

3863

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

LSD CLAIM PROPERTY

OMINECA MINING DIVISION

BRITISH COLUMBIA

REPORT ON EXPLORATION PROGRAM - 1972

BY R. A. FREBERG, P. ENG.

SEPTEMBER - 1972

NTS 93N/2E, 7E

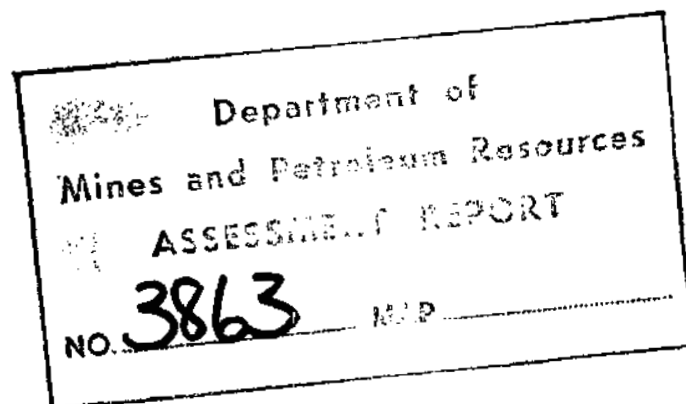


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ATTACHMENTS

- Report by Seigel Associates on Induced Polarization Survey
- Affidavits re Expenditure
- Statement of Qualifications of Supervisor
- List of Claims in Groups

INTRODUCTION

This report concerns the exploration program carried out in 1972 by Hudson Bay Exploration and Development Company Limited on their LSD claim property which is located approximately 5 miles north of the central part of Chuchi Lake, British Columbia. The property consists of 68 contiguous claims. The first 45 LSD claims were staked in late August and early September of 1970 and limited geochemical soil sampling was done. During the 1971 field season further geochemical sampling and prospecting was done and 23 additional claims were staked.

During the period June 13 to September 6, 1972 the exploration program on the LSD property consisted of 6.4 miles of surveyed base line and tie lines, 13.5 miles of line cutting on section lines, 383 soil samples collected and analyzed and 6.8 miles of induced polarization survey. In addition geological mapping, prospecting and trenching in selected areas was carried out. This program was carried out by two graduate geologists and one geology student. These men also assisted directly in the induced polarization survey.

SUMMARY AND CONCLUSIONS

The 1972 program was an extension of the programs carried out in 1970 and 1971 and was aimed at determining the mineral potential of the property. The base line survey permitted a tie-in of claim posts, soil sampling lines and topographic features.

Soil sampling on the northerly claims staked in 1971 provided a north trending copper anomaly which is the extension of the main anomaly outlined in 1971. Anomalous molybdenum values frequently occur in the copper anomaly.

Two relatively small chargeability anomalies were located on the northerly claims which have general coincidence with the geochemical anomalies.

It is apparent investigations to date on the LSD claim group have located target areas of interest which warrant work.

MINERAL CLAIMS

The Hudson Bay Exploration and Development Company Limited property consists of 68 LSD claims. Forty-five of these claims were recorded on September 14th, 1970 and the balance were recorded on September 20th, 1971. Further details on these claims is presented in the Attachments with this report.

OWNERSHIP

The registered owner of the 68 LSD claims is Hudson Bay Exploration and Development Company Limited, Flin Flon, Manitoba. The exploration program described in this report was conducted by 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 65 miles NNW of Fort St. James, B.C. Most of the claims are on the upper and north flank of the mountain immediately to the north of Chuchi Lake and extend northwards to Klawdatelle Creek.

The nearest road is the gravel road from Fort St. James to Germansen Landing. This road is a minimum of 15 miles east of the LSD claims. A small, shallow lake on Klawdatelle Creek near the northwest corner of the property is accessible by float air craft during high water periods. The property is most readily accessible by helicopter which can be chartered at Forth St. James and Germansen Landing. Fort St. James is approximately 65 air miles to the south of the property and Germansen Landing is about 35 air miles to the north.

TOPOGRAPHY & SURFACE FEATURES

The LSD claims are on an east-west trending mountain which rises to the north of Chuchi Lake to a maximum elevation of 6080 feet. Elevations range from 6080 feet to about 3500 feet on Klawdatelle Creek. The tree line is about 5000 feet. Below tree line the forest cover is variable in extent and density. A number of shallow creeks drain the higher areas. A small lake lies in a cirque depression near the southwest corner of the property. Rock exposure is sparse in the Klawdatelle Creek area but is relatively abundant above 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 which underlies most of the LSD property. These formations are considered to be of Mesozoic age.

The stock which underlies most of the LSD claims is reported to be syenite. However mafic content is variable from place to place and the exposures locally range from diorite to hornblendite. The stock is locally extensively fractured in north-south and east-west directions. A number of small occurrences of minor chalcopyrite, galena, pyrite, magnetite and molybdenite have been located in altered zones associated with fracturing.

Takla volcanics occur on the east side of the property and on the slopes to the north of Klawdatelle Creek.

GEOCHEMICAL SURVEY

The soil sampling program in 1972 is an extension of sampling done in 1970 and 1971. Most of the sampling was done on the 23 claims staked in 1971 at the north end of the property. Additional sampling was done on a small grid on LSD-23 and LSD-24.

A total of 383 samples were collected on 13.5 miles of line at 200 foot intervals on section lines 200 to 400 feet apart. The samples were collected from the "B" soil horizon at depths rarely in excess of 12 inches. The samples were shipped to Chemex Labs Ltd., Vancouver where they were dried and screened to 80 mesh. One-half gram of the -80 mesh material was digested in a perchloric-nitric acid mixture for 1.5 to 2 hours, diluted to 2ml, and analyzed for copper and molybdenum by the atomic absorption method. Results of this survey is recorded on the biochemical plan included with this report.

BASE LINE SURVEY

Due to magnetic variations related to variable occurrences of magnetite on the property the chain and compass lines on the property established in 1970 proved to be locally in error. During the 1972 program a total of 3.57 miles of base line and 2.83 miles of tie-in line was surveyed by transit. Elevations were carried from station to station. Section lines, where established, were oriented by transit normal to the base lines and extended by picket lines or by compass.

Claim posts and topographic features and section lines were tied in during the survey.

INDUCED POLARIZATION SURVEY

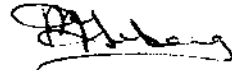
During the period August 22nd to September 6th an induced polarization survey was carried out on a total of 6.8 line miles of section line. The survey was contracted by Seigel Associates Limited of Vancouver who provided the operator and equipment. Three Hudson Bay Exploration and Development Company Limited personnel assisted in the survey.

A Scintrex 2.5 KW time-domain induced polarization system was used in the survey. Readings were taken with a three electrode array with 200 and 400 foot electrode spacings and a 200 foot station interval. Section lines surveyed varied from 800 to 400 feet apart.

A detailed report with maps has been prepared by Seigel Associates Limited and is included with this report. Two chargeability anomalies on the northerly claims warrant further investigation.

DISCUSSION

Investigations to date on the LSD claims have located a number of significant anomalous conditions which are being further 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.
1970-1972

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 helper.

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 Co., Limited, 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.

1960-1972 Hudson Bay Mining and Smelting Co., Limited.
1960-1963 - Supervisor of exploration diamond drilling.
1964-1966 - Senior Exploration Geologist - project research, property examinations.
1967-1972 - Resident Geologist, Vancouver Branch Office, Hudson Bay Exploration & Development Company Limited.
- Manager of exploration projects in Western Canada.

MINERAL CLAIM GROUPS

LSD GROUP "C" (34 Claims)

LSD GROUP "D" (34 Claims)

OWNED BY

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

IN THE

CHUCHI LAKE AREA, BRITISH COLUMBIA

LSD GROUP "C"

(34 Claims)

<u>Name of Claim</u>	<u>Record Number</u>	<u>Date Recorded</u>
LSD - 11	93403	Sept. 14/70
- 12	4	"
- 13	5	"
- 14	6	"
- 15	7	"
- 16	8	"
- 17	9	"
- 18	93410	"
- 19	1	"
- 20	2	"
- 21	3	"
- 22	4	"
LSD - 31	93423	"
- 32	4	"
- 33	5	"
- 34	6	"
- 36	93428	"
- 38	93430	"
LSD - 49	93436	"
- 50	7	"
- 51	104560	Sept. 20/71
- 52	1	"
- 53	2	"
- 54	3	"
- 55	4	"
- 56	5	"
- 57	6	"
- 58	7	"
- 59	8	"
- 60	9	"
- 61	104570	"
- 62	1	"
LSD - 71	104580	"
- 72	104581	"

LSD GROUP "D"

(34 Claims)

<u>Name of Claim</u>	<u>Record Number</u>	<u>Date Recorded</u>
LSD - 1	93393	Sept. 14/70
- 2	4	"
- 3	5	"
- 4	6	"
- 5	7	"
- 6	8	"
- 7	9	"
- 8	93400	"
- 9	1	"
- 10	2	"
LSD - 23	93415	"
- 24	6	"
- 25	7	"
- 26	8	"
- 27	9	"
- 28	93420	"
- 29	1	"
- 30	2	"
- 35	93427	"
- 37	93429	"
- 40	93431	"
- 42	2	"
- 44	3	"
- 46	4	"
- 48	5	"
LSD - 63	104572	Sept. 20/71
- 64	3	"
- 65	4	"
- 66	5	"
- 67	6	"
- 68	7	"
- 69	8	"
- 70	9	"
"A" Fraction	104582	"

LSD "C" GROUP

Cumo Group

61	62	63	64	65						
59	60	61	62	63						
57	58	59	60	61						
55	56	57	58	59						
53	54	5	7	1	3	5				
41	42	18	8	2	4	6				
71	72	48	44	44	42	40	33	25	27	29
22	20	18	31	32	35	37	34	26	28	30
21	19	17	32	34	36	38				
16	14	12	45							
15	13	11	50							

KIAUDETALLE CREEK

LSD "A" Fraction

SUNNY 614'

LSD "D" GROUP



Scale 1" = 1 mile

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **3863** MAP **#1**

CHUCHI LAKE

September, 1972

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA:
TO WIT:

In the Matter of Hudson Bay Exploration and Development Company Limited

1972 STATEMENT OF EXPENDITURES

I, R. A. Freberg

of Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that the following Statement of Expenditures on behalf of Hudson Bay Exploration and Development Company Limited on their LSD claims near Chuchi Lake, B.C. is correct.

Labour - June 1 ³ to Sept. 6/72			
P.T. Coyle @ \$774.00/month	\$ 2172.19		
R.P. Leel @ \$749.00/month	1013.23		
D.M. Strachan @ \$550.00/month	1633.33		
T.J. Fletcher @ \$650.00/month	1950.00		
Overtime & Vacation Pay	<u>1260.14</u>	\$ 8028.89	
Camp Operation - Groceries		1606.09	
Assaying		577.50	
Transportation - Helicopter & Fixed Wing	\$ 3338.00		
CP Air, Vehicle Rental	<u>388.50</u>	3726.50	
I.P. Survey - see attached statement from Seigel Associates Limited		3050.00	
Shipping Samples etc.		51.10	
Office Overhead @ 10% (includes supervision 6 days @ \$50.00/day)		<u>1704.00</u>	\$ 18,744.08
<u>DISTRIBUTION OF EXPENDITURES</u>			
LSD "C" Group (34 claims @ \$235.00/claim	\$ 7,990.00		
LSD "D" Group (34 claims @ \$316.30/claim	\$ 10,754.00		

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the
of VANCOUVER, B.C. on the
Province of British Columbia, this
day of SEP 14 1972
A.D.
Sub - Mining Recorder.

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

In the Matter of

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Statutory Declaration
(CANADA EVIDENCE ACT)

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of a geophysical survey on behalf of Hudson Bay Exploration & Development Company Limited

I, Peter J. Fominoff for Seigel Associates Limited

of 750 - 890 West Pender Street, Vancouver

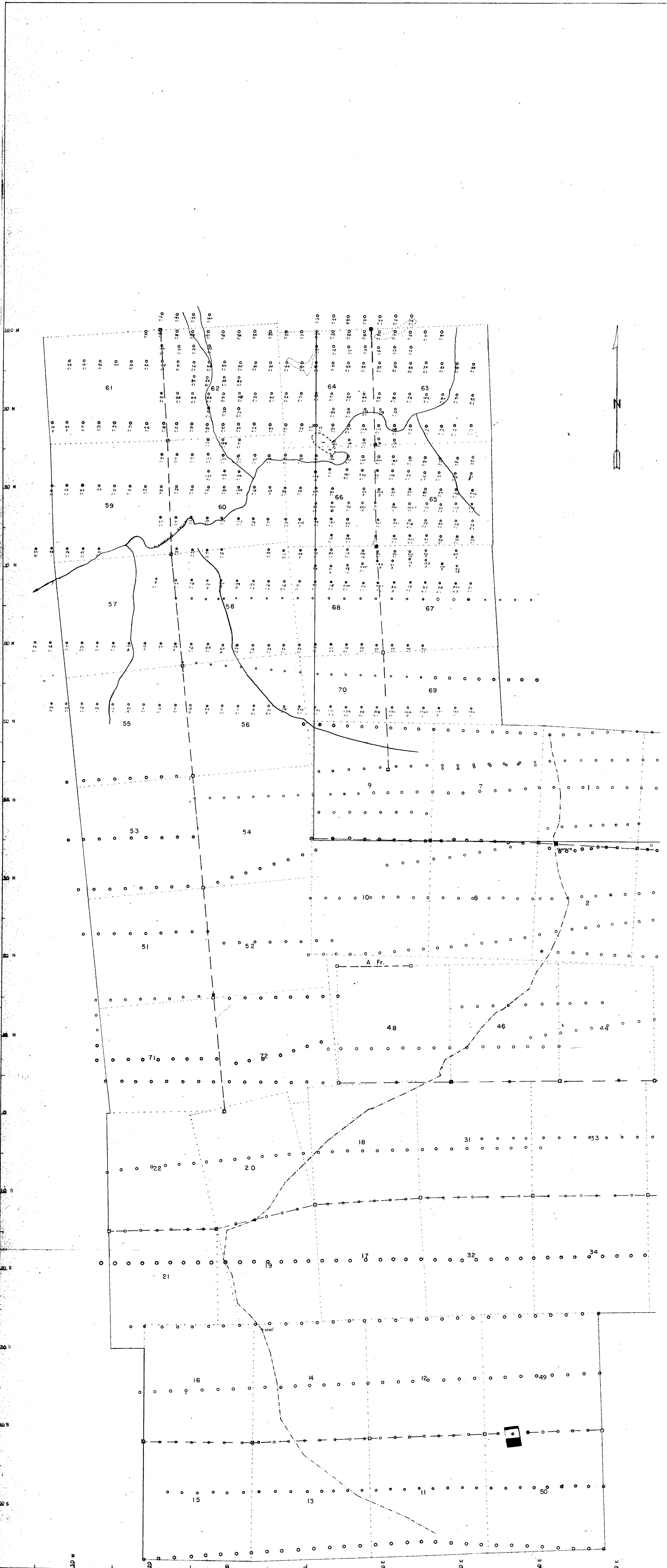
in the Province of British Columbia, do solemnly declare that an induced polarization survey has been executed on some LSD claims in the Chuchi Lake area, British Columbia between August 24 to September 6, 1972. The following expenses were incurred:

(1) Wages:		
R. Shel Drake - 14 days @ \$40.00/day		\$560.00
(2) Transportation & shipping to the job		350.00
(3) Use of geophysical equipment		
14 days @ \$65.00/day		910.00
(4) Paid to Seigel Associates Limited to cover geophysicist's supervision, calculating, plotting and fairdrawing data and preparation of final reports.		<u>1,230.00</u>
		<u>\$3,050.00</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 12th
y of September, 1972, A.D.

Julie Lussier
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
SUB-MINING RECORDER



100 N
90 N
80 N
70 N
60 N
50 N
40 N
30 N
20 N
10 N
N
10 S
20 S
30 S
40 S
50 S

10 W 20 W 30 W 40 W 50 W 60 W 70 W 80 W 90 W 100 W 10 E 110 E 120 E 130 E 140 E 150 E

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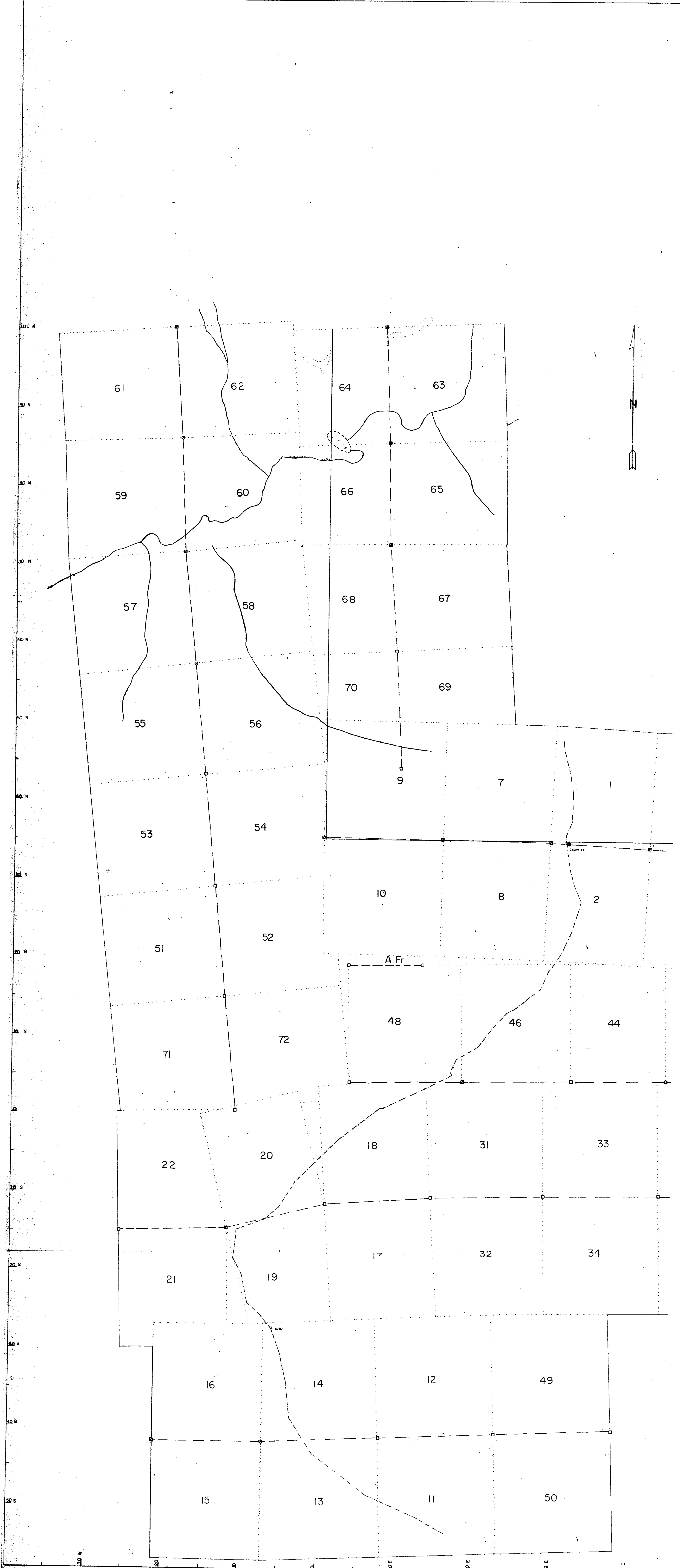
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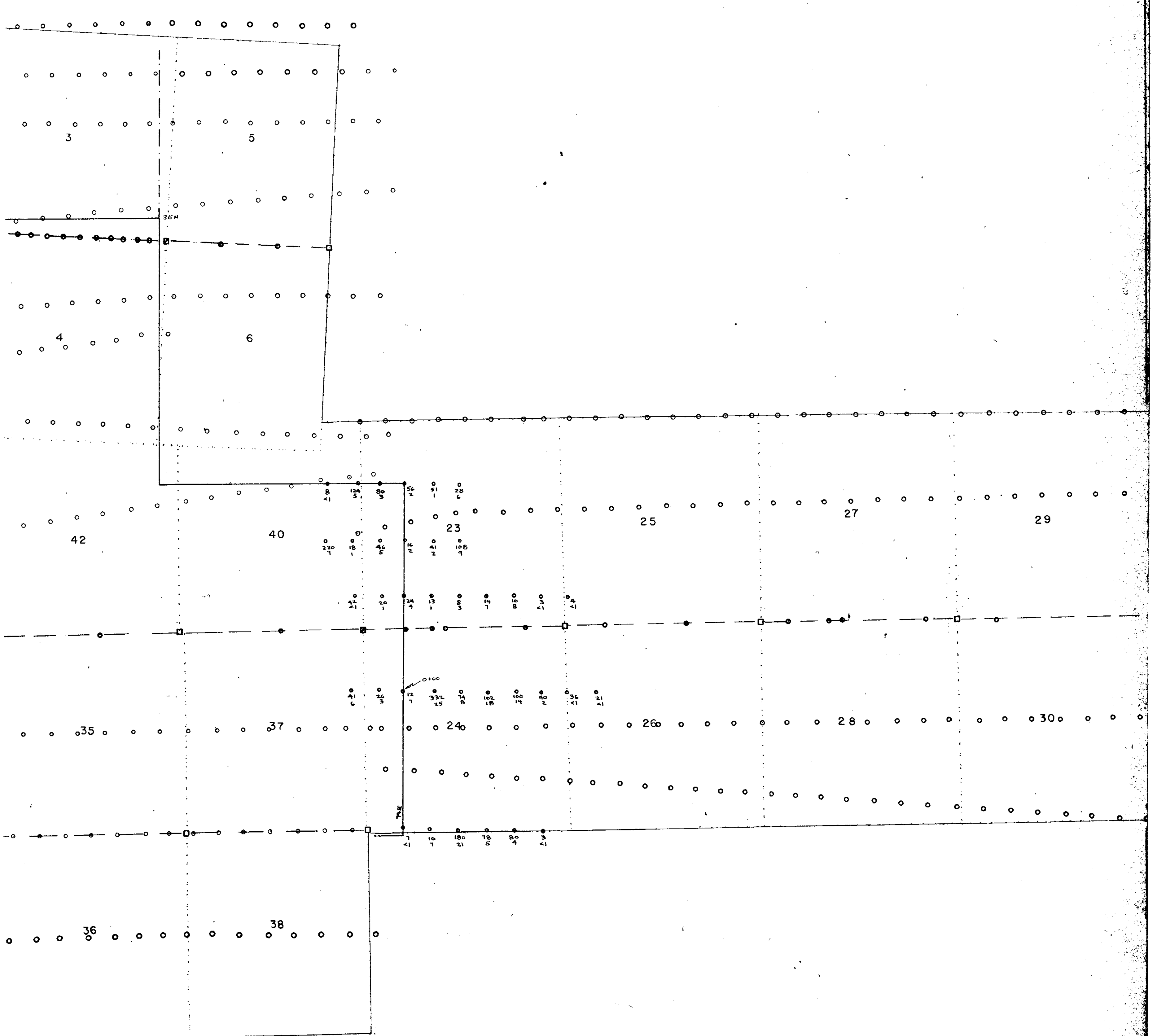
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GEOCHEMICAL PLAN

LSD CLAIMS

CHUCHI LAKE AREA, B.C.

Department of
Mines and Geotechnical Resources
ASSESSMENT REPORT
NO. 3863 A.M.P. #3

Scale 1 inch=400 feet

Sept., 1972

LEGEND

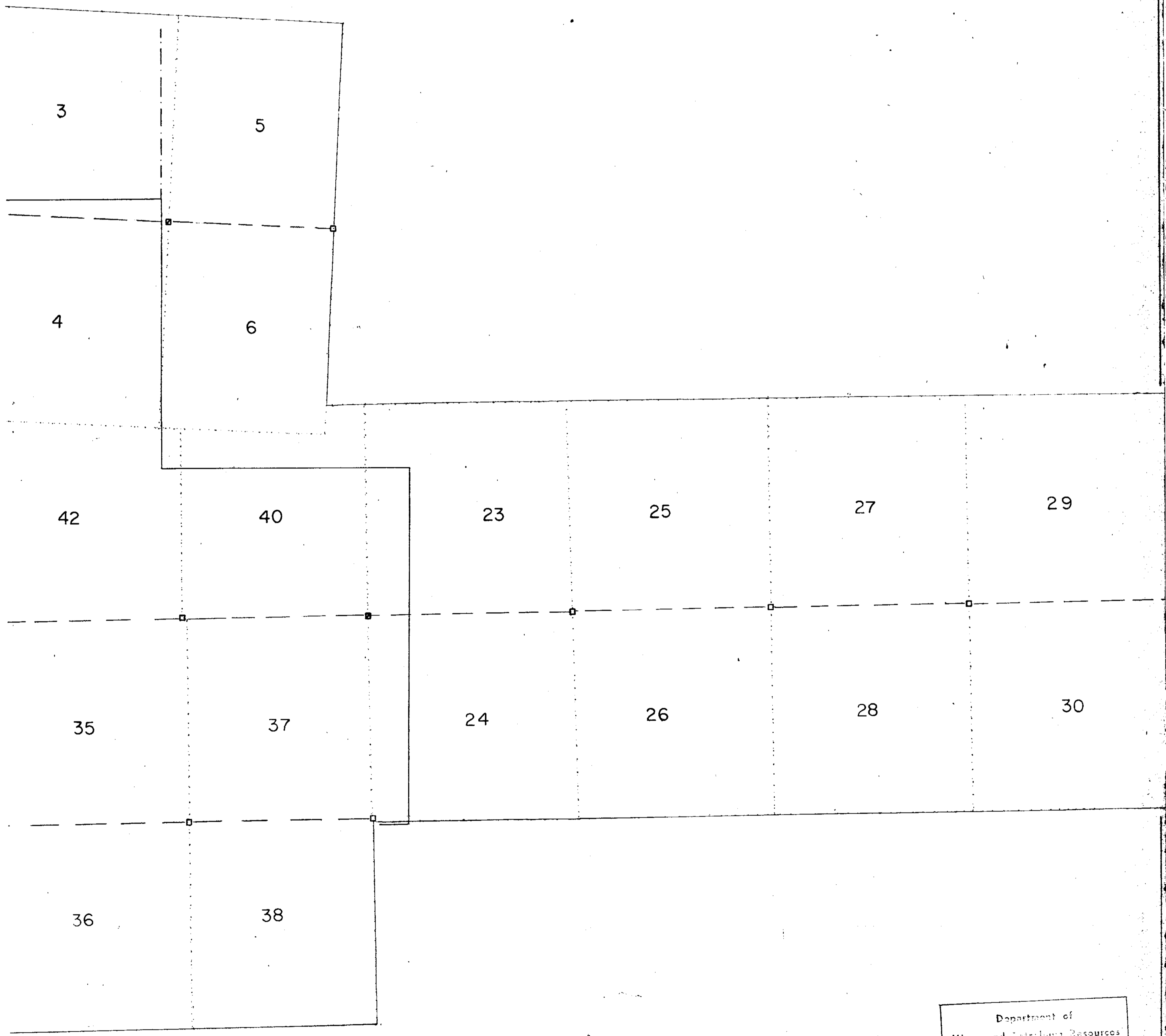
- Base Line
- Location Line
- Claim Boundary
- Creek
- Claim Post, Surveyed
- Claim Post
- Tie-in Line, Surveyed
- Soil Sample Location

3863

M-3

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400 E 300 E 200 E 100 E 0 100 E 200 E 300 E 400 E



CLAIM MAP
LSD CLAIMS

Department of
Mines and Technical Resources
ALIGNMENT REPORT
NO. 3863 MAP #2

CHUCHI LAKE AREA, B.C.

Scale 1 inch=400 feet

Sept, 1972

LEGEND

- Base Line
- Location Line
- Claim Boundary
- Creek
- Claim Post, Surveyed
- Claim Post
- Tie-in Line, Surveyed

3863 M-2