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ASSESSMENT REPORT
GEOCHEMICAL SOIL SURVEY
ON THE
REIN 51-60 MINERAL CLAIMS
(Record Nos. YA6479-YA6488)
Claims grouped as:
(1) REIN 36, 38-40, 49-50, 51-60
(Record Nos. YA5760, YA5762-YA5764,
YA5773-YA5774, YA6479-YA6488)
in the
Mayo Mining District, Yukon
N.T.S. 116B/9
Latitude 64°43'N
Longitude 138°11'W

by
Colin V. Dyson, P.Eng.

Work Done: July 15 to July 17, 1977

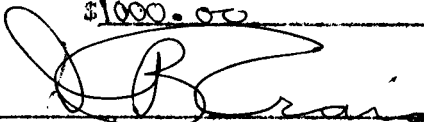
Date: September, 1977

Owner: Union Miniere Explorations and
Mining Corporation Limited

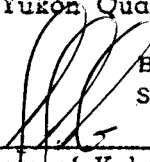
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


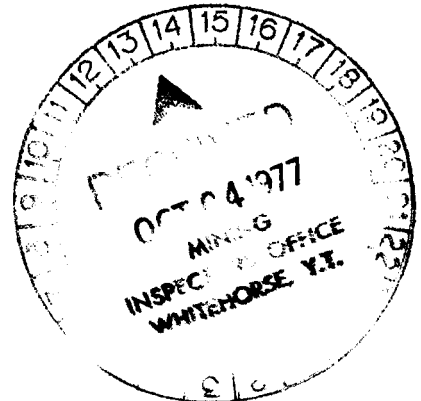
This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$1000.00


Resident Geologist or
~~Resident Mining Engineer~~

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


B. R. BAXTER
Supervising Mining Recorder


for Commissioner of Yukon Territory



Q90232

CONTENTS

	Page
INTRODUCTION	1
PROPERTY	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
APPENDIX I - STATEMENT OF COSTS	
APPENDIX II - STATEMENT OF PERSONNEL	

Figures

	following page
FIGURE 1 - Rein Claims, Location Map, 1/250,000	1
FIGURE 2 - Rein Claims, Geochemical Statistics of Lead in Soils	3
FIGURE 3 - Rein Claims, Lead Geochemistry, 1"=1000 ft.	in pocket

ASSESSMENT REPORT

GEOCHEMICAL SOIL SURVEY ON THE REIN 51-60 MINERAL CLAIMS

INTRODUCTION

During the period July 15 to July 17, 1977 a geochemical soil survey was completed on the REIN No. 1 group of mineral claims (which includes REIN 51-60 mineral claims) in the Mayo Mining District, Yukon. The claims are located approximately six miles south of Lomond Lake and five miles east of the Dempster Highway at latitude $64^{\circ}43'N$ and longitude $138^{\circ}11'W$ (Figure 1) and are accessible via helicopter. The geochemical soil survey was completed in the field by Mr. J. Reid, Mr. H. Holm, and Mr. L. Pettet under the supervision of Mr. C.V. Dyson, P.Eng. who was on the property on July 15, 1977 to organize the survey and to study the general claim geology and the soil development.

PROPERTY

Relevant details of the claim status is as follows:

Claim Name	Grant Numbers	Expiry Date
REIN 51-60	YA6479-YA6488	August 27, 1978

The claims are owned by Union Miniere Explorations and Mining Corporation Limited for whom the surveys were performed.

GENERAL GEOLOGY

The claims are entirely underlain by a thick, folded sequence of Middle Palaeozoic shales and argillites (G.S.C. Units 9 and 13)¹ which are described as consisting of Unit 9 Road River Formation (Ordovician and Silurian) inter-bedded black chert and black argillite, grey-green, olive green, and grey chert and grey-green argillite; minor quartzite, and chert-pebble conglomerate; and Unit 13 Middle Devonian to Carboniferous black shale, argillite, and slate, black platy limestone, chert; minor chert-pebble conglomerate and quartzite. The regional strike is east-west with medium-to-steep southerly dips. Regional east-west folding is predominant and expressed by a series of anticlinal and synclinal structures.

¹Geological Survey of Canada Map 1284A, Memoir 364, Green, 1972.

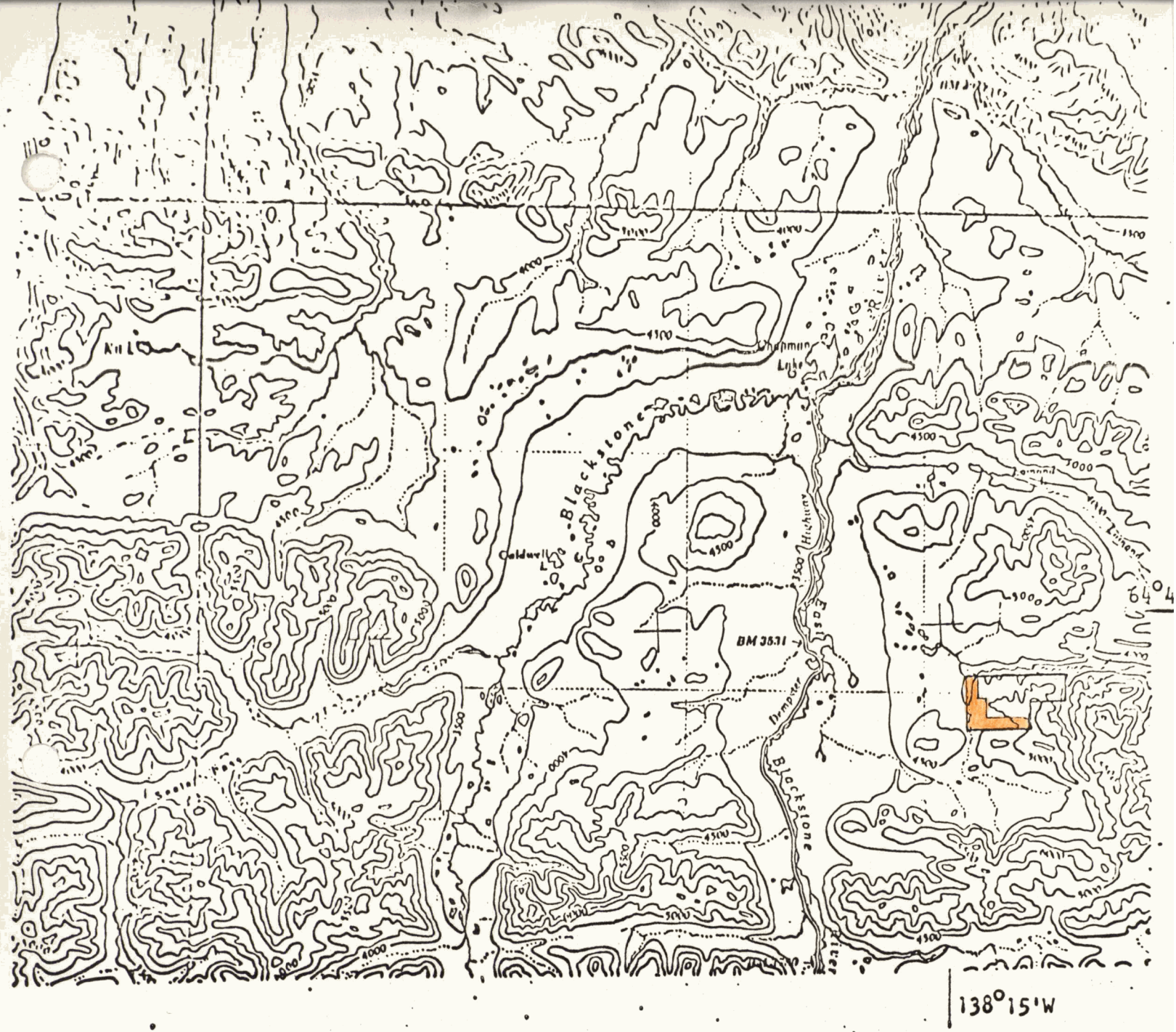
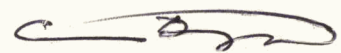


FIGURE 1

LOCATION MAP

REIN #1 GROUP OF MINERAL CLAIMS

1/250,000



The Ordovician to Silurian sediments (G.S.C. Unit 9) are mapped as over-thrust onto the Devonian to Carboniferous sediments (G.S.C. Unit 13).

GEOCHEMICAL SOIL SURVEY

Methods

A total of 114 soil samples were collected over 4.8 miles of line on the REIN No. 1 group of mineral claims and subsequently analysed for total lead. At each sample site a hole was dug with a mattock and 4-6 oz of "B" horizon soil, where available, was collected and placed in an appropriately labelled high wet-strength Kraft sample bag.

Grid Control

An east-west base line was established on the claims with north-south cross lines run at 500 foot spacings along the base line. 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 chain² 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 for analysis 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 for total lead by atomic absorption.

²The 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.

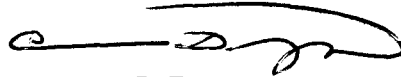
Results

Statistical analysis of the lead results (Figure 2) defines at least three populations of 5-20 ppm, 40-70 ppm, and +80 ppm lead, with the 20-40 ppm and 70-80 ppm lead ranges as zones of overlap. The 40-70 ppm and +80 ppm lead populations are interpreted to be possibly anomalous and anomalous populations, respectively. Contouring of the lead results (Figure 3) defines one main area of anomalous lead values along a single sample line (six adjacent samples) and several single and double sample "spot-high" anomalies.

CONCLUSIONS AND RECOMMENDATIONS

- (1) A geochemical soil survey completed on the REIN No. 1 group of mineral claims outlined one main and several very small areas of anomalous lead values.
- (2) Detailed geological mapping and prospecting is recommended in the anomalous areas to establish an explanation for the anomalous lead values.

Respectfully submitted,



C.V. Dyson, P.Eng.

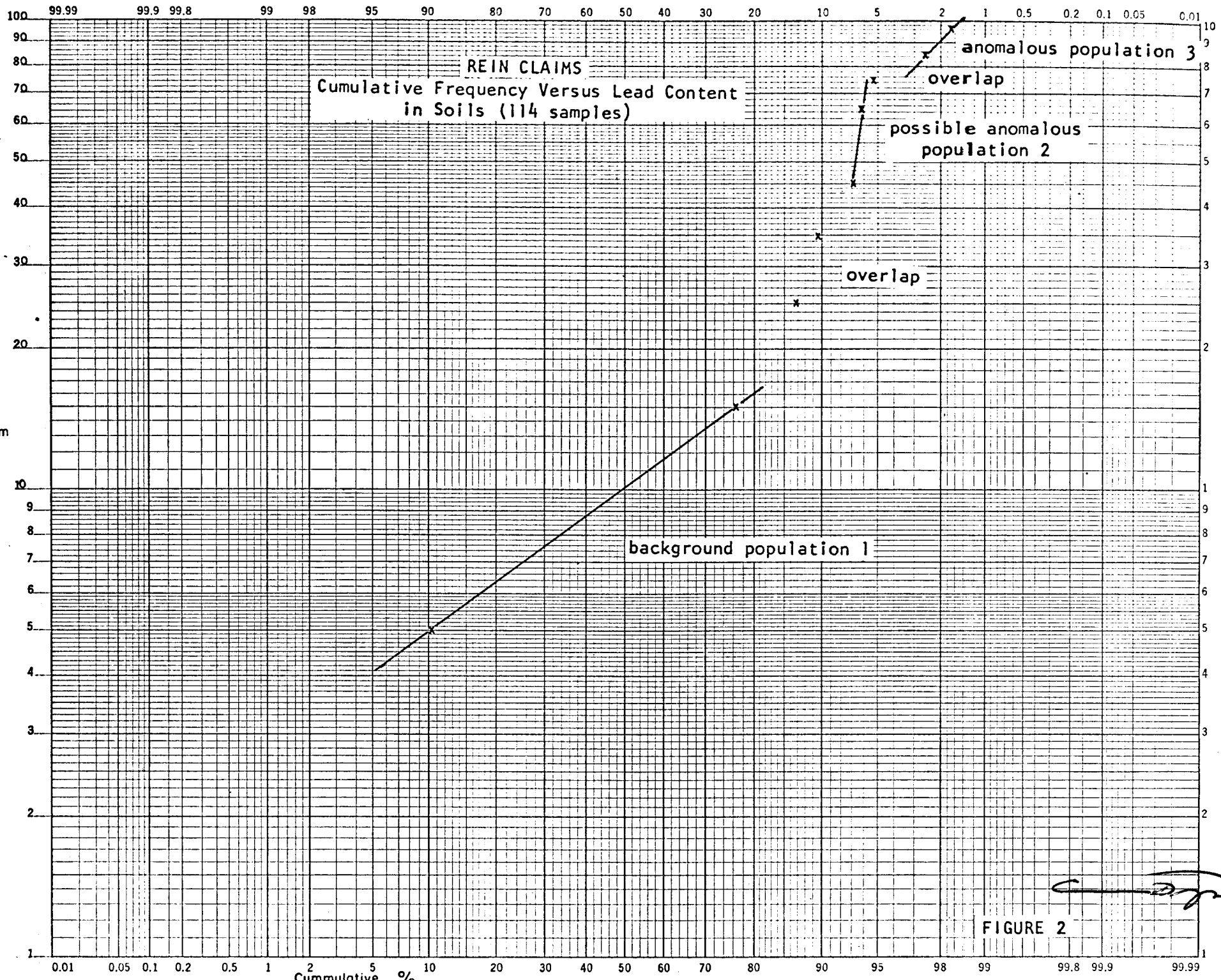
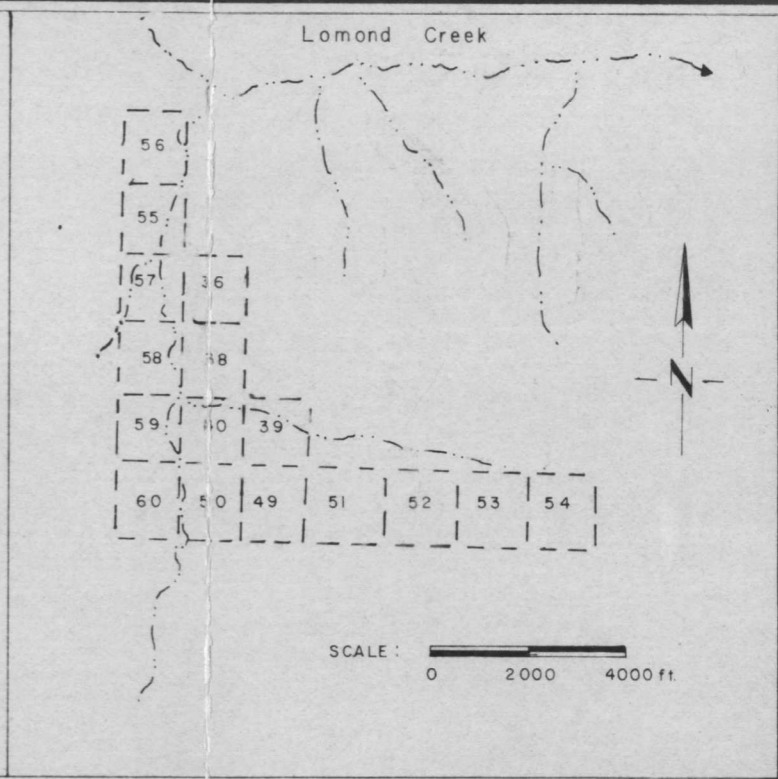
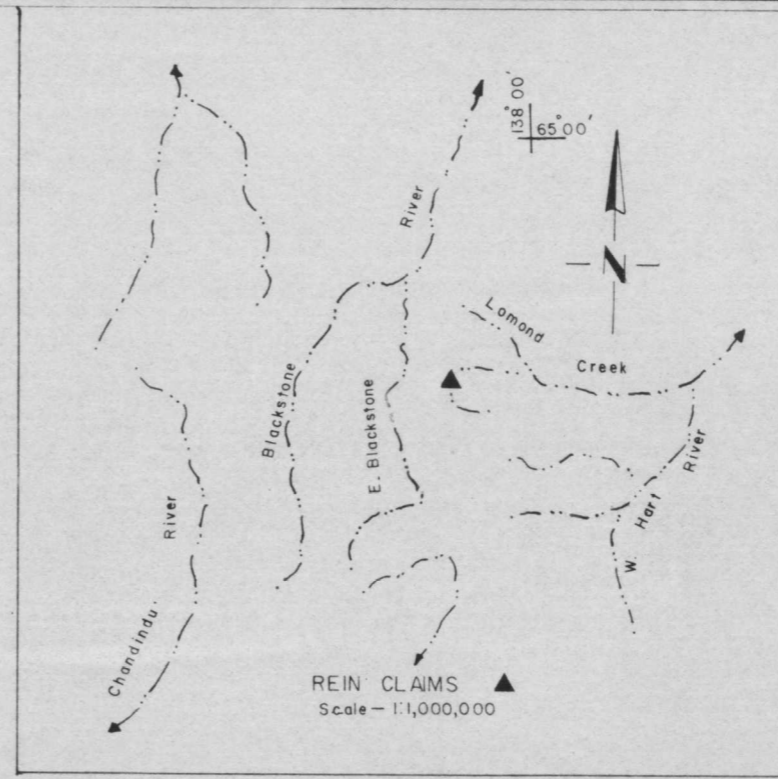
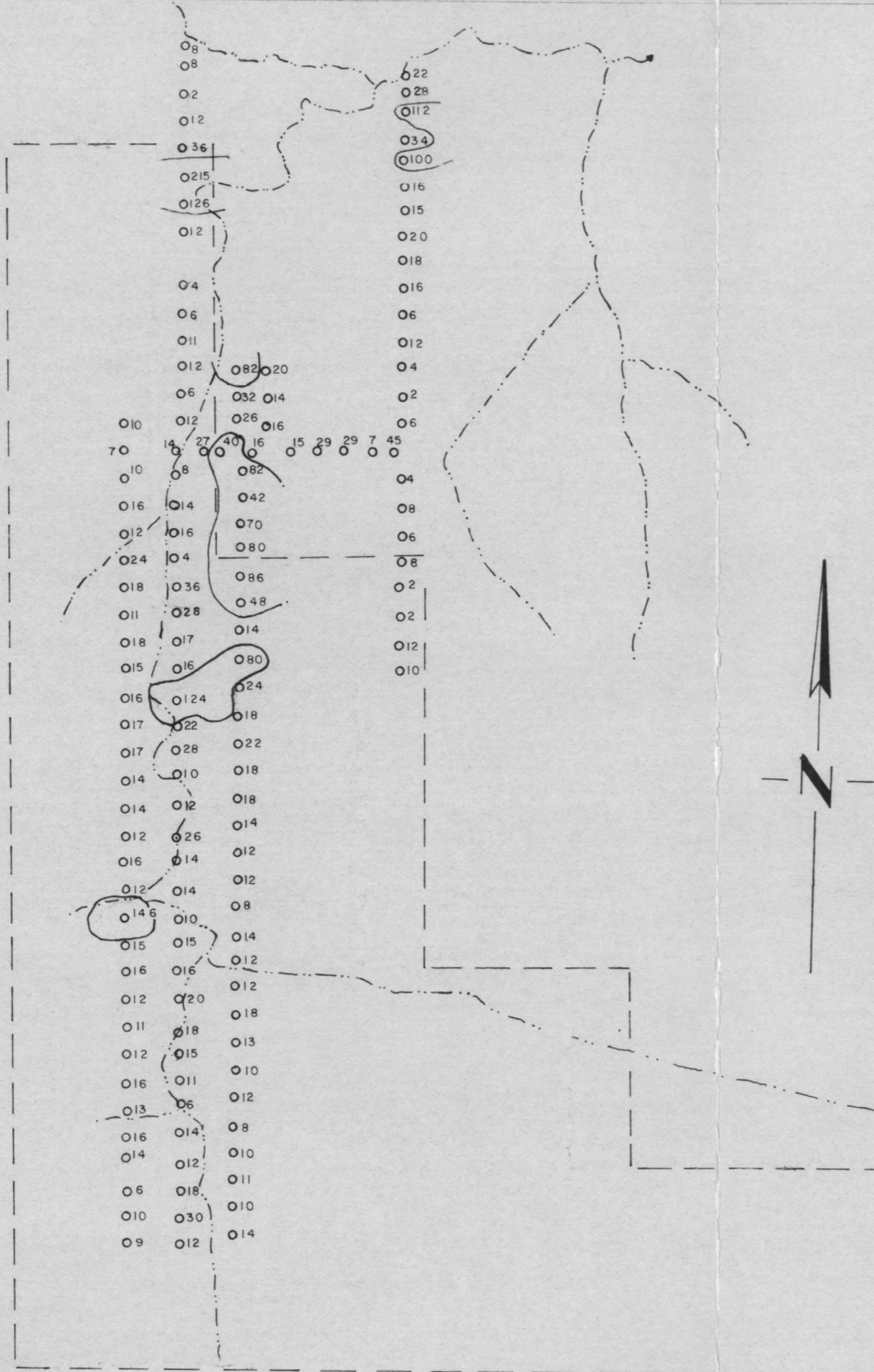


FIGURE 2



LEGEND

- 23 Sample locations and lead values in ppm
- 40 < ppm lead
- Streams
- Claim outline

[Handwritten signature]

Figure No 3

REIN CLAIMS
GEOCHEMISTRY OF
LEAD IN SOILS

Scale: 0 500 1000 ft.

UMEX CORPORATION LTD.

Drawn by H.H.
Date: SEPT. 77
Surveyed by: H.H., J.R., L.P.

DWG. No.

To accompany an Assessment Report on a Geochemical Soil Survey on the Rein 51-60 Mineral Claims in the Mayo Mining District Yukon, dated September, 1977 by Colin V. Dyson, P.Eng.