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NOTICE OF ADDENDUM
to accompany

COPPER PASS MINES LTD.,
GEOCHEMICAL REPORT NO. 1,
STIKINE PLATEAU PROPERTY
BRITISH COLUMBIA

by GEOSURVEY EXPLORATION LIMITED
10147 - 103 Street, Edmonton, Alberta.
January 1967.

ADDENDUM

1. Page 13 - Professional Qualifications
N. W. Reynolds
Change #2 from "I have a B.Sc. (1965)
from the University of Alberta, Edmonton."
to "I have a B.Sc. (1965) in Mathematics
and Geology from the University of Alberta,
Edmonton.
2. Page 13 - Add signature of N. W. Reynolds.

DATED: February 9. 1967.

F.A.M.C.
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APPENDIX A

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COPPER PASS MINES LTD.

GEOCHEMICAL REPORT NO. 1

STIKINE PLATEAU PROPERTY

BRITISH COLUMBIA

GEOSURVEY EXPLORATION LIMITED
GEOLOGY - GEOPHYSICS - ECONOMICS

DATED: January, 1967.

TABLE OF CONTENTS

	PAGE
INTRODUCTION	
Purpose of Report	1
Previous Work	1
Location of Survey	2
Method of Investigation	3
PHYSIOGRAPHY	
Topography	3
Soil Profile	4
GEOCHEMICAL INTERPRETATION	
Chemical Analysis	4
Interpretation of Results	5
Discussion of Results	5
Copper Anomalies	6
Mercury Anomalies	7
Downhill Line Geochemical Results	8
CONCLUSIONS	9
RECOMMENDATIONS	10
QUALIFICATIONS	
M. A. Roed	11
N. W. Reynolds	13
REFERENCES	14

APPENDIX A

Mercury and Copper Geochemical Profiles

FIGURES

- Figure 1 Index Map(in text) ~~#~~ 1
- Figure 2 Property Map(in pocket) ~~#~~ 2

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INTRODUCTION

Purpose of Report

This report is a compilation and interpretation of the geochemical work performed on Copper Pass Mines Ltd. property in the Stikine River area of British Columbia. The field work was done during the dates of August 22, 1966 and September 7, 1966. The interpretation was done in the office in Edmonton between December 10, 1966 and December 23, 1966.

The field work and subsequent interpretation of the geochemical results was carried out by N. W. Reynolds, B.Sc., geologist under the supervision of M. A. Roed, P.Geol., whose professional qualifications follow this report. J. Kudryk assisted in the field work.

Previous Work

Previous work done on the property during the 1966 field season included reconnaissance geological mapping, trenching and sampling, prospecting and an Induced Polarization Survey. A pilot geochemical survey was run to determine the method of approach that would be used on the overall geochemical survey. The effectiveness of this pilot survey

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Department of
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ASSESSMENT REPORT

NO. 896 MAP # 1

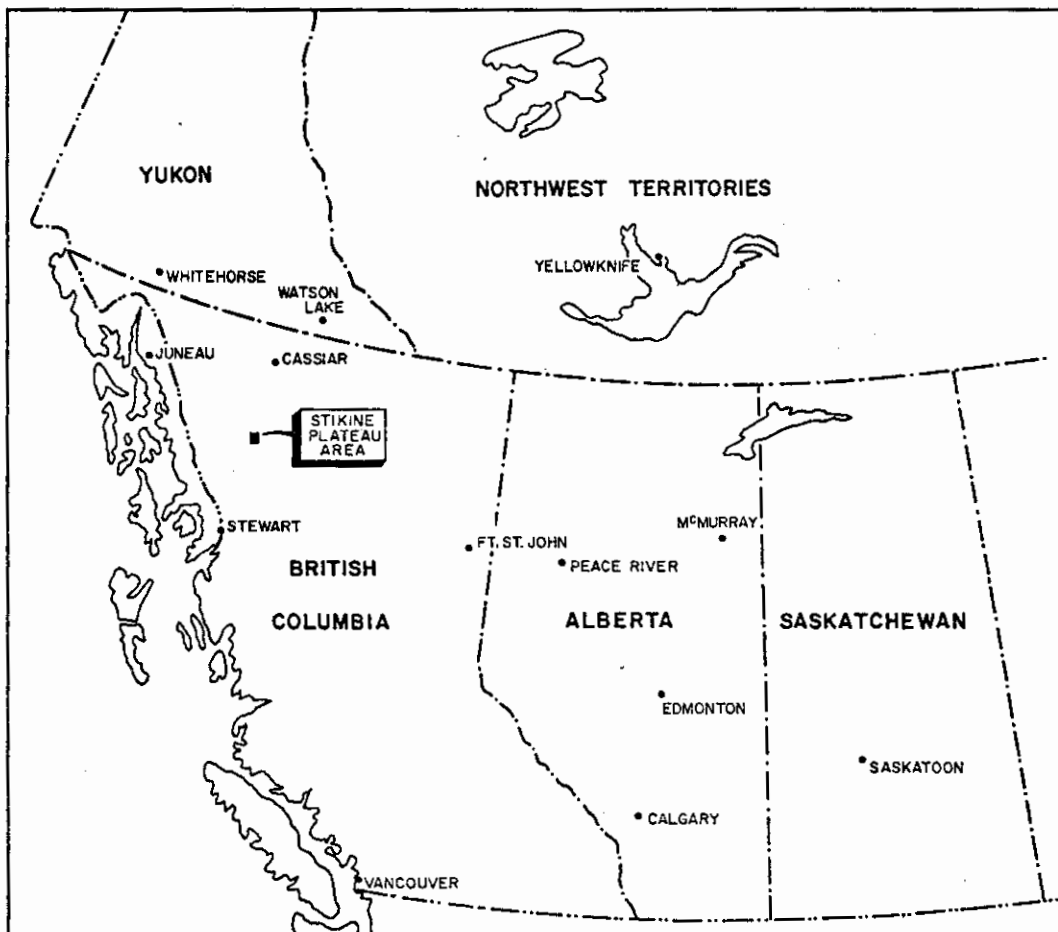


Figure 1

INDEX MAP
SHOWING LOCATION
OF
COPPER PASS MINES LTD.
PROPERTIES

showed that an overall geochemical soil survey would help to delineate the most interesting areas within the Induced Polarization anomalies. For a detailed account of the previous work one is referred to the following reports:

1. Geosurvey Exploration Limited, 1966.

Copper Pass Mines Ltd., Induced Polarization Survey, Dalvenie, Mac, and New Deal Claims, Stikine Plateau area, B.C. September 1966.

2. M. A. Roed Geological Explorations Ltd.

Copper Pass Mines Ltd., Geological Report No. 1, Dalvenie, Mac and New Deal Claims, Stikine Plateau area, B.C.

3. M. A. Roed Geological Explorations Ltd.

Copper Pass Mines Ltd., Geologic Report No. 2, Stikine Plateau and Pine Point Properties.

Location of Survey

The claims are situated on the eastern slope of Thenat-lodi Mountain and immediately west of Upper Gnat Lake, British Columbia at approximately $58^{\circ} 10'$ north latitude and $129^{\circ} 50'$ west longitude (see fig. 1). Specifically the samples were taken on the Induced Polarization Grid (see fig. 2 for location).

Method of Investigation

Samples were collected every 50 feet over the Induced Polarization Anomalies and every 150 feet elsewhere on crosslines 400 feet apart (see fig. 2). Also, eleven samples were taken over the down hill line Induced Polarization Anomaly. The only samples analyzed to date are those taken over the down hill line induced polarization anomaly and the north induced polarization anomaly on lines 36 + 00 N, 40 + 00 N, 44 + 00 N, 48 + 00 N, 52 + 00 N, and 56 + 00 N.

Samples were collected by means of digging a small hole with a shovel and then taking the sample from the wall of the hole and storing it in a plastic bag. By using this method the sample was relatively un-contaminated by particles from other soil horizons.

In all cases it was endeavored to sample the "C" horizon but in a few cases it was not clear which horizon was sampled due to the poorly developed soil profiles.

PHYSIOGRAPHY

Topography

The area covered by lines 36 + 00 N to 56 + 00 N are on the side of a mountain which has a slope of approximately 30°

to the east. There are only a couple of intermittent east flowing streams in this area. There are numerous outcrops in the area covered by the North Induced Polarization Anomaly.

Valley glaciers have scoured out the area giving characteristic N-S trending valleys and depressions.

Soil Profile

The soil profile in the area of the survey is typical of a mountainous region, in that the soil horizons are poorly developed. There is essentially no "B" soil horizon and there is no sharp division between the "A" and "C" horizons.

The "A" horizon is the upper most and contains rich partially decomposed organic debris. The plant roots extend right down into the "C" horizon which is characterized by numerous rock fragments and in some places by small glacial pebbles. In all sample localities it was endeavored to sample this "C" horizon.

GEOCHEMICAL INTERPRETATION

Chemical Analysis

The chemical analysis was done by Barringer Research Limited of Rexdale, Ontario. All samples were run for total

copper and total mercury.

Interpretation of Results

Background values were determined from geochemical analysis of rock samples. The difference in concentration of mercury and copper in the sediment and the porphyritic andesite was very little, thus only one background value was needed for the whole area. All but one geochemical rock sample was consistent. This sample was taken from an outcrop which was highly fractured with the fracture surfaces containing small specks of pyrite. Thus this sample was eliminated in determining the average background values.

As was mentioned earlier, organic material extended down into the "C" horizon in numerous localities thus making it impossible to get a soil sample completely free of organic material. As a result of this geochemical mercury analysis from these localities had to be discarded due to the fact that organic material will concentrate the mercury thus giving extra high values.

Discussion of Results

The geochemical results are generally low and show very little contrast, however, four anomalous areas have been

delineated. Two copper anomalies and two mercury anomalies have been noted. The down hill line geochemical results will be treated separately. All the profiles are included in Appendix A.

Copper Anomalies

Background for copper as determined by geochemical analysis of rock samples was set at 70 ppm (parts per million) with a threshold of 140 ppm copper.

Lines 36 + 00 N and 40 + 00 N contain anomalous copper values between the baseline and approximately 3 + 00 W. These values are probably reflecting the narrow highly-mineralized shear zone paralleling the baseline at approximately 2 + 50 W. The anomaly is not present on line 44 + 00 N and thus coincides with the northern most surface trace of the mineralized shear zone.

The minor anomalous value at 3 + 00 W on line 52 + 00 N is not significant due to the fact it only showed up in the one sample. This could be caused by an analytical or sampling error, or by a more highly fractured zone in the bedrock, which would give a higher copper value.

Mercury Anomalies

Due to organic material present in numerous samples some of the results are widely spaced and it is difficult to make a detailed interpretation. From results of geochemical rock samples run for total mercury, the background value was set at 13 ppb (parts per billion) with a threshold of 26 ppb. Warren, 1966 gives the following values:

"As a general guide, one may expect that in British Columbia, 1) a soil unrelated in any way to mineralization will vary from 0.01 ppm of mercury: 2) a soil in an area of base metal, gold or molybdenum mineralization, but well removed from it, will run from 0.05 to 0.25 ppm of mercury: 3) soils that are within a few hundred feet of major base metal mineralization, with which even minor amounts of mercury are associated, may be expected to run between 0.25 and 2.5 ppm of mercury, and to have one or possibly two horizons that carry upwards of 1 ppm of mercury: 4) soils in the immediate vicinity of mercury mineralization should run at least from 1 to 50 ppm, with many analyses running from 10 to 20 ppm or more". (Warren, 1966 Page 1016).

The anomaly on line 36 + 00 N between the baseline and 1 + 50 W and on line 40 + 00 N between the baseline and 2 + 50 W is probably reflecting the mineralized zone that the copper anomaly showed.

The mercury anomaly on lines 40 + 00 N through to line 48 + 00 N at approximately 5 + 50 W does not correspond with a copper anomaly and represents values significantly higher than background.

Two possibilities are present in the interpretation of this anomaly.

1. The anomaly is non-significant; i.e. it is unrelated to a mineral deposit. This could be due to analytical or sampling errors, but is unlikely as the anomaly extends over three lines. It could also be caused by a concentration due to topographic forces. If this were the case, one would expect that a significant difference in the copper values would also be present in the same vicinity, which is not the case.

2. The anomaly is significant in that it is related to a mineral deposit.

As mercury is more easily dispersed than copper it is possible that the mineralization causing the anomaly is at depth. Since this anomaly is entirely within the north Induced Polarization Anomaly (fig. 2) it is believed to be significant.

Downhill Line Geochemical Results

The profiles for total copper for the downhill line are included in Appendix A. A mercury interpretation for

this area is impossible due to the large number of samples containing organic material and thus being unreliable.

The copper values are generally above the threshold giving an anomalous zone, but a more detailed survey is necessary to delineate the extent and magnitude.

CONCLUSIONS

The geochemical mercury anomaly on lines 40 + 00 N through to line 48 + 00 N at approximately 5 + 50 W (fig. 2) may be reflecting a halo of mercury which has been dispersed from a subsurface base metal deposit. The mercury anomaly coincides with a near-surface Induced Polarization anomaly described by Geosurvey Exploration Limited (Geosurvey Exploration Limited, 1966). The combination of the mercury anomaly and the Induced Polarization anomaly may be representing a subsurface zone of mineralization which supports the general conclusions reached from the geologic and geophysical work carried out on the property to date.

RECOMMENDATIONS

It is recommended that a portion of the future exploration outlined in the Geologic Report No. 2 (M. A. Roed, 1966) be followed;

These recommendations are:

1. " drilling the north anomaly at a minimum of ten locations.
2. drilling the south anomaly at a minimum of three locations.
3. further induced polarization in order to delineate the anomalies for further drilling if results are favourable for the initial drilling programs.
4. further geochemical soil sampling especially in zones of suspected faults."

In addition it is recommended that a more detailed and extensive geochemical soil sampling program be carried out in the vicinity of the down hill induced polarization anomaly prior to drilling of this anomaly.

PROFESSIONAL QUALIFICATIONS

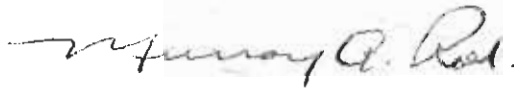
M. A. ROED

1. I, Murray Anderson Roed, reside at 10620 - Rowland Road, Edmonton, Alberta.
2. I have a B.A. (1959) and an M.A. (1961) in Geology from the University of Saskatchewan, Saskatoon.
3. I am a Professional Geologist registered with the Alberta Association of Professional Engineers.
4. Geosurvey Exploration Limited is registered in the Province of Alberta.
5. I possess experience in the following fields of geology: structural and stratigraphic geology; photo-geology; geophysics; engineering geology; subsurface coal exploration: surficial geology; paleontology.
6. I have worked in the Mackenzie Mountains, Franklin Mountains, Richardson Mountains, Mackenzie River Valley, Rocky Mountains, and Foothills, Old Crow Mountains, Keele Range, Eagle Plain, West Coast of Vancouver Island and Southern Alberta.
7. I belong to the following professional societies:
Alberta Association of Professional Engineers;
Geological Society of America; Association of Engineering Geologists; Canadian Institute of Mining and Metallurgy.

8. I have no interest in the property of the company or in the securities offered nor do I expect to receive any directly or indirectly.

Within the scope of this study, all information contained within this report is believed to be accurate.

Respectfully submitted,
GEOSURVEY EXPLORATION LIMITED
per:



Murray A. Roed, P.Geol.

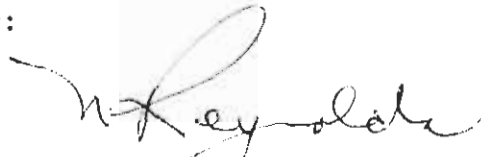
PROFESSIONAL QUALIFICATIONS

N. W. REYNOLDS

1. I. Norman Wayne Reynolds, reside at 10918 - 79 Avenue Edmonton, Alberta.
2. I have a B.Sc. (1965) from the University of Alberta, Edmonton.
3. I have no interest either directly or indirectly in the property covered in this report.
4. That the accompanying report is based on personal examination of the property and work done thereon.

Within the scope of this study, all information contained within this report is believed to be accurate.

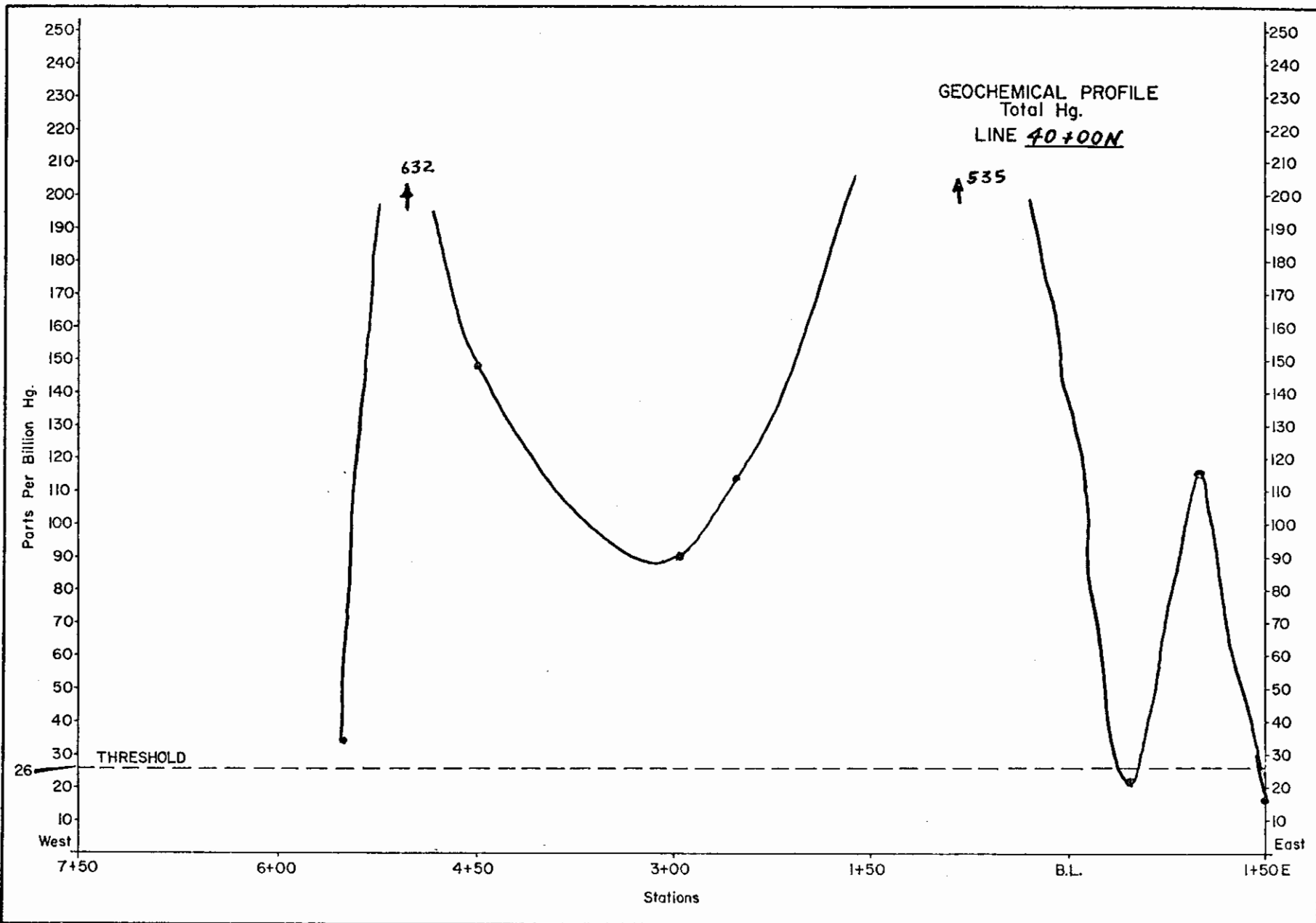
Respectfully submitted,
GEOSURVEY EXPLORATION LIMITED
per:



N. W. Reynolds, B.Sc.

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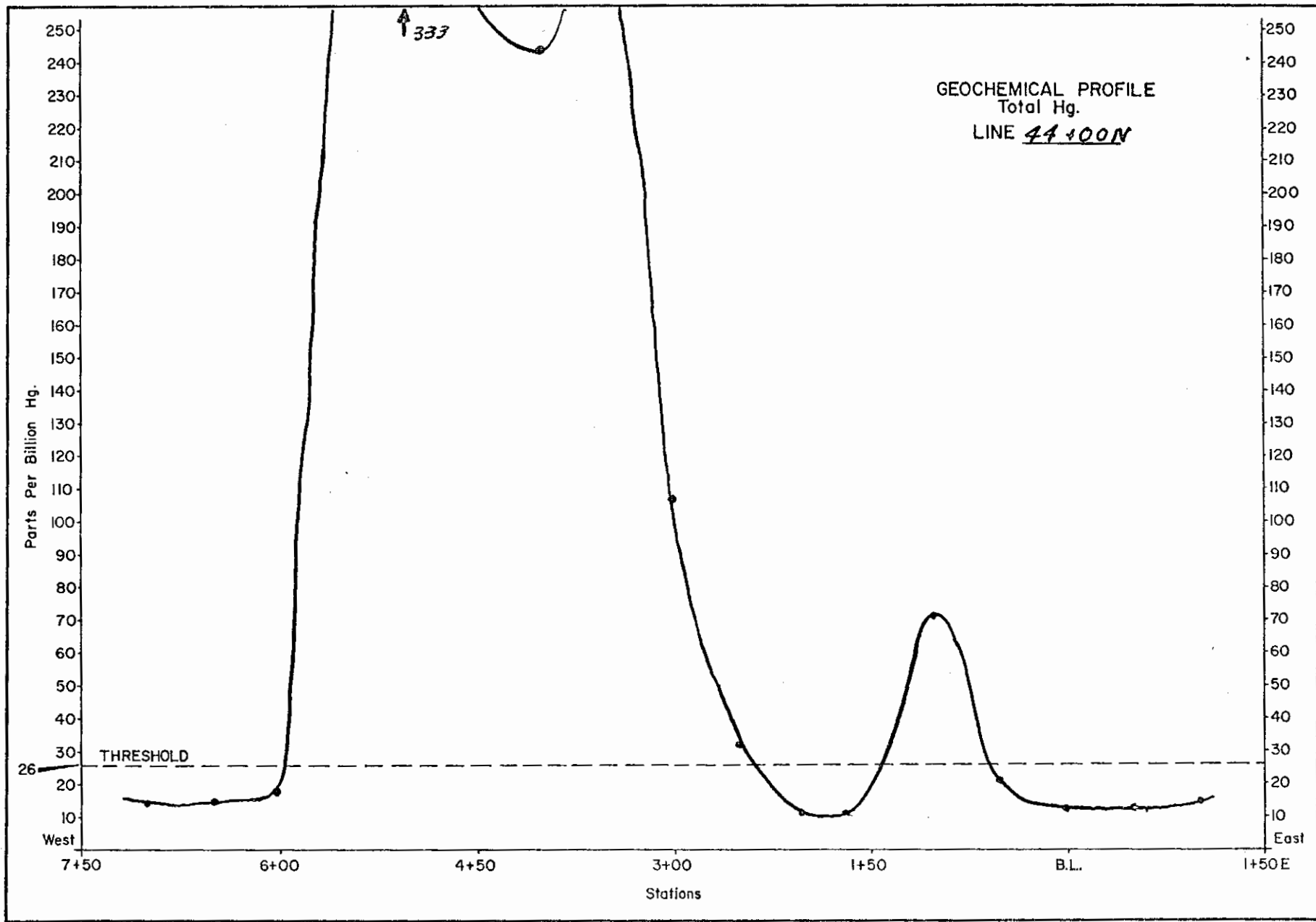


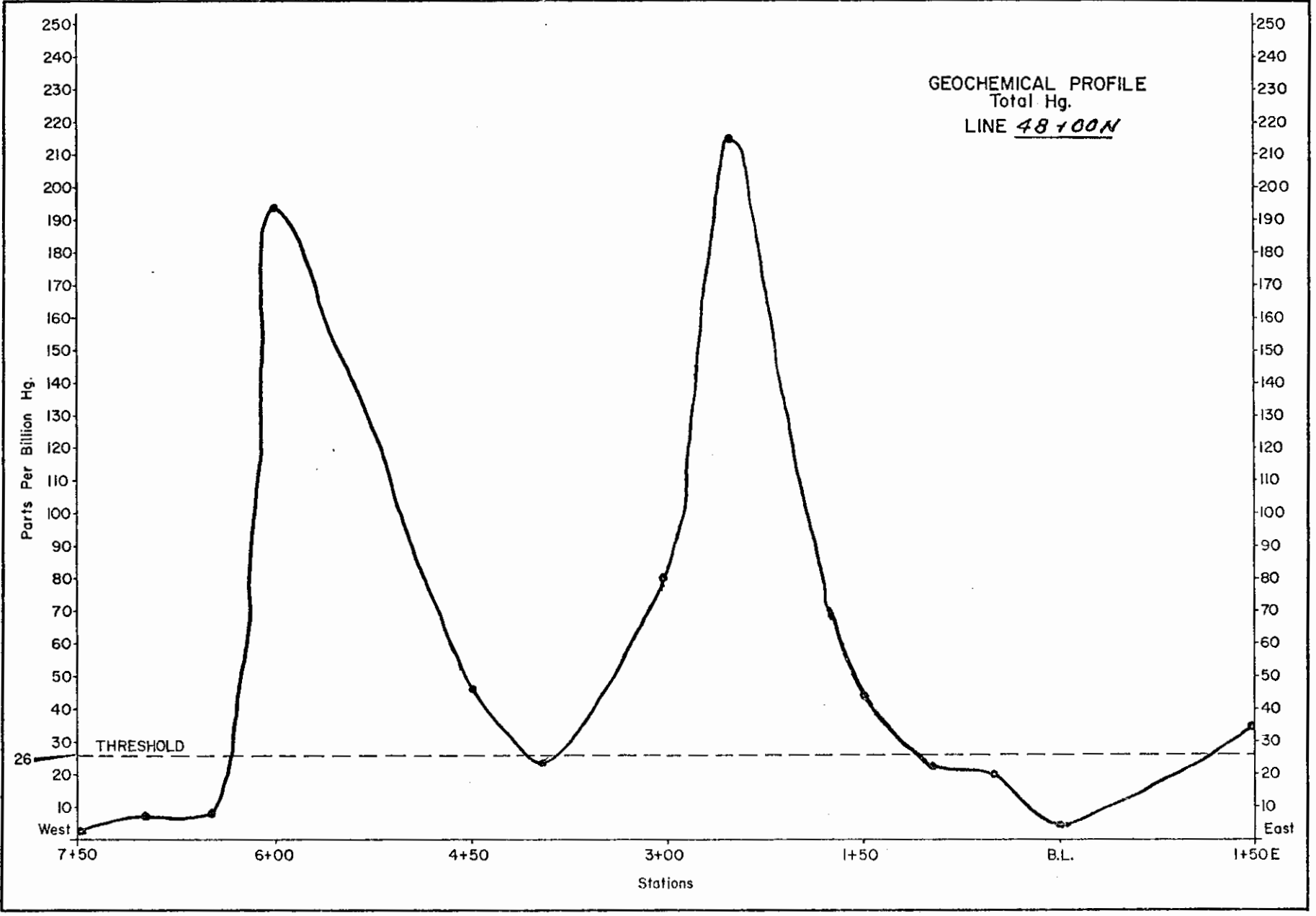
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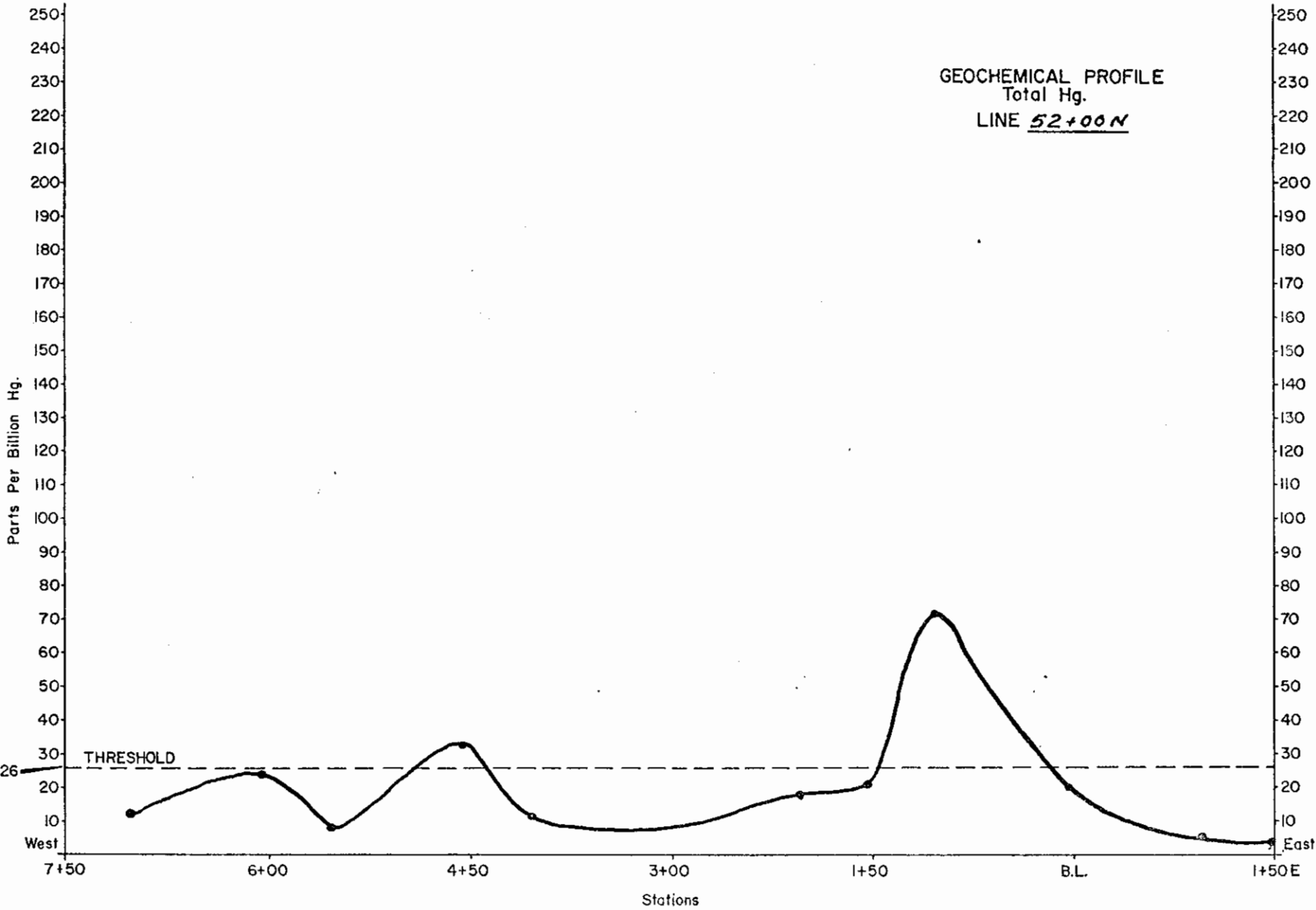
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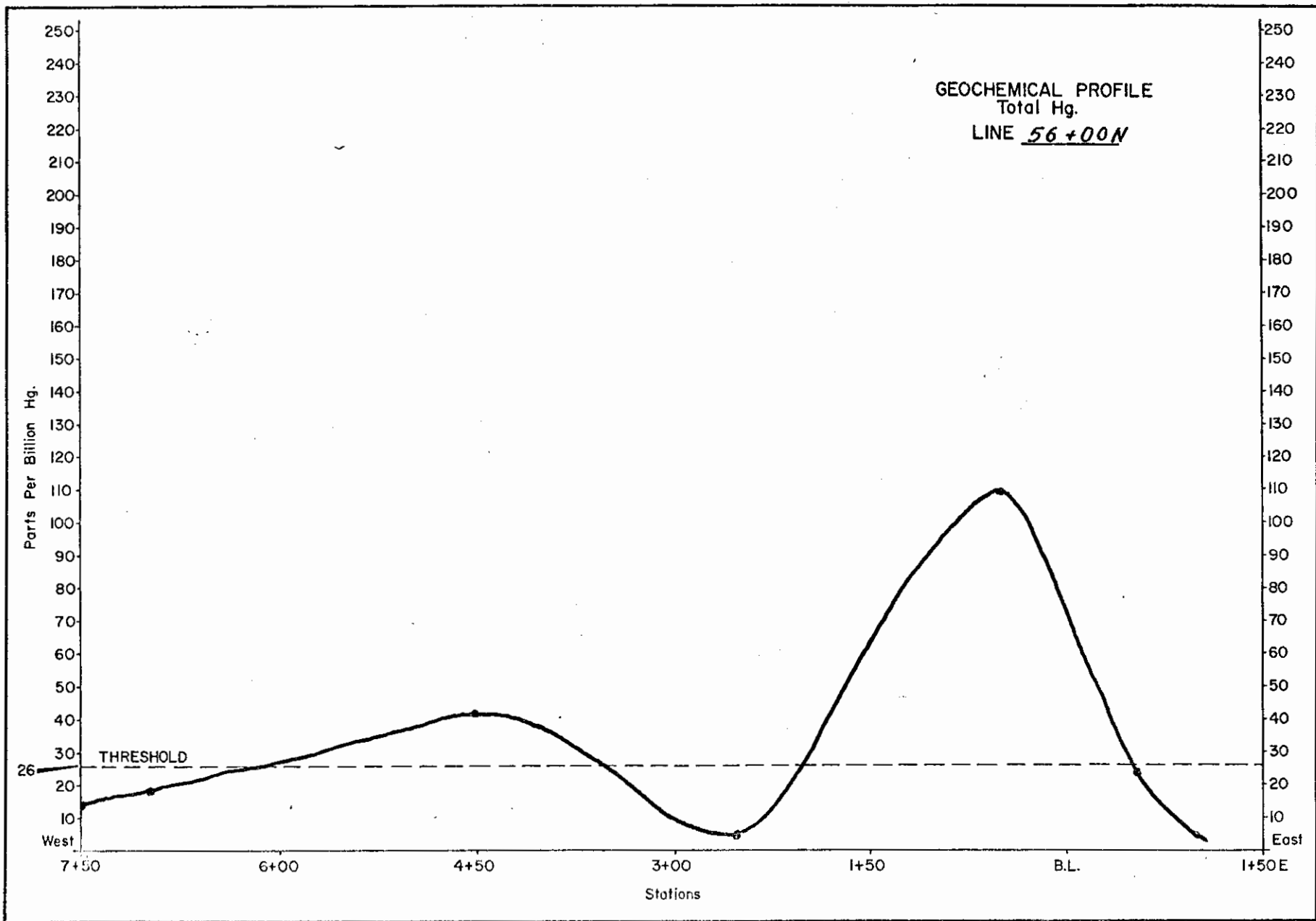
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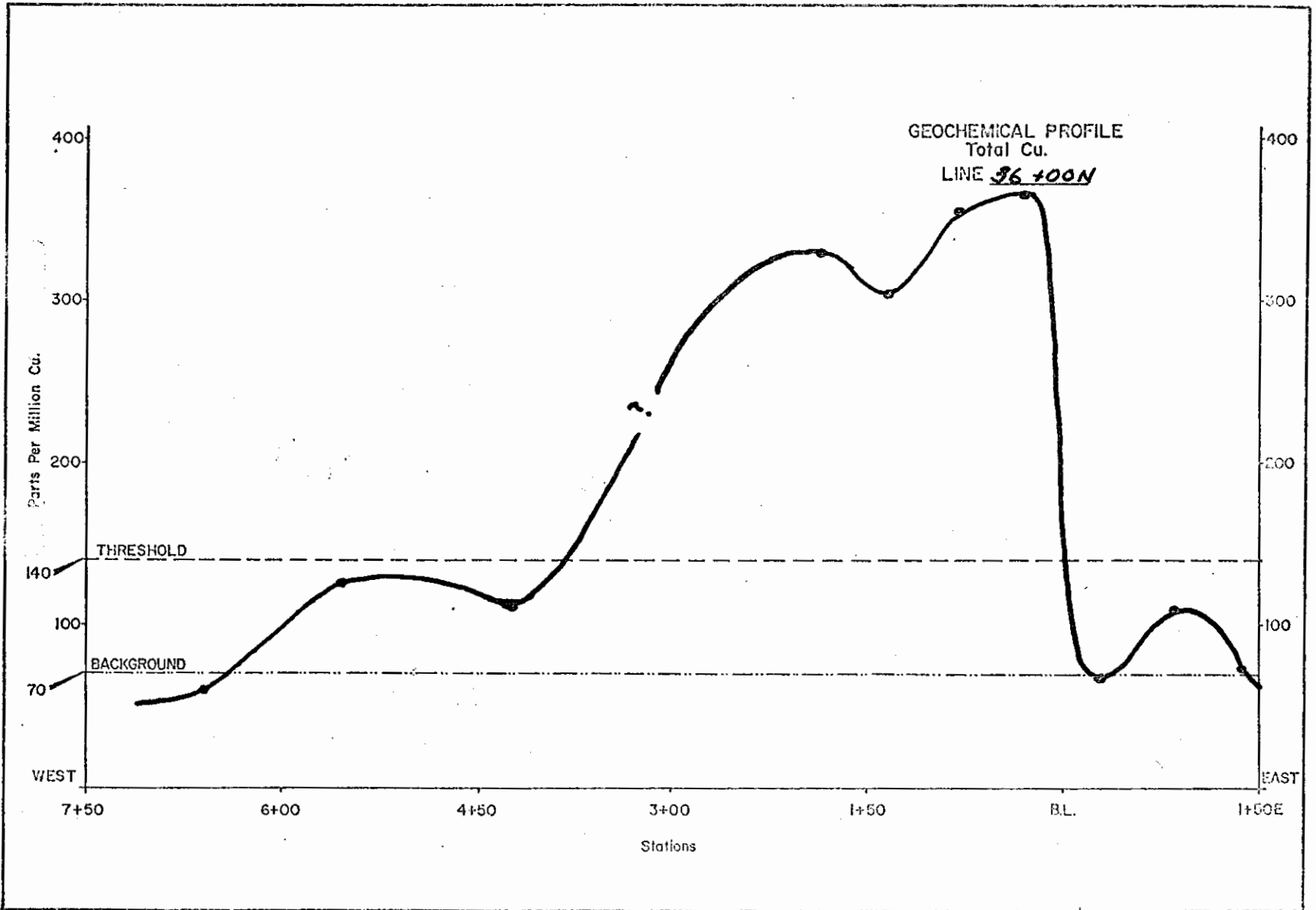
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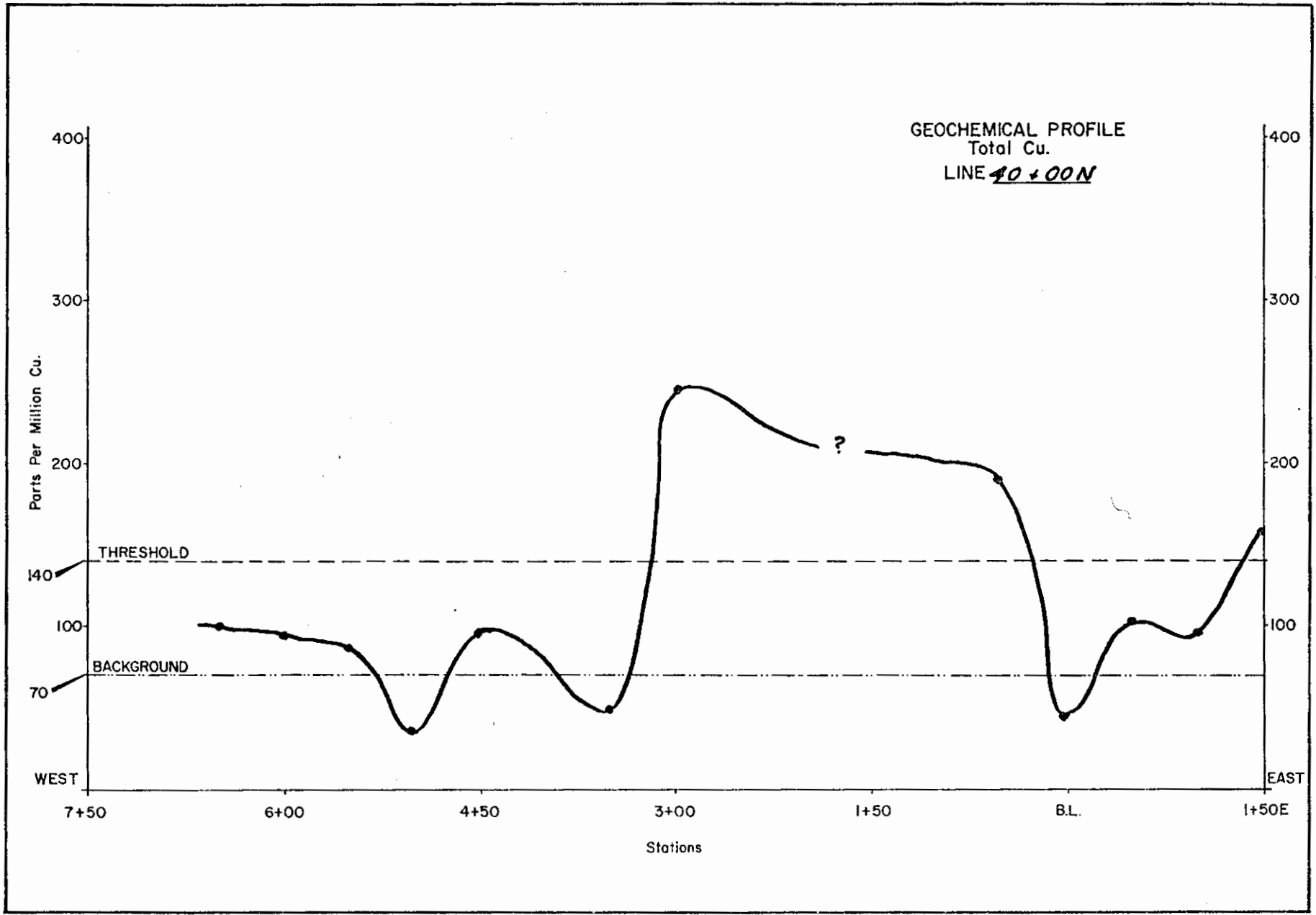


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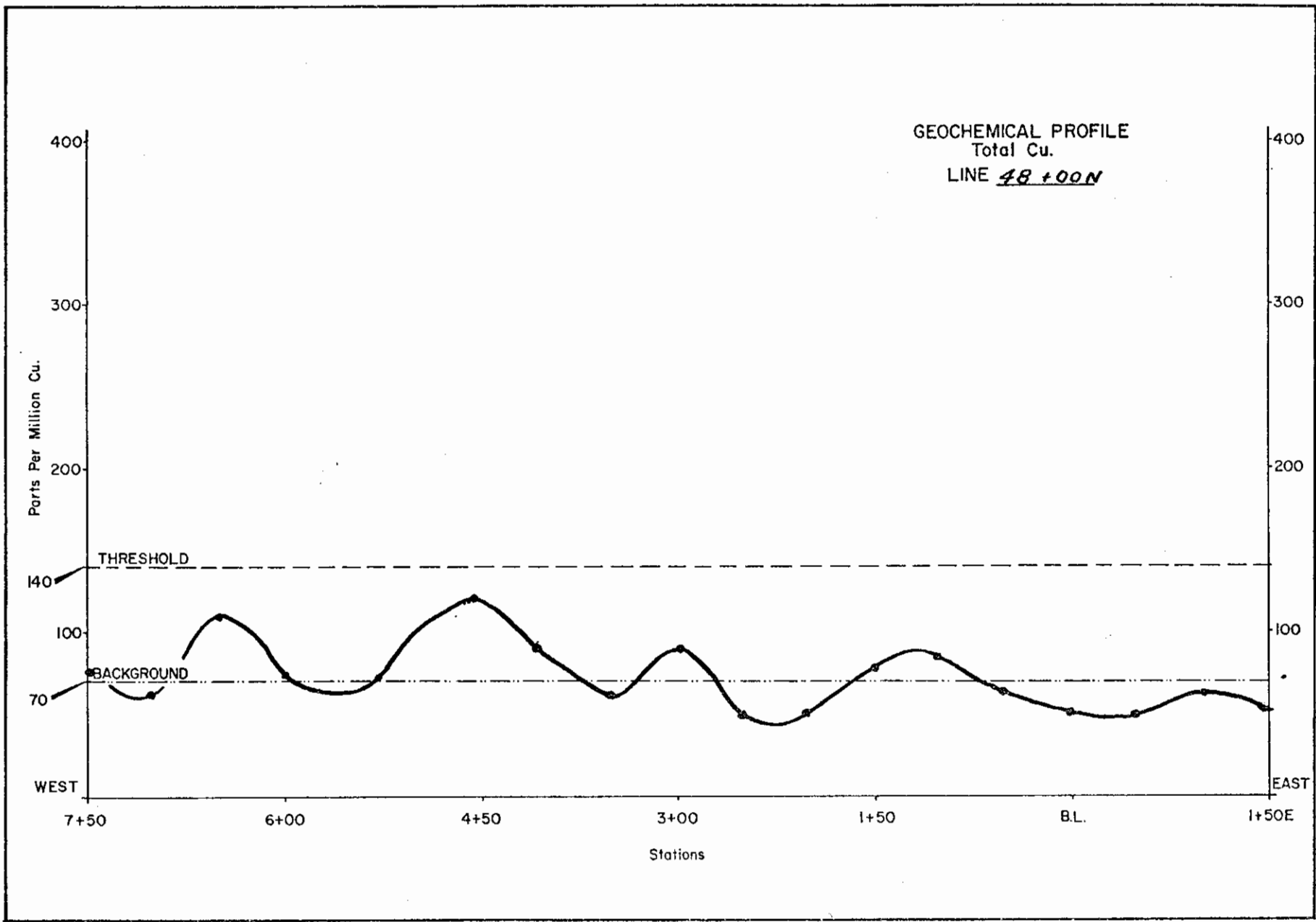
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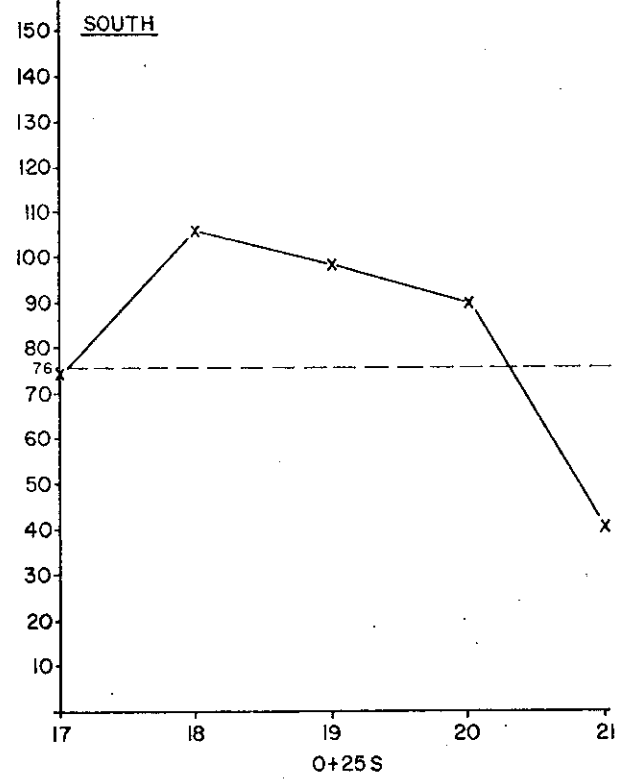
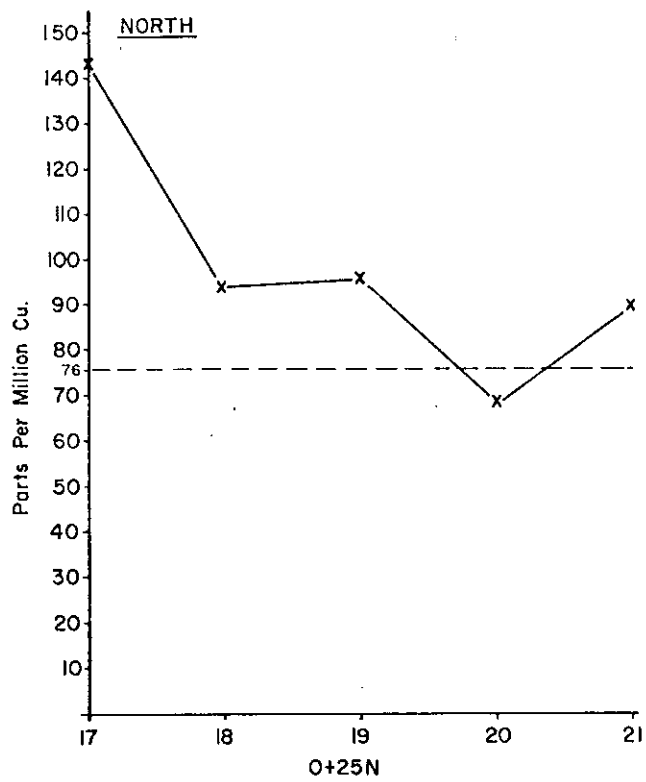


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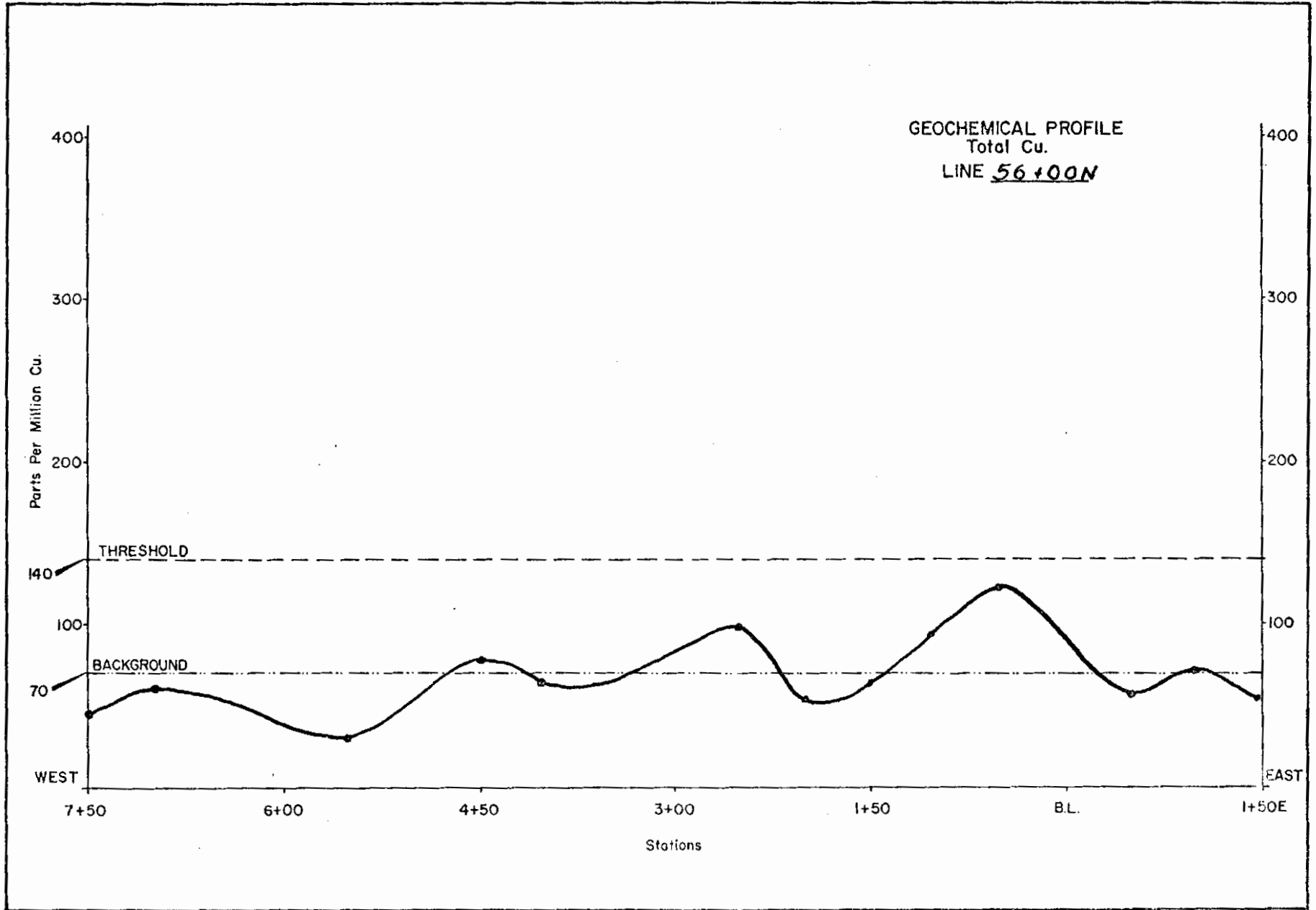
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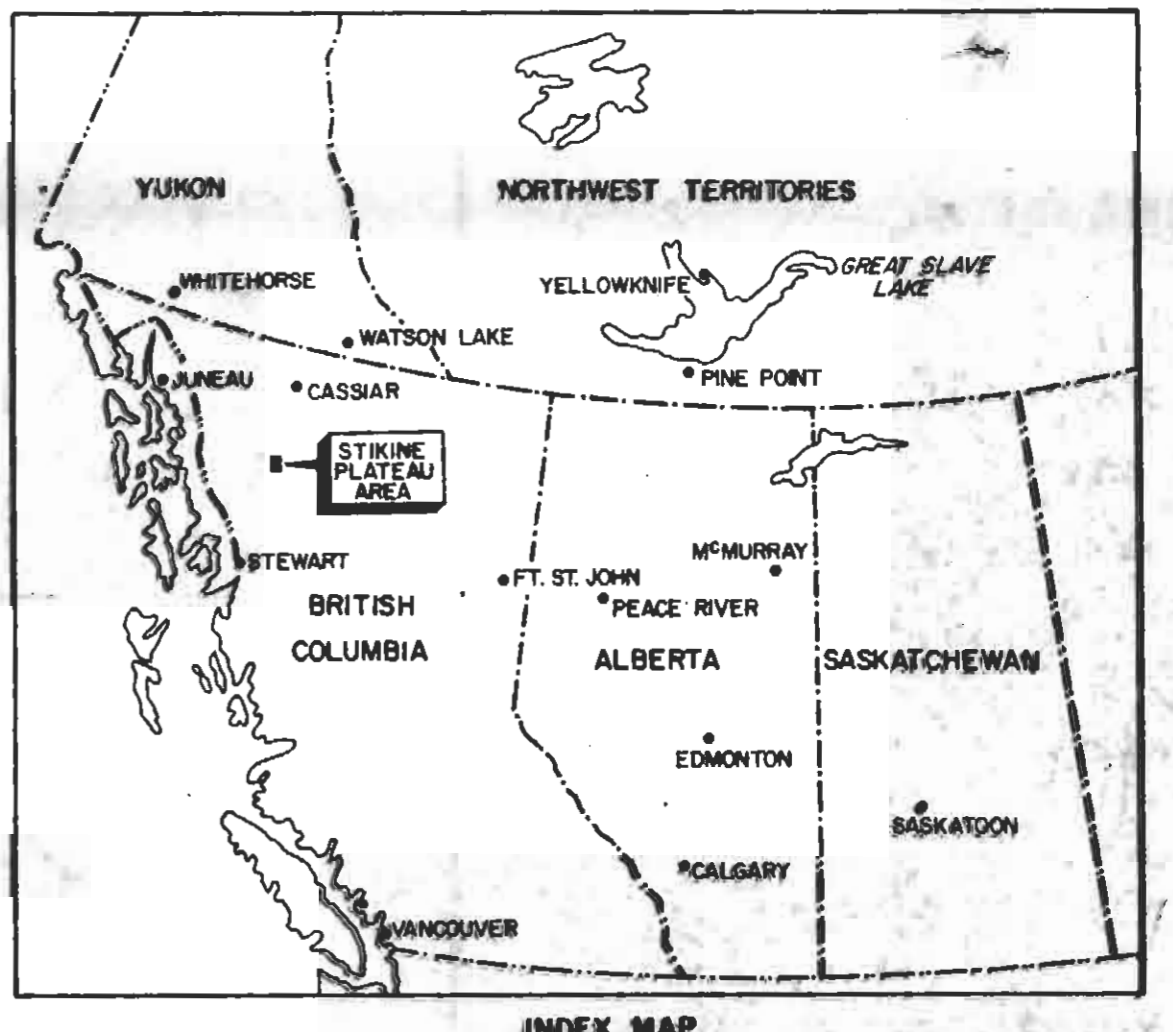
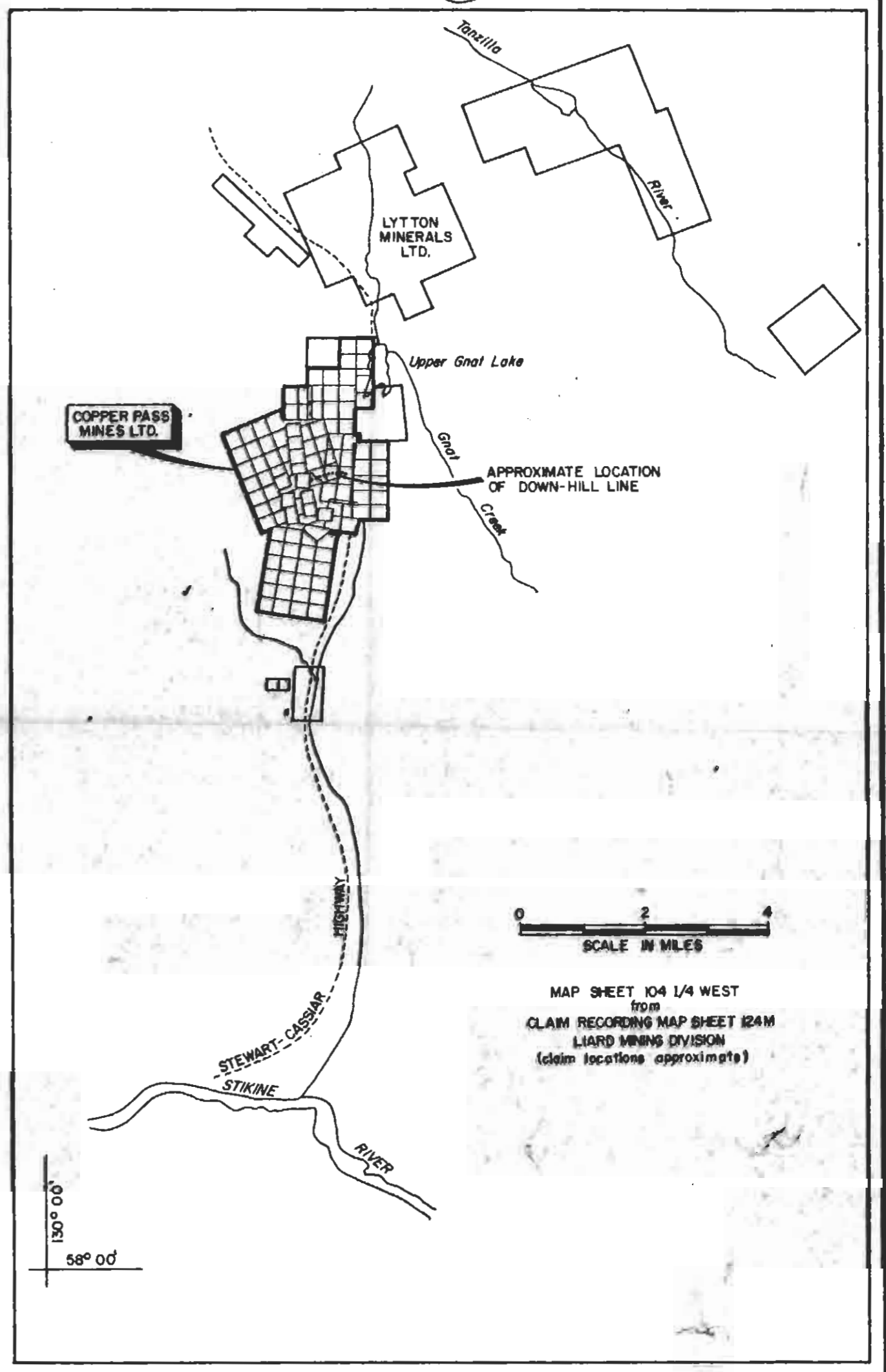
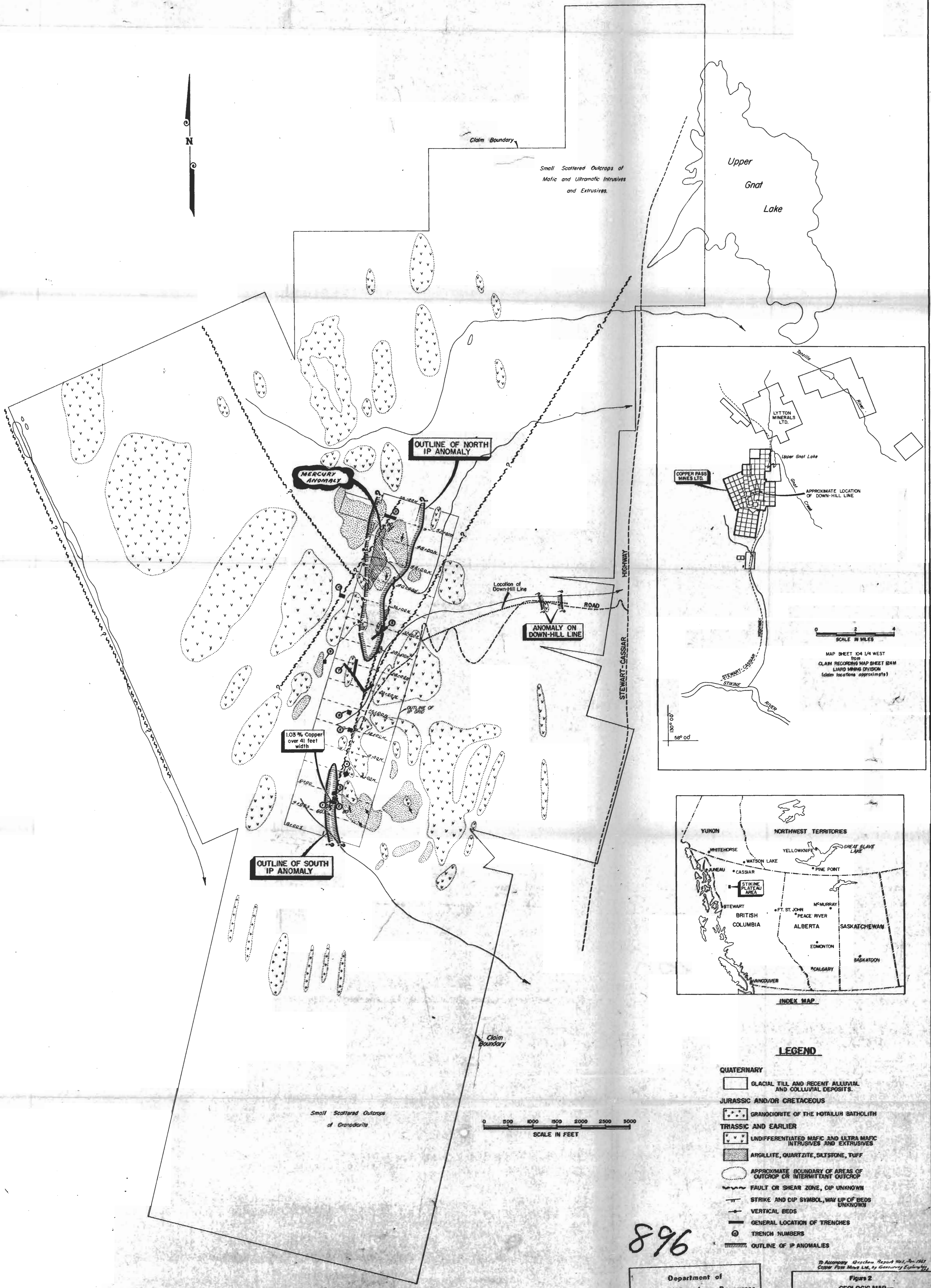
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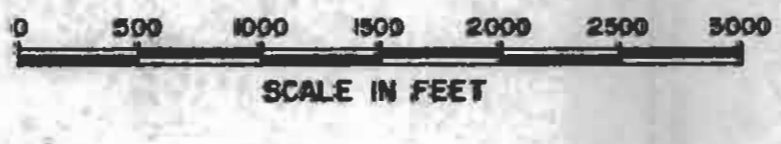
DOWNHILL LINE





LEGEND

- QUATERNARY**
 - GLACIAL TILL AND RECENT ALLUVIAL AND COLLUVIAL DEPOSITS.
- JURASSIC AND/OR CRETACEOUS**
 - GRANODIORITE OF THE HOTILAH BATHOLITH
- TRASSIC AND EARLIER**
 - UNDIFFERENTIATED MAFIC AND ULTRA MAFIC INTRUSIVES AND EXTRUSIVES
 - ARGILLITE, QUARTZITE, SLTSTONE, TUFF
- APPROXIMATE BOUNDARY OF AREAS OF OUTCROP OR INTERMITTANT OUTCROP
- FAULT OR SHEAR ZONE, DIP UNKNOWN
- STRIKE AND DIP SYMBOL, WAY UP OF BEDS UNKNOWN
- VERTICAL BEDS
- GENERAL LOCATION OF TRENCHES
- TRENCH NUMBERS
- OUTLINE OF IP ANOMALIES



896

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 896 MAP # 2

To Accompany Geotechnical Report No. 1015
Copper Pass Mines Ltd., by Geosurvey Exploration Ltd.
Figure 2
— GEOLOGIC MAP —
COPPER PASS MINES LTD.
STIKINE PLATEAU AREA
M.A. ROED GEOLOGICAL EXPLORATIONS LTD.