



UNION MINIÈRE EXPLORATIONS  
AND MINING CORPORATION LIMITED

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ASSESSMENT REPORT  
GEOCHEMICAL SOIL SURVEY  
ON THE  
DAWG 1-48 MINERAL CLAIMS  
(Record Nos. YA5219-YA5250, YA9478-YA9485, YA5251-YA5258)

Dawson Mining District, Yukon  
N.T.S. 116B/15  
Latitude  $64^{\circ}50'N$   
Longitude  $138^{\circ}51'W$

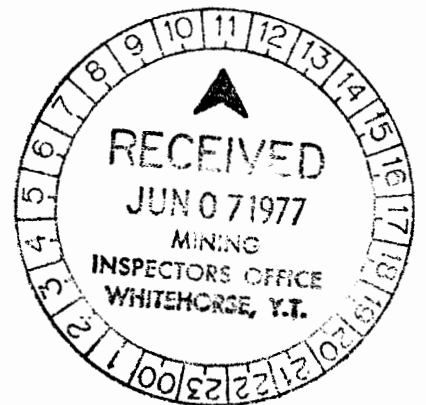
by  
Colin V. Dyson, P.Eng.

Work Done: August 23 to August 29, 1976

Date: April, 1977

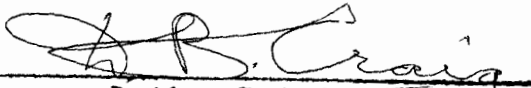
Owner: Union Miniere Explorations and  
Mining Corporation Limited

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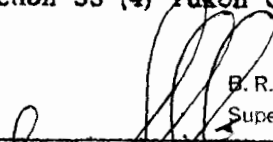





This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$4833.00

  
Resident Geologist or  
~~Resident Mining Engineer~~

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

  
B. R. BAXTER  
Supervising Mining Recorder  
  
Commissioner of Yukon Territory

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## ASSESSMENT REPORT

### GEOCHEMICAL SOIL SURVEY ON THE DAWG 1-48 MINERAL CLAIMS

#### INTRODUCTION

During the period August 23 to August 29, 1976 a geochemical soil survey was completed over the DAWG 1-48 mineral claims in the Dawson Mining District, Yukon. The claims are located approximately fifteen miles west of Chapman Lake at latitude  $64^{\circ}50'N$ , longitude  $138^{\circ}51'W$  (Figure 1), and are accessible via helicopter.

The geochemical soil survey was completed in the field by Mr. L. Pettet, Mr. P. Osborne, and Mr. T. Neale, under the supervision of Mr. R. Turna, B.Sc., geologist, who in turn was under the supervision of Mr. C.V. Dyson, P.Eng. The writer was on the property on August 23 and August 26, 1976 to organize the survey and to study the general claim geology.

#### PROPERTY

Relevant details of the claim status are as follows:

Claim Name	Record Numbers	Expiry Date
DAWG 1-32	YA5219-YA5250	August 23, 1977
DAWG 33-40	YA9478-YA9485	August 27, 1977
DAWG 41-48	YA5251-YA5258	August 23, 1977

#### GENERAL GEOLOGY

The claim area is underlain by an unconformable sequence of Middle Palaeozoic sediments (G.S.C. Units 8 and 13).<sup>1</sup> These consist of Cambro-Ordovician massive grey, sugary, fine to coarsely crystalline, commonly porous dolomite (Unit 8), which is unconformably overlain by Devonian to Carboniferous (Unit 13) black shale, argillite, and slate, black platy limestone, chert; minor chert-pebble conglomerate and quartzite. A series of relatively open east-west trending anticlines and synclines are present in the claim area. Commonly the anticline cores are formed by the dolomite unit, with black shales and argillites occurring on the flanks.

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<sup>1</sup>G.S.C. Map 1284A, Dawson Map Area Geology, Memoir 364, Green, 1972.



FIGURE 1

LOCATION MAP

DAWG 1-48 CLAIMS

1/250,000

*C. D. D.*

## GEOCHEMICAL SOIL SURVEY

A total of 481 soil samples were collected over 18.6 miles of line on the claims and subsequently analysed for total lead. At each sample site a hole was dug with a mattock and 4-6 ounces of "B" horizon soil (where available) collected and placed in a pre-labelled high wet-strength Kraft sample bag.

### Grid Control

A system of north-south samples lines were established in the northeasterly portion of the claims. Northeast-southwest trending sample lines spaced approximately 1500 feet apart were established in the southwestern half of the claim block. Sample site stations were marked by coloured flagging at 200 foot spacings along the cross lines, with a picket station every 600 feet or third sample site on the lines. Sample sites were similarly spaced and marked along the base line. Sample site coordinates were marked on the appropriate flag or picket by felt marker pen. A topofoil chain<sup>2</sup> and compass were used to control distances, directions and to tie-in the grid with existing claim posts and obvious topographic features.

### Analytical Treatment of Soil Samples

The samples were freighted to Dawson City, Yukon and analysed at a mobile laboratory of Acme Analytical Laboratories Ltd. The samples were dried in their respective sample bags at a temperature of 60°C, then sieved to -80 mesh through a nylon or stainless steel screen, digested for 1-1½ hours in aqua regia, bulked with deionized water, and analysed by atomic absorption.

### Results

Statistical analysis of the lead results (Figure 2) defines three populations of 10-20 ppm, 30-90 ppm, and +100 ppm Pb; the 20-30 ppm and

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<sup>2</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 bio-degradeable thread is cut and abandoned.

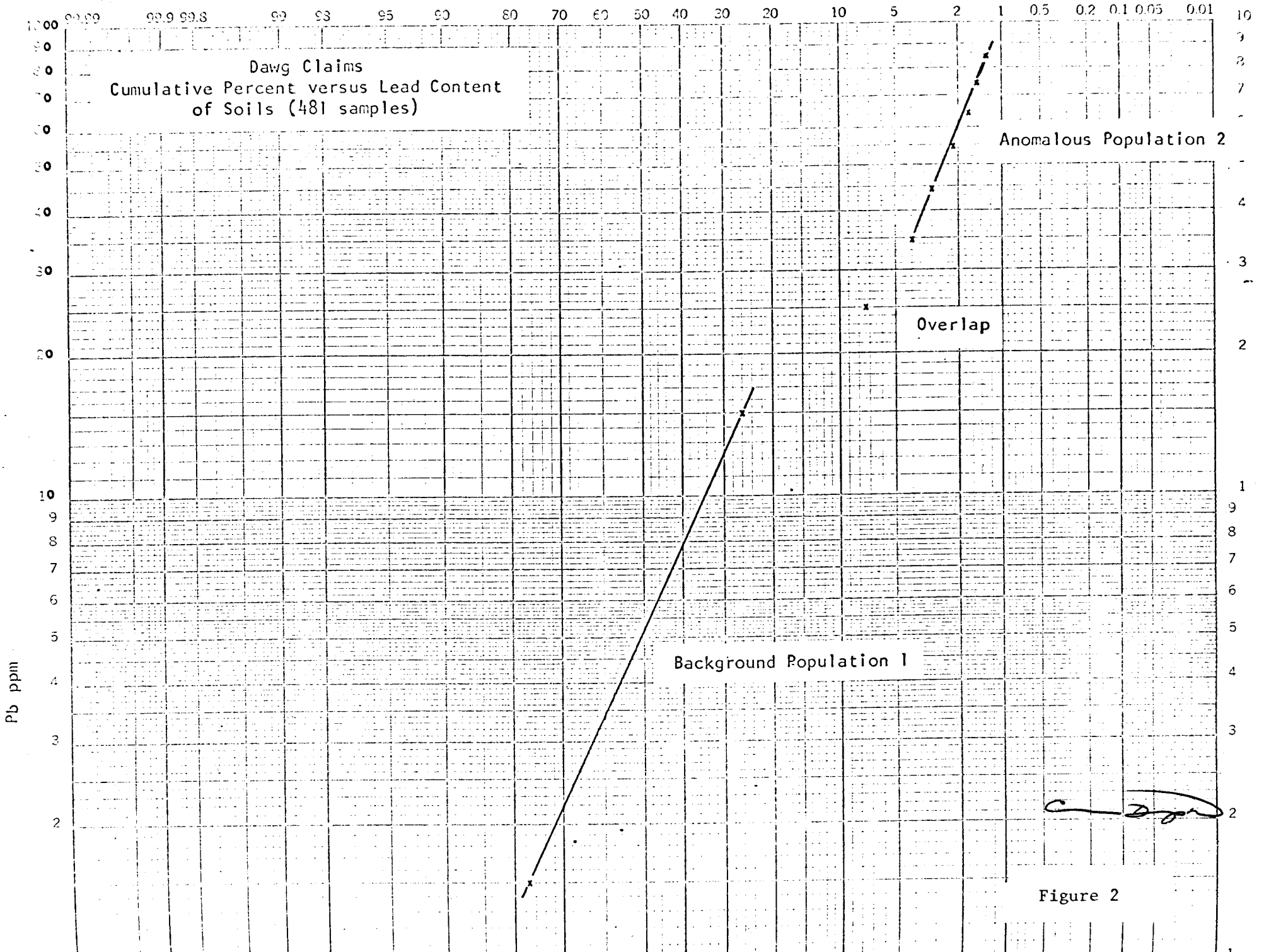


Figure 2

90-100 ppm Pb ranges are zones of overlap. The 30-90 ppm and +100 ppm Pb populations are interpreted to be possibly and definitely anomalous, respectively. Contouring of the lead results defines four small and several single sample spot high anomalies (Figure 3).

Anomaly 1: consists of three adjacent soil samples over a distance of 800 feet along one sample line in an area devoid of outcrop.

Anomaly 2: covers an east-west trending area of approximately 1500 feet by 500 feet, with veinlets all in the possibly anomalous category.

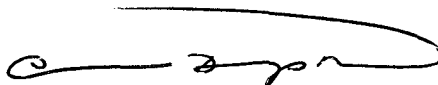
Anomaly 3: consists of two adjacent samples on two separate lines.

Anomaly 4: covers three adjacent samples on one sample line in the south-eastern part of the claims. All values are in the possibly anomalous category.

#### CONCLUSIONS AND RECOMMENDATIONS

- 1) A geochemical soil survey completed over the DAWG 1-48 claims outlined four small lead anomalies.
- 2) Fill-in soil sampling is recommended to better define and close-off these anomalies.
- 3) Geological mapping and prospecting is warranted in the anomalous areas to define or identify a source or explanation for these anomalies.
- 4) A 1 inch/1000 foot topographic base was constructed by Van Cal Reproductions for these recommended surveys.

Respectfully submitted,



C.V. Dyson, P.Eng.



- LEGEND**
- 12 Soil sample location with lead values in ppm
  - ◐ Values > 30 ppm < 90 ppm lead
  - ◑ Values > 100 ppm lead
  - Location of claim post
  - Outline of claims
  - ~ Stream

To accompany a report on a Geochemical Soil Survey on the DAWG 1-48 Mineral Claims, by Colin V. Dyson, P.Eng., dated April, 1977.

Figure 3

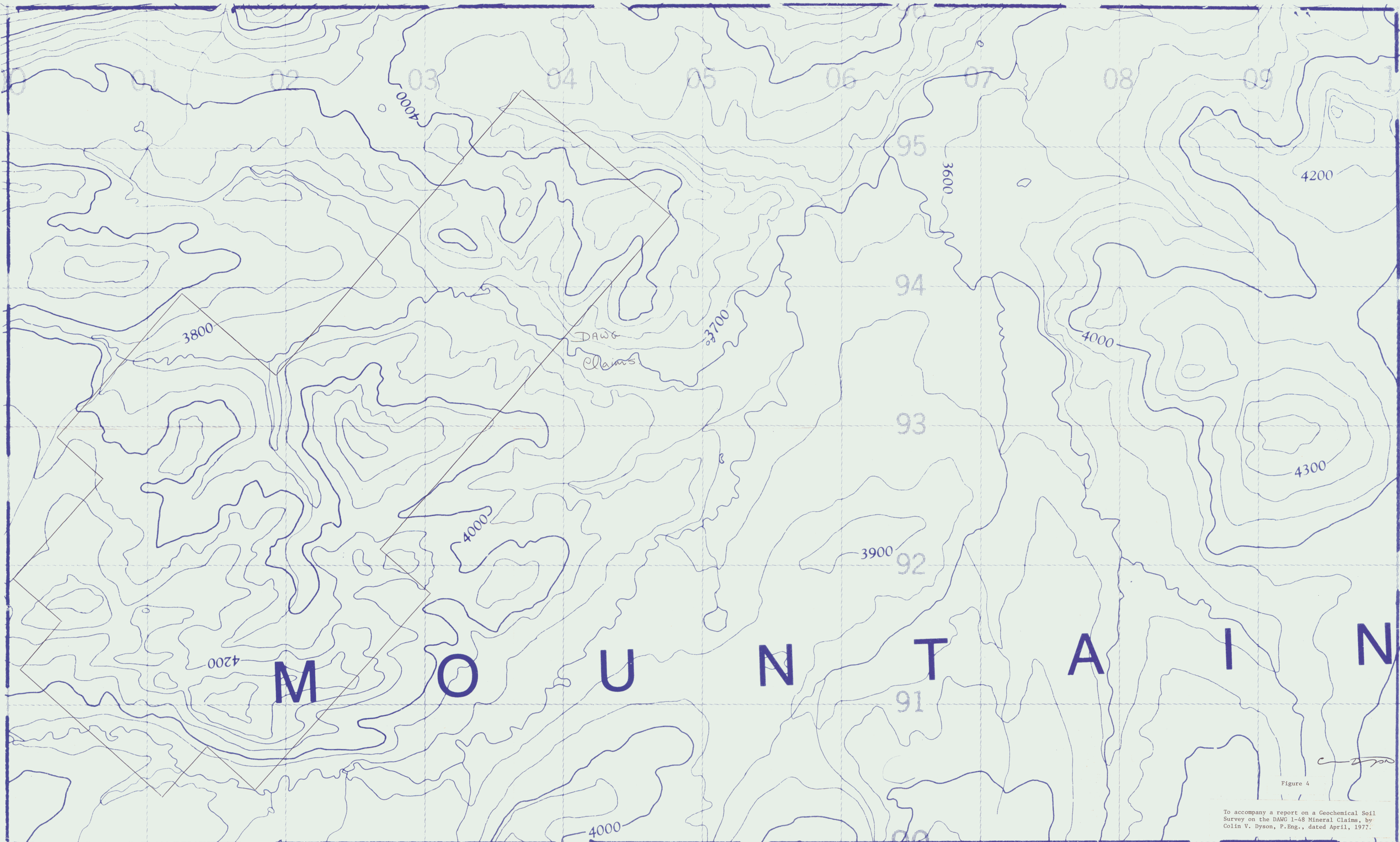
**BLACKSTONE PROJECT 1976**  
**DAWG CLAIMS**  
**GEOCHEMISTRY OF**  
**LEAD IN SOILS**

Scale: 0 500 1000 1500 2000 feet

UMEX CORPORATION LTD.

DRAWN BY: D.A.S.  
 DATE: OCT., 1976  
 SURVEYED BY: D.A.S.

DWG. No.



MOUNTAIN

DAWG  
Claims

C. Dyson

Figure 4  
To accompany a report on a Geochemical Soil  
Survey on the DAWG 1-48 Mineral Claims, by  
Colin V. Dyson, P.Eng., dated April, 1977.