93-B-8

INTERIM REPORT
GIBRALTAR MINES
McLEESE LAKE, B.C.

April 10, 1969. R.H. Seraphim.

TEL - OFFICE 685-2914
RES. 224-7309

R. H. SERAPHIM
PH.D., P.ENG.
GEOLOGICAL ENGINEERING

427-470 GRANVILLE
VANCOUVER 2, B.C.

April 9, 1969.

Mr. Don Tully,
Cyprus Exploration Ltd.,
510 West Hastings St.,
VANCOUVER, B.C.

Dear Don:

Enclosed are two copies of a very hurried report on the 'Gibraltar'. I hope somebody reading it a few years from now realizes that it was a rush, and excuses the lack of correlation and probable omissions.

The widespread mineralization is very attractive, and the property has many places where a mine could be hidden, including near those new holes. Thus it's easy to recommend further work, and I hope you end up doing it. I thank you for the commission.

Yours sincerely,

R.H. Seraphim.

RHS/db

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INTERIM REPORT

GIBRALTAR MINES

McLEESE LAKE, B.C.

SUMMARY and CONCLUSIONS

The property is located within a few miles of highway, railroad, and powerline about thirty-five miles north of Williams Lake. It contains widespread low-grade copper mineralization in altered foliated quartz diorite. Drilling prior to 1969 had disclosed one larger zone of mineralization, the west zone, reported by Cominco to contain 14 million tons of 0.5% Cu, mineable by open pit with a 4 to 1 waste to 'ore' ratio.

Four holes drilled in 1969 have disclosed a new zone about 2500 ft to the north-east of the above. The intercepts and grades listed below for the two holes on which assays are available indicate it holds much more promise than the west zone.

Hole 69-1

130-330 = 200' - 0.616 %Cu
330-830 = 500' - 0.22 "
830-910 = 85' - 0.69 "

or 130-910 = 780' - 0.37 %Cu

Hole 69-2

380- 540 = 160' - 0.465 %Cu
540- 650 = 110' - 0.180 "
650- 790 = 140' - 0.72 "
790- 975 = 175' - 0.25 "
975-1150 = 175' - 0.73 "
or 380-1150 = 770' - 0.48 "

The two holes, 69-3 and 69-4, show some sections which are visually comparable with 69-1 and 69-2.

RECOMMENDATIONS

Drilling in the immediate area should of course be continued, and the search for other similar zones of mineralization should be resumed. The I.P. anomalies (see attached Cominco map) are tested only locally, and they cover such large areas that consideration should be given to methods of narrowing down the targets. The better mineralized areas contain, on the average, more bleached rock than elsewhere, thus should give magnetic lows. The Cominco magnetics do not cover the I.P. anomalies completely, and should be expanded to show trends, and perhaps the better mineralized areas, assuming these do follow the lows.

Percussion drilling might be used initially to advantage to prospect the targets chosen, as it is much less expensive on a footage basis. The more expensive diamond drilling could be reserved for later drilling after mineralization approaching ore grade is found.

INTRODUCTION

The property was examined April 5 to 7 inclusive. Mr. Paul Sawyer of Cyprus staff worked with the author on April 5 and 6 and his contribution is appreciated. Mr. Alan Morris of Gibraltar Mines Ltd was an able and pleasant guide. A great deal of information exists concerning the property, and much of it is assembled in reports by Cominco staff, and A. Allen and F. Price acting for Gibraltar. Cominco's report summarizing their work to Oct. 1967 was obtained and is attached. The 1000 scale maps accompanying that report, covering claims, magnetics, induced polarity, geochemistry and geology are particularly useful in gaining an appreciation of the properties' potential. A copy of F. Price's report is not yet obtained, but the report was read. It also gives an excellent summary, and the drill hole sections with it are a necessary record.

This report is written in haste, but is meant to update and correlate the available and incomplete information. The Cominco report is used for background, and much of the information in it is not repeated herein. The report is considered reliable subject to some of the comments which follow.

LOCATION and ACCESS

A location map in the Cominco report follows the list of claims therein. The property is near the settlement of McLeese Lake, and within 5 miles of black-top highway, P.G.E. railroad, and B.C. Hydro high voltage transmission line. It is approximately 400 road miles from Vancouver, B.C. Logging roads lead through parts of the claim block.

CLAIMS

The Price report lists the claims valid in August, 1968. The Cominco report appendixed lists the claims as of December 11, 1967. The Price report should be obtained, and the claim list therein used as a base for rechecking the validity of the claims. Fortunately, the Cominco staff completed a rough survey and 'tightened up' the claim block.

HISTORY

The history is provided in the attached Cominco report.

OWNERSHIP

The data concerning the company in Financial Post Survey of Mines, 1967, is copied below. It is probably in part out of date.

GIBRALTAR MINES LTD.-(B.C. 1962). Head off.-807, 509 Richards St., Vancouver. Mine Off.-Marguerite, B.C. Company-Holds copper prospect, 120 cls., 35 miles N. of Williams Lake, B.C.; plus 50% interest in 13 cls. of Coast Silver Mines, adjacent to property. Also holds 300,000 vendor shs. of Vanguard Exploration.
Development-Survey and surface work incl. d.d. commenced on copper property in 1965. In May, 1966, Cominco Ltd. agreed to carry out and finance development and is receiving shs. of Gibraltar for work done. Large low-grade copper potential indicated.
Directors-C. D. Bowes, pres.; M. Frid, vice-pres.; C. W. Bowes, sec.-treas.

Capital Stock -	Author,	Outstand.	Par
Common.....	3,000,000 sh.	*1,300,000 sh.	50¢

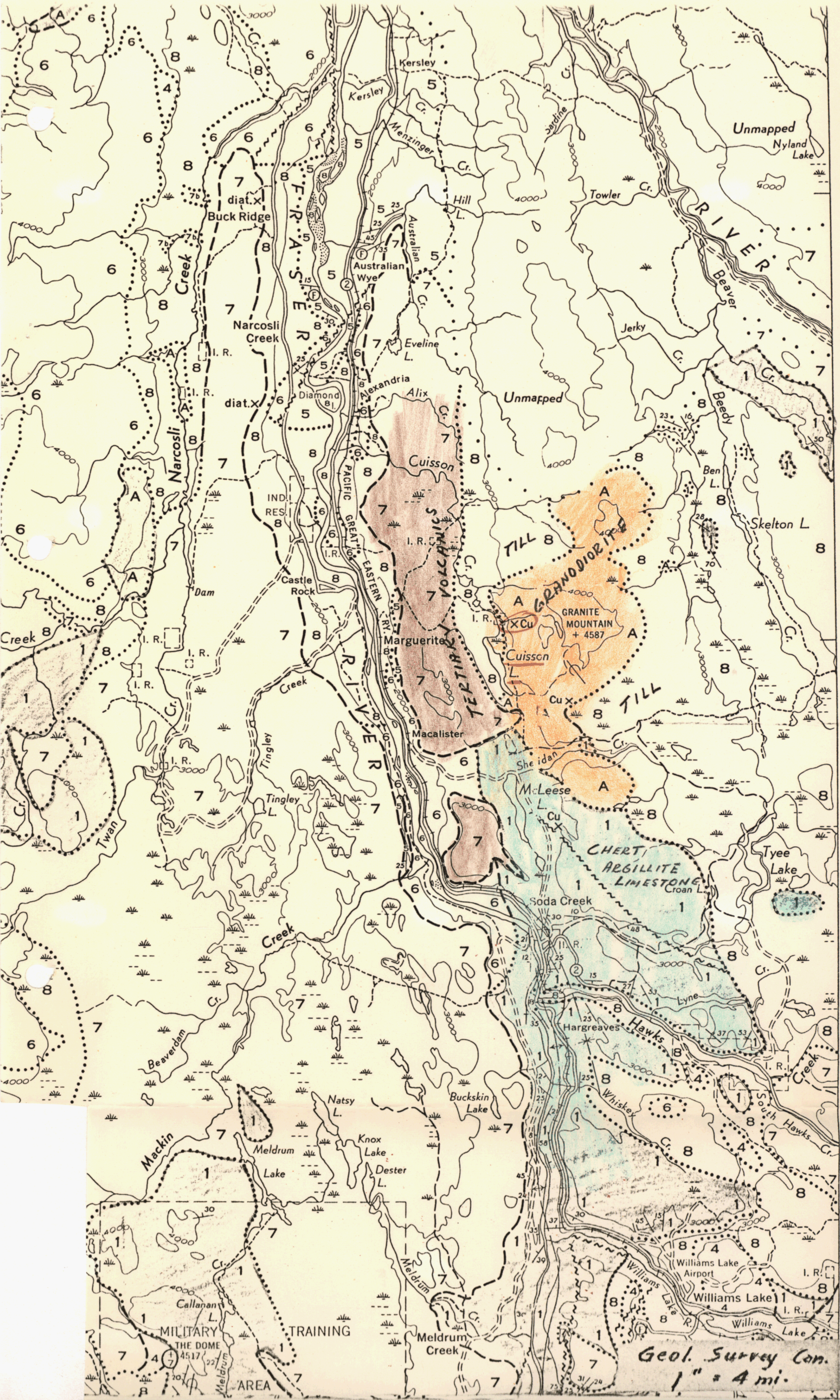
*Partly pooled.
Reported to have absorbed Malabar Mining on 1-for-3 basis in 1964.

REGIONAL GEOLOGY

The regional geology is published in G.S.C. Map 12-1959 - 'Quesnel'. The portion of the map sheet which covers the property is copied and follows this page. The property is on the general trend of British Columbias' southern interior copper belt.

LOCAL GEOLOGY

The geology of the claim group is summarized on pages 2 and 3 of the Cominco report. The relatively prevalent foliation in the quartz-diorite host rock makes it different from most porphyry type mineralized intrusives in B.C. The foliation varies markedly in intensity from place to place, even in a single drill hole. The mineralization, however, is obviously at least in part post-foliation, as numerous mineralized quartz stringers cut across the foliation, and are not themselves distorted.


Kersley
Menzinger Cr.
Hill L.
Australian Cr.
Australian Wye
Sardine Cr.
Towler Cr.
Unmapped
Nyland Lake
FRASER
RIVER
Beaver Cr.
Buck Ridge
diat.
Narcosli Creek
Narcosli Creek
Eveline L.
Alexandria
Alix Cr.
Diamond
Jerky Cr.
Unmapped
Beedy Cr.
Cuisson
PACIFIC GREAT EASTERN RY.
IND. RES.
TERTIARY VOLCANICS
TILL
GRANODIORITE
GRANITE MOUNTAIN + 4587
Cuisson L.
Cu
Ben L.
Skelton L.
Castle Rock
Dam
Marguerite
Macalister
Sheridan
McLeese L.
TILL
CHERT, ARGILLITE LIMESTONE
Croan L.
Tyee Lake
Tingley Cr.
Tingley L.
Twan Cr.
Soda Creek
Hargreaves
Lyne
Hawks
South Hawks Cr.
Whiskey Cr.
Beaverdam Cr.
Natsy L.
Knox Lake
Dester L.
Buckskin Lake
Mackin
Meldrum Lake
Meldrum Cr.
Meldrum Creek
Callanan L.
MILITARY TRAINING AREA
THE DOME 4517
Williams Lake Airport
Williams Lake
Williams Lake R.
Geol. Survey Can.
1" = 4 mi.

The controls of the mineralization are at least partly obvious, as grade increases in general near the more intensely foliated sections, although chiefly near those sections which are silicified and bleached or drag-folded. The foliation at the old adit trends about 120 deg., and dips 20 deg. to 30 deg. southwesterly. The accompanying mineralized zone has been shown by drilling to have the same trend. Judging by the data on the Cominco geology map, the direction of foliation is relatively consistent over the intrusive. Unless and until further information is obtained, drilling thus should continue under the assumption that the mineralized zones strike about 120 deg. and dip southwesterly.

MINERALIZATION

Sulfides are chiefly pyrite and chalcopyrite. Chalcocite, and traces of molybdenite and bornite are found locally. Although the larger proportion of sulfides lies in the folidation planes, some is in numerous cross-cutting quartz veinlets. It is not yet known whether or not these veinlets have a pattern, and the determination may be important in that it might provide a control to the trend of mineralization.

Alteration minerals include chlorite, epidote, kaolin, talc, sericite, and earthy hematite. Silicification is found, as well as quartz veinlets.

MINERALIZED ZONES

The Cominco report lists 'ore reserves' in the main zone at 14 million tons of 0.52% Cu with an open pit strip ratio of roughly 4:1. This is doubtfully ore under todays economics. The rough map, Gibraltar Mines Ltd 'Plan of Drill Holes' shows the location of the 'B' and 'C' series of holes, west of the creek, which explore the zone. Extensions might be found to the northwest.

A second mineralized zone is partially explored at 10 to 20 north near grid lines 16 to 24 E. Detailed assay logs of these are not currently available. The following intercepts indicate the size and grade of the zone.

Hole	Ft.	%Cu
B4	420	0.19
B1	220	0.30
B13	260	0.409
B3	400+	0.19

The new zone discovered in hole G 69-1 offers much more encouragement. The assays from holes G 69-1 and G 69-2 follow. Assays from holes G 69-3 and G 69-4 are not yet available but visual estimates are given below.

Hole G 69-1

Ft.	%Cu
91-100	.20
100-110	.20
110-120	.27
120-130	.27
130-140	.65
140-150	.70
150-160	.80
160-170	.85
170-180	.80
180-190	1.00
190-200	1.12
200-210	.72
210-220	.40
220-230	.50
230-240	.55
240-250	.30
250-260	.50
260-270	.45
270-280	.67
280-290	.52
290-300	.47
300-310	.32
310-320	.55
320-330	.45
330-340	.30
340-350	.17
350-360	.12
360-370	.10
370-380	.20
380-390	.20
390-400	.25
400-410	.15
410-420	.45
420-430	.55
430-440	.25
440-450	.55
450-460	.40
460-470	.15
470-480	.25
480-490	.17
490-500	.10
500-510	.07
510-520	.12
520-530	.62
530-540	.12
540-550	.40
550-560	.45
560-570	.05
570-580	.07
580-590	.05
590-600	.17
600-610	.15
610-620	.37
620-630	.02
630-640	.10
640-650	.22
650-660	.50
660-670	.15
670-680	.10
680-690	.20
690-700	.22
700-710	.17
710-720	.05
720-730	.17
730-740	.17
740-750	.25
750-760	.25
760-770	.20
770-780	.15
780-790	.12
790-800	.22
800-810	.35
810-820	.30
820-830	.10
830-840	1.60
840-850	.80
850-860	.40
860-870	.50
870-880	.27
880-890	.77
890-900	.50
900-910	.67
910-920	.25
920-930	.30
930-940	.20
940-950	.15
950-960	.62
960-970	.32
970-980	.17
980-990	.10
990-1000	.02
1000-1010	.10
1010-1020	.15
1020-1030	.40
1030-1040	.15
1040-1050	.17
1050-1060	.50
1060-1070	.07
1070-1080	.25
1080-1090	.15
1090-1113	.10

130-330 = 200' - 0.616
330-830 = 500' - 0.22
830-910 = 80' - 0.69

130-910 = 780' - 0.37

Hole G 69-2

Ft.	%Cu	Ft.	%Cu	Ft.	%Cu
126-130	.20	480-490	.37	840-850	.28
130-140	.15	490-500	.12	850-860	.20
140-150	.05	500-510	.17	860-870	.21
150-160	.05	510-520	.40	870-880	.09
160-170	.04	520-530	1.02	880-890	.30
170-180	.10	530-540	.40	890-900	.30
180-190	.17	540-550	.30	900-910	.17
190-200	.07	550-560	.35	910-920	.40
200-210	.50	560-570	.12	920-930	.25
210-220	.05	570-580	.17	930-940	.25
220-230	.22	580-590	.15	940-950	.23
230-240	.22	590-600	.12	950-960	.09
240-250	.35	600-610	.12	960-970	.13
250-260	.35	610-620	.20	970-980	.68
260-270	.20	620-630	.15	980-990	.52
270-280	.25	630-640	.10	990-1000	.15
280-290	.35	640-650	.25	1000-1010	.40
290-300	.60	650-660	.45	1010-1020	.48
300-310	.25	660-670	.65	1020-1030	.30
310-320	.10	670-680	.62	1030-1040	.80
320-330	.15	680-690	1.42	1040-1050	.90
330-340	.20	690-700	1.38	1050-1060	1.50
340-350	.25	700-710	1.27	1060-1070	.41
350-360	.15	710-720	1.05	1070-1080	.57
360-370	.25	720-730	.35	1080-1090	.58
370-380	.25	730-740	.62	1090-1100	1.45
380-390	1.02	740-750	.77	1100-1110	1.50
390-400	.67	750-760	.32	1110-1120	.90
400-410	.15	760-770	.24	1120-1130	.54
410-420	.20	770-780	.55	1130-1140	1.08
420-430	.55	780-790	.45	1140-1150	.38
430-440	.55	790-800	.30	1150-1160	.33
440-450	.40	800-810	.28	1160-1170	.10
450-460	.62	810-820	.42	1170-1180	.16
460-470	.50	820-830	.38		
470-480	.30	830-840	.20		

0-130 overburden
130-380 = 250' - 0.21
380-540 = 160' - 0.465
540-650 = 110' - 0.180
650-790 = 140' - 0.72
790-975 = 175' - 0.25
975-1150 = 175' - 0.73
or 380-1150 = 770' - 0.48

VISUAL ESTIMATES

Hole 69-3

67-180 = 113' - 0.1%
180-770 = 590' - 0.3%
770-840 = 70' - 0.5%
840-1035= 195' - 0.25%

Hole 69-4

90-380 = 290' - 0.5%
380-510 = 130' - 0.3%
510-580 = 70' - 0.5%
580-690 = 110' - 0.35%

Hole 68-4

Ft.	%Cu
51- 60	.35
60- 70	.50
70- 80	.30
80- 90	.35
90-100	.30
100-110	.40
110-120	.30
120-130	.30
130-140	.25
140-150	.17
150-160	.17
160-170	.50
170-180	.40
180-190	.35
190-200	.25
200-210	.15
210-220	.37
220-230	.32
230-240	.20
240-250	.40
250-260	.30
260-270	.27
270-280	.25
280-290	.22
290-300	.27
300-310	.20
310-320	.17
320-330	.14
330-340	.40
340-350	.20
350-360	.32
360-370	.30
370-380	.37
380-390	.35
390-400	.30
400-410	.07
410-420	.17
420-430	.17
430-440	.40
440-450	.57
450-460	.42
460-470	.37
470-480	.27
480-490	.57
490-500	.35
500-510	.53
510-520	.52
520-530	.20
530-540	.22
540-550	.55
550-560	.55
560-570	.30
570-580	.42
580-590	.27
590-600	.37
600-610	.27
610-620	.27
620-630	.55
630-640	.45
640-650	.85
650-660	.15
660-670	.45
670-680	.15
680-690	.25
690-700	.15
700-710	.22
710-720	.20
720-730	.35
730-740	.25
740-750	.15
750-760	.30
760-770	.20
770-780	.35
780-790	.35
790-800	.37
800-810	.32
810-820	.30
820-830	.27
830-840	.32
840-850	.30
850-860	.35
860-870	.22
870-880	.22
880-890	.35
890-900	.30
900-910	.30
910-920	.15
920-930	.15
930-940	.37
940-950	.37
950-960	.15
960-970	.40
970-980	.35
980-990	.17
990-1000	.12

430- 520 = 90' - 0.44
51-1000 = 950' - 0.31

Hole 68-5

Ft.	%Cu	Ft.	%Cu
100-110	.18	350-360	.14
110-120	.54	360-370	.31
120-130	.17	370-380	.50
130-140	.29	380-390	.35
140-150	.31	390-400	.30
150-160	.64	400-410	.30
160-170	.20	410-420	.17
170-180	.23	420-430	.19
180-190	.34	430-440	.26
190-200	.29	440-450	.24
200-210	.25	450-460	.76
210-220	.48	460-470	.23
220-230	.40	470-480	.33
230-240	.28	480-490	.30
240-250	.24	490-500	.30
250-260	.27	500-510	.30
260-270	.29	510-520	.25
270-280	.49	520-530	.17
280-290	.35	530-540	.08
290-300	.28	540-550	.15
300-310	.19	550-560	.30
310-320	.16	560-570	.22
320-330	.34	570-580	.27
330-340	.32	580-590	.15
340-350	.20	590-600	.40

500' - 0.294

Hole 68-6

Ft.	%Cu
26- 30	.05
30- 40	.07
40- 50	.07
50- 60	.07
60- 70	.12
70- 80	.05
80- 90	.17
90-100	.22
100-110	.10
110-120	.12
120-130	.38
130-140	.15
140-150	.10
150-160	.14
160-170	.20
170-180	.15
180-190	.32
190-200	.17
200-210	.10
210-220	.22
220-230	.22
230-240	.15
240-250	.35
250-260	.30
260-270	.32
270-280	.20
280-290	.30
290-300	.17
300-310	.35
310-320	.30
320-330	.37
330-340	.15
340-350	.12
350-360	.20
360-370	.22
370-380	.35
380-390	.42
390-400	.25
400-410	.17
410-420	.20

26-420 = 394' - 0.20

Hole 69-4 was still in progress at the time of examination, the fairly abundant chalcocite near the collar of the hole makes visual estimate even more unreliable than usual.

The holes near G 69-1 to 4 are of interest, thus were checked. The assay logs of 68-4, 68-5, and 68-6 were obtained and are provided above (68-6 is drilled at 12E, 17N, the others are shown on the "Plan of Drill Holes"). Assays of C 30 and C 31 are not available, as the core has been only recently split and sent for assay. They are visually of very low grade - in the 0.1% Cu range.

Some drilling has been completed on ground optioned from Coast Silver near 40W. on the base line. Some of these holes are reported to carry 0.4% copper in intercepts of about 100 ft. A brief visit was made to the drilled area, and it is as devoid of outcrop as the environs of G 69-1.

GEOPHYSICS and GEOCHEMISTRY

The relation of the drilled areas of major interest to the I.P. survey results is shown on the enclosed 400 ft to the inch map. There is little evidence of a N.W. trend; in fact the trend of the local I.P. anomaly is more NE-SW. However, the regional I.P. trend is N.W. on the Cominco 1000 scale map.

The magnetic survey, shown on the Cominco 1000 ft to the inch map, does show a strong N.W. trend in the south part of the claim group. Coverage is inadequate over the important showings.

Information concerning drilling of the outlying geophysical anomalies is contained in the Cominco reports. One or two of the I.P. anomalies did show a little copper mineralization. Further drilling on the flanks of the anomalies rather than in the highs should perhaps be instigated. The zone discovered in G 69-1 is certainly off to one side of the high, and this discovery of valuable sulfides on the flank of a high is certainly not an isolated occurrence. The highs are all to often caused by pyrite.

Magnetics might be useful to determine the bleached and silificied zones, which should show as lows, and in this property appear to carry the better chalcopyrite mineralization.

April 10, 1969.

R.H. Seraphim

00E
7+00E
4000E
44N
4000'
38N
32N
26N
20N
14N
4+00E
5000'
8N
2N
4S
10S
16S
27E
34+50E
36E
43E
43+50E CLAIM CORNER
BIT 63,64,65,66
50E
52+50E

57 55 53 51 49 42 43 44

58 56 54 52 50 48 76 75

59 61 63 65 67 69 71

60 62 64 66 68 70 72

74 73

FINAL CORNER NOT LOCATED

SUMMIT CORNER 5,6,7,8.

SUMMIT CORNER 3,4,5,6

SUMMIT 1,2,3,4

LAKE

SUMMIT GROUP

BIT GROUP

SUMMIT LOCATION LINE
Approx bearing N 45° W

GIBRALTAR OLD BASE LINE

40% w.

5 of these holes are reported to carry approx. 0.4% Cu/100 ft

0.69-6
0.69-5
0.69-4

69-1
69-2
69-3
69-4
69-5
69-6
69-7
69-8
69-9
69-10
69-11
69-12
69-13

LEGEND

- CLAIM CORNER LOCATED
- TIE POINTS
- DRILL SITE

MAGNETIC DECLINATION = 25° 45' East

AC Morris
Mail to Box 128 Malcolm Lk

FRANKLIN PRICE
PROFESSIONAL MINING ENGINEER

MOROCCO MINES LTD.
VANCOUVER, B.C.

PORTION OF BIT CLAIM

SCALE
500 0 500 1000 1500

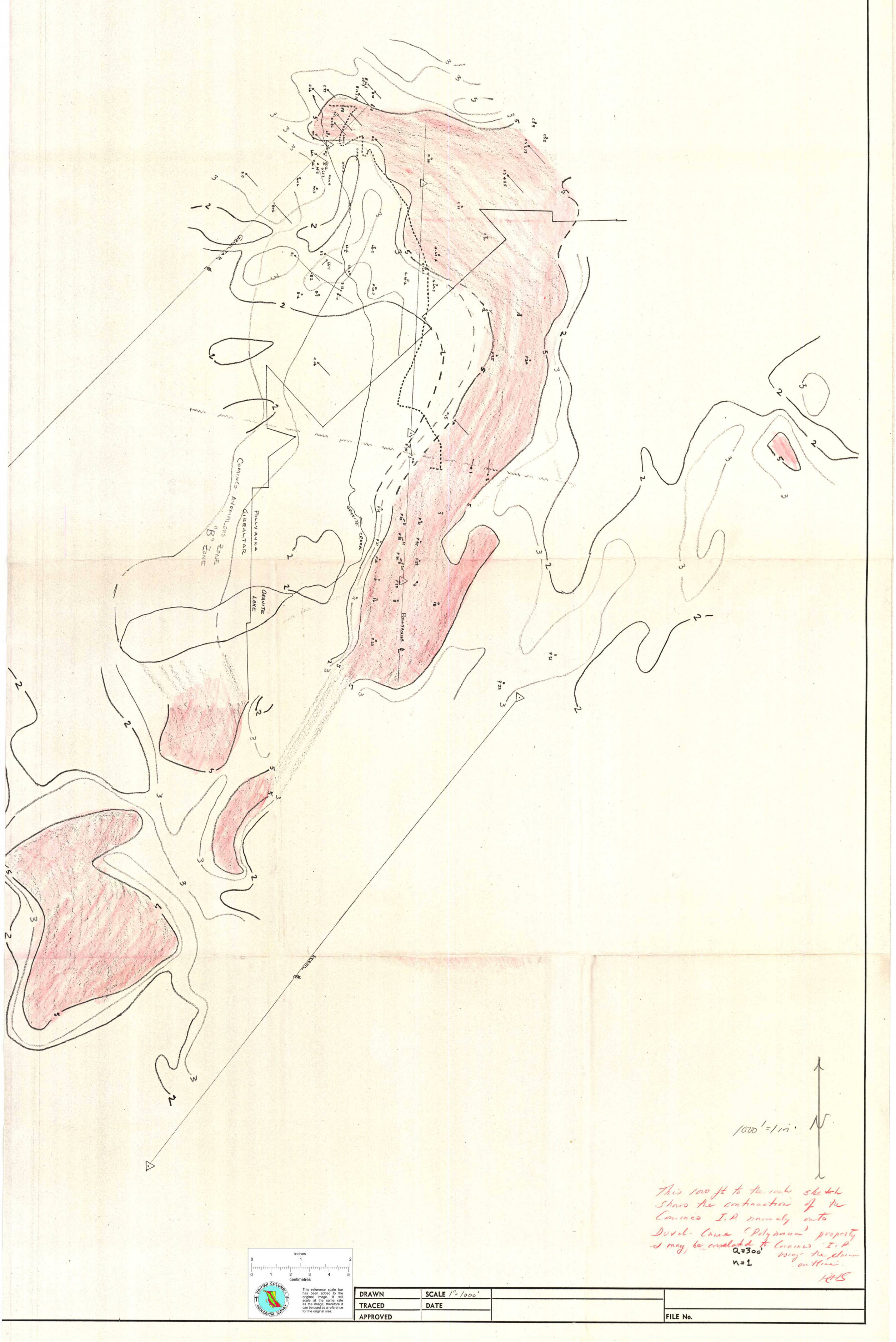
January 1969

COMPILED AA MORRIS
DRAFT: ALTAIR

inches
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

BRITISH COLUMBIA GEOLOGICAL SURVEY



This 1000 ft to the inch sketch shows the continuation of the Comino I.P. anomaly onto Duval-Canex (Polyanna) property & may be correlated to Comino I.P. using the claim outlines.

q=300'
n=1

HHS

inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

DRAWN	SCALE 1"=1000'		
TRACED	DATE		
APPROVED			FILE No.

DUVAL CANEX ?

Road to Duval Canex

Creek

500 300 200 150 100 50 20

C-30 C-31

G-69-3 G-69-4 G-69-1 G-69-2

68-5 68-4 68-6

Summit Claim Line

Summit 243

CLAIM LINE (HAW 8E 043)

CLAIM LINE

50 20 50 100 100 50 50 100 50 20

Area of 'Bit' Drill Holes (see Morocco Map)

75

40W 28W 24W 20W 16W 12W 8W 4W 0

BASE LINE N 45° W

ADIT

WEST MINERAL ZONE

50 20 50 20 20 20 20 20

27621 27632

To McLeese Lk

Creek

50

BASE LINE

50 50

designated anomalous
I.P contour
claim posts
road
creek
drill hole

inches 0 1 2 0 1 2 3 4 5 centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

I. P.

McPhar - Cominco

400' = 1 in.

Contours third separation 'metal factor' K = 400'

Traced from map dated Aug-15/66

RHS 1 Dec/66