

3997

GEOCHEMICAL REPORT

on the

LIN CLAIM GROUP

KWANIKA CREEK, 93N/11W

OMINECA MINING DIVISION

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3997 MAP

by

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Vancouver, B.C.

December 1, 1972

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ILLUSTRATION

#   Plate I - Geology and Soil Sample Results	in pocket at back of report
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INTRODUCTION

The LIN claim group described in this report is situated north of Kwanika Creek approximately 13 miles north of Indata Lake.

The Kwanika Creek Mines Access road runs across the south portion of the property.

Plate I enclosed in the pocket in the back of this report indicates location of the property on a 1" = 4 mile inset map.

Geochemical results and outcrop areas are also shown on Plate I.

The claims for which one year's assessment work credits are requested are listed below:

<u>Claim Group</u>	<u>Claim Names</u>	<u>Record Numbers</u>	<u>Recording Date</u>
LIN	LIN 1	112285	June 9, 1972
	2	286	"
	3	287	"
	4	288	"
	5	289	"
	6	290	"
	40	113048	July 7, 1972
	50	111623	June 5, 1972
	51	624	"
	52	625	"
	53	626	"
	60	111631	"
	62	111633	"
	63	634	"
	64	635	"
	65	636	"
	66	637	"
	72	111643	"
LIN	1 Fr.	112360	June 23, 1972
LIN	2 Fr.	112361	"
LIN	3 Fr.	362	"

GEOCHEMICAL SURVEY

PURPOSE

The LIN group of claims was staked to cover part of the trend of a geological structure indicated on newly published aeromagnetic map 93N/11 "Kwanika".

Prospecting during the preceding year had located alaskite with molybdenum mineralization to the south and an outcrop of "alaskite granite" on what is now the north portion of the LIN group.

The Kwanika Creek valley is generally flat lying with few outcrops. Air photos indicate glaciation probably moved from west to east through the valley and the surface shows strong west to east trending swamp areas. Drainage is generally poor in a north to south direction with numerous very small streams scattered over the surface.

A geochemical survey was proposed as an initial exploration program to explore geologically favourable ground. It was expected groundwater movement would result in possible geochemical anomalies although these may be displaced some distance from their source.

METHOD

The claim location line running northwesterly through LIN 1-6, etc., was designated 100E and used as a base line for tape and compass lines for silt sampling.

Strong magnetic anomalies in the west portion of the claim group led to deviation of sample lines and these were later tied in by location of points on enlarged air photos.

Samples were dug using a grubhoe, and collected in kraft paper bags. These samples were then dried and sifted to -40 mesh at the base camp.

During this procedure, it became apparent that many samples had a high organic content. These sample sites were later re-sampled and some of the re-sample results are shown on Plate I.

During sampling a record was kept of general soil conditions.

The dried and sifted samples were submitted to Chemex Labs Ltd., North Vancouver, for determination of total copper and molybdenum content. Hot acid extraction was used with colorimetric determination of molybdenum and atomic absorption determination of copper.

RESULTS AND INTERPRETATION

Examination of the field notes indicates samples were taken at depths varying from 6" to 24". Considerable effort was made to reach a 'B' horizon but it is estimated 15% of the samples are from organic material in the 'A' horizon.

Results are plotted together with geological information on Plate I. Examination of these results indicates only one definitely anomalous area which is contoured at 20 ppm Mo. Several other less well-defined areas with molybdenum content in excess of about 3 ppm are indicated by shading.

Approximately 107 sample sites were re-sampled because of excess organic material or leached material in the original samples. Results of 44 of these are plotted. The average values for these 44 samples are:

	<u>Cu</u>	<u>Mo</u>
Original samples	35.5 ppm	6.8 ppm
Re-samples	36.6	5.9

Generally, no significant differences were found in results from the various types of material sampled.

On claim LIN-18, a soil sample in an outcrop area showing minor fracturing with chalcopyrite and molybdenum mineralization ran 48 ppm Cu and 21 ppm Mo. Other anomalous results indicated in the vicinity are very weak.

The molybdenum anomaly on LIN 3 and 4 lies partly in a swampy area. It may be due in part to transport and concentration of molybdenum ions. However, there are numerous similarly swampy areas

in this portion of the claim group and as they are not anomalous, despite scattered mineralized fractures found during mapping, it is probable a significantly better mineralized zone should be the source of this soil anomaly.

Other less well defined anomalous zones may be significant since overburden is extensive and possibly deep.

There are no significant copper anomalies.

Geological mapping on the claim group as well as in the surrounding region indicates, with the help of the aeromagnetic maps, that the west and northwest portion of the claim group is underlain by diorite. The more interesting central portion of the claim group is underlain by monzonite intruded by granite and alaskite.

#### CONCLUSIONS

The central area of the claim group is favourable for molybdenum mineralization in view of the rock types exposed, the association of molybdenum with these rock types on the BURN group to the south, and the outlining of a molybdenum soil anomaly.

The area should be further explored with a detailed magnetometer survey and an IP survey.

TABLE OF EXPENDITURES

GEOCHEMICAL SURVEY

L. Tsang	Geologist	June 1 - July 7	\$810.00
J. Ross	Soil sampler	June 1 - July 7	560.00
T. Gallagher	Soil sampler	June 1 - July 7	560.00
G.C. Stephen	Sample preparation	6 days @ \$10	60.00
J.C. Stephen	Supervision	4 days @ \$35	140.00
Camp supply allowance		121 man days @ \$4/day	484.00
Chemex Labs Ltd.			<u>955.00</u>

Total \$3,569.00

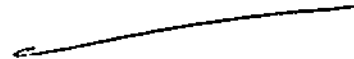
Declared before me at the City  
of Vancouver, in the  
Province of British Columbia, this 15  
day of December 1972, A.D.



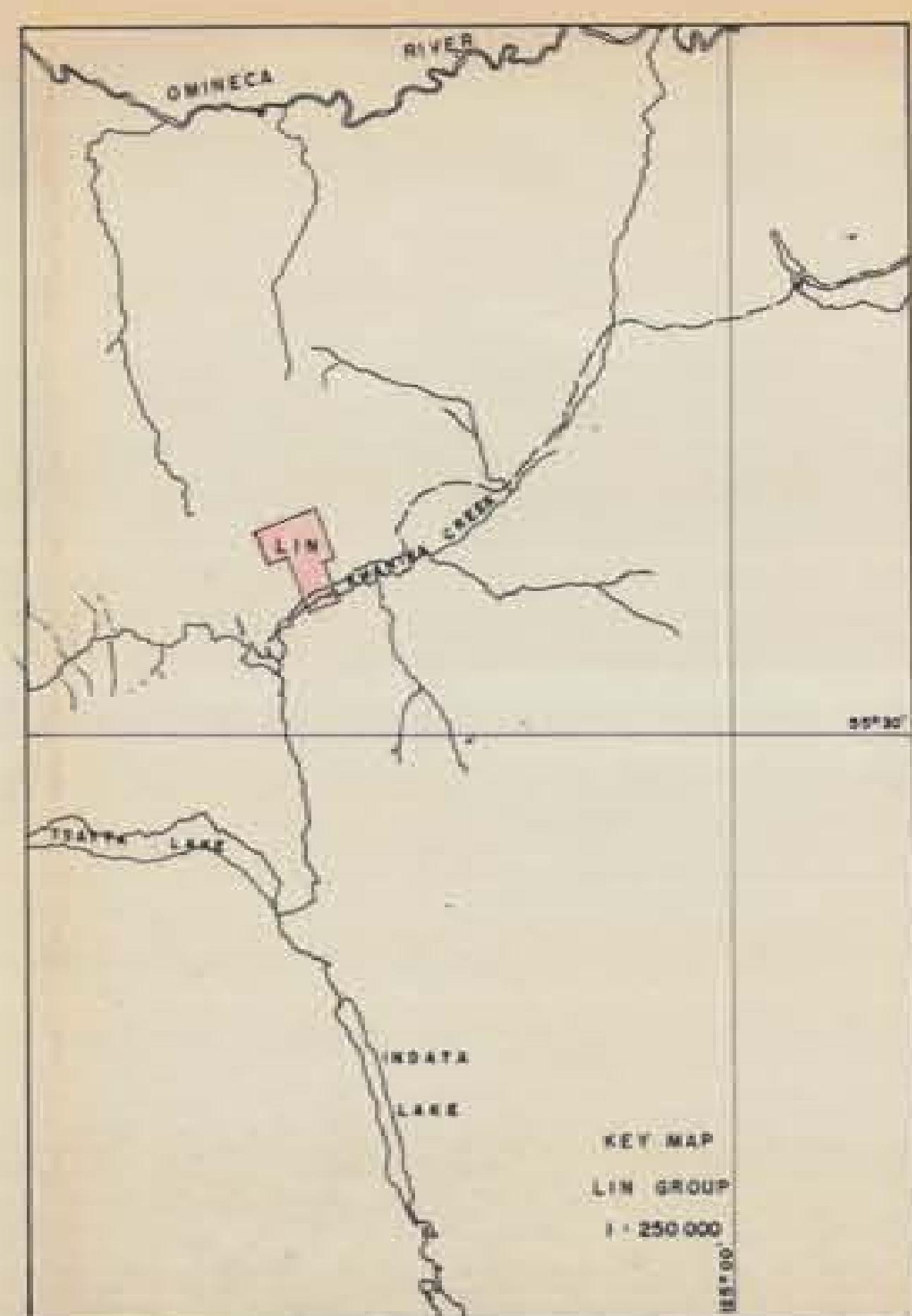
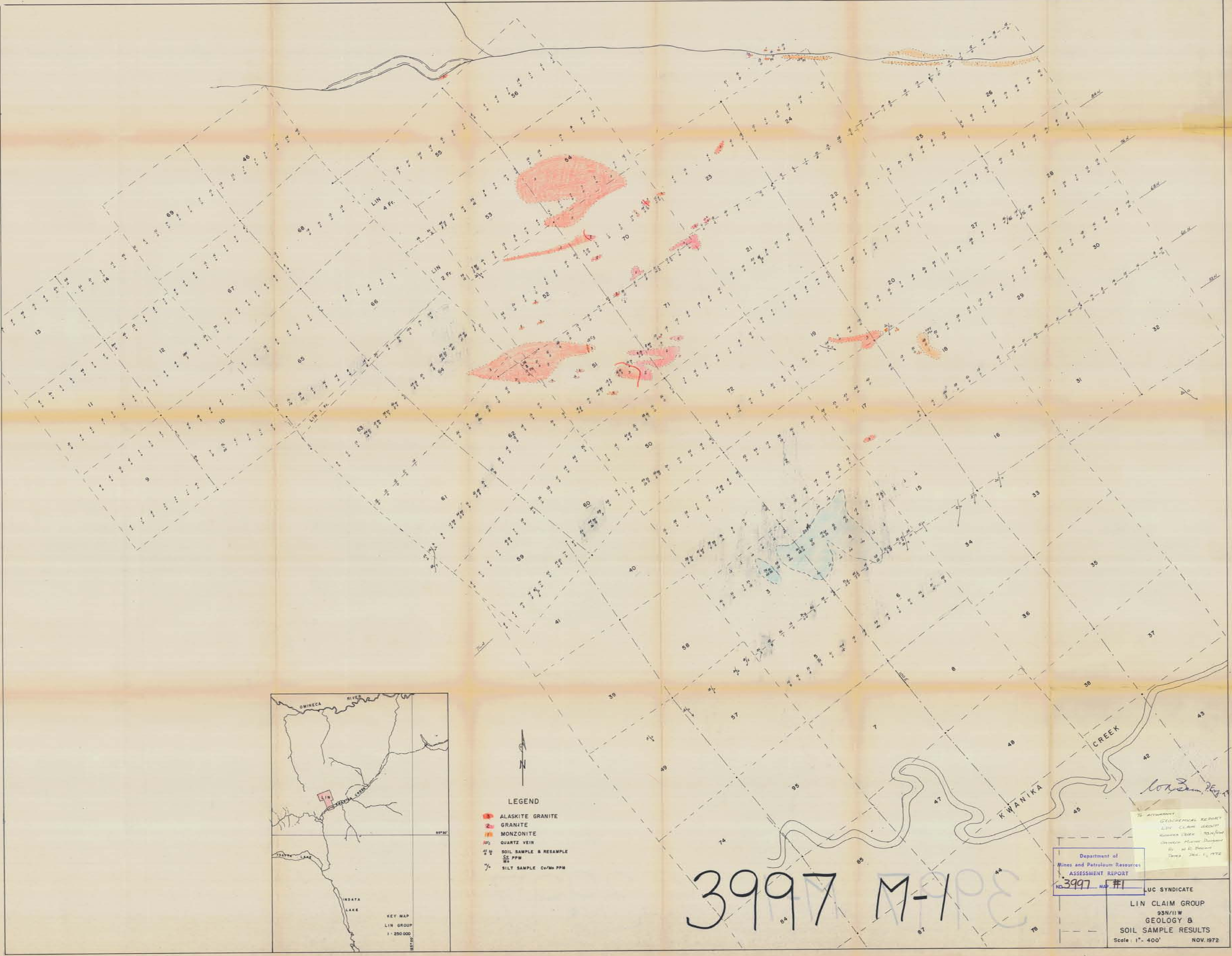
John Turner  
A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia.

W.R. Bacon, Ph.D, P.Eng.

Sub-mining Recorder







LEGEND

- ALASKITE GRANITE
- GRANITE
- MONZONITE
- QUARTZ VEIN
- SOIL SAMPLE & RESAMPLE
- SO PPM
- NO
- SILT SAMPLE Cu/Mo PPM

3997 M-1

*London*

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3997 MAP #1

LUC SYNDICATE  
LIN CLAIM GROUP  
93N/11W  
GEOLOGY &  
SOIL SAMPLE RESULTS  
Scale: 1" = 400' NOV. 1972