

GEOPHYSICAL REPORT

"TONEY GROUP" - *Anton Claim*

located 2½ miles southwest of

Greenwood, B.C.

49° 118° S.W.

Greenwood Mining Division

M.J. YOUNG

July 30-Aug. 28/67

*Option by Utah Construction & Mining Co.*

1067

1067

**GEOPHYSICAL REPORT**

**TONEY GROUP**

**MINERAL CLAIMS**

**GREENWOOD MINING DIVISION**

**BRITISH COLUMBIA**

by

**M. J. YOUNG (P. Eng.) GEOLOGIST**

**UTAH CONSTRUCTION & MINING CO.**

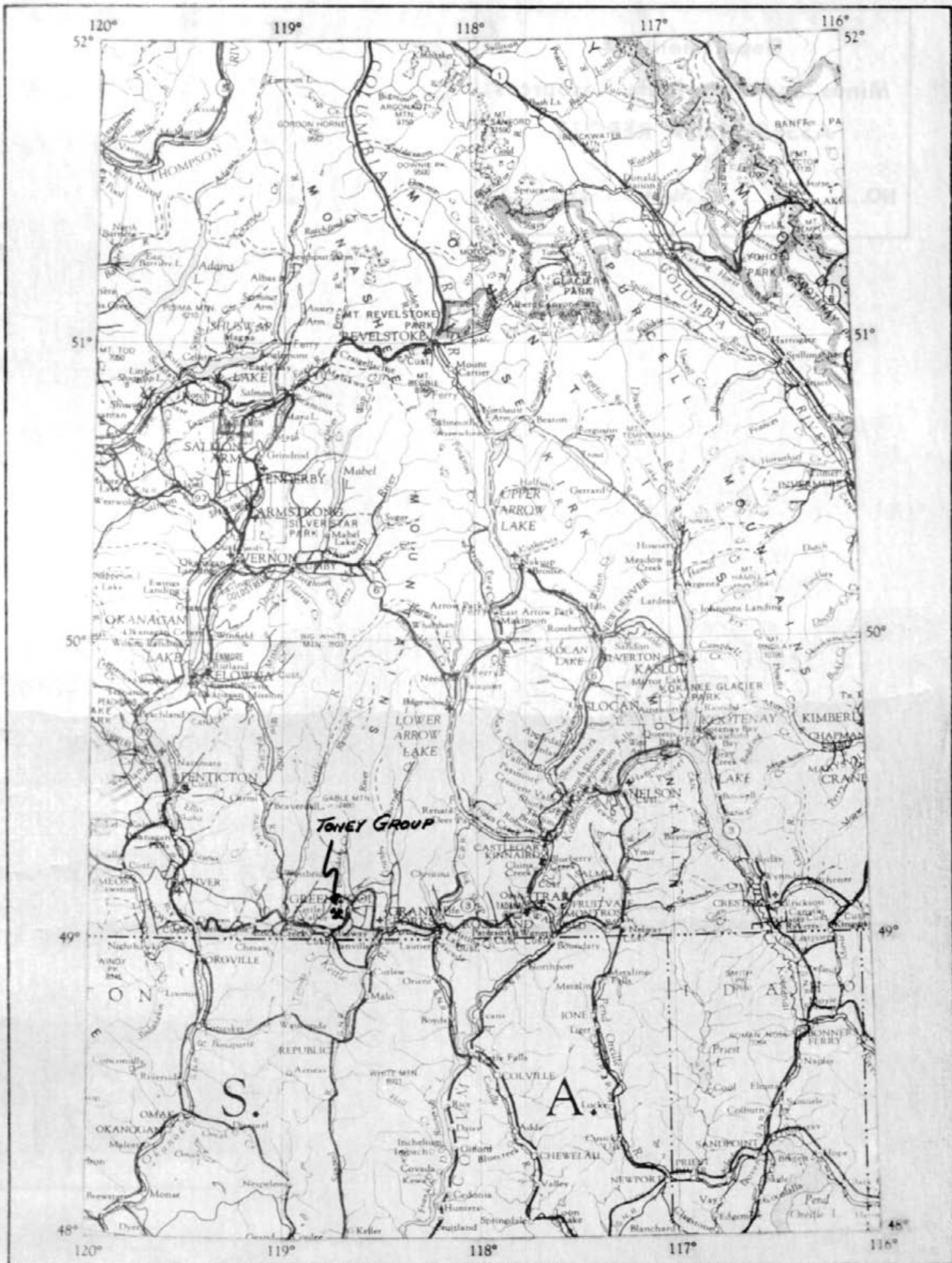
**September 15, 1967**

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SCALE: 1 INCH = 30 MILES

INDEX MAP

Toney Group  
Greenwood Mining Division

### S U M M A R Y

Utah Construction & Mining Co., signed an option agreement with the owners of the Toney Group of claims in the Greenwood Mining Division on May 5, 1967.

A grid survey and induced polarization and resistivity surveys were completed during the period July 30 to August 28, 1967 by Utah Construction & Mining Co. personnel under the direction of a geologist.

A coincident induced polarization high and resistivity low on the Chum #1 claim is recommended for testing with a diamond drill hole.

## INTRODUCTION

The Toney group of claims, consisting of Anton #1 to #8; Vendella #1 to #5; Pioneer #1 & 2 fractions; Toney fraction; Chum #1 and the Chum fraction; Eureka fraction; and the Vicki claim are located 2½ miles southwest of Greenwood, B.C. in the Greenwood Mining division.

An option to purchase agreement between

Kenneth G. Ewers of Okanagan Falls, B.C.;  
Ivan A. McKay of Greenwood, B.C.;  
Donald S. Bombini of Greenwood, B.C.;  
Arnold Bombini of Greenwood, B.C.;  
Samuel Bombini of Greenwood, B.C.;

And

Utah Construction & Mining Co.,  
718 - 510 West Hastings,  
Vancouver 2, B.C.

was signed on May 5, 1967

Utah Construction & Mining Co., worked on the Toney group from July 30, 1967 to August 28, 1967. During this period a grid was surveyed and induced polarization and resistivity surveys were conducted over the grid.

## GEOLOGY

The western edge of the group is underlain by sharpstone conglomerate which appears to overlie massive white to grey quartzite or chert on the east. The chert is underlain with interbedded siltstone and greywacke containing irregular bands and blobs of the white to grey chert. Intrusive diorite underlies the northeastern and eastern part of the claim group.

The sediments in general strike northerly and dip steeply to the west.

## PREVIOUS WORK

Skomac Mines Ltd., optioned a part of the Toney group in 1962 but there is no record of any work done on the group.

### PRESENT WORK

Lines 400 feet apart, were surveyed, using chain and compass, and flagged with 100 foot stations marked out along the lines. An induced polarization and resistivity survey was run over 5.8 line miles of grid. This work was done during the period July 30 to August 28, 1967. A total of 15 working days were spent doing the geophysical surveys.

The surveys were done by a geophysical technician and 4 assistants under the direction of a geologist, all employees of Utah Construction & Mining Co.

The recording instrument is a pulse type, with a variable voltage of 300, 600 or 900 volts. Chargeability is measured in millivots/volt (mv/v) and resistivity in ohm-feet. Hewitt Enterprises of Salt Lake City, Utah, U.S.A. manufacture the equipment.

A Wenner electrode array with a 300 foot 'a' spacing was used. Better definition of anomalous areas was given by repeating the survey using the Wenner array with a 100 foot 'a' spacing. Depth of penetration is about equal to the 'a' spacing.

### INDUCED POLARIZATION RESULTS

The chargeability background is about 20 mv/v for the Toney group.

Anomalies of 2 and 4 times background on the Chum fraction and Chum #1 claim respectively have been outlined.

The Chum #1 claim anomaly is underlain by white to grey chert near the chert-sharpstone contact. The chert has a rusty stain but no visible sulphides in the centre of the anomaly, but on its northern edge there is disseminated pyrite and also some in narrow seams. The outcrop, in the area of the Chum fraction anomaly, is also chert with no visible sulphides.

The chargeability buildup to about 2 times background on the Toney fraction and Anton #3 & #5 claims is thought to be due to disseminated and seamy pyrite in a hornblende diorite exposed in a surface cut at about 35 S on line 48E.

### RESISTIVITY RESULTS

A resistivity low of 680 ohm-feet was obtained at 56+ 50 s. on line 12 E. This reading is part of a general resistivity low, very irregular in outline, about 1,400 feet long in a north-south direction and averages about 500 feet wide. This low is associated with chargeability high found on line 4 E, 8 E and 12 E, on the Chum #1 claim.

The high resistivities encountered on the east edge of the property probably are caused by the underlying hornblende diorite.

CONCLUSION

Rock outcrop in the vicinity of the chargeability (mv/v) high and resistivity (ohm-feet) now contains less than 1% visible sulphides. The chargeability high of 79 mv/v is thought to be a result of fairly high sulphide content. Therefore a drill hole is recommended to explore the anomalous area at depth.



M. J. Young, F. Eng.  
Senior Geologist.



STATEMENT OF COSTS

Salaries and Expenses

(Field Time Only)

(Expenses @ \$10.00 per man day)

M. J. Young	10 days @	\$45.00	\$450.00
J. Sorrel	15 days @	33.00	495.00
V. Hardy	5 days @	25.50	127.50
Colin Brennan	15 days @	25.50	382.50
William Neeley	15 days @	25.50	382.50
R. St. John	15 days @	25.50	382.50
M. Bombini	10 days @	25.50	<u>250.50</u>
		Total	\$2,470.50

STATEMENT OF QUALIFICATIONS

1) M. J. Young

Education:

B. Sc. Geology, University of British Columbia, 1961

Employment:

1952 - 57        Howe Sound Co.  
                  Sampler, Assistant Geologist

1958 --61        U. B. C.; Utah Construction & Mining Co.  
                  Summer employment  
                  Assistant Geologist

1961 - present   Utah Construction & Mining Co.  
                  Senior Geologist.

Professional Status:

Professional Engineer, British Columbia

2) J. D. Sorrel

Education:

Graduated from High School, 1960

Employment:

1961 - 1962        Minex Company, Pasadena, California  
                  Induced polarization & Magnetometer operator

1962 - 1963        Huntco Limited, Arizona  
                  Induced polarization operator

1963 - 1964        Horizon Land Corp., Arizona  
                  Draftsman

1964 - 1965        Stebbins Mineral Surveys, Arizona  
                  Induced polarization crew chief

1965 - 1966        Barringer Research Ltd., Arizona  
                  Induced polarization, electro-magnetometer  
                  operator

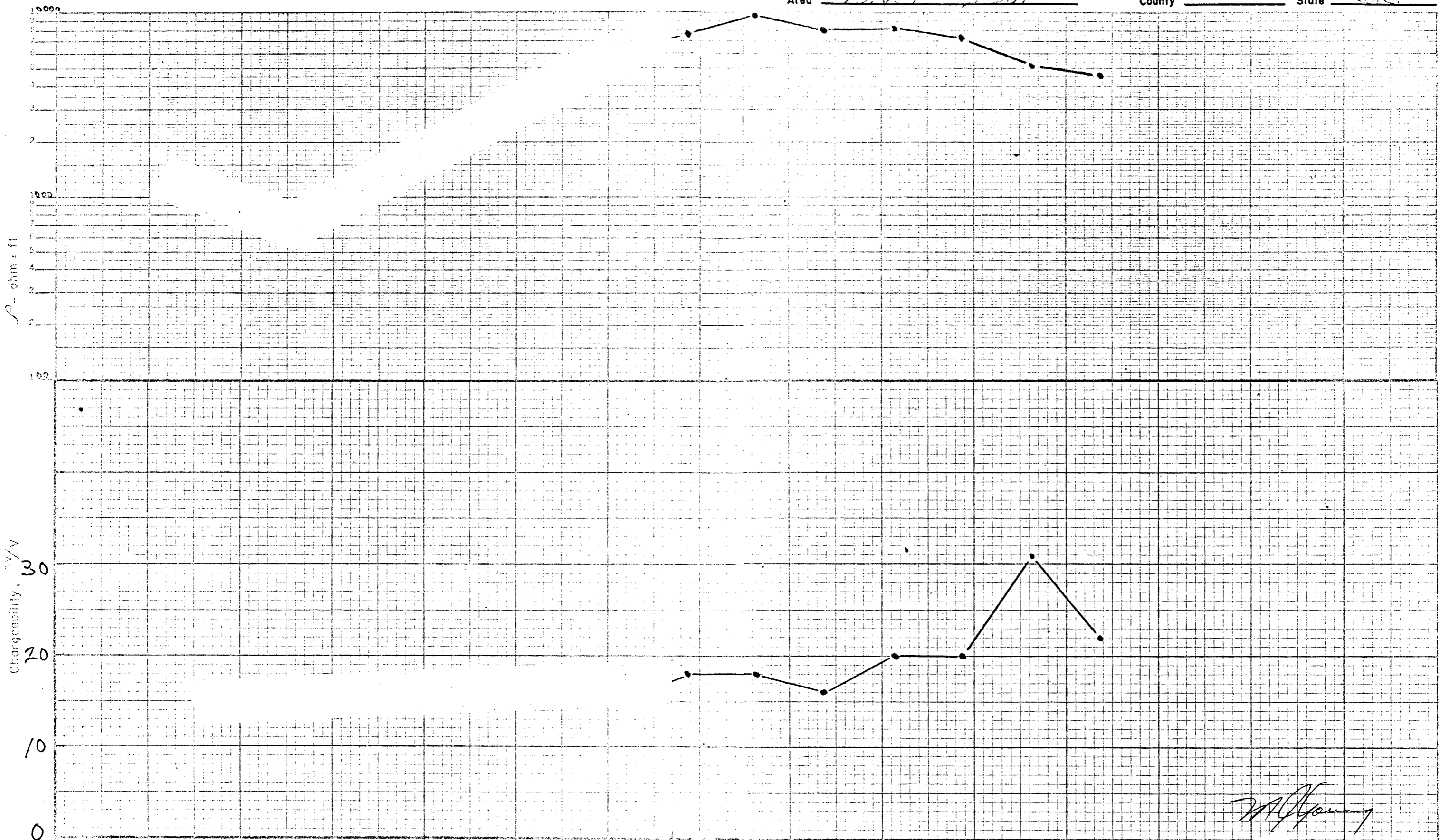
1966 - 1967        Utah Construction & Mining Co.,  
                  Induced polarization, electro-magnetometer and  
                  magnetometer operator.

Utah Const. & Mining Co.

Area TONNEY COUP

Induced Polarization Line No. 275

County \_\_\_\_\_ State B.C.



*W. Young*

Geologic Section Looking EAST Vert. Scale: 1" = 10 mv/v

Opr. J. D. Swinell Scale: 1" = 400'  
"a" W 300' Date 12<sup>th</sup> August 1967

Location SILVER DOME  
Bearing N 20° W

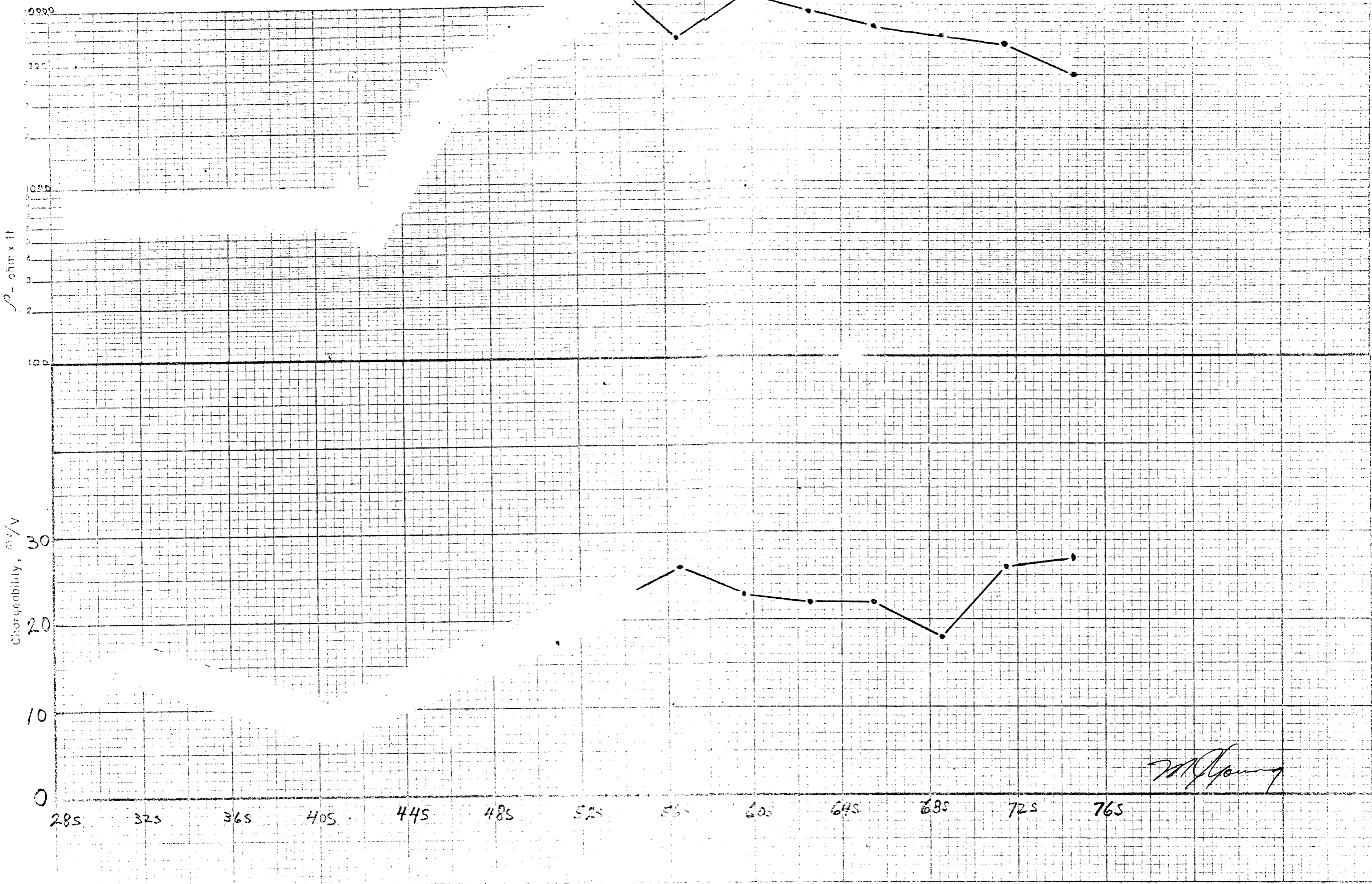
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Utah Const. & Mining Co.

Area TONEY GROUP

Induced Polarization Line No. 324

County \_\_\_\_\_ State \_\_\_\_\_



Geologic Section Looking EAST Vert. Scale: 1" = 10 m

Opr. JDS Scale: 1" = 400' Location \_\_\_\_\_  
"a" 300' Date Aug 19 1967 Bearing N20W



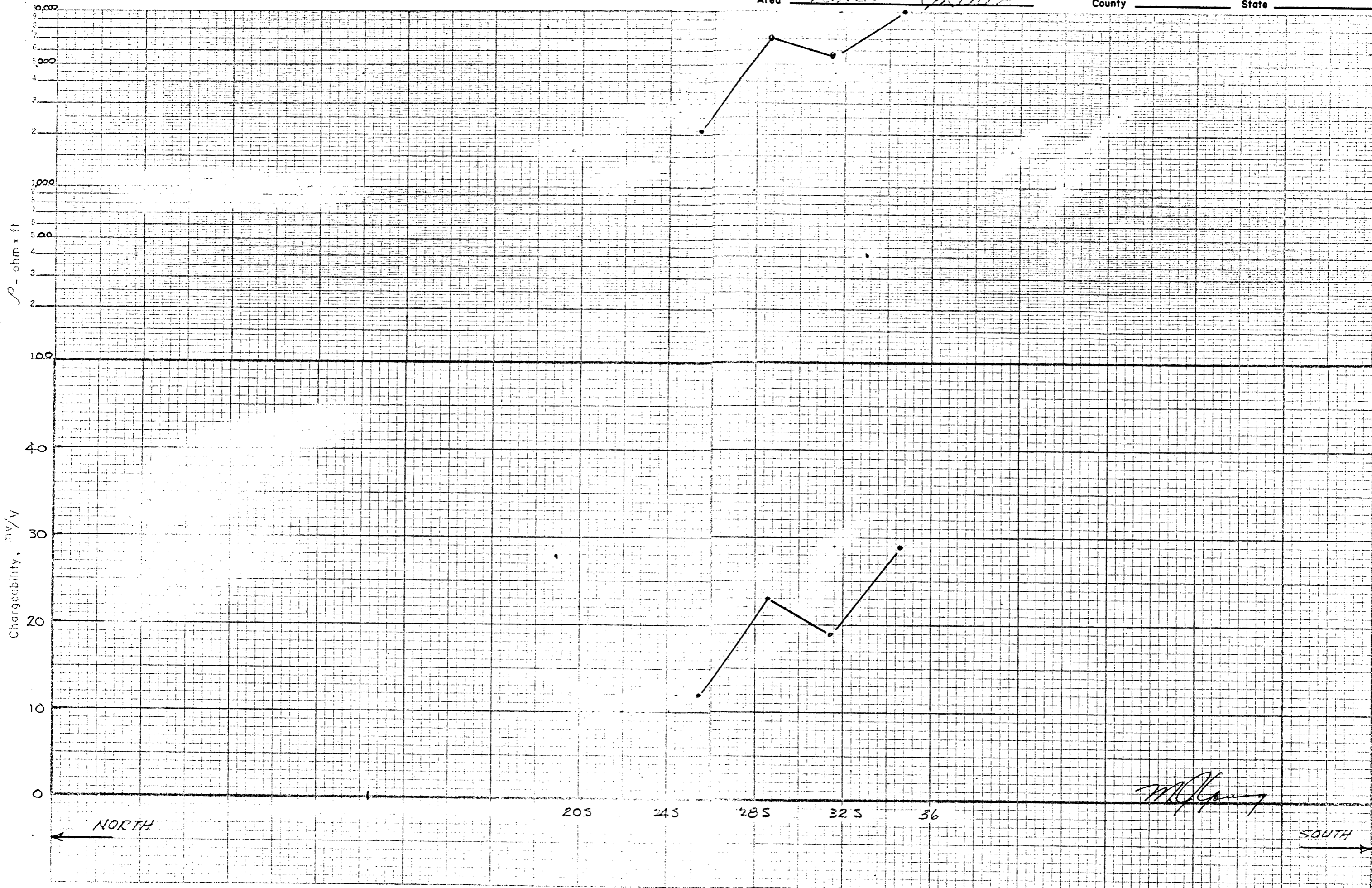
*W. Young*

Geologic Section Looking EAST Vert. Scale: 1" = 10<sup>mv/v</sup>

Opr. J.D.S. Scale: 1" = 400 Location \_\_\_\_\_  
 I. "a" 300' Date Aug 28, 1967 Bearing S20°E

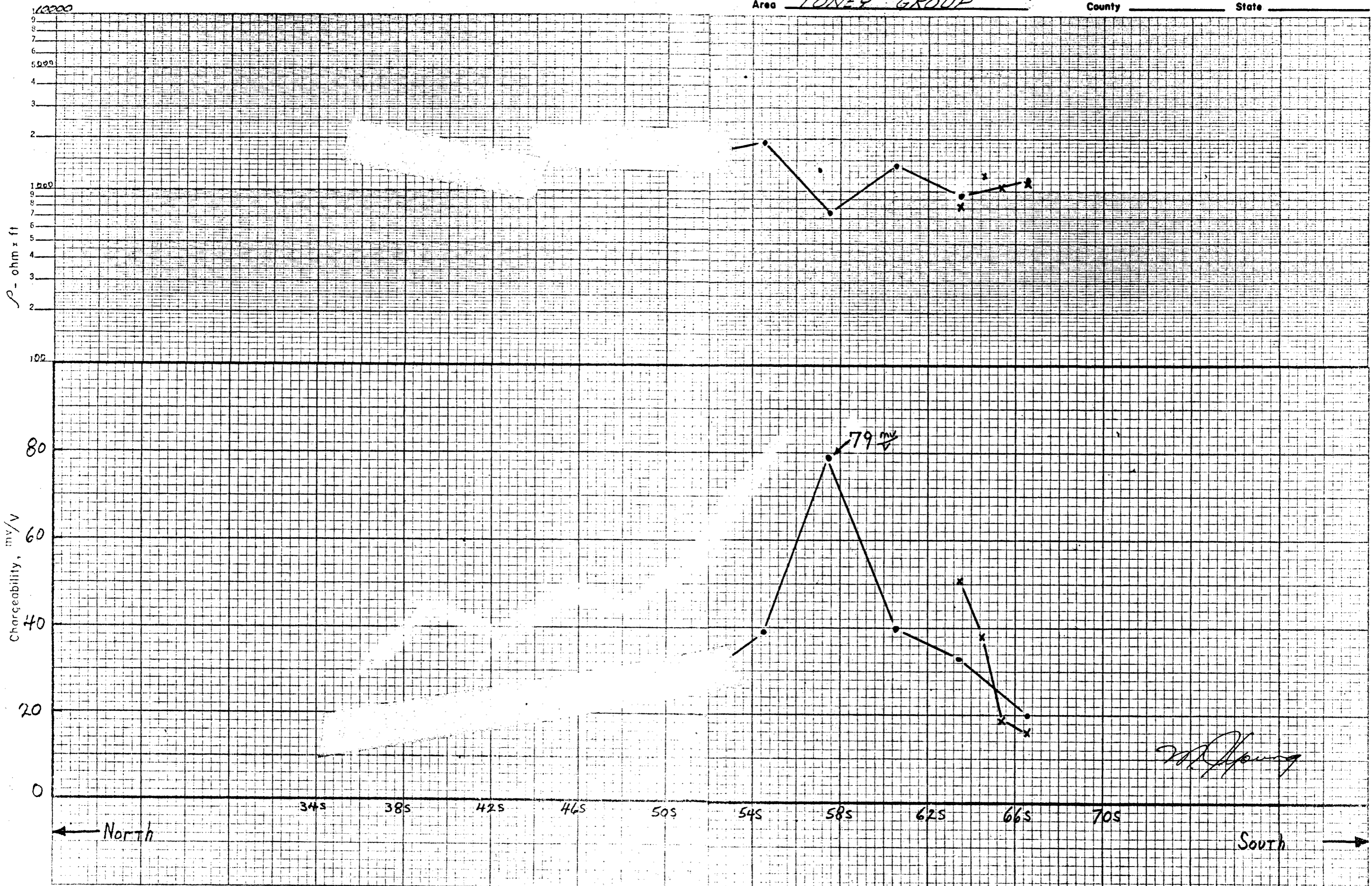
Utah Const. & Mining Co.  
Area TONEY GROUP

Induced Polarization Line No. 485  
County \_\_\_\_\_ State \_\_\_\_\_



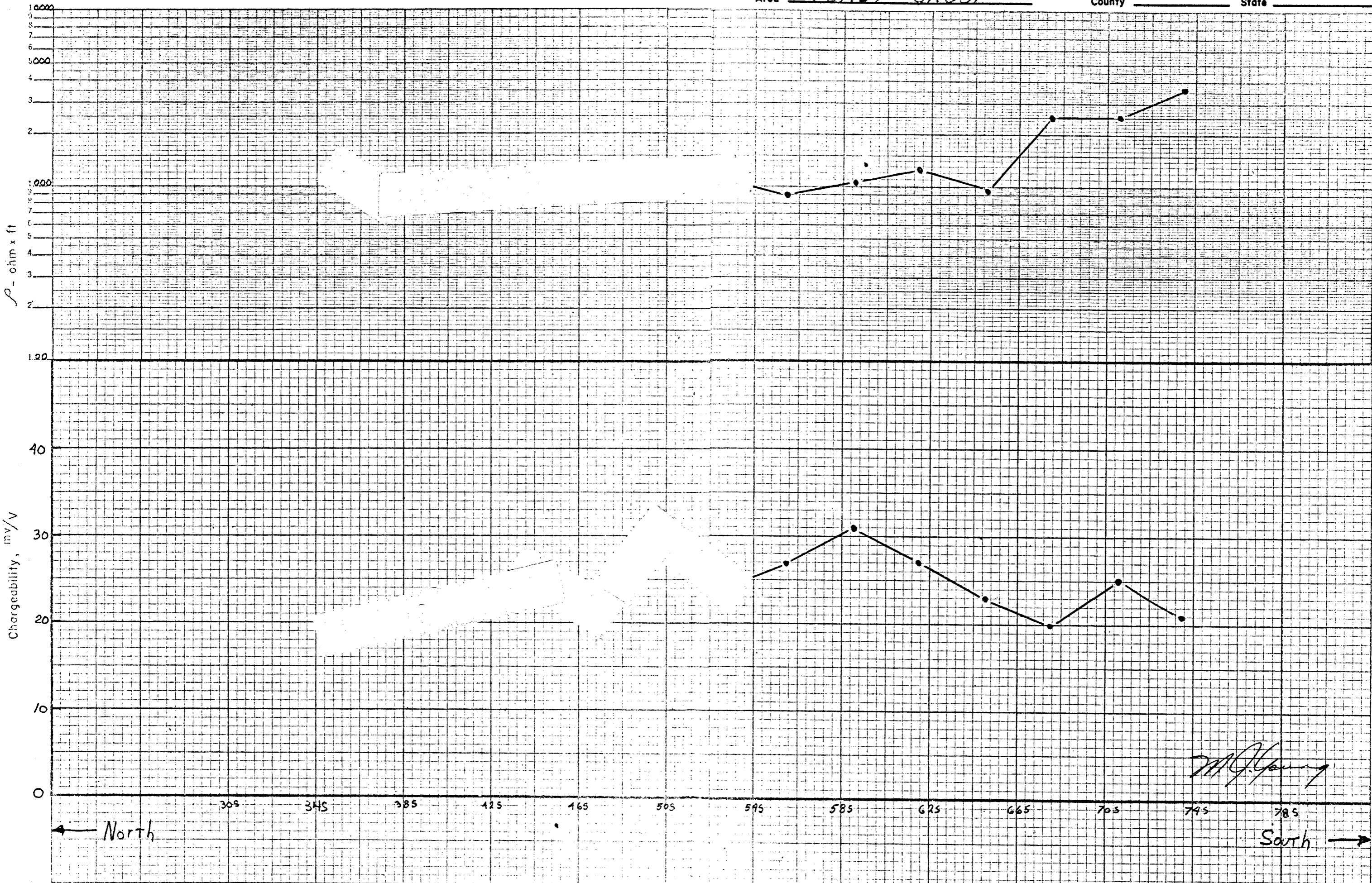
Geologic Section Looking EHST Vert. Scale: 1" = 10' NW

Opr. JDS Scale: 1" = 400' Location \_\_\_\_\_  
"a" 300' Date Aug 27 1967 Bearing 52E



Geologic Section Looking EAST Vert. Scale: 1" = 20 m X 3 elev. 100a

Opr. JDS Scale: 1" = 400' Location \_\_\_\_\_  
 "a" 300' Date Aug 5, 1967 Bearing S20E

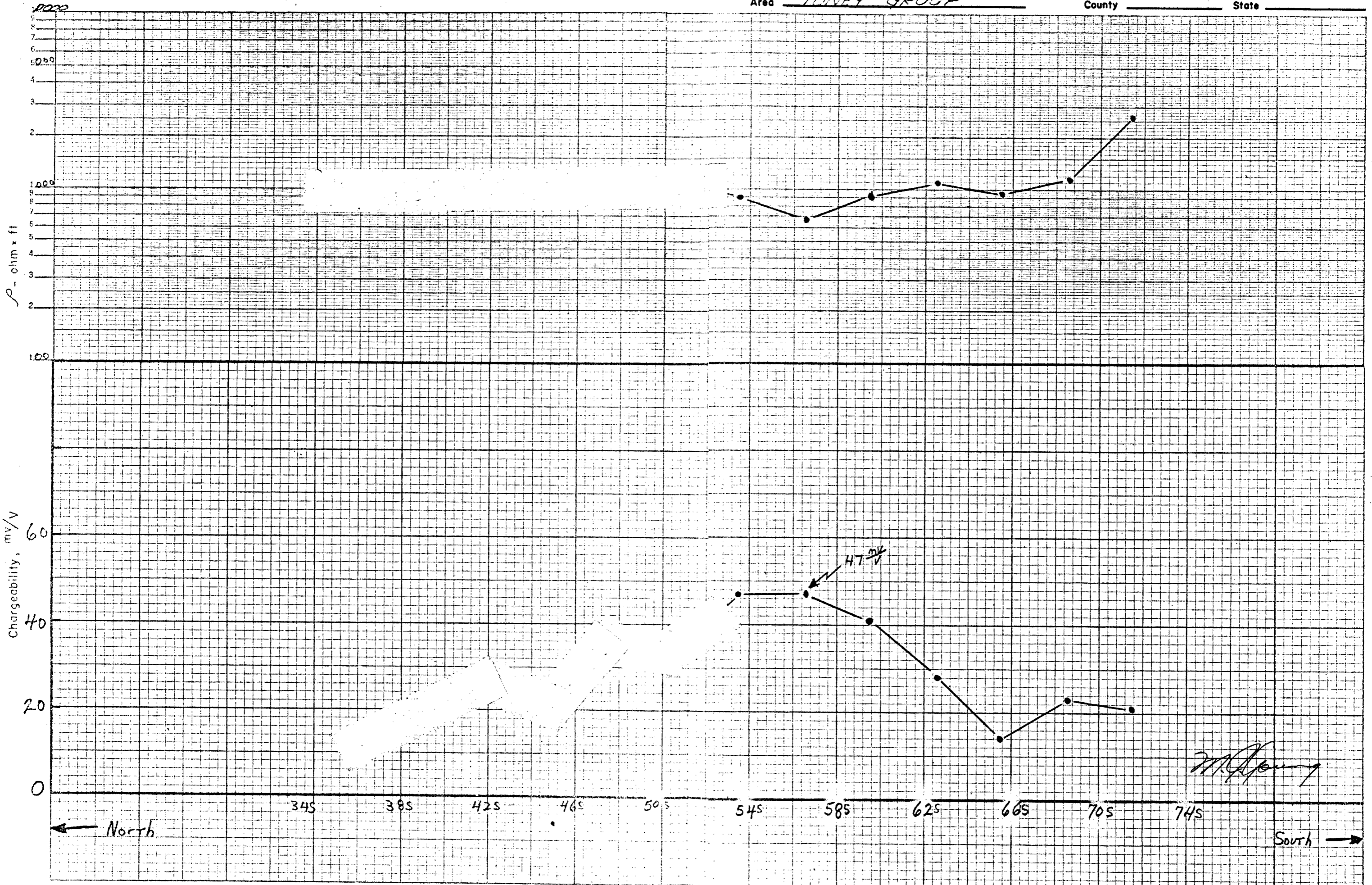


*M. J. Young*

North  
 Geologic Section Looking East Vert. Scale: 1" = 10 Mx

Opr. J.D.S. Scale: 1" = 400' Location \_\_\_\_\_  
 "a" 300' Date Aug 9/67 Bearing S 20'E





Geologic Section Looking EAST Vert. Scale: 1" = 20 mV

Opr. JDS

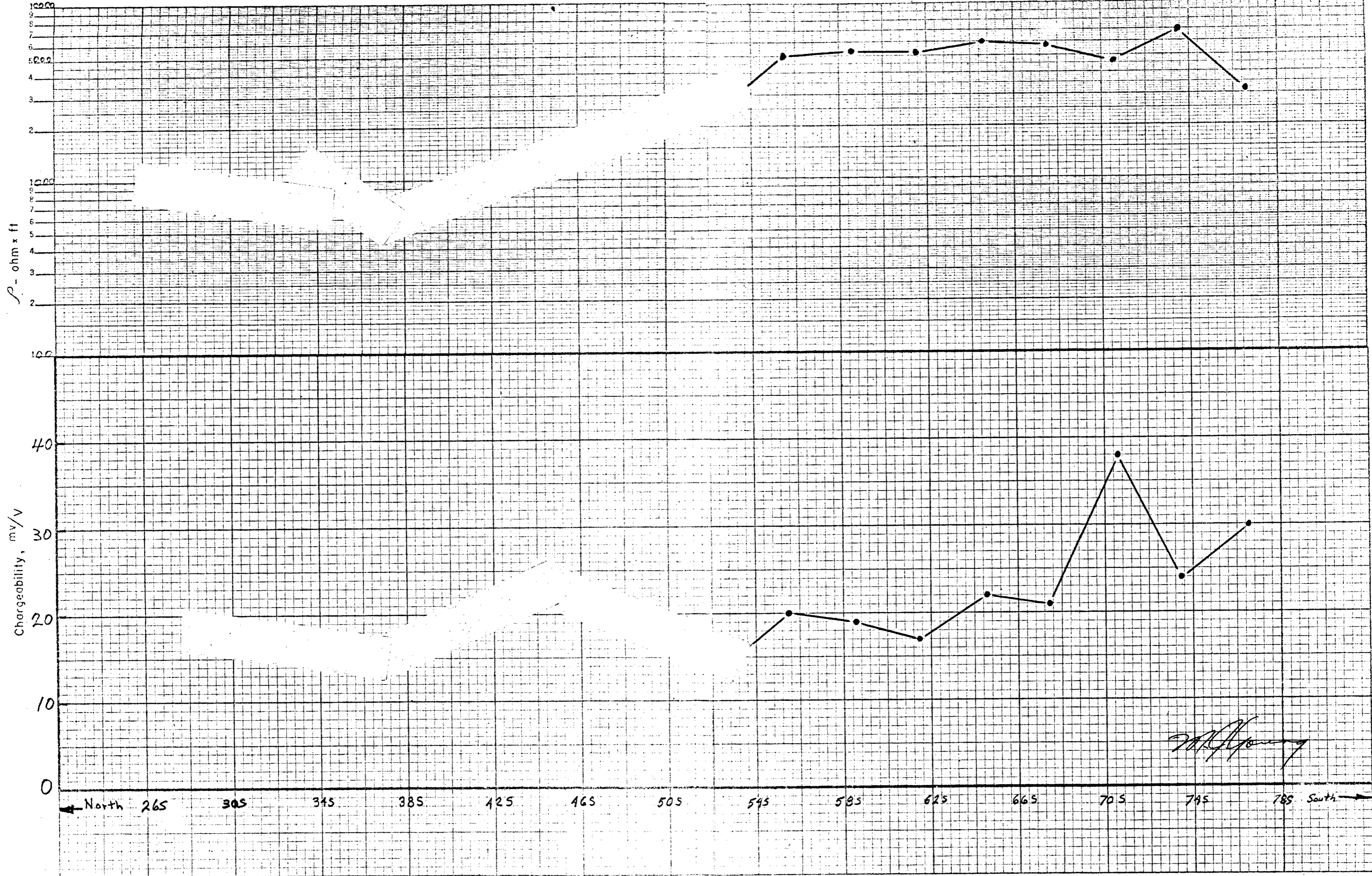
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Location \_\_\_\_\_

"a" 300'

Date Aug 8, 1967

Bearing N20W



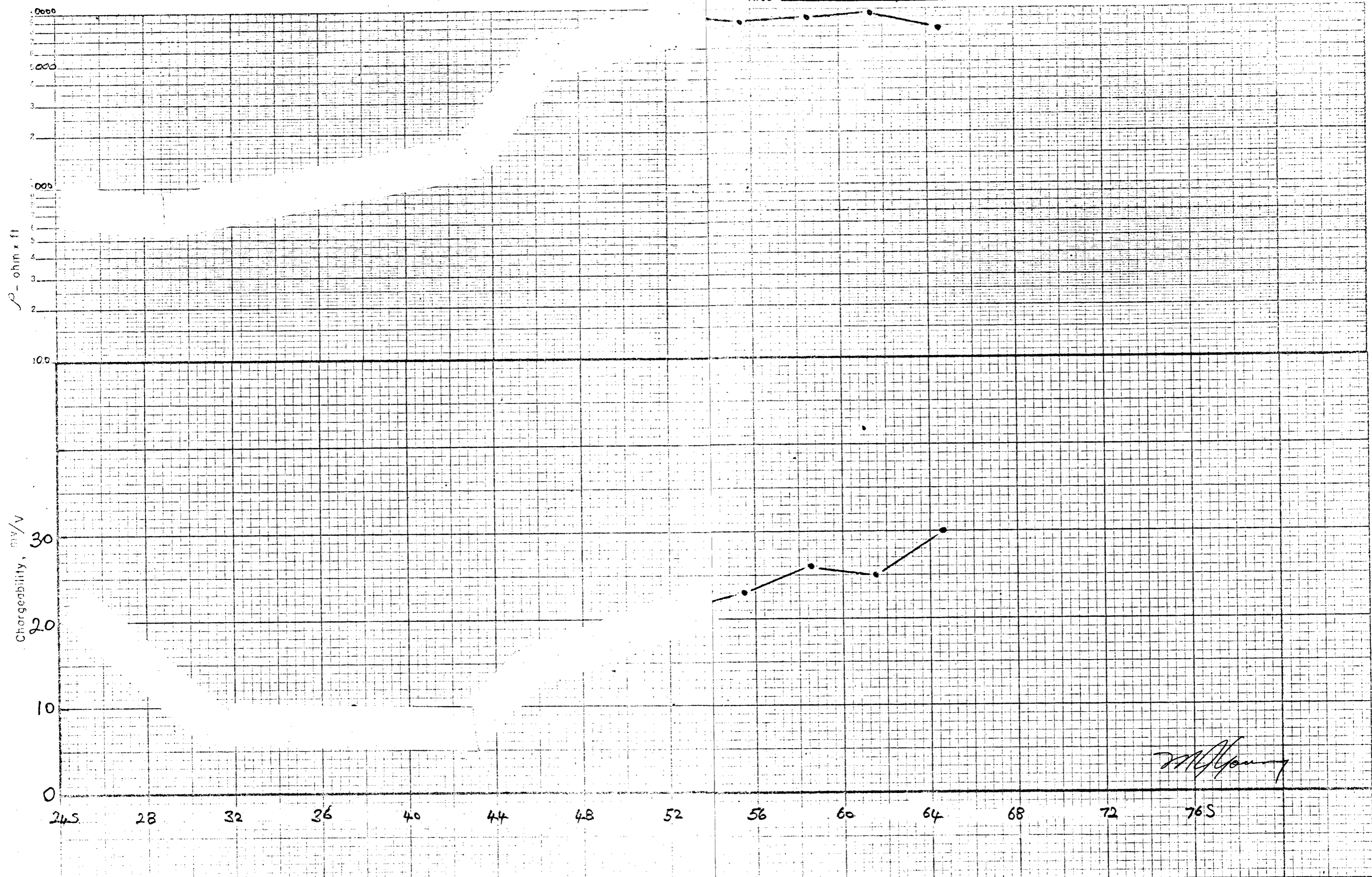
*W. D. Young*

Utah Const. & Mining Co.

Area TONNEY GROUP

Induced Polarization Line No. 365

County \_\_\_\_\_ State \_\_\_\_\_



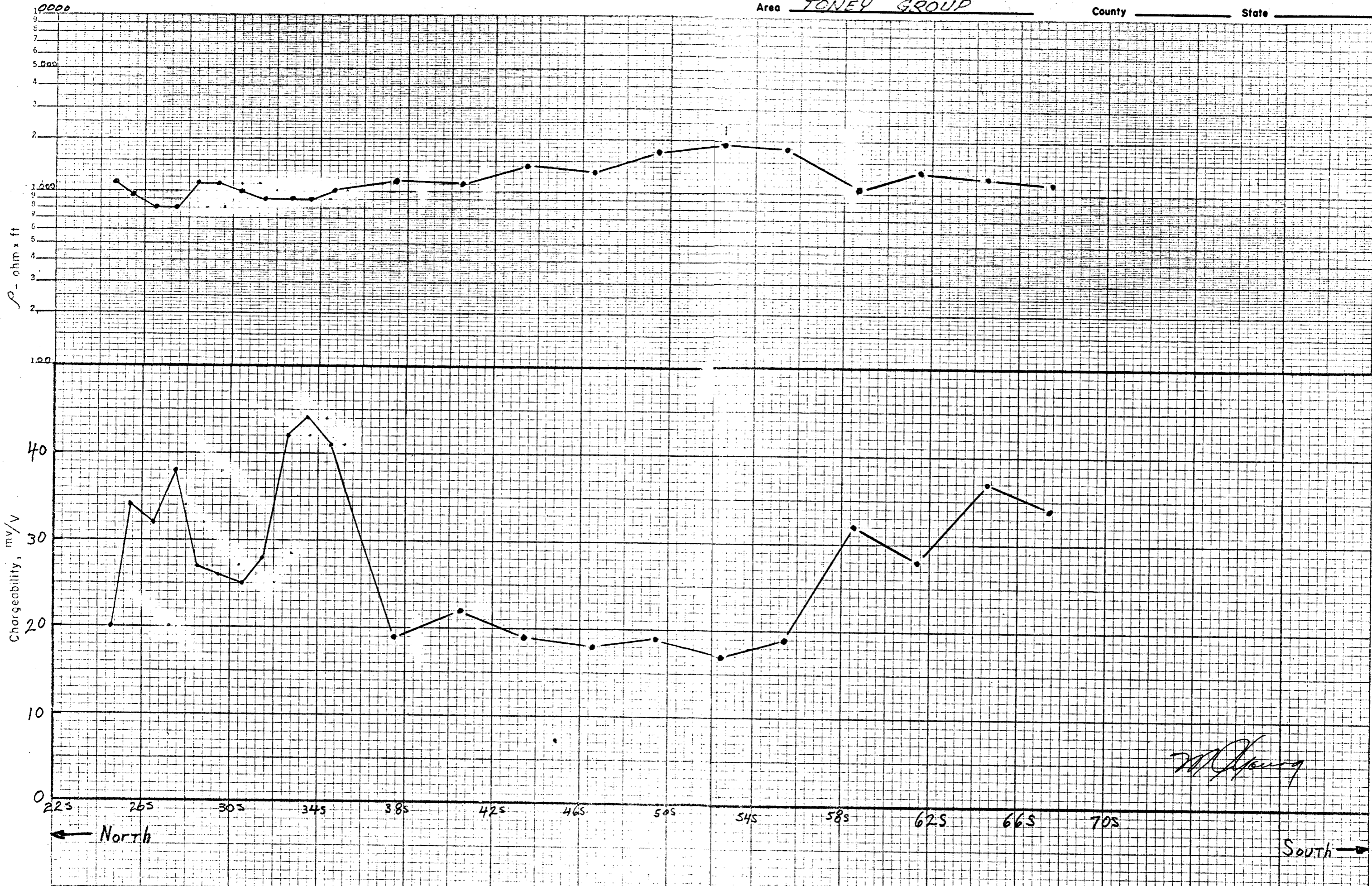
*[Handwritten signature]*

Geologic Section Looking EAST Vert. Scale: 1" = 10 mV

Opr. J. D. S.  
"a" 300'

Scale: 1" = 400  
Date Aug. 21, 1967.

Location \_\_\_\_\_  
Bearing S20°E



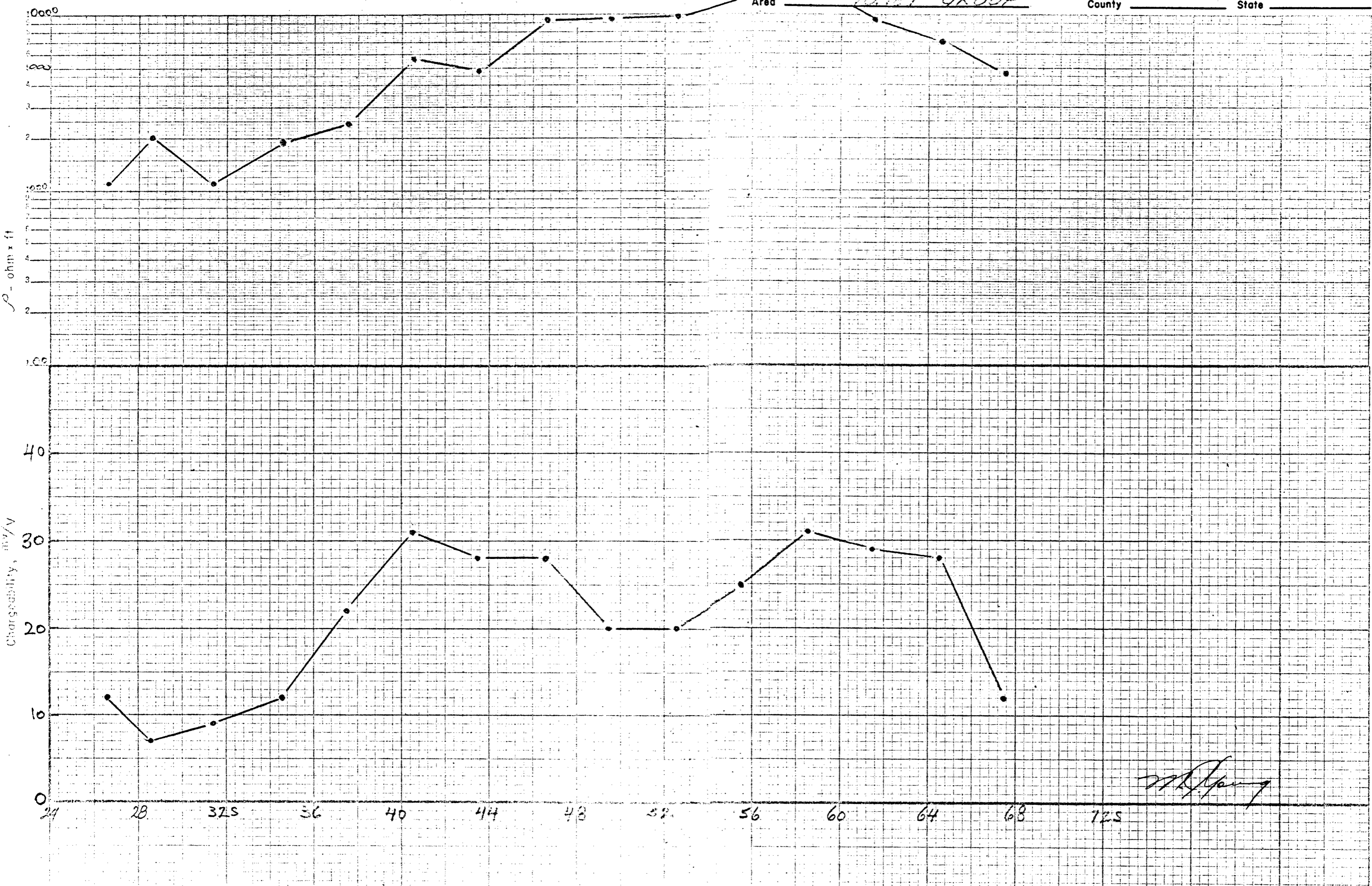
*W. J. Young*

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Opr. JDS Scale: 1" = 400' Location \_\_\_\_\_  
 "a" 300' Date Aug. 5, 1967 Bearing S20E

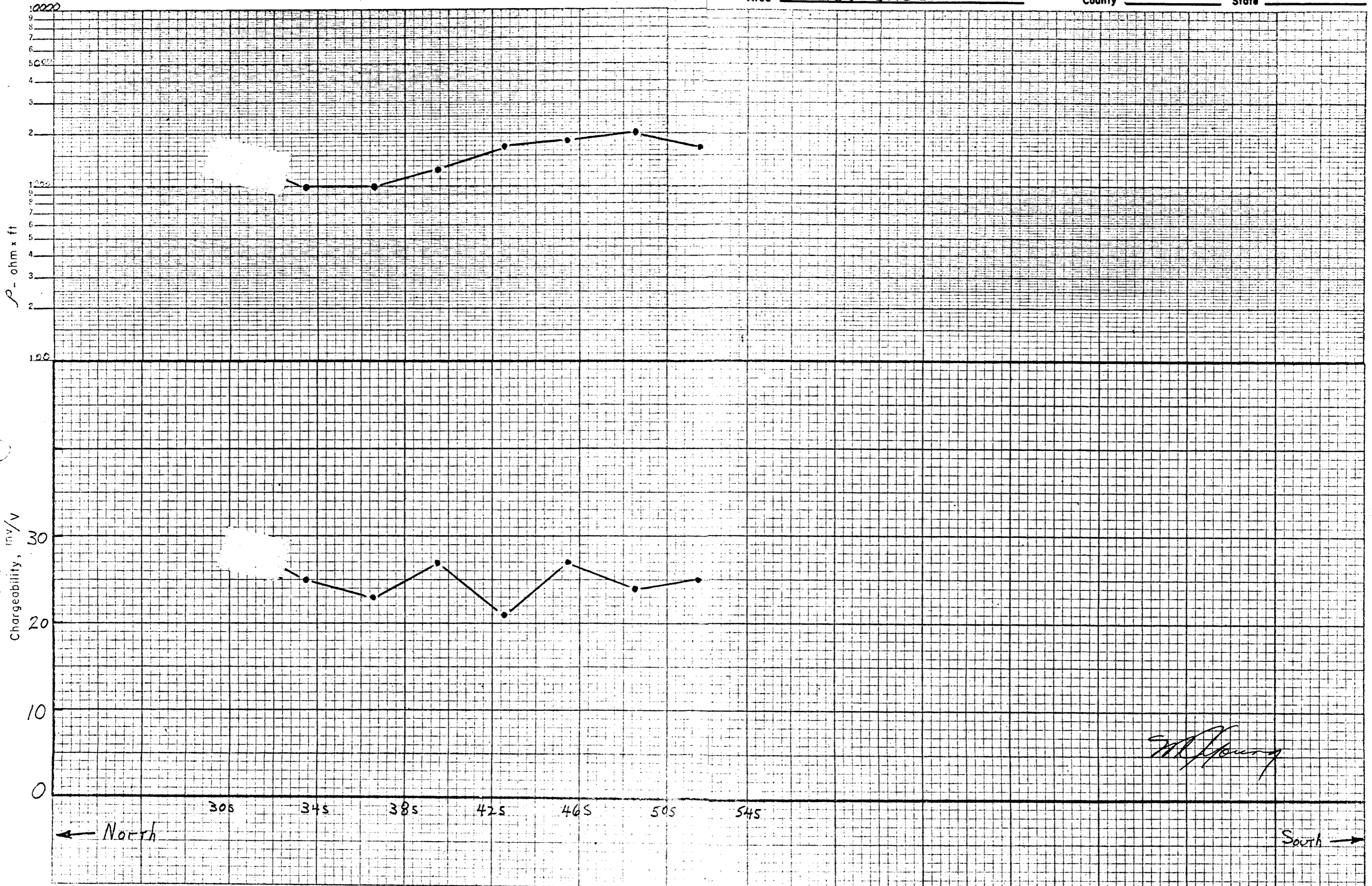
Utah Const. & Mining Co.  
Area TONEY GROUP

Induced Polarization Line No. 405  
County \_\_\_\_\_ State \_\_\_\_\_



Geologic Section Looking EAST Vert. Scale: 1" = 10 mV/V

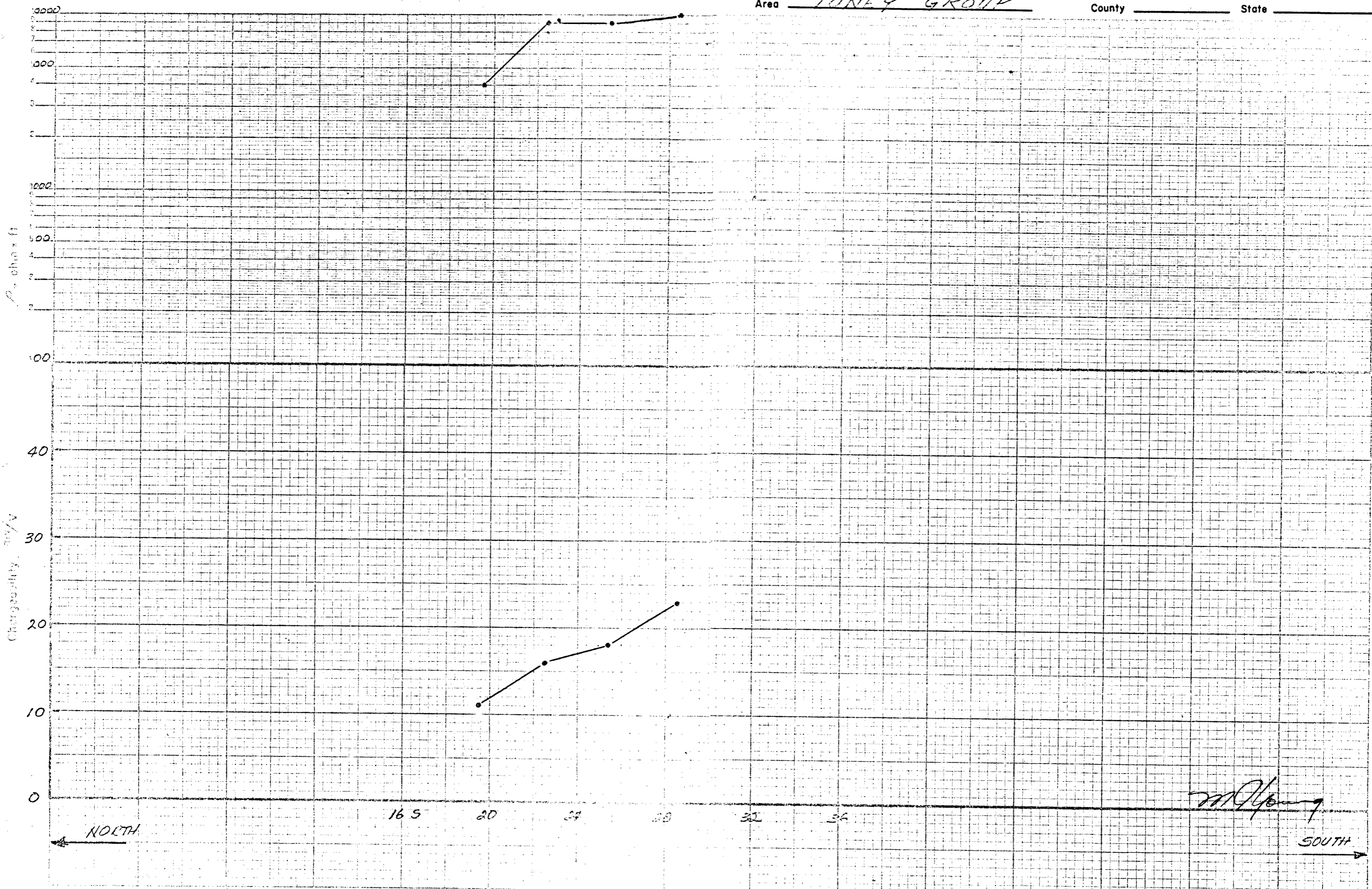
Opr. J.D.S. Scale: 1" = 400 Location \_\_\_\_\_  
 "a" 300' Date AUG. 22 1967 Bearing N20°W



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Geologic Section Looking EAST Vert. Scale: 1" = 10<sup>m</sup>

Opr. JDS Scale: 1" = 400' Location \_\_\_\_\_  
"a" 300' Date Aug 5, 1967 Bearing S20E



Geologic Section Looking East

Vert. Scale: 1" = 10 mV/V

Opr. IDS

Scale: 1" = 400'

Location \_\_\_\_\_

"a" 300'

Date Aug 27 1967

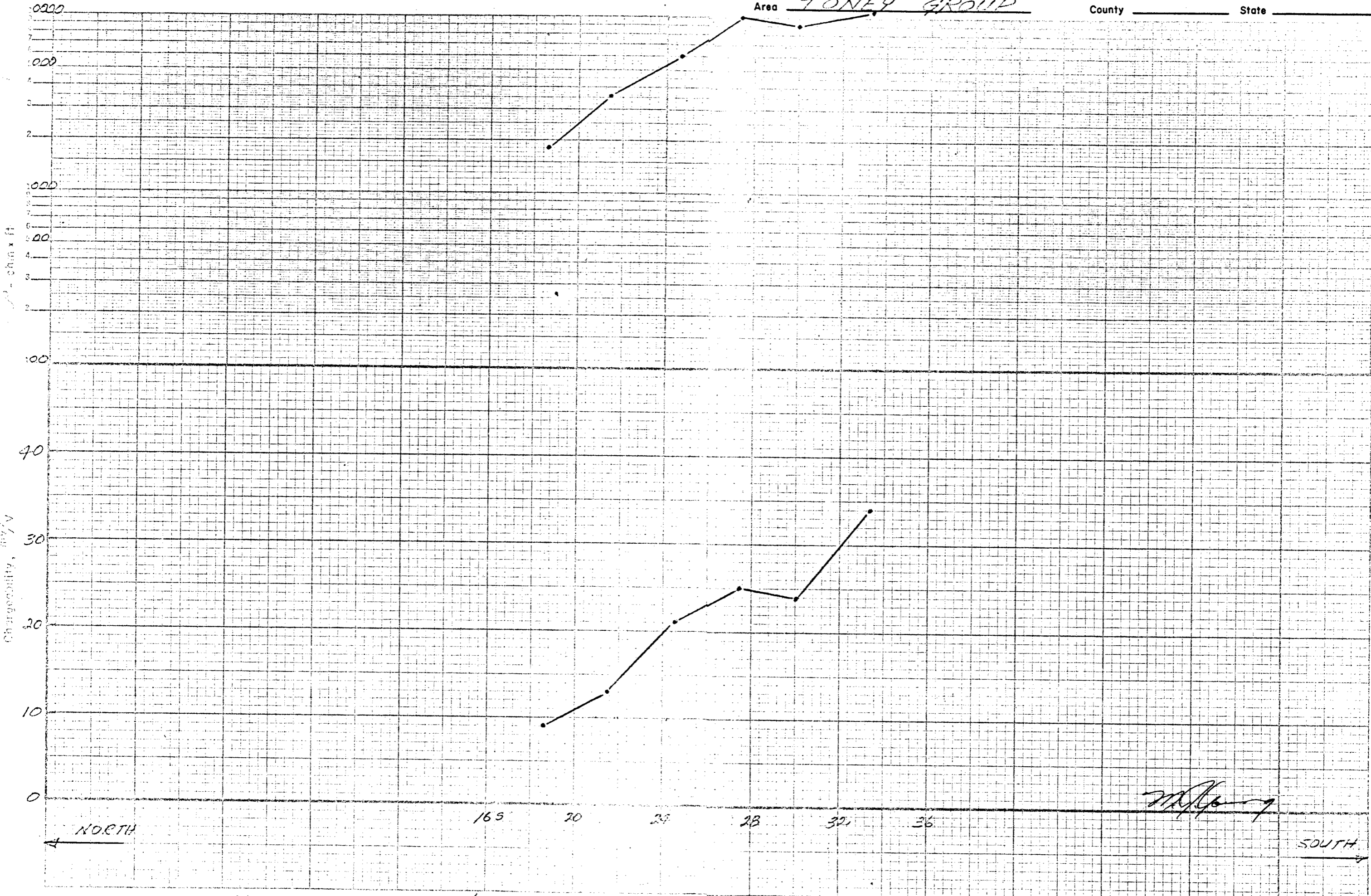
Bearing 52° E

Utah Const. & Mining Co.

Area TONY GROUP

Induced Polarization Line No. 524

County \_\_\_\_\_ State \_\_\_\_\_



NORTH

SOUTH

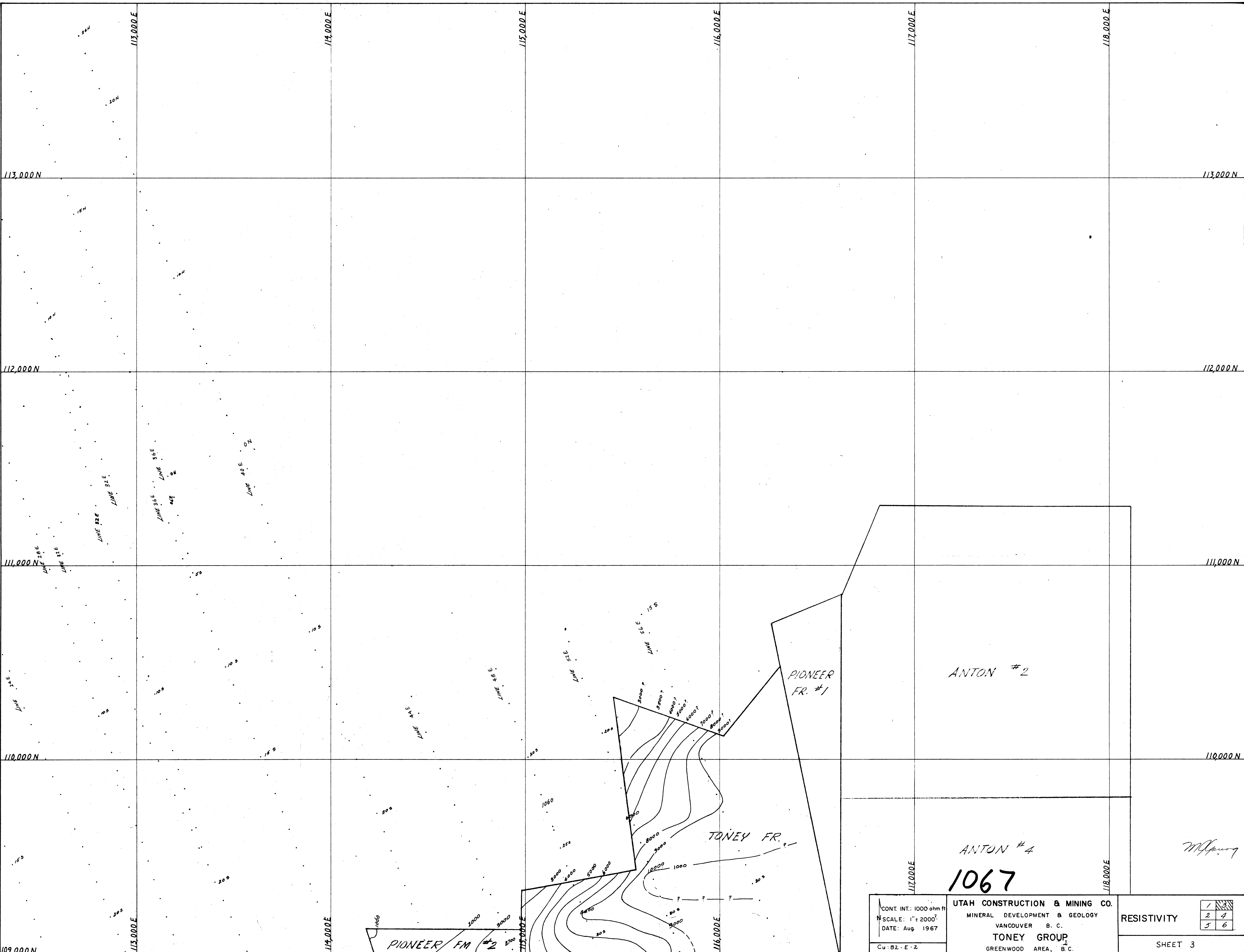
*M. J. ...*

Geologic Section Looking EAST Vert. Scale: 1" = 10 mV/V

Opr. JDS Scale: 1" = 400'  
"a" 300' Date Apr 27/67

Location \_\_\_\_\_ Bearing 52°E

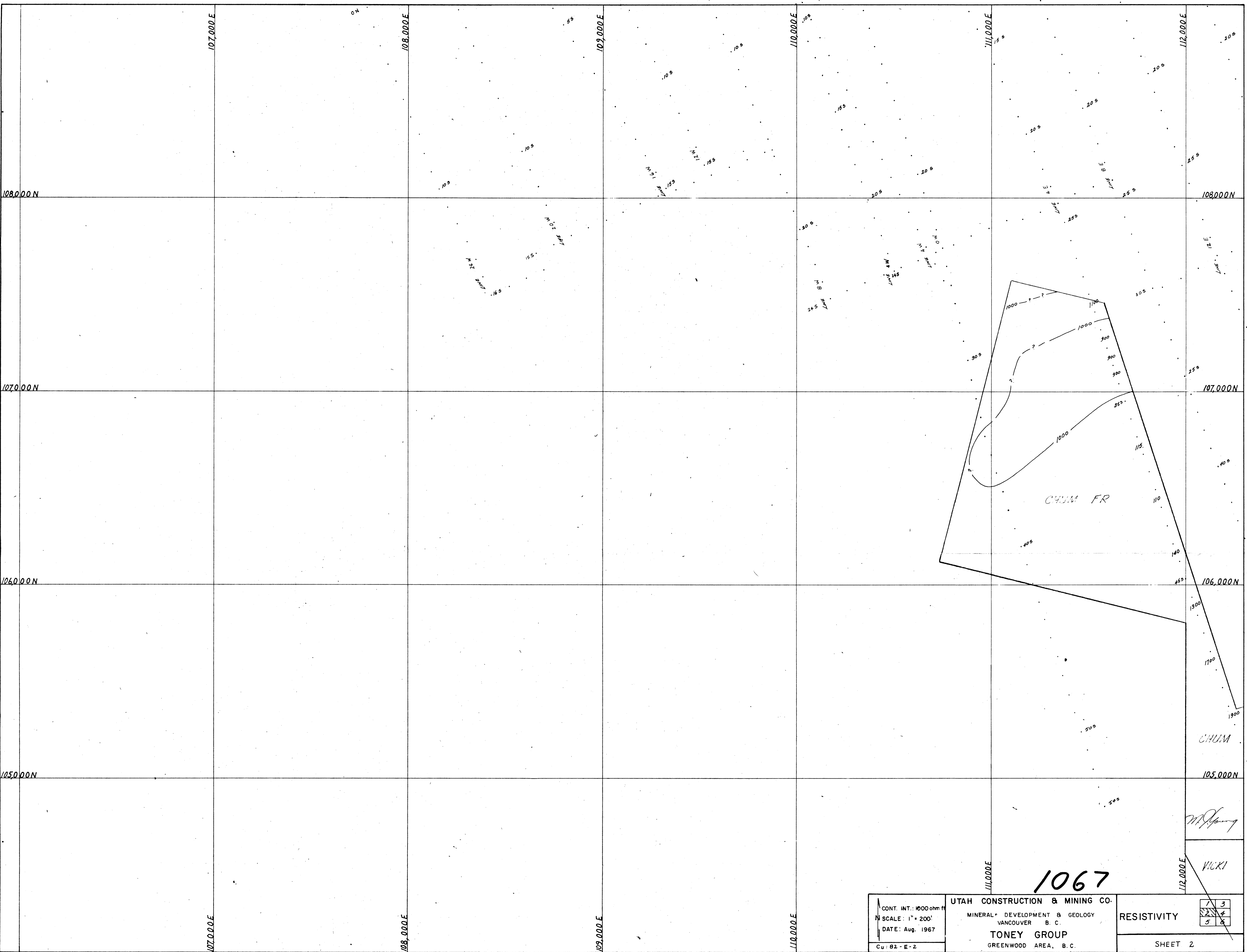




CONT. INT.: 1000 ohm ft  
 SCALE: 1" = 2000'  
 DATE: Aug 1967  
 Cu-82-E-2

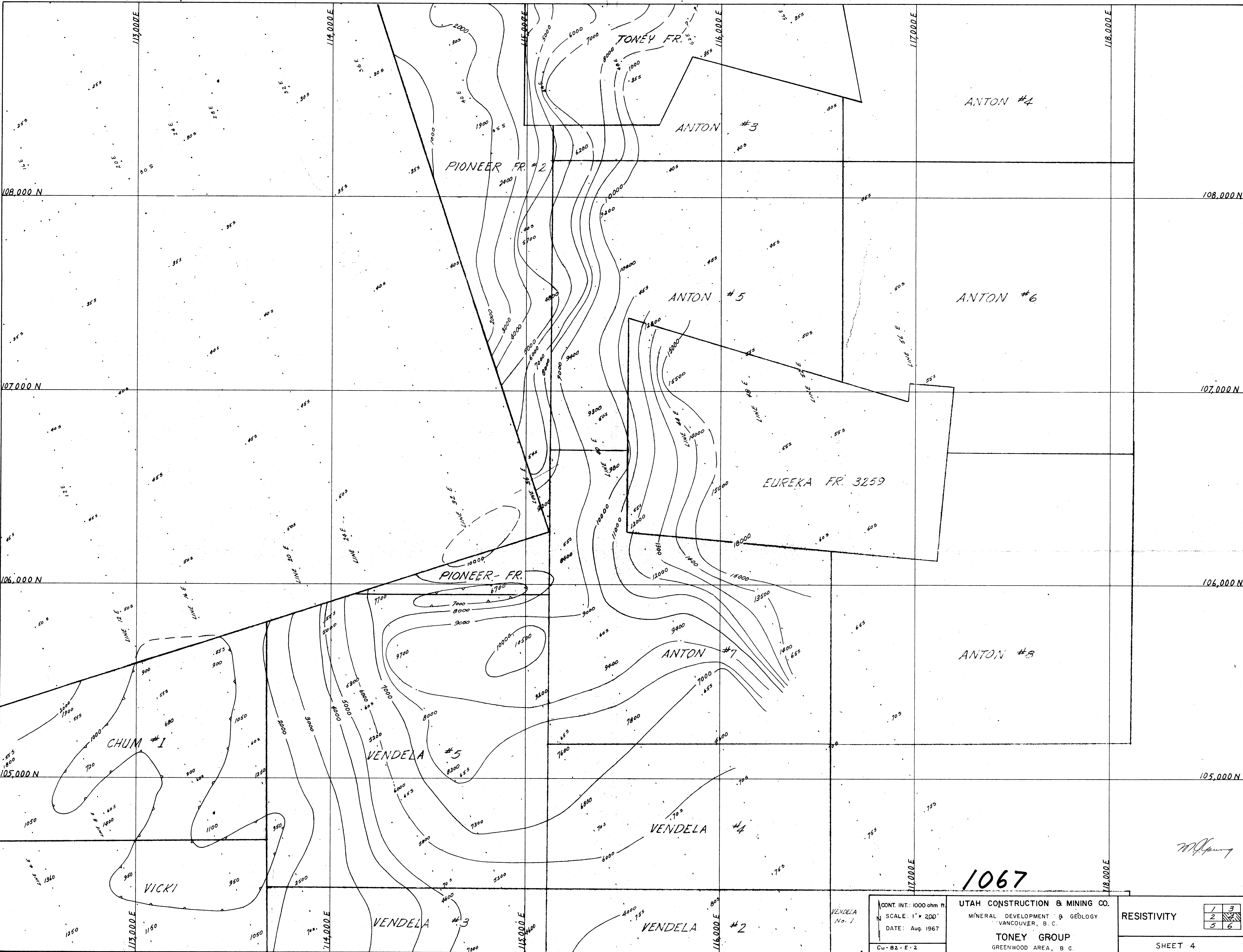
UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER B. C.  
**TONEY GROUP**  
 GREENWOOD AREA, B. C.

RESISTIVITY	1	2	3
	4	5	6
SHEET 3			



1067

CONT. INT.: 1000 ohm ft SCALE: 1" = 200' DATE: Aug. 1967 Cu: 82 - E - 2	UTAH CONSTRUCTION & MINING CO. MINERAL DEVELOPMENT & GEOLOGY VANCOUVER B. C. <b>TONEY GROUP</b> GREENWOOD AREA, B. C.	RESISTIVITY  SHEET 2
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*W.A. Young*

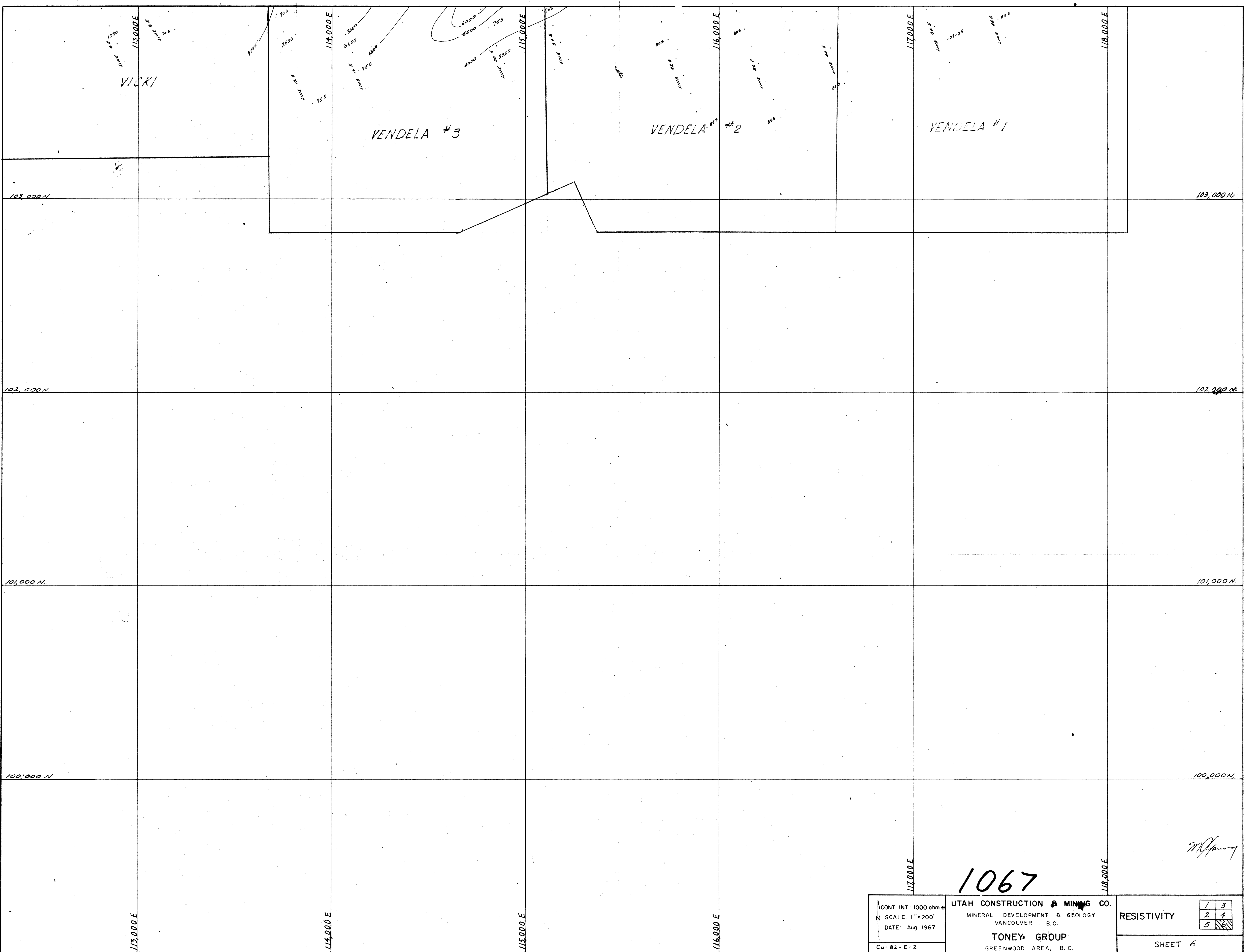
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 SCALE: 1" = 200'  
 DATE: Aug. 1967  
 Cu-82-E-2

UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER, B. C.  
 TONEY GROUP  
 GREENWOOD AREA, B. C.

RESISTIVITY

1	3
2	6
5	6

SHEET 4



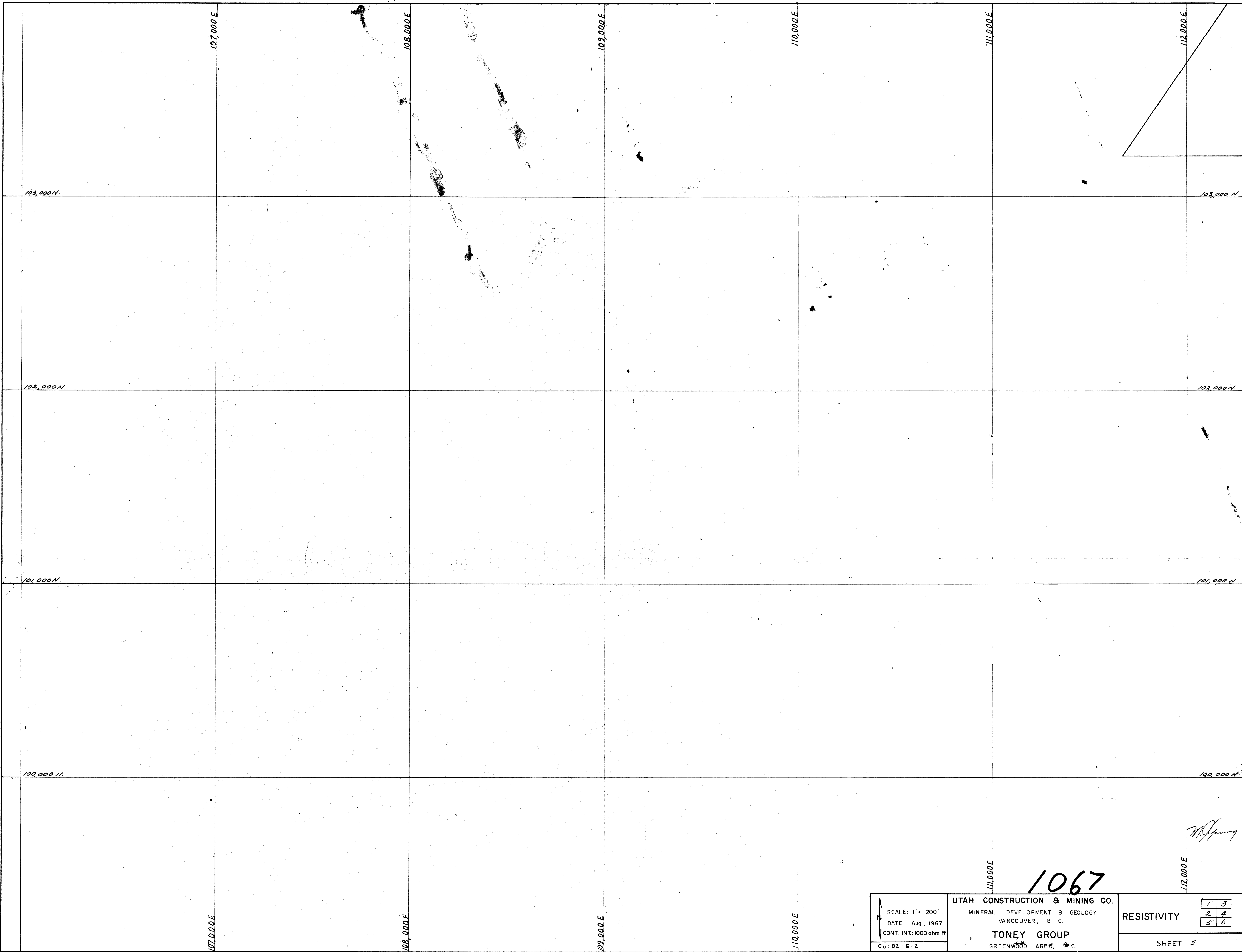
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 SCALE: 1" = 200'  
 DATE: Aug. 1967

UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER, B.C.  
**TONEY GROUP**  
 GREENWOOD AREA, B.C.

RESISTIVITY	1 3
	2 4
	5 6
SHEET 6	

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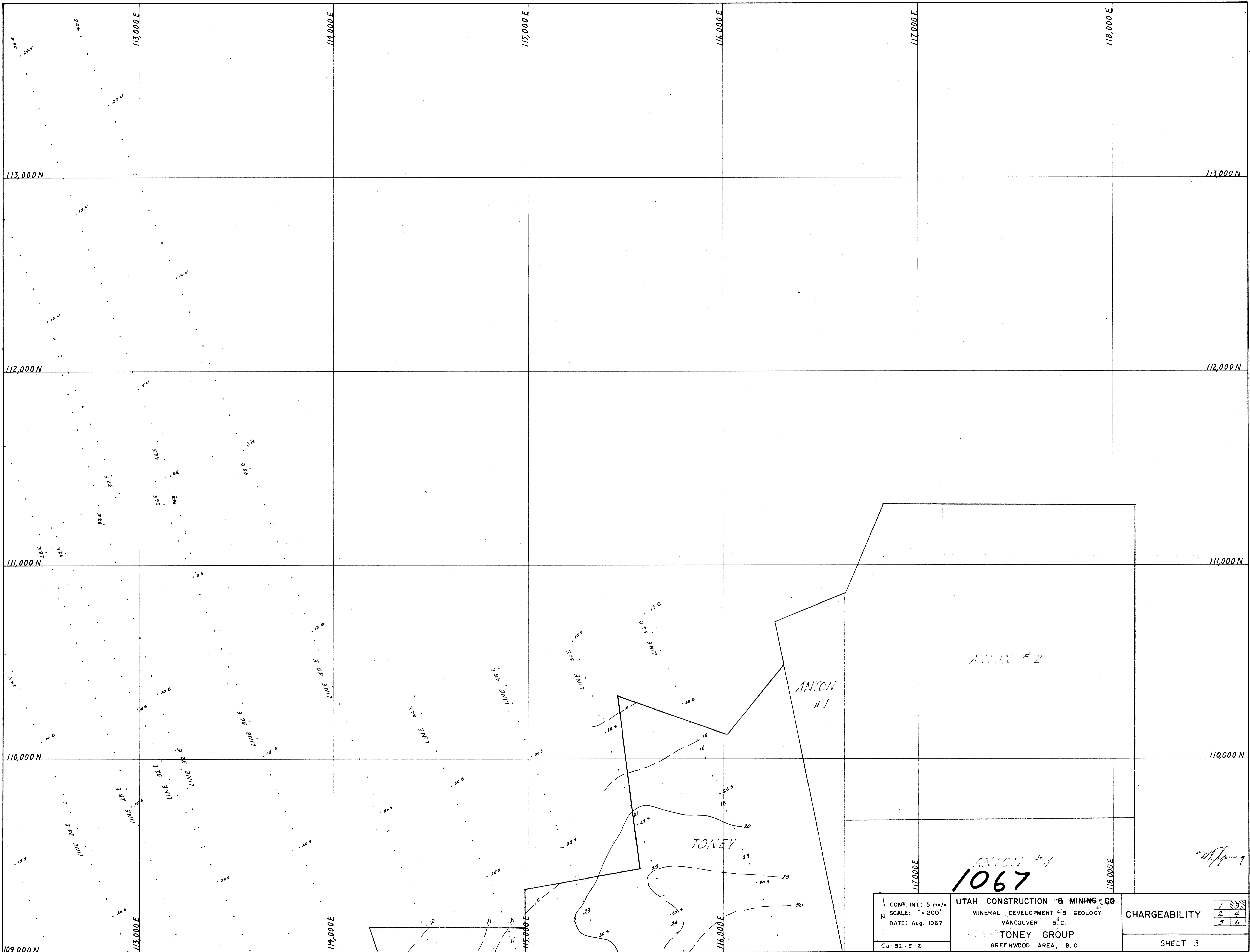
*M. J. Young*



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*M. J. [Signature]*

SCALE: 1" = 200' DATE: Aug., 1967 CONT. INT.: 1000 ohm ft Cu: 82-E-2	UTAH CONSTRUCTION & MINING CO. MINERAL DEVELOPMENT & GEOLOGY VANCOUVER, B. C.	RESISTIVITY <table border="1"> <tr><td>1</td><td>3</td></tr> <tr><td>2</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> </table>	1	3	2	4	5	6
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	2	4						
5	6							
TONEY GROUP GREENWOOD AREA, B. C.	SHEET 5							

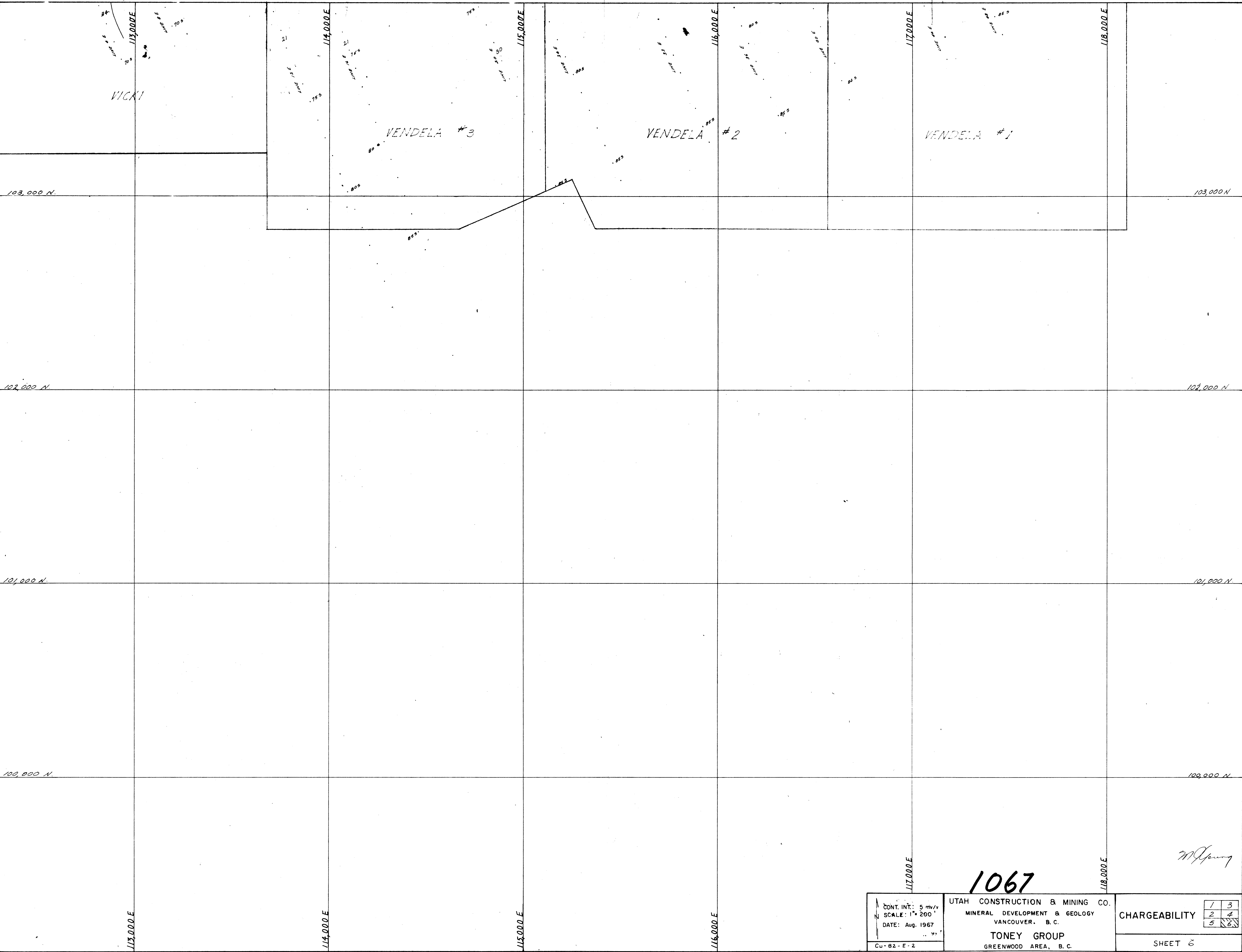


CONT. INT: 5' mv/v  
 SCALE: 1" = 200'  
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 Cu: 82-E-2

UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER B.C.  
 TONEY GROUP  
 GREENWOOD AREA, B.C.

CHARGEABILITY	1	3
	2	4
	5	6
SHEET 3		

*M. Spring*

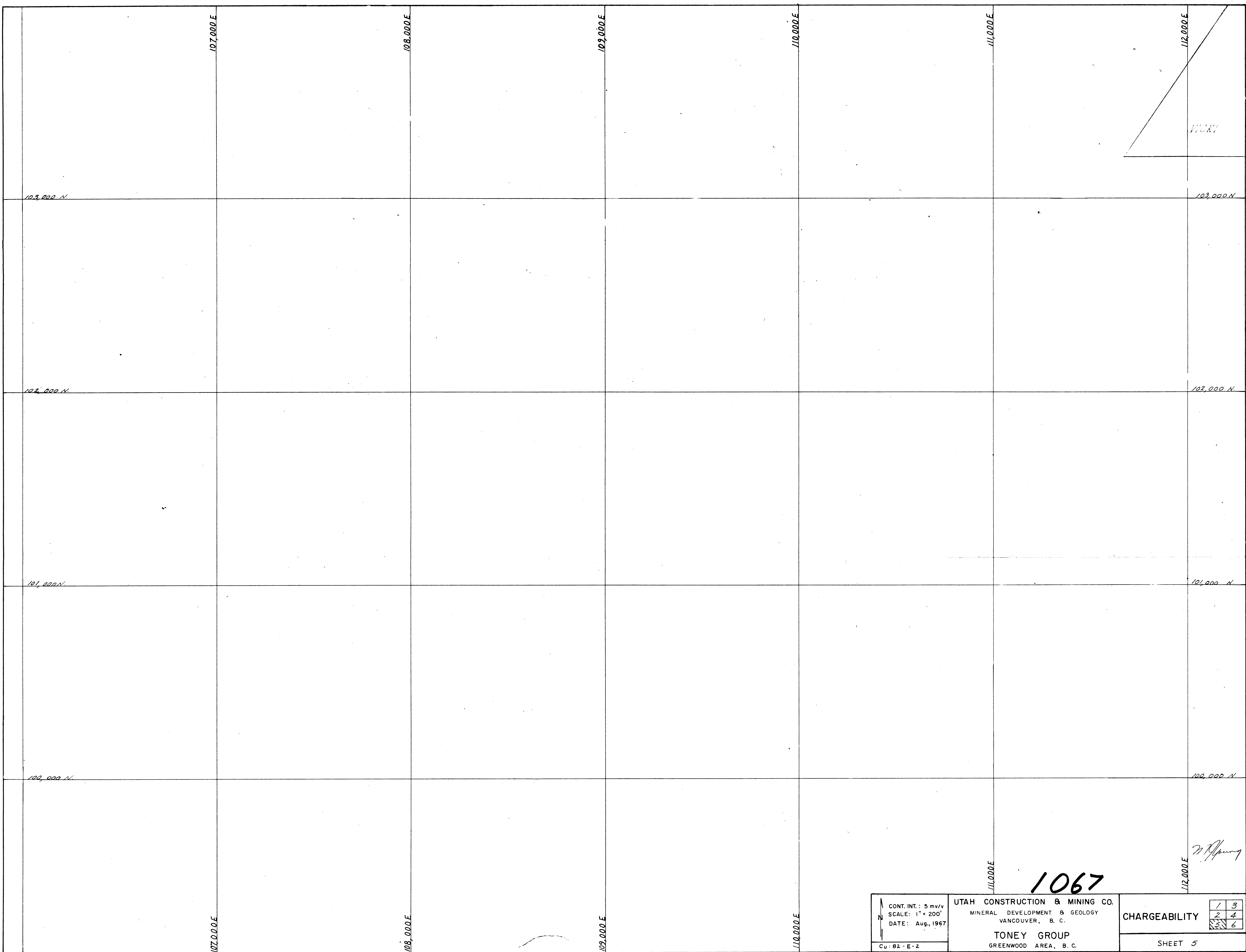


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CONT. INT.: 5 mv/v  
 SCALE: 1" = 200'  
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 Cu-82-E-2

UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER, B. C.  
 TONEY GROUP  
 GREENWOOD AREA, B. C.

CHARGEABILITY	1	3
	2	4
	5	8
SHEET 6		



CONT. INT.: 5 mv/v  
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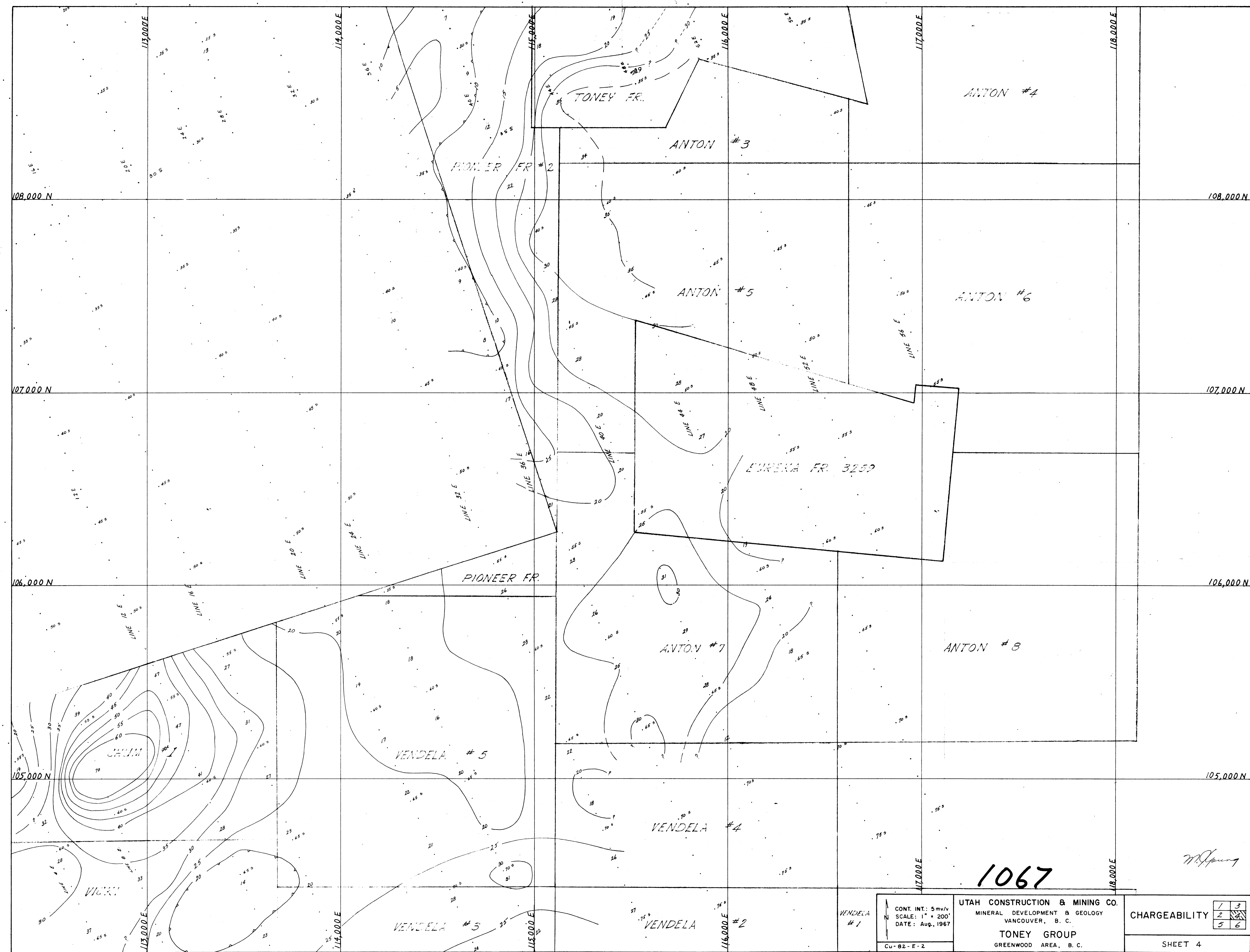
UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER, B. C.  
**TONEY GROUP**  
 GREENWOOD AREA, B. C.

CHARGEABILITY	
1	3
2	4
3	6
SHEET 5	

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*W. J. Sperry*





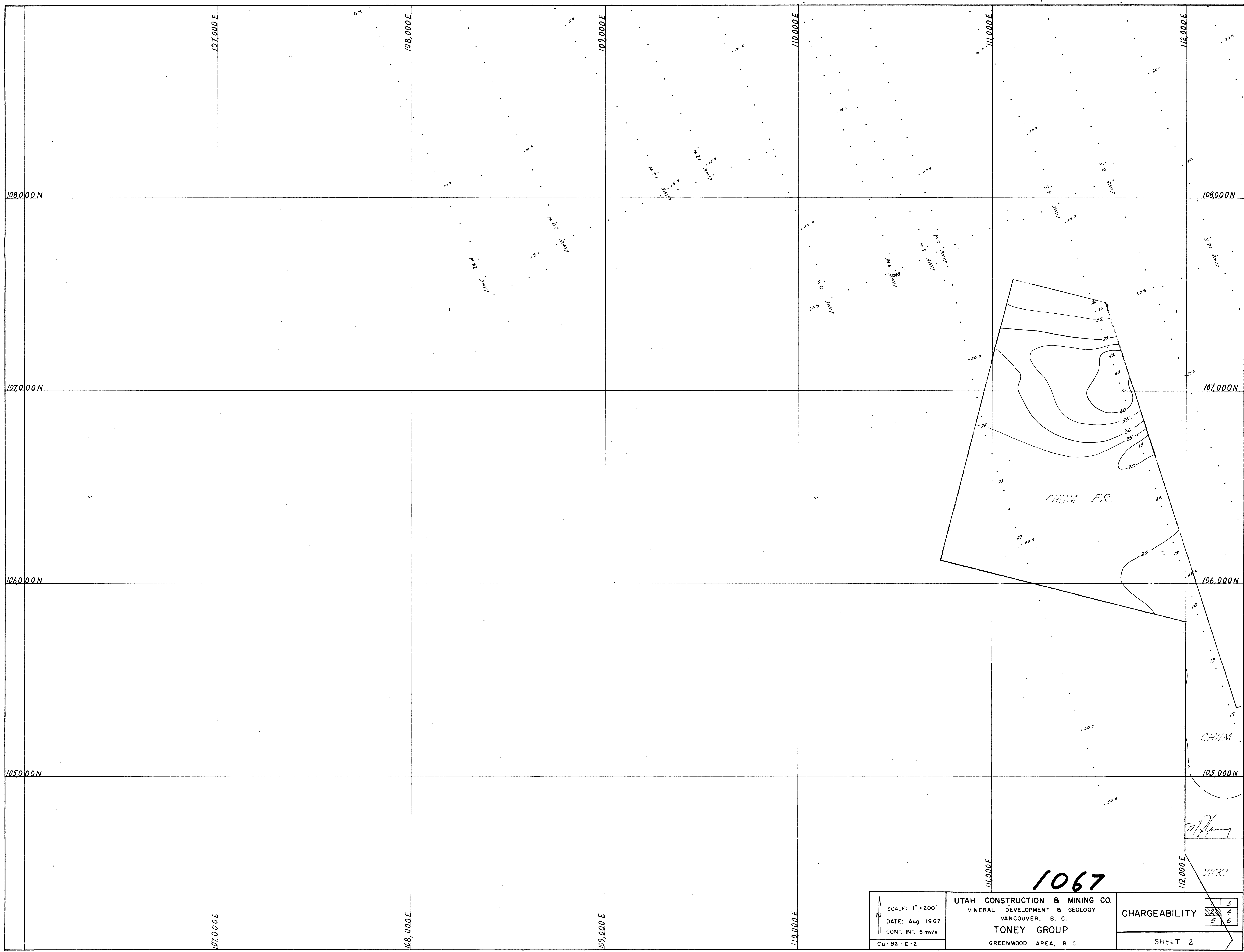
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*M. J. Young*

CONT. INT: 5mv/v  
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 DATE: Aug., 1967  
 Cu-82-E-2

UTAH CONSTRUCTION & MINING CO.  
 MINERAL DEVELOPMENT & GEOLOGY  
 VANCOUVER, B. C.  
**TONNEY GROUP**  
 GREENWOOD AREA, B. C.

CHARGEABILITY	
1	3
2	6
5	6
SHEET 4	



1067

<p>SCALE: 1" = 200'</p> <p>DATE: Aug. 1967</p> <p>CONT. INT. 5 mv/v</p>	<p>UTAH CONSTRUCTION &amp; MINING CO.</p> <p>MINERAL DEVELOPMENT &amp; GEOLOGY</p> <p>VANCOUVER, B. C.</p> <p><b>TONEY GROUP</b></p> <p>GREENWOOD AREA, B. C.</p>	<p>CHARGEABILITY</p> <table border="1" style="margin: auto;"> <tr><td>1</td><td>3</td></tr> <tr><td>2</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> </table>	1	3	2	4	5	6
1	3							
2	4							
5	6							
<p>Cu-82-E-2</p>		<p>SHEET 2</p>						