

Suite 200, 4299 Canada Way, Burnaby, B.C. V5G 1H4
Telephone (604) 437-9491

ASSESSMENT REPORT

GEOCHEMICAL COPPER SOIL SURVEY

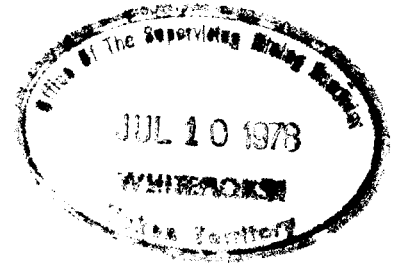
ROB 1-12 MINERAL CLAIMS

Record Numbers YA10340 to YA10345
YA10495 to YA10499
YA10501

Dawson Mining Division

N.T.S. 116B/14

Latitude $64^{\circ}52'N$
Longitude $139^{\circ}17'W$



by

A.A. Burgoyne, P.Eng.

090346
Work Done: August 15 to 26, 1977

Date: June 28, 1978

Owner: Union Miniere Explorations and
Mining Corporation Limited

This report has been examined by the
Geological Examination Unit and is recom-
mended to the appropriate Board to be consid-
ered as representing the work in the amount of
\$4800.00

D.B. Craig

~~Registered Geologist or
Professional Mining Engineer~~

Considered as representation work under
Section 53 (9) Yukon Quartz Mining Act.

B.R. Baxter
B. R. BAXTER
Supervising Mining Recorder

Per Commissioner of Yukon Territory

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GEOCHEMICAL COPPER SOIL SURVEY

ROB 1-12 MINERAL CLAIMS

INTRODUCTION

During the period of August 15 to 26, 1977 a geochemical soil survey for copper was completed on the Rob claims in the Dawson Mining Division. The geochemical soil survey consisted of taking 694 B soil horizon samples over 12.86 line miles.

The Rob claims are located in the Ogilvie Mountains approximately 28 miles west of Chapman Lake and the Dempster Highway at latitude $64^{\circ}52'N$ and longitude $139^{\circ}17'W$. The elevation of the claims varies from 4300 to 5700 feet. The claims are accessible by helicopter from the Dempster Highway or Dawson City. Note Figure 1.

The geochemical soil survey was completed by Messrs. Holm, Reid, Pettet, and Tolbert. The surveys were under the direction of Mr. C.V. Dyson, P.Eng. and Mr. A. Burgoyne, P.Eng.

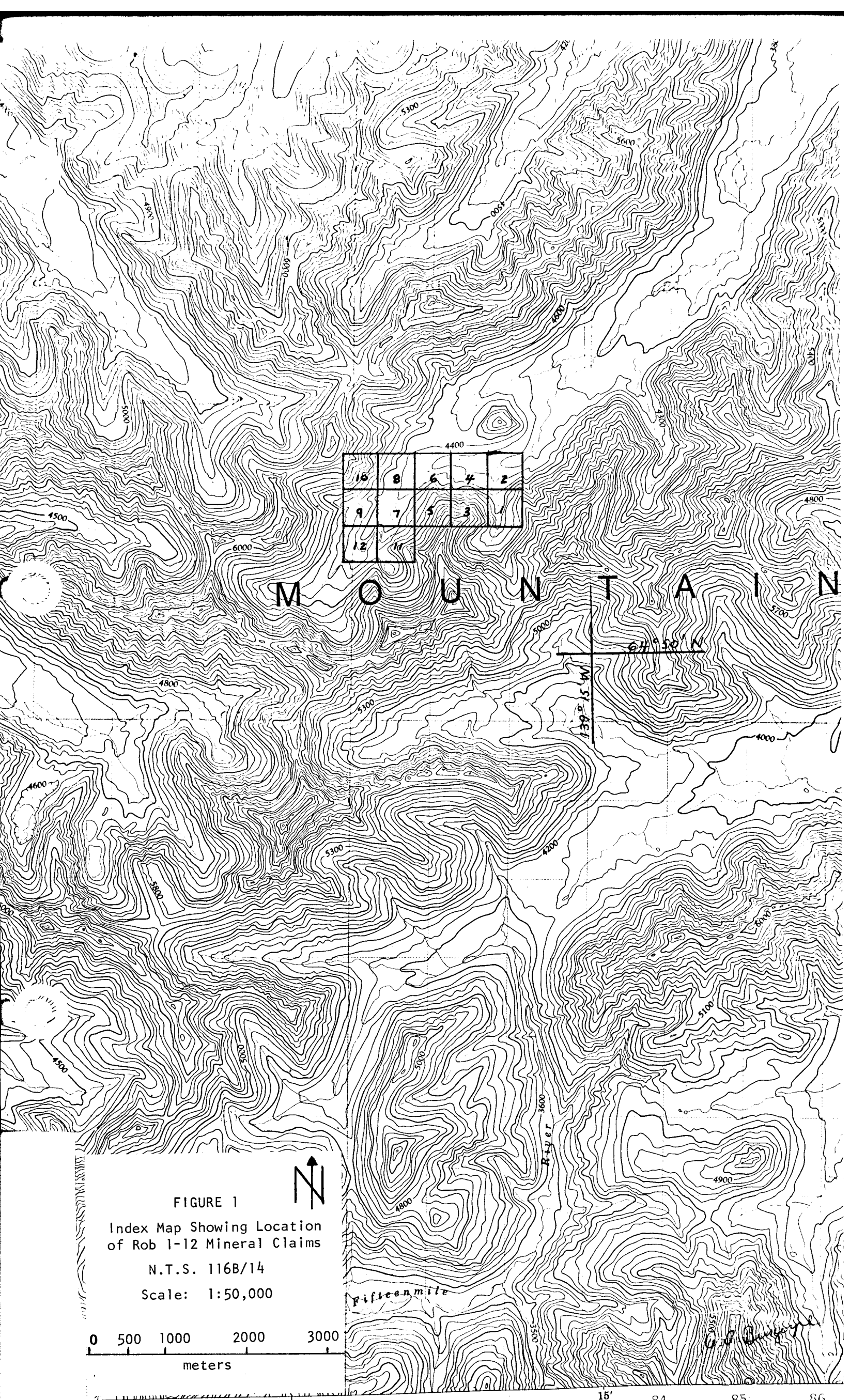
GEOLOGY

The claim area is regionally mapped by the Geological Survey of Canada¹ as underlain by Proterozoic (Unit 1, G.S.C., Map 1284A) sediments consisting of dark shale and argillite, with some siltstone to fine grained quartzite, and very minor limestone. Greenstone sills (Unit 20a) occur in the Proterozoic sediments.

Reconnaissance geological mapping by UMEX in the claim area in 1977 showed the area to be underlain by a thick sequence of Proterozoic sediments consisting of interbedded, laminated grey siltstones, thin bedded purple-maroon fine grained siltstones, dolomitic quartzites and black shales with some areas of brecciation. The sediments regionally strike south-southwest and dip steeply to north.

Mineralization occurs as sparse chalcopyrite and traces of pitchblende in thin (1/4 to 1 foot) quartz-ankerite veins.

¹Green, L.H., 1972, Geology of Nash Creek, Larsen Creek, and Dawson Map-Areas, Yukon Territory: Geological Survey of Canada, Memoir 364



M O U N T A I N

67° 30' N

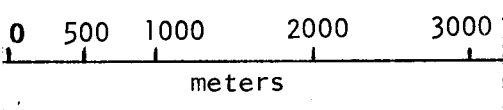
M.S. 951

Fifteen mile River

Fifteen mile

G. J. [Signature]

FIGURE 1
 Index Map Showing Location
 of Rob 1-12 Mineral Claims
 N.T.S. 116B/14
 Scale: 1:50,000



GEOCHEMICAL SOIL SURVEY

Line Placement

The main east-west claim location line used to stake the claims was used as an east-west baseline. Note Figure 3. On the east-west baseline, cross-lines were placed at 100 foot and 200 foot intervals (depending on the desired density of the survey) in a north-south direction by compass and topofoil chain. Sample site stations were marked by coloured (red) flagging at 100 foot intervals along all cross-lines and the baseline; the bulk of the soil sampling was done on 100 foot centers. In certain areas soil samples were obtained at 50 foot and 200 foot centers.

Soil Sampling and Analytical Treatment

A total of 694 soil samples were collected over 12.86 line miles and subsequently analysed for copper. At each sample site a hole was excavated with a shovel and 0.5 to 1.5 lbs. of mostly B soil horizon was collected and placed in a kraft soil sample bag. The B soil horizon is generally poorly developed; the soil samples were taken at a depth of 6 inches to 1 foot. The B soil horizon is relatively well developed in the Pymid Creek Valley (the northwesterly flowing creek that drains the claims) but less well to nil developed on the talus covered mountain slopes.

The soil samples were flown by helicopter to the UMEX base camp at Mile 68 on the Dempster Highway, freighted by road to Dawson City and thence air freighted to Vancouver, B.C. for analysis. The soil samples were analysed by Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C. The samples were dried at 50°C in their respective sample bags and then sieved to -80 mesh, digested for 1-2 hours in hot perchloric-nitric acid, bulked with deionized water, and analysed by atomic absorption.

Results

A cumulative frequency versus copper concentration plot for the B soil horizon samples collected from the Rob claims is illustrated in Figure 2. Two distinct populations are present: population 1 varies from 10 to 100 ppm and is considered a lithologic (soil) background whereas population 2 represents values in excess of 100 ppm that are considered anomalous and related to copper mineralization. Note Figure 2.

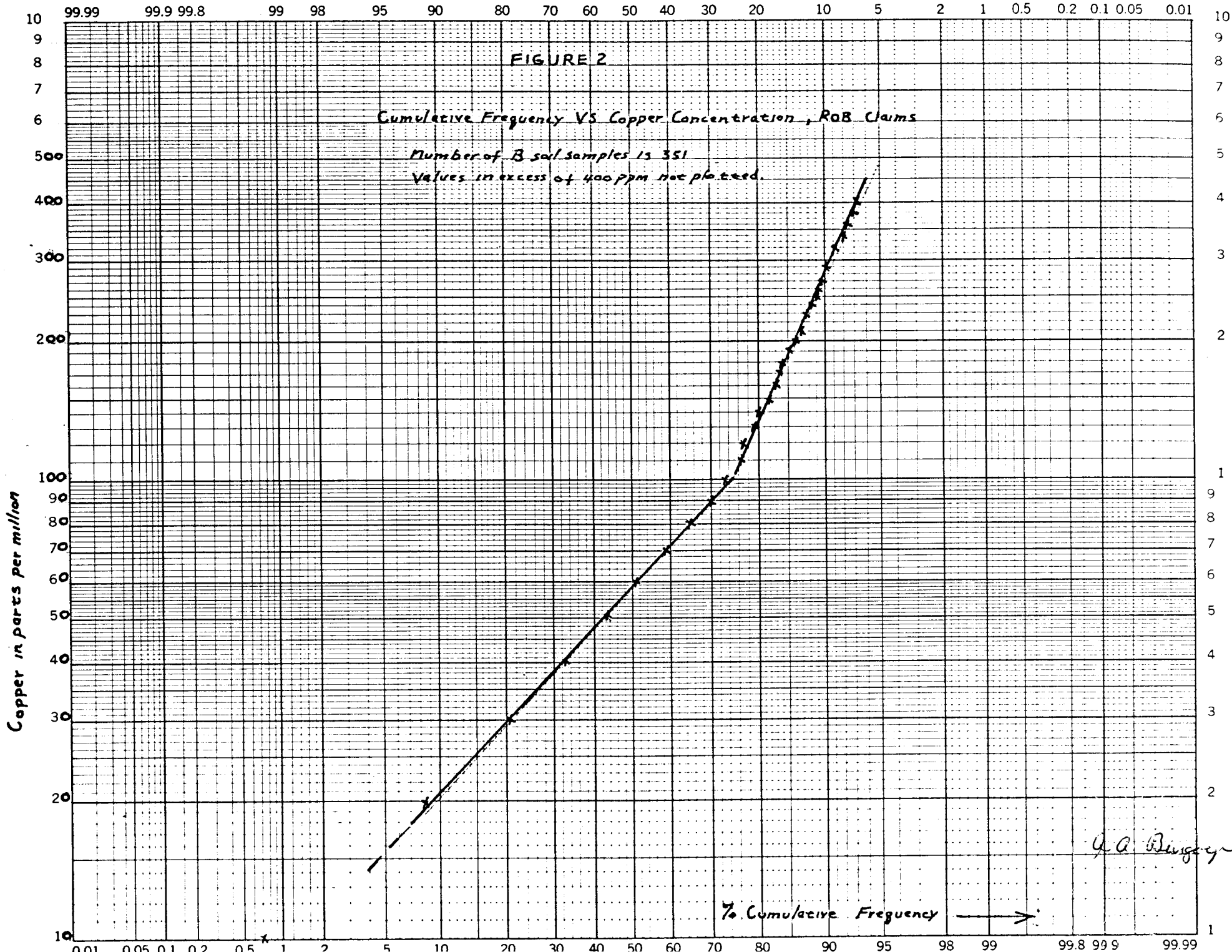


Figure 3 illustrates the plot of all copper values for the B soil horizon samples obtained from the survey on the claims. The copper results are contoured at the 100 ppm contour (minimum anomalous threshold) and at the 400 ppm contour. Values in excess of 400 ppm copper are considered high order anomalies and are spacially associated with chalcopyrite-bearing quartz-carbonate vein material both in float and in situ.

The 100 ppm contour encloses a large portion of ground on the eastern parts of the Rob claim block and in gross appearance has a southerly to southwesterly trend parallel to the regional geologic trend and observed in situ quartz-carbonite veinlets and veins. The survey was not carried out south of the baseline from lines 14 to 26W because of excessive talus cover. Two other smaller areal anomalies occur in the vicinity of: Baseline and lines 36-42W; Lines 64-66W, 12 to 14S.

The 400 ppm copper contour indicates several highly anomalous areas:

Area I: North of the baseline between line 21 to 28W

Here anomalous copper values are found directly associated with chalcopyrite-pyrite bearing quartz-ankerite vein and float material and, in part, a gossanous maroon coloured soil. Brief prospecting indicates several south and south-to-southeast striking veins contained within and adjacent to a southwesterly striking shear/fracture zone. Outcrop is abundant, perhaps as high as sixty percent, and the causative source of the copper soil anomaly is due to low grade chalcopyrite-bearing vein material.

Area II: Line 9 and 10W, 1 to 3S

Four anomalous values define this anomaly. Gossanous maroon coloured soil is present and in situ low grade chalcopyrite-pyrite bearing quartz-ankerite vein material occurs within the anomaly.

Area III: Lines 2 to 4W, 4 To 7S

This area is essentially drift covered although a tan coloured soil occurs on lines 2 and 3W at 7S. The cause of the high magnitude copper values is probably similar to Areas I and II.

Area IV: Lines 65 and 66W, 13S

This is a two sample anomaly and the area has no outcrop expression. The cause of the anomaly is probably related to minor chalcopyrite-bearing quartz-ankerite vein material.

Several other single +400 ppm copper values occur on the eastern parts of the claim block. The causative source has not been established for these values although it is probably similar to Areas I and II.

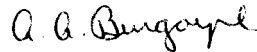
CONCLUSIONS AND RECOMMENDATIONS

A geochemical soil horizon survey for copper has been completed on the Rob claims. Several +400 ppm copper anomalous areas have been defined on the claims. Directly associated with these high magnitude copper anomalies are thin, low grade chalcopyrite(pyrite)-bearing quartz-ankerite veins contained in situ and as float.

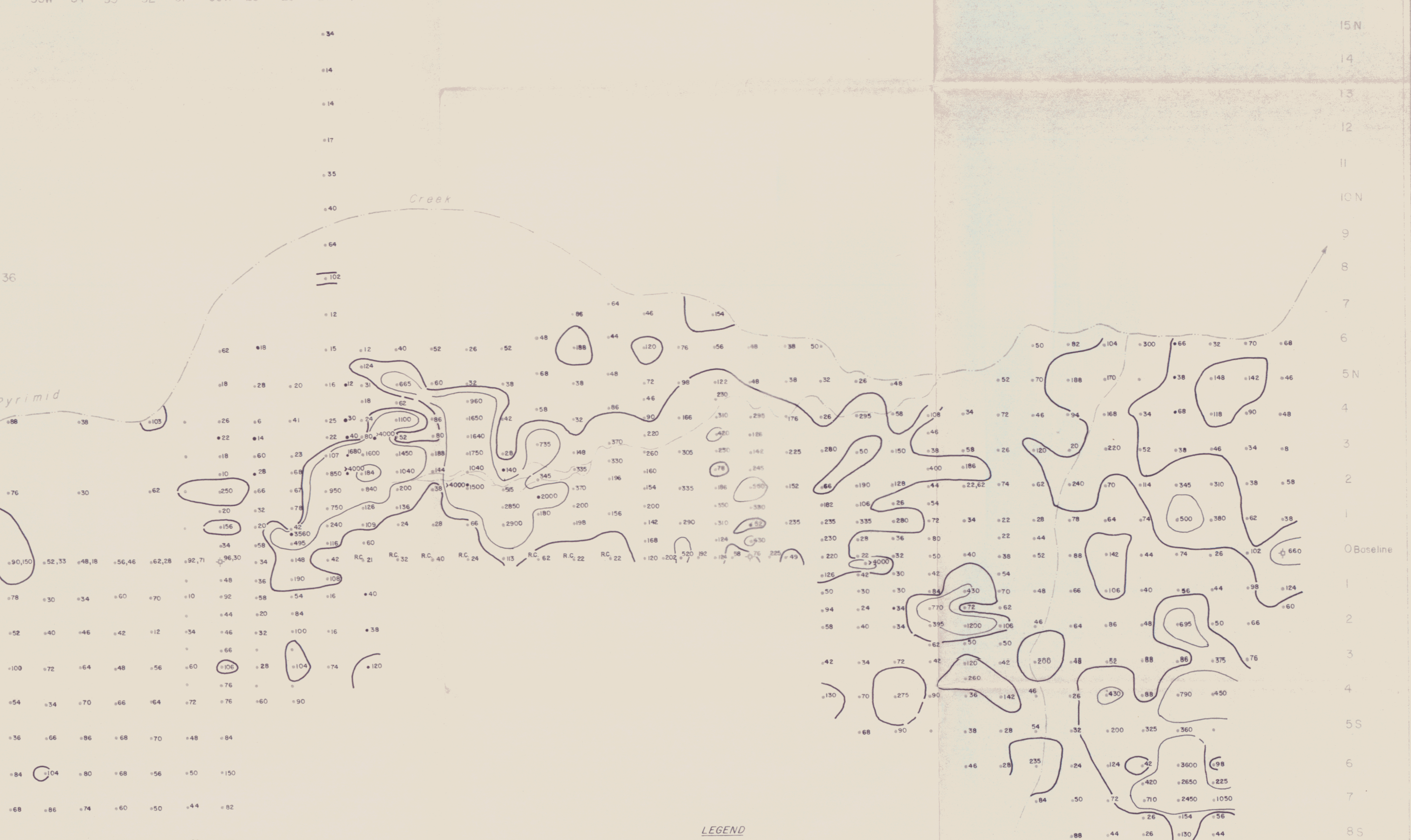
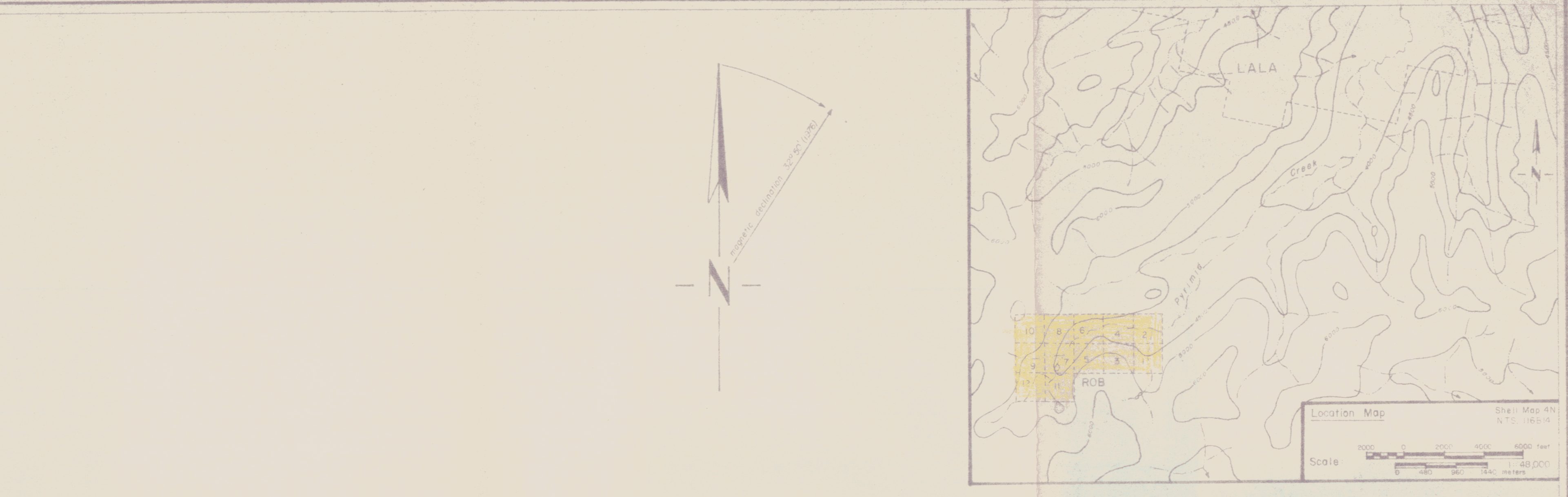
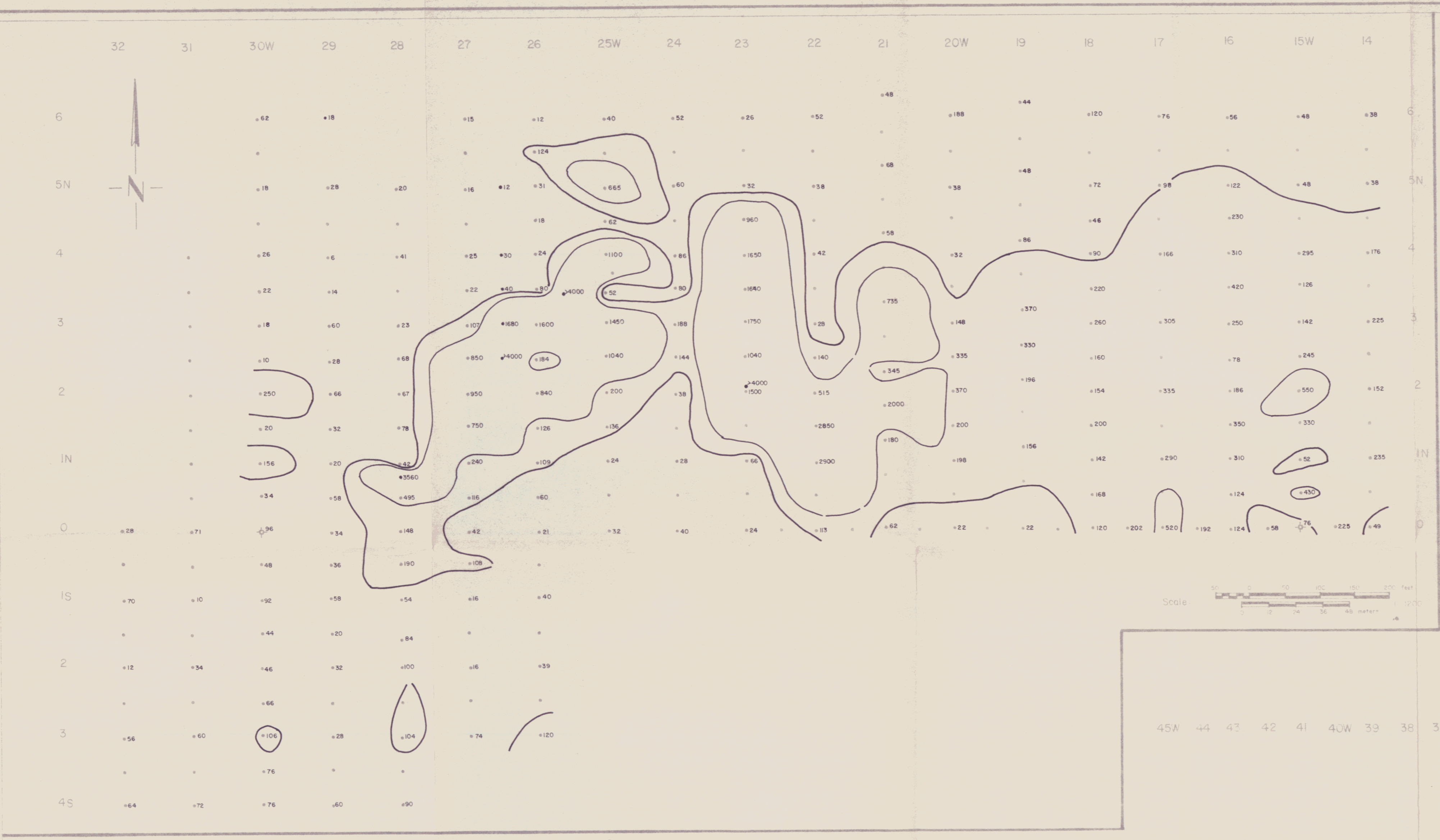
The copper soil anomalies are not considered of economic significance.

Geochemical soil surveys for copper should be completed on the unsurveyed parts of the claims, where applicable, to evaluate its potential.

Respectfully submitted,



A.A. Burgoyne, P.Eng.



- LEGEND**
- Stream
 - Lake
 - Claim post
 - Soil sample with copper in ppm.
 - Contoured at 100 and 400 ppm.
 - Copper greater than 400 ppm.

Figure 3
BLACKSTONE PROJECT 1977
ROB CLAIMS
COPPER GEOCHEMISTRY
IN SOILS

Scale: 1:2400
 0 24 48 72 96 meters

UMEX CORPORATION LTD.
 DRAWN BY: RST & HPH
 DATE: October, 1977
 SURVEYED BY: H.H. J.L.P.
 DWG. No.

To accompany an assessment report on a geochemical copper soil survey on the Rob 1-12 mineral claims, dated June 28, 1978 by A.A. Burgoyne, P.Eng.

A.A. Burgoyne