
		FINE GRN.	170	50	1/4	qtz-py-cp x2	0 10 20 30 40 50 60 70 80 90				90	17	96009	.29	.008	.10
		QUARTZ DIORITE a soft fine grn (2% qtz-diorite cut by numerous gyp and py veins - appears sheared and 201 alt'd due prob.	180	50 70 60 x2 70 80 90	1/10 1/4 1/4 1/4 1/4 1/4	qtz qyp qtz-py qyp qtz qtz py-cp qtz	0 10 20 30 40 50 60 70 80 90	0.5			70	20	96010	.12	.005	.08
		to the fault. ~ 25% qtz ~ 50% gyps pyg ~ 15-20% chi minerals.	190	50 70 60 x2 70 80 90	1/10 1/8 2" 1/4 1/4 1/2	qtz-corr-cp qyp qtz-chilz qyp qyp qtz	0 10 20 30 40 50 60 70 80 90	<0.5			70	20	96010	.12	.005	.08

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GIBRALTAR MINES LTD.

HOLE No. 86-23

SHEET No. 3 of 8

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Feilings	GRAPHIC LOG	Veins L to Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feilings Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	LIM. ZONE				SUPERGENE	Sample Number	% Cu	% Mo	Estimated Grade
										REMARKS									
			50 WK	200	40 15 5 40 50+60	1/8 1/8 1/8 1/10 1/5x2	qtz qtz-chl-py gyp qtz-chl-py qtz-xc	0 10 20 30 40 50 60 70 80 90	0.5			197	90	17	96011	.15	.004	.05	
		201		200				0 10 20 30 40 50 60 70 80 90				201	80						
		MAJOR FAULT ZONE? (201'-241')				10'	(gg)bx	0 10 20 30 40 50 60 70 80 90	2.0?			206	55	0	96012	.17	.007	?	
		- This could be a series of small faults but there is a rock change across it.		210				0 10 20 30 40 50 60 70 80 90				208	50				.18		
		- no strong gg. zones - mainly broken rough rock, and lost core				10'	(gg)bx	0 10 20 30 40 50 60 70 80 90	?			210	65				2690		
		- main gg zone occurs @ 235'-241'	60?			10	(gg)bx	0 10 20 30 40 50 60 70 80 90	3.0?			212	75	3	96013	.09	.006	?	
								0 10 20 30 40 50 60 70 80 90				216	45						
								0 10 20 30 40 50 60 70 80 90				218	60						
								0 10 20 30 40 50 60 70 80 90				222	70						
								0 10 20 30 40 50 60 70 80 90				227	85	0	96014	.11	.009	?	
								0 10 20 30 40 50 60 70 80 90				232	55						
						11'	gg-bx	0 10 20 30 40 50 60 70 80 90	?			239	50	0	96015	.10	.006	?	
		241						0 10 20 30 40 50 60 70 80 90				241	60						
		LEUCOCRATIC ZONE (241'-258')	ND		30 20 20	1/10 1" 1/20	qtz-Mlo-(cp) qtz qtz-cp-Mo	0 10 20 30 40 50 60 70 80 90	<0.5			247	90	7	96016	.16	.020	.10	
		Pale grey spar phos up to 1/4" dia (unheated) and occasional qtz. zones		250				0 10 20 30 40 50 60 70 80 90					95						

HOLE No. 86-23
SHEET No. 4 of 8

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GIBRALTAR MINES LTD.

HOLE No. 86-23
SHEET No. 5 of 8

ROCK TYPES & ALTERATION			Z to Core Feather	GRAPHIC LOG	Feather Feather	V. in Core Axis	Width of V. in	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
											LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
			to WK		320	60x3 50x60 60-70x10 45 60 45-70x12 45x3 50x4 30x10 30 80x60	1/4x3 1/2x1/10 1/8x10 1/10 1/8 1/4-1/10x12 1/4-1/10x3 1/10x4 1/2x1/4 1/2x2	qtz-x2 qtz-chl-cp-mag-x2 qtz-x10 qtz-chl-cp qtz-mag qtz-x12 qtz-x4 qtz-chl-cp-x2 qtz-cp qtz-x2	0 10 20 30 40 50 60 70 80 90	<0.5		316	95	27	96023	.20	.019	.14		
			ND		330	45 30 10+40-60x3 45 45x30x35 50x2 45x60 5 45x50 20	1/4x2 1/8x1/10x3 1/8x2 1/10x2 1/2x1/4 1/4 1/10x2 1/2x2	leucocratic zone * qtz-chl-cp qtz-chl + qtz-x2 leucocratic zone qtz-x2 qtz-x2 qtz-mag-cp-x2 qtz-chl-cp-x2 qtz-x2 qtz-cp	0 10 20 30 40 50 60 70 80 90	<0.5	* same as 241'-258'	327	90	37	96024	.12	.009	.15		
			ND		340	80x50 50-60x3 35x30 35x40x3 30 60x50x45 70 5 45x4 20x3	1/4x2 1/4-1/8x3 1/4x2 1/4-1/8x3 1/8 1/4-1/8x10 1/8x2 1/4-1/8x4 1/4x1/2	qtz-mag-x2 qtz-x2 qtz-mag-x2 qtz-cp + qtz-mag-x3 qtz-chl-cp qtz-x2 qtz-x2 qtz-chl-cp (Wd) qtz-x4 qtz-chl-cp-x2	0 10 20 30 40 50 60 70 80 90	<0.5	qtz-gyp zone similar to page 2 but core is sl. harder - no argillite adams - and gyps. is greater but the core is still dark - gyp. is sl. less abundant - qtz. is still in stework form - cp (Wd) occurs in small veins + inter throughout the core causing in effect a discontinuous background	337	98	43	96025	.21	.012	.18		
			ND		350	80x2 30 50-60x5 30 5 25-30x6 10 20x2	1/10x1/8 1/8 1/8-1/4x5 1/8 1/8 1/4-1/8x4 1/8 1/8x2	qtz-chl-cp-x2 qtz-chl-cp qtz-x5 qtz-mag qtz-mag-cp qtz-x6 qtz-mag qtz-x2	0 10 20 30 40 50 60 70 80 90	<0.5		347	95	30	96026	.25	.004	.20 .14		
			ND		360	45-65x12 30 40x2 30x2 45-50x3 40x2 40x45 40x2 50x30 45-60x4 + 70x2	1/4-1/8x12 1/8 1/10x2 1/8x2 1/4-1/8x3 1/4-1/8 1/4-1/8 1/4-1/8 1/4-1/8 1/4-1/8x6	qtz-chl-mag-cp qtz-x2 qtz-chl-cp-x2 qtz-x2 qtz-chl-cp + qtz-mag (cp) qtz-x2 qtz-chl-cp-x2 qtz-chl-cp (Wd) qtz-x2	0 10 20 30 40 50 60 70 80 90	<0.5		357	98	50	96027	.13	.010	.16		
			30 W.C. STR.		370	35x45 40 30x2 15 60x2 60x4 60x3x40 60-70x6 60	1/4x2 1/2-1/4x2 1/2 1/10x2 1/8x4 1/4-1/10x4 1/10-1/8x4 1/4	qtz-x2 qtz-chl-cp (Wd) qtz-x2 qtz-chl-mag-cp qtz-x2 qtz-x4 qtz-x4 qtz-x4	0 10 20 30 40 50 60 70 80 90	<0.5		367	95	50	96028	.18	.008	.12		

GIBRALTAR MINES LTD.

HOLE No. 86-23
SHEET No. 6 of 8

[illegible]

HOLE No. 86-23
SHEET No. 7 of 8

[illegible]

GIBRALTAR MINES LTD.

ROCK TYPES & ALTERATION						GRAPHIC LOG L to Core Axis Feet Structure	Vene L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS	Footage Blocks.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
					L.E.C.H.A.P.							Sample Number				% Cu	% Mo		Estimated Grade	
					L.I.M. ZONE															
					SUPERGENE															
REMARKS																				
			Go sm	70 x 2 80 70 65 65 x 2 45 45 65 x 2 500	1/8 x 2 1/8 1/10 1/10 x 2 1/10 1" 1/8 x 2 gyp x 2 qtz-chl-ep qtz-chl-ep qtz-chl-gpp-ep qtz-chl-ep x 2 qtz-chl-ep qts-ep gtp x 3		fine ep(p) dissem. along chlorite calc phase.	0 10 20 30 40 50 60 70 80 90	0.5		98	77	96041	.66	.020		.40			
EQH. SOR!				60 x 2 60-80 50 60 x 2 60 x 2 50 x 2	1/8 1/4 x 2 1/10 1/8 x 2 1/10 x 2 1/10 x 2		STP qtz qtz-chl-ep qtz-chl-ep x 2 qtz qtz-chl-ep x 2	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300	0.5		95		96042	.31	.012		.46 .30			
									0											
									10											
									20											
									30											
									40											
									50											
									60											
									70											
									80											
									90											
									100											
									110											
									120											
									130											
									140											
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									160											
									170											
									180											
									190											
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									240											
									250											
									260											
									270											
									280											
									290											
									300											
									310											
									320											
									330											
									340											

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-24
SHEET No. 1 of 9

LOCATION SAWMILL ZONE BEARING - LATITUDE ~33, 921.00 N CORE SIZE N.O.W. LOGGED BY G.D.B.
 DATE COLLECTED 19-Aug-86 LENGTH 597' DEPARTURE ~48, 249.00 E SCALE OF LOG 1"=10' DATE AUGUST 20, 1986
 DATE COMPLETED 20-Aug-86 DIP -90° ELEVATION ~2962.00 REMARKS _____

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP				Sample Number	% Cu	% Mo		Estimated Grade
		Casing To 80'															
		MEDIUM GRN QUARTZ DIORITE ~35% dk green chl 25% qtz ~35-40% med. grey plag.	6 str			broken rusty core minor mal. and py.		4.5			85	13	11177	.14	.002	.14	.10
		- rx is strongly sheared with original tex. largely indistinct - grain size 1/20-1/10" - contains clastic	35 str	40x30x25 10x2 30x5x45	1/10x3 1/10x2 1/10x3	qtz-chl-py-lin qtz-chl-py-lin mal-lin-cuprite + b		1.0			90	13	11178	.31	.006		.15 .04
		py along folia plane smaller the larger veins and others are noted in log. - the py often contains smaller veins of mal. py. Chlorite + quartz	35 str	5 20-30x10 15 20x5 50x5	1/10 1/10x10 1/10 1/10x2 1/10x4	lin-cup chl-py + b qtz-chl-py (cc) chlorite cnp-py + b		2.0			98	20	11179	.32	.012		.12
			45 str	35 30 20 20 50	1/10 1/10 1/10 1/10 1/10	qtz-chl-py (cc) qtz-chl-py (cp) qtz (cc) qtz-chl-py qtz-pr		3.5			80	33	11180	.17	.014		.10

HOLE No. 86-24
SHEET No. 3 of 3

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Feet	GRAPHIC LOG Feet	Vein L to Core Alt	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet Feet Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade
			30 Str.	190	5 20 80 20 15 5 20 40	1/2 1/8 1/4 x 2 2 1/2 3 1/4 x 1/8 x 2	qtz. carb-py (cp) qtz-chl-py qtz-chl-carb (vug) qtz-chl-py qtz-py qtz-carb-py qtz-chl-py x 3	0 10 20 30 40 50 60 70 80 90	3.5		184 186 189	98 85 80	10	11187	06	008		.10
			30 Str.	200	40 5 x 2 3 5 4 70 50 2	2" 1/8 + 7/8 1/4 1/8 1/8 1/2 6" 30"	qtz (cp) qtz-carb-chl-py x 2 carb-py qtz-carb-py qtz qtz-chl-py qtz-carb (pd) gs-bv	0 10 20 30 40 50 60 70 80 90	3.0		196	85 80	7	11188	08	007		.12
			60 Med	210	70 60 50	6" 1" 1/2 1"	broken core qtz qtz-chl-py qtz	0 10 20 30 40 50 60 70 80 90	2.0		205	60 85	0	96401	.11	.0006		.10
			80 Med	220	43 5 50	1/4 1/4 5'	qtz-chl-py (cp) qtz-carb-chl-py chl-carb-py chl-carb-py (ccp)	0 10 20 30 40 50 60 70 80 90	2.5		215 219	80 95	0	96402	.11	.0009		.12
		fairly weak micritic effects in 2nd & 3rd at end of 3rd - more discrete be due to changing in flow from micro micro	30-50 Str.	230	30-50 45	3' 4'	qtz-carb-chl-ser-py chl-carb-py zone	0 10 20 30 40 50 60 70 80 90	2.0		224	75 98	40	96403	.07	.0006	.09 2735	.10
			40-50 Str.	240	40-50	10'	chl-carb-py zone	0 10 20 30 40 50 60 70 80 90	2.0		234	95	33	96404	.12	.008		.10

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-24

SHEET No. 4 of _____

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein to Core Axis	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	REMARKS			Sample Number	% Cu	% Mo		Estimated Grade
			35-45 Mod	35-45	10'	qtz-carb-ser(chl)-py zone	0 10 20 30 40 50 60 70 80 90	2.0			241	23	46405	.13	.006		.08
		Prob. an alt'd qtz-perp-gen composition is ~5% chl. 10% ser 50% carb 25% qtz 25% plag.	45-60 Mod.	45-60	10'	qtz-carb-ser-py zone	0 10 20 30 40 50 60 70 80 90	1.5			247	50	96406	.12	.002		.08
			45-80 Mod	45-50 60-80	4' 6'	qtz-carb-ser-py chl-carb-py zone	0 10 20 30 40 50 60 70 80 90	1.5			254	50	96407	.04	.002	.10 2690	.06
		a dk green fine-grained zone - the dk color may be due to an incr. in chl and a decr. in qtz size due to shearing - that is, there is some metasom. alt'n (chl+carb) but not as great as first appear. would suggest	70 Mod	50-70 70-80 80-85 80-85+60	8' 1/3 1/4 2' x 1/2 2' x 2 4' 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2	qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py	0 10 20 30 40 50 60 70 80 90	2.0			264	20	96408	.07	.002		.08
			70 Mod	50-70 70-80 80-85 80-85+60	1/3 1/4 2' x 1/2 2' x 2 4' 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2	qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py	0 10 20 30 40 50 60 70 80 90	3.5			276	53	96409	.07	.006		.08
			70 Mod	50-70 70-80 80-85 80-85+60	1/3 1/4 2' x 1/2 2' x 2 4' 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2 1/4 x 2	qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py qtz-carb-py	0 10 20 30 40 50 60 70 80 90	4.0			277	20	96410	.11	.006		.05

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-24

SHEET No. 5 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Values L to Core Axis	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE			Sample Number	% Cu	% Mo		Estimated Grade
BORDER PHASE DIORITE (300-329') a dk green med grn (1/10-1/4" dia) rx ~40 % chl ~50 % sauss. plag.			70 Mod	40-50 15 15 20 20	1/10 x 3 1/4 1/5 1/5 1/5	qtz, chl, py x 3 qtz, chl, py qtz, carb qtz, carb, py qtz, chl, carb, py	0 10 15 20 30 40 50 60 70 80 90	3.5			90	23	96411	.07	.009		.05
- sl. bx. tex. with clots of sauss. plag. in chl. matrix			50-60 Mod	45 x 2 45 x 50 60 x 70 5 60 x 5 40	2 1/2 x 1/2 1/4 x 1/3 1/4 x 1/3 1/4 1/10 x 3 1/3	chl, carb, py x 2 chl, carb, py x 2 qtz, carb, chl, py qtz, carb, py (cp) qtz, chl, py x 3 qtz, carb, py	0 10 20 30 40 50 60 70 80 90	3.0			95	27	96412	.09	.002	.08 2645	.08
Pass. fault contact 329			60 Mod	25 30 ? 40 15?	12" 1/2 3" 10" 14"	qtz, chl, carb, py qtz, carb, py (cp) qq, bx. qtz, carb, chl, py zone qq	0 10 20 30 40 50 60 70 80 90	3.5			90	10	96413	.07	.004		.05
MED. GRN. DIORITE (329-597') a med grn (1/20-1/10 dia) diorite which may grade to Q.D. ~20-25 % bleached chl ~20 % interstitial qtz ~50 % sauss. plag.			50 Mod	40 25 x 60 x 3 45 x 60 x 10 45 45-60 x 12 50	30" 1/2 x 1/10 x 3 1/4 x 1/10 x 10 3" 1/20-1/8 x 12 2 1/2	qtz, chl, (ser)-py qtz, chl, py x 4 qtz, chl, py x 11 qtz, chl, carb, py qtz, chl, py x 12 qtz, chl, carb, py	0 10 20 30 40 50 60 70 80 90	7.0			85	67	96414	.07	.010		.10
- grn. size varies, part between 329-370, and finer grn sizes are common - ie 1/20"			50 Mod	45-60 x 10 10 x 25 50-60 x 8 8"	1/20-1/10 x 10 1/2 x 2 1/20 x 8 1"	qtz, chl, py x 10 qtz, carb, py x 2 qtz, chl, py x 8 qtz, carb, py (cp) qtz, carb, py	0 10 20 30 40 50 60 70 80 90	4.0			80	60	96415	.08	.004		.10
∴ this may be the typical rx underlying the north side of the ore zone.				60 x 20 40 x 45 15 x 20 x 30 45 x 2	1/20-1/10 x 20 1/10 x 2 1/2 x 1 1/2 1/10 x 2	qtz, chl, py x 20 qtz, chl, py x 2 qtz, carb, py x 3 qtz, chl, py x 2	0 10 20 30 40 50 60 70 80 90	4.0			95	47	96416	.11	.004	.08 2600	.08

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-24
SHEET No. 6 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein L to Core Alt	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Blocks	Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo	Estimated Grade
			60x10 25x20x3 45 50x5 40x5 35x2 30 15	370	1/20x10 1/4x10x3 1/8 1/8x2 1/10 1/3 1/4	qtz-chl-py x 10 qtz-chl-py x 4 qtz-chl-py-cp qtz-chl-py qtz-chl-py x 2 qtz-chl-py x 2 qtz-chl-carb-py qtz-chl-carb-py	0 10 20 30 40 50 60 70 80 90	4.0			367	80	43	96417	.11	.002	.08
			18 70 60-70x8 45 40-45x10 45x2 45x3 60	380	1/6 1/8 1/20x8 1/8 1/20x10 1/2x1/8 1/2x3 1/6	qtz-chl-py qtz-(Mo)(cp) qtz-chl-py x 8 qtz-chl-py qtz-chl-py qtz-Mo(csp)-py x 2 qtz-chl-py(csp)x2 qtz-chl-py	0 10 20 30 40 50 60 70 80 90	3.5			377	98		96418	.18	.010	.10
			45x4 10" 40x4 1" 5x10x2 20 5x10 10 5 3x2 5x10 40 5	390	1/20x3 10" 1/20x4 6" 2"x2 1 1/2 1/3x1" 14" 2" 1/2x1/4 1/10x20x10 1"	qtz-chl-py x 3 qtz qtz-chl-py x 4 qtz-py qtz-chl-carb-py (cp) x 2 qtz-carb-py qtz-carb-py (cp) x 2 chl-carb-ser-py (cp) zone qtz-carb(chl)-py qtz-chl-carb-py qtz-chl-py x 10 carb (cp) qtz-chl-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	4.5			387	98		96419	.11	.002	.12
			15 20x2 3 5x2 5	400	1/2x1/4 1/10x20x10 1"	qtz-chl-py qtz-chl-py x 2 qtz-chl-carb-py (cp) qtz-chl-py x 2	0 10 20 30 40 50 60 70 80 90	7.5			397	45		96420	.12	.002	.10
			15 20x2 3 5x2 5	410	1/2x1/4 1/10x20x10 1"	qtz-chl-py qtz-chl-py x 2 qtz-chl-carb-py (cp) qtz-chl-py x 2	0 10 20 30 40 50 60 70 80 90	4.5			407	100	40	96421	.13	.002	.13 .2555 .08
			15 5x2 15 40 15x4	420	1/2 1/4x1/8 1/8 12" 1/10x1/4x4	qtz-chl-py qtz-chl-py x 2 qtz-chl-py qtz-bx-hom qtz-carb-chl-py x 4	0 10 20 30 40 50 60 70 80 90	3.0			413	95	57	96422	.05	.002	.06

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-24
SHEET No. 7 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Veins ∠ to Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Feeling Direct.	Sample Number
			ND	20 5x4 20+50	1/10 1/20-1/10 x 4 1/10 x 2 2'	qtz-chl-py hem-gg } broken zone qtz-carb-py (cp) x 2 highly broken zone	0 10 20 30 40 50 60 70 80 90	2.5		423 425 429	90 90	13	96423	.03	.002	.05
			70 str	70	10'	qtz-carb-(chl)-ser(py) zone (pale brown weathering carb)	0 10 20 30 40 50 60 70 80 90	2.0		435	50 80	27	96424	.07	.002	.06
			ND	60 50-10x4 20 70 70 5 450	1/10 1/20 x 4 1/4 1/2 2' 1/2	broken gg zone qtz-carb-py (cp) chl-py x 4 qtz-carb-chl-py qtz-carb-py qtz-ser-carb zone qtz-carb	0 10 20 30 40 50 60 70 80 90	1.5		441 447	60	17	96425	.06	.001	.08 .06 2510
			ND	35 15-30-20+50 30+20 45 60+70 20+50 460	1/2 1/2-1/4 x 4 1/4 x 2 1/4 1/3 x 2 1/4-1/3	qtz-carb-py qtz-carb x 4 qtz-carb-py (cp) x 2 qtz-carb-py (cp) qtz-tour. qtz-carb x 2	0 10 20 30 40 50 60 70 80 90	2.0		457	90	60	96426	.07	.003	.10
			5-70 str.	5-70	12'	qtz-carb-ser-py (cp) zone (first coarse cp)	0 10 20 30 40 50 60 70 80 90	4.0		467	100	53	96427	.12	.004	.18
		Small fault	?	470 480	6'	gg. bz	0 10 20 30 40 50 60 70 80 90	1.5?		477	70	10	96428	.05	.001	.05?

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-24
SHEET No. 8 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Veins to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footest Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo		Estimated Grade
			ND	40	10-40 x 5 2' 2' 1/2' 1'	qtz-chl-py ss qtz-bx qtz-carb-py qtz-carb-py qtz-carb-py (cp) gg-bx-hem.	0 10 20 30 40 50 60 70 80 90	4.5			484 488	70 95	17	96429	.11	.004		.08
			ND	500	60 5 50 3'	qtz qtz-carb-py carb-hem broken core	0 10 20 30 40 50 60 70 80 90	1.0			494 500	85 80	13	96430	.06	.001	.08 2465	.05
			ND	510	20 15 30 25 x 3 8' 10-20 x 10 70 x 2	broken core gg qtz-carb-py qtz-carb-py qtz-chl-py x 2 qtz-chl-py carb qtz-chl-py (cp) x 10 qtz-carb	0 10 20 30 40 50 60 70 80 90	2.5			507	90	27	96431	.03	<.001		.08
			H3	520	5-20 30 3 x 2 20 60 40 x 2	qtz-carb-chl-py x 2 qtz-chl-py-cp qtz-chl-py x 2 qtz-py qtz-py	0 10 20 30 40 50 60 70 80 90	3.5			513	95 98	37	96432	.05	<.001		.10
			40 Mod	530	45 x 3 55 40 x 20 45-70 x 5 15-20 x 2 60 70	qtz-chl-py-carb x 3 qtz (Mod) chl-py x 20 qtz-chl-py x 5 qtz-chl-py x 3 qtz-chl-carb-py qtz	0 10 20 30 40 50 60 70 80 90	3.0			523 527	95	27	96433	.05	.001		.08
			50 Mod	540	30-60 x 5 60 50 x 2 50	qtz-chl-py x 5 qtz-chl-py qtz-chl-carb-py x 2 chl-carb-py (cp) zone	0 10 20 30 40 50 60 70 80 90	2.6			535.6	95	20	96434	.07	.001	.05 2426	.12

HOLE No. 86-24
SHEET No. 9 of 9

[illegible]

HOLE No. 86-25
SHEET No. 1 of 9

CORE SIZE N.Q. Wireline LOGGED BY G.D.B.
SCALE OF LOG 1"=10' DATE Nov. 26 1986
REMARKS this hole intersects w/c similar to that of 79-18

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG		L to Core Value	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS			
				Alteration Footage	Structure						LEACH CAP	75'				LIM. ZONE	100'	SUPERGENE	110'
		No Footage Marker - Casing Prob starts @ ~ 47'																	
		47'																	
		QUARTZ-CARB.	?	50						0	- strong leaching to 75' but only weak limonite to 100' - cc zone is weak and confined to fractures	47?							.05
		SERICITE-CHLORITE ZONE (47'-137')	30-40 sl Gren	50						0		20?							.05
		Typical alt'd shear zone - strongly sheared and in places folded and crenulated.		60			28'	zone of strong leaching		0		57	0%	96451	.07	.006			.05
		~ 20% brown weather. carb. as clots, veins and discontinuous laminae ~ 30% qtz as fine (1/4") grns ~ 20% pale grey plg ~ 30% combined chl + ser. - the ratio of chl to ser varies depending on original host rx - i.e. dioritic and quartz. porp. - tex. consists of catenated qtz-spur grns 1/4-1/2" in a swirling matrix of chl- ser-carb.	30-45 Str	60		30-45		broken core and lost core plus minor go. zones. Heavy pervasive limonite staining, minor chert and no magnetite.		0		60	57%						
				70								67	30%	96452	.13	.011			.05
			45	80		40-45	5'	qtz-carb-ser-py		2.5		75	8%						
				80								78	65%	10%	96453	.17	.009		.08

GIBRALTAR MINES LTD.

HOLE No. 86-25
SHEET No. 2 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG				Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Bleed.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
			L to Core Feilition	Felitation Altitide	Feeloge Stratigra	Veine .L to Core Altih					LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
		Py occurs throughout the zone mainly along folde planes associated with chl + ser. or with larger x-cutting qtz-carb. veins (gash veins?) Cp occurs in only minor amounts as tiny isolated grains or as microscopic intergrowths with py.	5-40 str. folded + sl. con.			5-40	10'	qtz-carb-ser-(chl)-py ((sp))	0 10 20 30 40 50 60 70 80 90	4.0		82 87	65% 108%	58%	96454	.10	.002		.12	.10
			5-30 str. + folded			5-30 5-20 5-15	2 1/2' 2' 4'	qtz-carb-ser(chl)-py gg-bx qtz-carb-ser.py-((sp))((cd)) gg-bx	0 10 20 30 40 50 60 70 80 90	4.0		93 100	97% 89%	20%	96455	.107	.001		.12	.12
			45-50 str.			45-50	10'	qtz-carb-ser-chl-py((cu))	0 10 20 30 40 50 60 70 80 90	4.5		105 108	76% 72%	10%	96456	.05	.003		.10	.10
			5-30 str. folded			5-50	10'	qtz-carb-ser-py	0 10 20 30 40 50 60 70 80 90	3.5		114 118	37% 80%	35%	96457	.03	.004		.12	.12
			5-50 str. folded sl. con.			5-50	10'	qtz-carb-ser(chl)-py(sp)	0 10 20 30 40 50 60 70 80 90	4.0		125	100%	73%	96458	.05	.003		.14	.14
			35 str.			35	7'	qtz-chl-carb(ser)-py	0 10 20 30 40 50 60 70 80 90	3.0		135	94%	70%	96459	.09	.003	.05	.08	.08

ROCK TYPES & ALTERATION			L to Core Foliation Foliation Alteration Foliation Alteration Foliation Alteration	GRAPHIC LOG	Vlns L to Core Ash	Width of Vln	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PIRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade	
										LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Feeling Block.	Sample Number		% Cu
			35 Mod		12"	8'	qtz-chl-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	2.5		201	73%	17%	96466	.06	.002	.10		
	strong pervasive qtz-carb. alth	45 Wx	210	40	1/10 + 1/20	1/2	qtz-carb-py	0 10 20 30 40 50 60 70 80 90	1.5		207	98%	210	80%	96467	.04	.001	.10	
				45 x 2 10 x 2 35 x 3 13 20 5 x 20	1/10 + 2 1/10 + 2 1/20 + 1/10 + 3 1/8 1/10	qtz-chl-py x 2 qtz-chl-py qtz-chl-py qtz-chl-py x 3 qtz-carb-py (cp) qtz-chl-py (cp) qtz-carb-py (cp) x 2	0 10 20 30 40 50 60 70 80 90												
		5-50 Mod-Int.	220	50-5	?	1'	qtz-chl-ser-carb (py) (cp) zone	0 10 20 30 40 50 60 70 80 90	2.0		221	100%	220	75%	96468	.04	.002	.12	
		5-60 Str. fold Cren.	230	5-60	10'		qtz-ser-carb-chl-py (cp) zone	0 10 20 30 40 50 60 70 80 90	8.0		231	88%	230	75%	96469	.02	.003	.14	
	small fault	5-50 Str-Mod	240	5	2'		qtz-ser-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	3.0		237	74%	240	67%	12%	96470	.05	.002	.15
				10 5	2' 1 1/2'	qtz-bx qtz-carb-chl-py (cp)	0 10 20 30 40 50 60 70 80 90												
		50-60 Mod	250	50 x 2	1/20 x 2		qtz-chl-py x 2	0 10 20 30 40 50 60 70 80 90	2.5		242	74%	250	86%	51%	96471	.05	.002	.12
			260	60 x 2 70 80-60	1/20 x 2 1/20 1'		qtz-chl-py x 2 qtz-chl-py (cp) x 2 qtz-chl-cp chl-carb-py zone	0 10 20 30 40 50 60 70 80 90			245	74%	250						

HOLE No. 86-25
SHEET No. 5 of 9

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Footage Stratigraphy	GRAPHIC LOG	Value L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Dissect.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP					Sample Number	% Cu	% Mo	Estimate Grade	
										LIM. ZONE	SUPERGENE								
											REMARKS								
			15-50 Mod	270	45-50	10'	qtz-chl-carb (py) zone	0 10 20 30 40 50 60 70 80 90	2.0			267	92%	58%	96472	.05	.001	.04 2690	.08
			30 Wx.	280	45x2 30 30	1/10x2 1/8 1/2 4'	qtz-chl-carb-py x2 qtz-carb-py qtz-carb highly broken core	0 10 20 30 40 50 60 70 80 90	1.0			273 277 279	93% 100% 6%	270 38%	96473	.08	.002		.03
			ND	290	30 25x6 15x3 45x6 30 60-70x10	30" 1/10x10x6 1/10x2 1/10x2 1/8 1/2 1/20x10	qtz-ser-carb-py (cp) zone qtz-chl-py x6 qtz-chl-py x3 qtz-carb-py (cp) x2 qtz-carb-py qtz-chl-py (cp) qtz-carb-chl-pr (cp) x18	0 10 20 30 40 50 60 70 80 90	3.5			287	75%	50%	96474	.07	.003		.12
			296 ND	300	? 20? 10x10+15x3 40x3	30" 3' 1/10x5 1/10x10x3	chl-pied-cp (py) zone chl-pied-cp (py) zone qtz-chl-carb-py ((cp)) x5	0 10 20 30 40 50 60 70 80 90	2.5			295.6	98%	67%	96475	.05	.002		.14
		SAUS. ALT'D FINE		310	40x3 15x5x2 20x4 20x2 5 5 6x2	1/10x3 1/10x4 1/8 1/4 1/3	qtz-chl-py (cp) x3 qtz-chl-py qtz-chl-py qtz-carb-py (cp) qtz-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	2.0			305.6	96%	300 70%	96476	.05	.001		.10
		MED GRN DIORITE (296'-420') This may be a diff rx type - composition appears similar but tex. is diff. plus the rx shows strong saus.	45 Wx	320	30-40x16 35x5 45x4 45	1/10x6 1/10x5 1/20x4 1/10	qtz-chl-py x6 qtz-chl-py (cp) x5 qtz-chl-py x4 qtz-chl-py (cp)	0 10 20 30 40 50 60 70 80 90	1.5			315.6 1117	75% 70%	310 320	96477	.05	.001	.06 2645	.10

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-25
SHEET No. 6 of 9

ROCK TYPES & ALTERATION			L to Core Footage	Foliation Pitch	GRAPHIC LOG	Vein L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
											LEACH CAP	LIM. ZONE			Footage Block.	Sample Number	% Cu	% Mo	Estimated Grade
			45 Wk			45 45+60+40 40 45+42 40-50+5	12" 1/20+3 1/10 1/8+1/10 1/20+5	qtz-chl-ep qtz-chl-py x3 qtz-chl-py qtz-chl-py x2 qtz-chl-py x5	0 10 20 30 40 50 60 70 80 90	1.5		324	102%	330	86%	96478	.04	.001	.08
			40 Wk + Mod			40+3 45 30 45+3	1/20+3 1/10 1/10 1/20+3	qtz-chl-py x3 qtz-chl-py qtz-chl-py qtz-chl-py x3	0 10 20 30 40 50 60 70 80 90	1.0		331 335	98%	340	44%	96479	.06	.002	.05
			ND			35 ? 5+2 ?	1 1/2' 2 1/2' 1/4+1/8 3'	qtz-chl-carb (py) zone ep (qtz) (carb) - py - ep zone qtz-chl-py x2 chl-ep (py)	0 10 20 30 40 50 60 70 80 90	2.5		342 347	80% 92%	350	62%	96480	.09	.002	.14
			45- 85 Str.			50+3 60+30+5 45-55	1/20+3 1/8+1/10+2 6'	qtz-chl-py (ep) x2 qtz-carb-chl-py x3 qtz-carb-chl - (mag) (py) (ep)	0 10 20 30 40 50 60 70 80 90	2.0		357	95%	360	63%	96481	.06	.002	.12
			60- 70 Str			60-70	10'	qtz-carb-chl - (py) (ep)	0 10 20 30 40 50 60 70 80 90	1.5		367	90%	370	8%	96482	.11	.001	.12
			80 Str.			80	10'	qtz-carb-chl (py)	0 10 20 30 40 50 60 70 80 90	1.0		376	90%	380	46%	96483	.03	.001	.10

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-25
SHEET No. 7 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	REMARKS			Sample Number	% Cu	% Mo	Estimated Grade
			70 WK	45x2 50x2 50 45x2 80x2	1/10x2 1/4x2 3' 1/10x2 1" + 1/16"	qtz-chl-py x2 hem-carb-gg x2 carb-chl-py-cp qtz-chl-py x2 qtz x2	0 10 20 30 40 50 60 70 80 90	1.0			94%	45%	96484	.06	.001	.12
			70 WK	70 70 15 80+70	1/20 1/4 1/4x2	qtz-chl-py qtz-chl-carb qtz x2	0 10 20 30 40 50 60 70 80 90	0.5			92%	75%	96485	.04	.002	.05
			60 WK	400 35 70-80x10 35+70 45	1/4x2 6" hls-Y20x10 1/4 + 1/3 1/10	qtz-carb x2 qtz-carb-chl qtz-chl-py x10 qtz-carb cutting & displacing qtz. qtz-chl-py	0 10 20 30 40 50 60 70 80 90	0.5			100%	92%	96486	.04	.001	.09 2555
			70 WK	420 15 70x3 80+70x2 60-70x6	1/2 hls-Y20x3 1/4 + 1/8x2 1/20x6	qtz-hem qtz-chl-py qtz-chl-py + qtz-chl-py (cp) x2 qtz-chl-py x6	0 10 20 30 40 50 60 70 80 90	1.0			102%	85%	96487	.05	.004	.05
		FINE-MED GRN. DORITE (420-507) same as 137-251 -that is, sans. alth is weak or absent - most of the core shows	80 Mod	430 70x2 80	1/20x2 7'	qtz-chl-py x2 qtz-carb-chl (py)	0 10 20 30 40 50 60 70 80 90	0.5			93%	52%	96488	.03	.006	.06
		chl-carb alth either pervasive or in strong zones accompanied by strong shearing and incr. sulfides.	80 WK	440 80 50 45	6' 3" 1/10	chl-qtz-carb-py (cp) massive py chl-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	5.0			100%	70%	96489	.04	.001	.12

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-25
SHEET No. 8 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Values L to Core Axis	Width of Veh	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE			Sample Number	% Cu	% Mo	Estimated Grade
			ND	75+20 65 50 1000	1/8 + 1/4 1/6 1/10 1/8 + 1/4	qtz-chl-ep-py (cp) = 2 qtz-chl-py qtz-py qtz-carb-chl-py (cp) = 2	0 10 20 30 40 50 60 70 80 90	1.0			100%	77%	96490	.11	.001	.12
			ND	45 60 40 45 45 + 40	1/10 1" 2" 1/4 1/4 + 1/10	chl-ep-carb-py (cp) qtz-chl-carb-py qtz chl-ep-py-cp qtz-chl-carb-py x 2	0 10 20 30 40 50 60 70 80 90	1.0			100%	76%	96491	.14	.001	.14
			ND to 80 Wk	80x 5 80	hlex 5 3 1/2"	chl-pyx 5 qtz-chl-carb-ser (pr)	0 10 20 30 40 50 60 70 80 90	2.0			94%	72%	96492	.05	.001	.07
			80 Med- str	80	10'	qtz-chl-carb-ser (pr) (cp)	0 10 20 30 40 50 60 70 80 90	3.0			100%	70%	96493	.17	.001	.08
			80 Str.	80 50	7' 2"	qtz-chl-carb-ser (pr) qtz-ep-carb-py (mag)	0 10 20 30 40 50 60 70 80 90	1.5			100%	75%	96494	.08	1.001	.12
			5-70 Str. Cren	5-70	10'	qtz-carb-ser (pr) * mag (cp)	0 10 20 30 40 50 60 70 80 90	0.5 + 2.0% Mag.			92%	56%	96495	.04	1.001	.10 2465

* mag occurs as trains
of microscopic grains which
lie along folia planes -
associated with ep.

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[illegible]

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GIBRALTAR MINES LTD.

HOLE No. 86-26
SHEET No. 1 of 8

LOCATION SAWMILL ZONE BEARING - LATITUDE ~33,996.00N CORE SIZE N.Q.W. LOGGED BY G.D.B.
 DATE COLLARED 22-Aug-86 LENGTH 507' DEPARTURE ~47,738.00E SCALE OF LOG 1"=10' DATE August 26 1986
 DATE COMPLETED 22-Aug-86 DIP -90° ELEVATION 2,903' REMARKS *this hole intersects the footwall of the West Boundary Fault

ROCK TYPES & ALTERATION			GRAPHIC LOG	L to Core Foliation Alteration Footings Structural	Values L to Core Axis	Width of Vena	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feetage Blacked.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo		Estimated Grade
		Casing To 66'		66				0 10 20 30 40 50 60 70 80 90				66							
		MAJOR FAULT ZONE (66'-91')		70				10 20 30 40 50 60 70 80 90				70	75		11201				
			NO			17'	"solid g5"	10 20 30 40 50 60 70 80 90	?			72	0						
								10 20 30 40 50 60 70 80 90				76	25	0	11201	.31	.022		.31
				80				10 20 30 40 50 60 70 80 90				79	98						28.25
			NO			10'	g3 + b.	10 20 30 40 50 60 70 80 90	?			81	98						
								10 20 30 40 50 60 70 80 90				85	70	0	11202	.24	.014		?
				90				10 20 30 40 50 60 70 80 90				87	90						
		BROKEN & ALT'D ZONE soft clay alt'd gts diorite with numerous bc zones and g3 zones	55 str			5" %	g13-cp* g13-chl-cp	10 20 30 40 50 60 70 80 90	?	*def - 15% cu eq. g3		90	75						
								10 20 30 40 50 60 70 80 90				93	75						
								10 20 30 40 50 60 70 80 90				98	98	3	11203	.40	.022		.30
		- structure and re types gen. not distinct - this is the footwall of the fault zone (91-125)	55 str			2' 1'	97 99	10 20 30 40 50 60 70 80 90	<.5?			99 100	75						
								10 20 30 40 50 60 70 80 90				107	40	0	11204	.43	.090		.15?
				110				10 20 30 40 50 60 70 80 90				110	98						

GIBRALTAR MINES LTD.

HOLE No. 86-26
SHEET No. 2 of 8

GRID

ROCK TYPES & ALTERATION			L to Core Feilistia	GRAPHIC LOG	Values L to Core Axis	Width of Vein	Unaltered Material	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS			Footage Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	LIM. ZONE	SUPERGENE				Sample Number	% Cu	% Mo	Estimated Grade	
REMARKS																				
			45	str	120	60 x 2 80 1 70 45 80	2" x 1 6" 14" 1/20 1/10 1/10	qtz x 2 99 99 MnS ₂ qtz-ent-ep qtz(ep)	0 10 20 30 40 50 60 70 80 90	?		112	98	0	11205	.33	.024		18	
			45	str	120				0 10 20 30 40 50 60 70 80 90			120	98							
			45	str	130	5 60 20 25 x 2	1/2 3" 1/2 1/10 x 2	qtz-ep-carb-ep ep-py(ep) chl-ep chl-ep x 2	0 10 20 30 40 50 60 70 80 90	.5		125.6	98	3	11206	.50	.018	2780	20	
		FINE-MED. GRN. MINE PHASE			130	50 40 x 2 30	1/10 1/10 x 2 1/10	chl-ep qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90	0.5		130	98							
		QUARTZ DIORITE (125'-319')			140	30 25	1/10 1/10	chl-ep qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			134	98	6	11207	.45	.014		.25	
		20-30% qtz 50-% eavs plag. 15-20% chl 1-5% ep clots			140	30 25	1/10 1/10	chl-ep qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			135.6	98							
		grn 2-3c 1/20-1/10" -rx is soft and mod. vuggy with fine dissem. py-(ep) or py(ep) along foln planes - only the larger veins are shown in the structure-min. columns			150	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90	1.0		138	98							
		poss small steep fault			160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			142	98							
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			147	98	6	11208	.48	.018		.25	
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			149	98							
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			152	98							
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			155	98	0	11209	.44	.040		?	
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			159	98							
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			161	98							
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			165	98	2.7	11210	.47	.020	.46	.35	
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			167	98							
					160	30 20	1/10 1/10	qtz-ent-ep(mag) chl-ep	0 10 20 30 40 50 60 70 80 90			170	98							

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 84-26
SHEET No. 3 of 8

ROCK TYPES & ALTERATION			L to Core Feet/In	GRAPHIC LOG	Feet/In Feet/In	V. to Core Feet/In	Width of V. In	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet/In Feet/In	Estimated Core Recovery %	R O D	ASSAY RESULTS			
		LEACH CAP									LIM. ZONE	SUPERGENE				REMARKS	Sample Number	% Cu	% Mo
			30 Str.		150	40 30 30 30 30 30 x 2 30 x 2 30 40	1/20 1/10 1/10 1/4 1/4 1/4 x 2 1/10 x 2 1/10	chl-carb.-cp qtz-chl.-cp qtz-cp(Mo) qtz-chl.-cp qtz-chl.-cp qtz-chl.-cp(Wo) x 2 qtz-chl.-carb.-py-cp x 2 qtz-cp qtz-chl.-py-cp	0 10 20 30 40 50 60 70 80 90	1.0		175 178	18 85	27	11211	.55	.038	.40	
		@ ~ 180' the rx becomes sl. finer grained - it is still a Q.D. but no longer resembles a fine coarse Q.D.	25 Str.		190	15 15 30 35 15 40 x 45 45 40 x 2	1/10 1/4 1/10 1/10 1/2 1/8 x 2 1/2 1/10 x 2	qtz-chl.-cp qtz-chl.-cp qtz-chl.-cp chl.-cp-py qtz-chl.-cp chl.-cp x 2 qtz-chl.-cp qtz-chl.-py x 2	0 10 20 30 40 50 60 70 80 90	1.0		185 190	90 90	20	11212	.54	.024	.40	
			30 Str.		200	25 25 15 x 20 15 15 x 2 20 25 25	1/2 1/10 x 2 1/10 1/2 1/4 x 1/8 1/4 1/4 1/4 x 1/2	qtz-chl.-cp qtz-chl.-py-cp x 2 qtz-chl.-py-cp x 2 qtz-chl.-carb.-py-cp qtz-chl.-carb.-py-cp chl.-cp qtz-chl.-cp qtz-chl.-py-cp	0 10 20 30 40 50 60 70 80 90	1.0		196 199	95 98	23	11213	.50	.028	.30	
			30 Str.		210	40 x 20 x 15 40 x 2 25 x 2 20	1/4 x 3 1/10 x 2 1/4 x 2 1/4	qtz-chl.-py-cp qtz-chl.-py-cp x 2 qtz-chl.-cp chl.-py-cp	0 10 20 30 40 50 60 70 80 90	1.0		205 210 212	98 40 50	17	11214	.42	.018	.25	
			?		220	45 30 60	1/10 1/10	qtz-cp qtz-chl.-cp qtz-cp(Mo)	0 10 20 30 40 50 60 70 80 90	0.5		217 221	40 0	0	11215	.64	.018	.52 .25	
			60		230	20 x 10 60 60	1/4 x 1/4 30" 12"	qtz-carb.-py-cp x 2 qtz-carb.-py-cp x 2 chl.-py-cp x 2	0 10 20 30 40 50 60 70 80 90	1.0		227 230	70 75	3	11216	.26	.014	.20	

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-26
SHEET No. 4 of 8

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	L to Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feetage Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade
			40 Str.	240	50 45-50x10 20 25x3 35x3 5x3+45x4	12" 1/10-1/6x10 1/8 1/8x3 1/4+1/8x1/8 1/10x7	chl-carb-py (cp) some qtz-chl-py (cp) x 10 qtz-chl-py (cp) qtz-chl-py-cp x 3 qtz-chl-carb-py (cp) x 2 qtz-chl-py (cp) x 7	0 10 20 30 40 50 60 70 80 90	4.0			236 239	95 95	3	11217	.22	.012	.15
			30 Med	250	15x5 45x60+30x20 15x2 20-60x10 40x2 30x3 60	1/8x5 1/10-1/8x4 1/2x2 1/20-1/10x10 1/8x2 1/4x1/4x2 1/4	qtz-chl-py (cp) x 5 qtz-chl-py x 4 qtz-(Mn) + qtz-py (cp) qtz-chl-py x 10 qtz-chl-py (cp) x 2 qtz-chl-py x 3 qtz-carb-py	0 10 20 30 40 50 60 70 80 90	4.0			244 249	95 98	10	11218	.19	.012	.15
			25 Str.	260	20 15x2 5 10x3 5x2 45x3	1/10x2 1/2x1/2 1/4 1/4x3 1/10x2 1/10x3	qtz-chl-py x 3 qtz-chl-carb-py (cp) x 2 qtz-carb-cp-py qtz-chl-py x 2 qtz-chl-carb-py x 2 qtz-chl-ser-py x 3	0 10 20 30 40 50 60 70 80 90	3.5			254 257 260	95 95 98	20	11219	.21	.008	.12 .27 2695
			25 Str.	270	10x2 10x2	1/4x2	qtz-carb-py (cp) x 2	0 10 20 30 40 50 60 70 80 90	3.5			266 270	98 98	27	11220	.19	.010	.12
			25 Str.	280	15x3 70 40 15 10x6 20 5-10x14 20x2 5-45	1/20x3 1/10 1/10 1/10 1/10x6 1/4x4 1/4x2 1/10x4	qtz-chl-py x 3 qtz qtz-chl-py qtz-chl-py (cp) qtz-chl-py x 4 qtz-chl-py (cp) qtz-chl-py (cp) x 4 qtz-chl-py (cp) x 2 qtz-chl-py (cp) x 2	0 10 20 30 40 50 60 70 80 90	4.0			272 276	95 98	20	11221	.22	.018	.14
			30 Str.	290	5 5 40x3 30x45x30 20x2 20x15x2+30	1/4 1/8 1/10x3 1/10x4 1/8x2 1/10x3	qtz-chl-py-cp qtz-chl-carb-py-cp qtz-chl-carb-py-cp qtz-chl-py x 3 qtz-chl-py x 4 qtz-chl-py (cp) x 2 qtz-chl-py (cp) x 4	0 10 20 30 40 50 60 70 80 90	4.0			287	98 95	33	11222	.24	.012	.25

GRID

GIBRALTAR MINES LTD.

HOLE No. 86-26

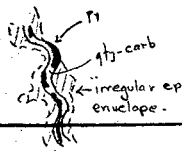
SHEET No. 5 of 8

ROCK TYPES & ALTERATION			L to Core Feather	GRAPHIC LOG	Value L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade
			30 Str	300	35 20x2 5x2 30 5x2 5x30	1/2 1/16x2 1/2 1/8x2 1/16x2	qtz-chl-ep-py (cp) qtz-chl-py x2 qtz-chl-py x2 cp qtz-chl-py x2 qtz-chl-py x2	0 10 20 30 40 50 60 70 80 90	2.5			292 297	95 95	33	11223	.09	.007	.10
			40 Mod	310	80 5x20x15 45x80 20x15x60 30x2	2" 1/10x3 3/4x1 1/4x3 1/4x2	qtz qtz-chl-py x3 qtz-cp-py cut by qtz (vug) qtz-w qtz-chl-carb-py (cp) x2 } 3' broken zone	0 10 20 30 40 50 60 70 80 90	2.5			304 307 210	40 30	23	11224	.12	.007	.18 2600 .14
			40 Str.	319	15x10x30 20x15 5 10 30 45 45	1/10x3 1/4x2 1/8 1/10 1/4 1/5 1/4	qtz-chl-py x2 + qtz-carb-py qtz-chl-py x2 qtz-chl-py-cp qtz-chl-py zone qtz-chl-py (cp) qtz-cp chl-carb-py zone	0 10 20 30 40 50 60 70 80 90	3.0			315 319 322	45 90 90	13	11225	.18	.004	.15
		QTZ-CHL-SER- CARB. SHEAR ZONE (319-381) a zone of alt'n, shearing and minor crenulation - proportions of alt'n minerals vary from qtz-ser-carb to chl-carb over > 5' intervals	60- 70 Str Sl. Gren	330	60-70	10'	qtz-chl-carb (ser)-py (cp) zone	0 10 20 30 40 50 60 70 80 90	2.0			327 332	95 95	20	10626	.16	.005	.12
			65 Str.	340	65	10'	qtz-ser-carb (chl)-py (cp) zone	0 10 20 30 40 50 60 70 80 90	2.0			337 339	40 45	7	10627	.21	.006	.10
		- a finely disseminated mineral is present- pass. Tourmaline - fine py (cp) dissem occur throughout zone, often along foli planes.	70	350	70	10'	qtz-ser-carb-py (cp)	0 10 20 30 40 50 60 70 80 90	2.0			347 80	85	13	10628	.19	.004	.18 2555 .14

HOLE No. 86-26
SHEET No. 6 of 8

ROCK TYPES & ALTERATION		L to Core Foliation Alteration Feet Structure	GRAPHIC LOG	Yates L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade
									LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	%	%	
		80 Sl. Crea.	360	80	3' 7'	qtz-carb vein carb-chl-py(ep) zone *	0 10 20 30 40 50 60 70 80 90	1.5	* in places the chl. is bright green (like manioposite)	351 missing blk.	90	27	10629	.08	.004	.10	
		45- 60 Str.	370	45-60	10'	qtz-chl-carb-ser-py	0 10 20 30 40 50 60 70 80 90	2.5		367	98	23	10630	.05	.002	.10	
		45- 70 Str Cren	380	45-70	8' 2'	qtz-chl-carb-ser-py(ep) chl-carb zone	0 10 20 30 40 50 60 70 80 90	3.0		372 380	98	30	10631	.06	.005	.12	
	FINE-MED GRN DIORITE (381-452) grades T _a & Q _D	NO	390	40x2 30 50 30 60 ?	1/10 x 2 1/10 1" 1/8 2" 2'	qtz-chl-carb-py x2 qtz-chl-carb-py qtz qtz-chl-carb-py qtz-py(ep) ep-chl zone	0 10 20 30 40 50 60 70 80 90	1.0		387	98	13	10632	.08	.003	.08	
	in places but is distinctly different from the Mine Phase G.D. - 20-30% chl. 50-60% save plag 10-20% qtz		400	5x2 4x 5x2 40x30 20	1/20 x 3 1" 1/10 x 1/8 1/10 x 2 1/10	hem-gg + z qtz(chl) qtz-ep-py x2 qtz-chl-py x2 qtz-ep-py qtz-ep-py	0 10 20 30 40 50 60 70 80 90	1.0		392 397	98	37	10633	.06	.003	.07 2510 .08	
	+ in places large clots and stringers of ep rx has a sciate tex. with large (K ₂ X) plae phenos in a matrix of finer grns (cataclastic deform.)		410	30 45x30 50x40x30 5x2	1/10 1/10 x 1/8 1/4 x 3 1" x 1/10	qtz-chl-py qtz-chl-ep-py x2 qtz-ep-carb-py x3 carb-ep-py x2 qtz-chl-py x2	0 10 20 30 40 50 60 70 80 90	2.0		407	98	53	10634	.09	.004	.05	

HOLE No. 86-26
SHEET No. 7 of 8

ROCK TYPES & ALTERATION		L to Core Relatlon	GRAPHIC LOG	Y to Core Alt	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feeling Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade	
									LIM. ZONE									
										REMARKS								
		ND	ND	5 5-15 x 4 20 x 15	1" 1/4 1/10 x 4 1/10 x 2	qtz-carb-ep-py qtz-carb-ep-py qtz-chl-ep-py x 4 qtz-chl-py (ep) x 2	0 10 20 30 40 50 60 70 80 90	1.0		417	98	50	10635	.06	.003		.08	
		ND	ND	15 x 2 + 20 15 x 5 10 30-10 x 4	1/8 x 2 + 1/4 1/10 x 2 1/8 1/10 x 4	qtz-chl-carb-py x 3 qtz-chl-py x 2 qtz-chl-ep-py (ep) qtz-chl-py x 4	0 10 20 30 40 50 60 70 80 90	1.5		427	98	67	10636	.09	.002		.08	
		ND	ND	5 x 2 + 50 x 2 5 20 x 2 5 x 10	1/10 x 4 1/8 1/10 x 2 1/8 - 1/10	qtz-chl-py x 4 qtz-chl-py qtz-chl-py x 2 qtz-chl-py x 2	0 10 20 30 40 50 60 70 80 90	1.0		432	98	53	10637	.08	.003	.08	.05	
		ND	ND	60 10 5 x 20 5 x 3 70 x 45	1" 1/4 1/8 x 2 1/8 x 3 1/10 x 2	qtz qtz-chl-py qtz-ep-py x 2 qtz-ep-py x 3 qtz-ep x 2	0 10 20 30 40 50 60 70 80 90	1.5		447	95	53	10638	.12	.004		.05	
		80 str	452	80 1	3'	chl-carb(py) zone	0 10 20 30 40 50 60 70 80 90	1.0		457	93	23	10639	.05	.002		.08	
		80 str cren	460	18'		qtz-carb-chl-ser(py) zone	0 10 20 30 40 50 60 70 80 90	1.0		467	90	37	10640	.06	.003		.10	

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GIBRALTAR MINES LTD.

HOLE No. 86-27
SHEET No. 1 of 5

LOCATION SAWMILL ZONE BEARING - LATITUDE N 32.779 N CORE SIZE N.O.W. LOGGED BY G.D.B.
 DATE COLLARED 23-Aug-86 LENGTH 351 DEPARTURE N 47.531 E SCALE OF LOG 1"=10' DATE Nov. 14 1986
 DATE COMPLETED 23-Aug-86 DIP -90° ELEVATION N 2.895' REMARKS hole was abandoned at 351' and did not intersect the projected ore zone. See below *

ROCK TYPES & ALTERATION			GRAPHIC LOG	Values - to Core - to Core - to Core	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feetage Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade
		Casing To 131'															
		MAJOR FAULT ZONE (131' - 175')			10	(gg)-bx			no limonite		131	50					
									* this hole intersects the West Boundary Fault Zone at ~250'-290'- another fault occurs at 131'-175'		137	30	0	96251	.01	<.002	?
		main gg zone occurs at 140'-163' -this also crosses a re change from mainly calc. gne. frags above to mainly pale diorite frags below			10	gg (bbx)					140	40					
		-that is, the main dislocation may take place at ~160'.									145	20	0	96252	<.01	<.002	?
											152	85					
					10	gg (bx)					157	20	0	96253	<.01	<.002	?
											164	90					
					10	gg-bx					164	30	0	96254	.01	<.002	?

HOLE No. 86-27
SHEET No. 2 of 5

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	Values L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP					Sample Number	% Cu	% Mo	
											REMARKS							
			175	ND		5'	gg-bx	0				171	25	0	96255	<.01	<.002	0
		BLEACHED DIORITE (175-188')		180		5'	broken rock	0				175	85					
		a pale grey med- coarse grn rx having a bleached appear. ~ 25% chl. ~ 10-15% interstitial qtz ~ 60-65% white plag	ND	70	1"	qtz		0				177	90					
		- the chl. appear chalky and poorly defined - this rx is a common type well exposed south of 79-11		190		12'	gg-bx	?			rock change occurs @ ~ 196'	185	50	3	96256	<.01	<.002	0
		FAULT ZONE (188-200')		200								187	75					
		EPIDOTE-CHLORITE PREDOMINANT BRECCIA a mottled chl-green epidote green and pink rx. consisting of ep-pied. clots up to 3" dia in a predominately chloritic matrix. (200-216')	ND	210		10'	} broken core	<0.5				194	85	0	96257	<.01	<.002	?
												198						
												85						
												205	50	3	96258	<.01	<.002	<.01 2690 .05
												208						
												85						
		BLEACHED DIORITE (206-231')	30- 80 str.	220		8" 3" 6" 7"	carb qtz carb qtz					217		7	96259	<.01	<.002	
		similar to (175-188)	ND	230			} zone of strong shearing and poss silicification					98						
				70		1/4	qtz					227		13	96260	.01	<.002	
				70		2"	qtz											

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GIBRALTAR MINES LTD.

HOLE No. 86-27
SHEET No. 4 of 5

ROCK TYPES & ALTERATION			GRAPHIC LOG	Veins in Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
		QUARTZ DIORITE (289' - 351')	80 Str.	300	80	10'	qts-chl-carb (mag)(py)(cp) zone + random gyp veins	1.0			70	14	96267	.17	.002	.02 2600	.10
		Prob. Mine Phase - 25% chl. - 25% qts								295							
		- 15% ap clots 25-30% wk. savs. plag. a soft dark med. grn (Y ₁₀ dia) rx which when coarser grnd does resemble Mine Phase - soft, sheared and broken from 289' to	45- 80 Str. sl. Gren.	310	45-80	10'	qts-chl-carb (ser)(py)(cp) zone + random gyp veins	1.0			94	20	96268	.14	.004		.12
		310' due likely to the fault but this is also an area of pre-fault shearing and alth. - weak gyp-qts-mag begins at 289' and increases towards EOH - the main gyp-qts	45- 80 Wk	320	45 10' + 45' + 20' 60 80 40 + 60 80 70	2 1/2' 1' + 1/3' 1/4 1/8 + 1/10 1 1/2' 2 1/2'	qts-chl-carb zone qts (cp) x 3 qts-mag-cp chl-mag-cp gyp x 2 chl-carb-gyp zone qts-mag	0.5			91	38	96269	.20	.004		.14
		Zone has not been reached and the high Cu values from the associated mag-cp (bol) are not expected. Py is still present in the intersected zone and therefore, the mag-cp (bol) zone is	45 Mod	330	80 + 60 + 70 + 20 50 + 60 60 40 80 80 + 80 5 10	1/4 x 5 1/10 x 3 1/4 1/4 1 1/2 1/16 1/8	qts-carb x 5 gyp x 2 gyp py qts-mag chl-gyp gyp x 2 qts-py-cp qts-py-cp	1.5			92	28	96270	.13	.006		.15
		expected to lie at a deeper level.		340	90 + 80 40 50 + 70 + 30 5 + 40 + 70 10 + 20 + 40 70 80 90 + 60	1/10 x 2 1/16 1/32 x 1/4 + 1/4 1/10 x 3 1/4 1/8 + 1/10 3'	qts-chl-mag-cp x 2 gyp qts x 3 qts x 3 qts x 3 py (cp) gyp x 2 qts-chl-carb zone qts x 2	1.0	beginning of qts stockworks and fine dissem. cp.		98	55	96271	.07	.006	.14 2555	.12
				350	20 + 70 10 + 60 + 45 5 40 40 + 2 80 + 70 80 + 5 + 45 40 40 + 5	1/10 1/32 x 1/4 + 1/8 1/4 1/4 1/10 x 2 1/32 1/32 1/32	qts-chl-cp-mag qts (cp) x 2 qts x 5 qts-mag qts-chl-cp gyp qts-mag qts-chl-cp	0.5			100	64	96272	.24	.014		.20
										346	90						

HOLE No. 86-27
SHEET No. 5 of 5

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GIBRALTAR MINES LTD.

HOLE No. 86-28
SHEET No. 1 of 7

LOCATION SAWMILL ZONE BEARINGS _____ LATITUDE ~ 31.049° N CORE SIZE N.O.W. LOGGED BY G.D.B.
 DATE COLLECTED 21 - Aug - 86 LENGTH 503' DEPARTURE ~ 47,253 E SCALE OF LOG 1" = 10' DATE Dec. 1, 1986
 DATE COMPLETED 25 - Aug - 86 DIP -90° ELEVATION ~ 2,896' REMARKS * see remarks column.

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein L to Core Axis	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP				Sample Number	% Cu	% Mo		Estimated Grade
		<u>Casing To</u> <u>125'</u>															
		<u>FAULT ZONE</u> <u>(125' - 149')</u> most rx frags are	60 Mod		5'	broken & lost core		0			126						
		fine to aphanitic brown weathering rx. but changes within 140-149' to the underlying meta-andesite - this zone is also one of greatest core loss + gg development and may be the zone of major dislocation	55- 60 str.		10'	broken & lost core		0			129	40	0				.01
											134	30	7				.01
											50						
			50- str.		9'	(gg)-bx + ~7' lost core		0			141	5	7				.01
											145	30					
											147	20					
		<u>DARK GREEN</u> <u>META-ANDESITE</u> <u>(149-239')</u> a typical rx. of the local Cache Creek Grp. - a fine grn rx showing banding imparted by alternating dk green chl.-rich bands and dk grey feldspathic bands, or bands of light grey gtx. carb. Laminar usually varies between 1/10 and 1/2" thick. - in a few places, dark grey chert bands (1/2") were noted with dissemin. mag.	149								149	20					
			45- 30 str		1/2"	chert-mag		0			153	55					
					2'	chert-mag		0			155	50	7				.01
					6"	chert-mag		0			159	60					
			45- 70 str		10'	highly broken core		0			167	20	0				.01
											45						

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GIBRALTAR MINES LTD.

HOLE No. 86-28
SHEET No. 2 of 87

ROCK TYPES & ALTERATION			GRAPHIC LOG	Value L to Core Alt	Width of Vena	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	Footage Blocks			Sample Number	% Cu	% Mo	Estimated Grade
		This unit is interpreted to be a metamorphic sequence of tuffs & volcanic sed. chiefly of andesitic comp.	80 str.		5'	broken + lost core		0		171		3				.01
										174	30					
										177	50					
					3'	gg-bx				180	45					
		This unit is heavily faulted and difficult to log (see R.P.B.) - it may be a series of fault wedges related to the West Boundary Fault zone - at 225 the rx. changes somewhat.	70 str.		2'	gg-bx		0		183	40	0				.01
										187	30					
										189	50					
		becomes more massive and in places contains clots of ep.	40-45 str.		1'-4'	chert-hem (spec.)					20.	3				.01
		- the chert-mag and chert. spec. bands are of interest - could this be of exhalative origin?			3'	chert (carb) (py)		<.5		194	40					
										199						
			45-60 str.		4'	(gg)-bx-hem		0		206	80	7				.01
										208	50					
			35-40 str.		5'	gg-bx-hem		0		215	55	0				.01
										218	60					
					30"	gg-bx				220	85					
			?		6'	gg-bx		0		225	60	7				.01
											80					

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GIBRALTAR MINES LTD.

HOLE No. B6-2B
SHEET No. 4 of 7

ROCK TYPES & ALTERATION			GRAPHIC LOG	Valve L to Core Alt	Width of Valve	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS			Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE	SUPERGENE			Sample Number	% Cu	% Mo		Estimated Grade
			70-80 str	70-80	10'	qtz-chl-carb	0	0				85	0					.01
			60-70 str	60-70	10'	qtz-chl-carb	0	0				85	0					.01
			10-60 str	10-60			0	0				98	17					.01
			ND				0	0				95	50					.01
			60-70 wk				20.5	20.5				95	53					.01
			70-80 wk				20.5	20.5				95	17					.01
			80 wk				20.5	20.5				95						.01

GREY LIMESTONE
UNIT (315-351')
a pale to med grey

fine grn rx with fine
micaceous partings. dk
color is due to a dk
grey dust scattered
throughout the rx and
in places defining a
weak folg - also present
is finely dissemin py.

-The rx fizzes readily
in wk HCl.
- this appears to be a
limestone not marble +
the mica parting prob.
represent bedding places -
that is, attitudes in the
folg column may be
bedding angles.

ROCK TYPES & ALTERATION			L to Core Foliation	GRAPHIC LOG	Y to Core Foliation	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu
		351																
		MIXED CALCAREOUS UNIT (351'-370') a mixture of the overlying limestone and other impure calcareous sediments - poss cut by various qtz-carb	80		20 40 ?	12" 6" 2'	scarn? - (py)(sphal)(ep) - fine dissem. in scarn. qz-bx qtz-chl-ep-carb chl-scarn	0 10 20 30 40 50 60 70 80 90	0.5			357	95	20				.01
		yeen systems - also includes some white marble - folia angles are clearly bedding angles	80- 90 WK		70-80	12" 3' 2'	ep-pied. chl scarn brown carb-chl. zone brown-carb-qtz zone	0 10 20 30 40 50 60 70 80 90	2.05			362 367	95 90	20				.01
		WHITE MARBLE (370' - 390') - a white pure rx which readily fizzes in acid. - no structures or bed- planes - contains qtz which is also white and diff. to estimate for - at 390' the marble passes abruptly into a dk green chl-ep bx., assumed to represent a meta-volcanic conglomerate (typical rx type here). This is not considered to be a fault contact!	ND			3'	broken zone	0 10 20 30 40 50 60 70 80 90	0			375	90	33				.01
			ND			7' 3'	highly broken zone healed bx? (marble appears shattered and contains material)	0 10 20 30 40 50 60 70 80 90	0			383 387	95 20	20				.01
		MAJOR FAULT ZONE (390'-408') this is a highly broken zone which several strong gg. zones and short sets of intact but friable rx.	?			8'	solid gg	0 10 20 30 40 50 60 70 80 90	?			397	85	0	96551	.02	<.002	3
		Most of the rx appears to belong to the chl-ep bx unit with some scarn and typical meta-andesite - a white qtz-porp (py) unit occurs @ 437-447'				10'	gg-bx (dissem py in some frags)	0 10 20 30 40 50 60 70 80 90	?.0?			407	80	0	96552	.06	<.002	?

GRID _____

GIBRALTAR MINES LTD.

HOLE No. B6-28
SHEET No. 6 of 87

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Fracture Structure	Y to Core Foliation Alteration Fracture Structure	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo	Estimated Grade
		-the main dislocation appears to be at 447' with the abrupt change to med-grn. qtz-diorite frags. -this change could also have taken place	?	?	10'	gg-bx + ~4' of lost core	0 10 20 30 40 50 60 70 80 90	1.0?			413 418	60 65	0	96553	.01	4.002	.05?
		at 437' with the first appearance of qtz porp. depending on whether the Q.P. belongs to the Cache Ck. rxs or to the qtz-diorite - assay values may resolve this	?	?	10'	bx (gg) - strong dissem py in scarce frags.	0 10 20 30 40 50 60 70 80 90	2.5?			423	60 90	0	96554	.01	4.002	.05
			?	?	10'	gg-bx	0 10 20 30 40 50 60 70 80 90	3.0?			431 437	80	0	96555	.05	.002	.05
			?	?	10'	bx-gg + ~5' lost core strong dissem py with Q.P.	0 10 20 30 40 50 60 70 80 90	3.0?			447	60 50	0	96556	.20	.010	.08
			?	?	10'	bx-gg + 5-6' lost core (first cp seen in frags)	0 10 20 30 40 50 60 70 80 90	2.0			451 457	40	3	96557	.25	.014	.18
			?	?	7'	bx-gg + ~3' lost core	0 10 20 30 40 50 60 70 80 90	1.0			467	55	0	96558	.39	.014	.25
			?	?			0 10 20 30 40 50 60 70 80 90										

60 X 3
70X 0.25
1/2qtz-chl-cpx
qtz-sph-sp

~ 1/4" solid cp

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-29
SHEET No. 1 of 8

LOCATION SAWMILL ZONE BEARING - LATITUDE ~ 33.509.00 N CORE SIZE N.D.W. LOGGED BY G.D.B.
 DATE COLLECTED 26-Aug-86 LENGTH 501' DEPARTURE ~ 48,442.00 E SCALE OF LOG 1"=10' DATE NOV. 17, 1986
 DATE COMPLETED 26-Aug-86 DIP -90° ELEVATION ~ 2915' REMARKS VERY low recovery and low R.O.D. throughout most of the hole.

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein to Core Axis	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimate Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP				Sample Number	% Cu	% Mo		Estimated Grade
		Casing To 54'															
		QUARTZ DIORITE (54' - 501')	30 Mod	7 15+5 20 30 x 2 20 5	2" 1/4 + 7/8 3" 1/2 1/4	qtz-py qtz-chl-carb (cp) (ca) + qtz chl-ep-py qtz-carb (cp) (ca) qtz-carb-chl (py) (ca) qtz-carb-py	0 10 20 30 40 50 60 70 80 90	1.5	no limonite zone	54 57	90 85		96326	.14	.004		.18
		- med-fine grn size ~ 1/10 avg. dia - could easily be called a diorite as qtz is not conspicuous (2 1/2" dia) ~ 30% chl ~ 20% interstitial qtz	35 mod. str.	30 35+5 15+20 20 50 10	1/2 1/2 x 2 1/3 1/4 1/4	chl-ep chl-px qtz-py qtz (cp) qtz-chl-ep qtz-chl-carb-py chl-carb (py) (cp) zone	0 10 20 30 40 50 60 70 80 90	2.0		61 67	90 80	27	96327	.20	.009		.20
		- 35-40% wk. saus plug 10-15% ep as clots and stringers - core has a sooty vuggy appear. and contains finely disse- py (cp) which is often with vuggy ep clots or stringers.	50- 70 Mod	70 80 70+80 70+30 50 70+3 25	1/2 1/3 1/4 + 1/2 1/2 x 2 2/6 1/6 1/10	qtz chl-carb qtz (cp) (ca) qtz-chl-ep qtz chl-py qtz (cp)	0 10 20 30 40 50 60 70 80 90	1.5		73 77	85	27	96328	.19	.009		.18
		- @ ~ 160' to E.H. the core becomes dark with the iron in carb chl and a discrete in ep - saus is still present however. - is this the reverse of zoning seen in 79-17 etc	95 wk	35+30 30 50 90 15 80 30 x 2 5-10 x 3	1/10 + 1/4 1/10 1/10 1/6 1/4 1/8 1/8	chl-py + qtz-chl-py qtz (cp) chl-py (cp) qtz-chl-ep chl-py qtz-carb-ep qtz-chl-py qtz-chl-py	0 10 20 30 40 50 60 70 80 90	2.0		95 97		50	96329	.01	.002		.16
			40 wk	15+10 45+70 50 5-10 x 2 5 35-40+45 20 5-2 100	1/10 x 2 1/20 x 2 1/3 1/10 x 3 1/4 1/10 + 3 1/4 1/10 x 2 1/8	qtz-chl-py chl-carb-ep qtz-mag (cp) qtz-chl-py (cp) qtz qtz-chl-carb-py-cp ser-py qtz-chl-py (cp) carb-ep	0 10 20 30 40 50 60 70 80 90	2.0		94 98		30	96330	.16	.003		.15

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-29
SHEET No. 2 of 8

ROCK TYPES & ALTERATION			GRAPHIC LOG	Values to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	Footage Block			Sample Number	% Cu	% Mo	Estimated Grade
			50 Wk- Mod	110	1/10 x 4 1/10 x 2 20 15 5 10 x 3 10 x 3 50 x 2 45 x 10 x 80	qtz-chl-py x 4 chl-py x 4 chl-carb-py qtz-chl-carb-py (cp) qtz qtz-chl-carb-py (cp) x 2 qtz-chl-py (cp) x 3 carb-chl-py x 2 qtz (py) x 2	0 10 20 20 30 30 40 50 60 70 80 90	2.5		101 107	90	23	96331	.14	.016	.15
			70 Mod	120	1/4 20 1/20 x 1/10 x 5 1/4 x 2 1/4 1/10 x 3 5 x 60 x 40 40 x 2 40 x 2	qtz-carb (py) qtz-chl-carb-py (cp) some qtz-chl-py (cp) x 5 qtz (cp) x 2 qtz-chl-py qtz-chl-py (cp) x 3 qtz (cp) + qtz-chl-py qtz-chl-carb py x 2	0 10 20 20 30 40 50 60 70 80 90	2.5		114	90 95	23	96332	.12	.009	.14
			70 Mod	130	10 x 2 80 10 1" 1" 70 20 x 10 x 15 x 3 3 40	qtz-chl-carb-py x 2 qtz-ser-py (cp) qtz-dms q (cp) qtz-mag (cp) qtz-cp qtz-chl-py x 5 qtz-chl-py (cp) qtz-chl-carb-py	0 10 20 30 40 50 60 70 80 90	2.0		121 125	90 95	17	96333	.31	.008	.15
			50- 60 Mod	140	5' 10 40 x 45 1/10 x 2	broken core qtz qtz-chl-py	0 10 20 30 40 50 60 70 80 90	1.0		131 137 140	90 60	3	96334	.12	.004	.18 2.780 .08
			50 Mod	150	10 35 x 2 40 x 12 x 80 45	qtz (w) qtz-chl-py x 2 qtz-chl-py x 3 qtz-mag (cp)	0 10 20 30 40 50 60 70 80 90	2.0		150	50	7	96335	.18	.004	.10
			45- 35 Mod	160	50 60 x 45 10-30 x 5 60	qtz qtz-carb-cp qtz-cp qtz-chl-py x 2 qtz-chl-cp	0 10 20 30 40 50 60 70 80 90	1.5		153 160	60 95	17	96336	.15	.007	.14

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-29
SHEET No. 3 of 8

ROCK TYPES & ALTERATION			L to Core Foliation Alteration Footprint Structure	GRAPHIC LOG	Vehs L to Core Axis	Width of Veh	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS			Estimated Core Recovery %	R O D	ASSAY RESULTS			
										LEACH CAP	LIM. ZONE	SUPERGENE			Sample Number	% Cu	% Mo	Estimated Grade
												REMARKS						
			50-60 Wk	170	20x2 20x80 15x3 20x2 30x80 45x50	1/3x1/4.0 1/4x2 1/10x1/8x3 1/10x2 1/8x2 1/10x2	qtz-chl-py #2 qtz #2 qtz-chl-py #3 qtz-chl-py #2 qtz-carb-py (ep) #2 qtz-chl-py (ep) #2	0 10 20 30 40 50 60 70 80 90	2.5				85 30 60	27	96337	.12	.009	.12
			50 Mod	180	40-45x4 40x35 20 15 40 15x40x4 50x35	1/10x4 1/8x2 1/4 1/4 1/4 1/4x5 1/10x2	qtz-mag qtz-chl-py (ep) qtz-chl-py (ep) qtz-chl-py qtz-chl-py qtz-chl-py (ep) qtz-ser-py qtz-carb-py #2	0 10 20 30 40 50 60 70 80 90	3.0				173 90 85	10	96338	.16	.013	.10 .15 2735
			50 Mod	190	20x2 30 15 25 20x2 30 15 25	1/10x2 1/4 1/5 1/10 1/10x2 1/4 1/5 1/10	qtz-chl-py #2 qtz (ep) qtz-carb-ser-py (ep) qtz-chl-py qtz-chl-py #2 qtz-chl (ep) qtz-chl-py qtz-chl-py #3 qtz-Mo-py qtz-chl-py #3	0 10 20 30 40 50 60 70 80 90	3.0				183 75 98	13	96339	.15	.018	.14
			30 Wk	200	5x2 10 10 25x40x40x2 40 40x3	1/10x2 1/5 1/8 1/10x2 1/8 1/10x3	qtz-chl-py #2 qtz-chl (ep) qtz-chl-py qtz-chl-py #3 qtz-Mo-py qtz-chl-py #3	0 10 20 30 40 50 60 70 80 90	3.0				194 95 90	17	96340	.16	.011	.12
			35-45 Wk	210	25 30x3 15x4x45 30x6 5 4x2	1/8 1/10x3 1/8-1/10x5 1/10x6 1/8 1/10x2	qtz qtz-chl-py (ep) qtz-chl-py #5 qtz-chl-py #6 qtz-chl-py qtz-chl-py	0 10 20 30 40 50 60 70 80 90	3.5				204 90 210	33	96341	.13	.007	.10
			40 Wk	220	40 25x2 15 25-30x6 45	1/10 1/10x2 2" 1/10-1/10x6 4"	qtz-chl-carb-py-ep qtz-chl-py #2 qtz-ser-chl-py qtz-chl-py #6 qtz-carb-chl-py zone	0 10 20 30 40 50 60 70 80 90	4.0				216 35	10	96342	.15	.005	.10

HOLE No. 86-29
SHEET No. 4 of 8

[illegible]

HOLE No. 86-29
SHEET No. 5 of 8

ROCK TYPES & ALTERATION			L in Core Feathered Alteration Footage Structure	GRAPHIC LOG	Values - L in Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade
										LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Feathered Block.	Sample Number	
			35-60 Str.	290	18-20+35+50 x 3 60 x 3 30 30 45 20 15 25	7/8 1/8 x 3 = 7/8 x 2. 1/4 1/2" 10" 1/8 30"	qtz-chl-py qtz-chl-py x s qtz-chl-py x s qtz-chl-py-cp qtz-chl-carb-py zone qtz-chl-py-Mo (cp) qtz-chl-carb-py (cp) zone qtz-chl-py qtz-chl-carb-py (cp) zone	0 10 20 30 40 50 60 70 80 90	3.5		283 287	98	47	96349	.15	.009		.14
			35-50 Str.	300	30 40 x 2 55 x 2 30 60 30 35 x 3	1/4 1/8 x 2 1/8 x 2 1/2 1/2 5' 1/8 x 1/8 x 3	qtz-chl-carb-cp qtz-chl-py x s qtz-chl-py (cp) x s qtz-ser-py qtz-py-xlo qtz-chl-carb-py zone qtz-chl-py (cp) x s	0 10 20 30 40 50 60 70 80 90	4.0		296 297	100 100	20	96350	.17	.014		.14
			45-60 Str.	310	50 40 x 2 45 60	4' 3' 1/8 x 2 12"	highly broken core chl-carb (py) (cp) zone chl-carb-cpx chl-carb-cp sile carb-cp zone	0 10 20 30 40 50 60 70 80 90	2.0		301 305 309	75 80 85	3	96351	.31	.025		20
			45-55 Str. sl. green	320	45-55	10'	qtz-chl-carb-py (cp) zone - zone of broken and lost core	0 10 20 30 40 50 60 70 80 90	2.5		215 317	50 50	3	96352	.21	.017	.21 50%	.25
			45-60 Str.	320	45-60 50 50 x 2 55 x 3 50 x 2	6' 1/8 1/8 x 2 10 x 3 1/2 x 2	chl-carb-py (cp) zone chl-cp qtz-chl-carb-cp x s qtz-chl-py (cp) x s qtz-chl-py (cp)	0 10 20 30 40 50 60 70 80 90	2.5	broken vuggy core + minor in disseminated pyrite	223 327	65 85	0	96353	.27	.010		.30
			35-45 Str.	340	45 x 2 45 10 x 2 40 35 x 2 20	1/8 x 2 1/8 1/8 1" 1/8 x 2 1/8	qtz-chl-py (cp) x s qtz-chl-cp qtz-ser-cp x s qtz-chl-py (cp) qtz-chl-py (cp) x s chl/cp	0 10 20 30 40 50 60 70 80 90	2.0		327	85	0	96354	.26	.014		.25

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 86-29
SHEET No. 6 of 8

ROCK TYPES & ALTERATION			GRAPHIC LOG	Values L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
			45-50 Mod	350	30 x 40 x 60 35 35 35 35 45 45 x 3 40 40 x 3 x 60 45 x 3 30	1/20 x 1/10 x 3 1/10 1/2 1/2 1/10 1/6 x 3 1/10 x 4 1/10 x 3 1/2	qtz-chl-cp-py x 3 qtz (cp) qtz-chl-py-cp chl-carb-cp qtz-chl-cp qtz-chl-cp qtz-chl-py-cp x 3 qtz-chl-cp x 4 qtz-chl-py-cp x 3	0 10 20 30 40 50 60 70 80 90	1.5		343 350	80 85	0	96355	.47	.030		.40
			40 Mod	360	40 40 45 x 3 60 30 40 x 2	1/10 x 2 1/6 1/10 x 3 1/4 1" 1/4 x 2	qtz-chl-cp-py qtz-chl-cp x 2 qtz-carb-cp qtz-chl-py x 3 qtz-chl-carb-py (cp) qtz-chl-carb-py-cp qtz-chl-carb-py-cp x 2	0 10 20 30 40 50 60 70 80 90	2.0		357	80	0	96356	.30	.027		.25
			40 Str	370	40 40	12" 7'	qtz-chl-carb (mag) py (cp) zone qtz-carb-ser-py (cp) zone	0 10 20 30 40 50 60 70 80 90	3.0		364 368	85 70	26	96357	.27	.020		.20
			45-60 Str	380	45-60	10'	carb-chl-py (cp) zone	0 10 20 30 40 50 60 70 80 90	2.0		377	80	0	96358	.23	.017		.30
			45-60 Str	390	45-60	9 1/2'	qtz-carb-chl-py (cp) zone	0 10 20 30 40 50 60 70 80 90	3.0		382 387	76 72	15	96359	.23	.016		.20
			50 Str	400		12"	qtz-py-p	0 10 20 30 40 50 60 70 80 90	3.0		393 397	83 65	3	96360	.22	.013		.20

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ROCK TYPES & ALTERATION			GRAPHIC LOG	Veins L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Blacks	Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade
									LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	
			47-50 Str	45-50	10'	(qtz) chl-carb-py (cp) zone	0 10 20 30 40 50 60 70 80 90	2.5			401	68	14	96361	.30	.012	.28 2510	.25
			40 Str	45x2 30 10 15x20 40	1/4 1/4 x 2 1/4 1/4 10"	qtz-carb-chl-py chl-carb-py-cp zone qtz-carb-chl-py x 2 qtz-carb-chl-py qtz (cp) qtz-chl-py-cp x 2 chl-carb-py-cp zone	0 10 20 30 40 50 60 70 80 90	3.0			413	85	3	96362	.23	.017		.18
			30 Str	45x2 45 40x4 35x5+10 50 30 40x6 60	1/4 1/4 1/10 x 4 1/4 1/4 1/4 1/4	qtz-br-hem qtz-(chl)cp x 2 qtz-chl-py qtz-chl-py x 4 qtz-chl-py x 3 qtz-cp-ser-py zone qtz-chl-py qtz-chl-py x 6 qtz-py (cp)	0 10 20 30 40 50 60 70 80 90	4.0			420	60	50	96363	.22	.023		.15
			45-50 Mod	35 35x60x2 30x3 60 30-50x6 45x4	1/4 1/10 x 3 1/10 x 3 1/4 1/4 1/10 x 4	qtz-ser-py qtz-chl-py x 3 qtz-chl-py x 3 qtz-chl (cp) qtz-chl-py x 6	0 10 20 30 40 50 60 70 80 90	1.0			433	86	18	96364	.11	.009		.10
			40 Mod	35 45x2 30 50 30x2 40x10 30x50x10 25x2x3 15x40x22	1/8 1/4 x 2 1/4 1/4 1/4 1/4 1/4 1/4 1/4	qtz-chl-py (cp) qtz-chl-py x 2 qtz-chl-py qtz-chl-py x 2 qtz-chl-py x 10 qtz-chl-py x 3 qtz-chl-py x 3 qtz-chl-carb-py x 3	0 10 20 30 40 50 60 70 80 90	5.5			441	83	36	96365	.12	.004	.18 2465	.08
			40-55 Mod	45 30 35 30x40x10 60 20x2	1/4 1/4 24' 1/4 1/4 1/4	qtz-chl-py qtz-chl-py (cp) zone qtz-chl-py x 10 qtz-py	0 10 20 30 40 50 60 70 80 90	6.0			454	66	15	96366	.07	.010		.06

HOLE No. 86-29
SHEET No. 8 of 8

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HOLE No. 86-30
SHEET No. 1 of 9

[illegible]

HOLE No. 86-30
SHEET No. 2 of 9

ROCK TYPES & ALTERATION			L to Core Feet	Feet	GRAPHIC LOG	Values L to Core Alt.	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade
											LEACH CAP	LIM. ZONE				SUPERGENE	REMARKS	Sample Number	% Cu	
	at ~ 290' to 375'	The qtz. Porp. becomes a pale green and in sections develops a pea green coloration- seriate alt.??	40 WK			50x2 70 14" 50 60x5 5 60 5	1/10x2 1/4 14" 1/8 1/4x2 1 1/10 1/4	qtz-Mo x2 qtz-ser-py qg (bx) qtz-ser-py qtz-py (cp) (Mo) x2 qtz-ser-py-cp qtz-py qtz-py	0 10 20 30 40 50 60 70 80 90	1.0		74	90	87	11230	.07	.008		.10	
			50 Mod			45 60x4 50x5 45x3 70	1/8 1/10x4 1/10x5 1/5x5 1/5	qtz-ser-py qtz-py (Mo) qtz-py x 5 qtz-py (Mo) x3 qtz-cp-Mo	0 10 20 30 40 50 60 70 80 90	1.0		84	95	50	11231	.09	.006		.14	
			60 Mod			45 40-50x4 5 45x2 70	1/8 1/10-1/10x4 12" 1/10x2 1/5	qtz-cp-ser qtz-py (Mo) x 4 qg (bx) qtz-cp x2 qtz-ser-py-cp	0 10 20 30 40 50 60 70 80 90	0.5		91	95	13	11232	.12	.004		.12	
			75 Mod			45 60x3 60 45x2+50 50 40x5 35x2	1/8 1/10 1/10 1/6x2+1/4 1/10 1/20-1/16x5 1/10x2	qtz-ser (Mo) qtz-py (cp) qtz-Mo qtz-chl-py (cp) (Mo) x3 qtz-cp qtz-py (cp) (Mo) x5 qtz-cp x2	0 10 20 30 40 50 60 70 80 90	0.5		106	95	60	11233	.09	.008	.09	.15	
			50 Mod			60x5 20 5 45	1" 3/4 1/4 1/2	qtz-Mo chl-qtz-py (cp) qtz-Mo-qg qtz-Mo	0 10 20 30 40 50 60 70 80 90	<.5	Poss 1/2 MoS ₂	114 118	95	30	11234	.17	.078		.10	
			40 STR			45 35 45	1/8 1/4 6" 2" 2 1/2	qtz (M.) (cp) qtz-chl-py-cp chl-qtz (py) (cp) zone qg-bx qtz-chl-carb-py (cp) zone	0 10 20 30 40 50 60 70 80 90	1.0		124 128	90	17	11235	.24	.015		.12	

GIBRALTAR MINES LTD.

HOLE No. 86-30
SHEET No. 3 of 9

[illegible]

GIBRALTAR MINES LTD.

ROCK TYPES & ALTERATION		L to Core Foliation Alteration Feet	GRAPHIC LOG Feet	Veins L to Core All Feet	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet Block	Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE				REMARKS	Sample Number	% Cu	% Mo
		50 Mod	200	5 x 2 1/8 65 50 x 10 1/8 1/16 x 2 2" 50 x 3	1/8 x 10 2" 1/16 x 10 x 3	qtz-Mo-Cp x 2 qtz-py (Mo) qtz-cp-chl-py-cp qtz-(Mo)(py)(cp) x 10 qtz-carb-py-cp qtz-py qtz-ser (Mo) qtz-Mo (cp)(py) x 3	0 10 20 30 40 50 60 70 80 90	0.5	Note: most of the veins are concordant with folis - those that are not are steep @ ~ 15°-5° and of rich in Mo-Cp	197 70	98	53	11242	.19	.010	.17 2.78	.12
		60 Mod	210	60 x 3 50 60 x 3 60 x 2	1/8 1/8 x 3 1/10 x 3 1/8 x 2	qtz-cp qtz-ser-cp qtz-(Gr)(Mo) x 3 qtz-ser-py qtz-(cp)(Mo) x 3 qtz-(cp)(Mo) x 2	0 10 20 30 40 50 60 70 80 90	0.5		201 207	98	70	11243	.11	.006		.10
		50 Mod	220	45 60-70 x 4 45 60 x 3	1/8 1/8 x 4 1/10 1/8 x 5	qtz-Mo qtz-py qtz-py (Mo) x 4 qtz-cp (Mo) qtz-(py)(Mo) x 5	0 10 20 30 40 50 60 70 80 90	1.0		217	98	43	11244	.11	.008		.08
		50 WK	230	60 x 12 45 x 50 x 12 80 60 45	1/8 1/8 x 3 1/8 1/10 1/8	qtz-(py)(Mo) x 12 qtz-Mo x 3 qtz-chl-py-cp qtz-ser-py-cp chl-py-cp	0 10 20 30 40 50 60 70 80 90	0.5		222 226	85	17	11245	.10	.008		.10
		45 WK	240	45-60 x 7 45 x 2 50 45 x 2	1/10 x 7 1/8 x 2 1/10 1/8 x 2	qtz-Mo-cp-py x 7 qtz-Mo-py x 2 qtz-cp-Mo qtz-Mo (cp) x 2	0 10 20 30 40 50 60 70 80 90	0.5		234	95	80	11246	.08	.002	.11 2.735	.10
		45 WK	260	60 60 60 x 7 50 60 45 x 60 x 3 50 x 3	1/10 1/10 1/8 x 3 1/8 1/10 1/10 x 3 1/10 x 3	qtz-Mo (cp) qtz-cp qtz-py-cp-Mo x 3 qtz-(py)(py) qtz-Mo qtz-Mo-cp qtz-cp (Mo) x 3	0 10 20 30 40 50 60 70 80 90	0.5		244	95	77	11247	.09	.013		.12

GIBRALTAR MINES LTD.

HOLE No. 86-30
SHEET No. 5 of 9

ROCK TYPES & ALTERATION		L to Core	Foliation	GRAPHIC LOG	Values L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP				Feetage Blasted.	Sample Number	%	%	Estimated Grade
										LIM. ZONE								
										SUPERGENE								
REMARKS																		
		60 WK		260	30+50 60 30 40 10+35+45 50x2 8 35 35x2	1/4x2 1/8 1/4 1/2x3 1/2x2 1/4 12" 1/2x2	qtz-cp x2 qtz-Mo qtz-cp (almost massive-cp) qtz-ser (cp) qtz-py-cp qtz-cp x2 qtz-cp ser 20x0 Mo x2	0 10 20 30 40 50 60 70 80 90	0.5		254	98	60	11248	20	.010		.20
		50 WK		270	10 60 80 60x3 35x4	10" 1/2 1/4 1" 1/2x3	qtz Mo qtz-py-cp qtz-chl qtz-py (Mo) x3	0 10 20 30 40 50 60 70 80 90	1.0		262 267	95	23	11249	.09	.008		.08
		50 WK		280	10x3 35x4 10x2 80x2+20 45x60	1/2x3 1/2x4 1/2x2 1/2x3 1/2x6	qtz-cp x3 qtz (Mo) x4 qtz-cp (Mo) x2 qtz-py (cp) (Mo) x3 qtz-Mo x2	0 10 20 30 40 50 60 70 80 90	1.0		273	95	47	11250	.17	.011		.12
		60 WK		290	15x4 60x5 30 60x3	1/2x4 1/2x5 1/2 1/2x3	qtz-py x4 qtz-py x5 qtz-py qtz-py x3	0 10 20 30 40 50 60 70 80 90	1.0		281 287	95	67	11251	.08	.003	.13 2690	.05
		60 WK		300	5+60 60 60x2 60 45	1/2x4 1/2 1/2x2 1/2 1/10	qtz-Mo-cp-py qtz-carb-cp carb-chl-cp-py x2 qtz-carb-cp qtz-Mo	0 10 20 30 40 50 60 70 80 90	0.5		294	98	33	11252	.11	.010		.08
		60 WK		310	35 45 60 45+30x3 50 70x3	1/2 1/2 1/2 1/2x3 1/2 1/2x3	qtz-py qtz-py qtz-py qtz-py x4 cp-Mo qtz-py x5	0 10 20 30 40 50 60 70 80 90	1.0		307 310	95 95	43	11253	.07	.004		.05

HOLE No. 86-30
SHEET No. 6 of 9

ROCK TYPES & ALTERATION			L to Core Relict Foliation Alteration Footage Structure	GRAPHIC LOG	Vein L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Blocks	Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade
										LEACH CAP					Sample Number	% Cu	% Mo	%	
			70 WK	320	60 x 5 50 60 x 5 x 6 45 60 x 6	hlc x 3 1/8 1/8 x 1/8 x 1/8 1/8 X ₀ -hlc x 4	qtz-py-cp-Mo x 5 qtz-py (cp) qtz-py-cp (Mo) x 5 qtz-cp Mo qtz-py-cp (Mo) x 6	0 10 20 30 40 50 60 70 80 90	1.0		317	90	40	11254	.15	.014		.14	
			60 WK	330	60 x 5 70 50 60-70 x 4 50 x 60 x 70 80 x 70	1/8 x 4 1/8 1/8 1/8 x 4 1/8 x 1/8 x 2 1/8 x 2	qtz-py-cp (Mo) x 4 qtz-py-cp qtz-py (Mo) qtz-Mo x 4 qtz-py-cp x 3 qtz-Mo-cp x 2	0 10 20 30 40 50 60 70 80 90	1.5		324	90	60	11255	.13	.018	.11 2645	.12	
			60 WK	340	70 x 50 60 60 x 5 70 70 x 10 70 70 x 3 70	1/4 x 1/8 1/4 hlc x 3 1/4 1/8 x 10 hlc 1/8 x 3 1/4	qtz-Mo x 3 qtz-ser-py Mo x 3 qtz-carb-cp qtz-py x 10 Mo qtz-py x 3 qtz-py (Mo) x 2	0 10 20 30 40 50 60 70 80 90	2.0		333	98	60	11256	.11	.017		.10	
			70 Mod	350	70 70 70-80 70	30" 1/4" 3" 6"	py-cp (Mo) in pea green sheared rx qtz-ser-py-cp (Mo) qtz-chl-carb-py shear zone py-cp (Mo) in pea green rx	0 10 20 30 40 50 60 70 80 90	5.0	This is an aphanitic pea green sheared rx with abundant sulfides along foln planes.	343	95	37	11257	.27	.025		.30	
			60 Mod	360	50 70 x 3 60 60 60 x 3 60 60 70	1/4 1/8 x 3 1/8 1/4 1/8 1/8 x 1/8 x 3 1/8 1/8 1/8	qtz-cp qtz-py x 3 qtz-Mo qtz-cp qtz-cp qtz-py (Mo) qtz-Mo qtz-cp-Mo qtz-cp-Mo	0 10 20 30 40 50 60 70 80 90	1.5		357	90	53	11258	.15	.016		.18	
			70 WK	370	70 x 10 60 x 2 70 70 70 x 3 70 x 8 60 60 x 2	hlc x 10 1/8 x 1/8 1/8 1/8 1/8 x 3 hlc x 10 x 6 1/8 1/8 x 1/8	qtz-py x 10 qtz-Mo + qtz-Mo-cp qtz-py (Mo) qtz-cp x 10 qtz-py in aphanitic pea green rx qtz-Mo x 3 qtz-py-Mo x 6 qtz-py qtz-py x 2	0 10 20 30 40 50 60 70 80 90	1.5		363	98	57	11259	.15	.021		.20	
											370	95							

GRID

GIBRALTAR MINES LTD.

HOLE No. 86-30SHEET No. 7 of 9

GRID												SHEET NO. 1											
ROCK TYPES & ALTERATION			L to Core Feet/Inches	GRAPHIC LOG	Feet/Inches Alteration Footage	Value L to Core Feet/Inches	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet/Inches Block.	Estimated Core Recovery %	R O D	ASSAY RESULTS							
											LEACH CAP					Sample Number	% Cu	% Mo	Estimated Grade				
			80 Mod		380	60x3 70 30"	1/20x3 30"	qtz-py-cp x 3 py-cp-Mo in pea green aphanitic qtz-py(Mo) qtz-chl(Cp) qtz-chl-carb zone	0 10 20 30 40 50 60 70 80 90	2.0		377	80	17	11260	.11	.013	.16 2600	.12				
			70 Mod		390	80x4 80 2' 80 90 5	1/2x4 1/2 2' 2" 1"	qtz-py-cp x 4 qtz broken qtz (Cp)(Mo)(py) zone qtz qtz qtz	0 10 20 30 40 50 60 70 80 90	1.0		387	90	27	11261	.06	.007		.08				
			60 Wk		400	60x2 60 70x3	1/20x2 1/20 1/20x3	qtz-Mo-cp qtz-py-Mo x 2 qtz-py Mo x 3	0 10 20 30 40 50 60 70 80 90	0.5		394 398%	80 50	13	11262	.06	.006		.05				
		Contact is a zone of broken and lost core - poss. fault	?						0 10 20 30 40 50 60 70 80 90	0.5		405	30	13	11263	.09	.007		.12				
		DARK GREEN FINE- MED. GRN META ANDESITE (405-497)	50- 70		410	50-70	8'	banded qtz-carb-chl-py(Cp) zone	0 10 20 30 40 50 60 70 80 90	10.0		412	95										
		~ 40% chl. 15% ep (as clots + stringers) 10-15% qtz 30-35% plag.	70 Mod		420	80x3 80 60x2 60	1-3/4x1/3 1/3 1/4 x 2 3"	qtz x 2 qtz py(Cp) qtz-chl-carb-py(Cp) x 2 qtz-chl-carb-py	0 10 20 30 40 50 60 70 80 90	2.0		417	90	50	11264	.07	.007	.07 2555	.10				
		avg. grn. size ~ 1/8" dia qtz not visible without mag. mod-str. sheared - in places grades to a fine grn diorite			430	60x2 5-60vL 80x60	1/20x2 1/20x3 1/20x2	qtz-py x 2 qtz-chl-py x 2 qtz-py x 2	0 10 20 30 40 50 60 70 80 90	1.5		427	98	70	11265	.07	.004		.08				

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GIBRALTAR MINES LTD.

HOLE No. 86-30

SHEET No. 8 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein ∠ to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feetage Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				
		∠ to Core Foliation							LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo		Estimated Grade
			80 Mod	60+50 50 50 45+60 440	1/16 x 2 1/8 1/16 x 2	chl-py x 2 qtz-ahl-py chl-py chl-py x 2	0 10 20 30 40 50 60 70 80 90	2.0			437	100	60	11266	.09	.003		.08
			80 Mod	80 5 60 450	1/8 1/8 1/4	qtz-carb-py-ep chl-carb-(Ccp) py (chl-carb)	0 10 20 30 40 50 60 70 80 90	1.5			447	95	40	11267	.14	.005		.05
			80 Str	60 x 2 70 80 70 460	1/16 x 2 1/10 1/20 1/10	chl-py x 2 chl-py ahl-py chl-py	0 10 20 30 40 50 60 70 80 90	1.0			457	95	63	11268	.106	.004		.05
			80 Str	50 80 x 4 70 70 470	1/8 1/20 x 4 2" 1/4 1/20	qtz-ahl-py (Ccp) chl-carb-py (Ccp) v 4 qtz-Ccp chl-py chl-py	0 10 20 30 40 50 60 70 80 90	2.5			467	90	40	11269	.120	.005	.10 25/10	.12
			70 Mod	60 70 80 70+2 480	1/8 1/8 1/8 1/20 x 2	qtz-py qtz-py qtz-ahl-py x 2	0 10 20 30 40 50 60 70 80 90	1.0			477	95	33	11270	.10	.003		.05
				70 40 30 50 490	1/10 1/2 1/2 1/2	chl-ep-py qtz (Ccp) cc qtz-ep-cc qtz-ahl-py (Ccp)	0 10 20 30 40 50 60 70 80 90	1.0	* at least 1' solid cp.		487	90	47	11271	.49	.003		.10

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GIBRALTAR MINES LTD.

HOLE No. 86-30
SHEET No. 9 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Valve L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS			Estimated Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE	SUPERGENE			Sample Number	% Cu	% Mo	Estimated Grade
FOM 497'	70 Mod.			90	1/4	qtz-py-cp	0	LO				95		11272	.07	.003	.10
				70x2	1/8x2	pyx2	10										
				50x2	1/8x2	qtz-chl-pyx2	20										
							30										
							40										
							50										
							60										
							70										
							80										
							90										
S.O.C.							0										
							10										
							20										
							30										
							40										
							50										
							60										
							70										
							80										
							90										
							0										
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							0										
							10										
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							50										
							60										
							70										
							80										
							90										

497

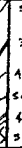
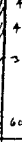
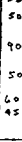


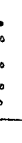
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SHEET No. 1 of 8

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HOLE No. 86-31
SHEET No. 4 of 8

ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein L in Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS			Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE	SUPERGENE			REMARKS	Sample Number	% Cu	% Mo	
			ND	45	1/10	chl-cp x 2	0	0.5		237	95	53	95918	.14	.006		.10	
				60	1/10	qtz-cp	10											
				35 + 5	1/4 x 2	qtz x 2	20											
				240	1/8	qtz chl-cp	30											
				45	1/8	qtz chl-cp	40											
				30 + 10	1/8 x 2	qtz-cp	50											
				20	1/8	chl-carb	60											
				60 + 50	1/4 x 2	carb x 2	70											
				250			80											
							90											
			ND	40	1"	qtz chl-py	0	0.5		255	88	18	95920	.15	.014	.08		
				30-50 x 6	1/8 x 6	qtz (cp) x 6	10											
				40	1/2	qtz-py (cp)	20											
				10	1/2	qtz chl-py (cp)	30											
				70 + 45	1/4 x 2	qtz x 2	40											
				260	1/4	qtz (cp)	50											
				50	1/4	qtz (cp)	60											
				60 + 45 x 2	1/4 x 2	qtz (cp) x 2	70											
				60	1/3	qtz (cp)	80											
							90											
			ND	40	1/2	qtz carb	0	<0.5		260	86	42	95921	.11	.008	.15	.10	
				50	1/4	qtz (cp)	10											
				25	1/8	qtz chl-py	20											
				30 + 45	1/10	qtz chl-py x 2	30											
				70 + 35	1/8 x 2	qtz x 2	40											
				5	1/4	qq-hem	50											
				20 + 70 x 2	1/2 x 3	qtz x 3	60											
				280			70											
				60 + 50	1/4 x 2	qtz chl-py x 2	80											
				60 x 3	1/10 x 3	qtz cp x 3	90											
			ND	45	1/10	qtz-cp	0	0.5		287	99	80	95923	.07	.006		.08	
				5	1/		10											
							20											
							30											
							40											
							50											
							60											
							70											
							80											
							90											

ROCK TYPES & ALTERATION			L to Core Feather Footage Alteration	GRAPHIC LOG Feather Footage Alteration	Values L to Core Axis	Width of Vial	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feather Block	Estimated Core Recovery %	R O D	ASSAY RESULTS				Estimated Grade
										LEACH CAP					LIM. ZONE		SUPERGENE		
			ND.		50	1/16	qtz-chl-carb-cp	0	1.0		297	100	68	95924	.05	.006		.05	
					35	1/2	qtz-ill	10											
					45	1/8	qtz	20											
					50	1/4	qtz	30											
					60x3	1/10x3	qtz-chl-py x3	40											
					70			50											
					80			60											
					90			70											
					100			80											
					110			90											
			ND		45x2	1/20x2	qtz-chl-py x2	0	0.5		304	90	43	95925	.13	.006		.08	
					45x2	1/20x2	qtz-chl-cp x2	10											
					50			20											
					60			30											
					70			40											
					80			50											
					90			60											
					100			70											
					110			80											
					120			90											
			60 WK		60x3	1/20x3	qtz-chl-py x3	0	0.5		312	100	50	95926	.08	.004		.05	
					50	1/2	qtz	10											
					60	1/2	qtz-py	20											
					70	1/8	qtz-tour.	30											
					80			40											
					90			50											
					100			60											
					110			70											
					120			80											
					130			90											
			60 WK		90	1"	qtz	0	0.5		325	90	40	95927	.04	.002		.05	
					100			10											
					110			20											
					120			30											
					130			40											
					140			50											
					150			60											
					160			70											
					170			80											
					180			90											
			60 WK		30	1/10	qtz-chl-py	0	1.0		334	70	10	95928	.04	.002		.05	
					40	1/2	qtz-chl-py	10											
					50	1/4	qtz	20											
					60			30											
					70			40											
					80			50											
					90			60											
					100			70											
					110			80											
					120			90											
			60 WK-ST		10	1"	qtz	0	2.0		342	60	16	95929	.07	.008			
					20	1/2	qtz-carb-py	10											
					30	2"	qtz-chl-carb-py	20											
					40	1"	qtz-carb-ser-chl-py	30											
					50			40											
					60			50											
					70			60											
					80			70											
					90			80											
					100			90											

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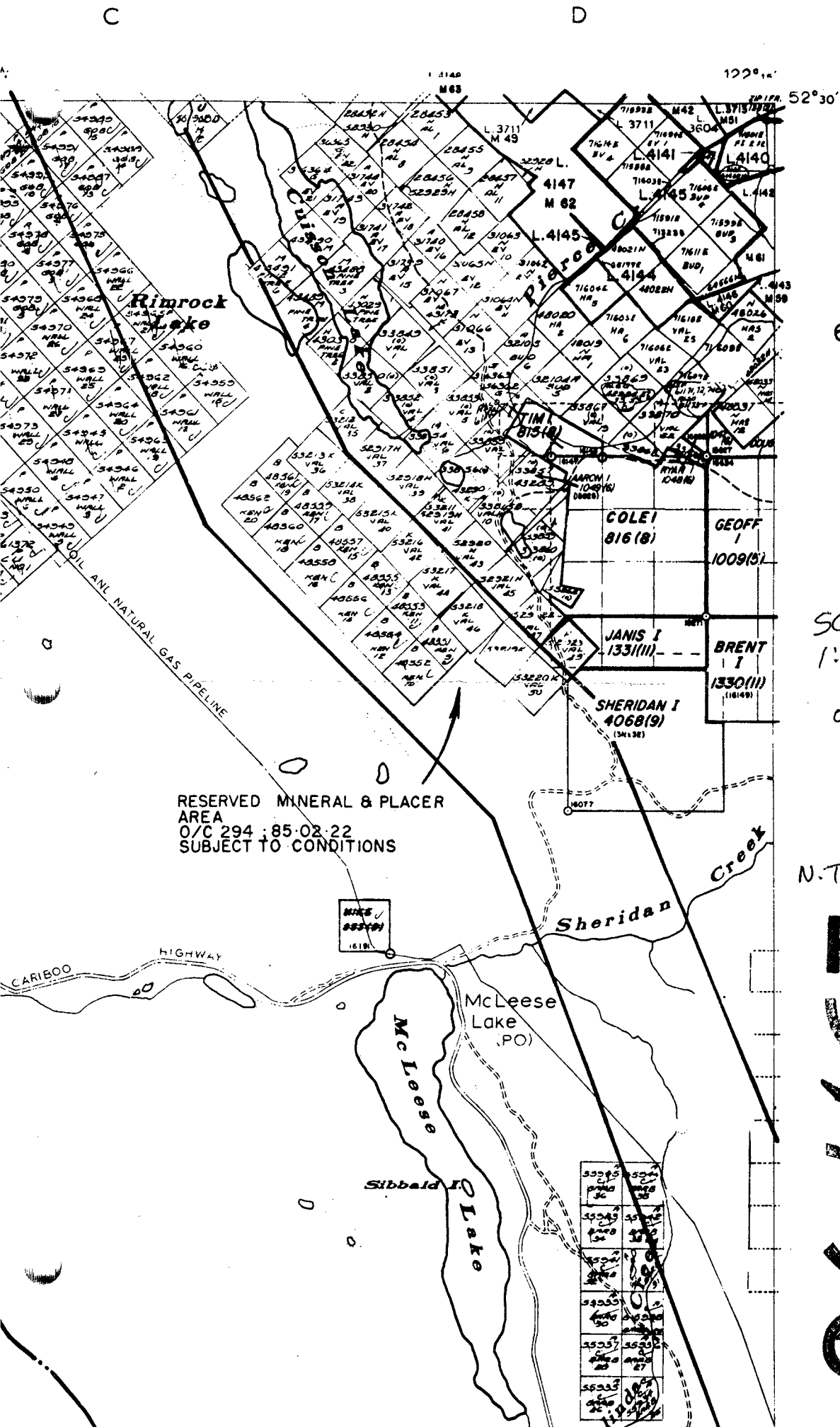
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HOLE No. 86-31
SHEET No. 7 of 8

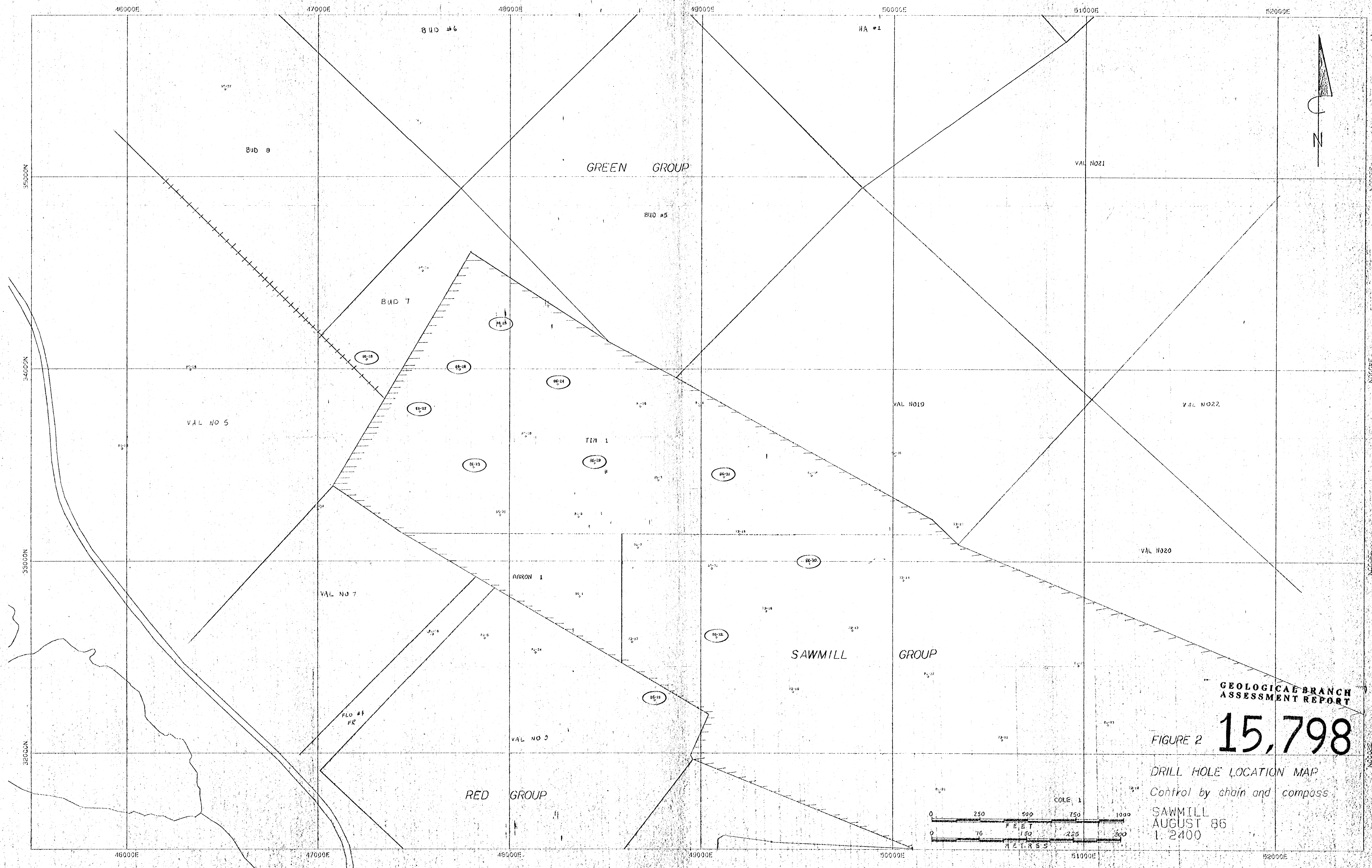
ROCK TYPES & ALTERATION			L to Core Feet/ft	GRAPHIC LOG Feet/ft	L to Core Feet/ft	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet/ft Direct	Estimated Core Recovery %	R O D	ASSAY RESULTS				
										LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo		Estimated Grade
			80 WK	420	50	1 1/2"	qtz-carb-py qtz-chl-py py qtz-carb (py) qtz-carb		0.5			415	98	43	95936	.04	.005		.05
			70 Mod	430	80	1" x 2"	qtz (Mo) chl-ep-bx-py qtz-chl-py xz		1.5			425	95	37	95937	.11	.010		.05
			70 Mod	440	70	7"	qtz (Mo) qtz (Cp) chl-carb-py qtz-chl-py		1.0			435	100	33	95938	.12	.015		.05
			70 WK	450	80	1/2"	chl-py chl-py qtz (Mo) qtz qtz		0.5			445	95	47	95939	.12	.024	.09 2555	.05
			80 1/2X	460	80	2 1/2"	qtz-py qtz-py (Mo)-bx qtz-ser-py		1.0			457	90	23	95940	.12	.027		.05
			80 WK	470	35	1/4"	qtz-py qtz-chl-py qtz-py qtz-ser-py qtz-chl-py qtz-chl-py		2.5			467	95	23	95941	.08	.008		.08

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SHEET No. 8 of 8

2465



15,798
GEOLOGICAL BRANCH
ASSESSMENT REPORT



GEOLOGICAL BRANCH
ASSESSMENT REPORT

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FIGURE 2

DRILL HOLE LOCATION MAP

Control by chain and compass

SAWMILL
AUGUST 86
1:2400

