

# 4503

92I/7E

GEOCHEMICAL REPORT  
on the  
KAY-LYN CLAIM GROUP  
SWAKUM MOUNTAIN AREA  
SOUTH-CENTRAL BRITISH COLUMBIA  
NICOLA MINING DIVISION  
Lat. 50°16'N  
Long. 120°41'W  
for  
HESCA DEVELOPMENT CORP. LTD.

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
Kay 1	53731	May 11, 1974
Kay 20	53750	May 13, 1974
Kay 39	53767	May 14, 1974
Kay 40	53768	May 14, 1974
Lyn 1 - 4	55924 - 55927	June 16, 1974
Lyn 11	55934	June 16, 1974
Lyn 12	55935	June 16, 1974
Lyn 32 - 40	55955 - 55963	June 18, 1974
Lyn 44 - 59	56119 - 56134	June 25, 1974
Lyn 78 - 81	56153 - 56156	June 28, 1974
Lyn 83	56158	June 28, 1974

by

G. C. GUTRATH, P. ENG.

ATTLED EXPLORATION MANAGEMENT LTD.

Department of

Mines and Petroleum Resources

NTS 921

ASSESSMENT REPORT

NO. 4503 MAP \_\_\_\_\_

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION.....	1
GEOGRAPHY	
Location.....	2
Access.....	2
Topography.....	2
Vegetation.....	2
Water.....	2
CLAIMS.....	3
PERSONNEL.....	3
WORK COMPLETED.....	4
SURVEY RESULTS	
Copper.....	6
Zinc.....	6
Lead.....	6
CONCLUSION.....	8
STATUTORY DECLARATION.....	9
ILLUSTRATIONS	
#1 Location Map.....	After Page 2
#2 Histogram of Soil Analyses--Copper.....	After Page 7
#3 Histogram of Soil Analyses--Zinc.....	After Page 7
#4 Histogram of Soil Analyses--Lead.....	After Page 7
#5 Claim Map and Geochemical Sample Points.....	In Map Pocket
#6 Geochemical Map--Copper (1" = 500').....	In Map Pocket
#7 Geochemical Map--Zinc (1" = 500').....	In Map Pocket
#8 Geochemical Map--Lead (1" = 500').....	In Map Pocket

GEOCHEMICAL REPORT  
KAY-LYN CLAIM GROUP  
NICOLA MINING DIVISION

INTRODUCTION

This report is written at the request of Mr. E. Mueller, President of Hesca Developments Ltd.

The Kay-Lyn Group of 40 claims is located on the south side of Swakum Mountain, seven miles north of Merritt in southern British Columbia.

An exploration program of geochemical soil, silt and rock chip sampling and analyses was carried out in July and August of 1972 and in May of 1973.

## GEOGRAPHY

### Location

The property is located in south-central British Columbia, 10 miles northeast of the community of Merritt.

The coordinates of the property are 50°16' north latitude and 120°41' west longitude.

### Access

The Clapperton Creek gravel road goes to the northeast from Highway 5 at the west end of Nicola Lake seven miles from Merritt. Approximately 2.5 miles north along the Clapperton Creek Road, the Shuta Creek Road turns off to the north and passes through the west side of the claim group at mile 5.

### Topography

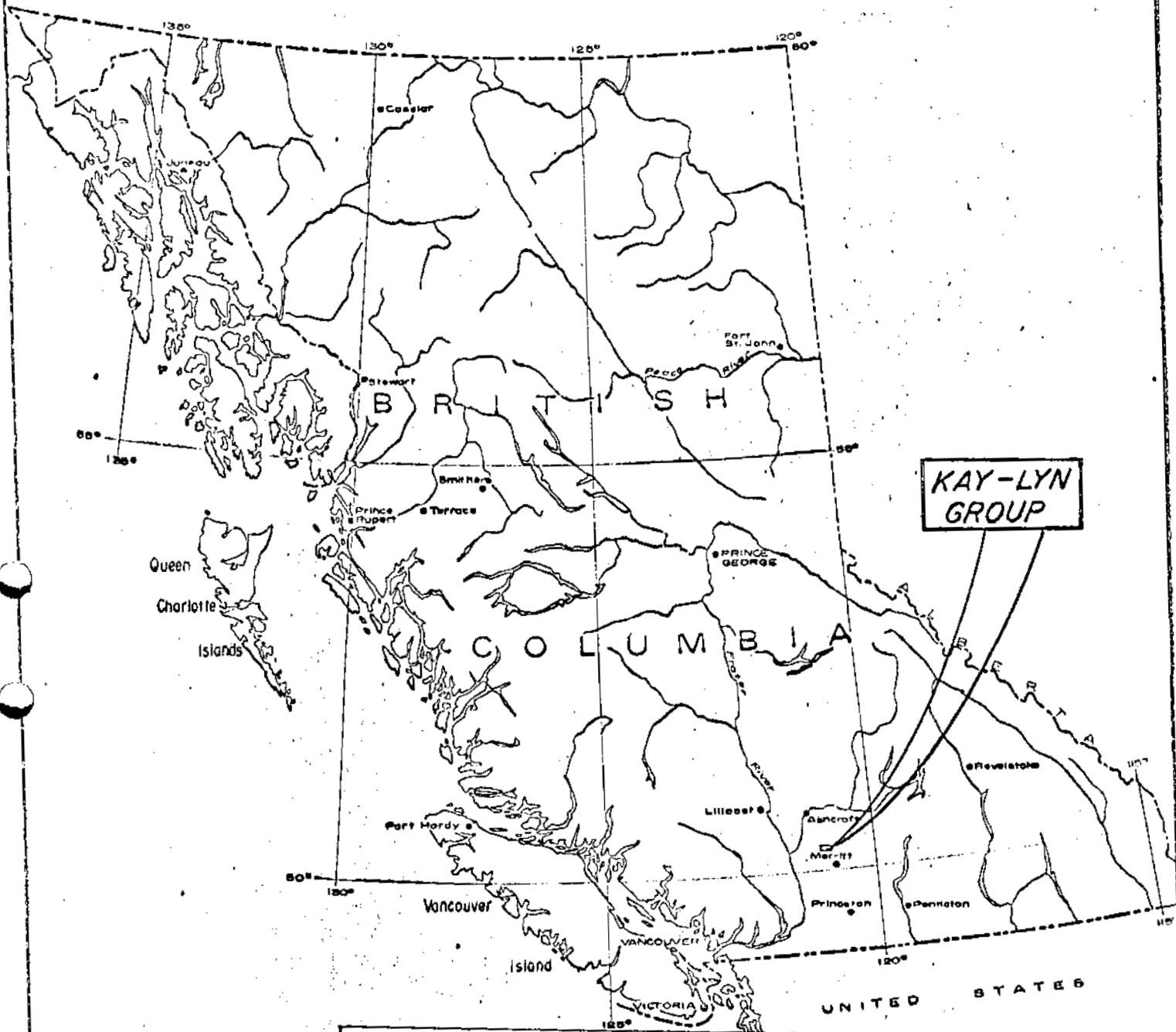
The claims cover an area between the elevations of 4,700 feet and 5,400 feet on the southerly facing slope of Swakum Mountain. The relief is quite gentle with numerous rounded ridges bordering Kirby and Shuta Creek.

### Vegetation

The area is completely timbered with mixed fir, spruce and pine on the well-drained ridges and with cedar and hemlock in the few poorly drained areas. The area is relatively open except along the creeks where there are thick willows.

### Water

There are numerous streams cutting the area as well as a number of small lakes. There is ample water in the area for drilling requirements.



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 ASSESSMENT REPORT  
 No. 4503 MAP #1

LOCATION MAP

CLAIMS

The following is a list of the claims grouped for assessment work.

<u>Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Kay 1	53731	May 11, 1974
Kay 20	53750	May 13, 1974
Kay 39	53767	May 14, 1974
Kay 40	53768	May 14, 1974
Lyn 1 - 4	55924 - 55927	June 16, 1974
Lyn 11	55934	June 16, 1974
Lyn 12	55935	June 16, 1974
Lyn 32 - 40	55955 - 55963	June 18, 1974
Lyn 44 - 59	56119 - 56134	June 25, 1974
Lyn 78 - 81	56153 - 56156	June 28, 1974
Lyn 83	56158	June 28, 1974

GEOLOGY

General

The Swakum Mountain area is underlain by a northerly trending belt of Nicola volcanics that has been intruded to the east and west by Coast Range granodiorite intrusive.

Occurrences of copper, gold, silver and tungsten have been reported on Swakum Mountain both to the north and south of the claim group. Areas of silicification associated with fracturing and pyritization were noted in a number of areas within the claim group.

The property geology has not been mapped.

PERSONNEL

The first phase of the exploration program was carried out in July and August of 1972 by Mr. Fritz Oerth under the supervision of Mr. G. Milburn.

The second phase of the programme consisted of line cutting for a grid survey and soil sampling. This work was carried out by Atled Exploration Management Ltd. under the overall supervision of G. C. Gutrath, P.Eng. The field work was done by G. Baker, E. Cox, and R. Emerson in May of 1973.

The work completed by both groups has been compiled by G. C. Gutrath.

#### WORK COMPLETED

Mr. Milburn and Mr. Orth collected soil, silt and rock chip samples using a topographic map and an aneroid barometer for survey control. They also chain-and-compassed three small grid areas for soil sampling. These are identified as Grids A, B and C on the enclosed maps. A total of 21,400 feet was surveyed.

Atled cut and surveyed an 8,000-foot baseline at N55°E which connects Grid "B" and Grid "C". Crosslines totalling 33,000 feet were cut at right angles at 1,000-foot intervals with stations marked every 200 feet.

A total of 160 soil and silt samples and 21 rock chip samples were collected for analysis in 1972. Vangeochem Lab. Ltd. analyzed 74 of the samples for copper and zinc, and Crest Laboratories (B.C.) Ltd. analyzed 86 of the samples as well as the 21 rock chip samples for copper, lead and zinc. A total of 210 soil samples were collected from the 1973 Atled grid and these samples were analyzed by Chemex Labs Ltd. for copper.

The samples were collected from the "B" soil horizon at depths varying from six inches to 15 inches using a mattock and a stainless steel trowel. The samples were placed in Kraft paper bags, labelled and partially dried before shipment to the various laboratories for analysis.

The sample analysis was carried out as follows:

1. Sample was sifted to -80 mesh.
2. Mesh weight used 0.50 g.
3. Final volume: 50 ml.
4. Analyzed by instrument: atomic absorption spec.
5. Extraction by hot  $\text{HClO}_4 - \text{HNO}_3$ .
6. Detection by tectatron AAS-AA1000



SURVEY RESULTS

Copper

The background for copper is in the range of 20 to 70 p.p.m. Threshold anomalous is +70 p.p.m., anomalous +120 p.p.m. and very anomalous is +150 p.p.m.

Since the lines are widely spaced, it is not possible to contour the results. However, the values have been colour coded on the enclosed maps to distinguish the more anomalous areas.

The results indicate an erratic distribution of copper anomalous values that are probably related to small occurrences of copper mineralization in the Nicola volcanics. There are a few isolated highs in the 120 to 150 p.p.m. range.

Zinc

Background zinc is in the range of 40 to 100 p.p.m., threshold anomalous +100 p.p.m., anomalous +140 p.p.m. and very anomalous +180 p.p.m.

Threshold anomalous values are common and are concentrated in the area of Grid "B" on the Lyn 50, 52 and 54 claims.

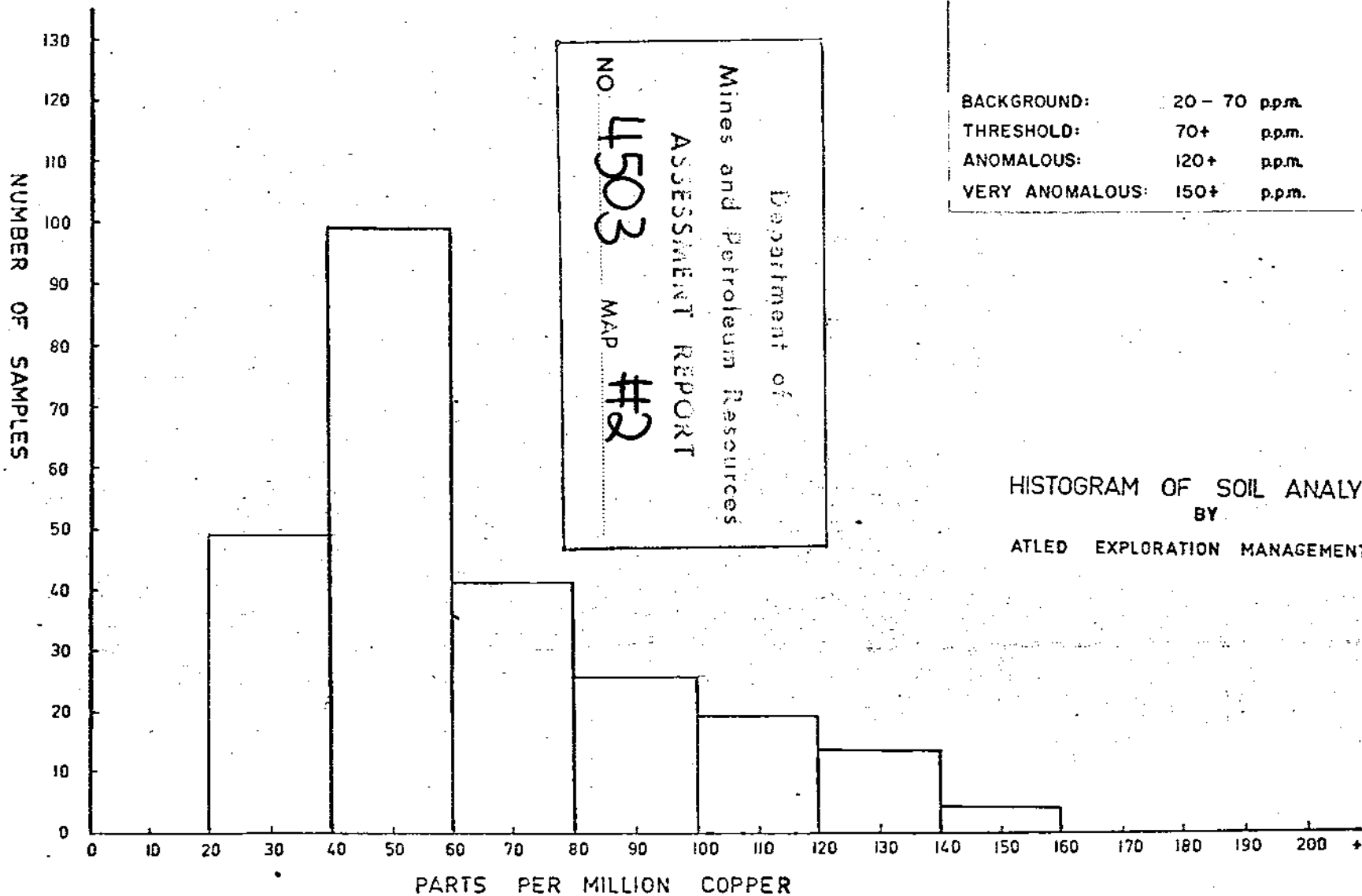
The silts from the lower part of Shuta Creek are threshold anomalous. The highest value of 170 p.p.m. is from the last silt taken from a southerly flowing tributary on the Lyn 53 claim.

Lead

Background values for lead are in the range of 20 to 70 p.p.m., threshold anomalous is +100 p.p.m. and very anomalous is +140 p.p.m.

The lower part of the Shuta Creek on the Lyn 12 claim is definitely anomalous for lead with a high of 152 p.p.m. The area around Hensel Lake on the Lyn 38 claim is also anomalous with a high of 120 p.p.m.

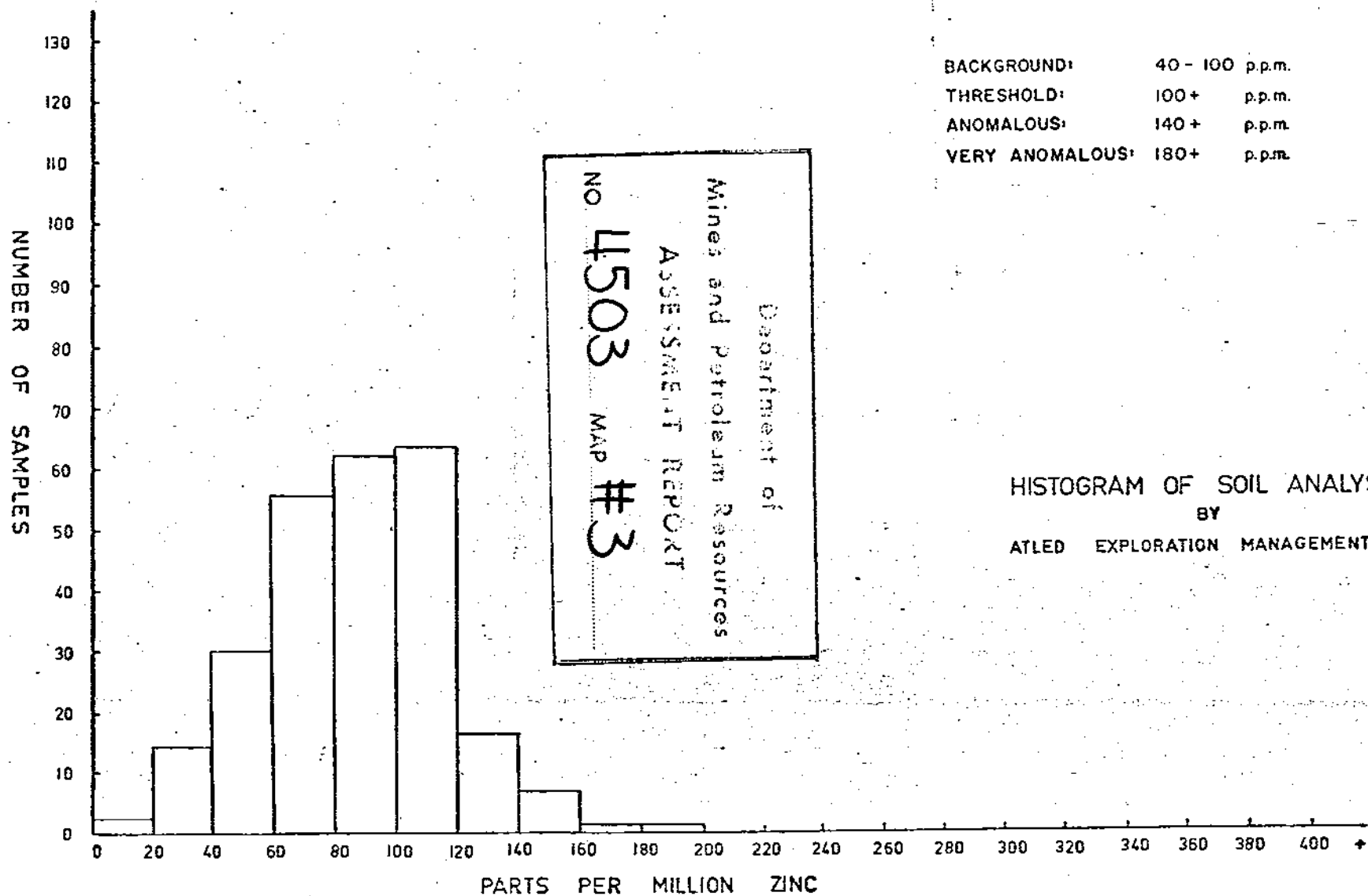
The remainder of the areas has very low background lead value.



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 ASSESSMENT REPORT  
 NO. 4503  
 MAP #2

BACKGROUND:	20 - 70	p.p.m.
THRESHOLD:	70+	p.p.m.
ANOMALOUS:	120+	p.p.m.
VERY ANOMALOUS:	150+	p.p.m.

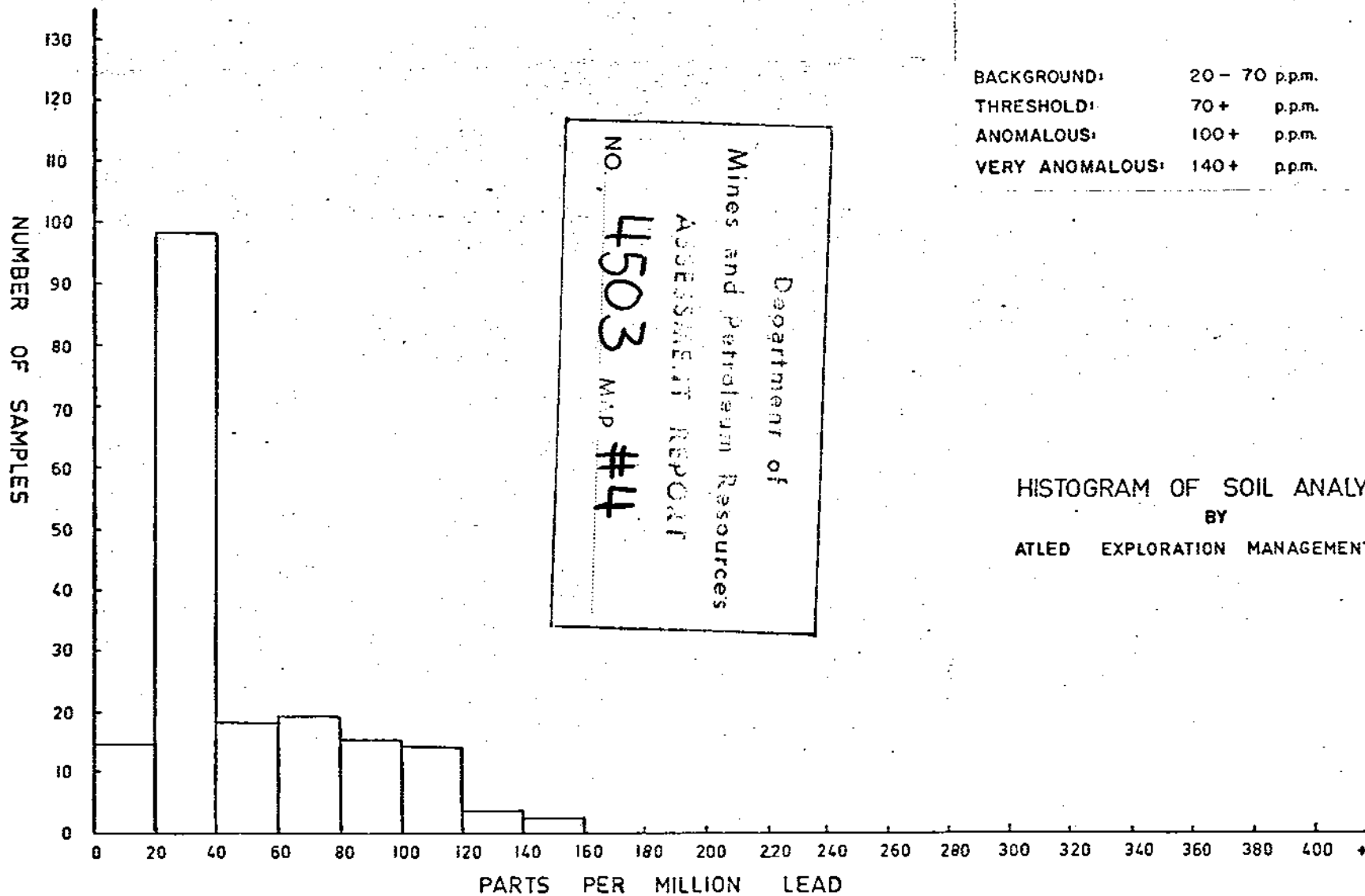
HISTOGRAM OF SOIL ANALYSES  
 BY  
 ATLED EXPLORATION MANAGEMENT LTD.



BACKGROUND: 40 - 100 p.p.m.  
 THRESHOLD: 100+ p.p.m.  
 ANOMALOUS: 140+ p.p.m.  
 VERY ANOMALOUS: 180+ p.p.m.

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 ASSESSMENT REPORT  
 NO 4503 MAP #3

HISTOGRAM OF SOIL ANALYSES  
 BY  
 ATLED EXPLORATION MANAGEMENT LTD.



BACKGROUND: 20 - 70 p.p.m.  
 THRESHOLD: 70+ p.p.m.  
 ANOMALOUS: 100+ p.p.m.  
 VERY ANOMALOUS: 140+ p.p.m.

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 NO. 4503 M.P. #4

HISTOGRAM OF SOIL ANALYSES  
 BY  
 ATLED EXPLORATION MANAGEMENT LTD.

CONCLUSION

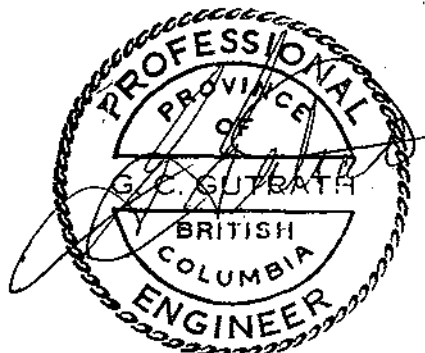
The geochemical results indicate two areas of coincident copper, zinc and lead anomalies. The most significant of these areas is the lower part of Shuta Creek on the Lyn 12 claim. The results indicate that lead mineralization associated with lesser copper and zinc mineralization occurs in this area.

The coincident lead, zinc and copper anomalous values in the Hensel Lake area appear to be related to possible down-slope ion migration and accumulation around the edge of the lake.

The zinc threshold anomaly in the Grid "B" area has very uniform values and is believed to be related to a particular soil condition rather than bedrock mineralization. The anomalous values in the silts to the north of Grid "B" are believed to be related to known mineral occurrences located to the north of the claim group.

The geochemical anomalous areas warrant detailed prospecting and geological mapping.

Respectfully submitted,



G. C. Gutrath, P.Eng.  
Atled Exploration Management Ltd.

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

In the Matter of Minimum Cost of Geochemical Survey  
Completed on the Kay-Lyn Group,  
Nicola Mining Division

I, Gordon Gutrath

of 420-475 Howe Street, Vancouver.

in the Province of British Columbia, do solemnly declare that the following expenditures were made in carrying out the geochemical survey on the Kay-Lyn Group.

Personnel and Support

July-August, 1972

G. Milburn--Field Supervision: 8 days @ \$60.00 \$ 480.00  
F. Orth--Linecutting, Soil Sampling: 20 days @ \$50.00 1,000.00

May, 1973

G. Baker--Field Supervision and Soil Sampling  
9 days @ \$50.00 450.00  
R. Emerson--Linecutting: 9 days @ \$30.00 270.00  
R. Cox--Linecutting: 9 days @ \$30.00 270.00  
G. Gutrath, P.Eng.--Overall Supervision, Data Compilation  
and Report 1,200.00  
8 days @ \$150.00

Geochemical Analyses

21 Rock Chip Samples @ \$2.40 50.40  
74 Samples for Cu, Zn @ \$1.70 125.80  
86 Samples for Cu, Pb, Zn @ \$2.10 180.60

Map, Reproductions on Xerox

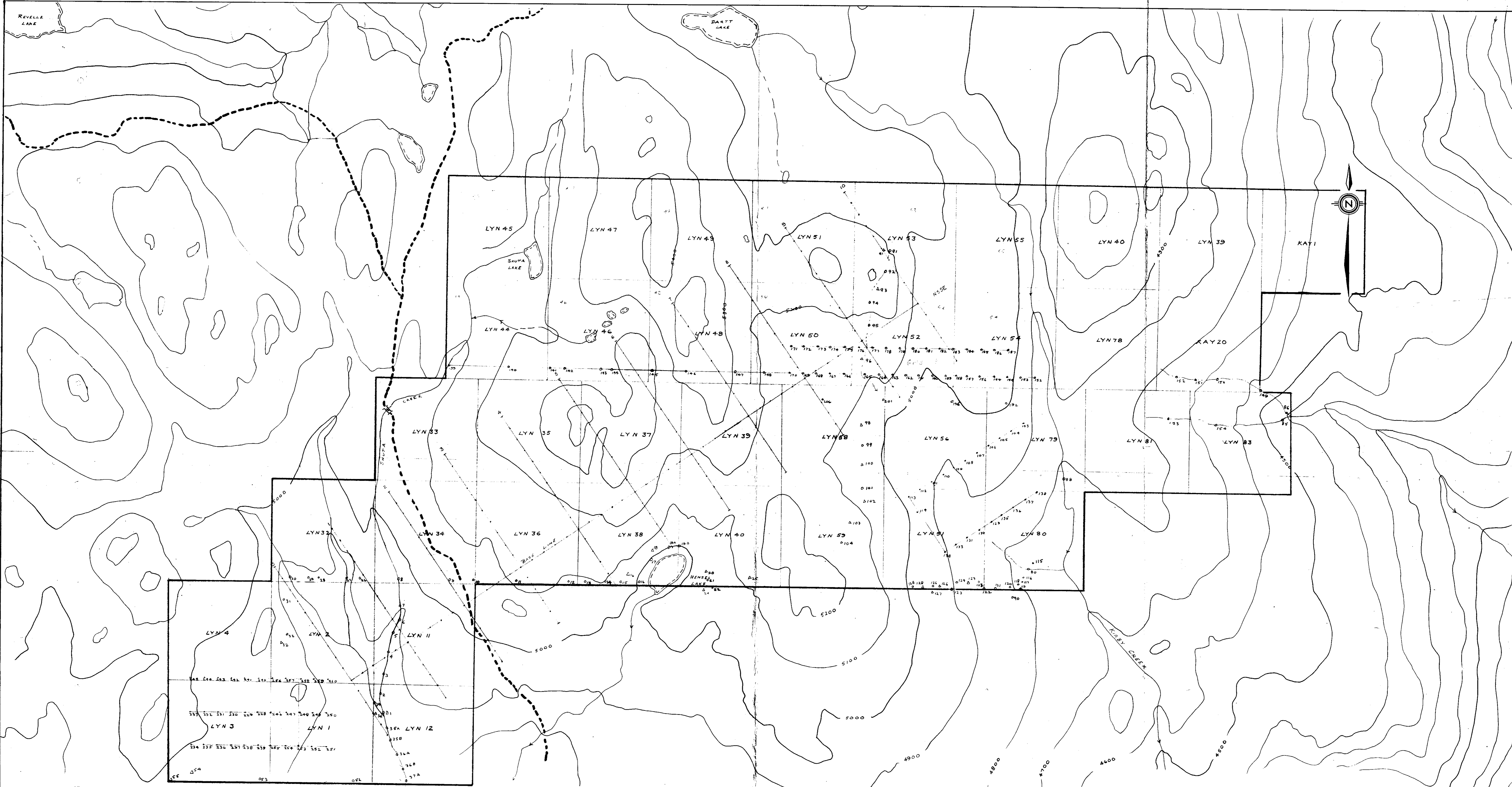
14.50  
\$4,041.30

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."

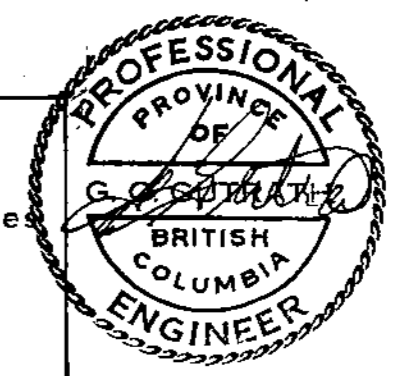
Declared before me at the City  
of Vancouver, in the  
Province of British Columbia, this 30<sup>th</sup>  
day of July, 1973, A.D.

*G. Gutrath*

*J. H. Hally*  
A Commissioner for taking Affidavits for British Columbia or  
a Notary Public in and for the Province of British Columbia.



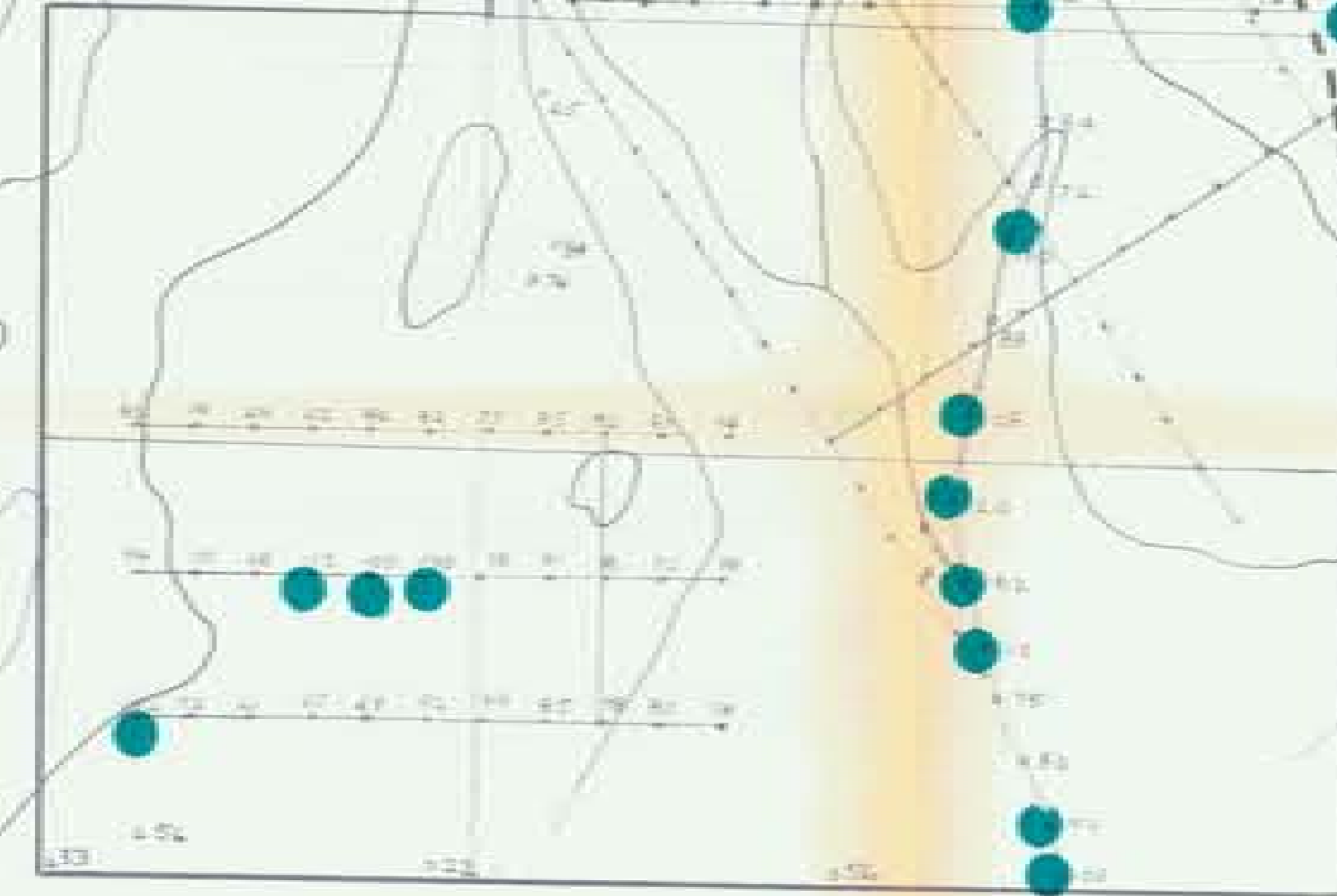
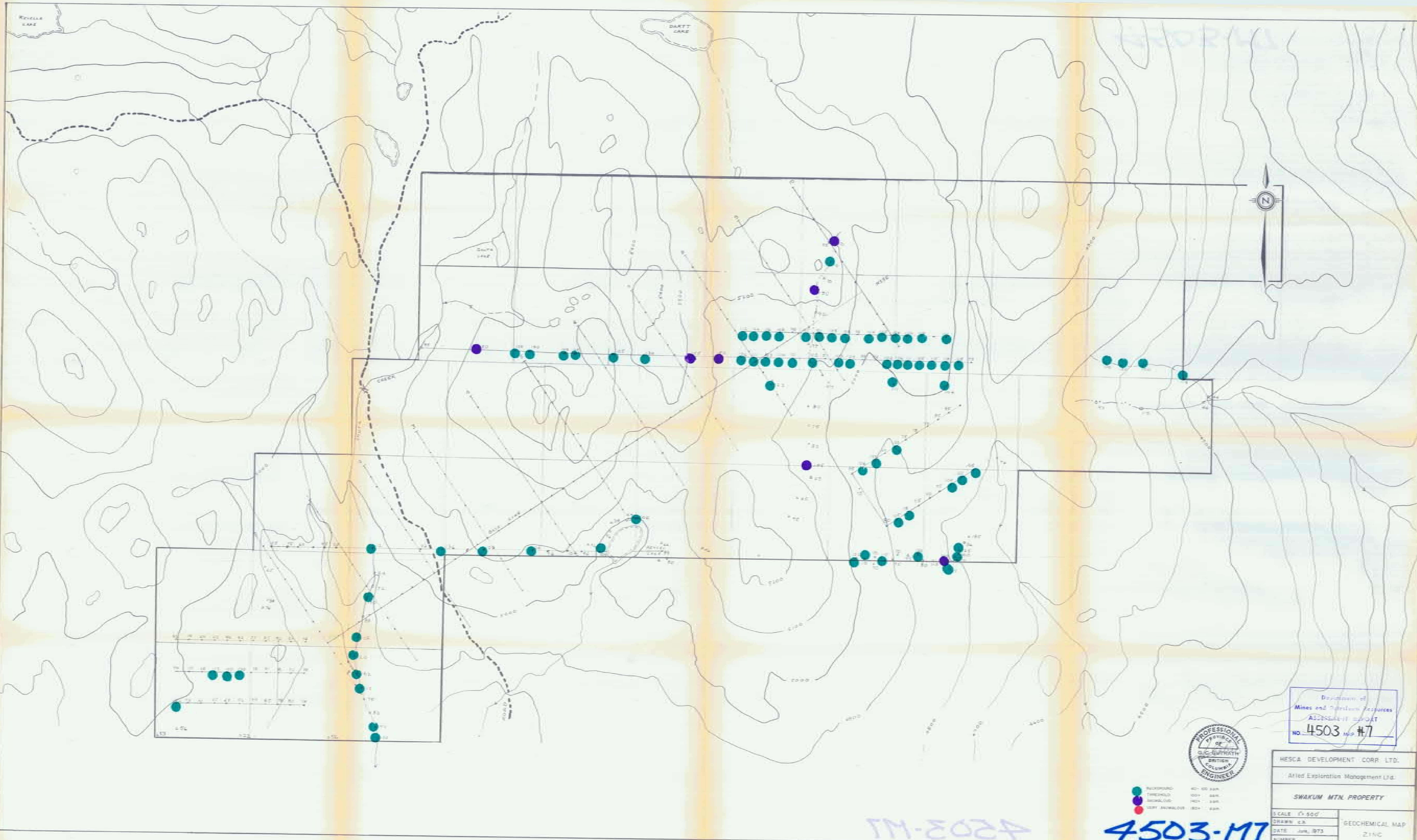
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 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 4503 MAP #5



**4503-15**

HESCA DEVELOPMENT CORP. LTD.	
Atled Exploration Management Ltd.	
<b>SWAKUM MTN. PROPERTY</b>	
SCALE 1" = 500'	CLAIMS MAP AND GEOCHEMICAL SAMPLE POINTS
DRAWN c.b.	
DATE June, 1973	
NUMBER	





BACKGROUND 40+ 50 50m  
 THRESHOLD 100+ 50m  
 WORKLOAD 150+ 50m  
 VERY KNOWLEDGE 180+ 50m

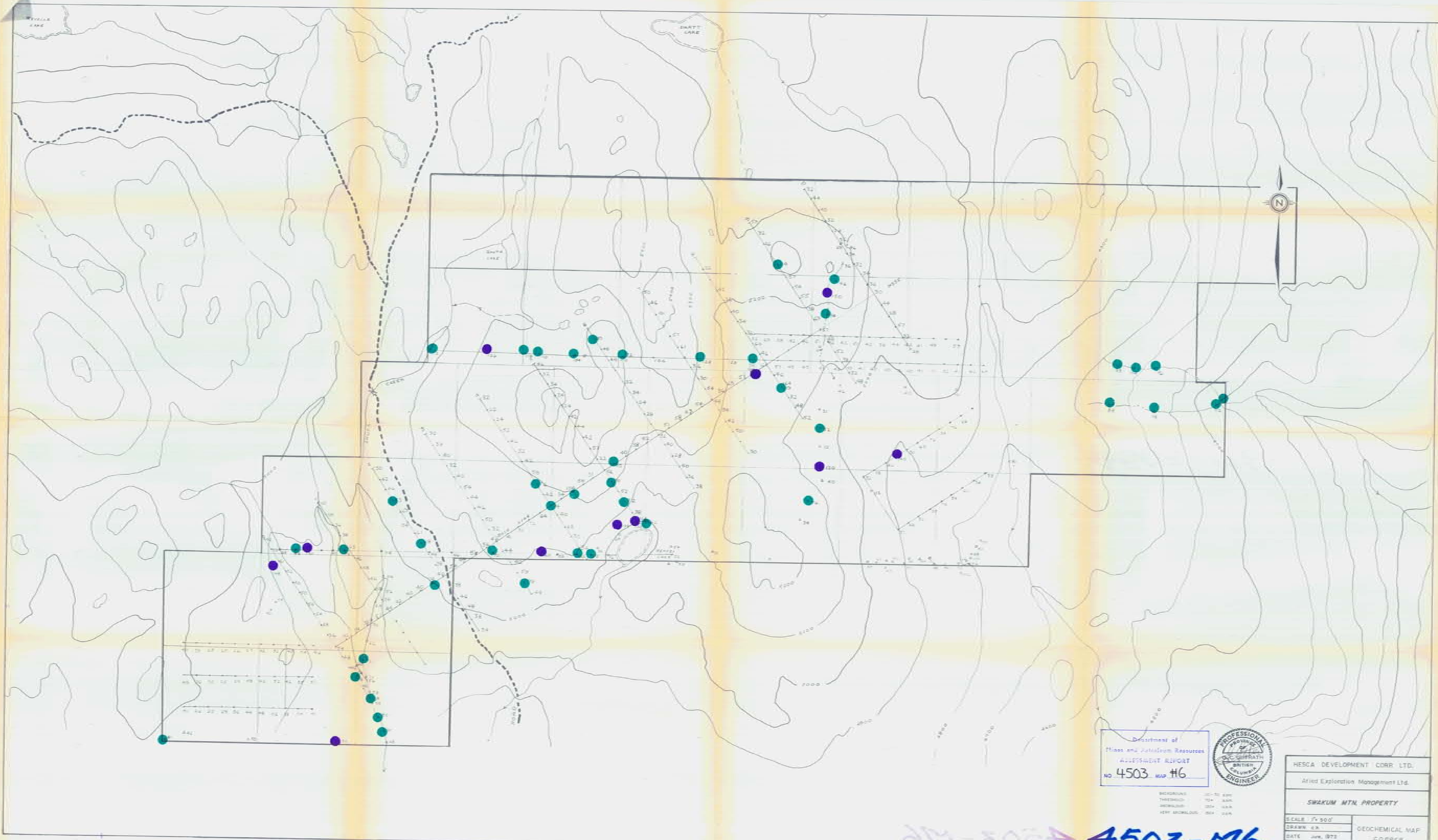


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 NO. 4503 MAP #7

HESCA DEVELOPMENT CORP. LTD.	
Affiliated Exploration Management Ltd.	
<b>SWAKUM MTN. PROPERTY</b>	
SCALE 1" = 500'	GEOCHEMICAL MAP ZINC
DRAWN C.K.	
DATE Jun, 1973	
NUMBER	

4203-M1

4503-M7



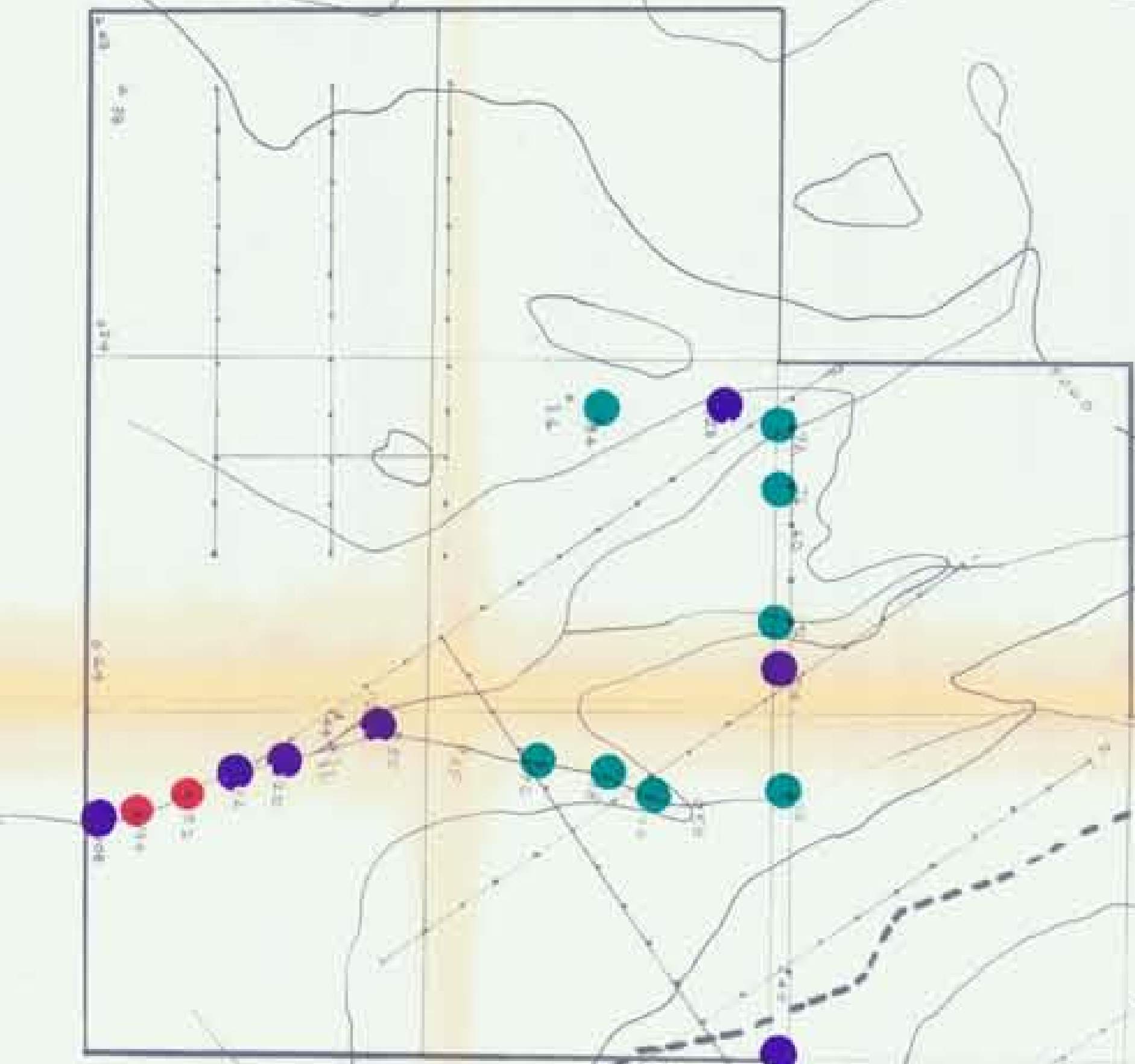
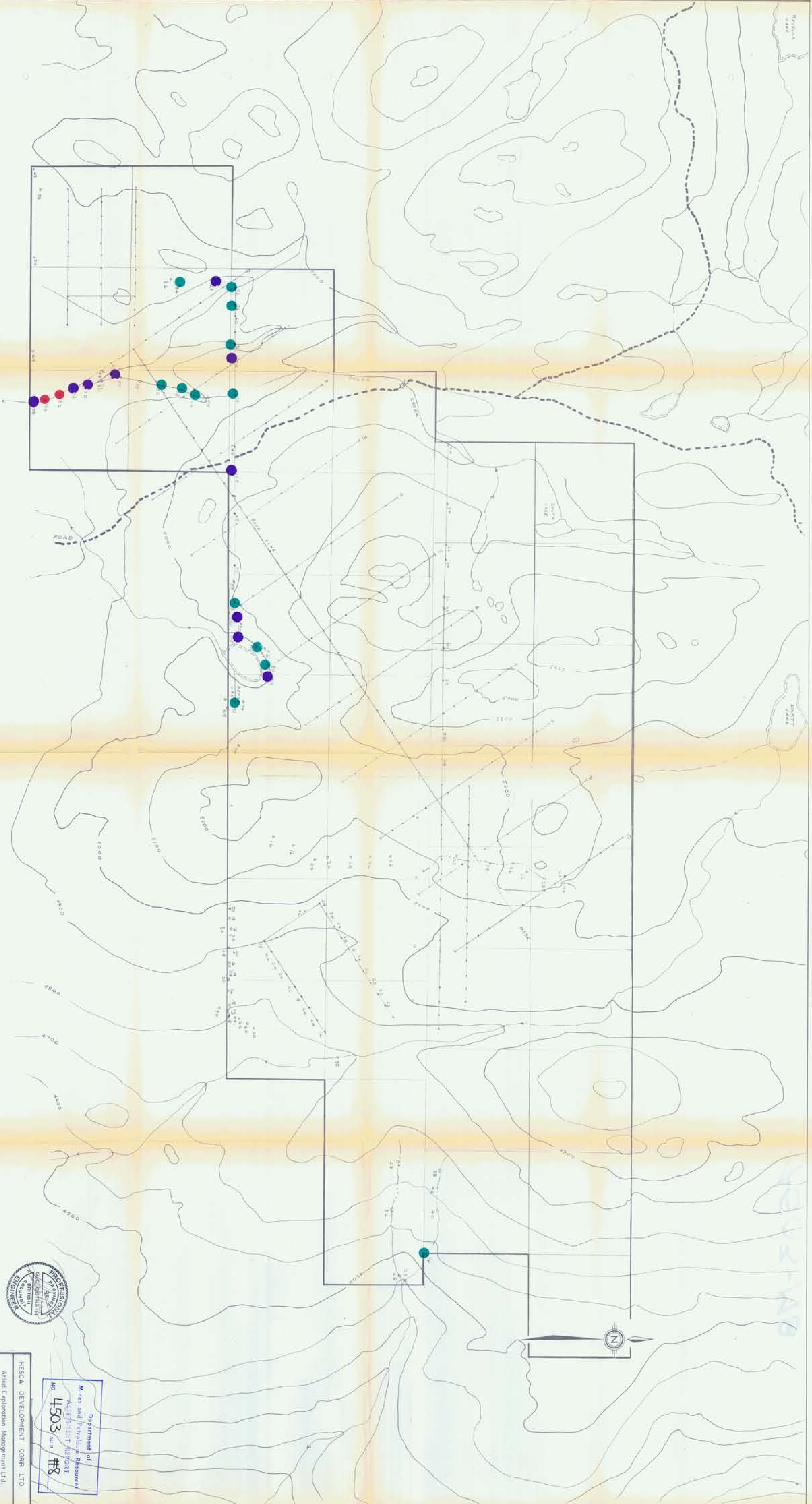
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 4503 MAP #6



BACKGROUND 10-15 ppm  
 THRESHOLD 20+ ppm  
 MODERATE 25+ ppm  
 VERY MODERATE 30+ ppm

HESCA DEVELOPMENT CORP. LTD.	
Aired Exploration Management Ltd.	
SWAKUM MTN. PROPERTY	
SCALE 1" = 500'	GEOCHEMICAL MAP COPPER
DRAWN BY	
DATE Jun. 87	
NUMBER	

DM-808A 4503-M6



Department of  
Mines and Petroleum Resources  
REGISTRATION DIVISION  
No. 4503  
#8

HESCA DEVELOPMENT CORP. LTD.  
Allied Exploration Management Ltd.

SHANKUM MTK PROPERTY

SCALE 1" = 500'  
DRAWN BY [illegible]  
DATE Jan, 873  
LEAD

BM-202A

4503-M8

4503-M8