

GEOCHEMICAL REPORT, LEMON CREEK  
CLAIMS VALERIE FR. & TLR # 30 THRU #38  
49° 117° S.E. KOKANEE PEAK  
10 Miles North of Nelson, B.C.  
By: Pentti Lassila  
HUDSON'S BAY OIL AND GAS COMPANY LIMITED  
June 11 to July 23, 1969

2171

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LEMON CREEK PROSPECT  
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<p><b>Department of</b> <b>Mines and Petroleum Resources</b> <b>ASSESSMENT REPORT</b></p> <p>NO. <u>2171</u> MAP .....</p>
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GEOCHEMICAL REPORT, LEMON CREEK PROSPECT  
CLAIMS VALERIE FR AND TLR #30 THROUGH TLR #38

KOKANEE PEAK  
10 Miles North 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

A total of twelve days were spent by a crew of four on a scintillometer and geochemical survey in the near vicinity and on the nine TLR claims and one Valerie FR claim group (Map A). About seven days of this work was done on and in the immediate vicinity of the claim group.

No geology was mapped.

PROPERTY

Ownership

The nine claim TLR (TLR #30 through TLR 38) and one claim Valerie FR group is owned by Hudson's Bay Oil and Gas Company Limited, 320 - Seventh Avenue S.W., Calgary 2, Alberta.

Location

The claims are located on the Slocan and Nelson Mining Division boundary about ten miles north of Nelson, B.C., on the east side of the northern tip of Duhamel Creek (Map A).

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 on the slopes is shallow and commonly contains much talus material.

GEOLOGY

The geology was not mapped. The reader is referred to the G.S.C. Memoir 308, Nelson Map-Area, West Half (82 F W 1/2), 1960.

GEOCHEMISTRY

The pertinent facts concerning the geochemical aspects of the surveyed area are given below:

Survey Method

Stream and soil sediment samples were collected on traverses using pacing, aerial photographs and a Thommen pocket altimeter for location control (see Maps 1, 2 and 3).

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.
- 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 9 1/2" 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 — HNO<sub>3</sub>  
Mo — K-pyrosulfate fusion HCl leach  
Cu, Pb — HNO<sub>3</sub>

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

Fraction used: under 80 mesh

#### Results and Conclusions

The analysis values for U are plotted as ppm. on Map No. 1, for Pb on Map No. 2, and for Cu on Map No. 3. The Mo values were very low and did not warrant plotting.

A number of anomalous uranium values were noted in the humic stream sediments but none in the B<sub>2</sub> horizon of the soils and therefore the higher uranium values were not considered a significant indication of uranium concentration.

No significant Pb or Cu anomalies were discovered.

#### GEOPHYSICS

McPhar TV-5 and TV-1 scintillometers were used. Readings at the U + Th threshold with 2  $\pi$  geometry were taken at each sample site. The resulting values are plotted on Map No. 4.

No significant radioactive anomalies were located.

#### STATEMENT OF COSTS

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

1) Wages:			
	P. Lassila, Party Chief, \$30/day	\$210.00	
	A. Johnson, Geologist, \$20/day	140.00	
	F. Baker, Assistant, \$14/day	98.00	
	W. Simpson, Assistant, \$14/day	98.00	
	7 days total wages	<u>\$546.00</u>	\$ 546.00
2) Sample analysis:	90 samples at \$4.70		
	per sample		\$ 423.00
3) Rental and operating costs of Wagoneer			
	Jeep for 7 days		\$ 135.00
4) Helicopter costs at \$160 per hour			\$ 280.00
5) Food and lodging for 7 days			\$ 82.00
6) Photo enlargements			<u>\$ 28.60</u>
		Total	<u>\$1,494.60</u>

RECOMMENDATIONS

No further work is recommended.

November 13, 1969

P. Lassila  
P. Lassila

CERTIFICATE

November 13, 1969

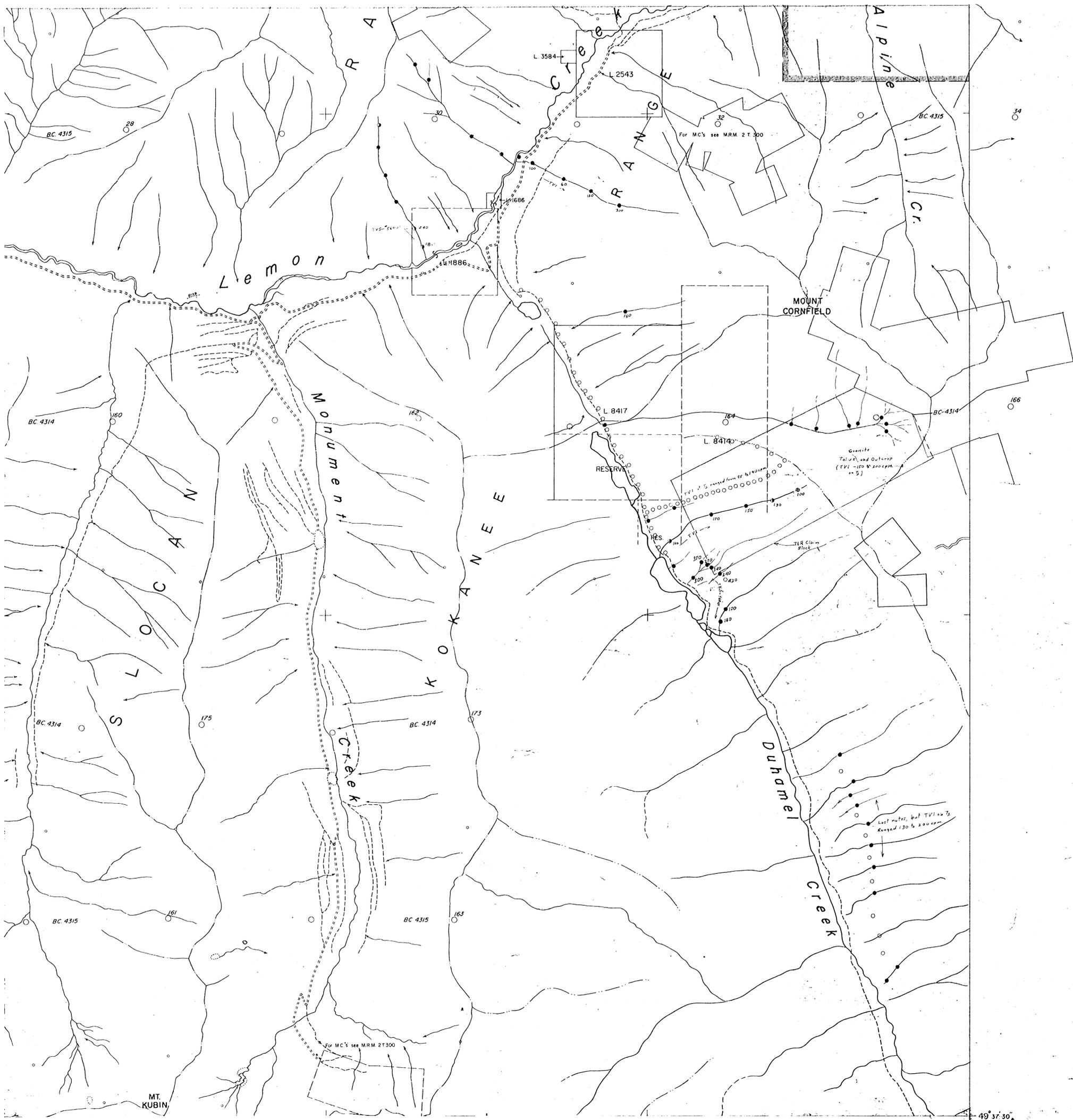
I, Pentti Lassila, of Calgary, Alberta, Canada do hereby certify that:

- 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



**LEGEND**

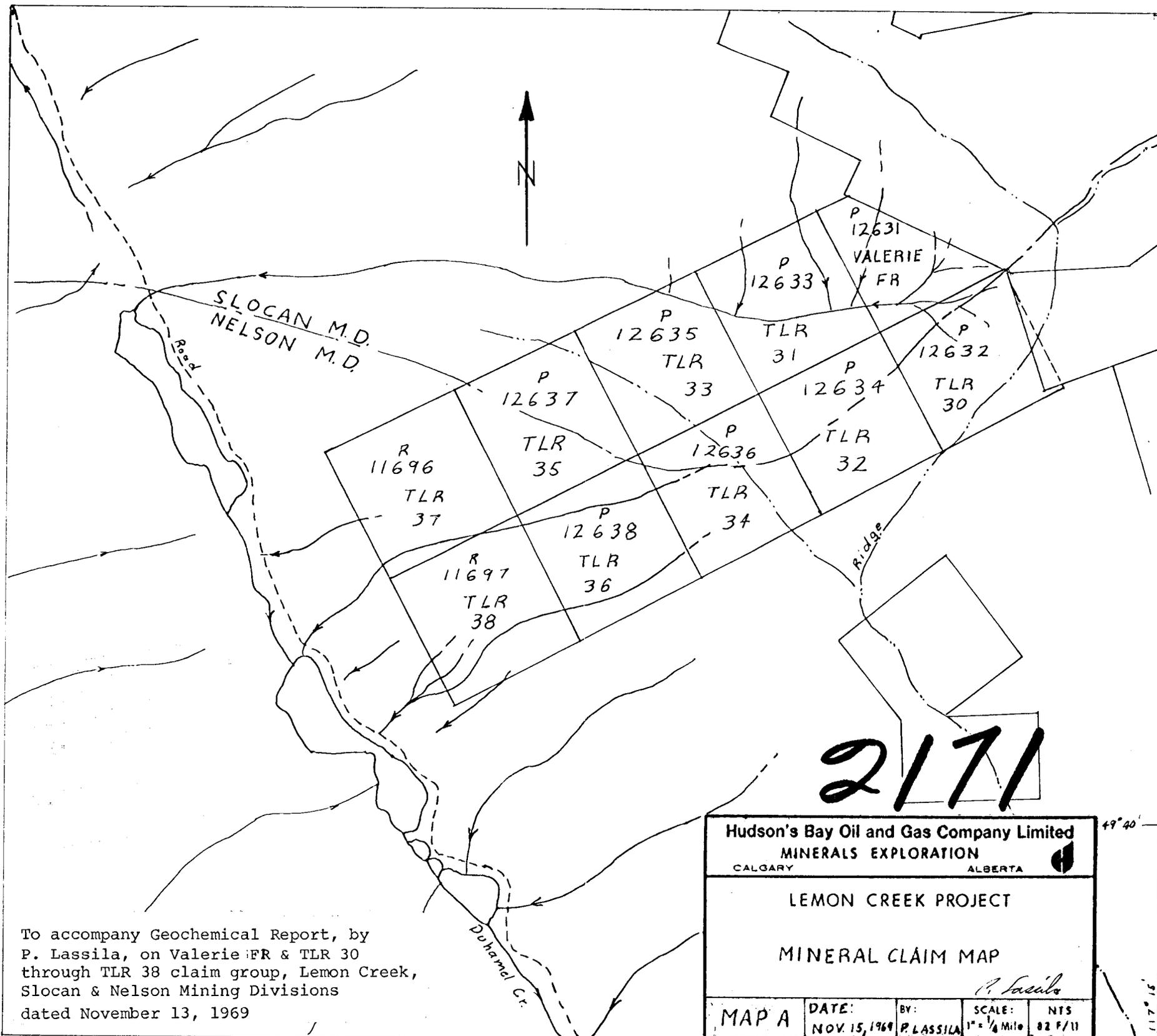
- Soil
- Mixed Soil and Stream
- Stream
- Scintillometer hexling

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 2171 MAP #5

2171

To accompany Geochemical Report, by  
 P. Lassila, on Valerie FR & TLR 30  
 through TLR 38 claim group, Lemon Creek,  
 Slocan & Nelson Mining Divisions,  
 dated November 13, 1969

<b>Hudson's Bay Oil and Gas Company Limited</b> MINERALS EXPLORATION <small>CALGARY ALBERTA</small>			
LEMON CREEK PROJECT <b>EAST LEMON CREEK          GEOCHEMICAL PLAN MAP</b> SCINTILLOMETER READINGS AT SAMPLE SITES <i>P. Lassila</i>			
MAP 4	DATE: NOV 15, 1969	BY: P. LASSILA	SCALE: 1" = 1/4 MI NTS: 827/11



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 dated November 13, 1969

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

LEMON CREEK PROJECT

MINERAL CLAIM MAP

MAP A

DATE:  
 NOV. 15, 1969

BY:  
 P. LASSILA

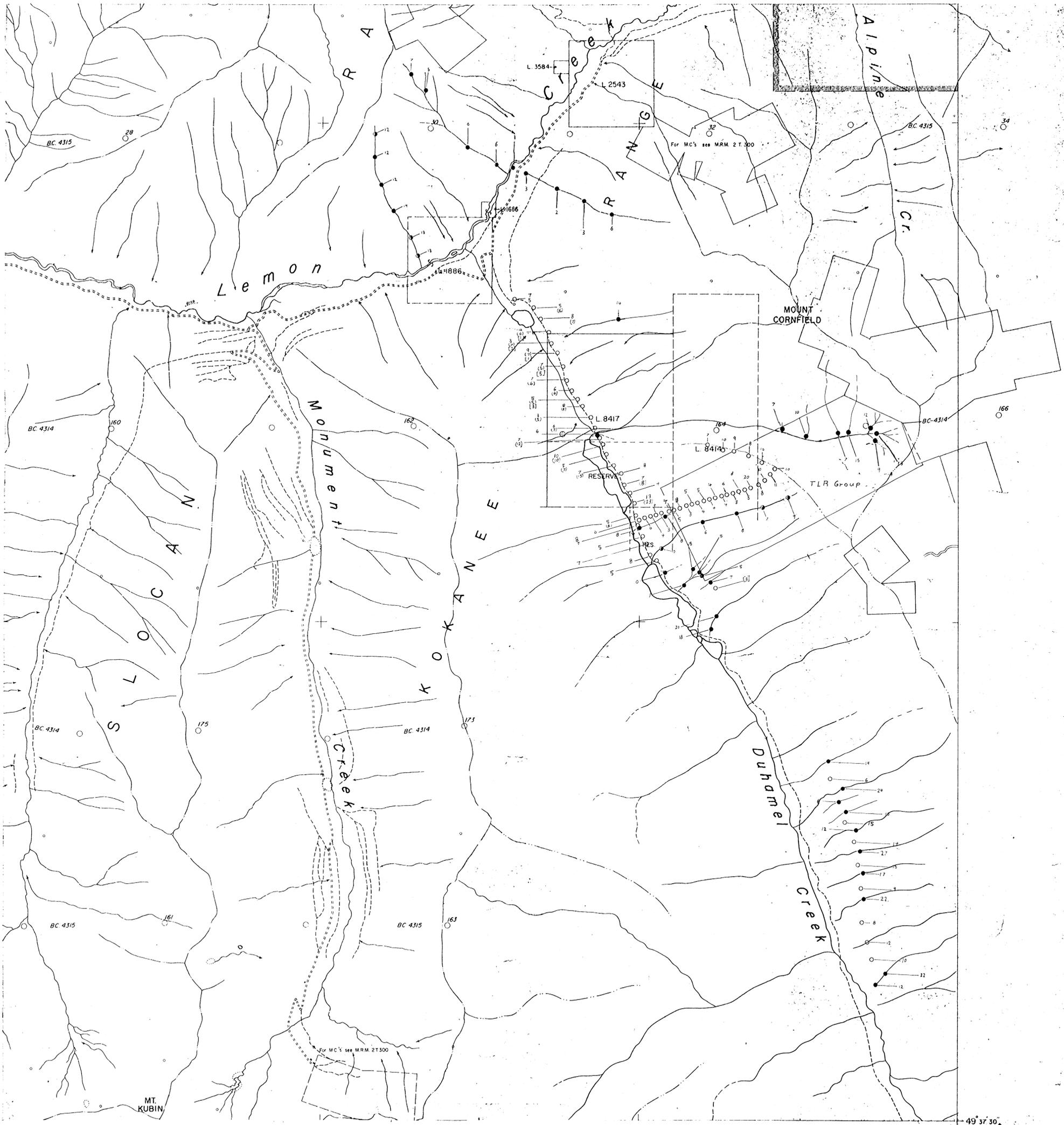
SCALE:  
 1" = 1/4 Mile

NTS  
 82 F/11

*P. Lassila*

49° 40'

117° 15'



**LEGEND**

- Soil
- Mixed Soil and Stream
- Stream

Topographic—Contour—Interval—500 ft.  
 Geochemical—Contour—Interval—p.p.m.

B<sub>2</sub> Horizon—2.6—○  
 Humic—(0.8)  
 Leached—(0.3)  
 STREAM SEDIMENT—22—●

Department of  
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 ASSESSMENT REPORT  
 NO. 2171 MAP #4

2171

To accompany Geochemical Report, by  
 P. Lassila, on Valerie PR & TLR 30  
 through TLR 38 claim group, Lemon Creek,  
 Slokan & Nelson Mining Divisions  
 dated November 13, 1969

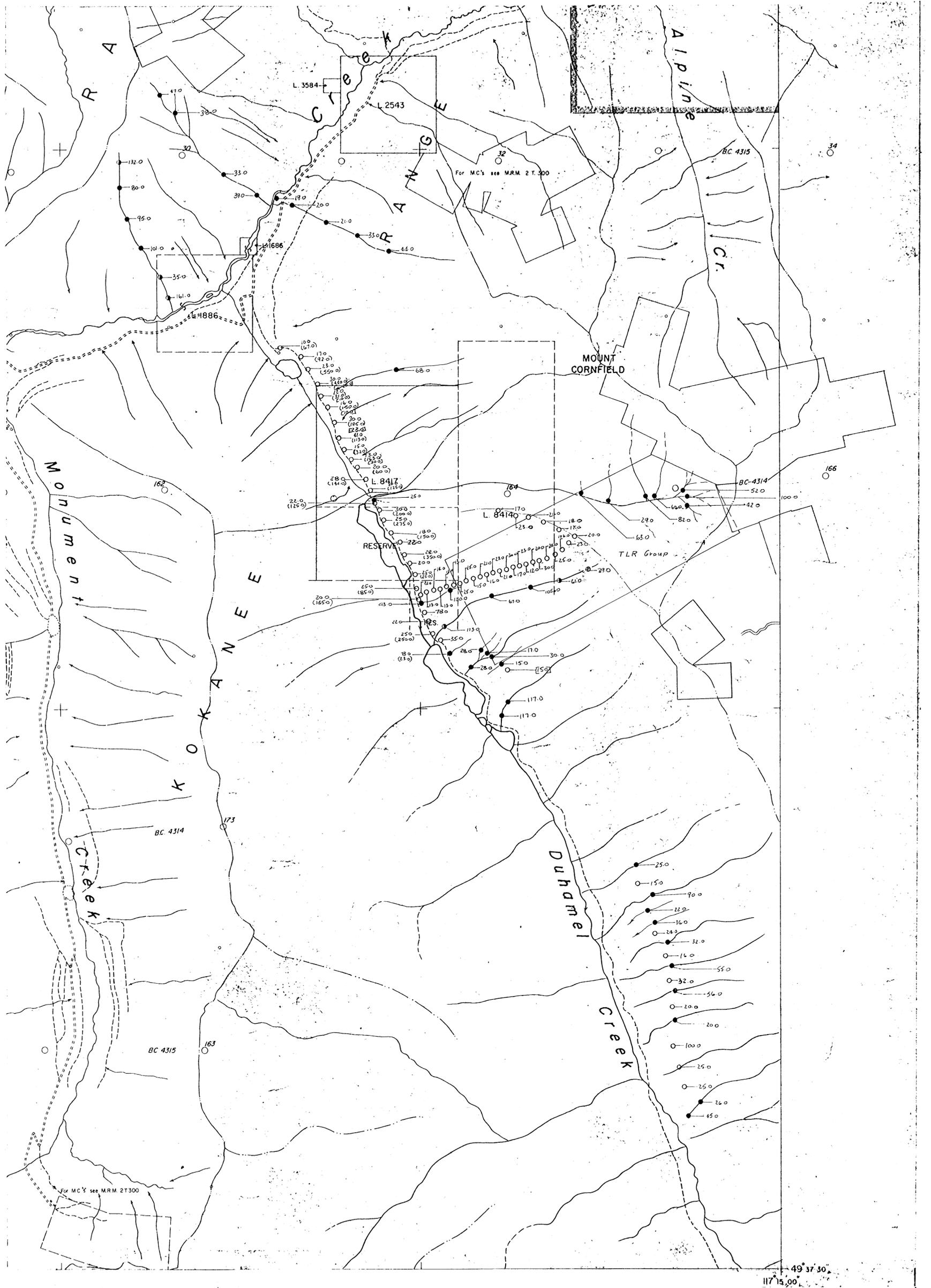
Hudson's Bay Oil and Gas Company Limited  
 MINERALS EXPLORATION

LEMON CREEK PROJECT  
 EAST LEMON CREEK  
 GEOCHEMICAL PLAN MAP

COPPER: HUMIC, LEACHED AND OXIDIZED HORIZONS  
 AND STREAM SEDIMENTS

MAP 3	DATE: NOV 15 1969	BY: P. LASSILA	SCALE: 1/4 mi.	NTS: 82 1/2
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49 37 30  
 117 15 00



49° 37' 30"  
117° 15' 00"

**LEGEND**

- Soil
- Mixed Soil and Stream
- Stream
- Topographic Contour Interval = 500 ft.
- Geochemical Contour Interval = p.p.m.

Plotted Values:

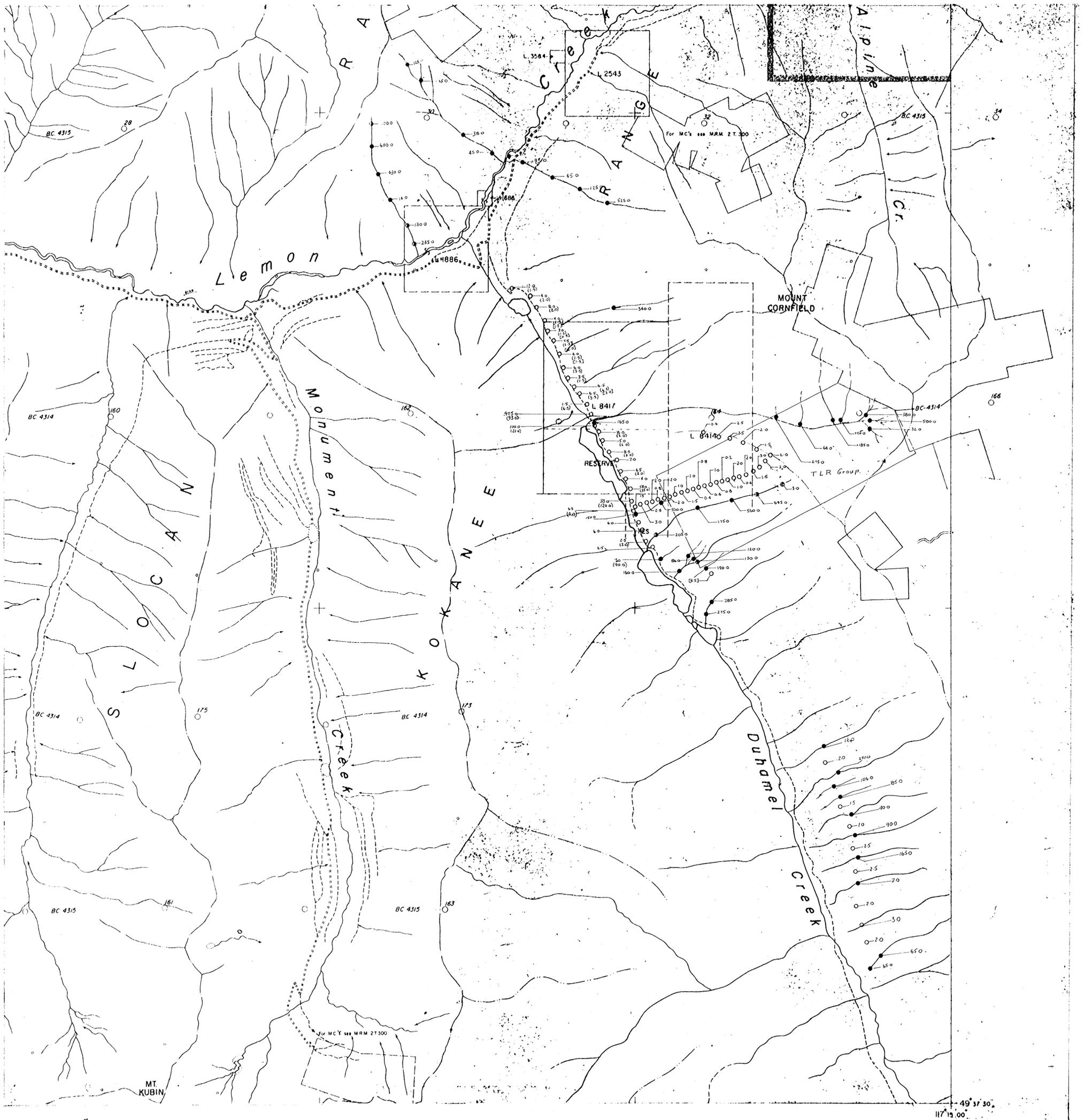
○ 25.0	Oxidized Horizon	} P.P.M.
○ 15.0	Humic	
○ 0.0	Leached	
● 20.0	Stream Sediment	

Department of  
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ASSESSMENT REPORT  
NO. 2171 MAP #3

2171

To accompany Geochemical Report, by P. Lassila, on Valerie PR & TLR 30 through TLR 38 claim group, Lemon Creek Slooan & Nelson Mining Divisions, dated November 13, 1969

Hudson's Bay Oil and Gas Company Limited MINERALS EXPLORATION CALGARY ALBERTA			
LEMON CREEK PROJECT EAST LEMON CREEK GEOCHEMICAL PLAN MAP			
LEAD: HUMIC, LEACHED & OXIDIZED HORIZONS AND STREAM SEDIMENTS <i>P. Lassila</i>			
MAP 2	DATE NOV. 15 1969	BY P. LASSILA	SCALE: NTS 1" = 1/4 mi. 82 f/11



**LEGEND**

- Soil
- Mixed Soil and Stream
- Stream
- Topographic—Contour Interval—500-ft.
- Geochemical—Contour Interval—p.p.m.

PLOTTED VALUES  
 ○—6.0—OXIDIZED HORIZON (S)  
 ○—15.0—HUMIC (S)  
 ○—0.8—LEACHED (S)  
 ●—90.0—STREAM SEDIMENT

Department of  
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 ASSESSMENT REPORT  
 NO. 2171 MAP #2

To accompany Geochemical Report, by  
 P. Lassila, on Valerie FR & TLR 30  
 through TLR 38 claim group, Lemon Creek,  
 Slocan & Nelson Mining Divisions  
 dated November 13, 1969

**Hudson's Bay Oil and Gas Company Limited**  
 MINERALS EXPLORATION

**LEMON CREEK PROJECT**  
**EAST LEMON CREEK**  
**GEOCHEMICAL PLAN MAP**

Medium, Hand, Leached & Oxidized Horizons  
 AND STREAM SEDIMENTS

*P. Lassila*

MAP 1	DATE: NOV. 15 1969	BY: P. LASSILA	SCALE: 1 : 1/4 mi
			NTS 82 x 111

2171

49° 37' 30"  
 117° 15' 00"