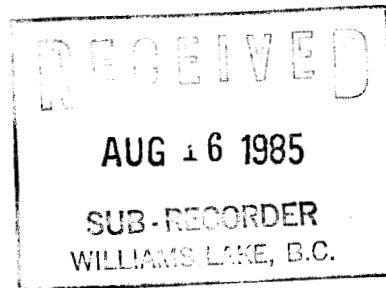


85-767-13950



DIAMOND DRILL REPORT

ON THE

ZE 1 GROUP

CARIBOO MINING DIVISION

93 B 9

(Latitude 52 deg 35', Longitude 122 deg 17')

OWNER AND OPERATOR
GIBRALTAR MINES LTD.
MCLEESE LAKE, B.C.

Author: G. D. Bysouth

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,950

TABLE OF CONTENTS

1.0	INTRODUCTION
2.0	MINERAL CLAIMS
3.0	DRILL PROGRAM
3.1	OBJECTIVE
3.2	RESULTS
3.3	INTERPRETATION
4.0	STATEMENT OF EXPENDITURES
5.0	CONCLUSIONS

FIGURES

Figure 1	AREA LOCATION MAP	(In Text)
Figure 2	ZE GROUP CLAIM MAP AND DIAMOND DRILL HOLE LOCATIONS	(In Pocket)

APPENDICES

I	STATEMENT OF QUALIFICATIONS	
II	LIST OF ABBREVIATIONS	
III	ASSAY SHEETS	
IV	DRILL LOGS:	
	85-33	(In Pocket)
	85-34	(In Pocket)

1.0 INTRODUCTION

The Ze Group lies about 6.5 km north of the Gibraltar Mines plantsite at an elevation of 3300 to 4400 feet. The claims cover a series of low rocky hills separated by broad tracts of poorly drained ground. Access is via a network of logging and exploration roads which link up with the Gibraltar Mines tailings pond road just north of the pond. General location of the claims is shown in Figure 1.

Available evidence indicates the Ze Group is underlain by a sequence of green volcanic rocks, consisting mainly of andesitic flows and associated pyroclastics, and a series of sedimentary rocks, consisting of various greywackes, calcareous siltstones, and graphitic schist. The graphitic rocks were discovered during the drilling of several I.P. target in 1978 and 1981.*

This report covers a minor drill program designed to test several gold anomalies outlined in soils overlying the sedimentary sequence. Two vertical N.Q. wireline diamond drill holes totalling 1003 feet (305.7m) were drilled during the period June 19, to July 6, 1985 by Double G Diamond Drilling Ltd. of Williams Lake B.C. The core was assayed for gold and silver. It was not split but sent in whole for analysis in order to reduce error. However, for each ten foot section, a segment of core was retained and stored at Gibraltar Mines for future reference.

2.0 MINERAL CLAIMS

The Ze 1 Group mineral claims are shown in Figure 2. Further information is provided below:

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>NO. OF UNITS</u>	<u>ANNIVERSARY DATE</u>
Ze 1	458	15	July 22
Ze 2	6621	20	Nov. 01
Ze 3	3927	20	Aug. 17
Ze 4	6620	10	Nov. 01
Ze 5	N/A	6	Aug.
Ze 6	N/A	10	Aug.
Ze 7	N/A	2	Aug.

* Assessment Reports by G.D. Bysouth

1. Percussion Drilling Report, Ze Mineral Claims, July 1978
2. Diamond Drill Report, Ze Group, July, 1981

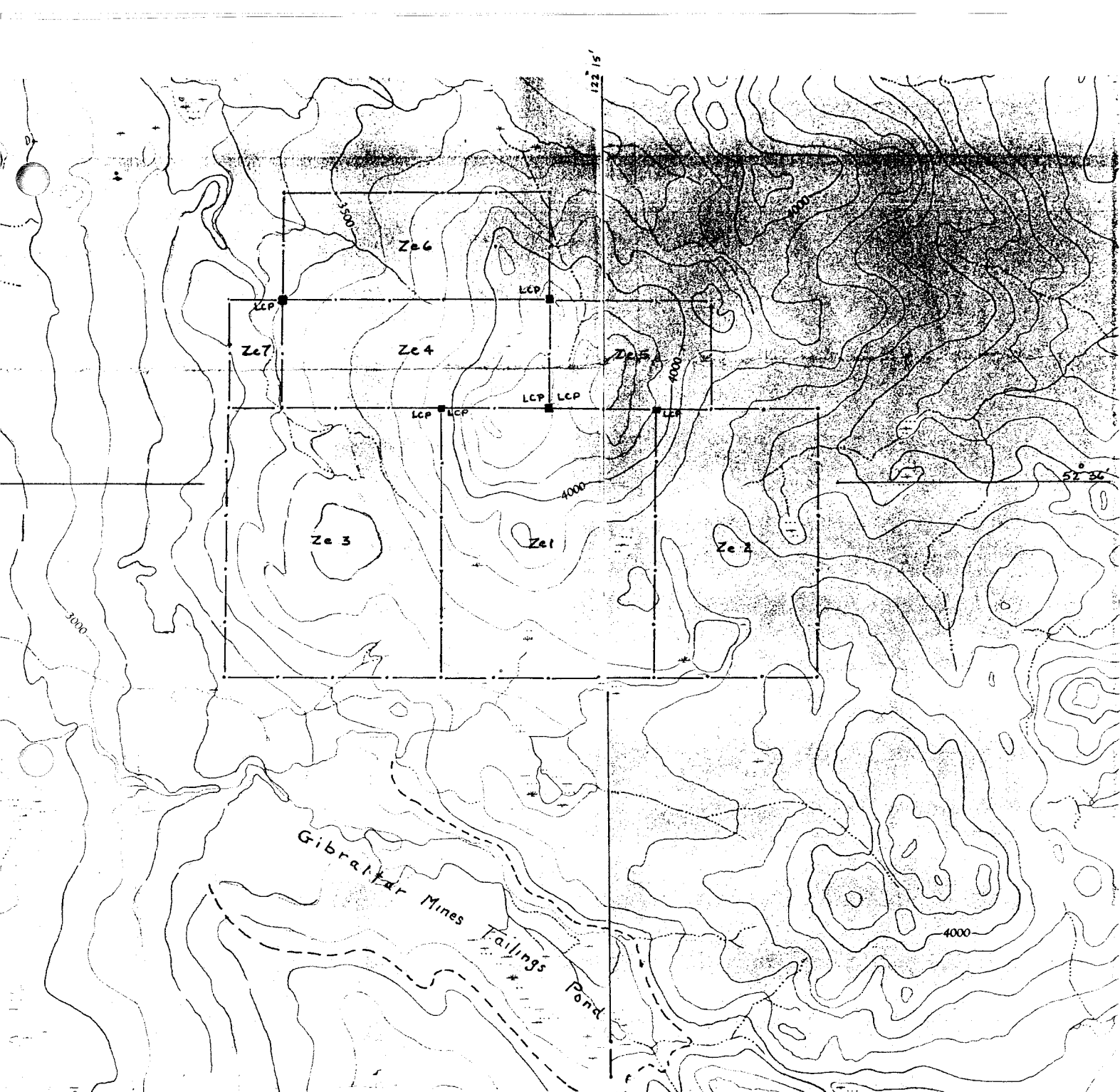
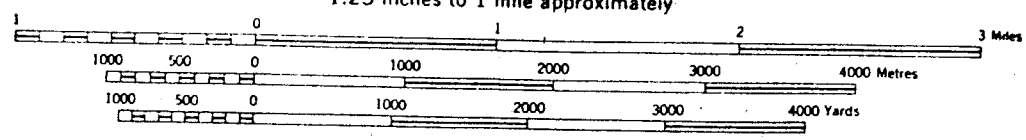
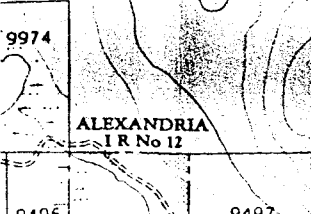


FIGURE 1
ZE 1 GROUP LOCATION MAP
93 B 9

SCALE 1:50,000
 1.25 inches to 1 mile approximately



CONTOUR INTERVAL 100 FEET
 Elevations in Feet above Mean Sea Level
 North American Datum 1927



3.0 DRILL PROGRAM

3.1 OBJECTIVE

The purpose of this program was to test for precious metal concentrations in rocks suspected of causing scattered gold anomalies in nearby soils. Hole 85-33 was located over a surface showing of black pyrite-bearing argillite. Hole 85-34 was located over an I.P. anomaly assumed to be caused by graphitic schist. Hole locations are shown in Figure 2.

3.2 RESULTS

Hole 85-33 was cased to 23-feet. From 23- to 169-feet a black dense argillite was intersected which contained up to 10% pyrite. This rock grades from massive black argillite to a banded argillite, consisting of alternating black and grey bands or laminae. The pyrite appears disseminated throughout the rock, but is most concentrated within the grey bands and in places forms massive lenses. The bands and laminae are considered to be primary bedding structures which now show a considerable amount of deformation and dislocation. Prevailing dip appears to be about 45-degrees but abrupt changes to much steeper and flatter angles suggest a complex structure, possibly containing numerous small-scale folds and crenulations. At 169- to 180-feet, the argillite grades into a grey pyrite-bearing cherty rock. From 180- to 286-feet, a soft talcose grey rock was encountered which has been tentatively identified as an altered augite andesite. Its chief characteristics appear to be an abundance of corroded euhedral augite phenocrysts enclosed in feldspathic matrix containing abundant red biotite. Below this rock, from 180- to 500-feet the same black argillite was encountered which at 358- to 428-feet included a strongly banded zone, inclined about 60-degrees to the core axis. Near the bottom of the hole the argillite appeared to become more graphitic but still contained abundant pyrite. Cross cutting all units were numerous carbonate and quartz-carbonate veinlets, often carrying sparse pyrite. It should be noted that most of the sulfide appears to be controlled by the bedding within the argillite and no sulfide was noted in the andesite. Throughout the hole the rock appeared to possess a weak slaty cleavage lying at about 70-degrees to the core axis.

Hole 85-34 was cased to 17-feet. From 17- to 30-feet a light green fine grained rock of possible andesitic composition was intersected. From 30- to 244-feet a black argillite unit was encountered which was very similar to that of hole 85-33 but appeared to contain more graphite and less sulfides. From 244- to 266-feet a grey cherty rock was encountered followed by an altered augite andesite from 266- to 309-feet. Both of these rocks are similar to the chert and augite andesite of hole 85-33. A mixed assemblage of greywacke, banded argillite and graphitic argillite was intersected at 309-feet to the bottom of the hole at 501-feet. The sequence was predominately greywacke down to 413-feet then abruptly changed to a

banded argillite which was the main phase to the bottom of the hole. As in hole 85-33, pyrite occurred throughout most of the sedimentary unit as disseminations, cross cutting veinlets and concordant laminae. Massive cross cutting pyrite was noted at 490- to 501-feet.

Both holes were assayed at ten-foot intervals for gold and silver. These were all fire assays done by Vangeochem Lab Limited of North Vancouver, using a one assay ton, gravimetric finish technique. Detection limit for silver was .01 oz per ton and for gold .005 oz per ton. As shown in the logs, no significant precious metal concentrations were found.

3.3 INTERPRETATION

Both drill holes have intersected a similiar sequence of rocks which are interpreted to belong to the same marine assemblage. Both holes show an upper black argillite unit which overlies an altered bed of augite andesite. In both cases also, a thin grey chert layer occurs at the contact. Below the andesite bed, a thick sequence of sedimentary rocks was again intersected but was found in hole 85-34 to include a large proportion of greywacke, some of which was very coarse and angular. Hole 85-34 also was found to contain less sulfide and particularly, less sulfide confined to bedding planes. In contrast, hole 85-33 intersected a thick sequence of fine, uniformly banded sediments which contained abundant strataform sulfide. Very likely this represents a deeper and less active part of the marine basin. In both holes, the disseminated pyrite, cross-cutting pyrite and quartz-carbonate veinlets were interpreted to represent material remobilized and recrystallized during low grade dynamothermal metamorphism.

4.0 STATEMENT OF EXPENDITURES

DIAMOND DRILL PROGRAM, Ze CLAIMS

1. Drilling Costs			
Hole 85-33	501-feet @ \$14.00/foot	\$7014.00	
	12 cat hrs @ \$41.00/hr.	\$ 492.00	
Hole 85-34	502-feet @ \$14.00/foot	\$7028.00	
	8 cat hrs @ \$41.00/hr.	\$ 328.00	
			\$14,862.00
2. Supplies			
Core boxes - 50 boxes @ 5.85 per box		\$ 292.50	
Tags, bags etc.		\$ 25.50	
			\$ 318.00
3. Vehicle Costs			
Rental 4x4 1985 pickup, June 12,17,24,25,26 and July 8-6 @ \$36.00/day			\$ 216.00
4. Personnel Costs			
(1) Core logging and supervision			
G.D. Bysouth	June 12 - 8hrs		
	June 27 - 8hrs		
	June 28 - 8hrs		
	July 3 - 8hrs		
	July 10 - 8hrs		
	July 15 - 8hrs		
	48 hrs @ 31.00/hr	\$1488.00	
(2) Report Preparation			
G.D. Bysouth	Aug 12-15		
	16 hours @ \$31.00/hr	\$ 496.00	
(3) Field Work and Sample Preparation			
E. Oliver	June 12 - 8hrs		
	June 17 - 8hrs		
	June 24-26 24hrs		
	June 28 - 8hrs		
	July 3 - 4hrs		
	July 8 - 2hrs		
	July 10 - 8hrs		
	July 15 - 4hrs		
	66 hrs. @ \$19.64	\$1296.24	
			\$3280.24
5. Assay Costs			
(1) Sample Preparation			
88 samples @ \$3.00/sample		\$ 264.00	
(2) Gold-silver Fire Assay			
88 samples @ \$11.00/sample		\$ 968.00	
			\$ 1232.00

	TOTAL DRILLING COSTS		\$19908.24

5.0 CONCLUSIONS

Although significant economic mineralization was neither seen in core nor determined in assay, the abundance of pyrite in hole 85-33 and its possible syngenetic origin warrants further investigation which should include multi-element assaying of existing core, as well as geochemical and geophysical field work.

G.D. Bysouth


G.D. Bysouth
Senior Geologist
Gibraltar Mines Limited

APPENDIX I

STATEMENT OF QUALIFICATION

I, Garry D. Bysouth, of Gibraltar Mines Limited, McLeese Lake, B.C., do certify that:

1. I am a geologist
2. I am a graduate of the University of B.C., 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 B.C.
4. I personally supervised this soil sampling program and interpreted the results.


Garry D. Bysouth

APPENDIX II

ABBREVIATIONS USED IN DRILL LOGS

alt'd	altered
cal.	calciate
carb.	carbonate
chl.	chlorite
cp.	chalcopyrite
cren.	crenulated
dissem.	disseminateed
foln.	foliation
grn.	grained
h	hardness
py	pyrite
qtz	quartz
rx.	rock
sphal	sphalerite
str.	strong
stkwk	stockwork
x-cutting	cross-cutting
wk	weak



VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 988-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 85-40-001

JOB NUMBER: 85171

GIBRALTAR MINES LTD.

PAGE 1 OF 1

SAMPLE #	Ag oz/st	Au oz/st
81626	.02	<.005 ✓
81627	<.01	<.005 ✓
81628	.01	<.005 ✓
81629	<.01	<.005 ✓
81630	<.01	<.005
81631	<.01	<.005 ✓
81632	<.01	<.005 ✓
81633	<.01	<.005 ✓
81634	<.01	<.005 ✓
81635	<.01	<.005 ✓
81636	<.01	<.005 ✓
81637	<.01	<.005 ✓
81638	<.01	<.005 ✓
81639	<.01	<.005 ✓
81640	<.01	<.005 ✓
81641	<.01	<.005 ✓
81642	<.01	<.005 ✓
81643	<.01	<.005 ✓
81644	<.01	<.005 ✓
81645	<.01	<.005 ✓

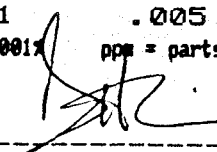
DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001

.005
ppm = parts per million

(< = less than

signed: _____




VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 85-40-002

JOB NUMBER: 85194

GIBRALTAR MINES LTD.

PAGE 1 OF 1

SAMPLE #	Ag oz/st	Au oz/st
80805	.18	.440
80806	.49	.407
80807	.57	.402
81646	<.01	<.005 ✓
81647	<.01	<.005 ✓
81648	<.01	<.005 ✓
81649	<.01	<.005 ✓
81650	<.01	<.005 ✓
81651	<.01	<.005 ✓
81652	<.01	<.005 ✓
81653	<.01	<.005 ✓
81654	<.01	<.005 ✓
81655	.02	<.005 ✓
81656	<.01	<.005 ✓
81657	<.01	<.005 ✓
81658	<.01	<.005 ✓
81659	.06	<.005 ✓
81660	<.01	<.005 ✓
81661	<.01	<.005 ✓
81662	.02	<.005 ✓

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01 .005
1 ppm = 0.0001%

ppm = parts per million

(= less than

signed: _____



VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 85-40-003

JOB NUMBER: 85202

GIBRALTAR MINES LTD.

PAGE 1 OF 2

SAMPLE #	Ag oz/st	Au oz/st
80809	<.01	<.005
80810	<.01	<.005
80811	<.01	<.005
80812	<.01	<.005
80826	<.01	<.005
80827	<.01	<.005
80828	<.01	<.005
80829	<.01	<.005
80830	<.01	<.005
81501	<.01	<.005
81502	<.01	<.005
81503	<.01	<.005
81504	<.01	<.005
81505	<.01	<.005
81506	1.30	.026
81672 LDB		
81627	<.01	<.005
81663	<.01	<.005
81664	<.01	<.005
81665	<.01	<.005
81666	<.01	<.005

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

(= less than

signed: _____



VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 966-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 85-40-003

JOB NUMBER: 85202

GIBRALTAR MINES LTD.

PAGE 2 OF 2

SAMPLE #	Ag oz/st	Au oz/st
81667	<.01	<.005 /
81668	<.01	<.005 /
81669	.03	<.005 /
81670	<.01	<.005 /
81671	.02	<.005 /
81673	.03	<.005 /

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

(= less than

signed: _____



VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1830 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5856

REPORT NUMBER: 85-48-004

JOB NUMBER: 85238

GIBRALTAR MINES LTD.

PAGE 1 OF 2

SAMPLE #	Ag oz/st	Au oz/st
80876	<.01	<.005 ✓
80877	<.01	<.005 ✓
80878	<.01	<.005 ✓
80879	<.01	<.005 ✓
80880	<.01	<.005
80881	<.01	<.005 ✓
80882	<.01	<.005 ✓
80883	<.01	<.005 ✓
80884	<.01	<.005 ✓
80885	<.01	<.005 ✓
80886	<.01	<.005 ✓
80887	<.01	<.005 ✓
80888	<.01	<.005 ✓
80889	<.01	<.005 ✓
80890	<.01	<.005 ✓
80891	<.01	<.005 ✓
80892	<.01	<.005 ✓
80893	<.01	<.005 ✓
80894	.02	<.005 ✓
80895	<.01	<.005 ✓

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01

1 ppm = 0.0001%

.005

ppm = parts per million

(= less than

signed: _____



VANGEOCHEM LAB LIMITED

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE
1630 PANDORA ST.
VANCOUVER, B.C. V5L 1L6
(604) 251-5656

REPORT NUMBER: 85-40-004

JOB NUMBER: 85238

GIBRALTAR MINES LTD.

PAGE 2 OF 2

SAMPLE #	Ag oz/st	Au oz/st
80896	.02	<.005 ✓
80897	<.01	<.005 ✓
80898	.01	<.005 ✓
80899	<.01	<.005 ✓
80900	.03	<.005 ✓
81726	.03	<.005 ✓
81727	.05	<.005 ✓
81728	<.01	<.005 ✓
81729	.09	<.005 ✓
81730	.09	<.005 ✓
81731	<.01	<.005 ✓
81732	<.01	<.005 ✓
81733	<.01	<.005 ✓
81734	<.01	<.005 ✓
81735	<.01	<.005
81736	.02	<.005 ✓
81737	.05	<.005 ✓
81738	<.01	<.005 ✓
81739	<.01	<.005 ✓
81740	<.01	<.005 ✓

DETECTION LIMIT

1 Troy oz/short ton = 34.28 ppm

.01
1 ppm = 0.0001%

.005

ppm = parts per million









< = less than

signed: _____

GRID _____

GIBRALTAR MINES LTD

HOLE No. 85-33
SHEET No. 2 of 9

ROCK TYPES & ALTERATION		Z to Core Feet	GRAPHIC LOG	Veins Z 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	Feet	Block
BLACK ARGILLITE (23' - 169') cont'd The rx is soft (H ~ 3-4), very fine grn to aphanitic. Prob. contains much graphite which is evident on some slip planes, and is def. calcareous - leach tests suggest 5-15% carbonate. Rx is cut by veins of white carbonate or qtz- carbonate. Bedding often shows very abrupt changes from flat to steep angles (ie 100-110') Poss. this is large scale cren. ie 		5-30		5	1/2 carb	From 23'-80', the dk grey laminae contain 30-70% sulfide - ie, the beds are massive sulfide.	0 10 20 30 40 50 60 70 80 90	15			90	81630			<.01	
		70		80+30+45	1/2 + 1/4 x 2	carb x 2	0 10 20 30 40 50 60 70 80 90	.12	64	95	<.01		<.005			
Beading often shows very abrupt changes from flat to steep angles (ie 100-110') Poss. this is large scale cren. ie 		5-70		80	60+3	1/6 + 1/4 + 1/10	carb x 3	0 10 20 30 40 50 60 70 80 90	.10		85	81632			<.01	
		80		80	1'	carb	0 10 20 30 40 50 60 70 80 90	.10	74	95	<.01		<.005			
Beading often shows very abrupt changes from flat to steep angles (ie 100-110') Poss. this is large scale cren. ie 		45-80		90	30	1/4	carb (py)	0 10 20 30 40 50 60 70 80 90	.10		75	81633			<.01	
		80		30-50	3'	qtz-carb-vein-bx system -ribbon structure-	0 10 20 30 40 50 60 70 80 90	.10	79	85	<.01		<.005			
		5-80		100				0 10 20 30 40 50 60 70 80 90	.15		90	81634			<.01	
		80					0 10 20 30 40 50 60 70 80 90	.15	95	90	<.01		<.005			
		10-45		110				0 10 20 30 40 50 60 70 80 90	.12		50	81635			<.01	
		45					0 10 20 30 40 50 60 70 80 90	.12	114	60	<.01		<.005			



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	LIM. ZONE	SUPERGENE			Sample Number	% Cu	% Mo	⁰³ /ton Ag Au
			5-15			lost 4 bx core - poss Fault	10?			124	10	81636			<.01	
			40	40x3		carb x3	20		numerous massive sulfide clots (1/4" dia)	129	95	81637			<.01	
			10-50			Core fractured & healed with carb.	20		clots of sulfide as above	140	90	81638			<.01	
			30-70			sheared + bx zone healed by cal (py)	15		recry. py often accomp by white fibrous mineral	150	90	81639			<.01	
			20	70x4		cal cal-py x4	20			160	85	81640			<.01	
						bx - healed by py (carb) *			* also a white metallic mineral arsenopyrite?	165	80				<.005	
			45			py (carb)				170	85				<.01	
			45	50x2		py (carb) x2	80			177		81641			<.01	
						py (carb)									<.005	

MED GRAY
CHERT (169-180)
aphanitic cherty texture
in (H+G) - not pure chert
but incr. in SiO₂ - bed-
angles not obvious - well
fractured - healed by carb.
veinlets

GRID

GIBRALTAR MINES LTD

HOLE No. 85-33
SHEET No. 5 of 9

ROCK TYPES & ALTERATION	L to Core Feathering	GRAPHIC LOG	Veins L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % SLATE	BOTTOM DEPTHS		Estimated Core Recovery %	R.O.D	ASSAY RESULTS				
								LEACH CAP	LIM. ZONE			Sample Number	% Cu	% Mo	oz/ton Ag Au	Estimated Grade
	ND	250	20 30 x 1/2	1/5 1/10 x 2	talc-tremolite talcs	0	0			50		81648			<.01	
	ND	260	40	1/2	talc-tremolite	0	0			50		81649			<.01	
	ND	270	10	1/8	talc	0	0			55		81650			<.01	
	ND	280	5 60 x 2 30 60 x 1 + 20	1/5 1/4 x 2 1/2 1/10 - 1/8 x 5	talc-trem. talc-trem. talc-trem talc-trem x 5	0	0			85		81651			<.01	
	286	290	30	1/4	talc-carb	0	3.0	Pass. Fault contact		20		81652			<.01	
BLACK ARGILLITE (286' - 358')		290								50					<.005	
Same as (23'-169')	5-70	300	60	1/4	carb	0	10.0			25		81653			<.01	

GRID

GIBRALTAR MINES LTD.

HOLE No. 85-33
SHEET No. 7 of 9

ROCK TYPES & ALTERATION			L to Core Feet/ft	GRAPHIC LOG	Vein L to Core ft/in	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTNS		Estimated Core Recovery %	R.O.D.	ASSAY RESULTS							
										LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Sample number	% Cu	% Mo	oz/ton Ag Au	Estimated Grade	
<p><u>GREY BANDED ARGILLITE</u> (358' - 428')</p> <p>- a distinctly banded rx consisting of alternatin beds or laminae of black graphite-rich material and dk grey sulfide rich material - bands generally range from 1/10 - 1" in width - has a varre-like appearance.</p>			60-70						15.0		361	90		81660				<.01			
					370							370								<.005	
			50-60			20x2 80x60	1/10 x 2 1/8 x 1/10	py (carb) x 2 carb x 2		20.0	several ~6" sec's of massive sulfide with "good" sed. textures	380	85			81661				<.01	
			70							20.0	*slump tex is common; ie. 20-80% py band.		85			81662				<.02	
			70					carb		20.0	fine textures - bands 1/8 - 1/4" thick but grey bands are 60-80% py.	391 395	80			81663				<.01	
			70		20x3	1/10 x 3	carb		15.0		404 407	60		81664				<.005			
				400							80								<.005		
			70		20	1/8	py (carb)		15.0		411	40			81665				<.01		
			70								415	60							<.005		
			70		20	1/8	carb		15.0		417	40							<.005		

GRID

GIBRALTAR MINES LTD.

HOLE No. 85-33

SHEET No. 8 of 9

ROCK TYPES & ALTERATION	L to Core Feet	GRAPHIC LOG Feet	Veins L to Core Feet	Width of Veins	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feet Blow	Estimated Core Recovery %	R O D	ASSAY RESULTS							
								LEACH CAP					Sample Number	% Cu	% Mo	oz/ton Ag Au	Collimated Grade			
								LIM. ZONE	SUPERGENE					REMARKS						
BLACK ARGILLITE (428 - 500')	10-60	428	60	6"	grey chert bands + diss. py.	0-100	20.0			422	70	81666								
										426	75									
			430								430									
		5-80		30	6"	ribbon - carb. qtz	0-100	12.0				85	81667							
				86	12"	cherty bx. healed with qtz-carb-py	0-100				437	95								
	50		30 + 45	6" + 12"	ribbon - carb - qtz ((py)) x 2	0-100	8.0			441	85	81668								
			45	4"	grey - chert - py	0-100				444	98									
	30-45		45 1/2	1/4 + 1/8	carb x 2	0-100	8.0			448	95	81669								
										453	100									
	10-20									456		81670								
										466	98									
	20									471	90	81671								
										477	60									
										480										

} broken core

GEOLOGICAL BRANCH ASSESSMENT REPORT

GIBRALTAR MINES LTD.

HOLE No. 85-34

SHEET No. 1 of 9

GRID _____

LOCATION Zc Claims
DATE COLLECTED 27 June 1985
DATE COMPLETED 6 July 1985

13,950

CORE SIZE N.O.W.

LOGGED BY G.D.B.

SCALE OF LOG 1" = 10'

DATE July 10 1985

REMARKS Very poor recovery

ROCK TYPES & ALTERATION	L to Core Foliation Alteration	GRAPHIC Foliation Alteration	Feolite Structure	Veins L to Core A to	Width Vein	Mineral Content	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Feolite Block	Estimated Core Recovery %	R O D	ASSAY RESULTS					
									LEACH CAP	0				Sample Number	% Cu	% Mo	oz/ton Ag Au	Estimate Grade	
									LIM. ZONE	0									SUPERGENE
Core rec. at 12' but cased to 17'																			
(bedrock @ surface)	12																		
<u>ANDESITE</u> (12-30) a light green fine grn to aphanitic dense rx - poss.	?			20	1"	qtz-carb-chl		0											
a volcano-clastic rx of chiefly andesitic composition - contacts not evident due to broken & lost core	?			20	1/10	fts.													
	30																		
<u>BLACK</u> <u>ARGILLITE</u> (30-244)	?																		
a dk grey finely banded rx consist. of med-light grey calcareous py-rich laminae alternating with black graphitic bands - widths vary between 1/20 - 1/2"	?																		
	40																		
	50																		

extremely
broken
and lost
core
Poss fault

GRID _____

GIBRALTAR MINES LTD.

HOLE No. B5-34
SHEET No. 3 of 9

ROCK TYPES & ALTERATION			L to Core Feet/ft	GRAPHIC LOG	Veins L to Core Act	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			Feet/ft	Feet/ft	Sample Number	% Cu	% Mo
			5-70	120	80	3"	qtz-carb-graphitic	0-100	4.0			85	80886				<.01	
					60+40+80	3/4+1+2"	qtz-carb				118							
			5-45	130				0-100	2.0			60	80887				<.01	
											123			10				
		138-150 - grey bands become thicker (up to 3") and graphitic bands are subordinate, usually than 1/2" thick	50	140				0-100	2.0			80	80888				<.01	
											135							
			50	150				0-100	1.0			80	80889				<.01	
											143			40				
			60	160	70	1/3	qtz	0-100	4.0			25	80890				<.01	
					30	10"	qtz-carb			several clots of massive py (up to 1/2" dia)				147		70		
			?	170				0-100	?			20	80891				<.01	
										highly broken core				150		50		

GRID

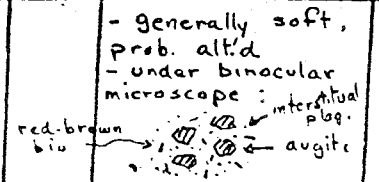
GIBRALTAR MINES LTD.

HOLE No. 85-34

SHEET No. 4 of 9

ROCK TYPES & ALTERATION			GRAPHIC LOG	Veins 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	g/ton Ag Au	Collected Grade																								
From 160' to 244' core appears much darker - almost jet-black and shows less banding - prob incr. in graphite material			180				0 10 20 30 40 50 60 70 80 90	3.0	REMARKS		15		80892				<.01																								
									174																																
									179																																
									181																																
									185																																
									188																																
									190																																
									197																																
									199																																
									200																																
60-80 60-80x4 1/10-1/8x4 qtz-carb x 4			190	60 5x2 1/5x2	2' 1/5x2	greenish grey band (cal. sandstone?) qtz-carb (sphal-Mo) * qtz-carb x 4	0 10 20 30 40 50 60 70 80 90	2.0	REMARKS		20		80893				<.01																								
									* sphal is a resinous yellow																																
									Mo could be rex. graphite																																
									181																																
									185																																
									188																																
									190																																
									197																																
									199																																
									200																																
70 70-80			200				0 10 20 30 40 50 60 70 80 90	2.0	REMARKS		20		80894				.02																								
									197																																
									199																																
									202																																
									208																																
									213																																
									219																																
									220																																
									229																																
									230																																
70-80			210		3'	bz zone heated by qtz-carb veinlets	0 10 20 30 40 50 60 70 80 90	1.0	REMARKS		90		80896				.02																								
									213																																
									219																																
									220																																
									229																																
									230																																
									60										220		2"	qtz-carb	0 10 20 30 40 50 60 70 80 90	1.0	REMARKS		40		80897				<.01								
																									213																
																									219																
																									220																
229																																									
230																																									

ROCK TYPES & ALTERATION			GRAPHIC LOG	Veins L 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	Sample Number	% Cu	% Mo
			?	240			zone of broken and lost core	?		235	15		80898			<.01	
			?	240	80x2	2"x2	carb x2			242	50					<.01	
		244	?	240		3'	carb-graphite-bx zone	.5		245	50		80899				
		<u>GREY CHERT</u> (244-266)	?	250						248	80						
			?	250						250	40						<.005
			?	260	80	1/4	cal-chl	0.5		255	60		80900				.03
			?	260						260	80						<.005
			70	260						262	90						.03
		<u>AUGITE ANDESITE</u> (266-309')	?	270	40	1/4	qtz-chl-carb-py	0.5		267	95		81726				
			?	270	70	1/4	carb										<.005
			?	280	45	1/5	carb-chl	0		277	95		81727				.05
			?	280						280	70						<.005
			?	290	25	1"	carb										<.01
			?	290	70x2	1/8x2	carb x2										
			?	290	45	2"	carb	0			95		81728				
			?	290						290							<.005



ROCK TYPES & ALTERATION		L to Core Foliation	GRAPHIC LOG	Y-axis L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Foot Blotch	Estimate Core Recovery %	R O D	ASSAY RESULTS			
									LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo	oz/ton Ag Au
291-296 - an aphanitic rx similar to the grey chert - also has several 1-6" graphitic zones	?	60	300	60	1/2"	carb	0				100		81729			.09	
				70	2"	carb											
309	60	300	300	?	24"	qq-bx					297						<.005
				20	2"	qtz-carb							90				
309	60	309	309	20-30 x 4	1/10-1/3 x 4	qtz-carb					301						.09
				20-30 x 4	1/10-1/3 x 4	qtz-carb							90				
GREYWACKE (309'-413')	?	310	310	5	1/2"	qtz-carb					310						<.01
				5	6"	qtz-carb-graphite							35				
a dk grey clastic rx consisting mainly of volcanic fragments usually < 1/2" dia.	?	320	320	5	1/2"	qtz-carb-graphite					315						<.005
				5	1/2"	qtz-carb-graphite							10				
rounded to subang. and larger frags of blk argillite - usually 1/20-1/4" dia.* - qtz frags appear rare - rx appears mod.	?	330	330	5	1/2"	qtz-carb					319						<.005
				5	1/2"	qtz-carb							45				
calcareous - in places, contains much graphite and grades to a blk graphitic argillite	?	340	340	5	1/2"	qtz-carb					323						<.005
				5	1/2"	qtz-carb							50				
graphitic zone	?	340	340	?	24"	graphitic zone					330						<.01
				?	24"	graphitic zone							35				
graphitic zone	?	340	340	?	12"	graphitic zone					334						<.005
				?	12"	graphitic zone							55				
soft bx zone - ang. frags of banded argillite in greywacke matrix all of which has been broken and "healed" by carb - also several 1-2" graphite zones	?	350	350	?	12"	graphitic zone					338						<.005
				?	12"	graphitic zone							50				
soft bx zone - ang. frags of banded argillite in greywacke matrix all of which has been broken and "healed" by carb - also several 1-2" graphite zones	?	350	350	?	12"	graphitic zone					341						<.01
				?	12"	graphitic zone							75				



* at 408-416, the
greywacke contains
angular frags of blk
argillite up to 2" dia
ie,

GRID

GIBRALTAR MINES LTD.

HOLE No. 85-34
SHEET No. 7 of 9

ROCK TYPES & ALTERATION		L to Core Feet/In	GRAPHIC LOG	Width of Vein	Microfossils	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS						
								LEACH CAP	LIM. ZONE			REMARKS	Feet	Inches	Sample Number	% Cu	% Mo	oz/ton Ag Au
		?	360	5	8'	gg-bx } Small steep fault	0?			70		81735					<.01	
		?	360	45x2 60'	3' 1 1/2" 8" 3'	graphite-qtz carb zone qtz-carb x2 qtz-carb graphite zone	0?			85		81736					.02	
		70	370	5-80	4-1/2"	zone of qtz-carb stockwork	0?			80		81737					<.005	
		70	380	70	6"	graphitic zone	0?			85		81738					.05	
	greywacke grades to banded dk grey argillite	70	390				1.0?			60		81739					<.005	
		70	400	70x2	4" x 6"	graphitic zone x2	0			80		81740					<.01	
		80	410	70	6"	graphitic carb zone	0			90		81741					<.005	
				20x5	1/5-1/10 x 5	carb x 5	0			90		81742					<.005	

ROCK TYPES & ALTERATION		GRAPHIC LOG	Value L to Core Axis	Width of Vein	Mineralization	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % PYRITE	BOTTOM DEPTHS		Footage Blacks	Estimated Core Recovery %	R O D	ASSAY RESULTS			
								LEACH CAP	LIM. ZONE				Sample Number	% Cu	% Mo	oz/ton Ag Au
	grey wacke becomes a sed. breccia @ contact.* 413					0 10 20 30 40 50 60 70 80 90					85					
	BLACK ARGILLITE (413-501) grades from blk graphitic argillite to grey and blk banded argillite, and to fine grn greywacke. No sharp contacts-phases seem to grade from one to another with thicknesses of 2 1/2" - 8". All phases are calcareous. In general, the argillite predominates over the graphitic and greywacke phases.	420	80	1"	qtz-carb	0 10 20 30 40 50 60 70 80 90	.5		416		90					
		430	80x40	2"x1"	qtz-carb x 2	0 10 20 30 40 50 60 70 80 90	.5		421		45					
		430	5+60	2 1/2"	qtz-carb x 2	0 10 20 30 40 50 60 70 80 90	.5		424		80					
		440	80	2"	qtz-carb random clots of massive py and qtz-carb	0 10 20 30 40 50 60 70 80 90	1.0		430		75					
		450	70 70x2	5" 1"x2	qtz-carb qtz-carb x 2 a strongly graphitic zone	0 10 20 30 40 50 60 70 80 90	.5		439		80					
		460	?	6'	a qtz-carb-graphite bz zone - frags in crushed graphitic matrix	0 10 20 30 40 50 60 70 80 90	1.0		448		85					
		470	?		most py appears as rounded 1/10-1/16" dia clots in fine greywacke	0 10 20 30 40 50 60 70 80 90	1.5		453		90					
	some shears coated with malachite- green clay	470				0 10 20 30 40 50 60 70 80 90			460		85					
		470				0 10 20 30 40 50 60 70 80 90			466		85					

GRID _____

GIBRALTAR MINES LTD.

HOLE No. 85-34

SHEET No. 9 of 9

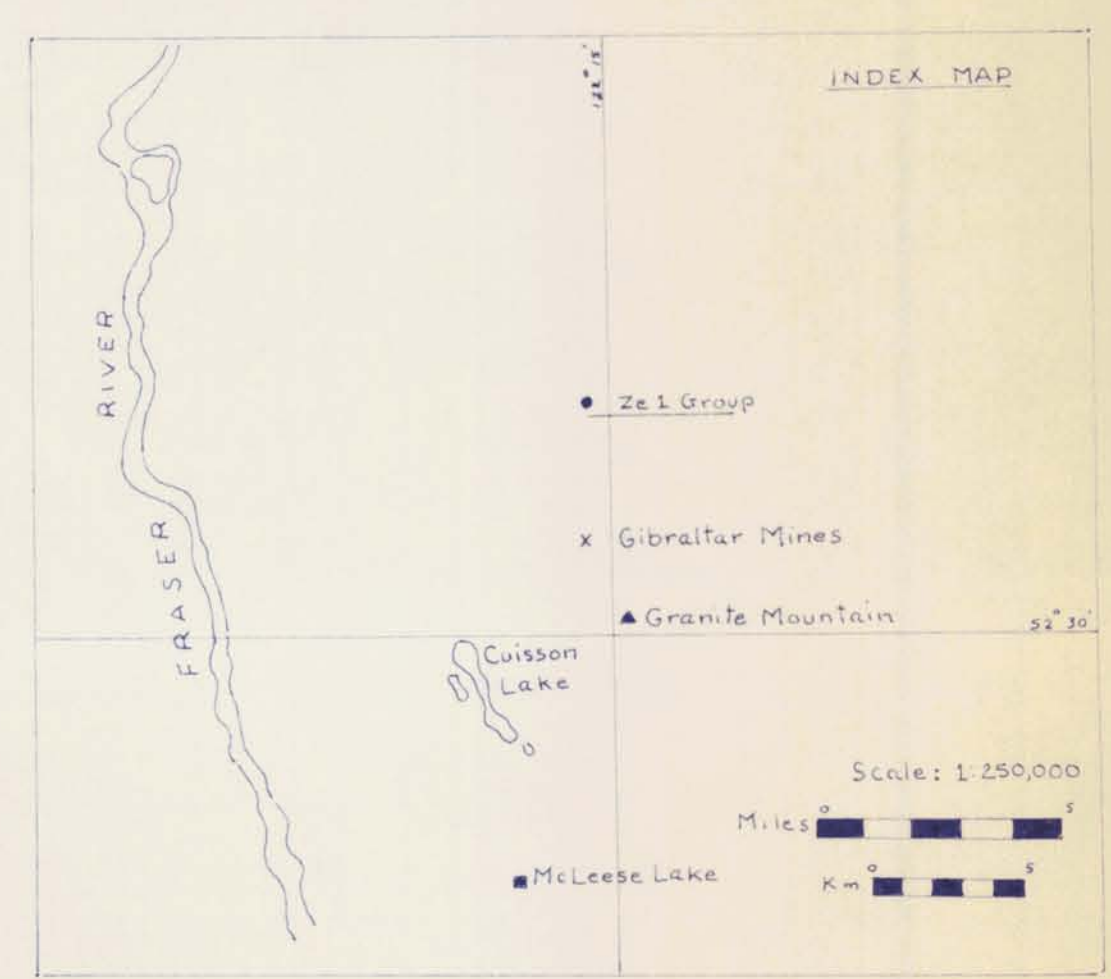
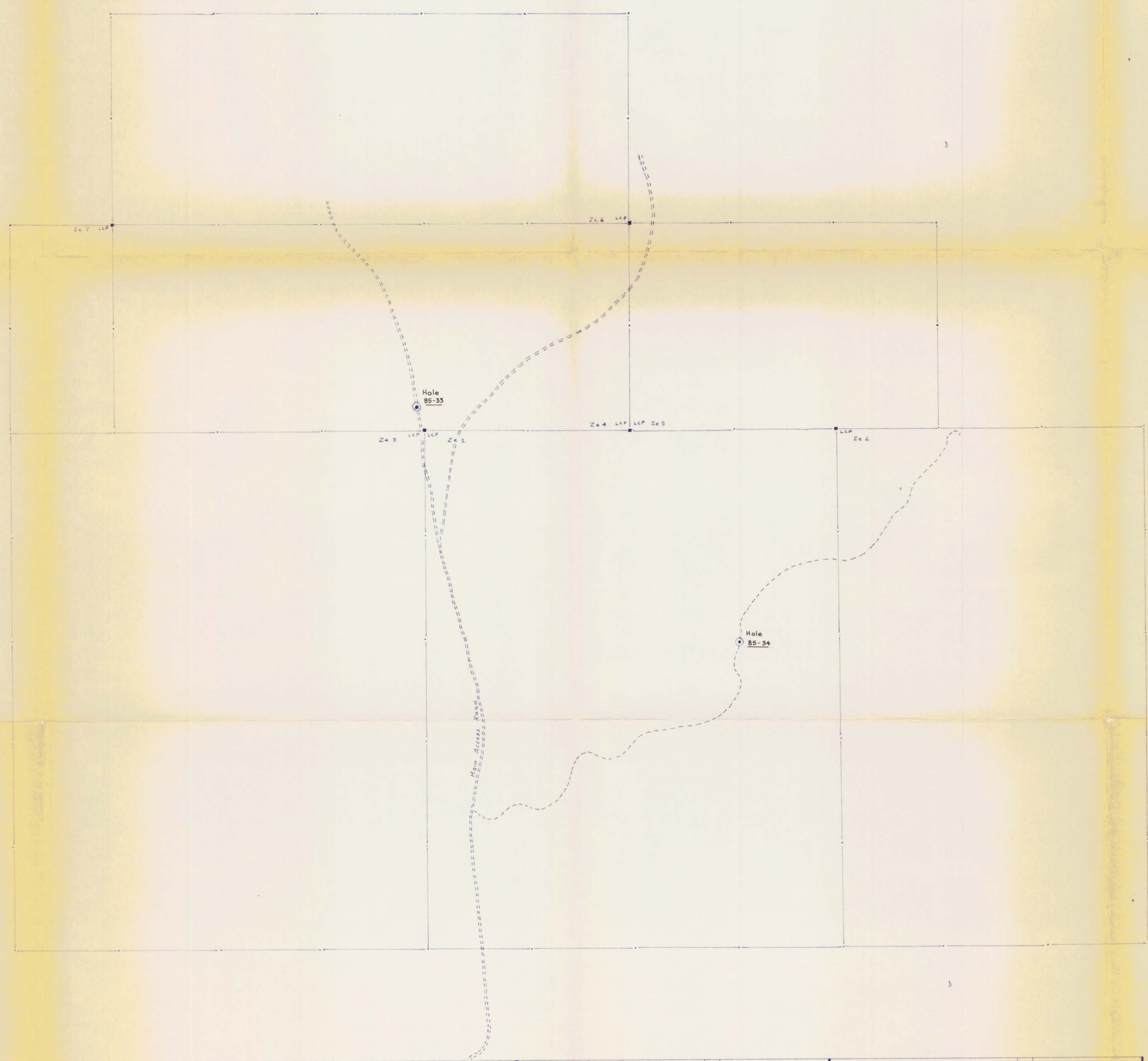
ROCK TYPES & ALTERATION			GRAPHIC LOG	Vein ∠ to Core Ash	Width of Vein	Mineralisation	FRACTURE ANGLE TO CORE AXIS -FREQUENCY-	ESTIMATED % STRIKE	BOTTOM DEPTHS		Estimated Core Recovery %	R O D	ASSAY RESULTS				
									LEACH CAP	LIM. ZONE			SUPERGENE	REMARKS	Sample Number	% Cu	% Mo
			80	480			0 10 20 30 40 50 60 70 80 90	2.0		473	40						
			80	490			0 10 20 30 40 50 60 70 80 90	2.0		184	50						
			70		70"	8"	0 10 20 30 40 50 60 70 80 90	6.0		496	50						
		EOH 501'	500		10"		0 10 20 30 40 50 60 70 80 90			501	80						
							0 10 20 30 40 50 60 70 80 90										
							0 10 20 30 40 50 60 70 80 90										

S. J. Bysouth

mainly grey wacke
with round clots
of py up to 1/16" dia

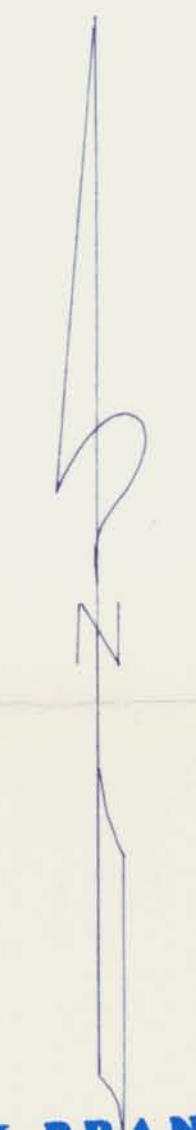
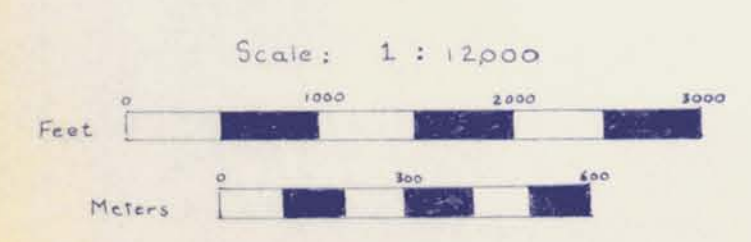
massive py which
appears to replace
frags in a fine
pebble conglomerate

stringers, clots and veinlets of
massive py x-cutting
bedding of banded argillite



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,950



Control by chain and compass

GIBALTAR MINES LIMITED		DRILL HOLE LOCATIONS	
ZE 1 GROUP		FILE No.	FIGURE 2

DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	DWN.	CHECK	APPR.	ISSUED FOR	DATE	REV.	DESCRIPTION	REFERENCE	No.	DWG. No.	SCALE
																	1 inch = 1000 feet

NO. 271 - G.W.L.