GEOCHEMICAL REPORT

on

"ON" # 1 - 8, 21. - 28, 41 - 44, 49 - 60, 76 - 84 Mineral Claims

Situated to the East of Highway No. 5

14 miles North of Princeton

Similkameen Mining Division

British Columbia

NTS: 92 H/10(E)

Latitude: 49°38' N Longitude: 120°35' W

on behalf of

Zone Explorations Ltd. (N.P.L.) #1010-789 West Pender St., Vancouver, B.C. the owner of the claims

by

David R. Morgan, geologist, P. Eng. Dates of geochemical work: 22 March 1970 - 22 April 1970 Date of Report: 1 July 1970

> Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 2542 MAP

14

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5.95

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Maps Accompaning this report: (new pocket)

#1 nonn	Claims	Geochem.	Map	Showing	Zn	Results	in	P.P.M. (1" ·	- 1000')
#2 "ON"	Claims	Geochem.	Map	Showing	Pb	Results	in	P.P.M. (1"	- 1000')
#3 "ON"	Claims	Geochem.	Map	Showing	Cu	Results	in	P.P.M. (1 " -	- 1000*)
#4"ON"	Claims	Geochem.	Map	Showing	Mo	Results	in	P.P.M. (J	- 1000')

page 1

1-0 SUMMARY:

A geochemical survey of the southern half of Zone Exploration's "ON" group of 89 claims, 14 miles north of Princeton, B.C., was carried out in the Spring of 1970 simultaneously with a line cutting program.

A total of 471 soil samples were taken at 400 foot intervals along 36.2 miles of line. These samples were analysed for their lead, zinc, copper and molybdenum content.

The results of this geochemical survey program, which was carried out under the supervision of the writer, appear on four maps accompanying this report.

2-0 INTRODUCTION:

This program was started on 22 March 1970 and completed on 22 April 1970.



1.

2-2 <u>TITLE</u>:

Zone Explorations Ltd. (N.P.L.) is the undivided owner of a group

of 89 contiguous claims as described below:

ON 1 - 48 24464 - 24511 28 April 1969 ON 49 - 70 24886 - 24907 21 May 1969 ON 76 - 94 24908 - 24926 21 May 1969 ON 71 - 74 25007 - 25010 2 June 1969	Claims	Record Number	Date Recorded
ON / I = /4 2500/ = 25010 2 50110 1909	ON 49 - 70	24886 - 24907	21 May 1969

These claims have been grouped as follows for purposes of assessment.

Group	Claims	Group Totals
West Group Centre Group	ON #s 76 - 94 ON #s 25 - 29, 31, 33, 35, 37 - 40	19
East Group	49 - 70 ON #s 1 - 24, 30, 32, 34, 36, 41 - 44	34
	$\frac{1}{71} - \frac{1}{74}$	36

3-0 GEOGRAPHY:

3-1 <u>Location</u>: The property lies 14 miles north of Princeton, B.C. on Highway No. 5. The property lies immediately to the east of the highway and to the northeast of Laird Lake.

3-2 <u>Access</u>: From Highway No. 5 access to the property is provided by a network of logging roads and the gas pipeline road which runs in a northerly direction through the eastern part of the property. All parts of the property lie within 3,000 ft distance from a road except for an area about the size of one claim to the east of the final post of ON # 70.

3-3 <u>Topography</u>: The property covers the southwest margin of a fairly steep sided plateau area lying between Allison and Summers creeks. Elevation range from 2,500 feet in the creek valleys to around 4,500 feet on the plateau with a maximum elevation of 4,900 feet in the northeast part of the property.



3-4 <u>Climate</u>: The climate is typical of the southern interior of B.C. with hot and generally dry summers and a cool to cold winter. The property is typically snow-free between 1 April and 15 November.

3-5 <u>Vegetation</u>: Below 4,400 elevation the property is typically an open parkland with ponderosa pine. Above 4,400 the forest cover is fairly dense and made up chiefly of lodgepole pine, spruce and balsam. The ground is generally well drained and there are no swamps on the property.

4-0 <u>REGIONAL GEOLOGY</u>:

The property covers a saddle shaped pendant of Nicola volcanics separating two intrusives. Northerly regional faults (Allison Lake faults) cut the area and regional strikes are also northerly. A total of six miles of Nicola - intrusive contact are covered by the property.

5-0 GEOLOGY OF THE PROPERTY:

The detailed geology of the property has not yet been mapped. This work, which has been recommended by the company's consultant, will be carried out this year.

6-0, EXPLORATION OF THE PROPERTY:

6-1 <u>Direct Exploration</u>:

6-1-1 <u>Underground Workings</u>: There are no underground workings on the property.

6-1-2 Diamond Drilling: The property has never been drilled.

6-1-3 <u>Trenching</u>: Three bulldozer trenches with a total length of about 500 feet were cut on ground now covered by ON # 26 and 28 by the owners of the T.V. claims which have since lapsed.



3.

6-2 Indirect Exploration:

6-2-1 <u>Surveying</u>: Survey control for the soil sampling was provided by a system of east - west lines turned off at 400 foot intervals from a central north - south base line. The lines were run by compass and chained with a 300 foot nylon chain with due allowance being made for slope. The lines were brushed out and blazed and the station chainages were marked at 100 foot intervals on aluminum strips nailed to trees and flagged with red plastic flagging.

Overall survey control was provided by a 1" - 1000" scale topographic map made by photo-enlargement of part of the Federal Government 1:50,000 scale topographic sheet 92 H/10(E).

6-2-2 <u>Geophysical Surveys</u>: No geophysical survey has been conducted on this property.

6-2-3 <u>Geochemical Surveys</u>: A soil sampling program was carried out on the southern half of the property in the spring of 1970 and forms the subject of this report.

6-2-3-1 <u>Sampling Technique</u>: Samples were taken at 400 foot intervals along east - west lines spaced 400 feet apart. Sampling was done with an auger and the operator was shown how to distinguish between the "B" horizon which was to be sampled and the overlying organic "A" horizon. Soil from the "B" horizon was placed in high wet strength, metal free standard paper soil sample bags which can be fastened and kept in sequence on a wire. The samples collected were dried each night near a stove.

6-2-3-2 <u>Analysis</u>: After sifting the sample through a screen, the -70 mesh fraction was treated with hot aqua regia and the metal content determined by atomic absorbtion.



6-2-3-3 <u>Results</u>: Lead, zinc, copper and molybdenum values obtained by analysis of the soil samples are plotted on four maps accompanying this report. An area of combined lead, zinc, copper and molybdenum anomalies emerges roughly centred along the location line of ON #s 79 - 82 claims. The topography in this area has a fairly steep slope to the southwest so that the source of these anomalous metal values in the soil may lie uphill to the northeast of the anomalous area.

Respectfully submitted,

R. MORGAN David R. Morgan, Geologist ng

7-0 EXPENDITURES:

Wages & Salaries: 3,880.00 97 man days : \$40.00 per man day Engineering: 750.00 January 30, 31; March 23, 24; June 20, 21; Transportation: 750.00 Truck 400.00 Skidoo Room & Board: 970.00 97 man days : \$10.00 per day Supplies: 325.00 Snow shoes, shovels, tape, tages etc., 2,150.00 Analysis & Report:

Total: \$ 9,225.00

6.

Declared before me at the of Vancour

, in the

Province of British Columbia, this 24.2h

day of august

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

1970, A.D.

Sub-mining Recorder

8-0 STATEMENTS OF QUALIFICATIONS:

8-1 Qualifications of Supervisor:

I, David R. Morgan of 3424 West 6th Avenue, Vancouver 8, B.C.,

do hereby certify that:

- 1. I am a graduate of McGill University, Montreal, Quebec. (B.Sc. Honours Geology, 1954)
- 2. Since graduating I have engaged in mining exploration in British Columbia, Quebec, Labrador, Ontario, Northwest Territories, the Yukon, Haiti, Arizona, Washington, Montana, Idaho and Mexico.
- 3. I have supervised geochemical surveys in the Highland Valley, Haiti, the Yukon and the Kootenays.
- 4. I am a consulting geologist.
- 5. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.
- 6. I personally visited the "ON" claim group of Zone Explorations Ltd. (N.P.L.) on March 24, 1970, for the purpose of supervising the start of the program of line cutting and soil sampling.

Signed: D.R. Morgan, P. Eng.



7.

8-2 Qualifications of Sampler:

I, E.J. Liepins of 1920 West 4th Avenue, Vancouver 9, B.C.,

do hereby certify that:

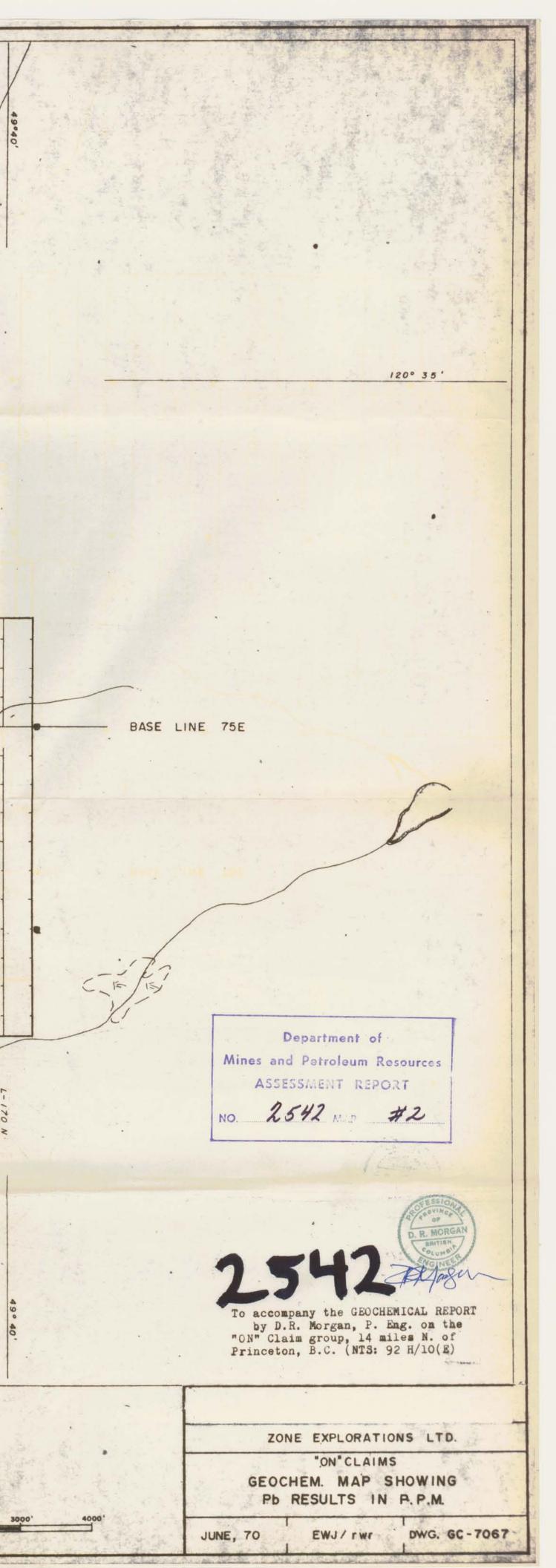
- 1. I have worked as Engineering Inspector in soils and drilling at Grand Rapids, Manitoba for Manitoba Hydro and also at Mica Creek, B.C., for Caseco Consultants.
- 2. I have worked as a surveyor for C.N.R. (Winnipeg) and also at Mica Creek, B.C., for Caseco Consultants.
- 3. I conscientiously carried out the line cutting and soil sampling program as instructed by D.R. Morgan, geologist.

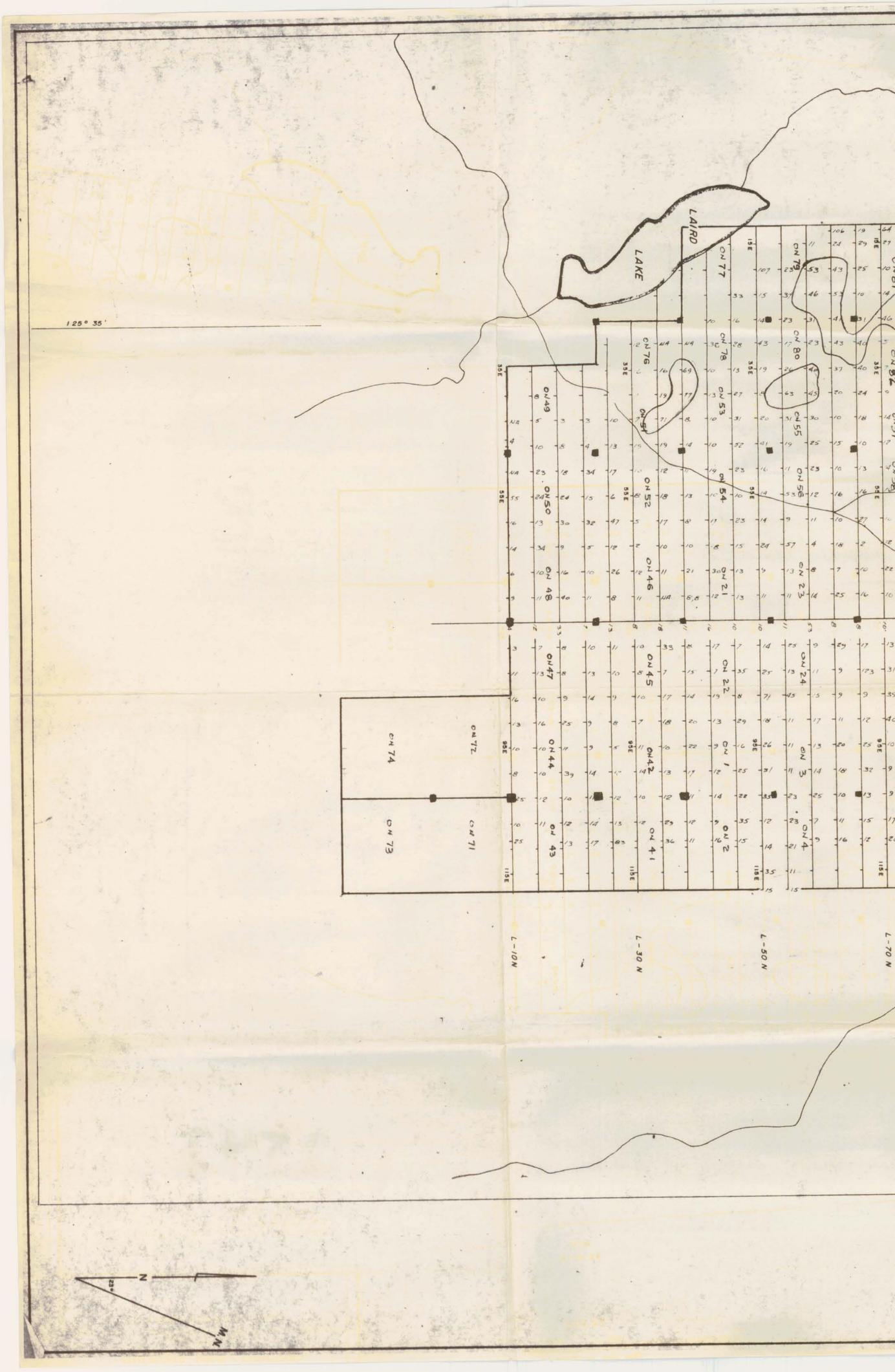
Signed:

soil samplir Huebucc E.J. Liepins

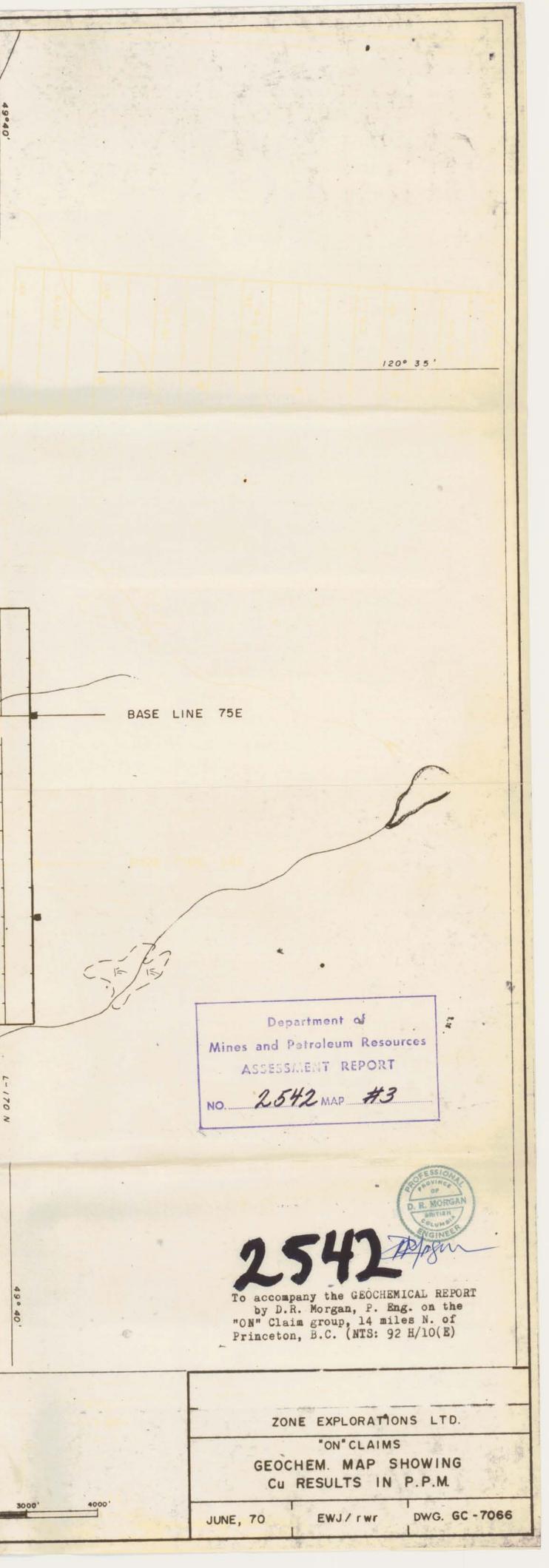


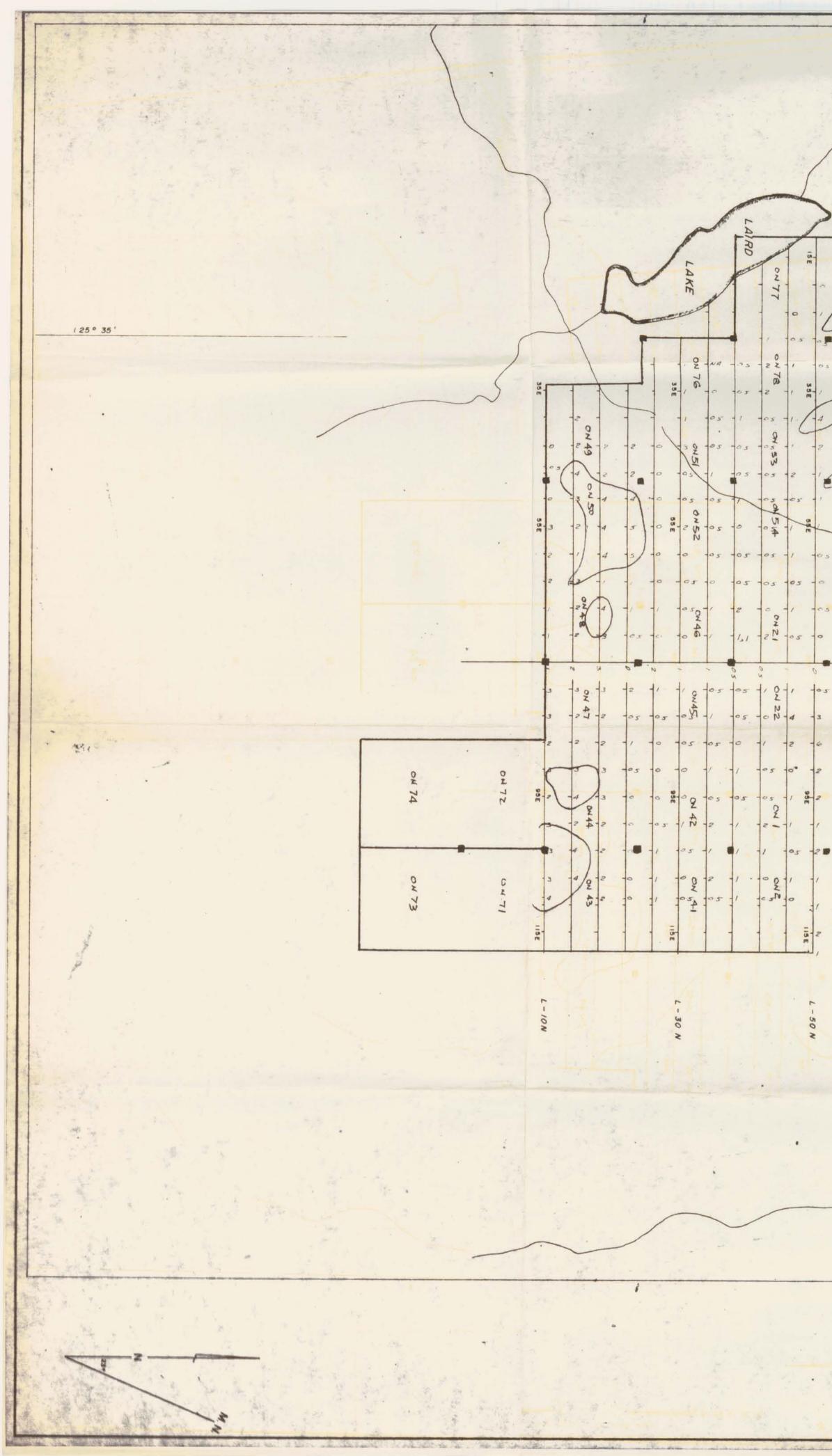
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106 -19 35/-61 29 0 27 2-11 -24 12 -107 -230/53 -43 -25 -102 -34 09 -14 -54 -33 -15 -37 -46 -52 -10 -57 -46 -255 3 -25 -14 -23 2 -23 -43 -40 -5 -25 -13 -14 9 -24 -43 20 04-73 m 032 40 m 00 -10 -13 m-19 -26 35 6 tad -36 -10 -30 -24 -63 -45 20 -312-30 1 80 63 -18 S -8 4/ . -19 -23 -16 -11 0-23 -10 -13 -42 -15 66555 3 -10 -10 8-14 8--10 -24 -27 -18 -29 -13 -15 -24 -22 0-29 -36 - 67 4-10 -10 5 -11 -8 -11 12-14 -25 -16 -17 -7 -14 -25 -9 -29 -17 -13 -10 02 141 -13 N--9 -123 -31 N-23 -8 -18 2-16 -16 5 -9 -9 -39 -25 -71 -45 -40 -18 200 -24 -10 W714 -9 01--3/ 100 -- 18 34 201 -14 N.T.S 92-H-9 1 SCALE 1000' 0' One inch = 1000 Feet



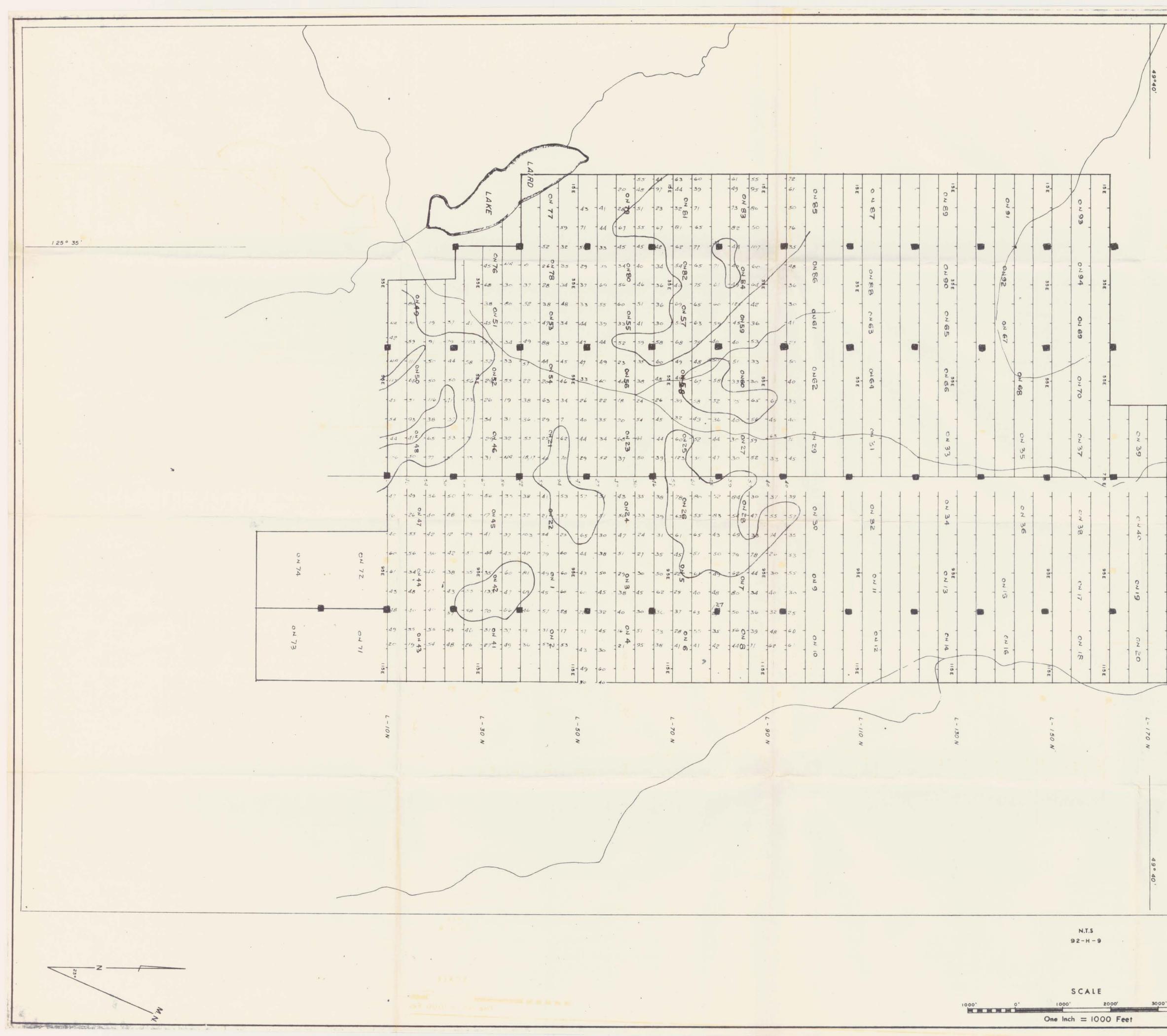


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SCALE

49°40'

120° 35' BASE LINE 75E 4. Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 2.542 MAP # 4 To accompany the GEOCHEMICAL REPORT by D.R. Morgan, P. Eng. on the "ON" Claim group, 14 miles N. of Princeton, B.C. (NTS: 92 H/10(E) 12 which was and show a surger photo-the surger ZONE EXPLORATIONS LTD. "ON" CLAIMS GEOCHEM. MAP SHOWING Mo RESULTS IN P. P. M. JUNE, 70 EWJ/rwr DWG. GC-7069



120° 35' BASE LINE 75E Department of Mines and Petroleum Resources ASSESSMENT REPORT NO 2542 MAP #1 To accompany the GEOCHEMICAL REPORT by D.R. Morgan, P.Eng. on the "ON" Claim group, 14 miles N. of Princeton, B.C. (NTS: 92 H/10(E) ZONE EXPLORATIONS LTD. "ON" CLAIMS GEOCHEM. MAP SHOWING Zn RESULTS IN P.P.M. 4000 EWJ/rwr DWG. GC-7068 JUNE, 70