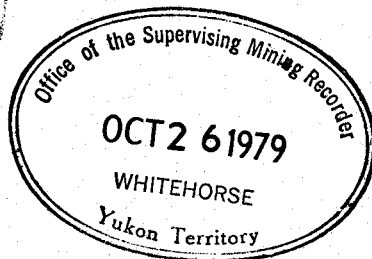
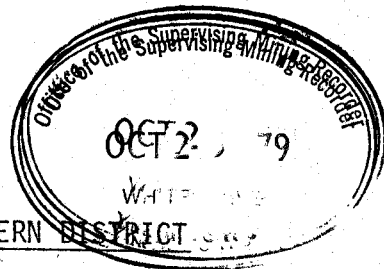


COMINCO LTD.

EXPLORATION
NTS: 105I/5
105I/12

WESTERN DISTRICT



GEOPHYSICAL SURVEYS ON THE RITZ CLAIMS

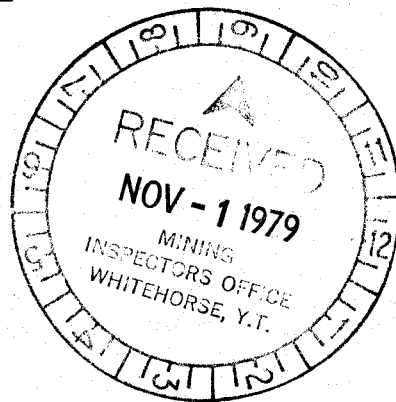
WATSON LAKE M.D.; YUKON TERRITORY

LATITUDE: 62°30'N; LONGITUDE 129°40'W

WORK PERFORMED: JULY 7-24, 1979

CLAIMS COVERED: RITZ 39, 40, 44, 46, 63, 65,

171, 172, 188, 190, 192, 194-198, 221, 222

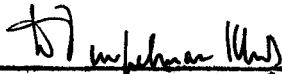


090504
SEPTEMBER 1979

A.R. SCOTT

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 7900



Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.


B. R. BAXTER

Supervising Mining Recorder



Commissioner of Yukon Territory

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154-79-2	CLAIM MAP; NORTH GRID
154-79-3	CLAIM MAP; SOUTH GRID
154-79-4 to 8	GRAVITY/TOPOGRAPHIC PROFILES
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APPENDIX II	STATEMENT OF EXPENDITURES
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COMINCO LTD.

EXPLORATION
NTS: 105I/5
105I/12

WESTERN DISTRICT
1 OCTOBER 1979

GEOPHYSICAL SURVEYS ON THE RITZ CLAIMS

WATSON LAKE M.D., YUKON TERRITORY

INTRODUCTION

During the period July 7 to July 24, 1979, a Cominco geophysical crew under the direction of Cominco geophysicist N.T. Hopkins completed 10.2 line kilometers of horizontal loop electromagnetic (HLEM) survey and 3.4 line kilometers of gravity/levels survey over portions of the Ritz claims.

The Ritz claims are located approximately 160 kilometers northeast of the town of Ross River, Yukon Territory. Access can be gained either by road or fixed wing aircraft to the airstrip at MacMillan Pass, thence by helicopter to the claims.

This report describes the geophysical surveys done on the claim, and discusses the results obtained.

GEOPHYSICAL SURVEYS

Horizontal Loop Electromagnetics (HLEM)

An Apex Max Min II electromagnetometer was used for the HLEM survey. Readings were taken at a 150 meter coil separation and at frequencies of 444 and 1777 Hz. The station interval was 25 meters.

On the Ritz north grid, lines 15, 16 and 17N of the (1978) HLEM coverage was extended to 900E, and line 18N was surveyed from 100E to 900E. Repeatability of the 1979 data to 1978 data was good, as shown on the profiles (Plate 154-79-9).

On the Ritz south grid, lines 32, 34 and 36S were surveyed. The instrument malfunctioned during the course of the south grid survey. This can be seen by the very strong shift in the zero level near the baseline on line 32S. (The west portion of the line was surveyed on one day and the east portion on another. The problem was that the batteries were not taking an adequate charge so that power output declined during the course of the survey). The data on the south grid is therefore unreliable and no quantitative assessment of it should be attempted. However, the conductor locations are still evident from the data.

Gravimetrics Survey

A Texas Instruments Worden Master gravimeter was used to obtain the gravity measurements, and a Kern level for establishing relative

2.

station elevations. Data reduction to Bouguer values was accomplished with the aid of a programmable calculator. A Bouguer density of 2.67 gm/cc was assumed, and each line was reduced to an independent arbitrary datum.

Portions of lines 14N and 16N were surveyed on the north grid, and portions of lines 26S, 28S and the baseline were surveyed on the south grid. The station interval was 25 meters.

DESCRIPTION OF RESULTS

Horizontal Loop EM

The HLEM data is plotted in profile form on accompanying Plates 154-79-9 (north grid) and 154-79-10 (south grid). Both the 444 Hz and 1777 Hz frequencies are plotted.

The work on the Ritz north grid consisted of extending the 1978 survey coverage to the east. On the north grid, conductor locations have been defined from the lower (444 Hz) frequency. A new conductor was detected on the 1979 survey, as indicated on the profiles. The conductor is centered at 800E on line 1500N and extends to 650E on line 1800N. This conductor is generally quite broad and gives a strong HLEM response.

Work on the south grid consisted of surveying lines 32, 34 and 36S. Due to an instrument malfunction, this survey was cut short, and the data that was collected is unreliable with respect to both the amplitude and the zero level. Hence no quantitative assessment should be attempted. However, the conductor locations are still interpretable. Response on the south grid (both in 1978 and 1979) was generally weaker than on the north grid, with conductors being only poorly defined at the lower 444 Hz frequency. The only conductor that is fairly well defined at 444 Hz (on the 1979 survey) is centered at 75 metres east of the baseline on line 3200S. At the higher frequency (1777 Hz) this conductor can be traced as striking from 75E on line 3200S to 175E on line 3600S. A somewhat weaker response conductor (1777 Hz) extends from 675E on line 3600S to 650E on line 3200S.

Gravimetrics

The Bouguer gravity values and relative station elevations are plotted in profile form on Plates 154-79-4 to 8. Terrain corrections have not been made to the gravity values so that very strong correlation of topography to gravity is apparent. Only gravity highs which do not correlate with changes in topography are considered here.

Lines 1300N and 1400N were surveyed on the north grid. The only gravity high that is not correlatable to topography is the single station high at 25 meters east of the baseline on line 1400N.

Lines 2600S, 2800S and a section of the baseline were surveyed on the south grid. The only gravity high that is uncorrelated to topography is centered at 650 west on line 2800S.

3.

CONCLUSIONS

Horizontal loop electromagnetic (HLEM) and gravimetric geophysical surveys were carried out over portions of the Ritz claim during the summer of 1979. The work was done on two separate grids, namely the north and south grids. These surveys are an extension of similar work done in 1978.

A new HLEM conductor (444 Hz) was detected on the north grid and extends from 800E on line 1500N to 650E on line 1800N. The only gravity high not correlatable to topography was the single station high at 25E on line 1400N.

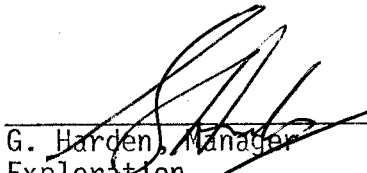
The only HLEM conductor at the low frequency (444 Hz) detected on the south grid is centred at 75E on line 3200S. At the higher frequency (1777 Hz) this conductor can be traced to 175E on line 3600S. The only gravity high on the south grid that is not correlatable to topography is centered at 650W on line 2800S.

Respectfully Submitted:



Alan Scott
Geophysicist

Endorsed for Release by:

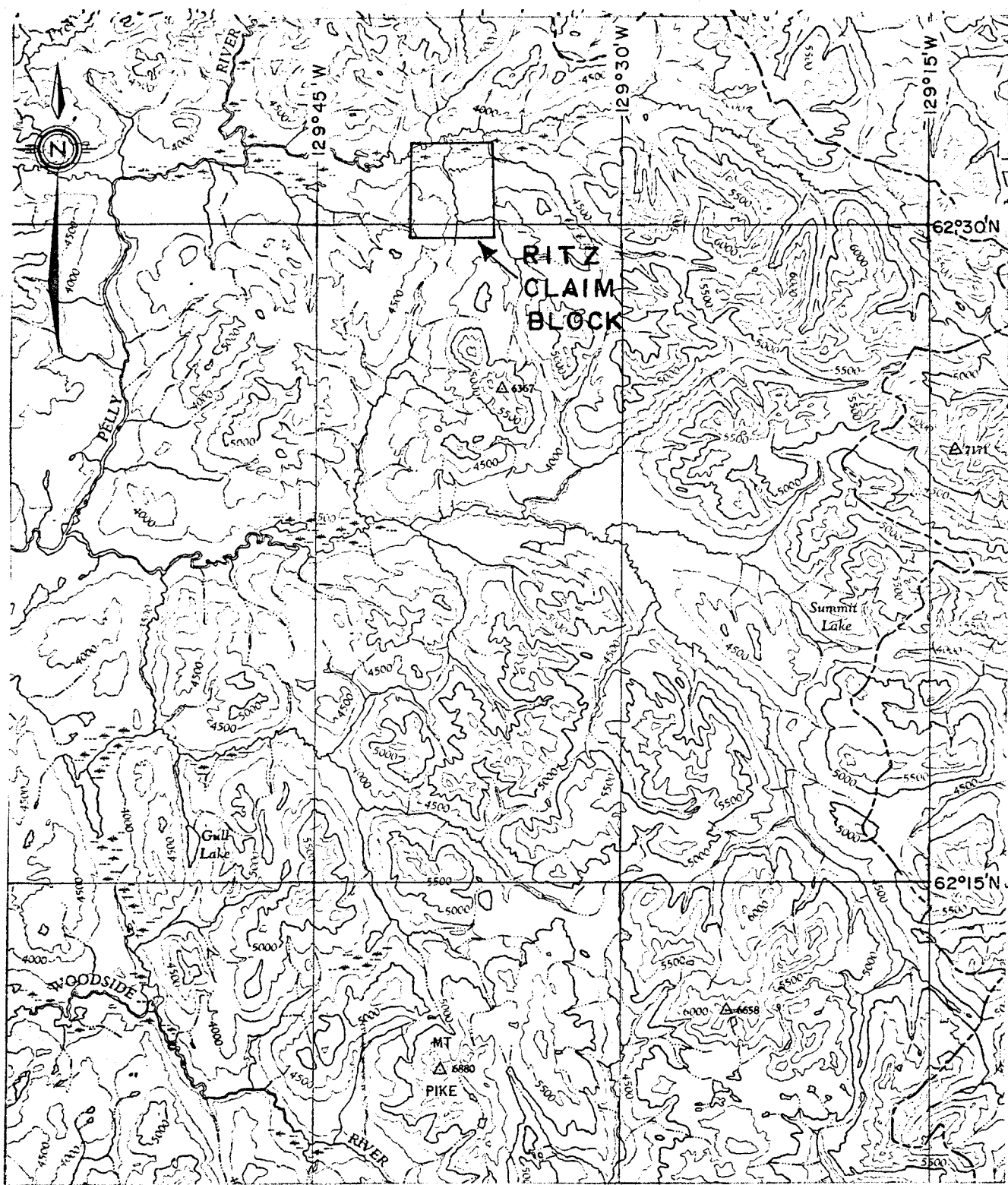


G. Harden, Manager
Exploration
Western District

AS/gk

Distribution:

Mining Recorder (2)
Western District (1)
Geophysics file (1)

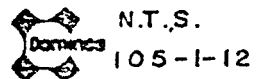


SELWYN RECCE

RITZ CLAIMS (R3)

WATSON LAKE M.D., YUKON

Scale 1 : 250,000
1 Inch to 4 Miles Approximately.



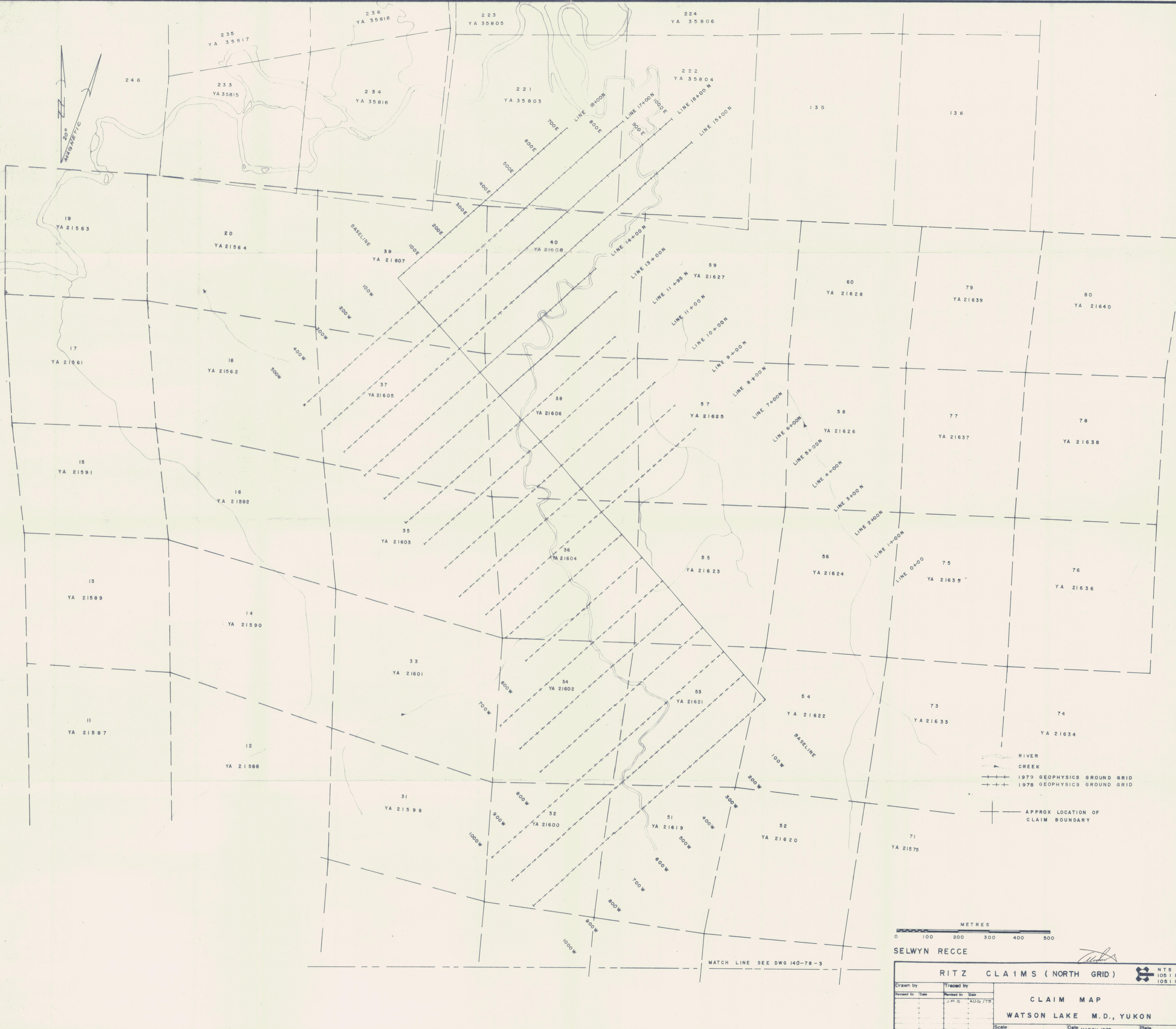
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App. and Date	Date	Revised by	Date
		J.P.S.	AUG/79

LOCATION MAP

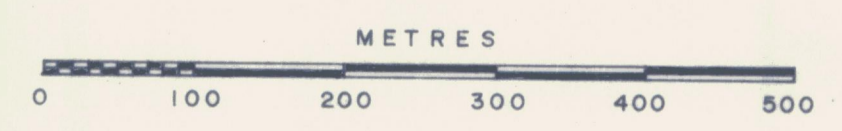
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Date:

Plate 154-79-1



- RIVER
- CREEK
- 1979 GEOPHYSICS GROUND GRID
- 1978 GEOPHYSICS GROUND GRID
- APPROX LOCATION OF CLAIM BOUNDARY



SELWYN RECCE

Drawn by		Traced by	
Revised by		Revised by	
Date		Date	
J.P.S.		ADG/79	
CLAIM MAP			
WATSON LAKE M.D., YUKON			
Scale		Date	
1:5000		MARCH 1979	
Plate		FORM 210 0660	
154-79-2			

MATCH LINE SEE DWG 140-78-3

RITZ NORTH

RITZ CLAIMS

Handwritten signature



NTS
105-1-5
105-1-12

Drawn by:

Traced by:

Revised by

Date

Revised by

Date

LINE 13+00 N

BOUGUER GRAVITY AND TOPOGRAPHY PROFILES

WATSON LAKE M.D., YUKON

Scale:

AS SHOWN

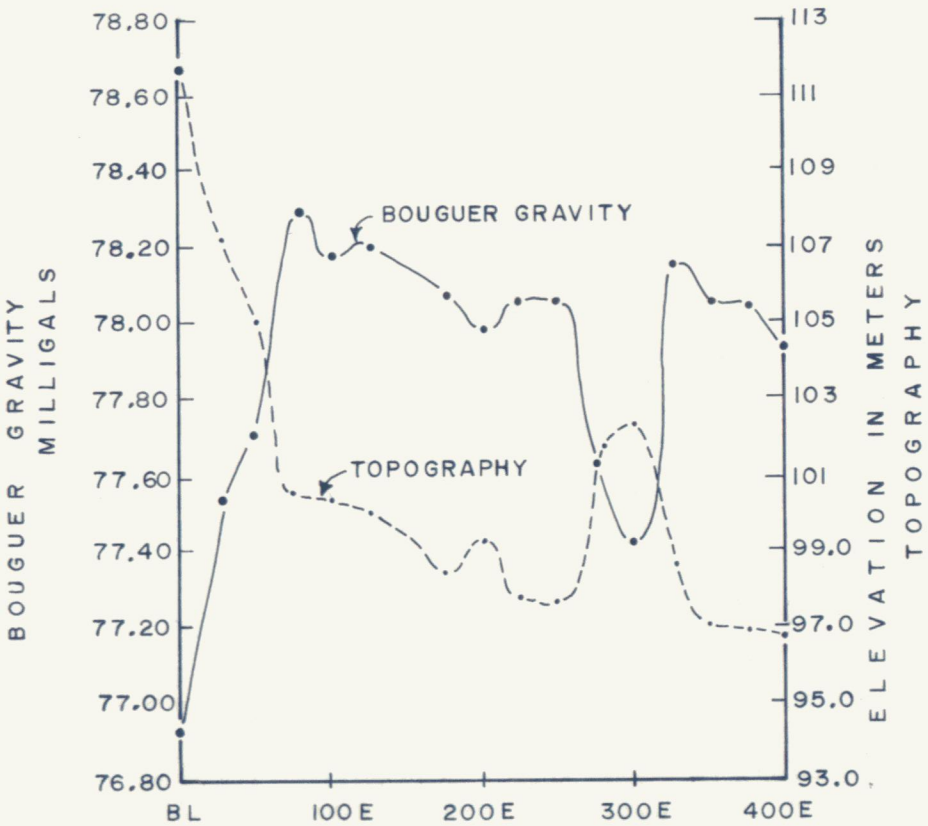
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AUG., 1979

Plate:

154-79-4

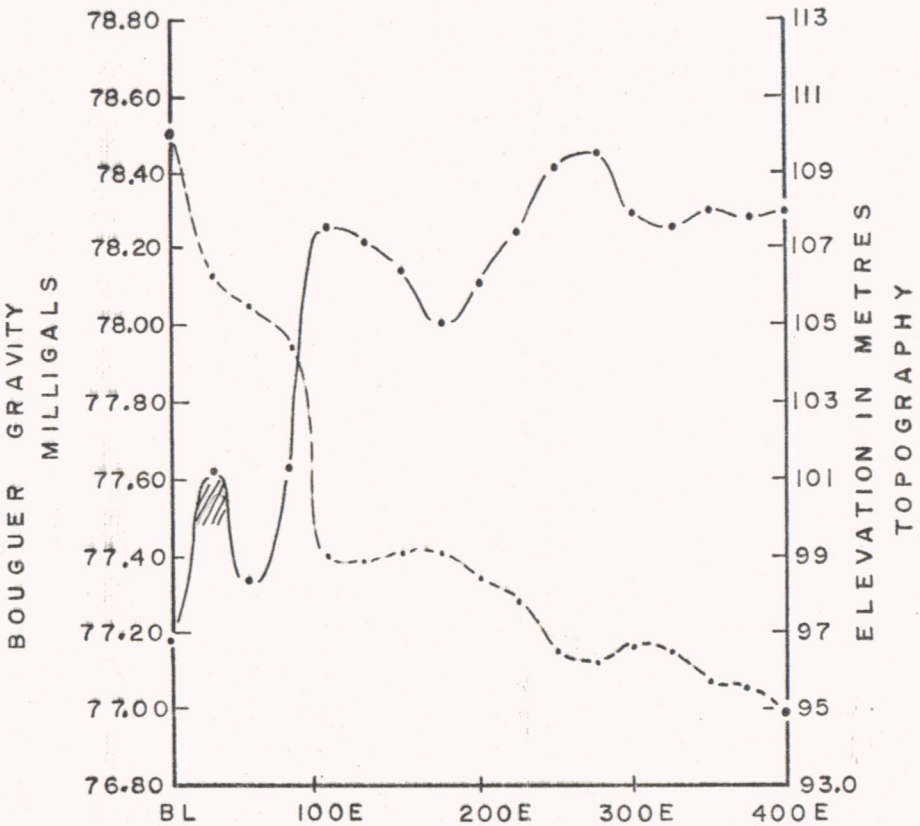
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BOUGUER DENSITY 2.67 gm / cc

LINE 14 + 00 N



INSTRUMENT : WORDEN MASTER SCALE CONSTANT 0.0823 MILLIGALS / div
 BOUGUER DENSITY 2.67 gm / cc

RITZ NORTH

RITZ CLAIMS

Handwritten signature



NTS
 105-1-5
 105-1-12

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Revised by: _____ Date _____	Revised by: _____ Date _____

LINE 14+00N

BOUGUER GRAVITY AND TOPOGRAPHY PROFILES
 WATSON LAKE M.D., YUKON

Scale: AS SHOWN

Date: AUG., 1979

Plate: 154-79-5

Drawn by:	Traced by:
Revised by	Revised by
Date	Date

RITZ SOUTH

RITZ CLAIMS

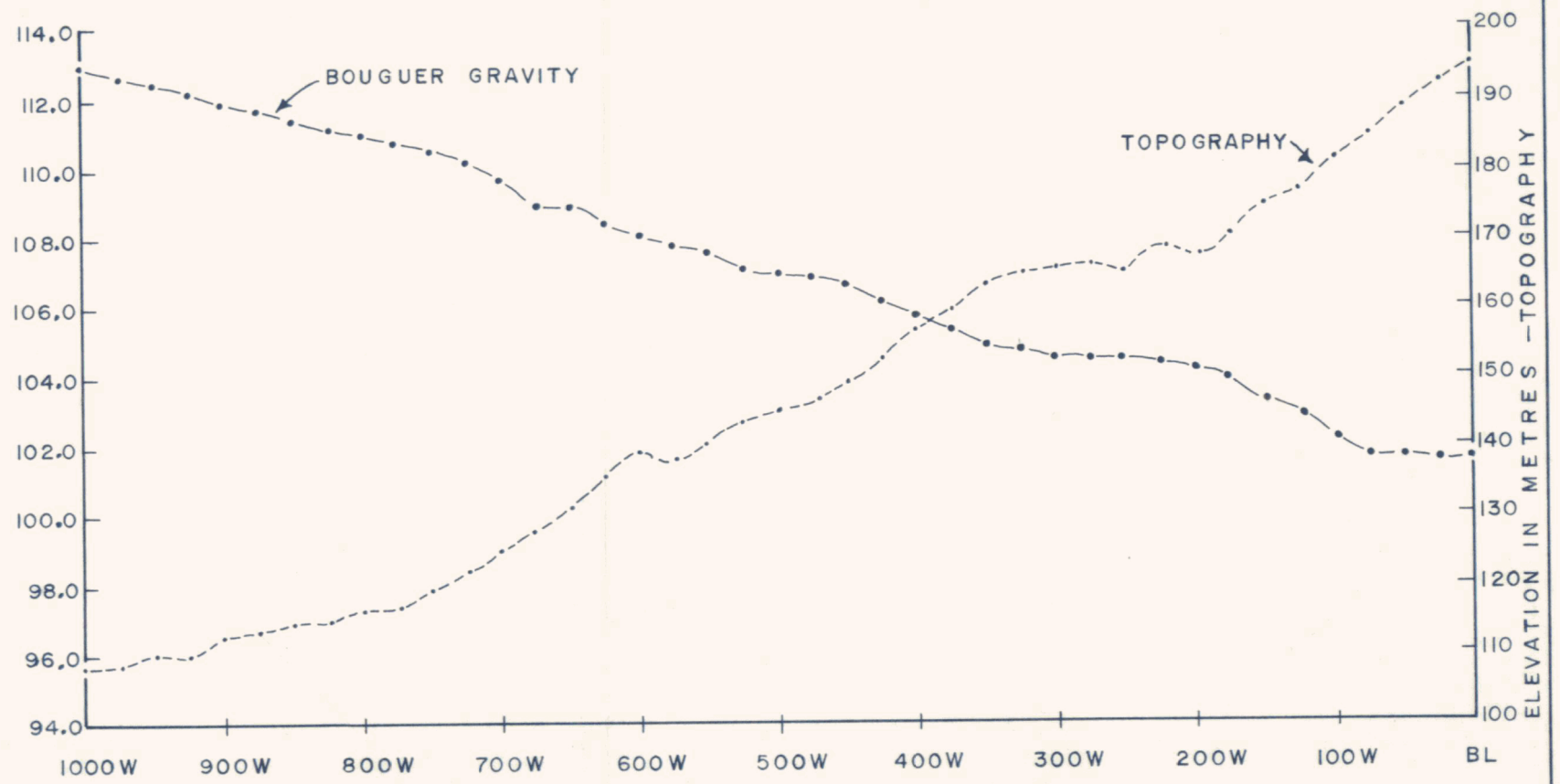
NTS
105-1-5
105-1-12

LINE 26+00S

BOUGUER GRAVITY AND TOPOGRAPHY PROFILES WATSON LAKE M.D., YUKON

Scale: AS SHOWN Date: AUG, 1979 Plate: 154-79-6

LINE 26 + 00 S



INSTRUMENT; WORDEN MASTER SCALE CONSTANT 0.0823 MILLIGALS / div
BOUGUER DENSITY 2.67 gm / cc

Drawn by:	Traced by:
Revised by	Revised by
Date	Date

RITZ SOUTH

RITZ CLAIMS

LINE 28+00 S

W. J. ...

NTS
105-1-5
105-1-12

BOUGUER GRAVITY AND TOPOGRAPHY PROFILES

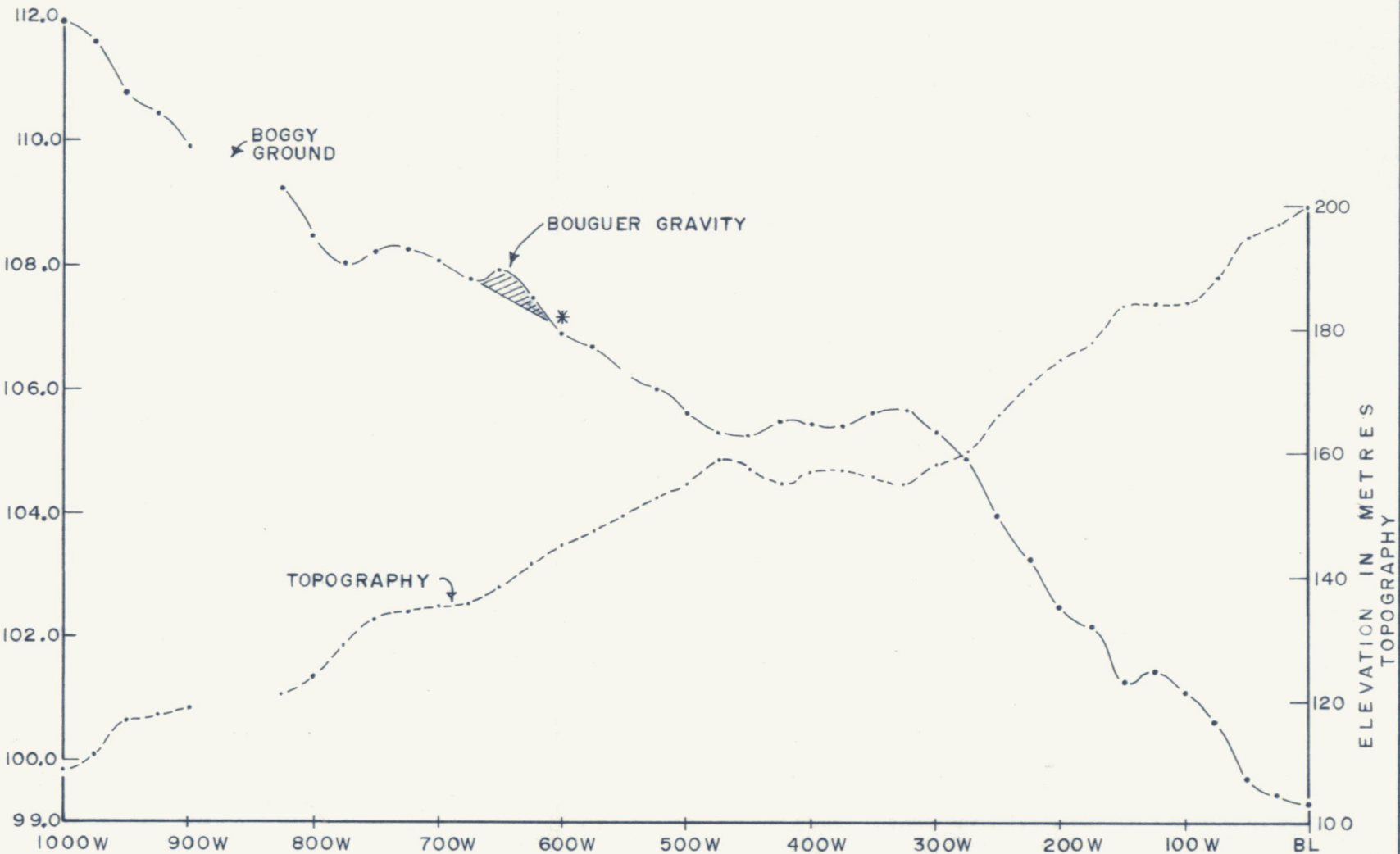
WATSON LAKE M.D., YUKON

Scale: AS SHOWN

Date: AUG., 1979

Plate: 154-79-7

LINE 28+00 S



INSTRUMENT: WORDEN MASTER SCALE CONSTANT 0.0823 MILLIGALS/div
 BOUGUER DENSITY 2.67 gm/cc
 * READING UNCERTAIN

RITZ SOUTH RITZ CLAIMS

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Traced by:

Revised by Date

Revised by Date



NTS
105-1-5
105-1-12

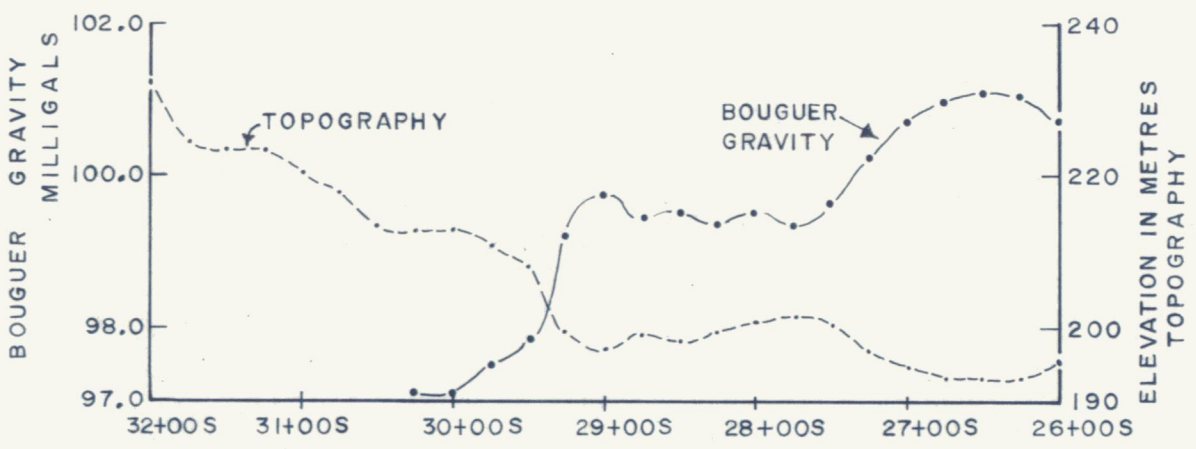
BASELINE
BOUGUER GRAVITY AND TOPOGRAPHY PROFILES
WATSON LAKE M.D., YUKON

Scale: AS SHOWN

Date: AUG., 1979

Plate: 154-79-8

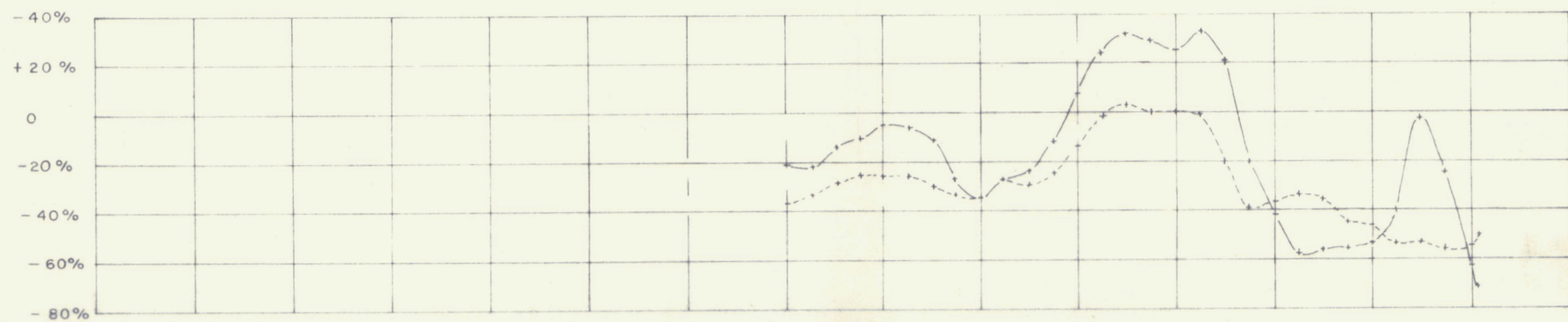
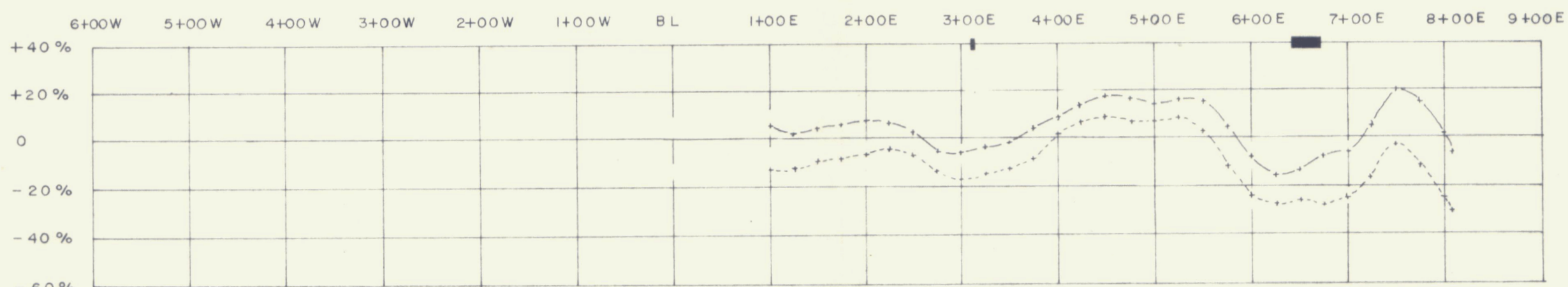
BASELINE



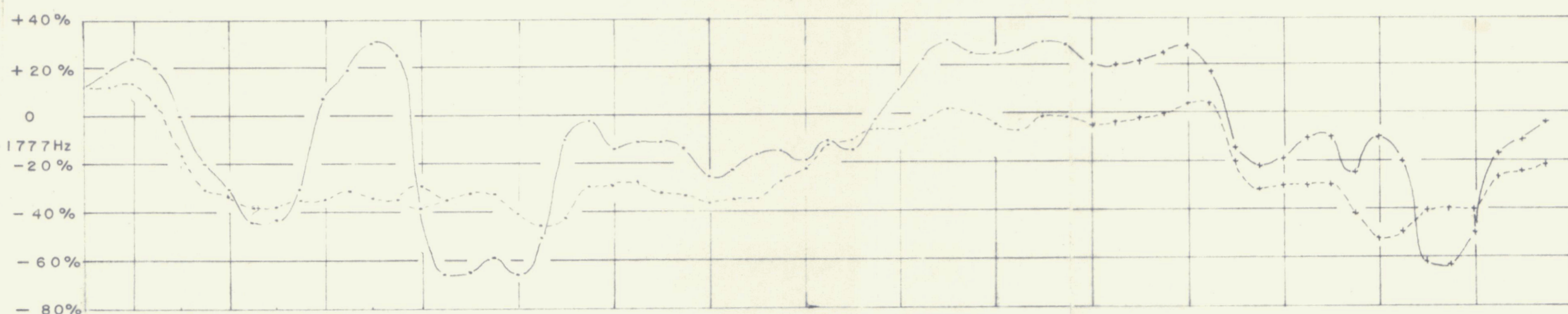
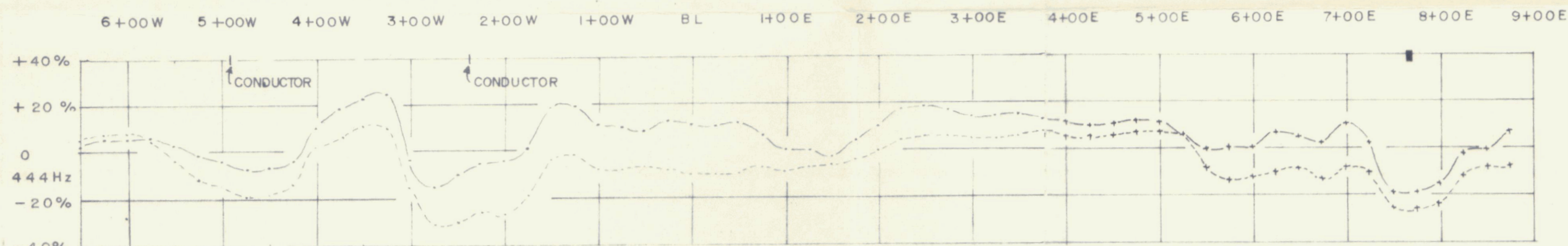
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BOUGUER DENSITY 2.67 gm / cc

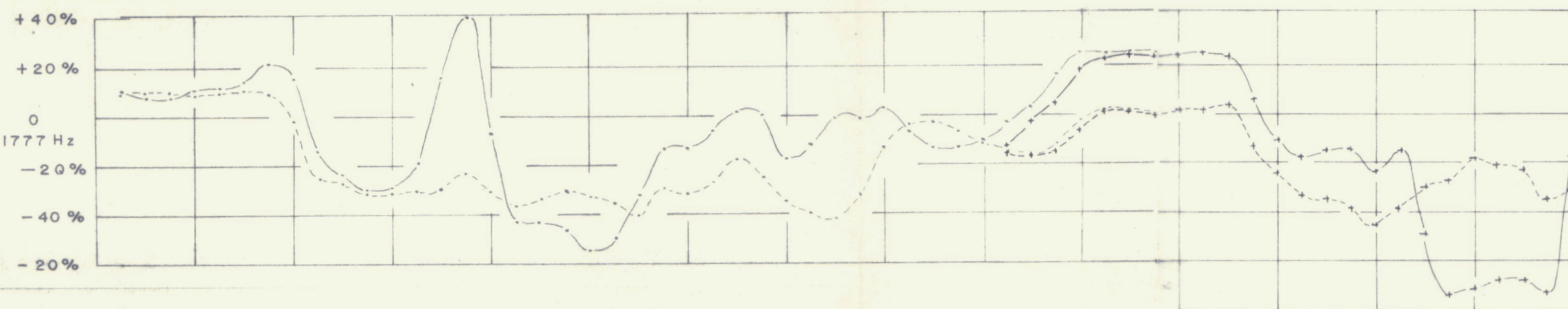
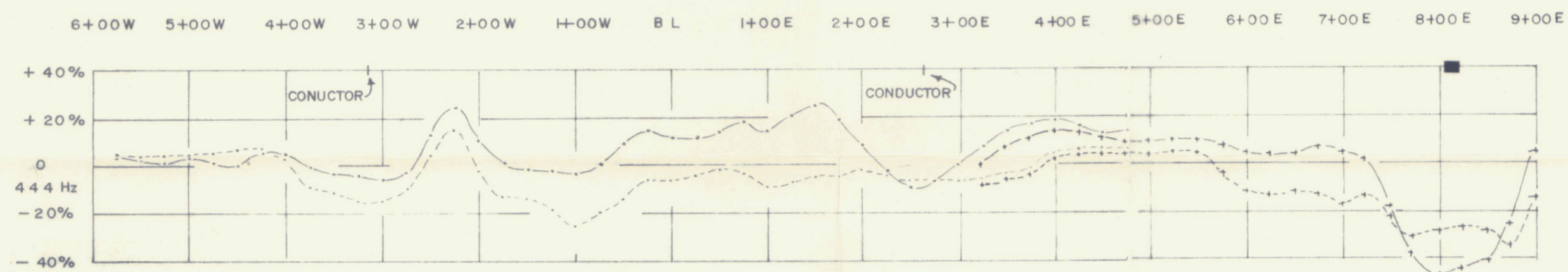
LINE 18+00N



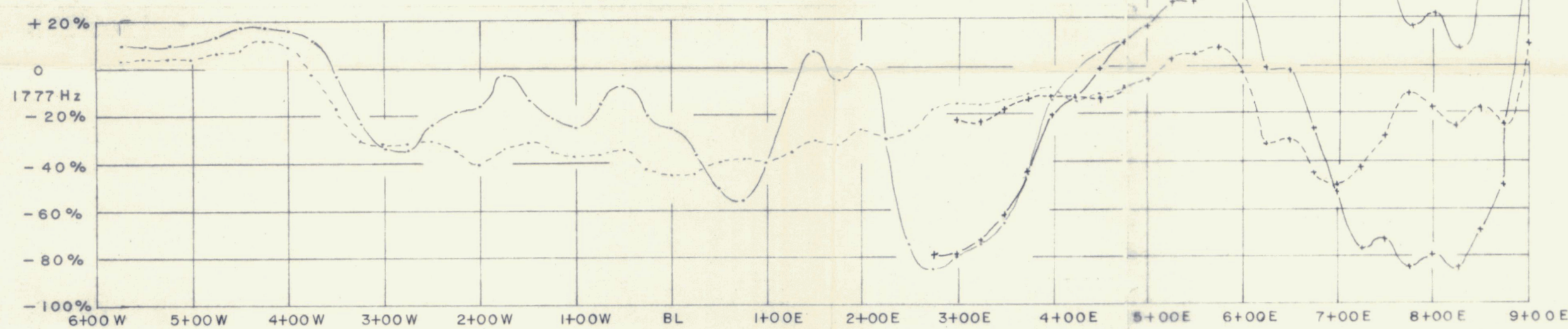
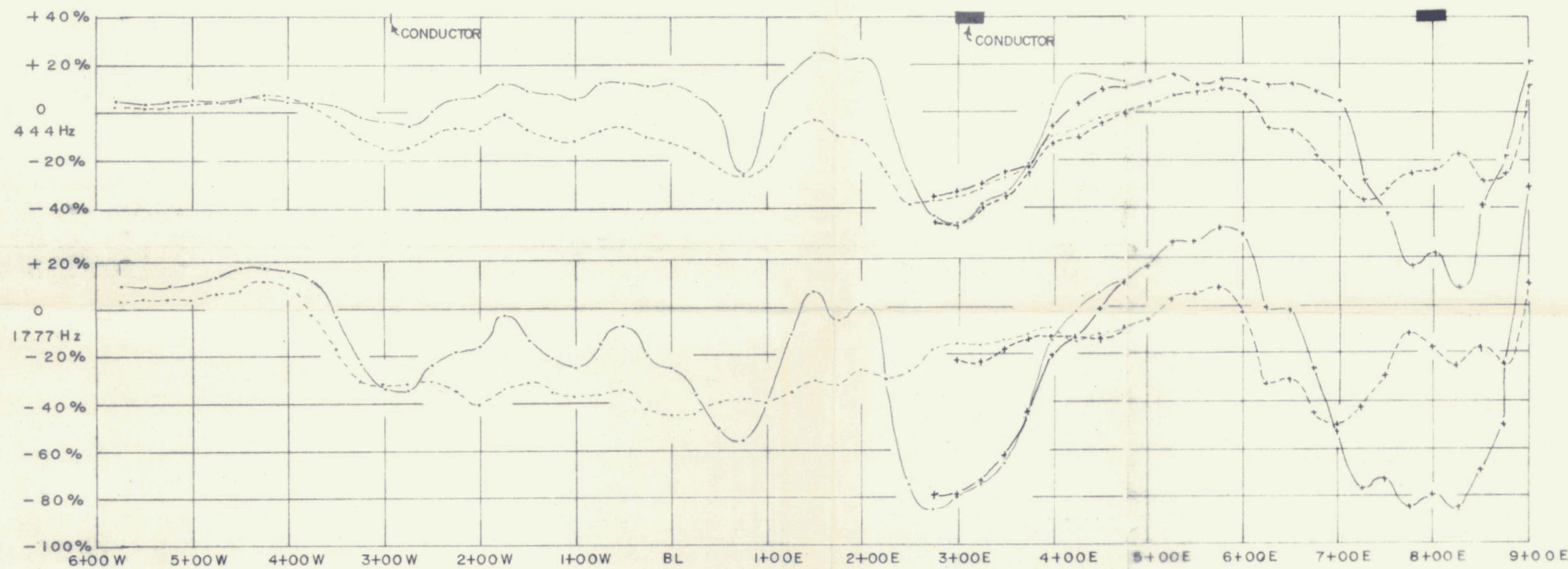
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LINE 16+00N



LINE 15+00N

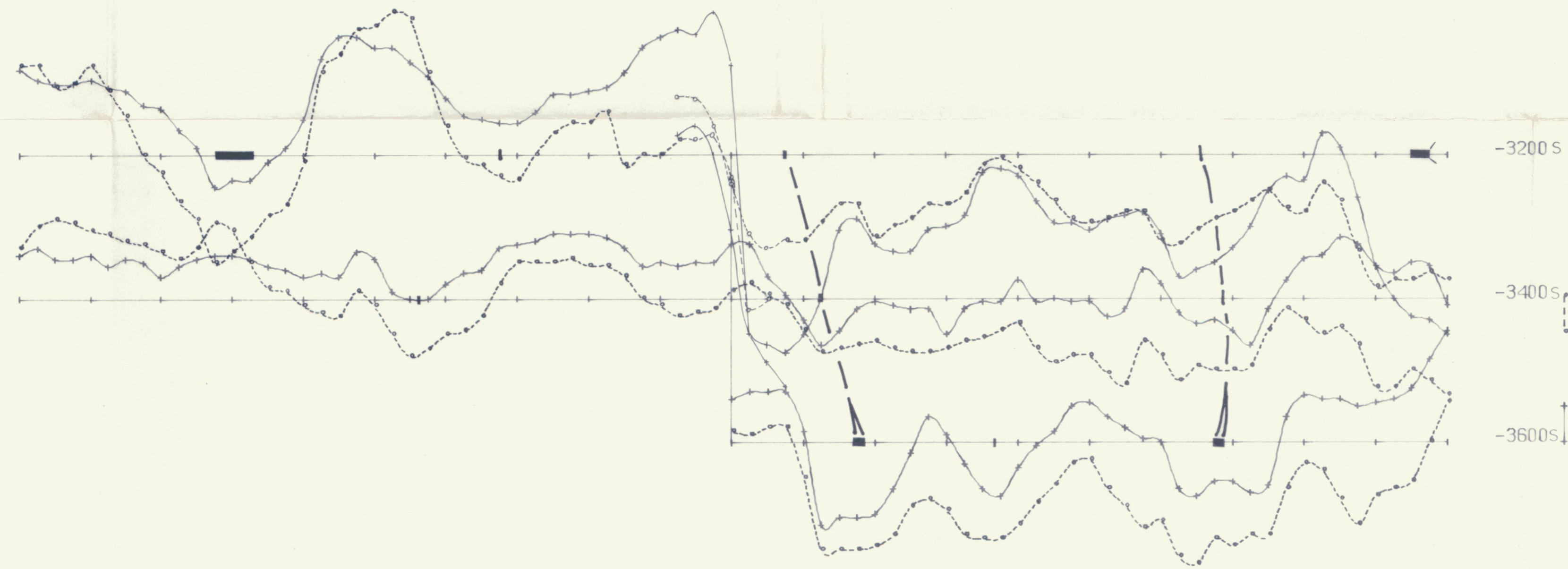


- + + IN PHASE (1979)
 - - OUT OF PHASE (1979)
 - - IN PHASE (1978)
 - - OUT OF PHASE (1978)
 - CONDUCTOR LOCATION WITH INDICATED WIDTH
 - CONDUCTOR LOCATION NO INDICATED WIDTH
- INSTRUMENT : MAX MIN II



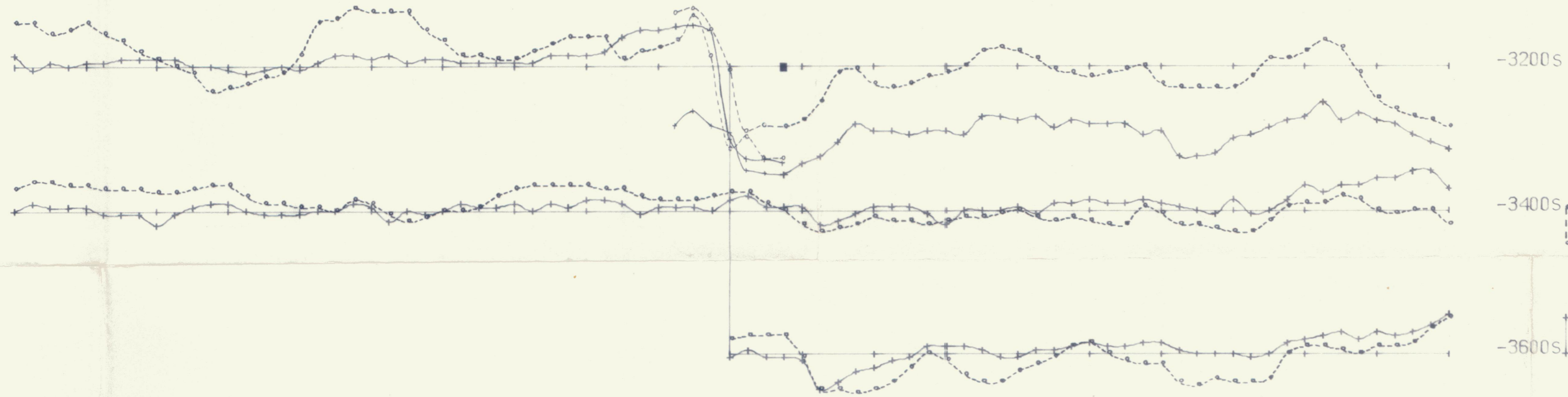
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RITZ CLAIMS (NORTH GRID)				 NTS 10515 105112
Drawn by:	Traced by:			
Revised by	Date	Revised by	Date	ELECTROMAGNETIC HORIZONTAL LOOP PROFILES, 444 Hz AND 1777 Hz 150 m COIL SEPARATION WATSON LAKE M.D., YUKON
Scale: AS SHOWN		Date: SEPT 1979		Plate: 154-79-9



1000W 900W 800W 700W 600W 500W 400W 300W 200W 100W 0 100E 200E 300E 400E 500E 600E 700E 800E 900E 1000E

RITZ GRID HLEM CS=150M 1777 HZ 1:5000 1CM=10%



1000W 900W 800W 700W 600W 500W 400W 300W 200W 100W 0 100E 200E 300E 400E 500E 600E 700E 800E 900E 1000E

RITZ GRID HLEM CS=150M 444 HZ 1:5000 1CM=10%

- +— IN PHASE
- o- OUT OF PHASE
- █ CONDUCTOR LOCATION WITH INDICATED WIDTH
- +— CONDUCTOR LOCATION NO INDICATED WIDTH
- - - INFERRED CONDUCTOR STRIKE
- INSTRUMENT: MAX MIN II



RITZ CLAIMS (SOUTH GRID)			
Drawn by:		Traced by:	
Revised by:	Date:	Revised by:	Date:
ELECTROMAGNETIC HORIZONTAL LOOP PROFILES, 444 Hz AND 1777 Hz 150m COIL SEPARATION WATSON LAKE M.D., N.W.T.			
Scale: AS SHOWN		Date: SEPT., 1979	Plate: 54-79-10



NTS
105-1-5
105-1-12