

3218

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3218 MAP

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

LSD CLAIM PROPERTY

OMINECA MINING DIVISION

BRITISH COLUMBIA

REPORT ON GEOCHEMICAL SURVEY

BY R. A. FREBERG, P. ENG.

SEPTEMBER, 1971

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ATTACHMENTS

Affidavits re Expenditure

Statement of Qualifications of Supervisor

List of Claims in Group

#1 Location Plan
2 Geochem Plan

INTRODUCTION

This report concerns the geochemical survey carried out by Hudson Bay Exploration and Development Company Limited on their property which is situated approximately 5 miles north of the central part of Chuchi Lake, British Columbia. The property consists of 45 contiguous LSD Claims. The property was staked during the period August 25th to September 6th, 1970 and soil sampling was subsequently carried out along most of the location lines before the onset of winter conditions in mid-September. A four-man party carried out further soil sampling during the period July 10th to 23rd, 1971.

SUMMARY AND CONCLUSIONS

Following the general prospecting and the staking of the 45 LSD Claims in August - September, 1970, exploration on these claims has consisted mainly of a geochemical survey. Soil sampling has been carried out on a grid established by chain and compass survey. The section lines are in an E-W direction and are at 750 foot intervals. Soil samples were collected at 200 foot intervals on these section lines and were assayed by the atomic absorption method for copper, silver and molybdenum. A total of 749 soil samples were collected and assayed over a total of 14.32 miles of section lines.

The cost of the geochemical survey on the LSD Claims is estimated to be \$ 5941.58 as per the attached affidavits.

Numerous northwest trending copper anomalies are indicated at the northwest corner of the property. There are also a number of molybdenum anomalies of interest on the property. Further detailed exploration of these anomalies is currently under way and will be continued during the 1972 field season.

MINERAL CLAIMS

The Hudson Bay Exploration and Development Company Limited property consists of 45 LSD Claims which were recorded on September 14th, 1970. Details on these claims is presented in the Attachments with this report.

OWNERSHIP

The registered owner of the 45 LSD Claims is Hudson Bay Exploration and Development Company Limited, Flin Flon, Manitoba. The exploration program described in this report was conducted from the Vancouver branch office of the owner located at 1695-555 Burrard Street, Vancouver 1, B.C.

LOCATION AND ACCESS

The LSD Claims are situated approximately 5 miles north of the central part of Chuchi Lake and about 58 miles NNW of Fort St. James, B.C.

The nearest road to the property is the gravel road from Fort St. James to Germansen Landing which is a minimum of 15 miles east of the LSD Claims. There are no other roads of any type on or in the vicinity of the claims. In view of the 2500 to 3000 foot difference in elevation between the LSD Claims and the Chuchi Lake - Manson road area the property is most readily accessible by helicopter. The nearest helicopters for charter are based at Fort St. James and during the field season at Germansen Landing which is 40 miles to the north.

TOPOGRAPHY AND SURFACE FEATURES

The LSD Claims are on an east-west trending ridge which rises to the north of Chuchi Lake to a maximum elevation of 6080 feet near the west side of the property. Elevations range from 6080 feet to about 4500 feet with the tree line at about 5000 feet. Below the tree line forest cover is variable in extent and thickness. A number of relatively shallow creeks drain the area and there is a small lake in a cirque depression immediately to the east of the 6080 foot peak. Rock exposure is relatively sparse at lower elevations but is abundant over most of the property above the tree line.

GEOLOGY

The general geology of the Chuchi Lake area is presented on the Manson Creek Map 876A (1946). In the Chuchi Lake area volcanics of the Takla Group are intruded by granitic rocks of the Omineca intrusion and later by a syenite stock. These formations are considered to be all of Mesozoic age.

The LSD Claims appear to be entirely underlain by the syenite stock with the exception of a small area of Takla volcanics at the most easterly corner of the property. Minor galena with pyrite has been observed in narrow shear zones in syenite talus near the west side of the property.

GEOCHEMICAL SURVEY

The soil sampling in September, 1970, was carried out at varying chained intervals along the location lines and along two traverses outside the claim area. A total of 56 samples were collected on the claims. These samples were tested by the atomic absorption method at T.S.L. Laboratories Ltd., in Vancouver.

The soil sampling program in July, 1971, was carried out on east-west trending section lines which followed the claim location lines and along lines intermediate to them. Samples were collected at 200 foot intervals and shipped to Chemex Labs Ltd., in Vancouver. A total of 693 soil samples were collected.

In review, during the soil sampling programs on the LSD Claims in September, 1970 and July, 1971, a total of 749 soil samples were collected on a total of 14.32 miles of line. These samples were collected where possible from the "B" horizon at depths rarely in excess of 12 inches. The soil samples were dried and screened to 80 mesh and a weighed amount of the -80 mesh material was digested in hot aqua regia. The solution was brought to a specific volume for testing by atomic absorption for copper, silver and molybdenum. A few of the samples were also tested for lead and zinc.

DISCUSSION

The geochemical survey has located a number of distinctive copper and molybdenum anomalies on the LSD Claims. These anomalous areas are now being investigated.



R. A. Freberg, P. Eng.



QUALIFICATIONS

OF

SUPERVISORY PERSONNEL

EMPLOYED BY

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

LSD CLAIMS, CHUCHI LAKE, B.C.

1970-1971

RAY ALFRED FREBERG

1946-1950 University of Toronto. Graduated with B.A. Sc. in Mining Geology in 1950.

1950-1951 University of Toronto. School of Graduate Studies. Graduated with MA. Sc. in Mining Geology in 1951.

Summer Employment 1947-1950

1947 INCO, Frood Mine, Sudbury, Ontario - underground halper.

1948 McIntyre Porcupine Mines Ltd. - prospecting, mapping - Ontario.

1949 Kennco Explorations, geological mapping - Quebec.

1950 Kennco Explorations, geochemical survey - Gaspé, Quebec.

1951-1956 Hudson Bay Mining and Smelting Company Ltd., Flin Flon, Manitoba.
1950 - drilling supervision in field camps.
1951-1952 - Supervisor of all exploration diamond drilling.
1953-1956 - Resident Geologist at Hudson Yukon Mines property, Quill Creek, Y.T. Surface & underground geologist.

1956-1958 Greyhawk Uranium Mines Ltd., Bancroft, Ontario
1956-1958 - Mine Engineer & Mine Geologist.
1958 - Mine Manager, 600 tpd operation.

1959 Faraday Uranium Mines Ltd., Bancroft, Ontario.
Mine Geologist - part time shift boss.

1960-1971 Hudson Bay Mining and Smelting Company Limited.
1960-1963 - Supervisor of exploration diamond drilling.
1964-1966 - Senior Exploration Geologist - project research, property examinations.
1967-1971 - Resident Geologist, Vancouver Branch Office, Hudson Bay Exploration & Development Co. Ltd.
- Manager of exploration projects in Western Canada.

MINERAL CLAIM GROUPS

LSD GROUP "A" (14 Claims)

LSD GROUP "B" (31 Claims)

OWNED BY

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

IN THE

CHUCHI LAKE AREA, BRITISH COLUMBIA

LSD GROUP "A"

<u>Name of Claim</u>	<u>Record Number</u>	<u>Date Recorded</u>
LSD- 1	93393	September 14, 1970
- 2	93394	"
- 3	93395	"
- 4	93396	"
- 5	93397	"
- 6	93398	"
- 7	93399	"
- 8	93400	"
- 9	93401	"
-10	93402	"
LSD-42	93432	"
-44	93433	"
-46	93434	"
-48	93435	"

LSD GROUP "B"

<u>Name of Claim</u>	<u>Record Number</u>	<u>Date Recorded</u>
LSD-11	93403	September 14, 1970
-12	93404	"
-13	93405	"
-14	93406	"
-15	93407	"
-16	93408	"
-17	93409	"
-18	93410	"
-19	93411	"
-20	93412	"
-21	93413	"
-22	93414	"
-23	93415	"
-24	93416	"
-25	93417	"
-26	93418	"
-27	93419	"
-28	93420	"
-29	93421	"
-30	93422	"
-31	93423	"
-32	93424	"
-33	93425	"
-34	93426	"
-35	93427	"

Name of Claim

Record Number

Date Recorded

LSD-36

93428

September 14, 1970

-37

93429

"

-38

93430

"

-40

93431

"

-49

93436

"

-50

93437

"

WORK SCHEDULE & WAGE STATEMENT

GEOCHEMICAL SURVEY

LSD CLAIMS - CHUCHI LAKE AREA, B.C.

<u>EMPLOYEE</u>	<u>RATE/MONTH</u>	<u>SEPT./1970</u>	<u>JULY/1971</u>	<u>TOTAL DAYS</u>	<u>WAGES</u>
D. G. Forsyth	\$ 600.00 - 1970 \$ 650.00 - 1971	3	14	3 14	\$ 60.00 302.90
L. Stonehawker	\$ 470.00	3		3	47.00
R. Leal	\$ 700.00		14	14	326.20
J. Russell	\$ 775.00		14	14	361.15
D. Duncan	\$ 650.00		9	9	195.00
				<u>57</u>	<u>\$ 1292.25</u>

SUPERVISION

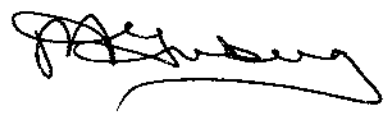
R. A. Freberg - 4 days @ \$50.00/day 200.00

\$ 1492.25

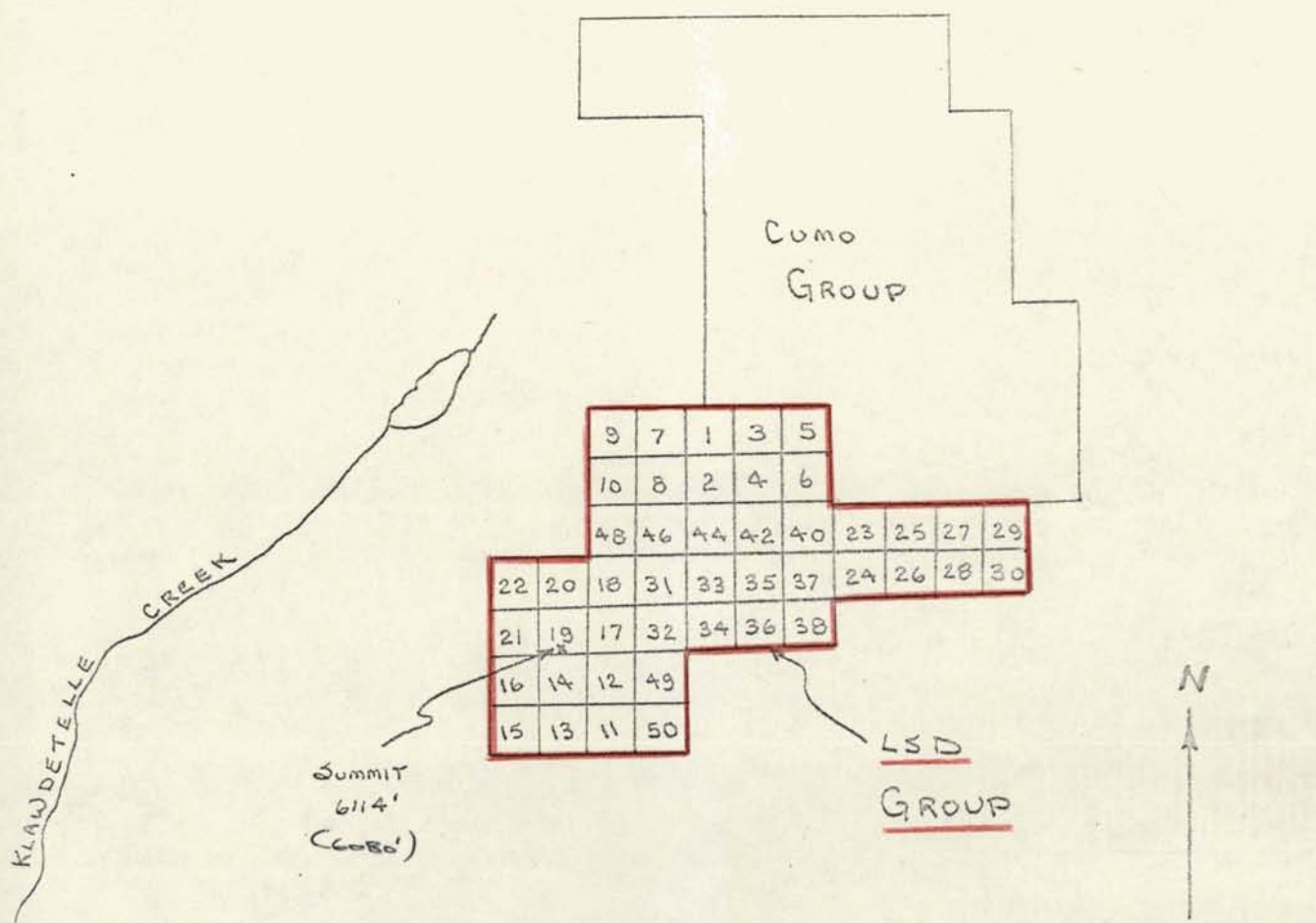
Office Charges @ 20% (includes vacation pay, bonus time, plotting,
overhead) 298.45

Total \$ 1790.70

Declared before me of the *City*
Nassau in the
County of *Nassau* this *14*
Aug 5 1971 A.D.



Julie Jensen
Sub-mining Recorder

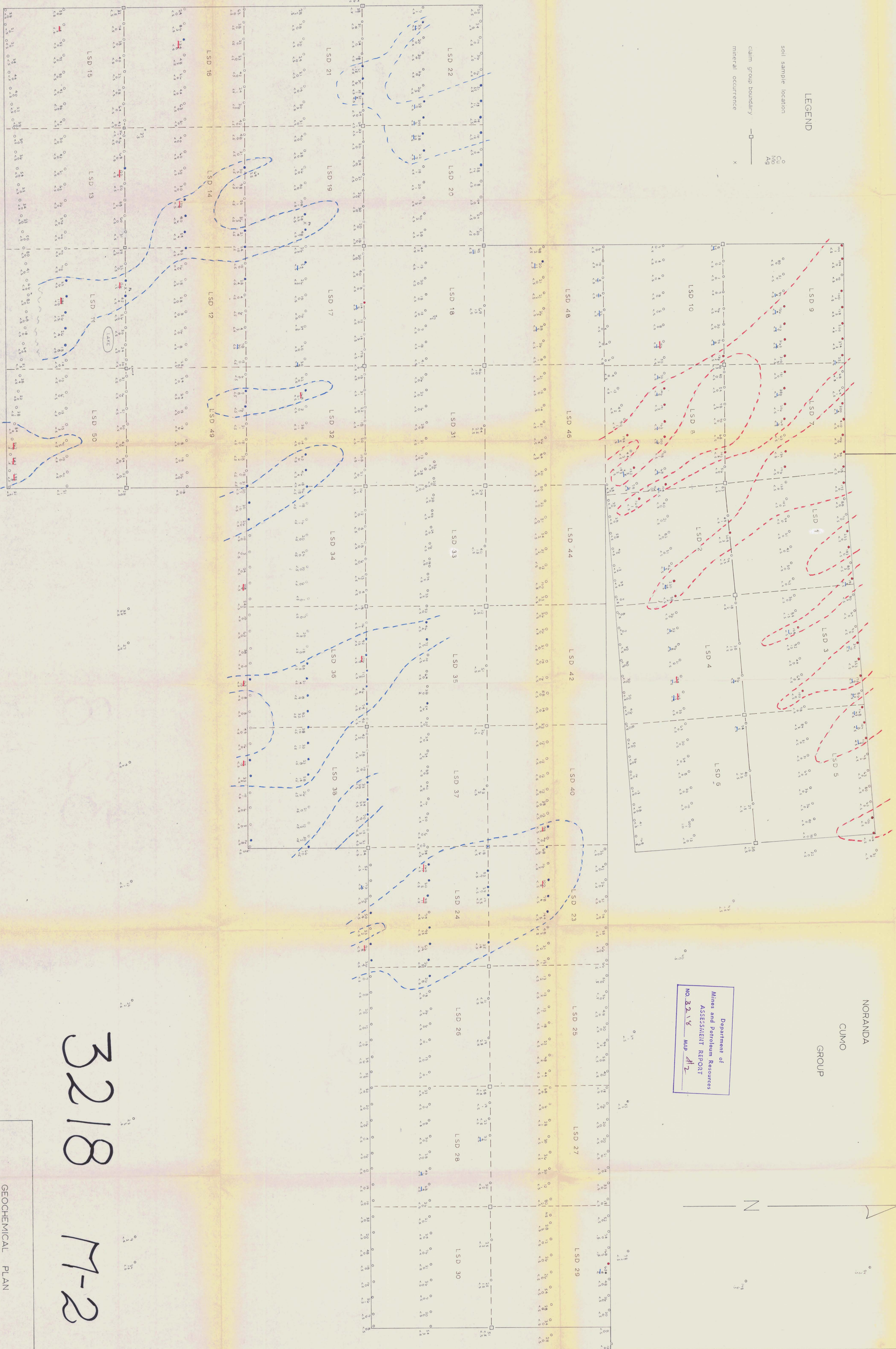


Department of
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 ASSESSMENT REPORT
 NO. 3218 MAP #1

CHUCHI LAKE

LOCATION PLAN
 LSD CLAIMS
 GEOCHEMICAL SURVEY

LEGEND
 soil sample location
 mineral occurrence
 claim group boundary
 X



3218 M-2

GEOCHEMICAL PLAN

LSD CLAIMS

CHUCHI LAKE AREA, B.C.

Scale: 1 inch = 400 feet

August, 1971