

REPORT on
THE PIMAINUS LAKE GROUP
of
RED ROCK MINES LTD.

921/6

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by: R.W. Phendler, B.Sc., P.Eng.

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March 10, 1970.

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BACON & CROWHURST LTD.

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R.W. PHENDLER, B.Sc., P.Eng.

Vancouver, B.C.

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The seven Pimainus Lake claims of Red Rock Mines Ltd. are located in the Highland Valley area of south central British Columbia, about eleven miles east of Spences Bridge and four miles southwest of the Lornex copper deposit.

The claim area is underlain by the Bethsaida phase granodiorite of the Guichon Creek batholithic complex.

During 1966, magnetometer and soil sampling surveys were carried out. Although maps showing results of this work are not at hand, enough information is available to arrive at certain conclusions with regard to further work.

The magnetometer survey disclosed the presence of two magnetic lows and three or four northwest-trending zones of moderate magnetic relief. The lows may be significant, i.e. due to the alteration of original magnetite to hematite. Both lows have been trenched and some bornite mineralization uncovered. The zones of moderate magnetic relief coincide with exposures of granodiorite.

The reconnaissance geochemical survey done in 1966 showed two samples with greater than 1000 ppm copper. A third sample showed 112 ppm Cu. Reconnaissance soil sampling carried out in October 1969 indicated that 10% of the 105 samples taken contained in excess of 100 ppm copper.

In view of the recent discoveries of widespread copper mineralization in the Highland Valley, and the presence of favourable

Bethsaida granodiorite on the Red Rock Mines Ltd. claims, the property has some merit, in spite of its small size. The geochemical results indicate that more work of this nature is advisable. An induced polarization survey should also be considered. A total expenditure of \$11,000 would cover the work recommended.

Regional structural patterns should be studied for possible projections of significant fractures onto the Red Rock property.

LOCATION AND ACCESS
(See Fig. 1)

The Pimainus Lake group of claims is in the Highland Valley area, eleven miles east of Spences Bridge. Spences Bridge is on the Trans-Canada Highway about 200 road miles northeast of Vancouver.

Access to the property is by the Highland Valley road from Ashcroft, thence by either of two dirt roads. One leaves the Alwin Mine road near the mine buildings and goes south by Pimainus Lake and east to the claims; the other passes the Lornex Mining Corporation Ltd. operations and heads southwest. The dirt roads merge and continue as one to the centre of the claim group. A four wheel drive vehicle is necessary on both roads during most of the year.

PROPERTY AND OWNERSHIP
(See Fig. 2)

The seven claims that comprise the Pimainus Lake group of Red Rock Mines Ltd. are as follows:

Ture 1 - 6
Ture #1 Fraction

The Red Rock claims are bordered on the south and west by claims belonging to T.C. Explorations Ltd., on the north side by claims of Northlode Explorations Ltd. and on the east by Lornex Mining Corporation Ltd.

HISTORY

Nothing is recorded prior to 1966. During that year Mr. K. Lovang did a magnetometer survey and Mr. J. Koop did geochemical work. Some trenching was undertaken.

Dr. A.C. Skerl, Vancouver consulting geologist, visited the property on April 6th, 1967, and he recommended additional work. In October 1969 E. Fitzsimmons and G. Buckles took 105 soil samples on three reconnaissance lines over about one third of the area of the claims.

GEOPHYSICS (See Fig. 3)

During the late fall of 1966 a magnetometer survey was conducted along east-west lines spaced 500' apart.

Two magnetic lows were found on the property. The largest is located in the centre of the claims on two adjacent lines. This indicates that the width of the anomaly must be between 500' and 1000'. Length is unknown.

Another magnetic low was discovered on three lines on the west edge of the claims. Length in a northerly direction is at least 1000'.

In the Highland Valley area, a magnetic low may result from the breakdown (alteration to hematite) of the original magnetite in the host rock. A magnetic low can be caused, however, by other geological conditions and hence the results of a magnetic survey must be used in conjunction with other exploration findings.

Verbal discussion (February 12, 1969) with Mr. K. Lovang, who did the survey in 1966, indicates that three or four north-west-trending zones of moderate magnetic relief were disclosed in the northwest portion of the claims. These were in the vicinity of moderate outcrop exposure. Width of these zones is reported to be 200'-300'.

A map showing results of the magnetometer survey carried out in 1966 is not available. The comments regarding location of the lows are after Dr. A.C. Skerl - 1967.

GEOCHEMISTRY
(See Fig. 3)

In 1966, soil samples were apparently taken at 200' centres along lines spaced 500' apart. Verbal discussion with Mr. Roy Roberts, who was employed by Red Rock Mines Ltd. at the time of the survey, indicates that background was considered to be 100-200 parts per million copper. Dr. A.C. Skerl's report of 1967, however, states that in the area of the magnetic low on the west side of the property, a sample gave a "fair" copper and molybdenum assay (112 ppm Cu and 5 ppm Mo). This suggests that 50 ppm Cu should be considered a more logical background.

As far as is known, only two "high" soil samples were collected; one, on the south boundary of the claims ran 1350 ppm Cu

(and 6.5 ppm Mo); the second was collected in the north central part of the area and ran 1125 ppm Cu (and 6.0 ppm Mo).

In October 1969, soil sampling for copper and molybdenum was carried out. Samples were taken along the road to the central area of the claims and along the claim location line to the east. Samples were also taken at 100 foot intervals along two other east-west lines, one 800 feet north and one 1100 feet north of the road.

For the 105 samples the metal distribution was as follows:

Copper - Background - Below 50 ppm Cu	75 samples
Threshold - Between 50 and 100 ppm Cu	15 "
Anomalous - Greater than 100 ppm Cu	15 "

The higher readings are somewhat scattered but are sufficient to indicate that additional sampling on a grid basis is warranted.

Molybdenum - Background - Below 4 ppm Mo	80 samples
Threshold - Between 5 and 8 ppm Mo	18 "
Anomalous - Greater than 8 ppm Mo	7 "

The higher readings favour the central part of the claims, north and northwest of the mineral showings in the trench area. All three lines show continuous readings greater than 5 ppm Mo.

GEOLOGY AND MINERALIZATION

The area in which the Pimainus Lake claim group is located is underlain by granodiorite of the Bethsaida phase of the Guichon Creek batholithic complex. (The younger central core of the batholith is composed of Bethsaida phase granodiorite.) During the

emplacement of this rock, mineral deposits, such as the O.K. (Alwin Mining Company Ltd.), Lornex and others associated with the Bethsaida, were formed, possibly accompanied by emplacement of the Gnawed Mountain porphyry dykes.

(Earlier periods of mineralization occurred during the emplacement of the Witches Brook phase soon after the crystallization of the Bethlehem phase granodiorite. It is believed that the Bethlehem ores were introduced at this time.)

Copper mineralization in the form of bornite has been reported at two locations on the Red Rock property. On the west edge of the claims, a 5' wide fault zone was reported to contain a 1/4" wide bornite vein. The fault strikes northeasterly. Trenching was carried out in the central area of the claims to investigate the magnetic low previously mentioned. Specks of bornite were uncovered in fresh Bethsaida granodiorite.

It is reported that a moderate amount of outcrop exists on the property and that overburden depth, in general, is not great.

RECOMMENDATION

The property is small but in view of the fact that it is underlain by favourable Bethsaida phase granodiorite, that two magnetic lows have been discovered, that some anomalous copper soil samples were obtained and that bornite has been observed, the writer suggests that a coordinated work program is warranted. This should include geological mapping, detailed soil sampling on a grid basis and,


probably, an induced polarization survey. Aerial photographs should be studied with a view to identifying linears and possible significant fracture zones.

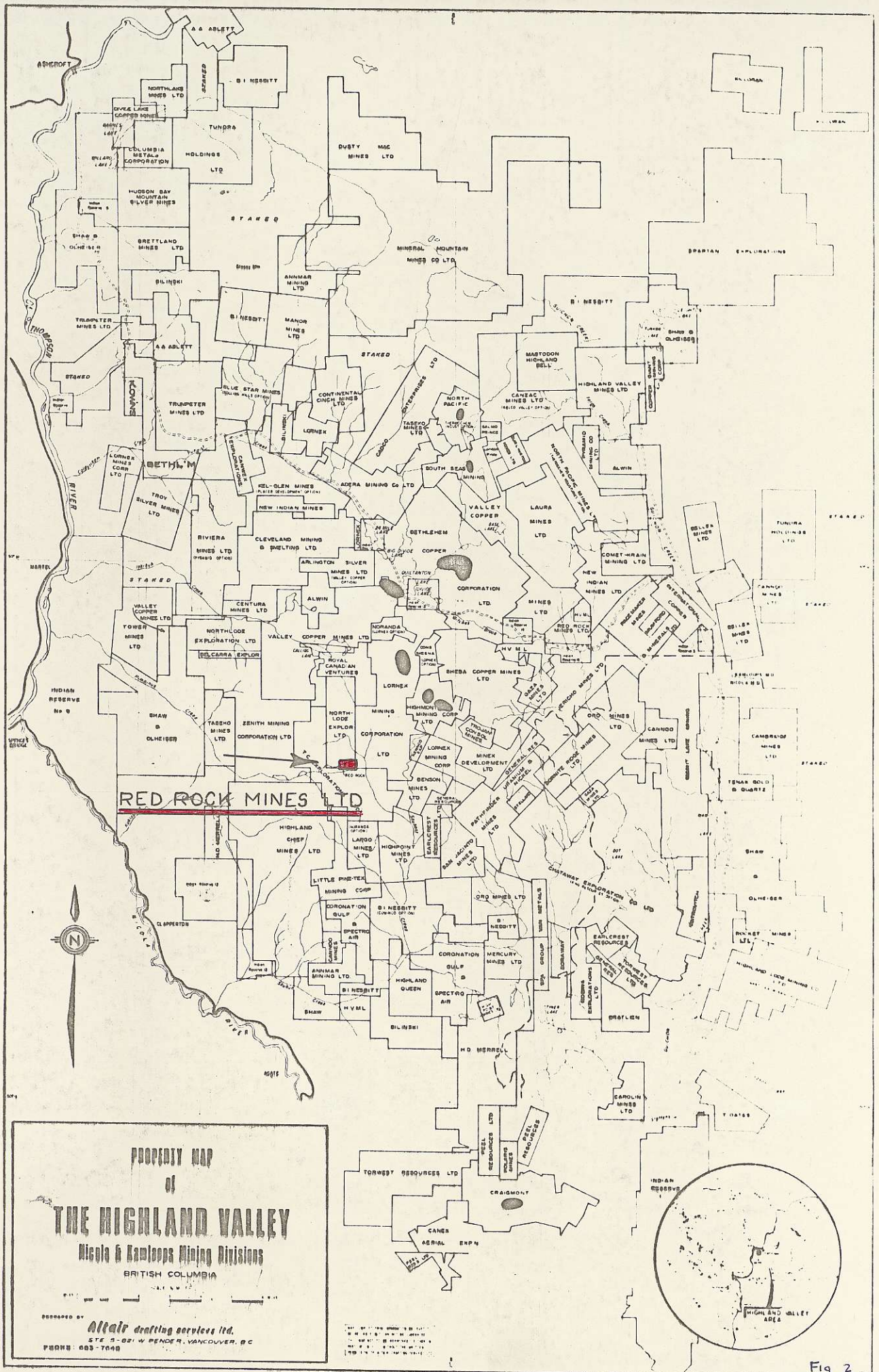
COST ESTIMATE

(1) 10 miles line @ \$100/mile	\$1,000.00
(2) 250 soil samples - collection - \$1.20/sample	300.00
(3) " " " analyzing "	300.00
(4) 10 miles line induced polarization @ \$500/mile	5,000.00
(5) Engineering & geology (mapping, etc.)	<u>3,000.00</u>
	\$9,600.00
10% contingencies	<u>960.00</u>
	\$10,560.00

Respectfully submitted,

BACON & CROWHURST LTD.

R. W. Phendler P. Eng.
 R.W. Phendler, B.Sc., P. Eng.




PROPERTY MAP
 of
THE HIGHLAND VALLEY
 Nicola & Kamloops Mining Divisions
 BRITISH COLUMBIA

PREPARED BY
Allair drafting services Ltd.
 STE 5-021 W PENDER, VANCOUVER, B.C.
 PHONE 683-7048

Fig 2

CREST LABORATORIES (B.C.) LTD.B.C. REGISTERED ASSAYERS
GEOCHEMISTS1068 HOMER STREET,
VANCOUVER 3, B.C.

November 6, 1969

Mr. D.W. Tully, P. Eng.
102 - 2222 - Bellevue Avenue
WEST VANCOUVER, B.C.Lot No. 105 G:Geochemical Analysis for Molybdenum, Copper:

Mesh Size:

-80

Samples Received: Nov. 3/69

Analytical Method:

Atomic Absorption

Samples Analyzed: Nov. 5/69

Digestion Method:

 $\text{HClO}_4 - \text{HNO}_3$

Sample Number:	Moly. ppm	Copper ppm	Sample Number:	Moly. ppm	Copper ppm
8 A ✓	2 ✓	146 ✓	31 A	1	25
9 A ✓	4 ✓	70 T	32 A	2	30
10 A ✓	2 ✓	39	33 A	1	70 T
11 A ✓	1 ✓	45	34 A	2	14
12 A ✓	1 ✓	32	35 A ✓	2 ✓	25
13 A ✓	2 ✓	20	36 A	1 ✓	24
14 A	1 ✓	15	37 A	2 ✓	24
15 A	1 ✓	23	38 A	1 ✓	14
16 A	4 ✓	31	39 A	1 ✓	24
17 A	1 ✓	46	40 A	1 ✓	10
18 A ✓	2 ✓	130 -	41 A	1 ✓	14
19 A ✓	5 ✓	38	42 A	2 ✓	15
20 A	6 ✓	21	43 A	2 ✓	260 -
21 A	20 ✓	680 -	44 A	4 ✓	32
22 A	4 ✓	235 -	45 A ✓	5 ✓	24
23 A	1 ✓	25	46 A ✓	1 ✓	46
24 A	1 ✓	58 T	47 A ✓	5	86 T
25 A	2 ✓	24	48 A ✓	5	290 -
26 A	1 ✓	17	49 A ✓	9	43
27 A	1 ✓	19	50 A ✓	9	40
28 A	5 ✓	28	51 A ✓	5	37
29 A	2 ✓	39	52 A ✓	2	36
30 A	2 ✓	52 T	53 A ✓	4	67 T

Mr. D.W. Tully, P. Eng.
 Lot No. 105 G
 November 6, 1969
 Page 2...

Sample Number:	Moly. ppm	Copper ppm	Sample Number:	Moly. ppm	Copper ppm
54 A ✓	2	65 T	80 A ✓	1	34
55 A ✓	5	410 -	81 A ✓	1	15
56 A ✓	10	21	82 A ✓	2	17
57 A ✓	10	40	83 A ✓	2	28
58 A ✓	9	12	84 A ✓	1	20
59 A ✓	5	10	85 A ✓	1	22
60 A ✓	2	23	86 A ✓	1	68 T
61 A ✓	5	12	87 A ✓	1	108 -
62 A ✓	5	18	88 A ✓	1	22
63 A ✓	5	77 T	89 A ✓	2	24
64 A ✓	2	13	90 A ✓	2	54 T
65 A ✓	5	64 T	91 A ✓	2	40
66 A ✓	5	18	92 A ✓	1	23
67 A ✓	9	24	93 A ✓	2	285 -
68 A ✓	1	28	94 A ✓	5	46
69 A ✓	2	50 T	95 A ✓	1	96 T
70 A ✓	1	20	96 A ✓	5	13
71 A ✓	1	18	97 A ✓	2	9
72 A ✓	2	14	98 A ✓	6	20
73 A ✓	2	138 -	99 A ✓	2	4
74 A ✓	1	27	1 A	2	8
75 A ✓	2	59 T	#2 Trench	1 ✓	170
76 A ✓	2	125 -	#3 + R	2 ✓	104
77 A ✓	4	22	#4 + R	7	38
78 A ✓	2	54 T	1 Trench + Remch	4	380
79 A ✓	1	36	83 + 50 Trench	2	150

Yours truly,
 CREST LABORATORIES (B.C.) LTD.

Alfred A. Burgoyne
 Alfred A. Burgoyne
 Geologist-Geochemist

CREST LABORATORIES (B.C.) LTD.

105
 under 50 50-100 over 100
 75 15 15
 12 15/65 25/80

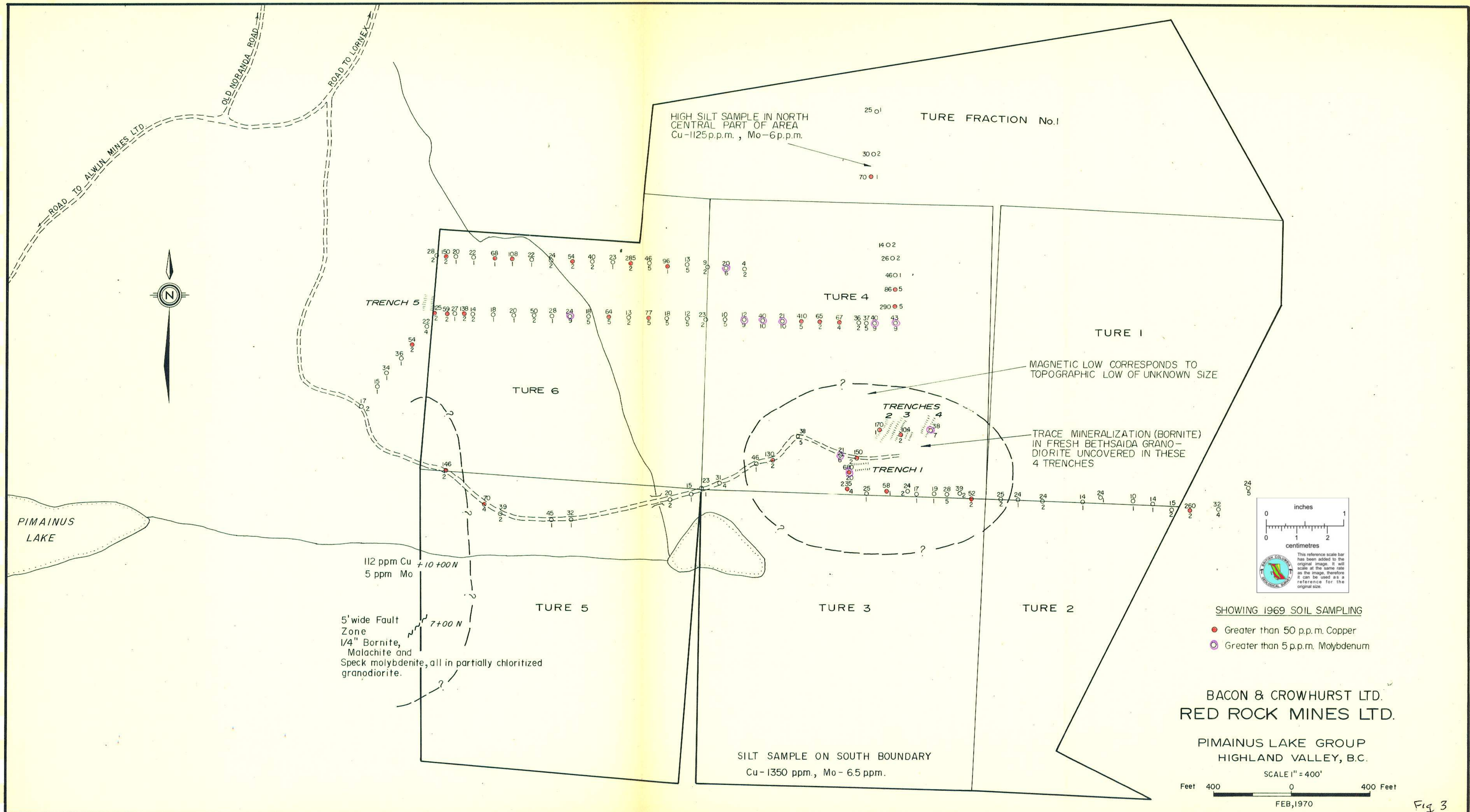


Fig 3