

# UMEX

UNION MINIERE EXPLORATIONS  
AND MINING CORPORATION LIMITED

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## GEOCHEMICAL SOIL SURVEY

ON THE

ID NO. 1 GROUP OF MINERAL CLAIMS

(ID 18, 20, 22, 24, 26, 61-64, 66-67, 69-72,  
Record Nos. Y99968, Y99970, Y99972,  
Y99974, Y99976, Y99977-Y99986)

and the

ID NO. 2 GROUP OF MINERAL CLAIMS

(ID 1-10, 17, 19, 21, 23, 25,  
Record Nos. Y99957-Y99967, Y99969,  
Y99971, Y99973, Y99975)

in the

Dawson Mining Division, Y.T.

N.T.S. 116B/13

Latitude  $64^{\circ}50'N$   
Longitude  $139^{\circ}45'W$

by

Colin V. Dyson, P.Eng.

Work Done: July 10 - July 15, 1975

Date: December, 1975

Owner: Union Miniere Explorations and  
Mining Corporation Limited

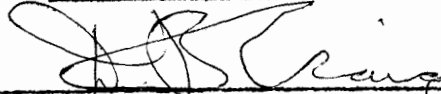
Office Of The Supervising Mining Recorder  
**JAN 23 1976**  
WHITEHORSE  
Yukon Territory

RECEIVED  
15 JAN 1976  
MINING RECORDER  
LAND AGENT  
DAWSON, Y.T.  
I.A. & N.D.

RECEIVED  
JAN 23 1976  
MINING  
INSPECTORS OFFICE  
WHITEHORSE, Y.T.

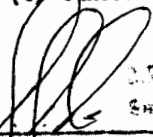
This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of


\$ 3117.00



Resident Geologist for  
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

  
J.C. BAXTER  
Supervising Mining Recorder

 Commissioner of Yukon Territory

## CONTENTS

	Page
INTRODUCTION . . . . .	1
CLAIM GROUPS . . . . .	1
GENERAL GEOLOGY . . . . .	1
GEOCHEMICAL SOIL SURVEY . . . . .	2
Methods . . . . .	2
Grid Control . . . . .	2
Analytical Treatment of Soil Samples . . . . .	2
Results . . . . .	3
CONCLUSIONS AND RECOMMENDATIONS . . . . .	3
STATEMENT OF COSTS . . . . .	5
STATEMENT OF PERSONNEL . . . . .	6

## Figures

	following page
FIGURE 1 Location Map, ID Claims, 1/250,000 . . . . .	3
FIGURE 2 Geochemical Statistics for Copper . . . . .	3
FIGURE 3 Geochemical Statistics for Zinc . . . . .	3
FIGURE 4 Geochemical Statistics for Cobalt . . . . .	3
FIGURE 5 Geochemistry of Copper in Soils . . . . .	in pocket
FIGURE 6 Geochemistry of Zinc in Soils. . . . .	in pocket
FIGURE 7 Geochemistry of Cobalt/Silver in Soils . . . . .	in pocket

GEOCHEMICAL SOIL SURVEY ON THE ID NO. 1 GROUP  
AND ID NO. 2 GROUP OF MINERAL CLAIMS

INTRODUCTION

In the period July 10 to July 15, 1975, a geochemical soil survey for total lead, zinc, cobalt/silver was completed on the ID No. 1 and 2 groups of mineral claims.

The claims are located approximately 22 miles west of Kit Lake and 12 miles north-northeast of Mount Harper (Figure 1). They lie within the Dawson Mining Division, Yukon Territory at latitude  $64^{\circ}50'N$  and longitude  $139^{\circ}45'W$ . The claims cover the western side of a northerly trending mountain ridge and a northeasterly facing cirque, where elevations range from 4000 to 6000 feet.

Access to the property was via helicopter from a base camp at Mile 68 on the Dempster Highway, a distance of approximately 38 miles to the east.

CLAIM GROUPS

The ID No. 1 and No. 2 groups of mineral claims total 30 full-size claims in a contiguous block. Details of the groups are:

Group	Claim Name	Record No.	Staking Date	Record Date
1	ID 18, 20, 22,	Y99968-70-72-		
	24, 26	74-76	July 6, 1975	July 22, 1975
	ID 61-67	Y99977-Y99982	July 8, 9, 1975	July 22, 1975
	ID 69-72	Y99983-Y99986	July 8, 9, 1975	July 22, 1975
2	ID 1-10	Y99957-Y99966	July 5, 1975	July 22, 1975
	ID 17, 19, 21,	Y99967-69-71-		
	23, 25	73-75	July 6, 1975	July 22, 1975

The claims are owned by Union Miniere Explorations and Mining Corporation Limited for whom the geochemical survey was performed.

GENERAL GEOLOGY

The claims are underlain by a thick sequence of Proterozoic and younger sediments which have been intruded in some areas by dark green basic dykes. The following general sequence appears to be present on the property. A basal sequence of interbedded purple to maroon shales, siltstones, conglomerates, grey-black-green shales and pink-white dolomite quartzites is overlain by a

sequence of black shales, laminated grey-black shale and grey-to-greenish siltstones, and minor dolomitic quartzites. These Proterozoic sediments in turn are overlain in the northern edges of the claim area by a sequence of massive grey silicified dolomites, vuggy, veined, and solution eroded, and blacky orange-weathering grey dolomite. The area is faulted and folded.

## GEOCHEMICAL SOIL SURVEY

### Methods

In the course of the survey a total of 170 soil samples were collected over 6.8 miles of line, and subsequently analysed for lead and zinc. At each sampling site a hole was dug with a mattock and 4 - 6 ounces of "B" horizon soil (where available) was taken. The sample was placed in a high, wet-strength Kraft sample bag and appropriately marked.

The writer was in the field on July 10 and 11 to organize the survey and to study the geology on the claims. The soil sampling was performed by P. Osborne and R. Tolbert in the period July 10 to July 15, 1975.

### Grid Control

Reconnaissance sample lines were established along the claim lines, spaced approximately 3000 feet apart, with samples taken at 200 foot spacings along the lines. "Topofoil chain"<sup>1</sup> and compass were used to control distances and direction, with sample sites marked with coloured flagging at 200 foot spacings along the lines. The station coordinates were marked on the flagging by felt marker pen. The grid was tied into the claim posts and obvious topographic features.

### Analytical Treatment of Soil Samples

The soil samples were analysed by Acme Laboratories in Dawson City for

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<sup>1</sup>The Topofoil chain is a "lost" thread measuring device in which a counter accurately records in feet from 0 to 15,000 feet the length of thread unreeling from the unit when measuring a length or distance covered. The operator attaches the end of the thread to a fixed point, the counter is set at zero and the operator moves on foot carrying the Topofoil chain. As the thread unwinds, the counter records the length. The counter readout is accurate to +0.2%; on completion of a measurement the counter is reset at zero. The biodegradable thread is cut and abandoned.

copper and zinc and in part for cobalt and silver. The samples were dried in their respective sample bags at a temperature of 120<sup>o</sup>F and then sieved to -80 mesh through a nylon screen. The prepared samples were digested for 1 - 1½ hours in aqua regia, bulked with deionized water, and analysed by atomic absorption.

### Results

Statistical analysis of the copper results (Figure 2) defines those distinct populations of 10-40 ppm, 50-130 ppm, and +190 ppm Cu, the 40-50 ppm and 130-190 ppm ranges are zones of overlap. The +190 ppm Cu population is considered to be anomalous. Statistical analysis of the zinc results (Figure 3) defines two populations of 30-130 ppm and 200-270 ppm zinc with the 130-200 ppm Zn range a zone of overlap. The 200-270 ppm Zn population is considered to be possibly anomalous.

Statistical analysis of the cobalt results (Figure 4) defines only one population of 10-70 ppm cobalt, interpreted to be background, includes 98% of the samples.

In addition, 38 of the soil samples were analysed for silver. No statistical analysis was needed for the results which were all uniformly low (Figure 7).

In general, anomalous copper values are generally found along the central to western portions of the east-west soil lines (Figure 5). Taking topography and general geology into account, it can be postulated that the anomalous soils are derived from roughly the same north-south trending stratigraphic horizons on the claims. Fill-in soil sampling is needed before any trend can be established with authority and related to the claim area geology.

Similarly, before further fill-in soil sampling (and geology), the anomalous zinc values on the ID 4 and 6 claims are an isolated entity without direction or geologic control (Figure 6). As mentioned above, the cobalt and silver values are mostly all from background populations with the occasional erratic spot high value, probably unrelated to mineralization (Figure 7).

### CONCLUSIONS AND RECOMMENDATIONS

- 1) A reconnaissance geochemical soil survey performed on the ID 1 and 2 groups of mineral claims outlined several areas where copper and zinc results were anomalous.

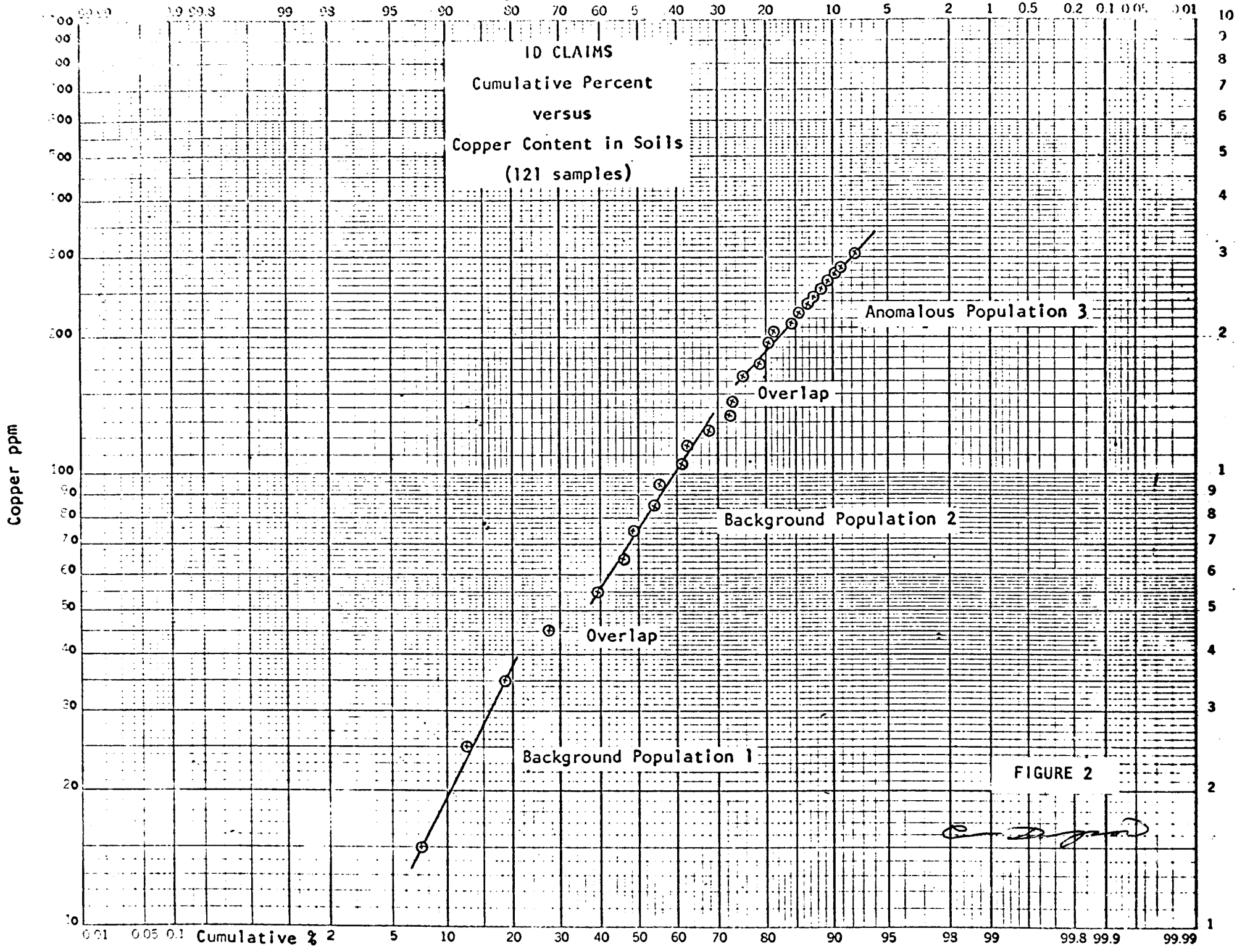


LOCATION MAP

ID CLAIMS

1/250,000

*C. D. ...*



ID CLAIMS  
Cumulative Percent  
versus  
Zinc Content in Soils  
(121 samples)

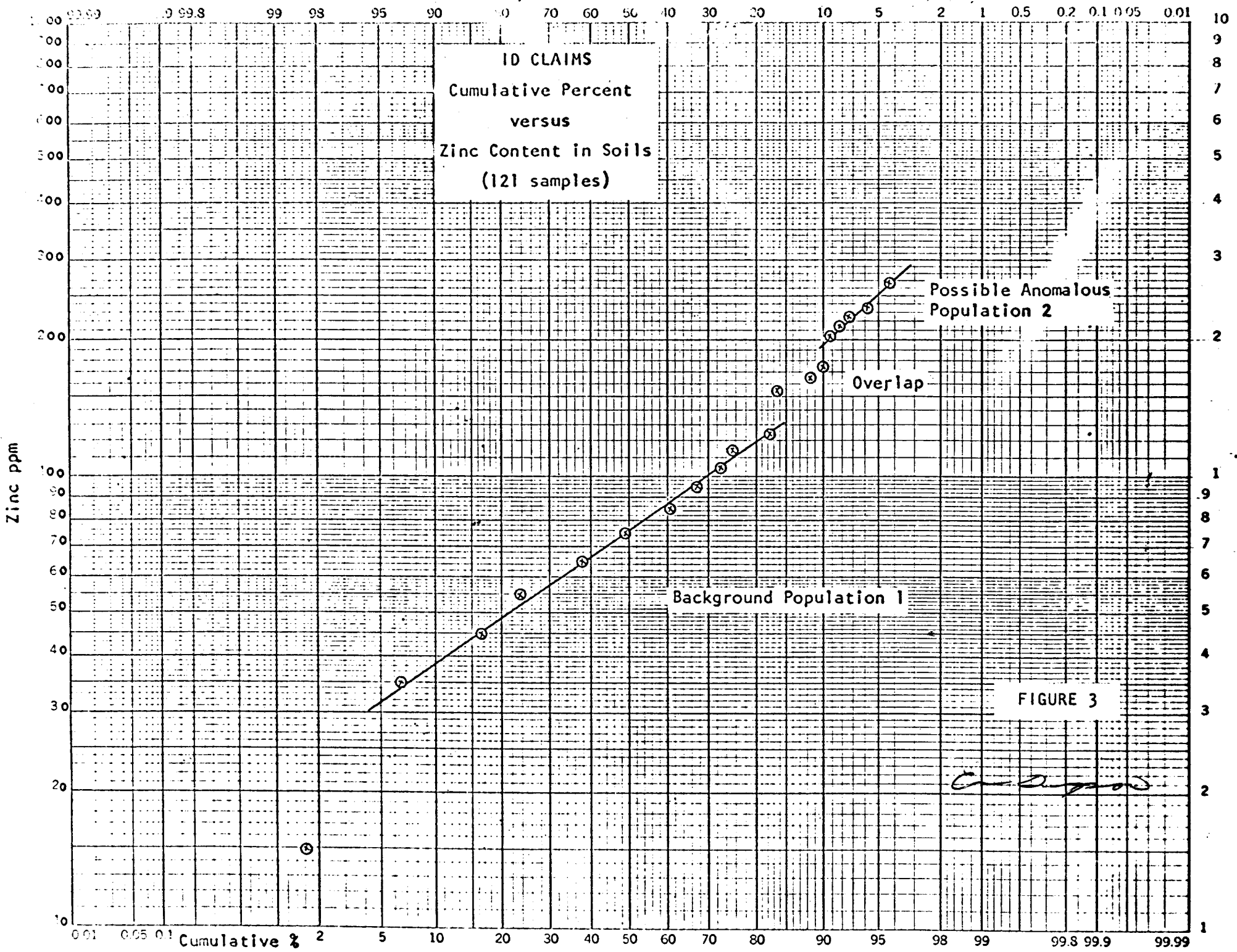
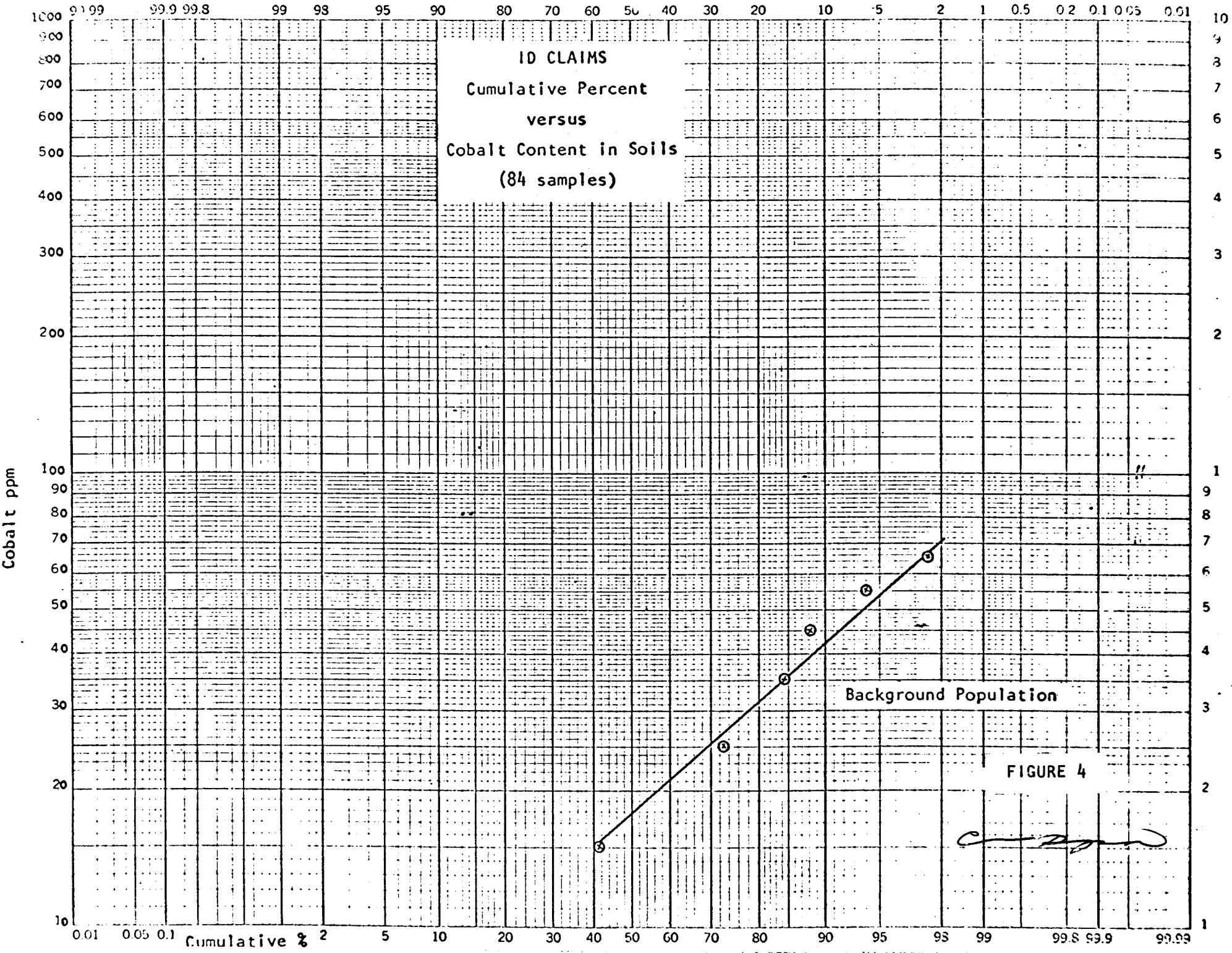


FIGURE 3

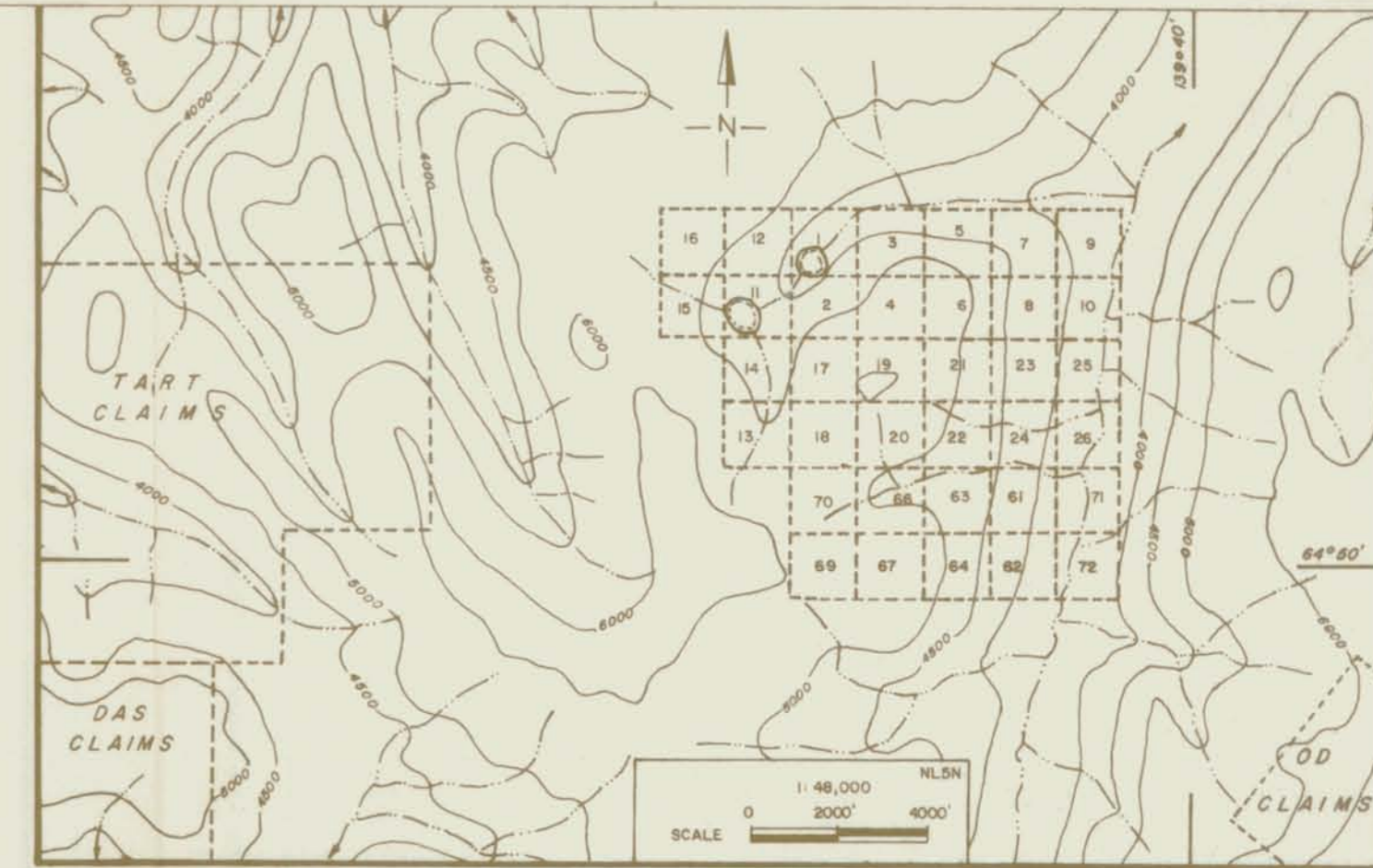


- 2) Further work on the claims is recommended, directed towards providing an explanation for the anomalous results.
- 3) Additional soil sampling is warranted to outline and "close" off the "single-line" anomalies.

Respectfully submitted,



Colin V. Dyson, P.Eng.



**LEGEND**

- Soil line with sample points and values in ppm
- Soil sample location with values in ppm
- ✕ Claim post location
- Soil samples with copper values > 160ppm

*Colin V. Dyson*

Figure No. 5

**BLACKSTONE PROJECT 1975**  
**ID CLAIMS**  
**SOIL GEOCHEMISTRY,**  
**COPPER**

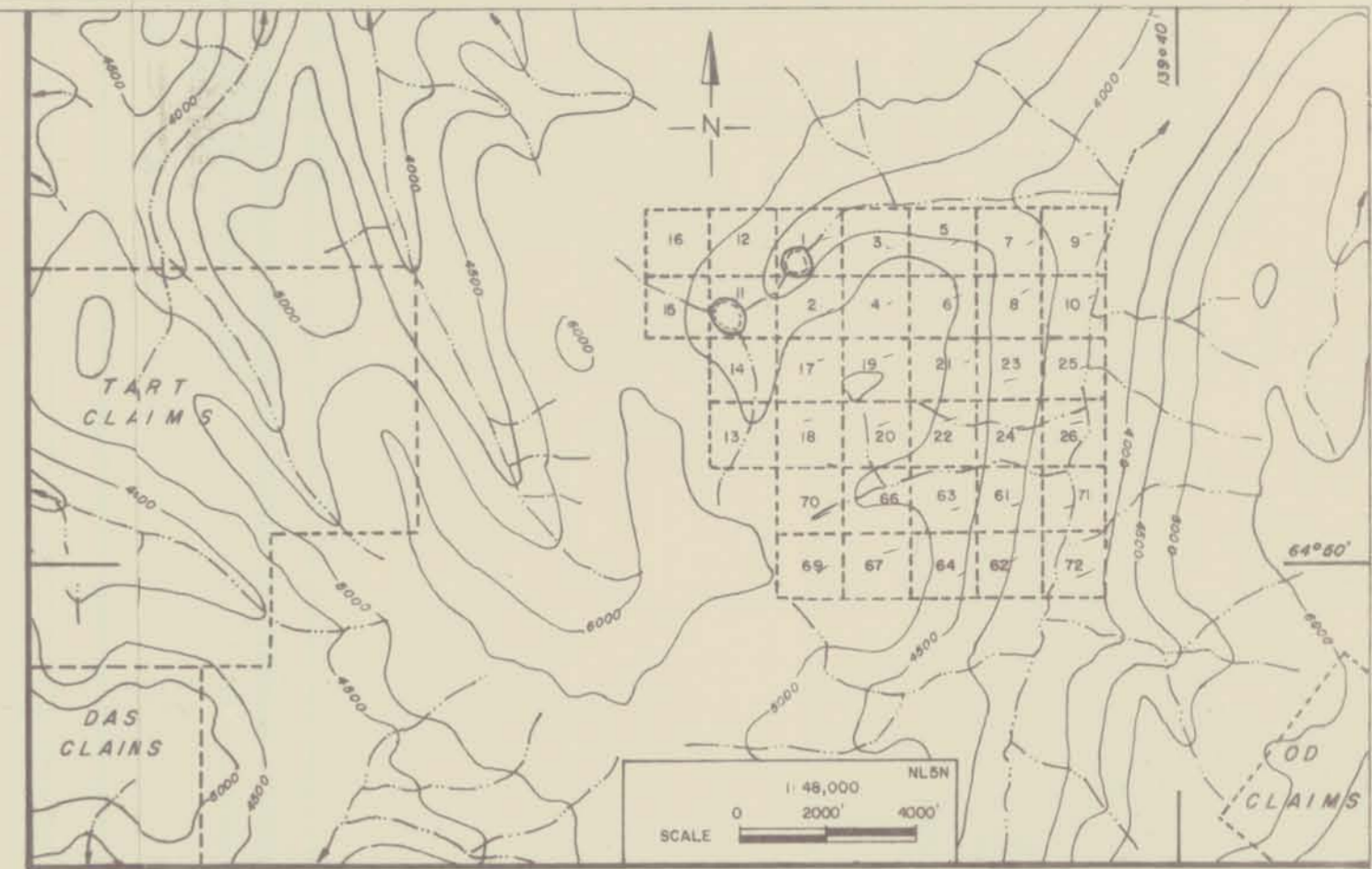
Scale: 0 500 1000 1500 2000 feet

**UMEX CORPORATION LTD.**

To accompany a report on the ID No. 1 Group of mineral claims and the ID No. 2 Group of mineral claims in the Dawson Mining Division, Y.T., by Colin V. Dyson, P.Eng., December, 1975.

DRAWN BY: R.S.T.  
 DATE: December 1975  
 SURVEYED BY: RST, PPM, DAS

DWG. No.



**LEGEND**

- Soil line with sample points and values in ppm
- Soil sample location with values in ppm
- ⊕ Claim post location
- Areas of zinc values greater than 200ppm.

*Colin V. Dyson*  
Figure No. 6

**BLACKSTONE PROJECT 1975**  
**ID CLAIMS**  
**SOIL GEOCHEMISTRY,**  
**ZINC**

Scale: 0 500 1000 1500 2000 feet

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To accompany a report on the ID No. 1 Group of mineral claims and the ID No. 2 Group of mineral claims in the Dawson Mining Division, Y.T., by Colin V. Dyson, P.Eng., December, 1975.

DRAWN BY: R. Tolbert  
DATE: December 1975  
SURVEYED BY: RST, PPM, DAS

DWG. No.

