

REPORT

92I/10W

INDUCED POLARIZATION SURVEY

XY MINERAL CLAIMS  
HIGHLAND VALLEY AREA  
KAMLOOPS, M.D., B.C.

LATITUDE 120° 55'W

LONGITUDE 50° 00N

by

ROBERT E. CHAPLIN, P. ENG.

OWNER - COMET INDUSTRIES LIMITED - 2502-1177W HASTINGS ST.

WORK BY - R. CHAPLIN

VANCOUVER, B.C.

WORK DATES - JUNE 21st to JULY 10th, 1972

4114

4114

REPORT

INDUCED POLARIZATION SURVEY

XY MINERAL CLAIMS  
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KAMLOOPS, M.D., B.C.

LATITUDE 120° 55'W

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ROBERT E. CHAPLIN, P. ENG.

*Robert E. Chaplin*  
*July 1972*

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Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 4114	MAP .....

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ACCOMPANYING MAPS

- ~~#1 ~~Map 1~~ Apparent Resistivity in ohm meters 1" = 400'~~
- #1 Index Map
- ~~#2 ~~Map 2~~ Percent frequency effect 3.0 - 0.1 cps 1" = 400'~~
- #2 Location Map
- #3 MAP 3 - PLAN OF CLAIMS + INDUCED POLARIZATION SURVEY *REL.*
- #4 Line 26E I.P. Pole - Dipole 1" = 200'
- #5 " 34E " " "
- #6 " 38E " " "
- #7 " 42E " " "
- #8 " 46E " " "
- #9 " 50E " " "
- #10 " 54E " " "
- #11 " 58E " " "
- #12 " 62E " " "
- #13 " 66E " " "
- #14 " 74E " " "

SUMMARY

Nine miles of pole - dipole reconnaissance induced polarization survey were completed on the XY Claims using a 400 foot spread to the first separation, on N - S lines spaced 400 feet apart. No anomalous frequency effects were located and no further work is recommended in the search for a large low grade type of copper deposit.

INTRODUCTION

The XY Claims are located on the NE side of the Guichon Batholith, the host rock for the large low-grade copper deposits of the Highland Valley area of British Columbia.

Access is provided by jeep road from the Merritt - Savona road, approximately six miles south of the Leighton - Tunkwa Lakes turn-off.

The survey was performed to locate the presence of a large low-grade copper deposit. Outcrop is common on the property except for the S.W. corner. A relatively narrow exposure of copper mineralization was seen during the survey.

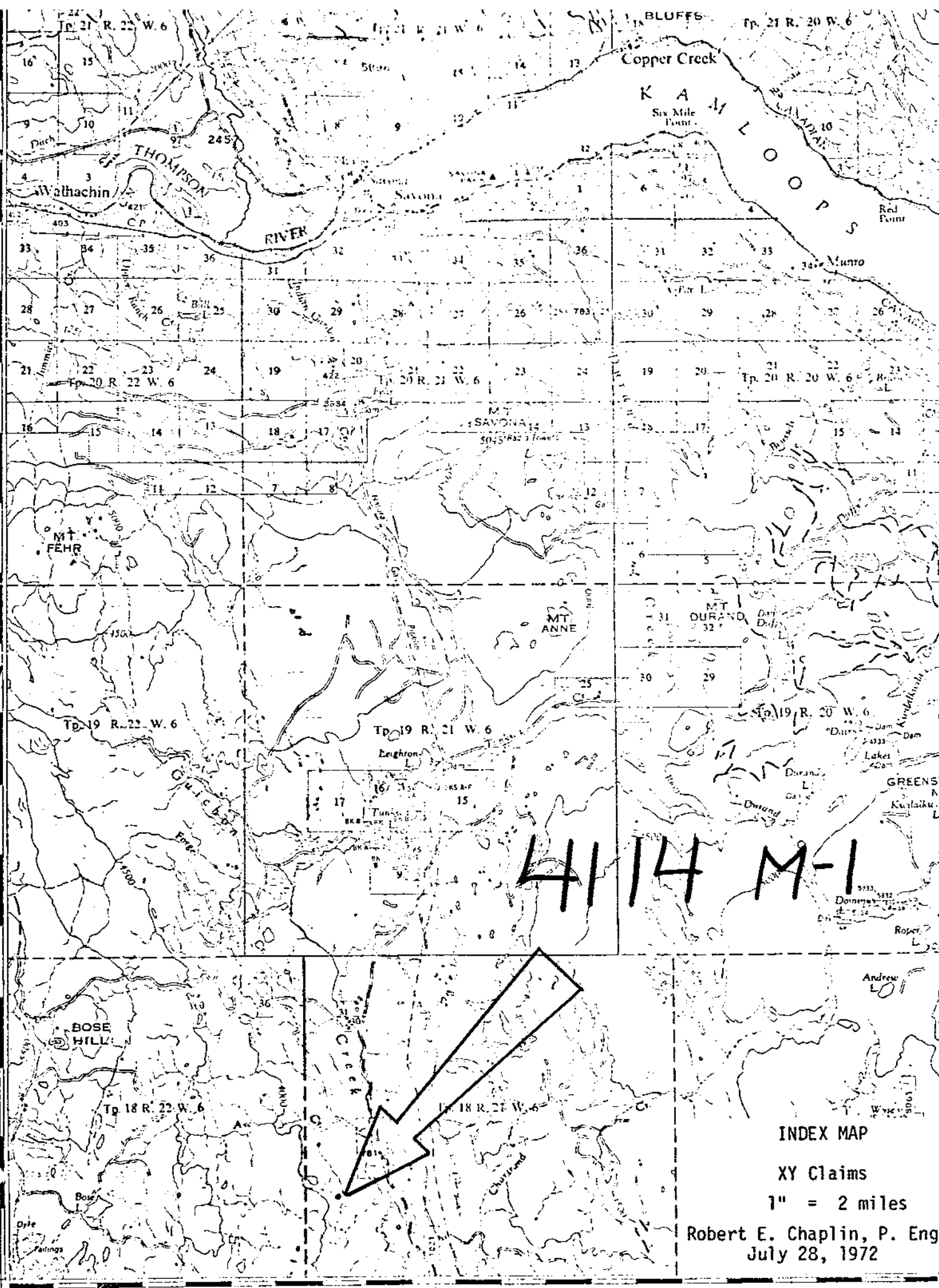
SURVEY PROCEDURE

A geoscience frequency - type induced polarization unit performed a pole - dipole array using a 400 foot spread to the first separation.

The unit was powered by a 2.75 kw generator, and ground currents of approximately one ampere maintained relatively noise - free signals on the 3.0 - 0.1 c.p.s. frequency range.

Apparent resistivities commonly above 100 ohm - meters, were calculated at each station during the survey to insure adequate spread widths to measure bedrock effects.

To Abasco To Cache Creek - 15 miles



INDEX MAP

XY Claims

1" = 2 miles

Robert E. Chaplin, P. Eng.  
July 28, 1972

50°30'

121°00'

45'

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NO. 4114 MAP #1

All percent frequency effects were calculated by deducting both transmitter and daily calibration frequency effects from the receiver frequency effects.

#### SURVEY RESULTS

The percent frequency effects ranged between 0.5 to 3.0, indicating background response typical of the Guichon quartz diorite rock.

Apparent resistivities were commonly above 100 ohm-meters, indicating that bedrock was adequately searched for a large area of sulphide within 200 feet of the topographic surface.

#### CONCLUSIONS

No economic amounts of polarizable material is present within the area and depth surveyed to constitute a large-low grade copper deposit within the Guichon intrusive rocks that underlie the survey area.

No further work for the above type target is recommended.

COST OF SURVEY

<u>DATES WORKED</u>	<u>PERSONNEL EMPLOYED</u>	<u>WAGES</u>
June 21 - July 7, 1972	E. Lee 12 @ \$40.00/day	\$ 480.00
	M. Hilland 13 @ \$25.00/day	\$ 325.00
	R. Jelfs 13 @ \$25.00/day	\$ 325.00
	S. Reid 13 @ \$25.00/day	\$ 325.00
	B. Tattrie 13 @ \$25.00/day	\$ 325.00
	R. Chaplin 5 @ \$100.00/day	\$ <u>500.00</u>
		\$2280.00
FOOD AND SUPPLIES		\$ 585.00
I.P. EQUIPMENT RENTAL @ \$75.00/day		\$1000.00
I.P. WIRE		\$ 250.00
TRANSPORTATION & FUEL		\$ <u>400.00</u>
		\$4515.00

*Robert A. Chaplin P. Eng*  
*July/72*



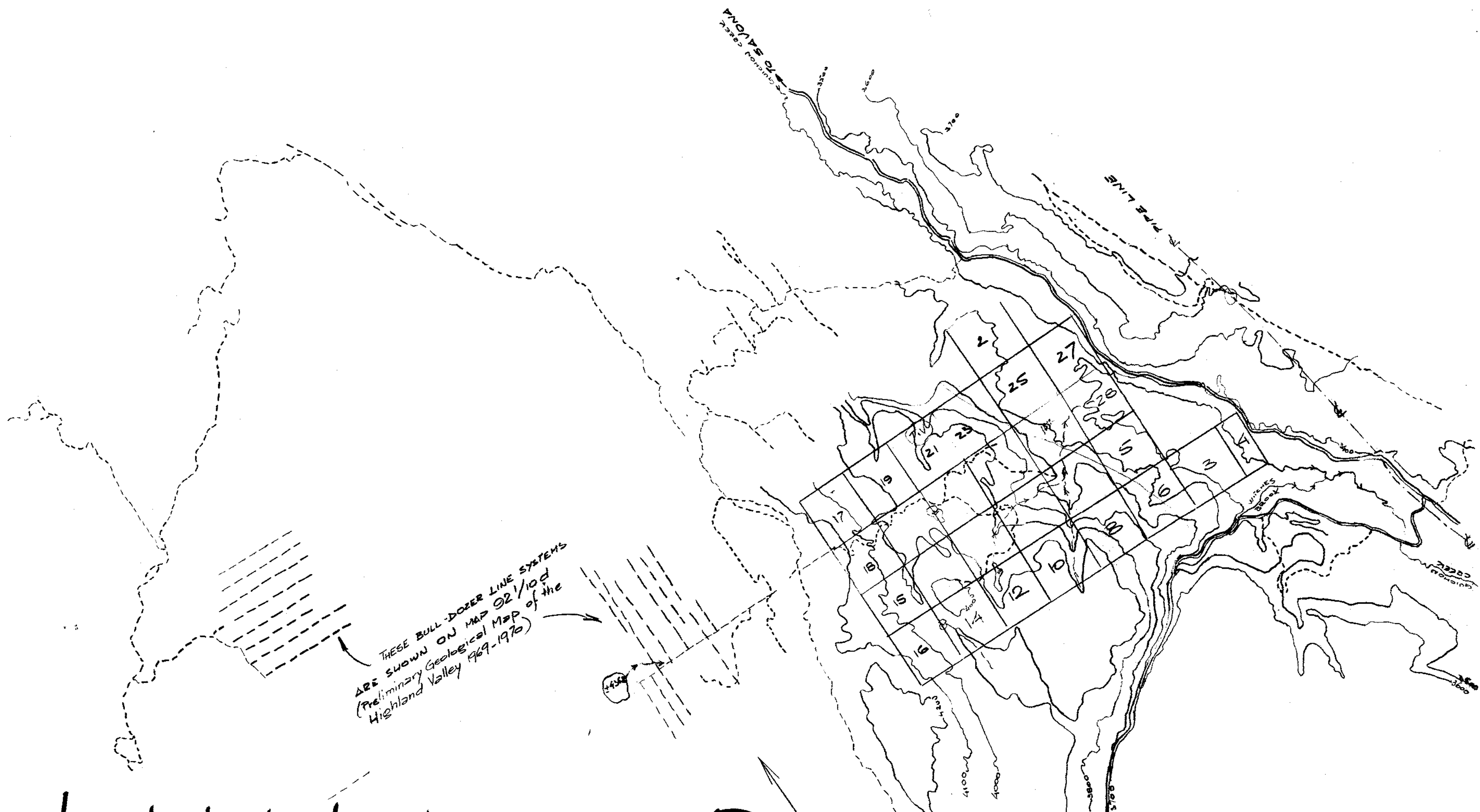
QUALIFICATIONS OF AUTHOR

1. Graduate, University of British Columbia, Geological Eng. 1959  
(B.A. - Sc.)
2. Owned and operated induced polarization unit for seven seasons.
3. Registered with the British Columbia Association of Professional Engineers.

Respectfully submitted,

*Robert E. Chaplin P. Eng.*  
*July 1972*

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1761 Drummond Drive  
Vancouver 8, B.C.



4114 M-2

- LEGEND**
- Contour line
  - Secondary road
  - Jeep trail
  - Creek, perennial
  - Creek, intermittent
  - Bull-dozer line
  - Pipeline

Location Map  
 X-Y Claims  
 Logan Lake Area  
 Kamloops Mining  
 Division  
 Scale: 1"=2000ft  
 Contour interval 100ft.

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 ANNUAL REPORT  
 NO. 4114 P. 2 #2

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*July/72*

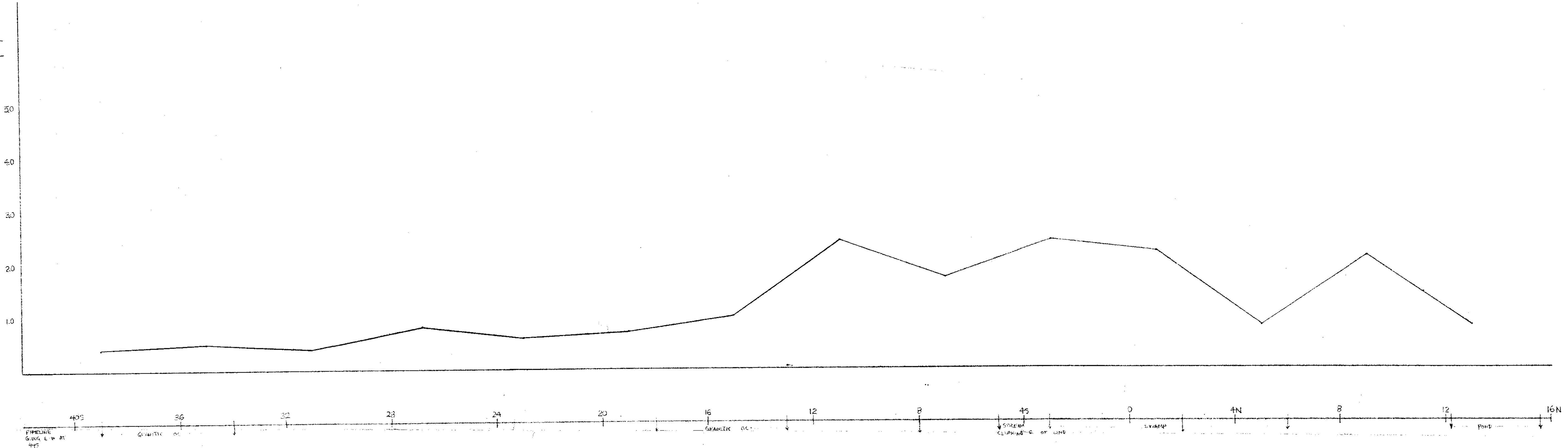
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Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. **4114** MAP # **13**

LINE 66 E  
SCALE: 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP.  
XY GROUP

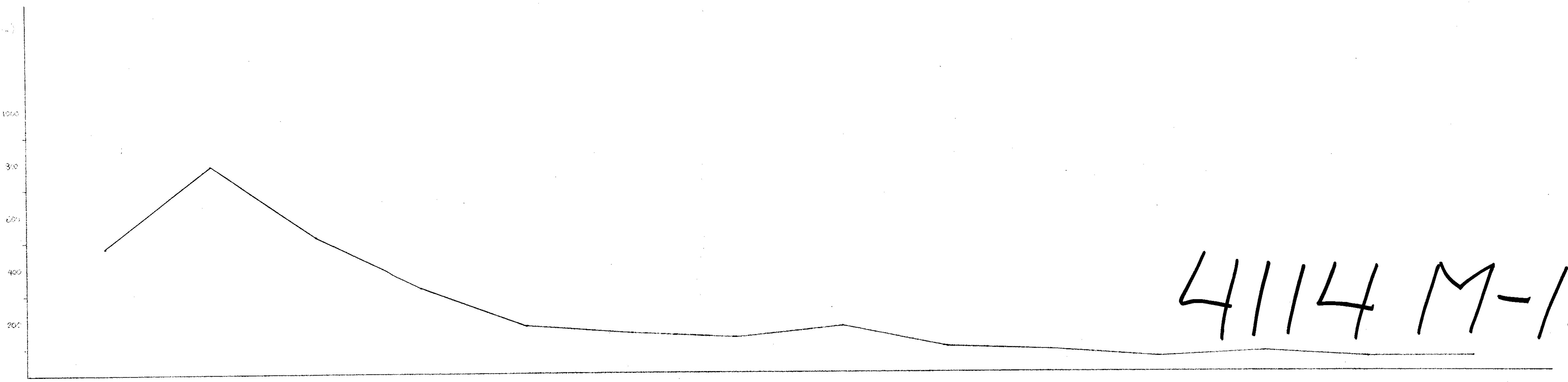
INDUCED POLARIZATION  
POLE-DIPOLE

L = 400'  
PLOTTED BY: E. LEE  
DATE: JUNE 28, 1972  
R. CHAPLIN, P. ENG.

PFE



*P*



**4114 M-13**

*Report of R. Chaplin, P. Eng.*  
*July 1972*

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NO. 4114 MAP #12

LINE 62E  
SCALE: 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP  
XY GROUP  
INDUCED POLARIZATION

POLE - DIPOLE

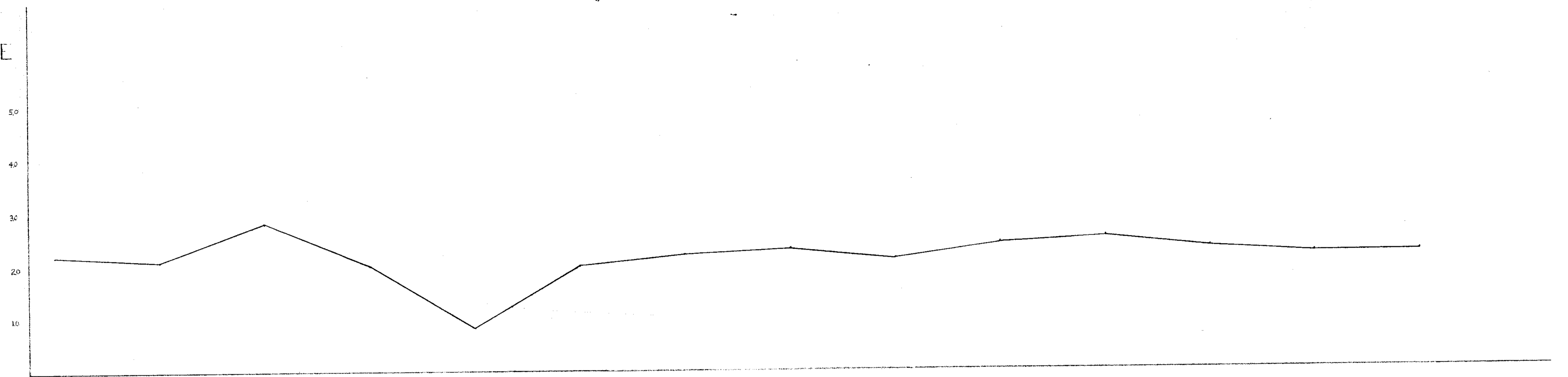
L = 400'

PLOTTED BY: E. LEE

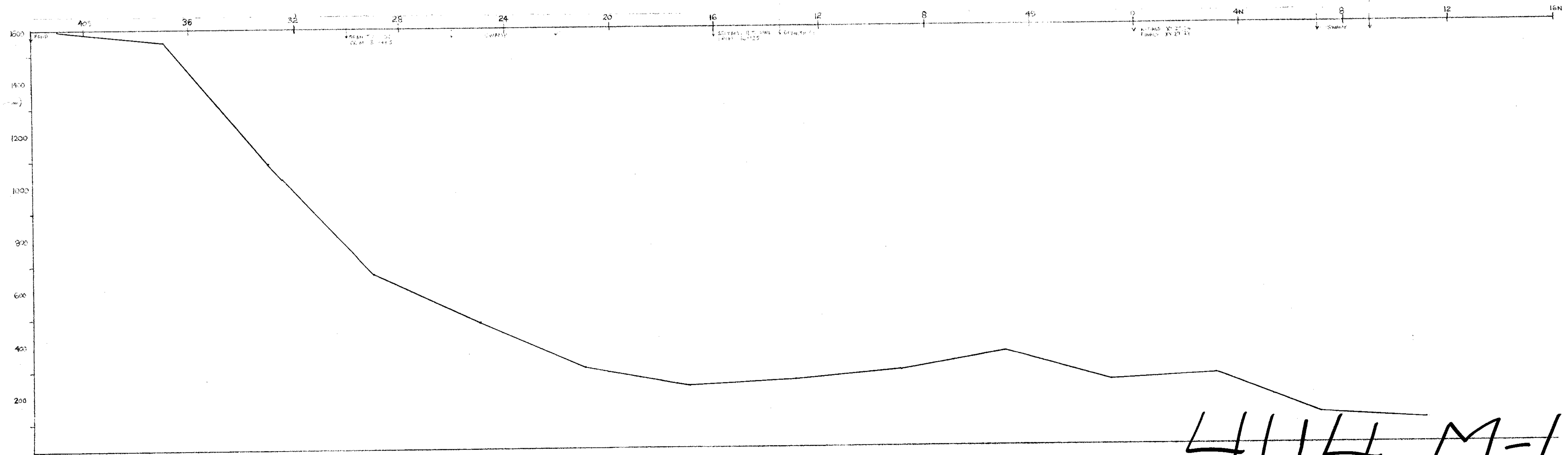
DATE: JUNE 28 1972

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$\rho_{ch}$   
( $\Omega \cdot m$ )



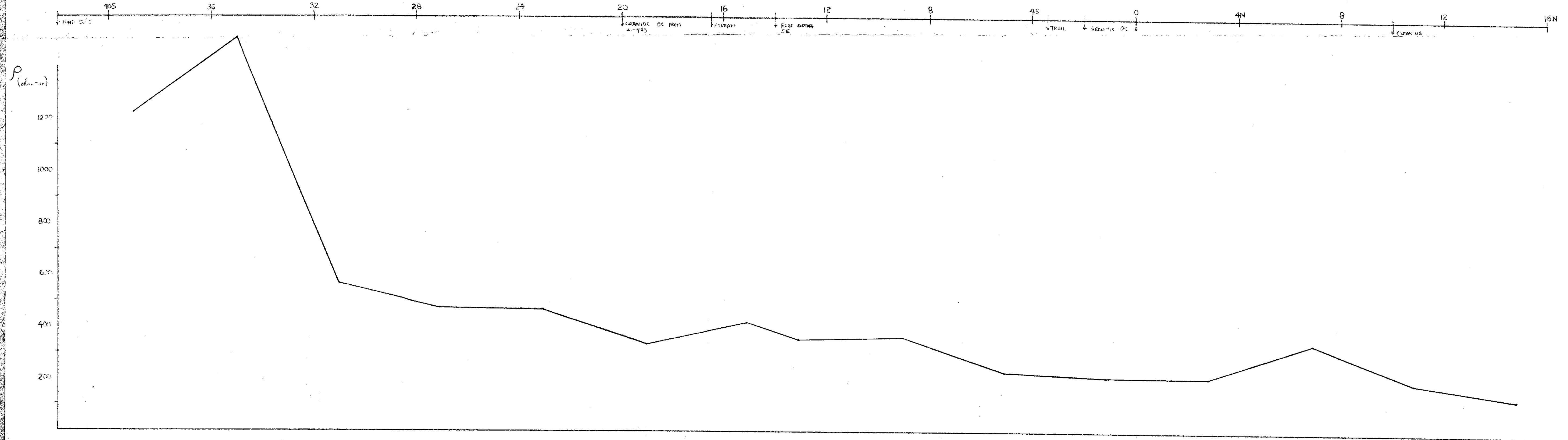
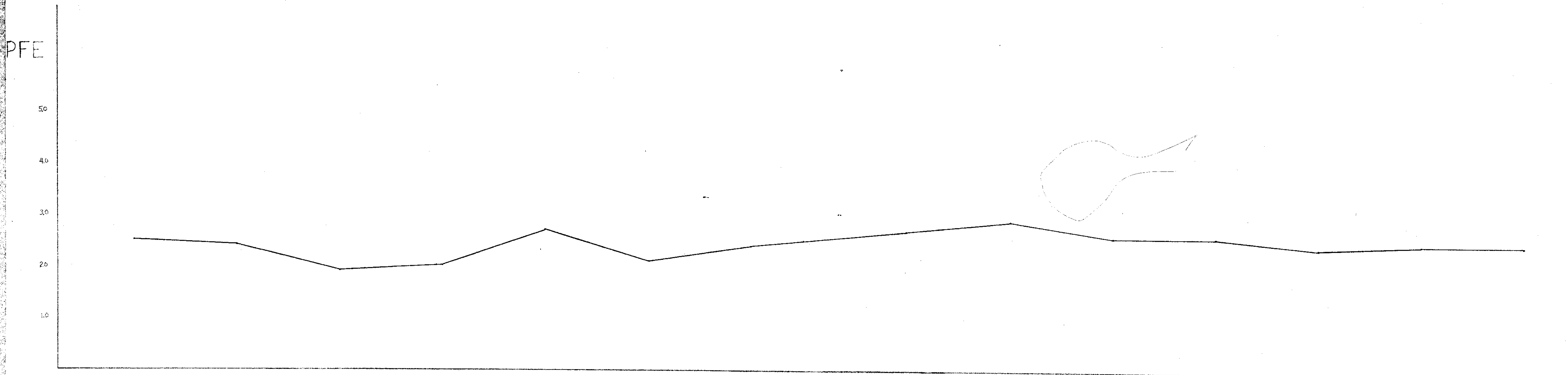
4114 M-12

*Robert J. Chaplin, P. Eng.*  
*July 1972*

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ASSESSMENT REPORT  
NO. 4114 MAP #11

LINE 58E  
SCALE 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP.  
XY GROUP  
  
INDUCED POLARIZATION  
  
POLE-DIPOLE

L = 400  
  
PLOTTED BY: E. LEE  
  
DATE: JUNE 27, 1972  
  
R. CHAPLIN, P. ENG.



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*Richard Chaplin P. Eng.*  
*July 1972*

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NO. **4114** MAP #10

LINE 34E  
SCALE: 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP.  
XY GROUP

INDUCED POLARIZATION

POLE-DIPOLE

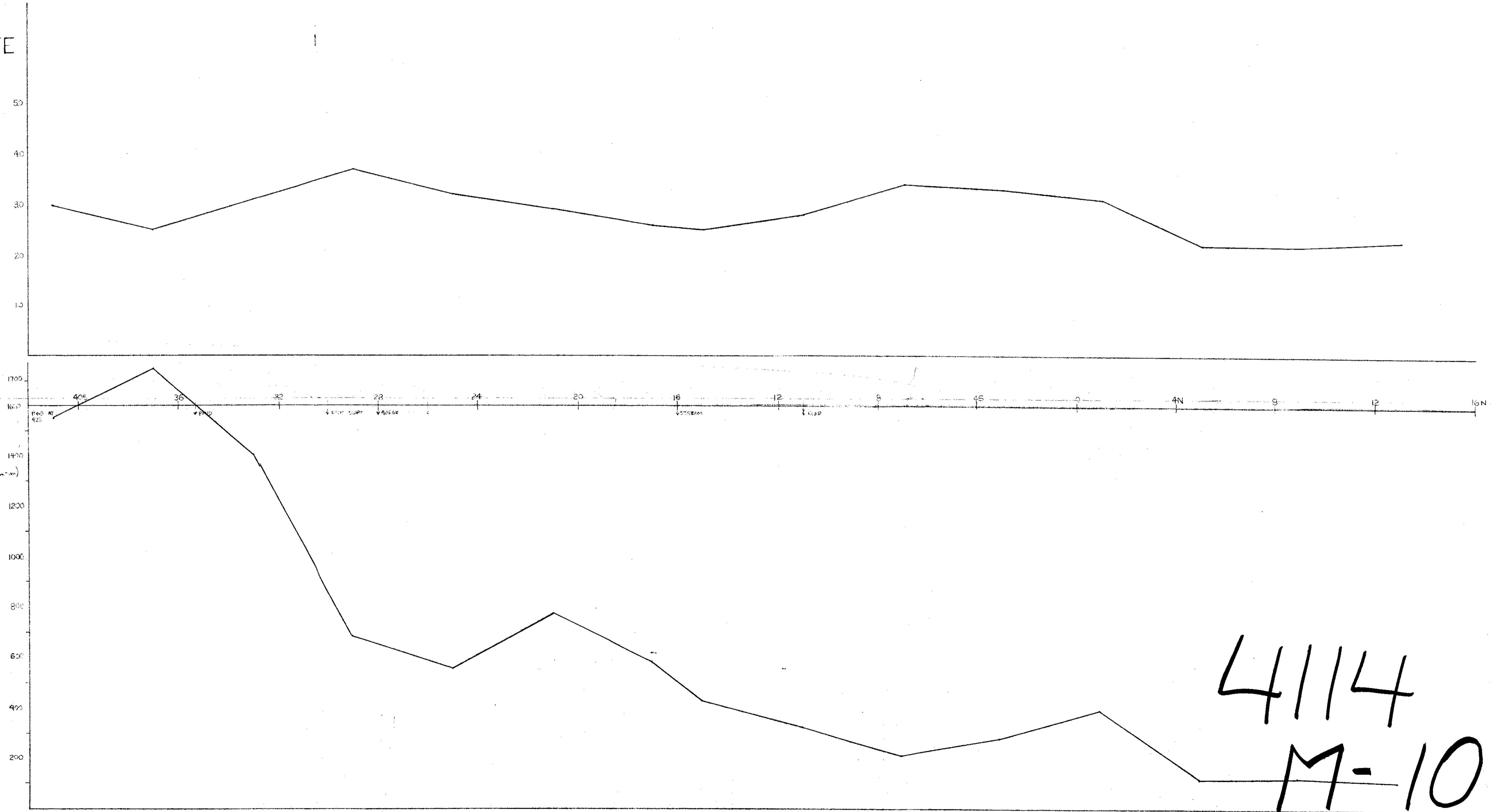
L = 400'

PLOTTED BY: E. LEE

DATE: JUNE 26, 1972

R. CHAPLIN, P. ENG.

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**4114**  
**M-10**

*Robert L. Chaplin P. Eng.*  
*July/72*

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Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 4114 M-9

LINE 50E  
SCALE: 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP.  
XY GROUP  
INDUCED POLARIZATION

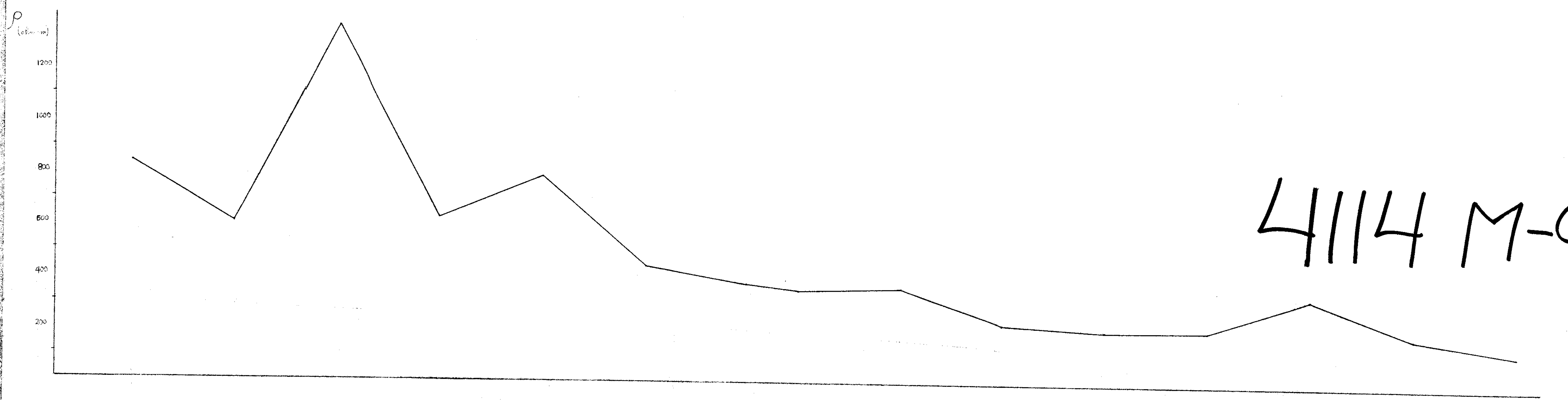
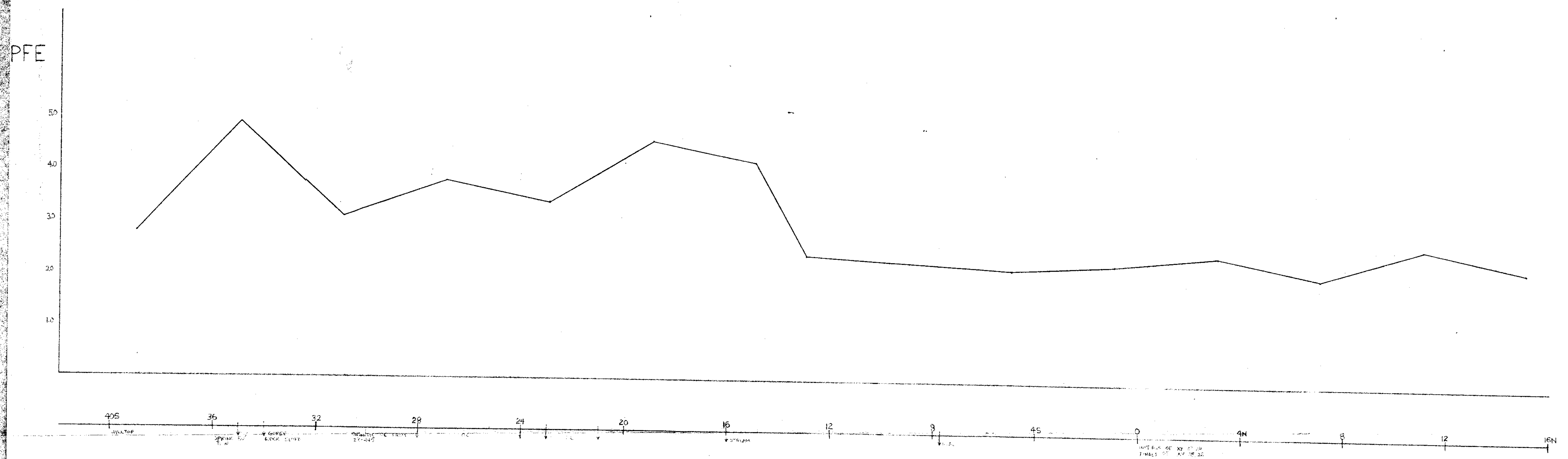
POLE-DIPOLE

L = 400'

PLOTTED BY: E. LEE

DATE: JUNE 26, 1972

R. CHAPLIN, P. ENG.



4114 M-9

*Robert Chaplin*

*July 72*

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PROSPECT REPORT  
No. 4114 MAP #8

LINE 46E  
SCALE: 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP  
XY GROUP  
INDUCED POLARIZATION

POLE-DIPOLE

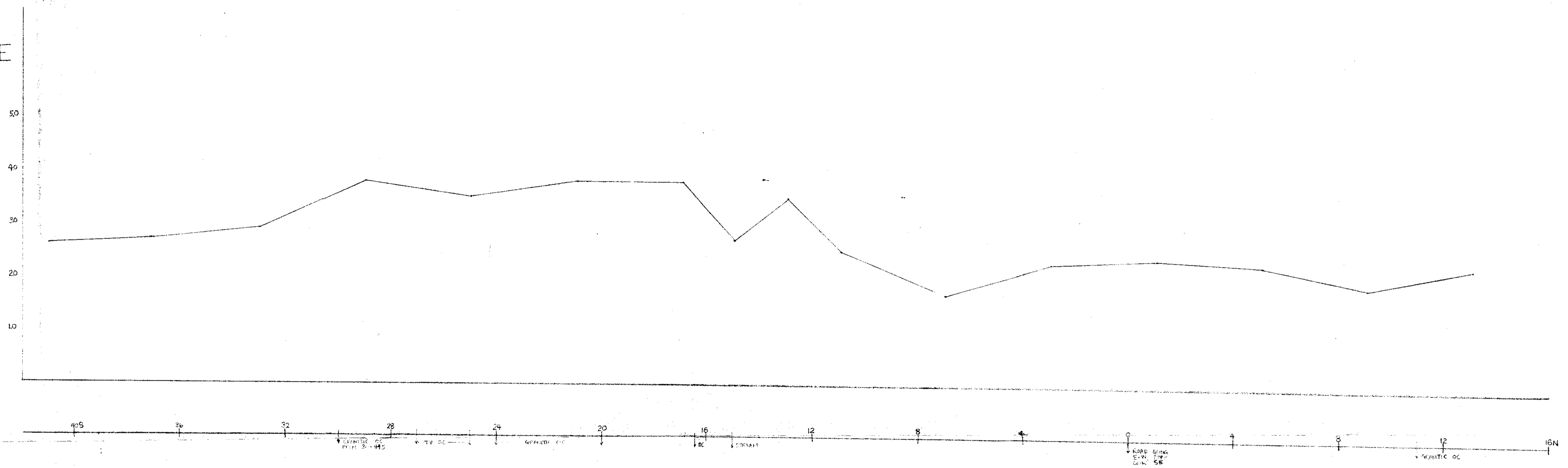
L = 400'

PLOTTED BY E. LEE

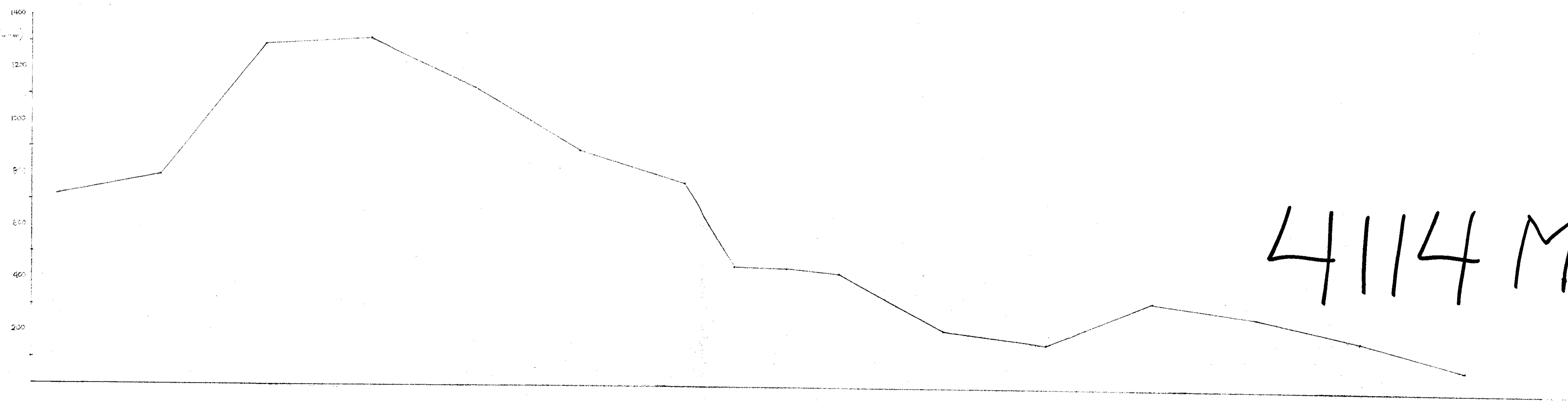
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*July 72*

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ASSESSMENT REPORT  
NO. 4114 MAP #7

LINE 42E  
SCALE 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP  
XY GROUP  
INDUCED POLARIZATION  
POLE-DIPOLE

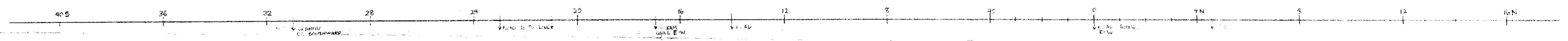
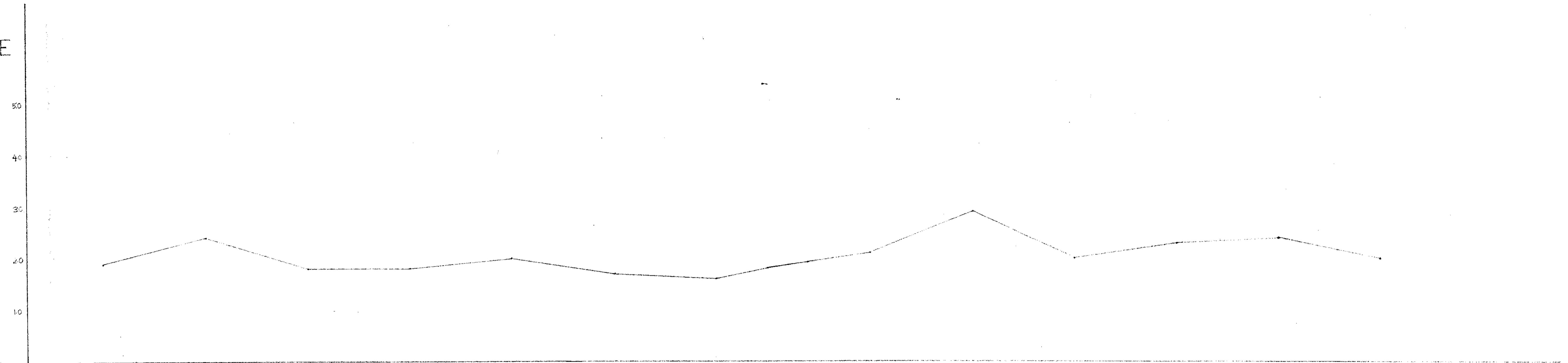
L = 400'

PLOTTED BY E. LEE

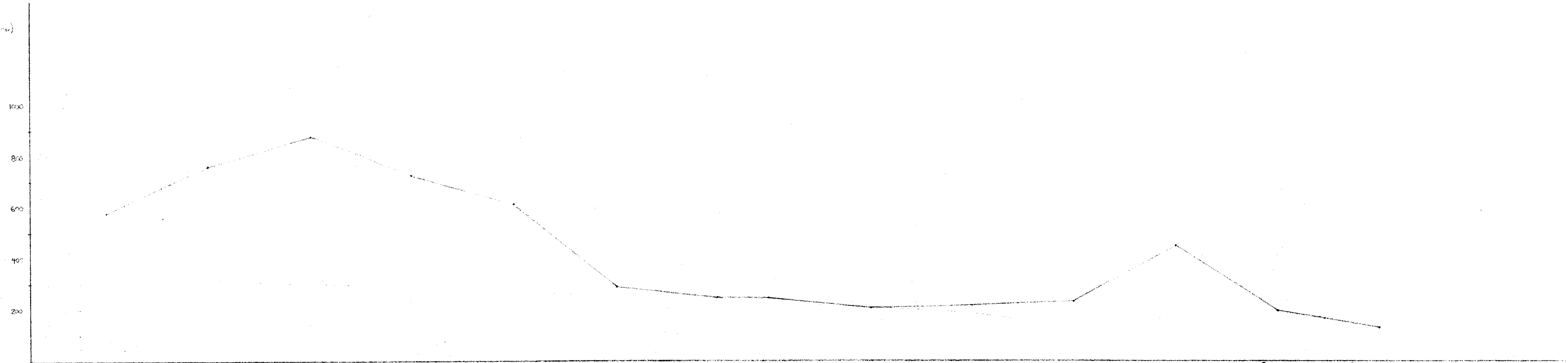
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0 (baseline)



4114 M-7

*R. Chaplin P. Eng.*

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ASSESSMENT REPORT  
NO. 4114 MAP #6

LINE 38E  
SCALE 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP  
XY GROUP  
INDUCED POLARIZATION

POLE-DIPOLE

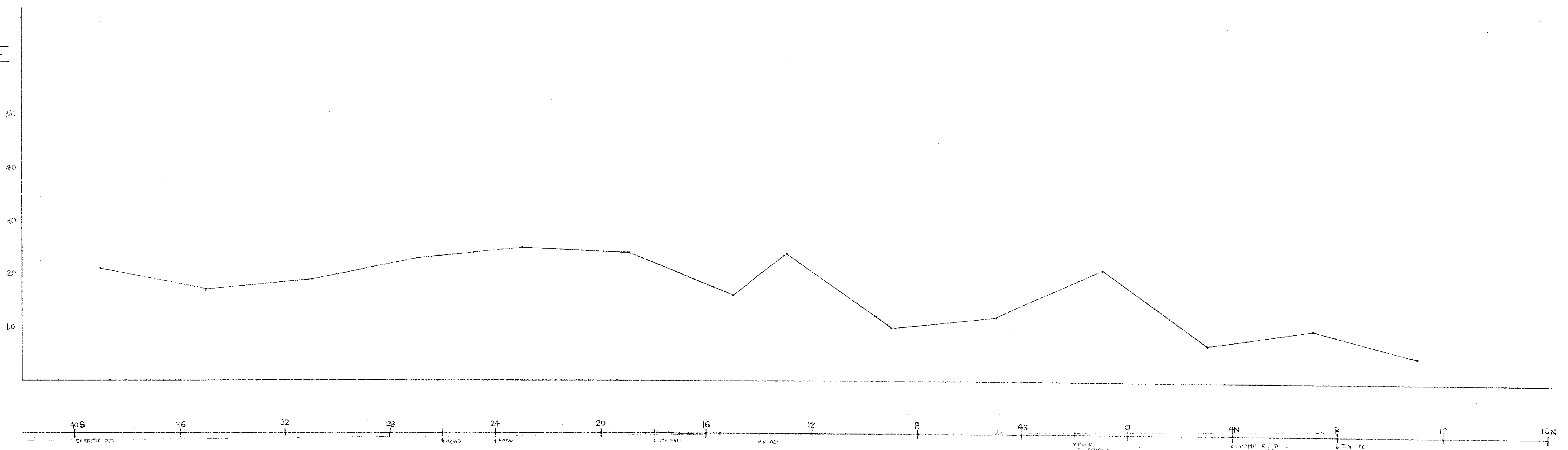
L = 400'

PLOTTED BY: E. LEE

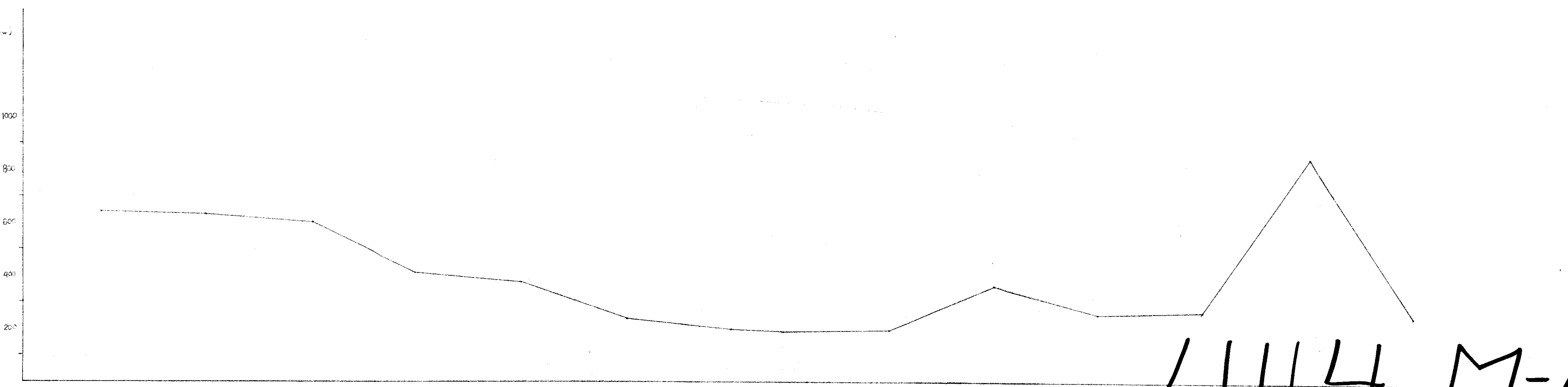
DATE: JUNE 30, 1972

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*July 72*

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NO. 4114 #5

LINE 34E  
SCALE: 1 INCH = 200 FEET  
INITIAL DEVELOPERS  
CORP.  
XY GROUP  
INDUCED POLARIZATION

POLE-DIPOLE

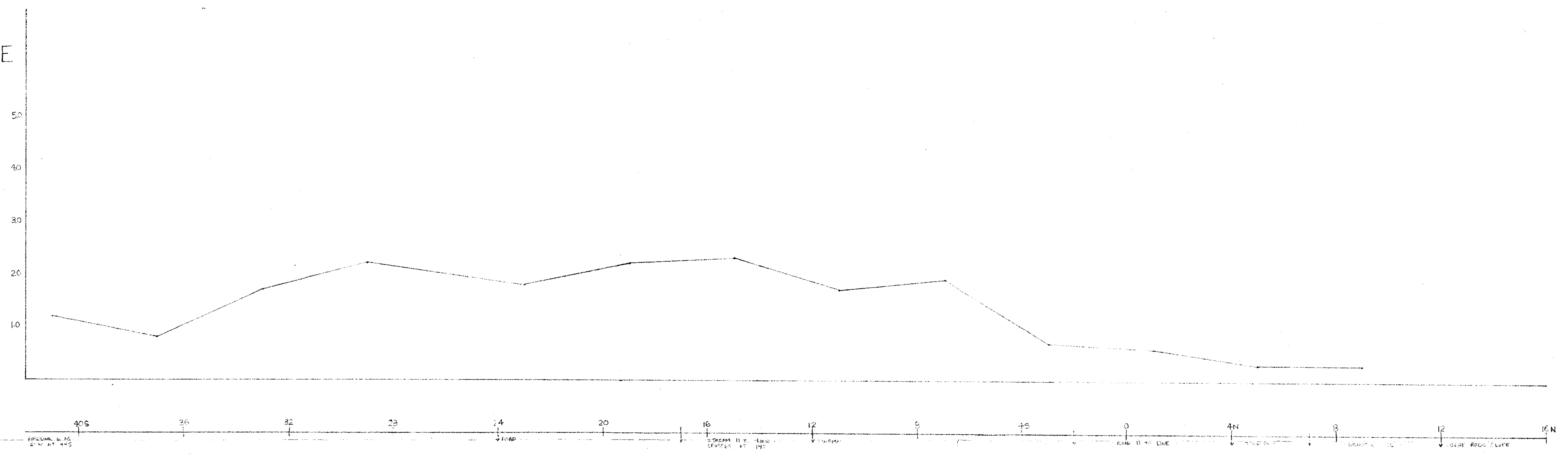
L = 400'

PLOTTED BY: E. LEE

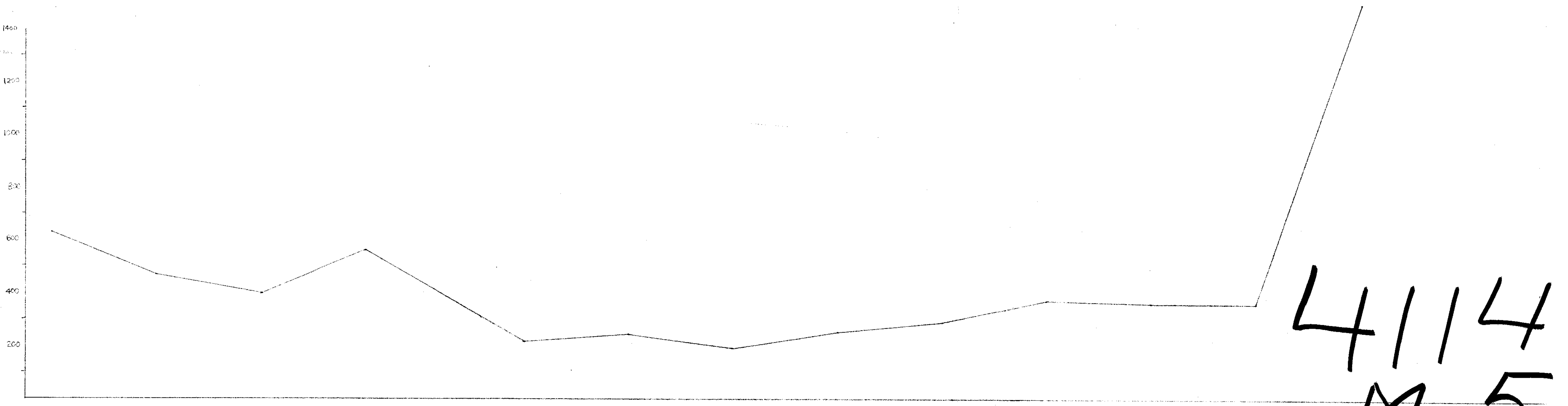
DATE: JUNE 30, 1972

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$\rho$   
(ohm-m)



4114  
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ASSESSMENT REPORT

NO. 4114 MAP #4

*Robert C. Chaplin*  
July 70

LINE 20E  
SCALE: 1 INCH = 200 FEET

INITIAL DEVELOPERS  
CORP

XY GROUP

INDUCED POLARIZATION

POLE-DIPOLE

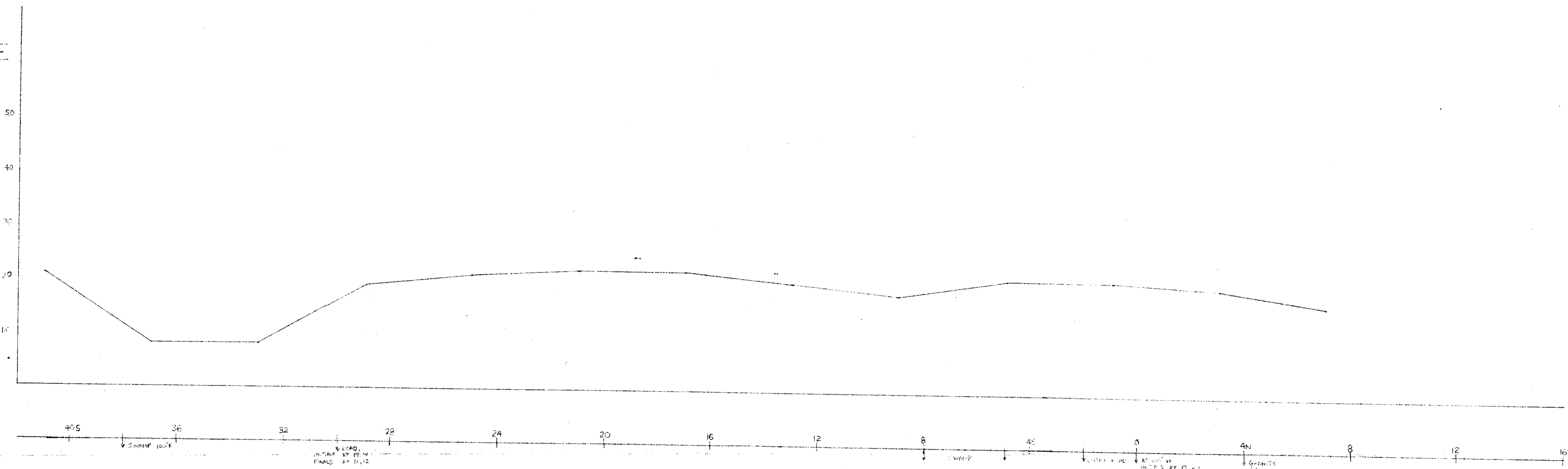
L=400

PLOTTED BY E. LEE

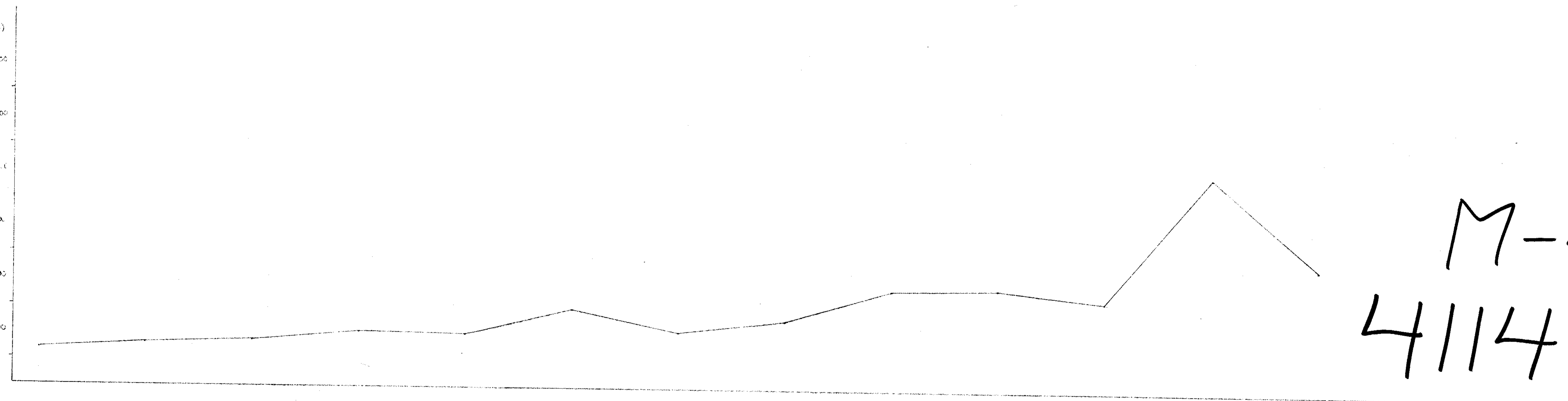
DATE: JULY 7, 1972

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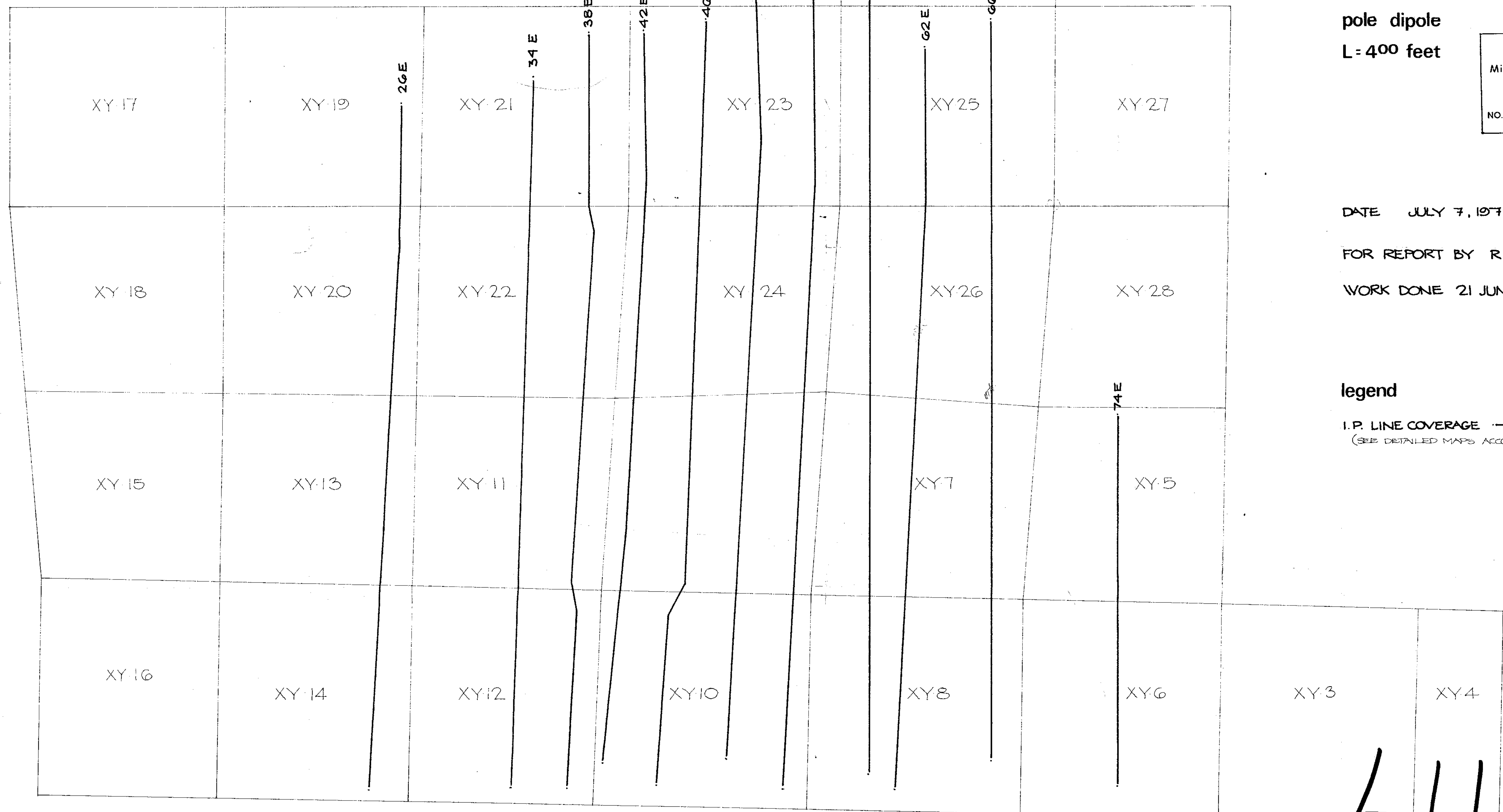
PFE



$\rho$   
(ohm-m)



M-4  
4114



COMET INDUSTRIES LIMITED ( N.P.L.)

xy claim group  
highland vally

PLAN OF CLAIMS AND  
INDUCED POLARIZATION SURVEY

pole dipole  
L = 400 feet

Department of Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 4114	MAP #3

DATE JULY 7, 1972

FOR REPORT BY R. CHAPLIN P. ENG.

WORK DONE 21 JUNE TO 10 JULY, 1972

legend

I. P. LINE COVERAGE   
(SEE DETAILED MAPS ACCOMPANYING REPORT)

4114M-3

*Robert L. Chaplin*  
*July 1972*

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Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 4114 MAP #14  
LINE 74E

SCALE: 1 INCH = 200 FEET

INITIAL DEVELOPERS  
CORP

X.Y. GROUP

INDUCED POLARIZATION

POLE-DIPOLE

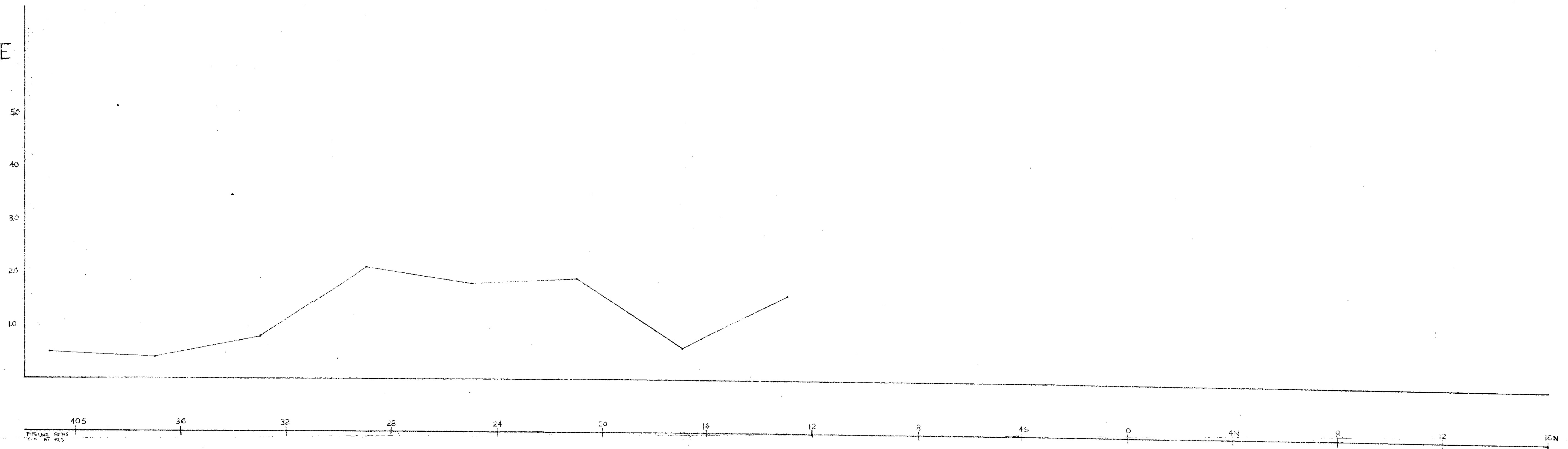
L = 400'

PLOTTED BY: E. LEE

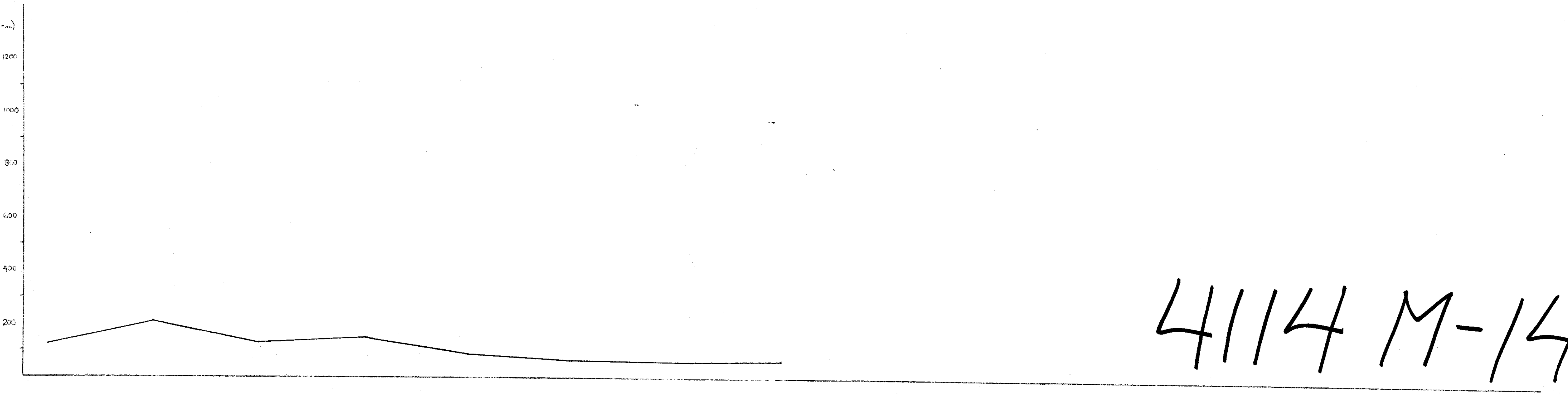
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$\rho$   
(ohm-m)



4114 M-14