

LEMON CREEK (TRY AGAIN)

2170

LEMON CREEK PROSPECT  
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Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. 2170 MAP .....

GEOCHEMICAL REPORT, LEMON CREEK PROSPECT  
TLR CLAIM GROUP

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(TLR #1 through TLR #28)

KOKAMEE PEAK  
11 Miles N.N.W. of Nelson, B. C.  
49° 117° S.E.

By: Pentti Lassila

HUDSON'S BAY OIL AND GAS COMPANY LIMITED

June 11 to July 23, 1969

INTRODUCTION

During the period June 11 to July 23, 1969, a combined geochemical and scintillometer survey was conducted in the Lemon Creek Area. Although no geological mapping was done, the geology was observed and significant changes in lithology and structure were noted.

Thirty days of the above period were spent working on the 28 claim TLR group (Map A).

PROPERTY

Ownership

The TLR claim group (TLR #1 through TLR #28) is owned by Hudson's Bay Oil and Gas Company Limited, 320 - Seventh Avenue S.W., Calgary 2, Alberta.

Location

The claims are situated in the Slocan Mining Division on the south side of Lemon Creek, about eleven air miles N.N.W. of Nelson, B.C.

ACCESS AND TOPOGRAPHY

Access is by logging roads. The upper elevations may be reached by helicopter.

The topography is of a steep mountain type with 25° to 40° slopes. Most of the area has good timber cover. Overburden is shallow and commonly contains much talus material.

### GEOLOGY

The geology in the claim group consists mainly of a rather uniform medium to coarse grained granite. The medium grain granite tends to be biotiferous and more mafic than the coarser quartz and K-feldspar rich rock which in some areas approaches a porphyritic texture. Very little structure, outside of a few small andesitic dikes, was observed.

In the upper elevations, particularly on the cirque ridge south of the upper limits of Cirque Creek, large inclusions or xenoliths of what appear to be metamorphosed volcanics were observed in the granite. These appear to be mainly well banded quartz biotite oligoclase gneisses which may have formed by metamorphism of aplite or granite. Some contain what appear to be post-metamorphic porphyroblasts of hornblende(?).

No mineralization, outside of some minor disseminated pyrite was observed.\*

### GEOCHEMISTRY

The pertinent facts concerning the geochemical aspects of the survey in the area are given in listed form below:

#### Survey Method

Samples were collected at 300 foot or less intervals along 200 foot contours using pacing, aerial photographs, and a Thommen pocket altimeter for location control.

#### Method of Sampling

- 1) Soil samples were taken from the B<sub>2</sub> horizon where available. Some additional samples were taken from the humic (O<sub>2</sub>) horizon as well as a few from the leached (A<sub>2</sub>) horizon.

\* For further information the reader is referred to the G.S.C. Memoir 308, Nelson Map-Area, West Half, B.C. (82 F W 1/2), 1960.

- 2) Holes were dug with a maddock and the soil removed by hand from the desired horizon and placed into a standard 3 1/2" x 7/8" heavy kraft paper sample bag.
- 3) Stream sediments were collected as "grab samples" from the silt and sand size fraction.
- 4) Data recorded: location, sample depth, soil type, soil horizon, date and sampler name. On most samples a brief description of the soil horizons and other pertinent data relating to the geochemical environment was also noted.
- 5) Samples were dried in the original bags on racks in a heated tent.

#### Sample Analysis

- 1) Done by Bondar-Clegg & Company Limited, 1481 Michael Street, Ottawa 8, Ontario

- 2) Analysed for U, Pb, Cu and Mo as follows:

Extraction: U —  $\text{HNO}_3$   
Mo — K-pyrosulfate fusion HCl leach  
Cu, Pb —  $\text{HNO}_3$

Method: U — Fluorometric  
Mo — Colorimetric  
Pb, Cu — Atomic absorption

Fraction used: under 80 mesh

#### Results and Conclusions

The analysis values for U, Pb and Cu in the B<sub>2</sub> horizon are plotted as ppm. on Map No. 1. The values for U, Pb and Cu in the humic horizon, stream sediments, and mixed stream and soil sediments are plotted on Map No. 2. The Mo values were very low and did not warrant plotting.

Although occasional anomalous U, Pb and Cu values were recorded, no significant anomalies were found.

GEOPHYSICS

McPhar TV-5 and McPhar TV-J scintillometers were used. Readings at the U + Th threshold with 2π geometry were taken at each sample site. The resulting values are plotted on Map No. 3.

No significant radioactive anomalies were located.

STATEMENT OF COSTS

A detailed statement of the cost for the work done on the TLR claim group follows:

1) Wages:		
P. Lassila, Party Chief, \$30/day	\$900.00	
A. Johnson, Geologist, \$20/day	\$600.00	
F. Baker, Assistant, \$14/day	\$420.00	
W. Simpson, Assistant, \$14/day	\$420.00	
30 days total wages	\$2,340.00	\$2,340.00
2) Sample analysis: 724 samples at \$4.70 per sample		\$3,402.80
3) Rental and operating costs of Wagoneer Jeep for 30 days		\$ 578.57
4) Helicopter costs at \$160 per hour		\$ 775.83
5) Food and lodging for 30 days		\$ 350.00
6) Photo enlargements		\$ 28.60
	Total	<u>\$7,475.80</u>

RECOMMENDATIONS

No further work is recommended.

November 13, 1969

P. Lassila  
P. Lassila

CERTIFICATE

November 13, 1969

I, Pentti Lassila, of Calgary, Alberta, Canada do hereby certify that:

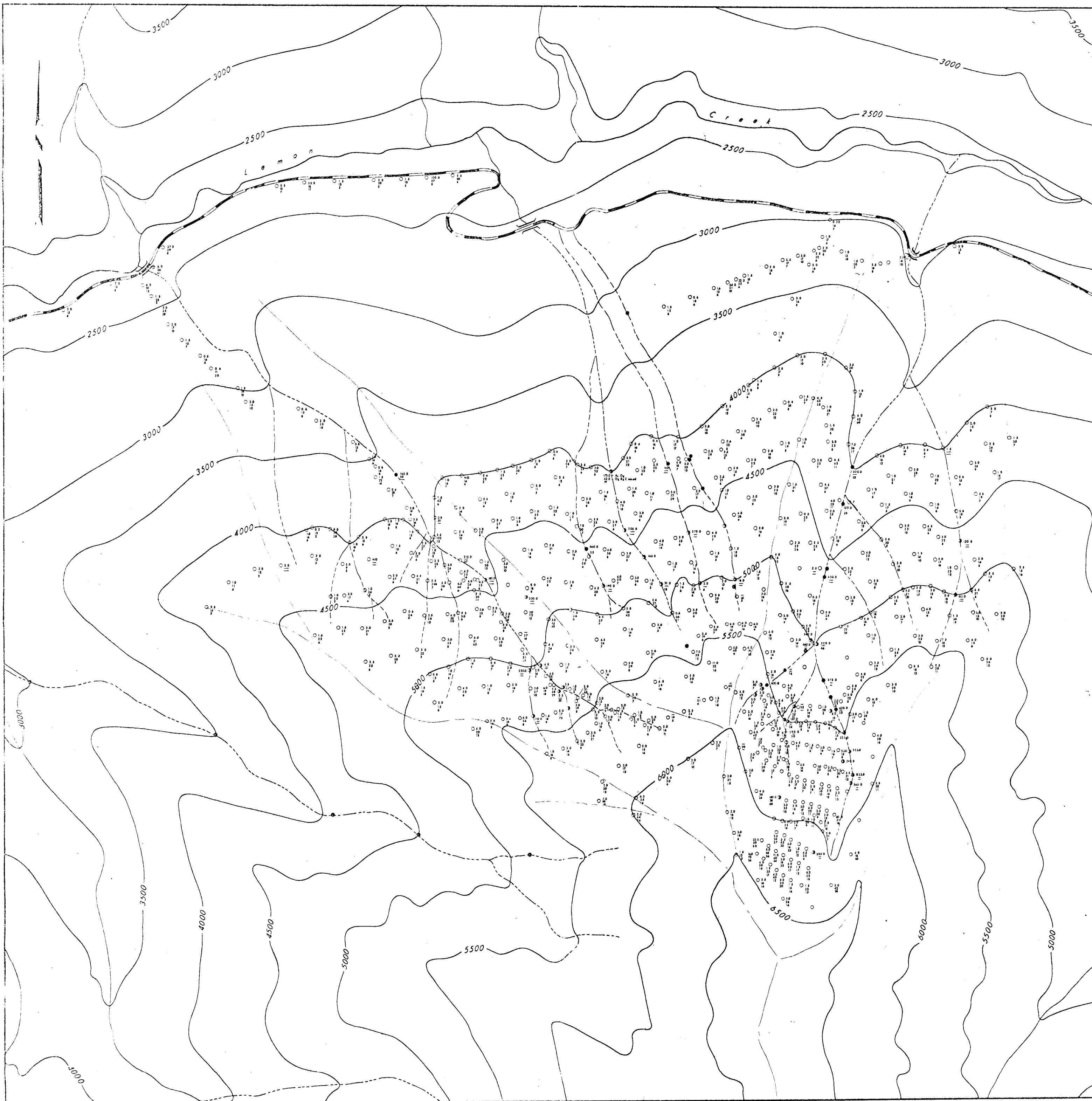
- 1) I am an Exploration Geologist presently employed by Hudson's Bay Oil and Gas Company Limited.
- 2) I am a graduate of the University of North Dakota, U.S.A. (B.Sc. January, 1968).
- 3) I am at present completing my thesis for a M.Sc. Degree (University of North Dakota).
- 4) I have worked in geological exploration in Ontario and British Columbia from 1959 to the present date (in summers only from 1963 through 1968).
- 5) I have personally conducted the survey described in this report.

Respectfully submitted,

*P. Lassila*

P. Lassila





**LEGEND**

- Soil
- Mined Soil and Stream
- Stream

Topographic Contour Interval = 500 Ft

- 23.0 — ppm U<sub>3</sub>O<sub>8</sub>
- 50 — ppm Pb
- 50 — ppm Cu

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2170 MAP #2

**CAUTION**  
**50%**  
**OF ORIGINAL SIZE**

To accompany Geochanical Report by  
P. Lassila, on TLR #1 through TLR #23  
claim group, Lemon Creek, Slocan  
Mining Division, dated Nov. 13/69

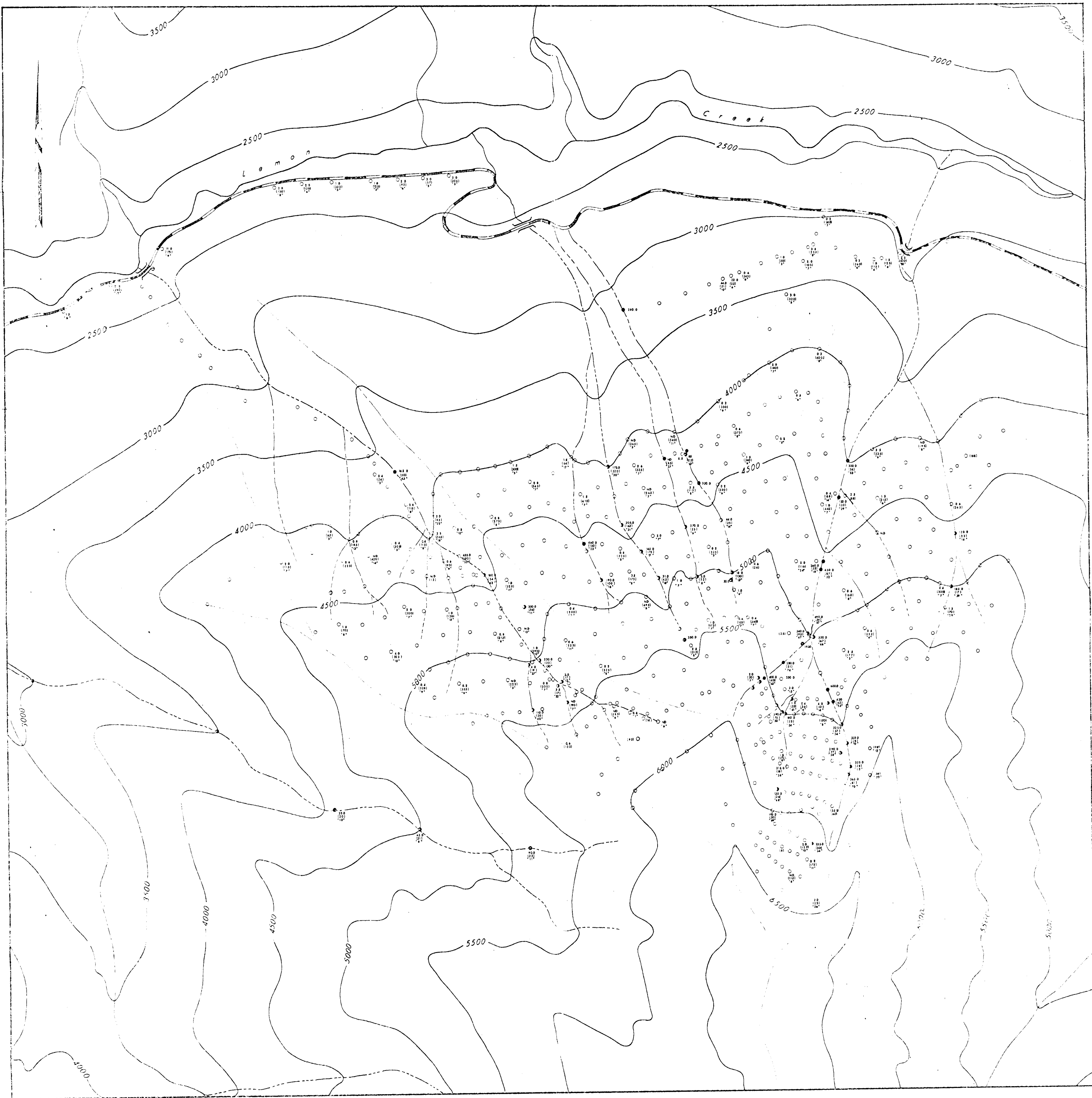
Hudson's Bay Oil and Gas Company Limited  
MINERALS EXPLORATION

LEMON CREEK PROJECT  
WEST LEMON CREEK  
GEOCHEMICAL PLAN MAP  
U., Pb AND Cu VALUES  
IN THE B<sub>2</sub> HORIZON

MAP 1 DATE  
NOVEMBER, 1969 PLASSILA

*P. Lassila*





**LEGEND**

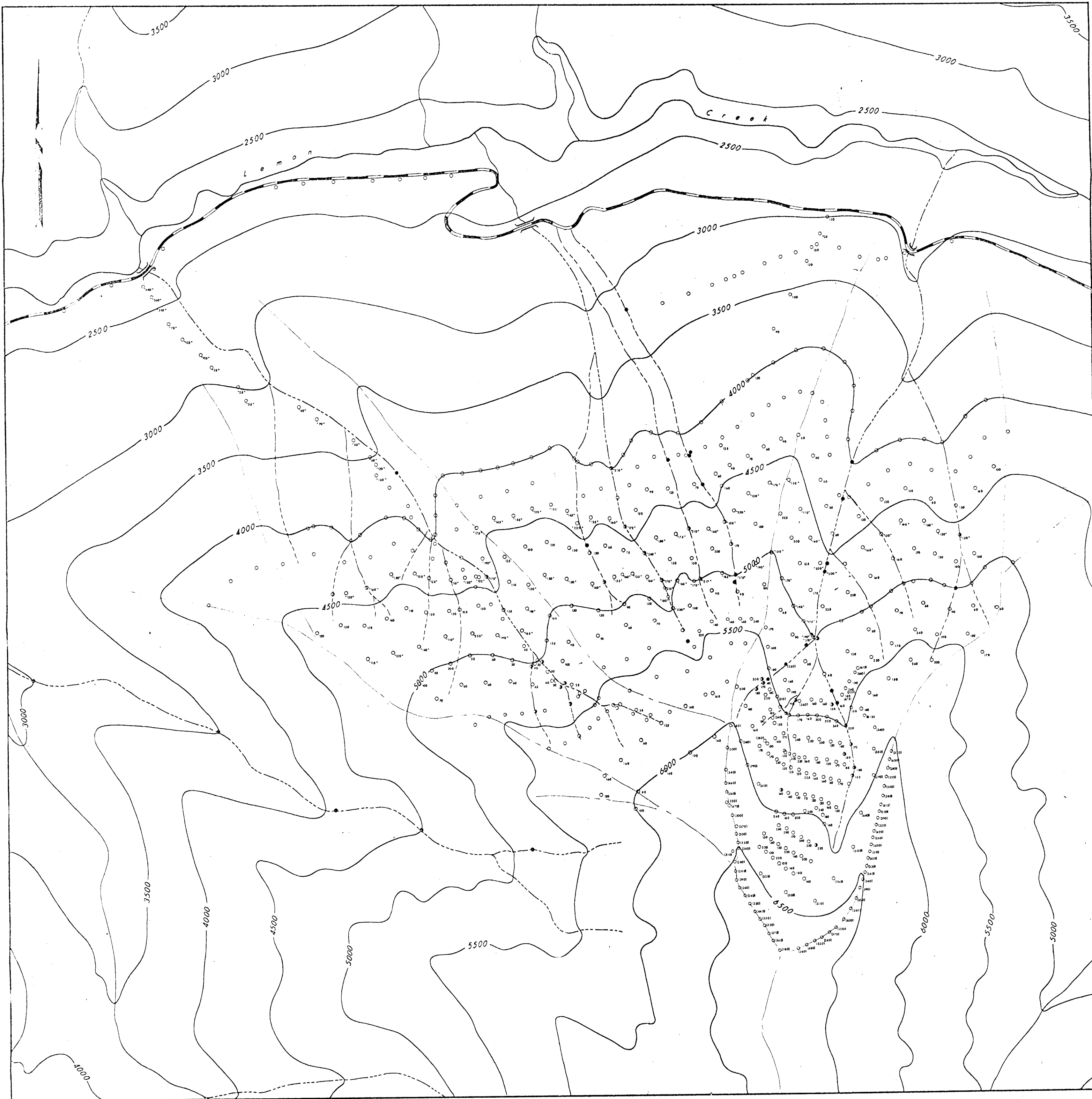
- 25
  - 100
  - 1000
  - 10000
  - Unnumbered
- Topographic Contour Interval = 500 ft
- 100 — ppm U<sub>3</sub>O<sub>8</sub>  
 (40) — ppm Pb  
 \*30\* — ppm Cu
- Unnumbered — only by Harrison Tolson

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 2170 MAP #3

**CAUTION**  
 50%  
 OF ORIGINAL SIZE

To accompany Geochemical Report by  
 P. Lassila, on TMR #1 through TMR #28  
 claim group, Lemon Creek, Sitkan  
 Mining Division, dated Nov. 13/69

Hudson's Bay Oil and Gas Company Limited  
 LEMON CREEK PROJECT  
 WEST LEMON CREEK  
 GEOCHEMICAL PLAN MAP  
 U, Pb & Cu VALUES IN THE HUMIC HORIZON,  
 MIXED STREAM & SOIL, & STREAM SEDIMENTS  
*P. Lassila*  
 MAP 2 DATE: NOVEMBER, 1969 P. LASSILA



**LEGEND**

- Soil
- Mixed Soil and Stream
- Stream

Topographic Contour Interval - 500 ft

- 1200 — T.V.S., Serial No. 569-01
- 1300 — T.V.S., Serial No. 569-11
- 118 — T.V.I.

○ Unnumbered — No. Scintillometer Reading Taken

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2170 MAP #4

**CAUTION**  
**50%**  
**OF ORIGINAL SIZE**

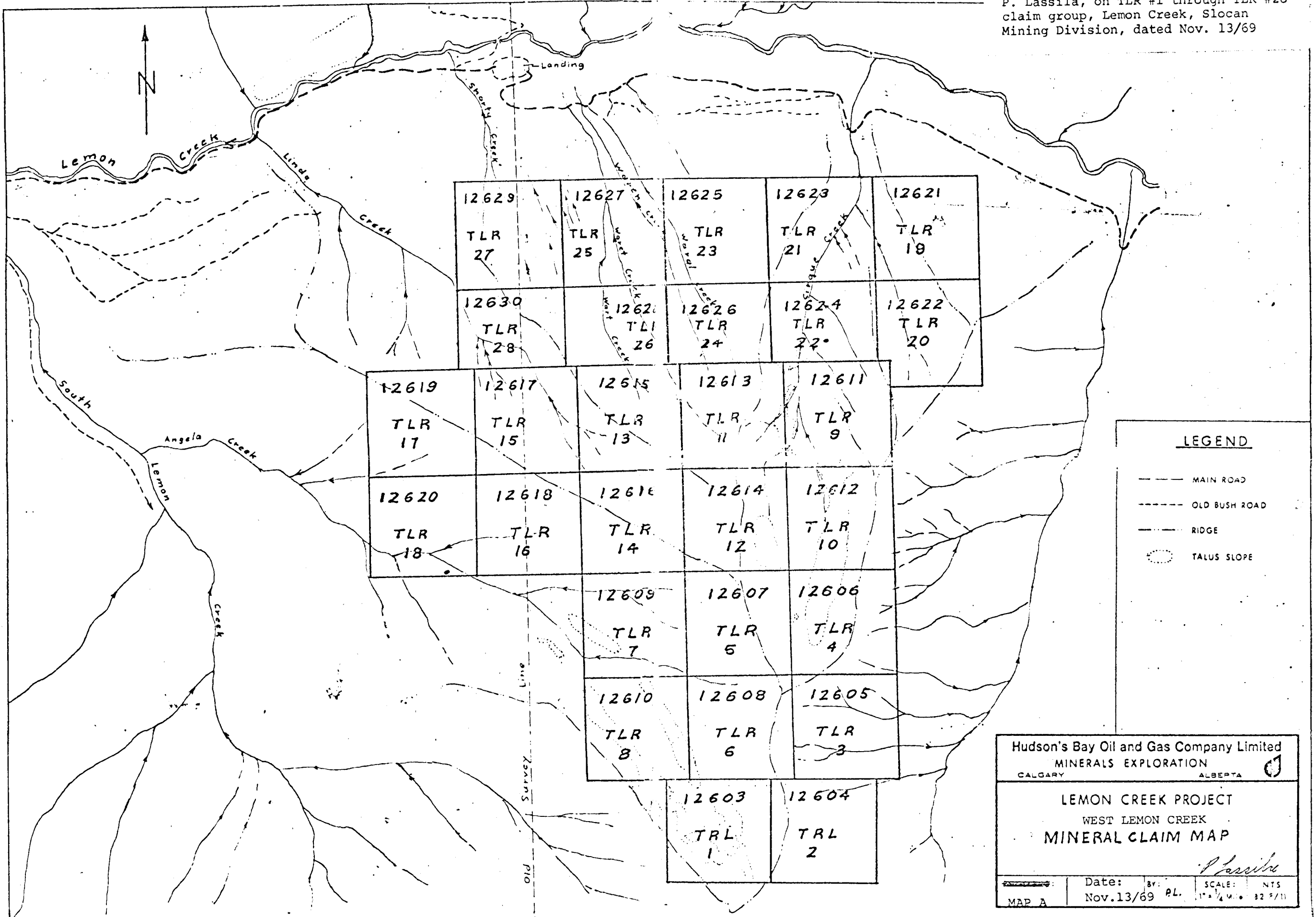
To accompany Geochemical Report by  
P. Lassila, on TLR #1 through TLR #28  
claim group, Lemon Creek, Slovan  
Mining Division, dated Nov. 13/69

Hudson's Bay Oil and Gas Company Limited  
MINERALS EXPLORATION

LEMON CREEK PROJECT  
WEST LEMON CREEK  
GEOCHEMICAL PLAN MAP  
SCINTILLOMETER READINGS  
AT THE SAMPLE SITES

MAP 3 DATE: NOVEMBER, 1969 P. LASSILA

To accompany Geochemical Report by  
 P. Lassila, on TLR #1 through TLR #28  
 claim group, Lemon Creek, Slocan  
 Mining Division, dated Nov. 13/69



Hudson's Bay Oil and Gas Company Limited  
 MINERALS EXPLORATION  
 CALGARY ALBERTA

**LEMON CREEK PROJECT**  
 WEST LEMON CREEK  
 MINERAL CLAIM MAP

*P. Lassila*

Date: Nov. 13/69 By: PL. SCALE: NTS 1" = 1/4 M. 32 5/11

MAP A

COPY 100%