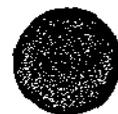


V 1521 / 3

A 5611



I:910

ESSO EXPLORATION AND PRODUCTION AUST. INC.  
NORTH POLE  
ANNUAL REPORT FOR PERIOD ENDING MARCH 1975.

SHELF/RAY No.	
Box 758	204

ESSO EXPLORATION AND PRODUCTION AUSTRALIA INC.

NORTH POLE

ANNUAL REPORT FOR PERIOD ENDING MARCH, 1975

J. Chappell

17/3/75.

NORTH POLE - PROJECT 617

ANNUAL REPORT FOR THE PERIOD ENDING MARCH, 1975

TENEMENT

12 - 300 acre mineral claims, numbers 45/6968 - 6979.

Total area 3600 acres.

Recommended for approval February 15th, 1973.

Location 25 miles northwest of Marble Bar, Western Australia.

DISCUSSION

Throughout 1974 priority has been to other mineral claim blocks throughout the Pilbara and the status of the claims remains as stated in the report of March 1974. Exploration undertaken is briefly summarised as follows:

1. Geological mapping at a scale of 1:5940.
2. Ground Induced Polarisation surveys,  
6 lines by 400' dipole dipole,  
1 line by 200' dipole dipole.
3. Ground magnetics, 20,000 ft.
4. Geochemical stream sediment sampling.
5. Geochemical soil sampling.
6. Gossan sampling.
7. A single 700' diamond drill hole completed.

Data for all this work was included with the 1973 annual report, the only exception being the I.P. profiles which are included in this report.

Several gossanous outcrops within silicic volcanics have been located but are not anomalous in geochemistry. These will be reassessed to determine whether extreme leaching has occurred. No additional targets have been defined but work will continue to relate the stratigraphy at North Pole to adjacent areas carrying known mineralisation.



J. Chappell

17/3/75.

ACCOMPANYING DATA

I.P. Profiles

Geophysical Summary

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NORTH POLE - PROJECT 617

GEOPHYSICAL SUMMARY.

Geophysical work done on this area comprised frequency domain induced polarisation surveying. A 400 ft dipole - dipole array was used for the initial work comprising some 6 lines. Follow up work of 4 lines of 200 ft dipoles was also completed. Readings were taken to n=6.

Results

Lines 8100N and 9600N - These two lines show very high resistivities and no worthwhile frequency effects.

Line 15200N - This line is also quite highly resistive but has a polarisable conductor located between 24E and 28E.

Line 16000N - This line is strongly resistive again with the polarisable conductor between 24E and 28E. Dips are probably to the east.

Line 16600N - The polarisable conductor here is seen to be located near 26E.

Line 16800N - The polarisable conductor here is located again fairly close to 26E. This line shows quite a strong anomaly.

Line 17000N - The polarisable conductor on this line appears to be a little weaker and may be limited in depth extent. It is located between 25E and 27E.

Line 17600N - The polarisable conductor here is considerably weaker and located between 24E and 28E.

Line 2600E - This line was run parallel to strike in an attempt to better define the best zones of the polarisable conductor. The strongest zone appears to be between 16400N and 16800N.

S.H. Robinson,  
19.3.75.



**McPHAR GEOPHYSICS PTY. LTD.**  
**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 17000N

SPREAD 200 FT.

FREQUENCIES 0.3/2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 214

DATE OF SURVEY 17.10.73

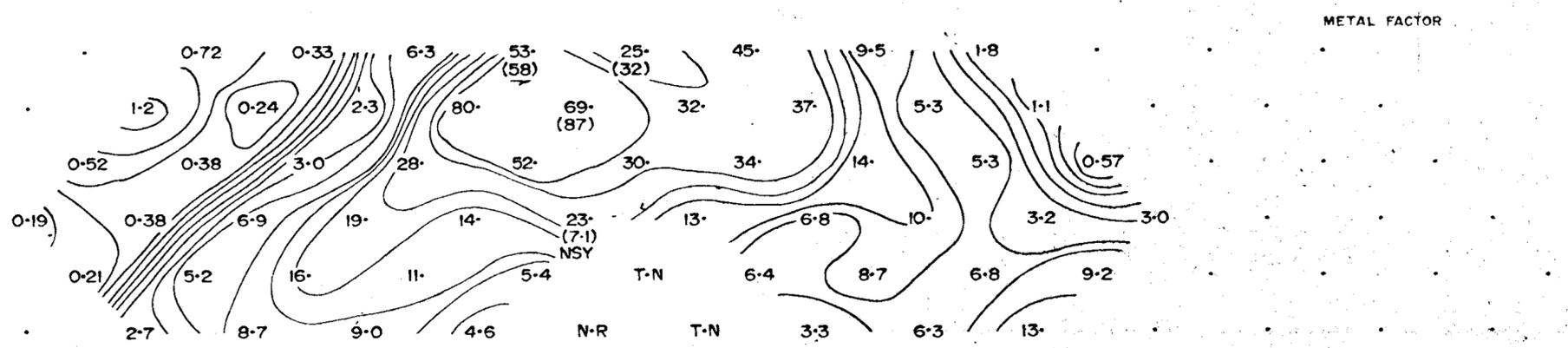
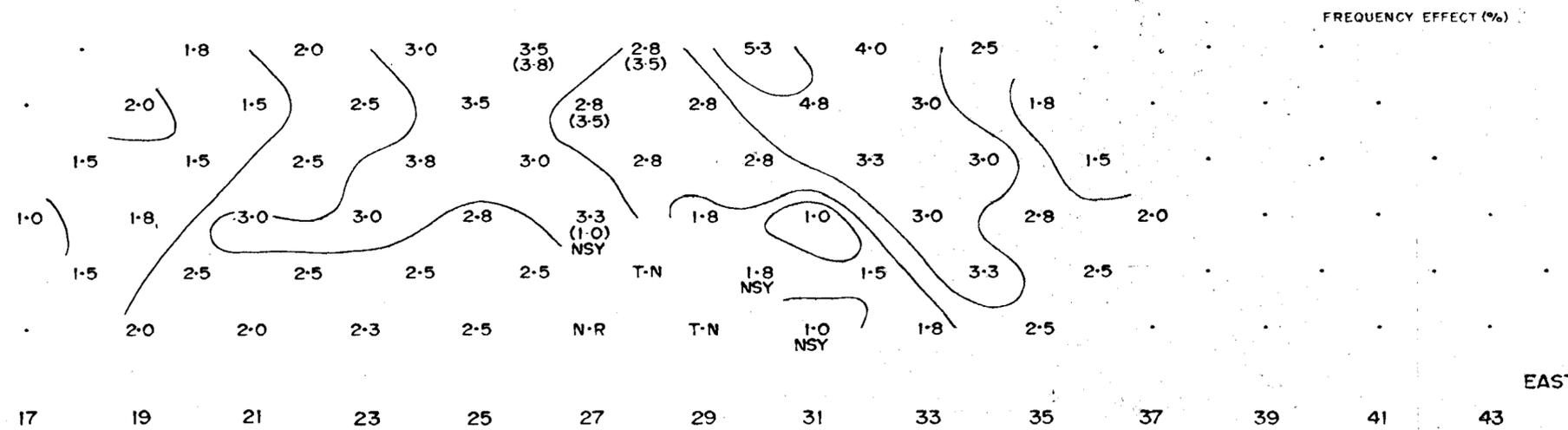
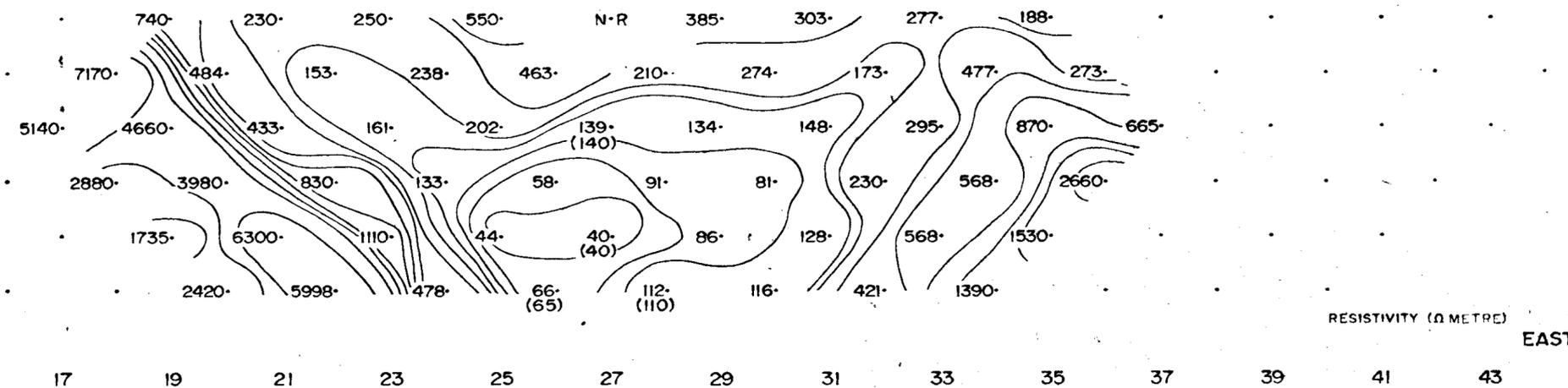
PLOTTED BY B. RAU

FIELD CHECK \_\_\_\_\_

INTERPRETATION \_\_\_\_\_

FINAL CHECK \_\_\_\_\_

DISTRIBUTED \_\_\_\_\_





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**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 17600N

SPREAD 400 FT.

FREQUENCIES 0.3/2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 203

DATE OF SURVEY 25.7.73

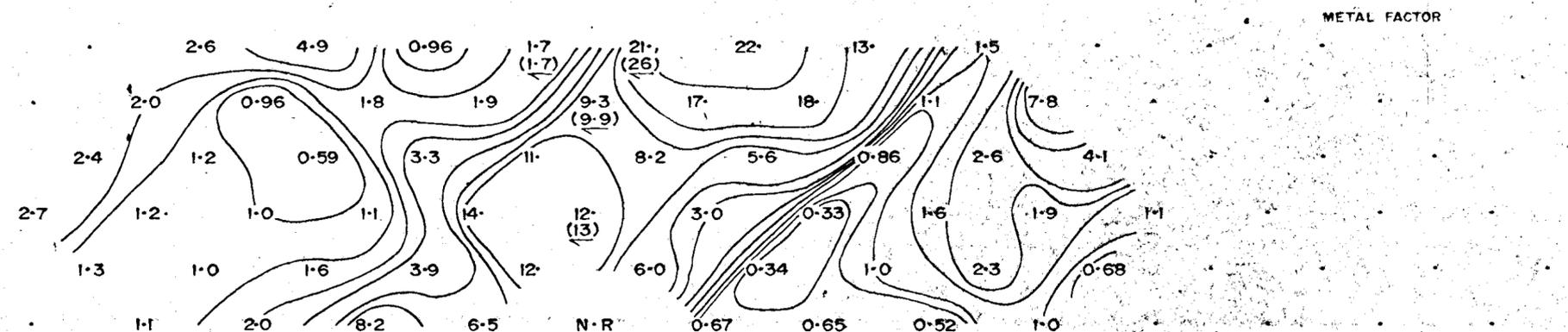
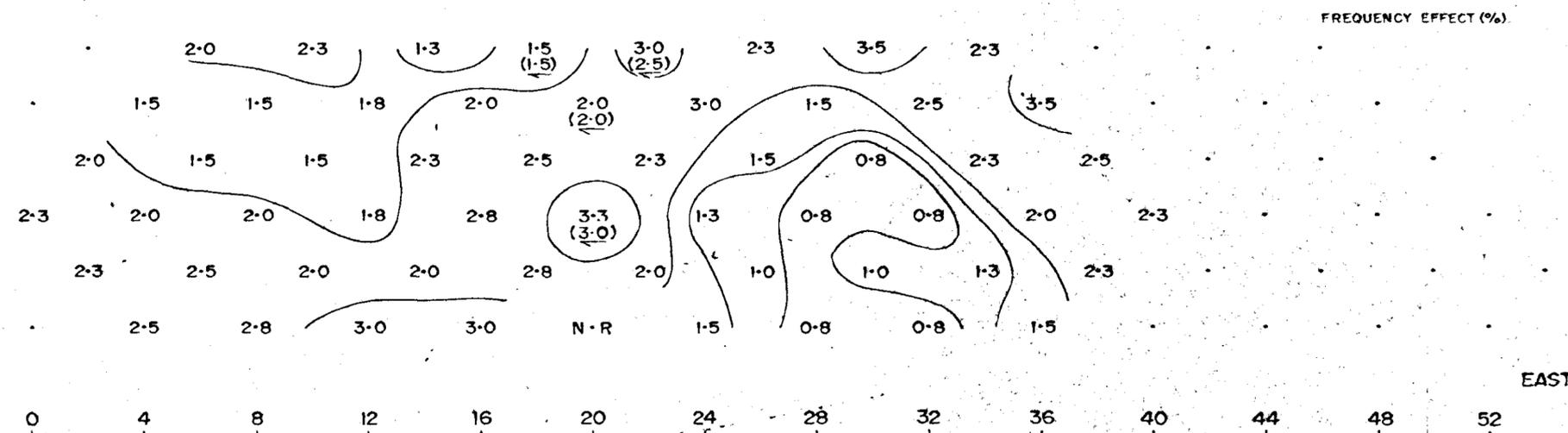
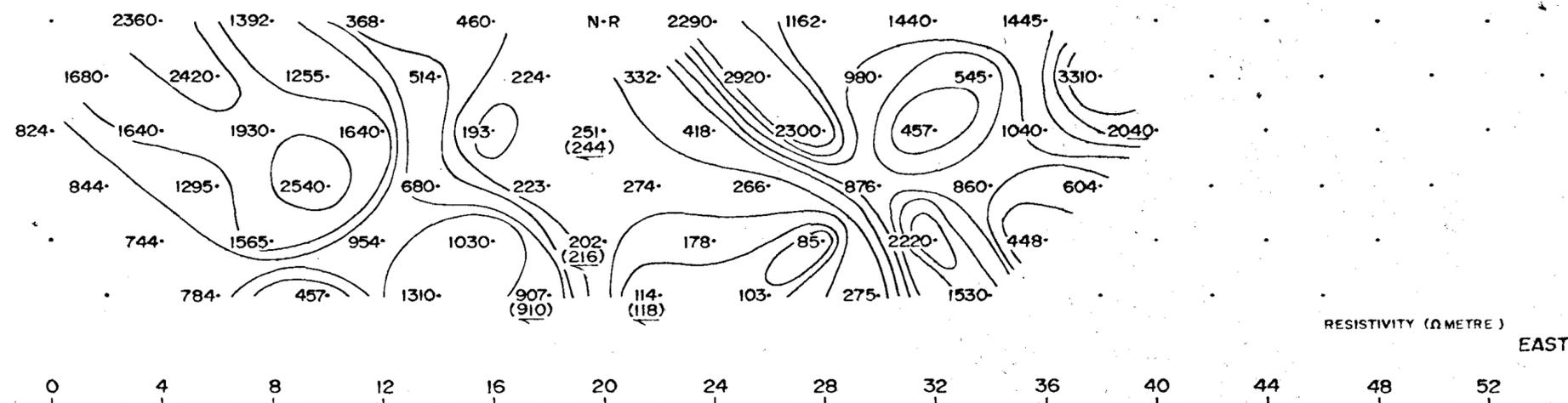
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FINAL CHECK

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**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 2600E

SPREAD 200 FT.

FREQUENCIES 0.3 / 2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 214

DATE OF SURVEY 17.10.73

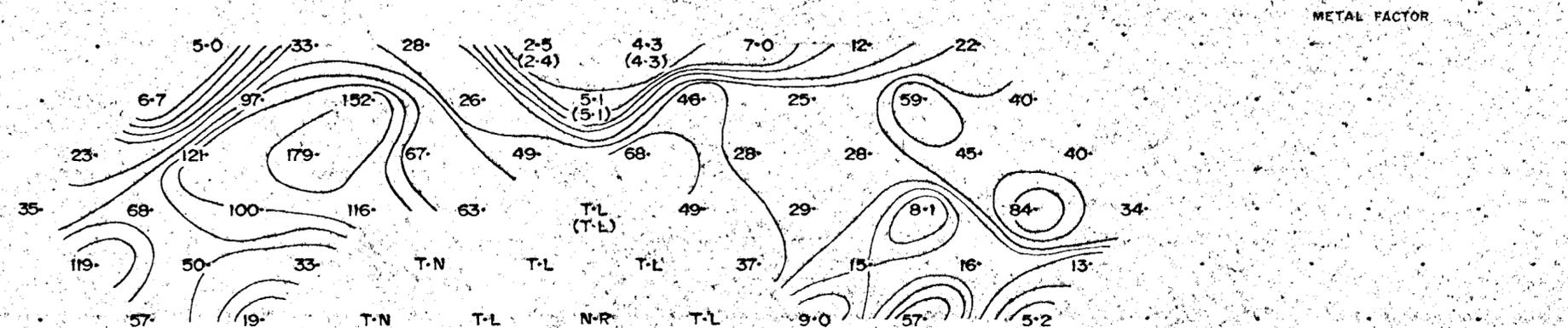
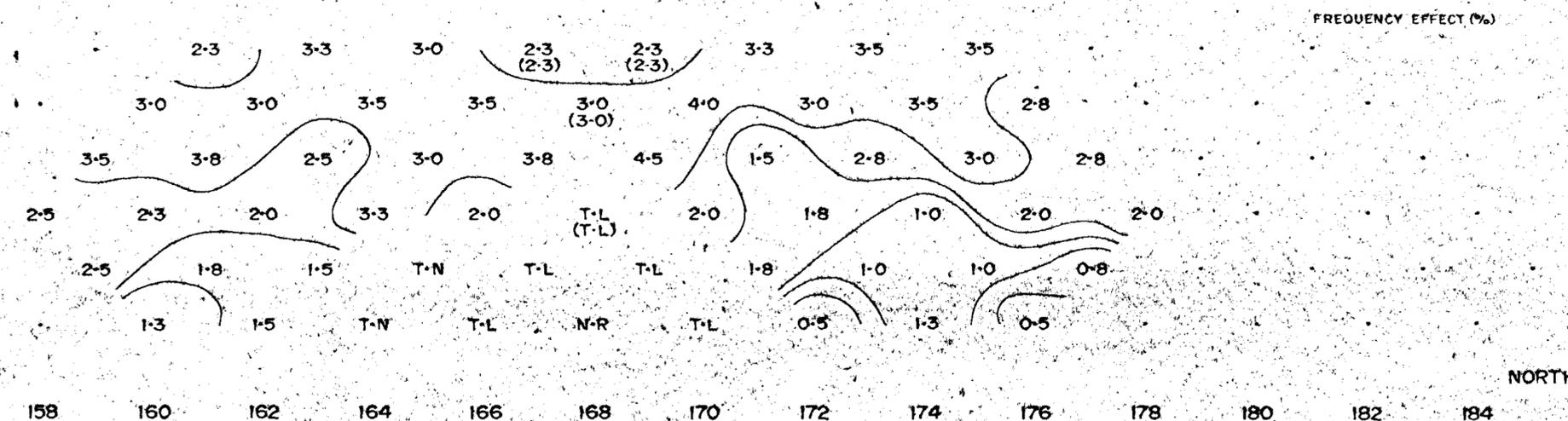
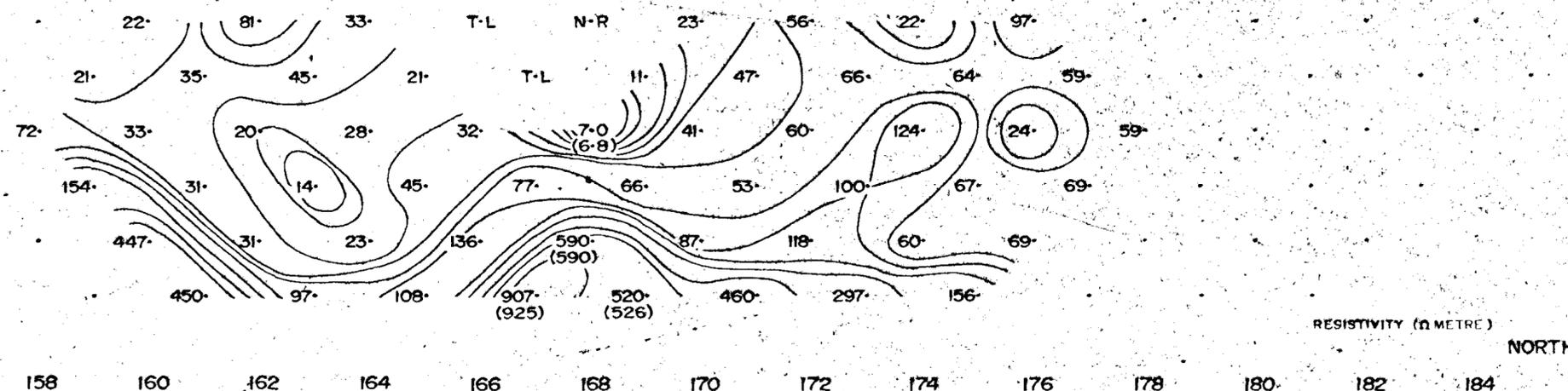
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FIELD CHECK B. RAU

INTERPRETATION \_\_\_\_\_

FINAL CHECK \_\_\_\_\_

DISTRIBUTED \_\_\_\_\_





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**I.P. SURVEY**

5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 8100N

SPREAD 400 FT.

FREQUENCIES 0.3 / 2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 203

DATE OF SURVEY 27.7.73

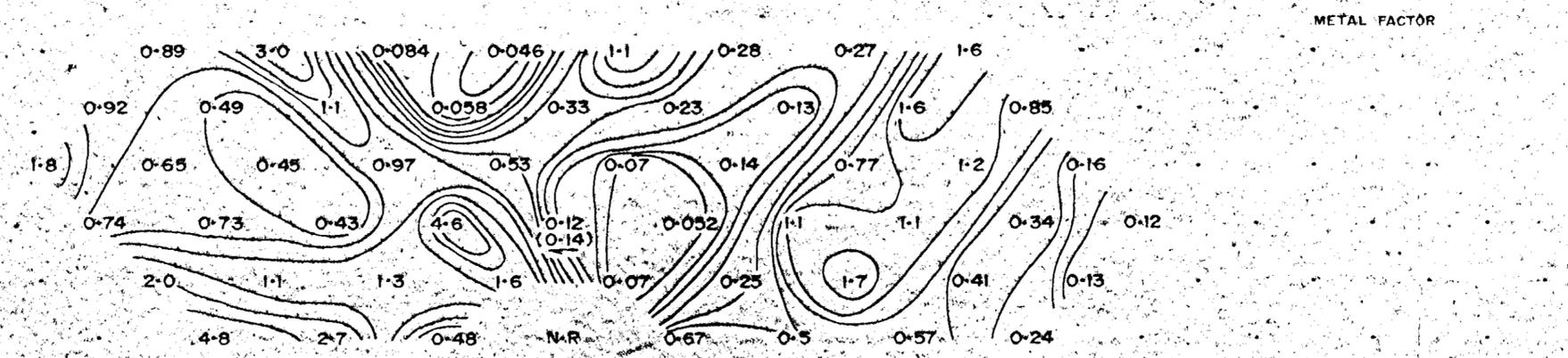
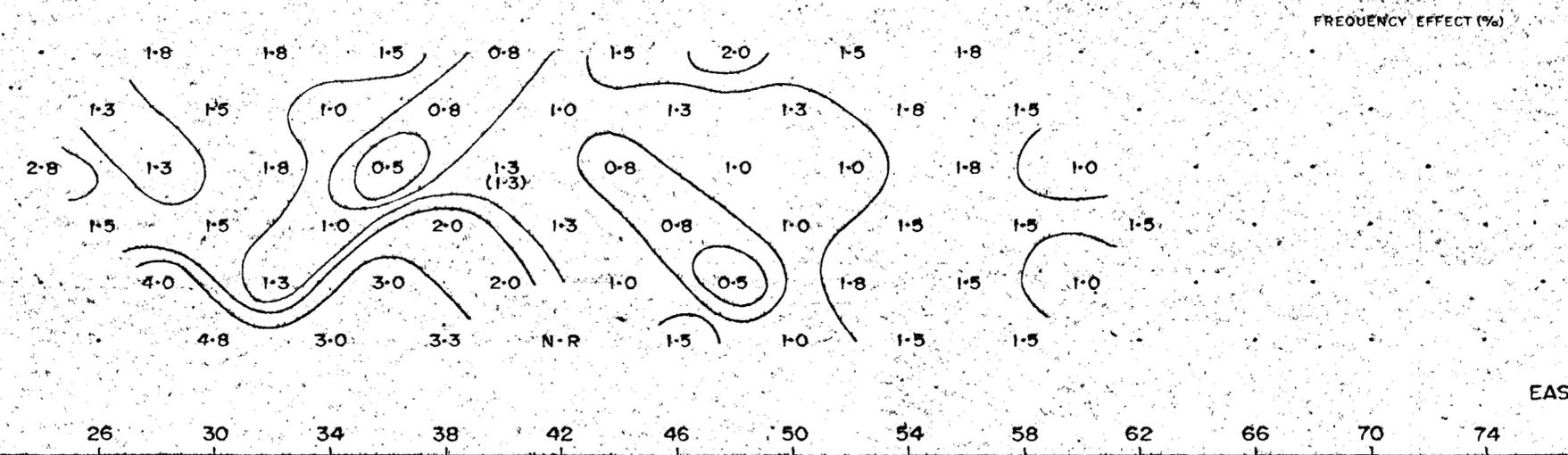
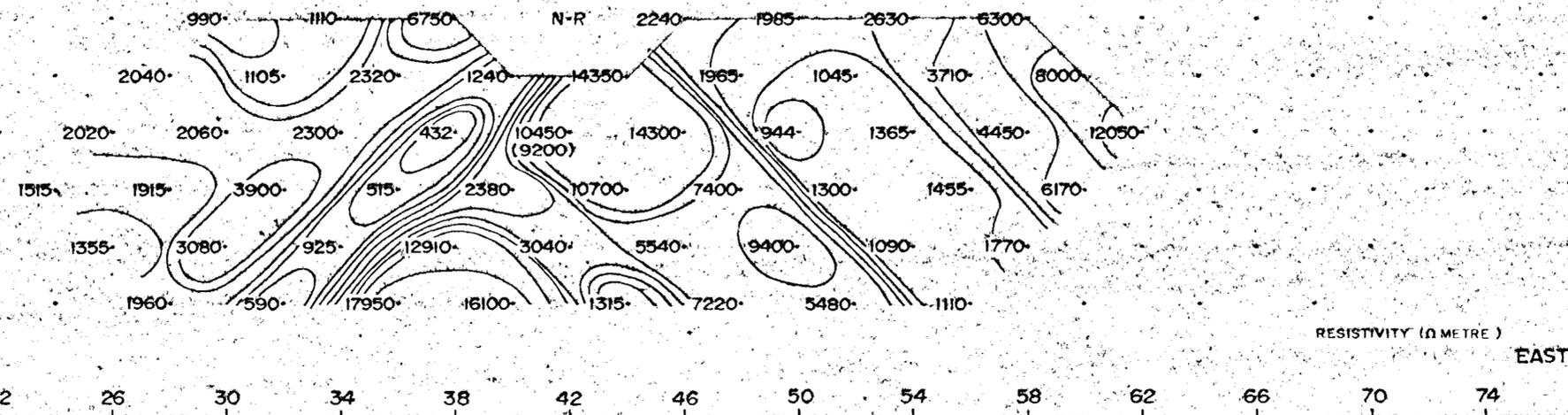
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FIELD CHECK

INTERPRETATION

FINAL CHECK

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**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 15200 N

SPREAD 400 FT.

FREQUENCIES 0.3/2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 203

DATE OF SURVEY 20.7.73

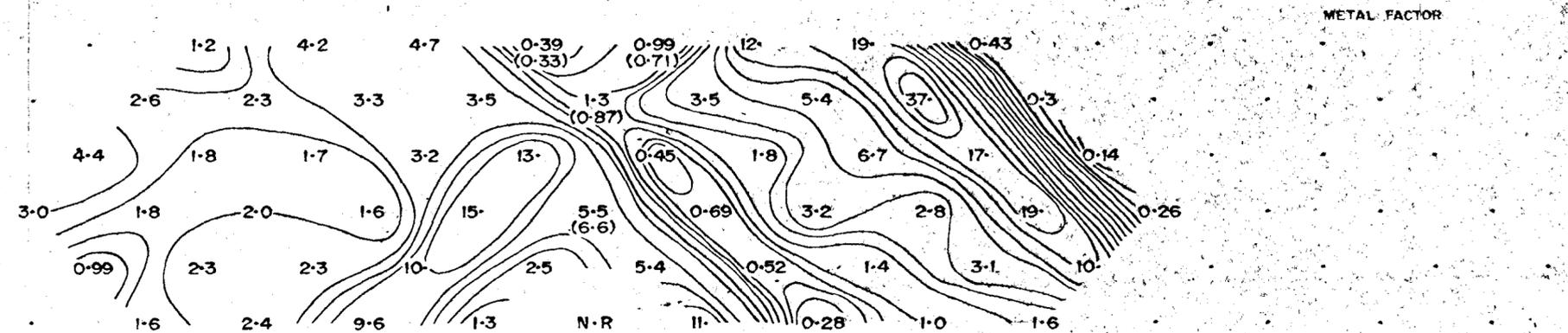
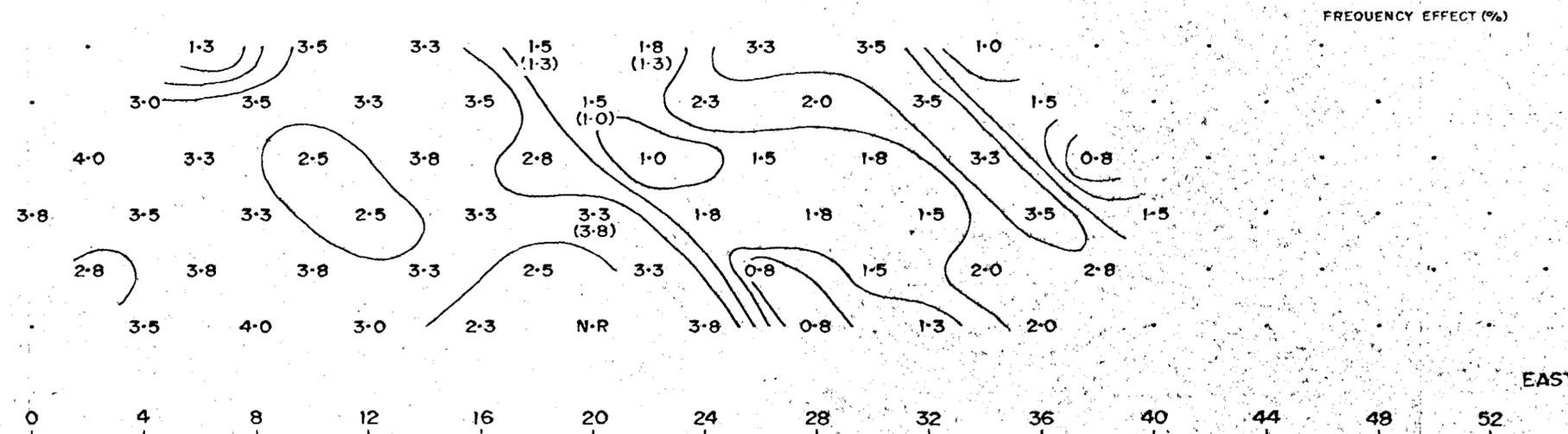
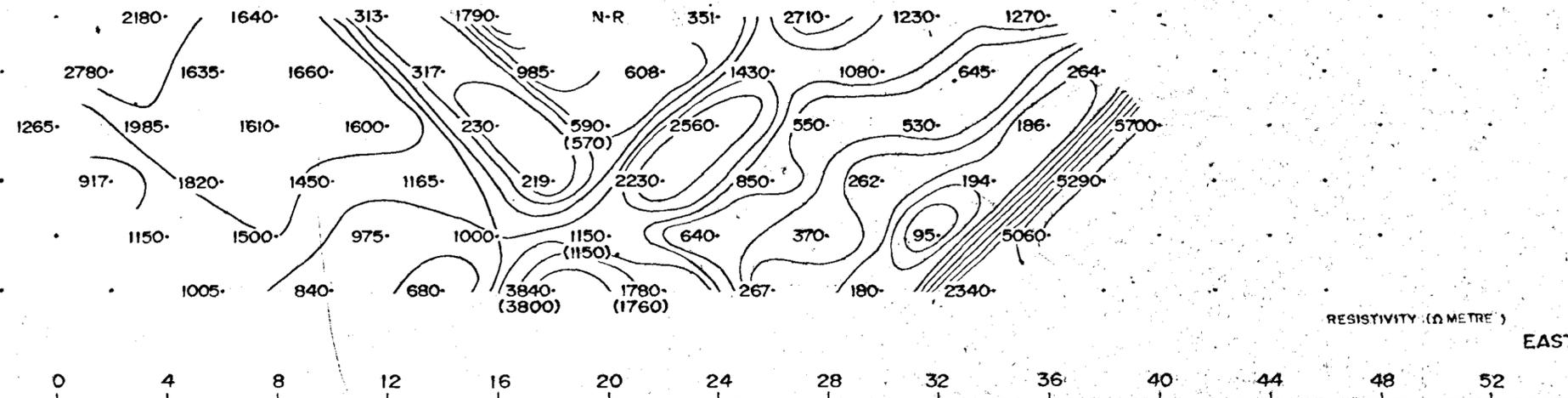
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INTERPRETATION \_\_\_\_\_

FINAL CHECK \_\_\_\_\_

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**I.P. SURVEY**

A 5611

CLIENT: ESSO MINERALS PTY. LTD.

AREA: NORTH POLE N8

LINE: 16000.N

SPREAD: 400 FT.

FREQUENCIES: 0.3 / 2.5 Hz

ELECTRODES: SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 203

DATE OF SURVEY: 21.7.73

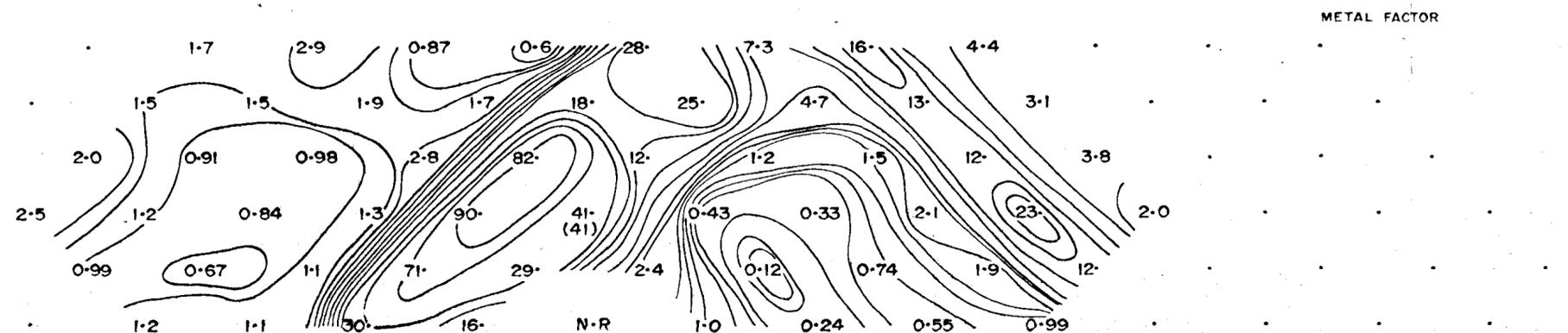
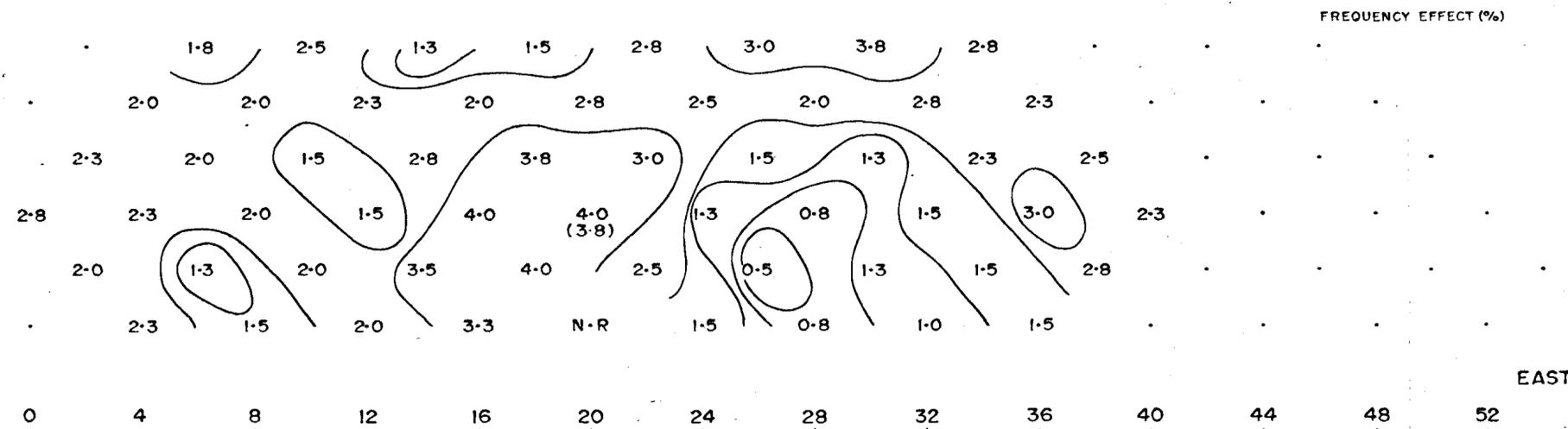
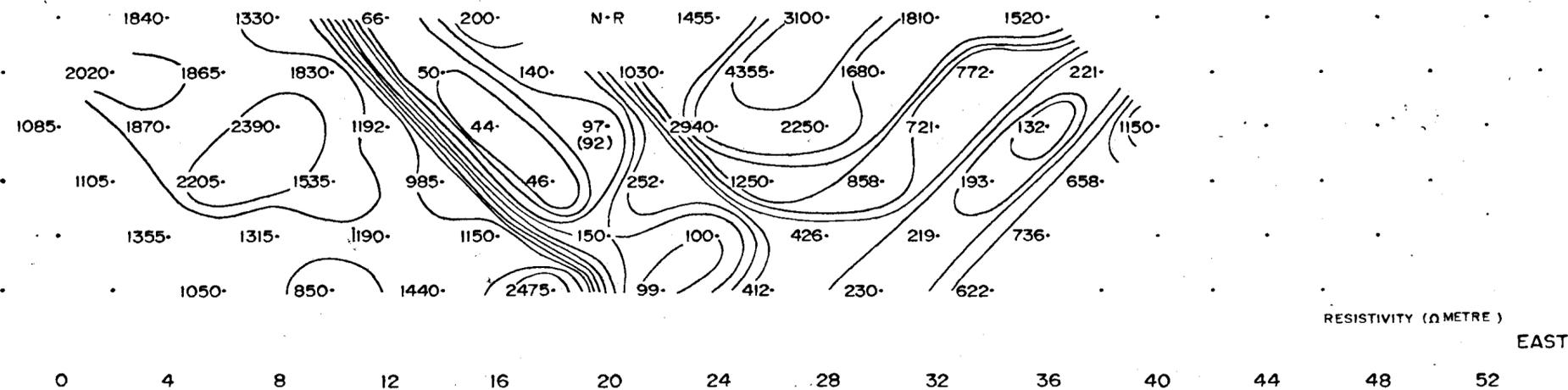
PLOTTED BY: S. JEWITT

FIELD CHECK

INTERPRETATION

FINAL CHECK

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**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE NS

LINE 16600 N

SPREAD 200 FT.

FREQUENCIES 0.3/2.5 Hz

ELECTRODES SINGLE FOIL

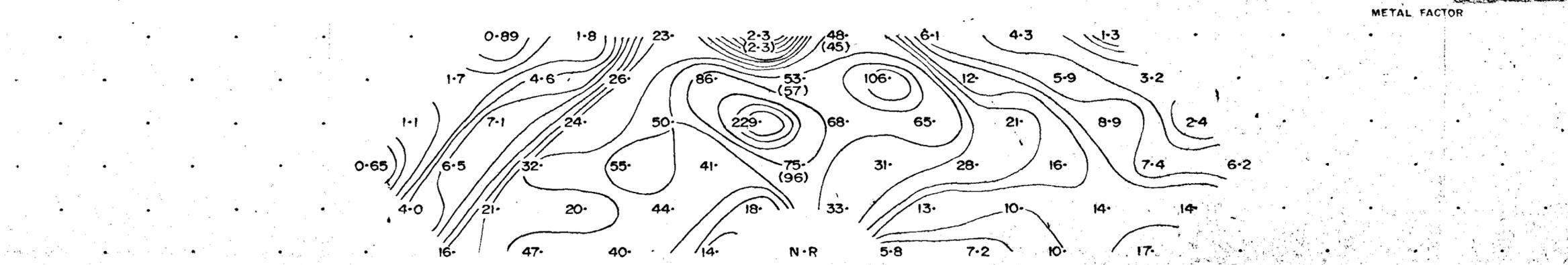
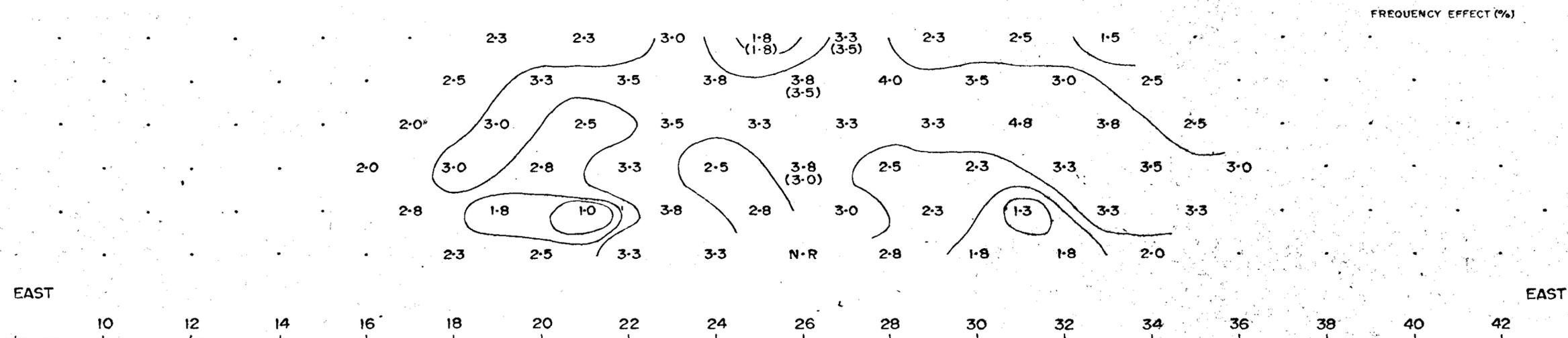
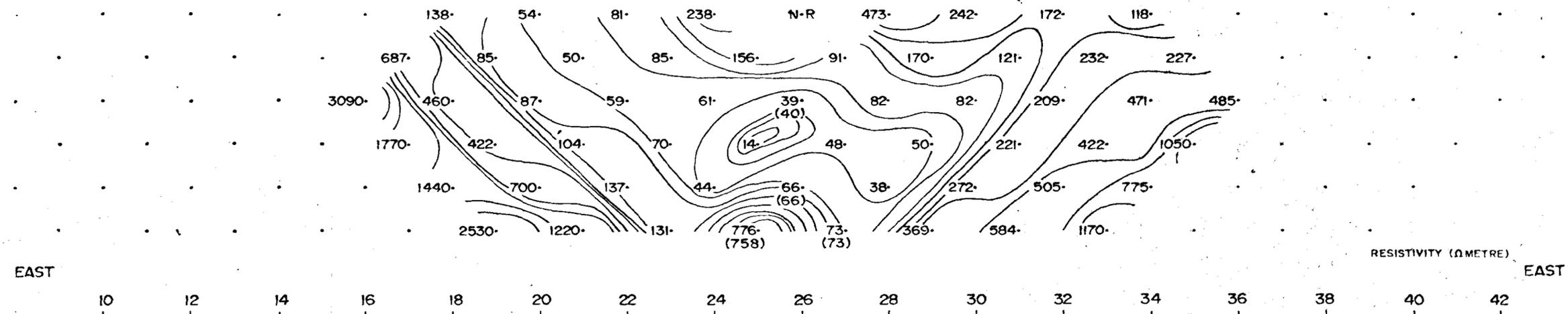
Tx SERIAL No. 123

Rx SERIAL No. 214

DATE OF SURVEY 17.10.73

PLOTTED BY K. WEGMUELLER

FIELD CHECK B. RAU



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**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 16800N

SPREAD 200 FT.

FREQUENCIES 0.3/2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 203

DATE OF SURVEY 28.7.73

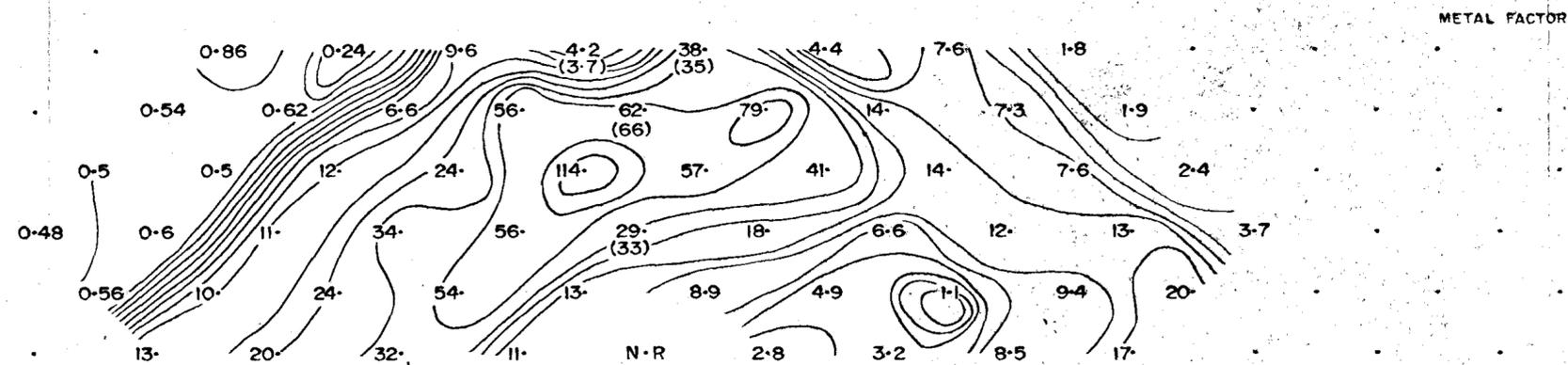
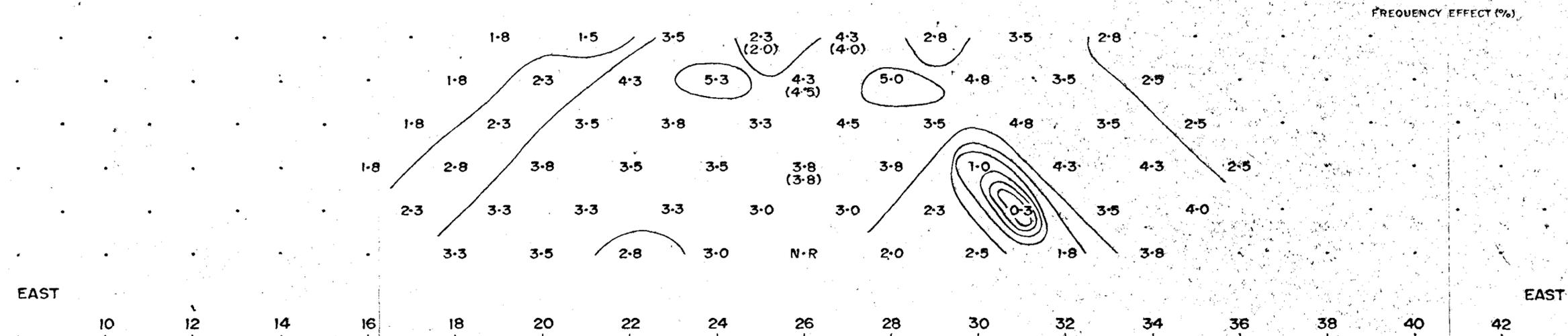
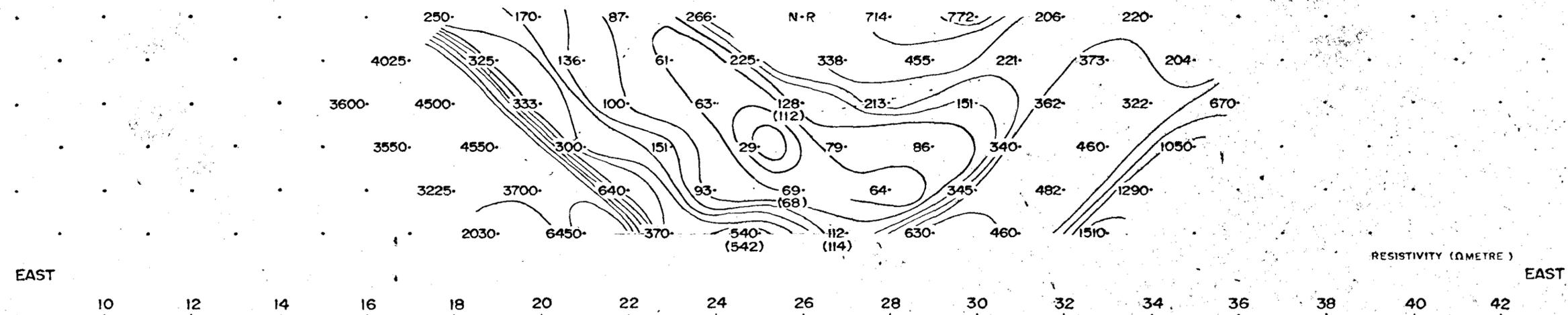
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FINAL CHECK \_\_\_\_\_

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**I.P. SURVEY**

A 5611

CLIENT ESSO MINERALS PTY. LTD.

AREA NORTH POLE N8

LINE 16800 N

SPREAD 400 FT.

FREQUENCIES 0.3 / 2.5 Hz

ELECTRODES SINGLE FOIL

Tx SERIAL No. 123

Rx SERIAL No. 203

DATE OF SURVEY 24.7.73

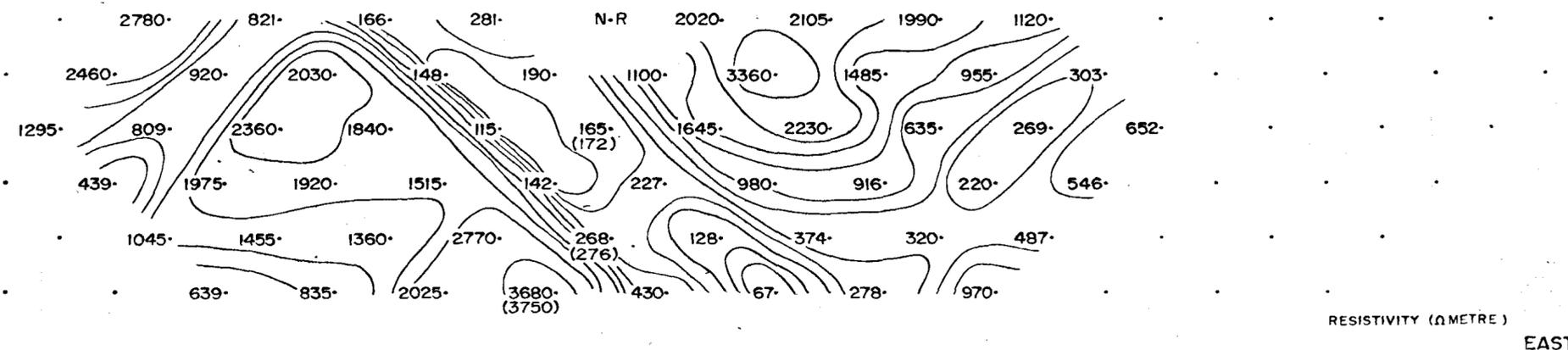
PLOTTED BY

FIELD CHECK

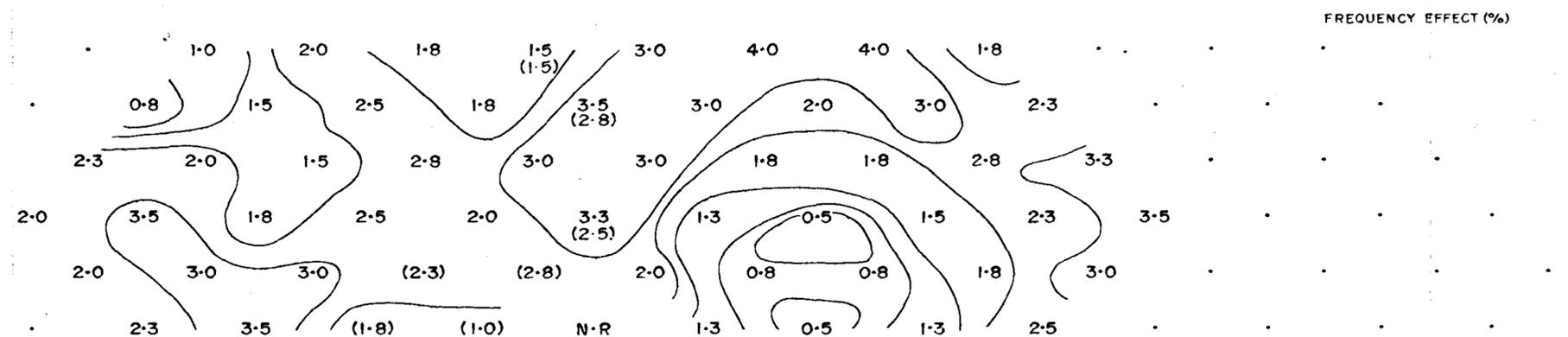
INTERPRETATION

FINAL CHECK

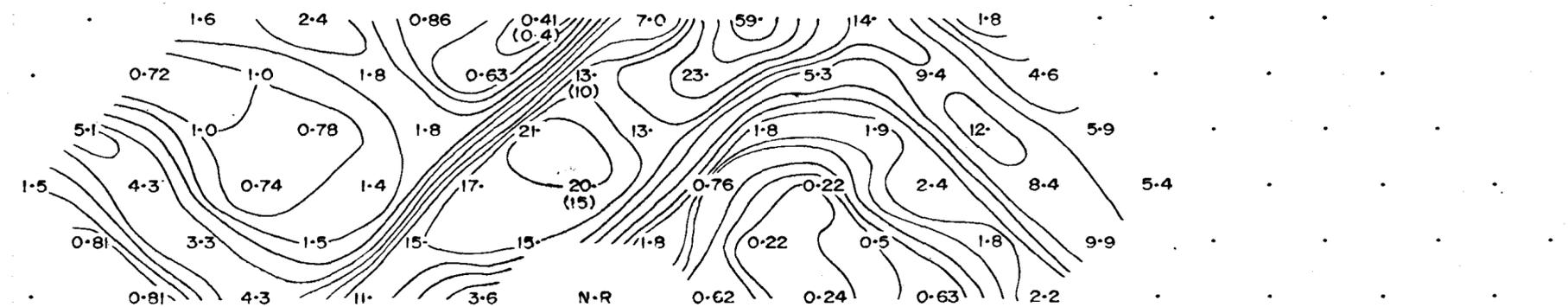
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FREQUENCY EFFECT (%)



METAL FACTOR