



McPHAR GEOPHY

REPORT ON THE
INDUCED POLARIZATION
AND RESISTIVITY SURVEY
IN
CHESTER AND BENNEWEISS TOWNSHIPS
SUDBURY MINING DIVISION, ONTARIO
FOR
LAVA MINERALS

1. INTRODUCTION

At the request of the company, an Induced Polarization and Resistivity Survey has been completed on claims in Chester and Benneweiss Townships for Lava Minerals. The survey grid is situated in the northwest quadrant of the 1^o quadrilateral whose southeast corner is at 47^o latitude and 81^o longitude.

The country rocks in the grid area are Pre-Algoman diorite and quartz diorite. There are several outcrops of sulphides and gold to the west of the grid in the Three Duck Lake area; however, the geologic environment there is different, consisting of granite with intruding basic dikes and gold-bearing quartz veins.

The Induced Polarization and Resistivity survey was carried out to locate any economic deposits of metallic mineralization which might be present. A McPhar P660 high power variable frequency IP unit was used in

January, 1971, over the following claims:

S21529, S220605, S21528, S259295, S220607, S284546, S21567, S21568,
S284547, S21362, S284548, S292908, S284549, S21611, S284550, S284551,
S21778, S21779, S284552, S284553, S284554, S284555, S21615, S284556,
S26084, S284557, S25602, S284558, S25502, S284559, S284560, S21618,
S259298, S284561, S284562, S284563, S284564, S284565, S259310, S21624
S290131, S290130, S290129, S290128.

These claims are assumed to be owned or held under option by
Lava Minerals. The claims have been plotted to the best of our ability with
the information supplied.

2. PRESENTATION OF RESULTS

The Induced Polarisation and Resistivity results are shown on
the following data plots in the manner described in the notes preceding this
report.

<u>Line</u>	<u>Electrode Intervals</u>	<u>Dwg. No.</u>
72W	400 feet	IP 5814-1
68W	400 feet	IP 5814-2
64W	400 feet	IP 5814-3
60W	400 feet	IP 5814-4
56W	400 feet	IP 5814-5
52W	400 feet	IP 5814-6
48W	400 feet	IP 5814-7
44W	400 feet	IP 5814-8
40W	400 feet	IP 5814-9

<u>Line</u>	<u>Electrode Intervals</u>	<u>Dwg. No.</u>
36W	400 feet	IP 5814-10
	100 feet	IP 5814-11
32W	400 feet	IP 5814-12
	100 feet	IP 5814-13
28W	400 feet	IP 5814-14
24W	400 feet	IP 5814-15
20W	400 feet	IP 5814-16
16W	400 feet	IP 5814-17
12W	400 feet	IP 5814-18
8W	400 feet	IP 5814-19
4W	400 feet	IP 5814-20
0	400 feet	IP 5814-21

Also enclosed with this report is Dwg. I.P.P. 4781, a plan map of the Chester and Benneweiss Townships Grid at a scale of 1" = 400'. The definite, probable and possible Induced Polarization anomalies are indicated by bars, in the manner shown on the legend, on this plan map as well as on the data plots. These bars represent the surface projection of the anomalous zones as interpreted from the location of the transmitter and receiver electrodes when the anomalous values were measured.

Since the Induced Polarization measurement is essentially an averaging process, as are all potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly, no anomaly can be located with more accuracy than the electrode interval length; i. e. when using 400' electrode intervals the position of a narrow sulphide body can only be determined

to lie between two stations 400' apart. In order to definitely locate, and fully evaluate, a narrow, shallow source it is necessary to use shorter electrode intervals. In order to locate sources at some depth, larger electrode intervals must be used, with a corresponding increase in the uncertainties of location. Therefore, while the centre of the indicated anomaly probably corresponds fairly well with source, the length of the indicated anomaly along the line should not be taken to represent the exact edges of the anomalous material.

3. DISCUSSION OF RESULTS

No anomalies were located by the Induced Polarization and Resistivity survey. Resistivities are generally high except over water, where conductive bottom sediments are reflected in decreased resistivities. No increase in frequency effects accompanies any decrease in resistivities except on Line 32W from 3S to the south. Here a power line crosses a swamp and the slight increase in Metal Factor values must be suspect.

4. SUMMARY

The results obtained by the IP survey do not suggest the presence of a substantial zone of massive metallic mineralization or a large volume of disseminated sulphide mineralization.

McPHAR GEOPHYSICS LIMITED

Marion A. Goudie

Marion A. Goudie,
Geologist.

Robert A. Bell

Robert A. Bell,
Geologist.

Dated: July 29, 1971

N - 5

N - 5

N - 4

N - 4

N - 3

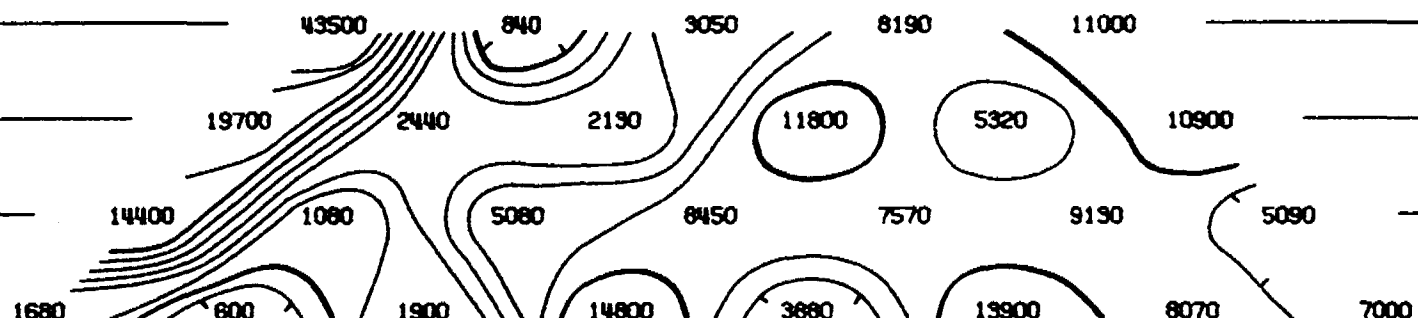
N - 3

N - 2

N - 2

N - 1

N - 1



RESISTIVITY (APP.) IN OHM FEET / 2π

RESISTIVITY (APP.) IN OHM FEET / 2π

32S

28S

24S

20S

16S

12S

8S

4S

0

4N

8N

METAL FACTOR (APP.)

METAL FACTOR (APP.)

N - 1

N - 1

N - 2

N - 2

N - 3

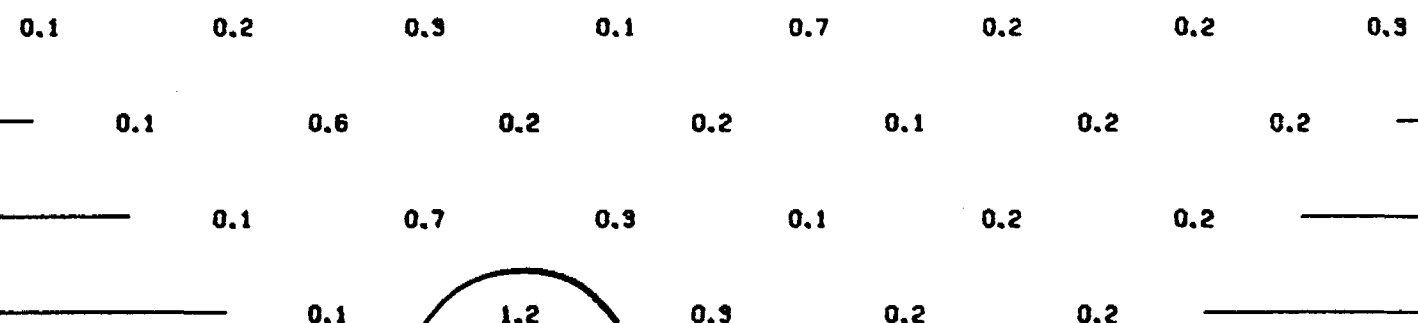
N - 3

N - 4

N - 4

N - 5

N - 5



32S

28S

24S

20S

16S

12S

8S

4S

0

4N

8N

FREQUENCY EFFECT (APP.) IN %

FREQUENCY EFFECT (APP.) IN %

N - 1

N - 1

N - 2

N - 2

N - 3

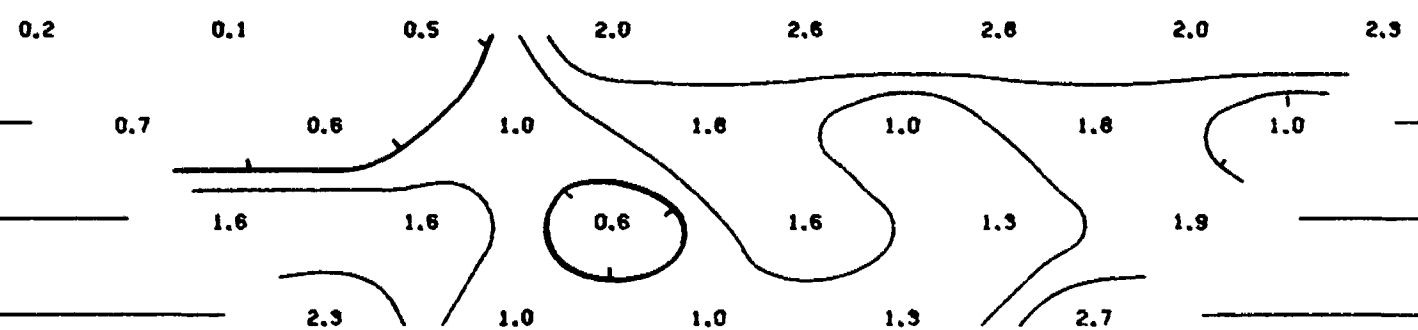
N - 3

N - 4

N - 4

N - 5

N - 5



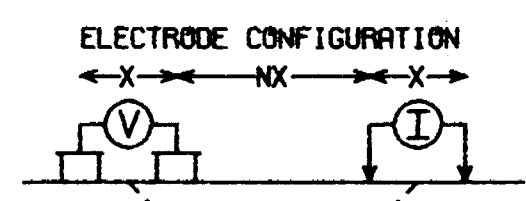
2.567

DWG. NO. - I.P. - 5814-19

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 8W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED: _____

DATE: 29 July 71

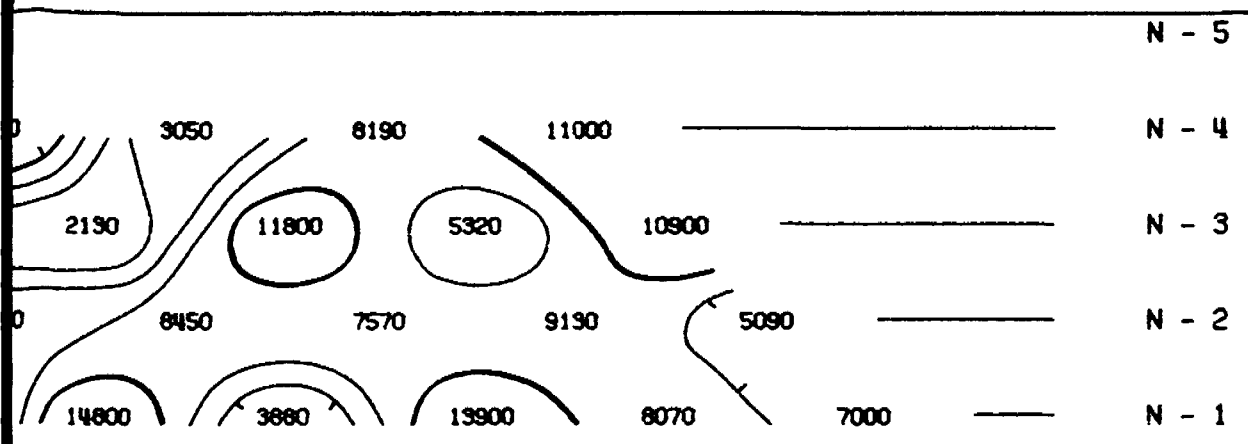


NOTE: CONTOURS AT LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



RESISTIVITY (APP.) IN OHM FEET / 2π

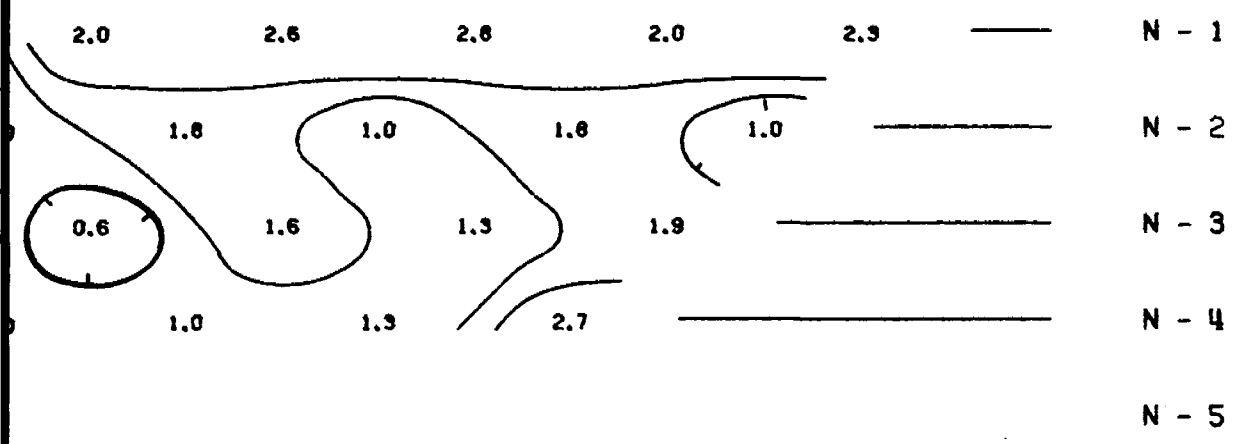
S 12S 8S 4S 0 4N 8N

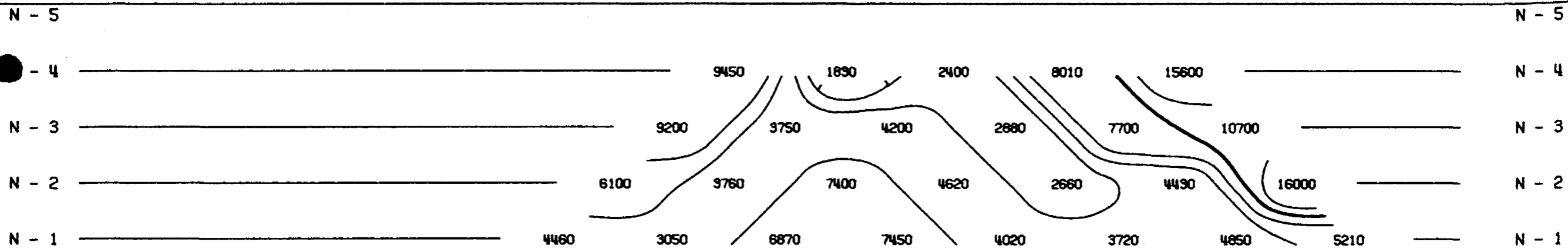
METAL FACTOR (APP.)

0.1	0.7	0.2	0.2	0.3	—	N - 1
0.2	0.1	0.2	0.2	—	—	N - 2
0.3	0.1	0.2	0.2	—	—	N - 3
0.3	0.2	0.2	—	—	—	N - 4
—	—	—	—	—	—	N - 5

S 12S 8S 4S 0 4N 8N

FREQUENCY EFFECT (APP.) IN %





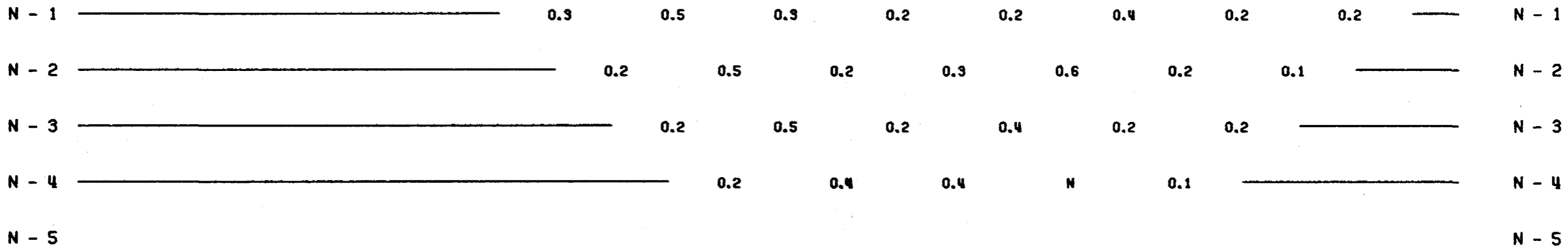
RESISTIVITY (APP.) IN OHM FEET / 2π

RESISTIVITY (APP.) IN OHM FEET / 2π

32S 28S 24S 20S 16S 12S 8S 4S 0 4N 8N

METAL FACTOR (APP.)

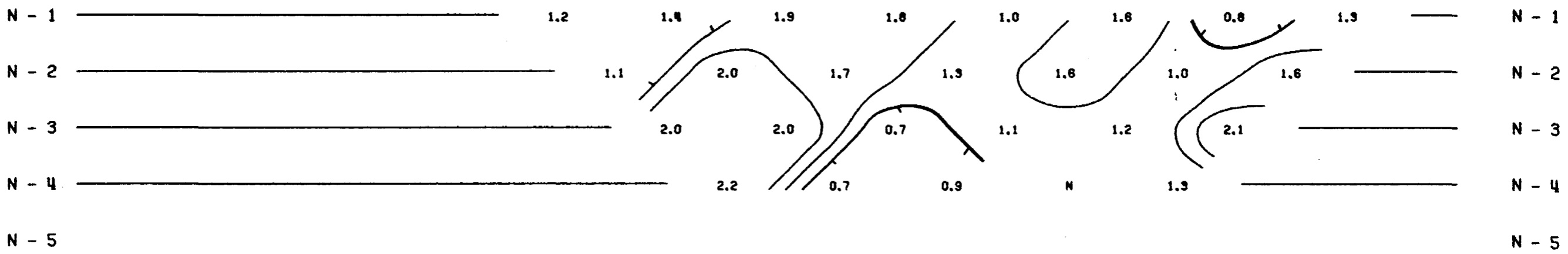
METAL FACTOR (APP.)



32S 28S 24S 20S 16S 12S 8S 4S 0 4N 8N

FREQUENCY EFFECT (APP.) IN %

FREQUENCY EFFECT (APP.) IN %



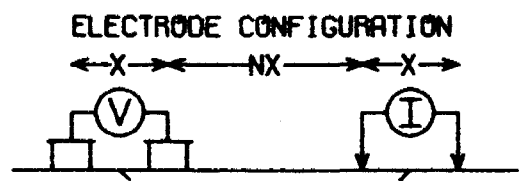
2.577

DWG. NO. - I.P. - 5814-20

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 4W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

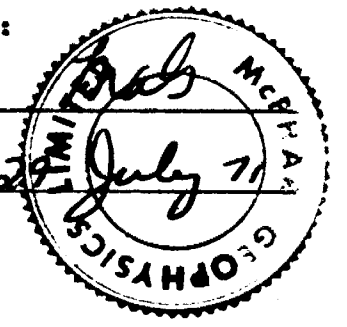
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED: _____

DATE: July 71

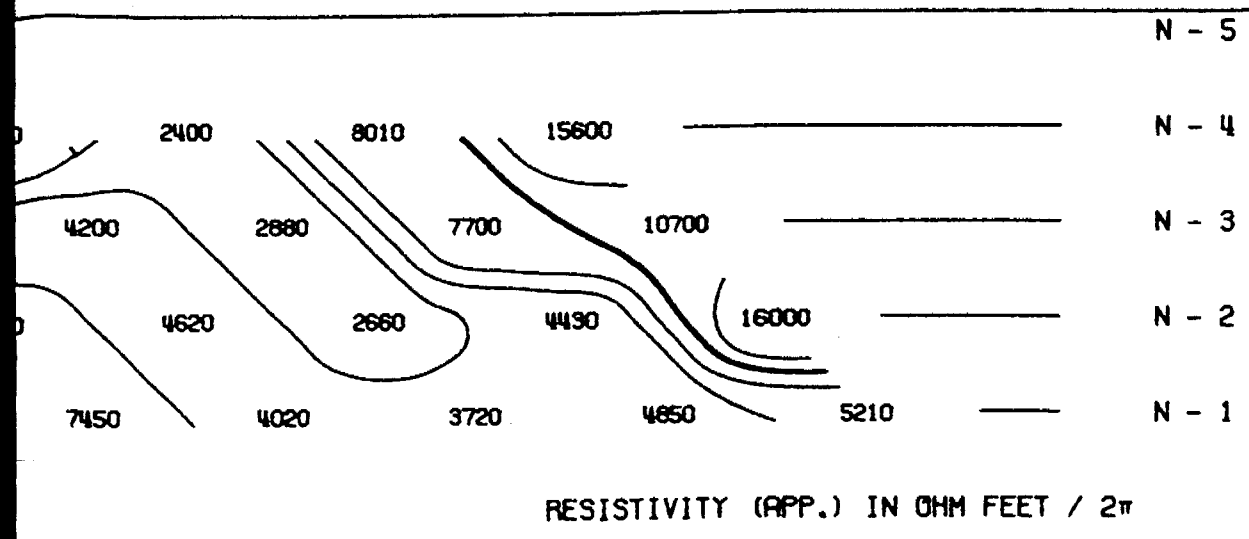


NOTE: CONTOURS AT LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



RESISTIVITY (APP.) IN OHM FEET / 2π

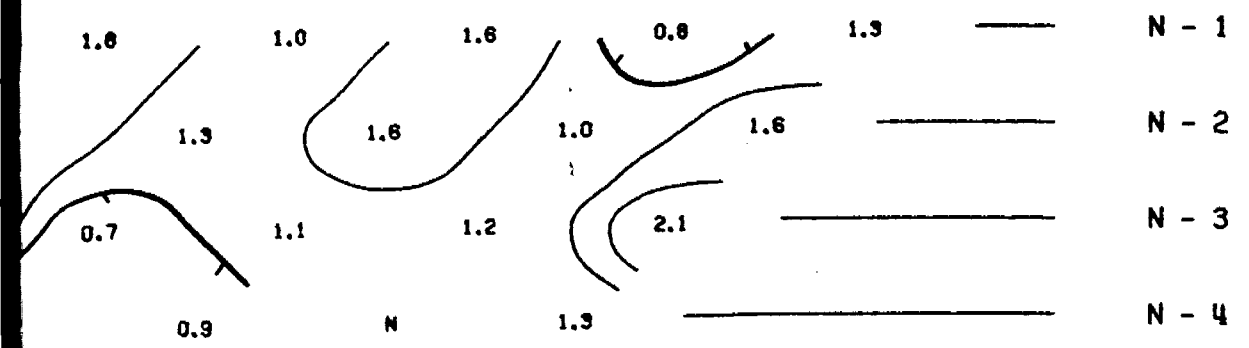
12S 8S 4S 0 4N 8N

METAL FACTOR (APP.)

0.2	0.2	0.4	0.2	0.2	_____	N - 1
0.3	0.6	0.2	0.1	_____	_____	N - 2
0.2	0.4	0.2	0.2	_____	_____	N - 3
0.4	N	0.1	_____	_____	_____	N - 4
						N - 5

12S 8S 4S 0 4N 8N

FREQUENCY EFFECT (APP.) IN %



N - 5
N - 4
N - 3
N - 2
N - 1
N - 1
N - 2
N - 3
N - 4
N - 5
N - 1
N - 2
N - 3
N - 4
N - 5

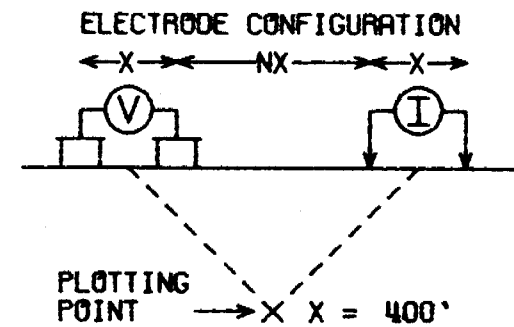
2,567

DWG. NO. - I.P. - 5814-21

LAVA MINERALS LTD.

BENNEWEISS TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 0



SURFACE PROJECTION
OF ANOMALOUS ZONES

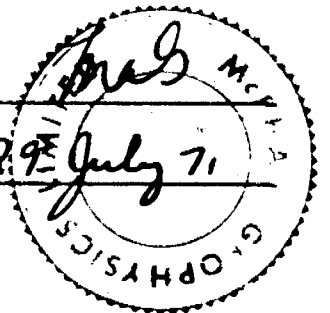
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED: _____

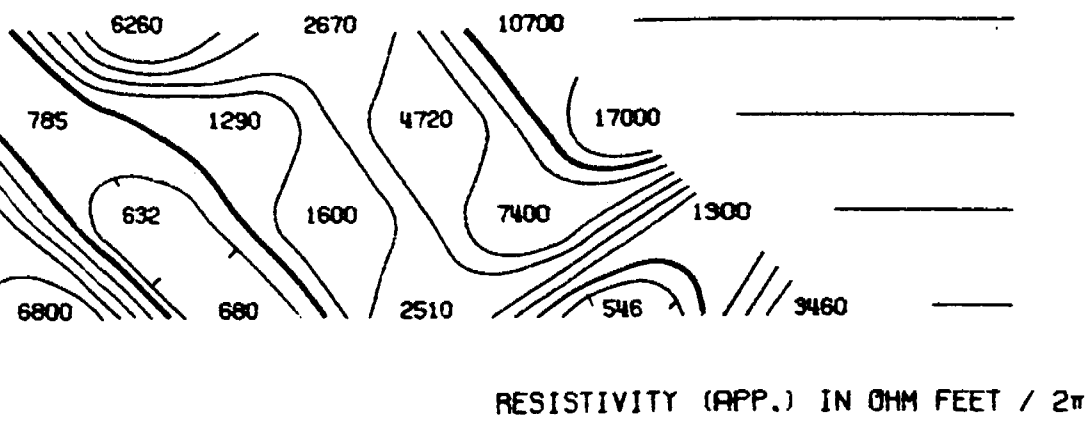
DATE: 29 July 71



McPHAR GEOPHYSICS

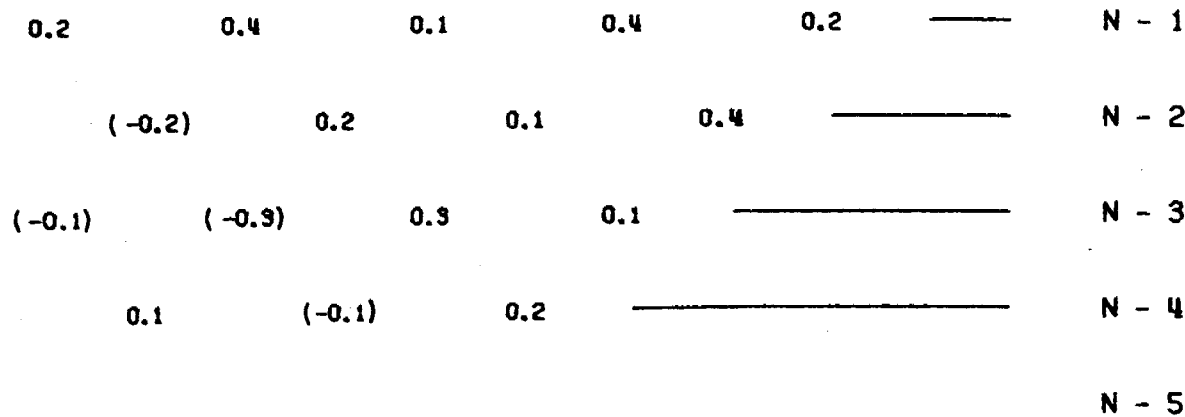
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



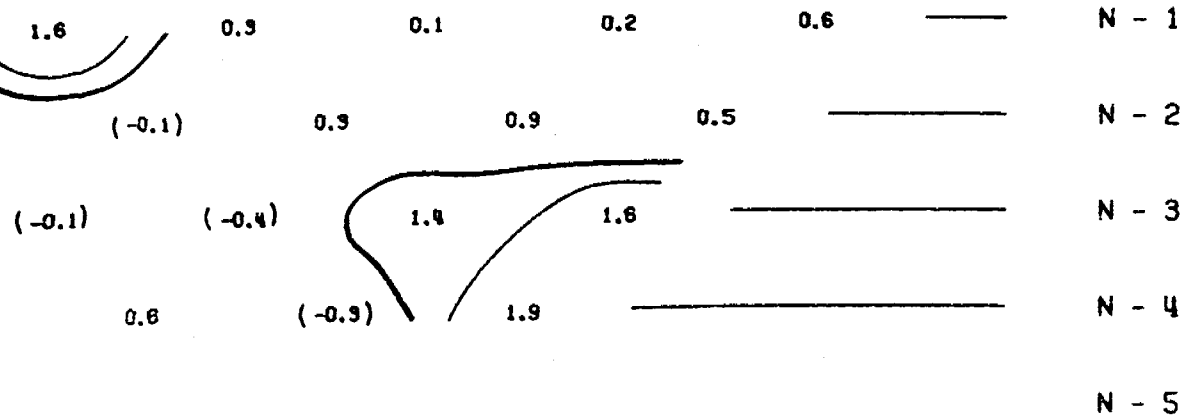
165 125 85 45 0 4N

METAL FACTOR (APP.)



165 125 85 45 0 4N

FREQUENCY EFFECT (APP.) IN %



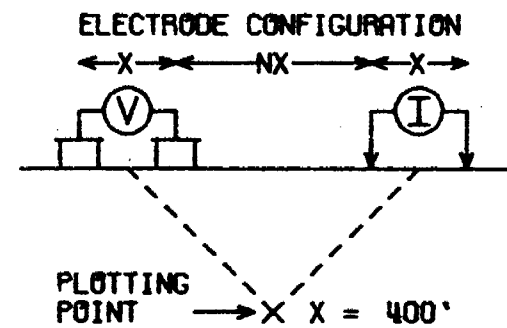
2.567

DWG. NO.- I.P.-5814-18

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO.- 12W



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE **—————**
 PROBABLE **.....**
 POSSIBLE **//////**

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

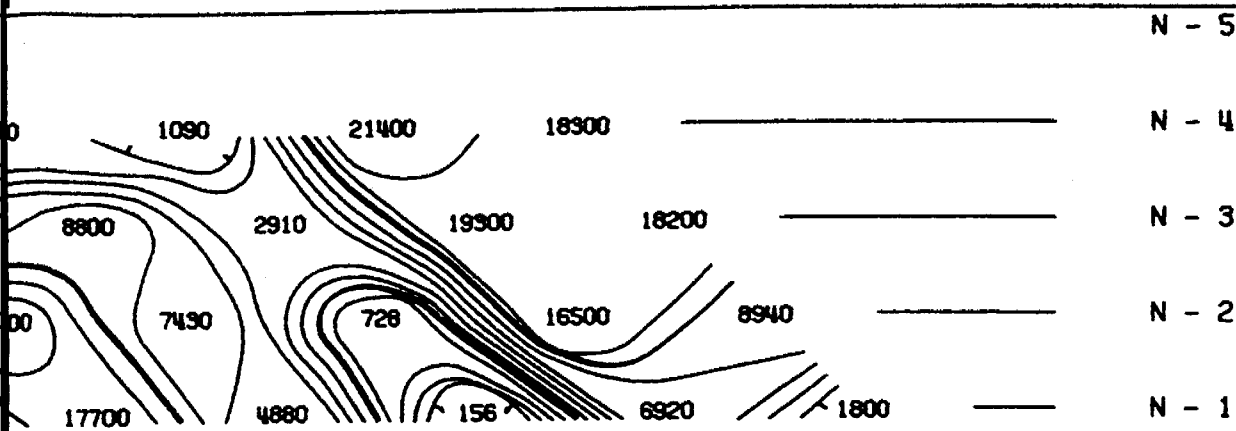
DATE: 29 July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

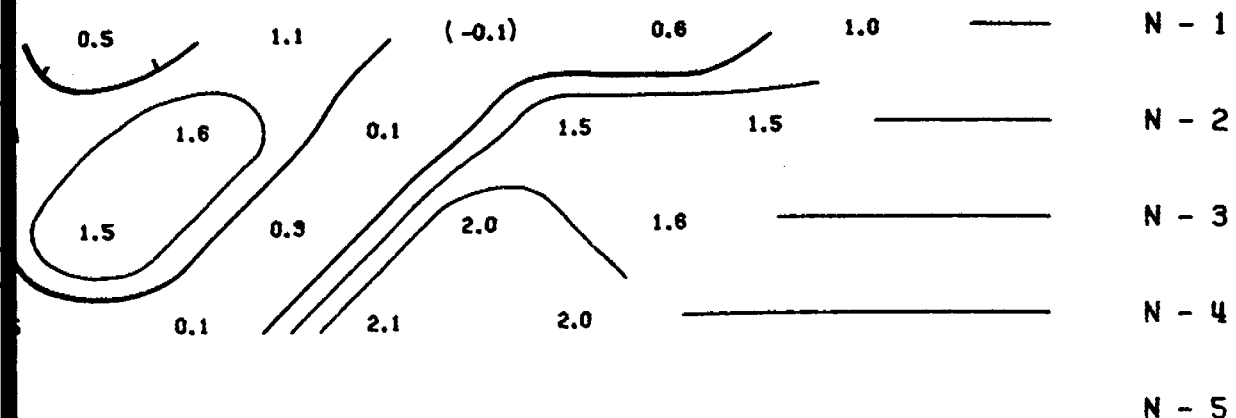


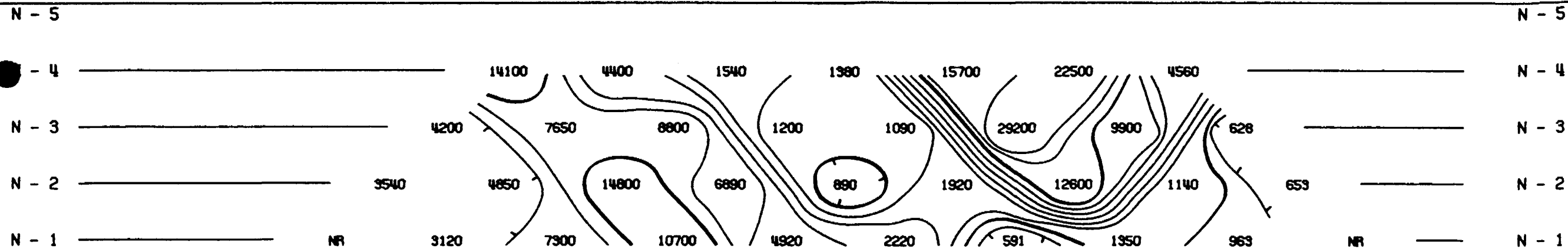
RESISTIVITY (APP.) IN OHM FEET / 2π

METAL FACTOR (APP.)

0.1	0.2	(-0.6)	0.1	0.6	—————	N - 1
0.2	0.1	0.1	0.1	0.2	—————	N - 2
0.2	0.1	0.1	0.1	—————	—————	N - 3
0.1	0.1	0.1	—————	—————	—————	N - 4
						N - 5

FREQUENCY EFFECT (APP.) IN %





POWER LINE

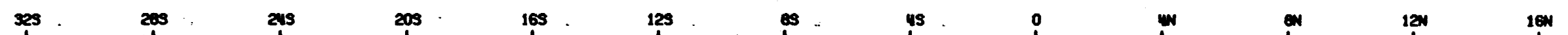
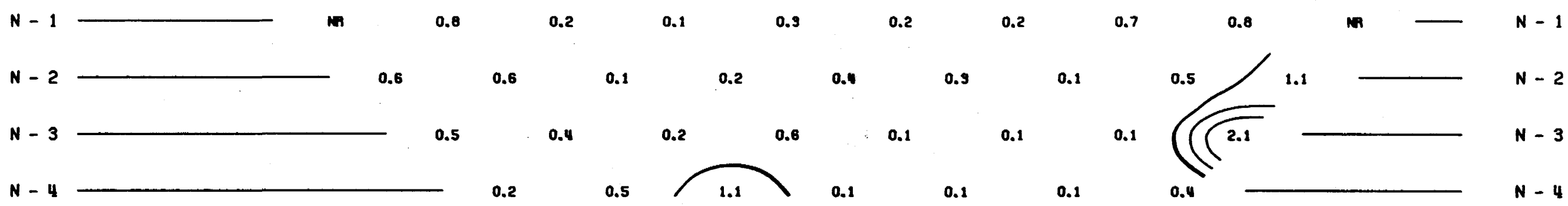
RESISTIVITY (APP.) IN OHM FEET / 2π

RESISTIVITY (APP.) IN OHM FEET / 2π



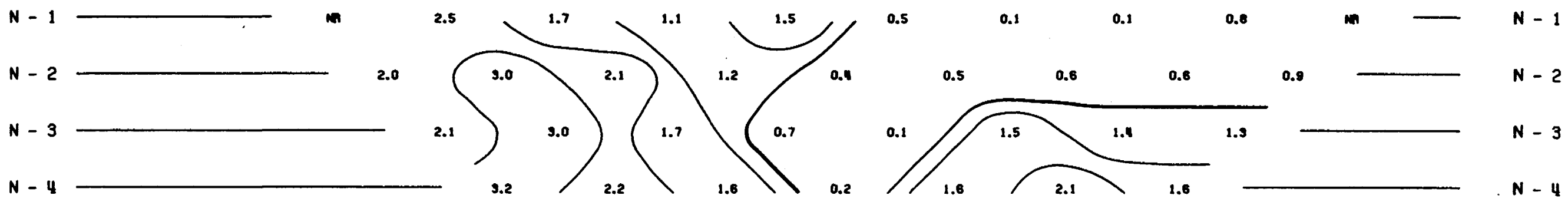
METAL FACTOR (APP.)

METAL FACTOR (APP.)



FREQUENCY EFFECT (APP.) IN %

FREQUENCY EFFECT (APP.) IN %



N - 5

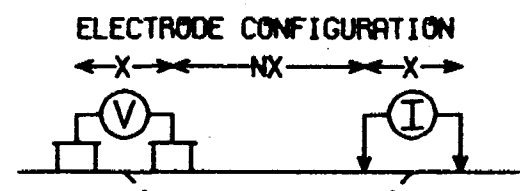
2.567

DWG. NO. - I.P. - 5814 - 16

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 20W



PLOTTING POINT X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

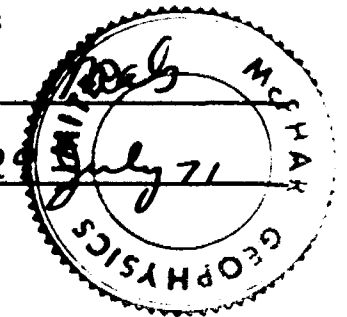
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE: 29 July 71

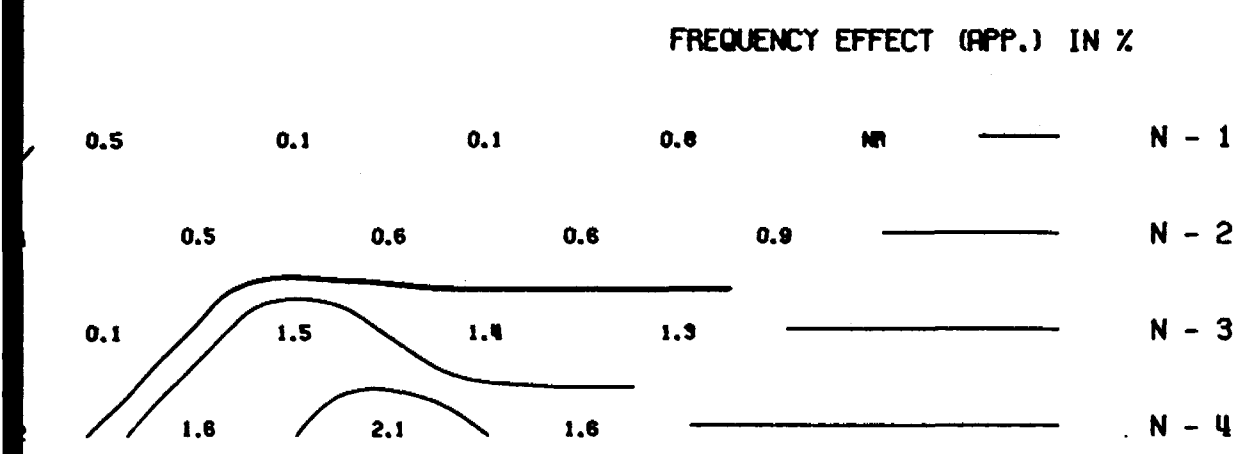
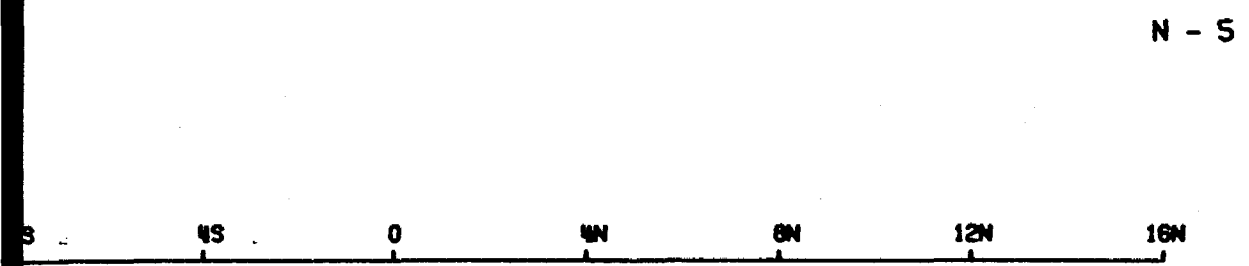
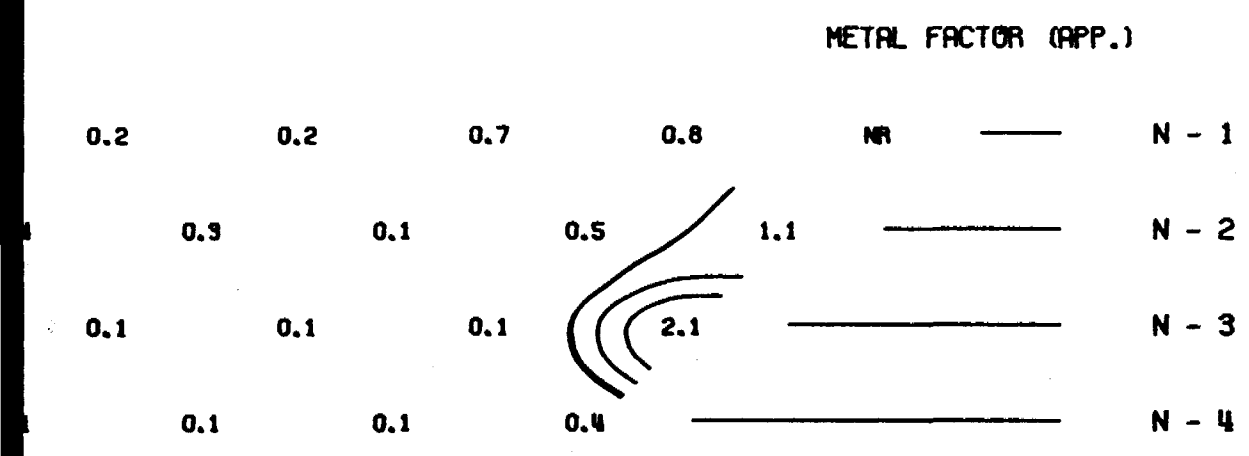
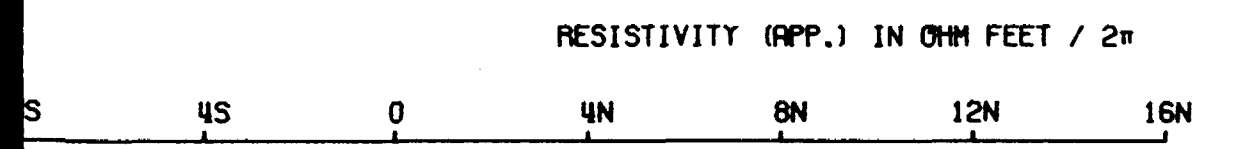
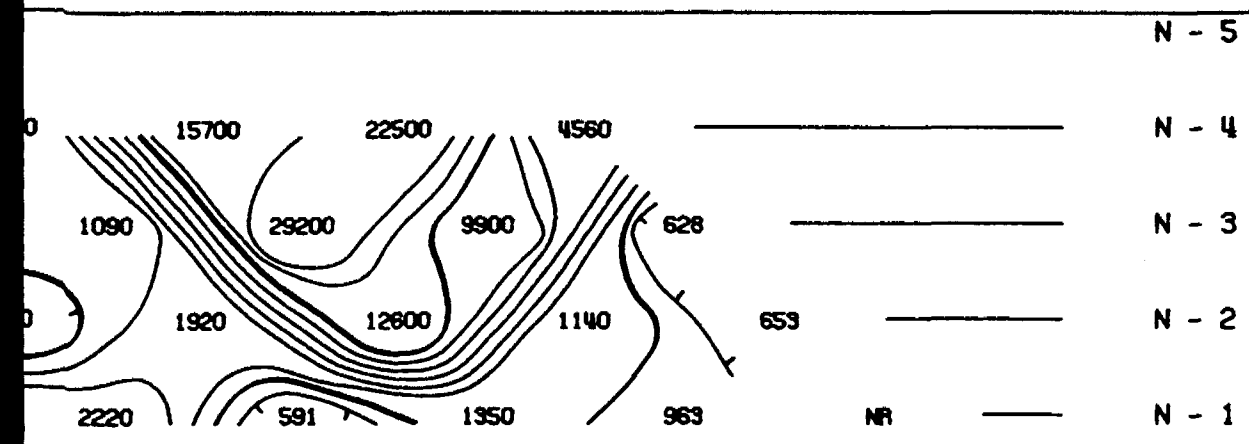


NOTE: CONTOURS AT LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



N - 5

N - 5

N - 4

N - 4

N - 3

N - 3

N - 2

N - 2

N - 1

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

RESISTIVITY (APP.) IN OHM FEET / 2π

32S

28S

24S

20S

16S

12S

8S

4S

0

4N

8N

12N

16N

METAL FACTOR (APP.)

METAL FACTOR (APP.)

N - 1

N - 1

N - 2

N - 2

N - 3

N - 3

N - 4

N - 4

N - 5

N - 5

32S

28S

24S

20S

16S

12S

8S

4S

0

4N

8N

12N

16N

FREQUENCY EFFECT (APP.) IN %

FREQUENCY EFFECT (APP.) IN %

N - 1

N - 1

N - 2

N - 2

N - 3

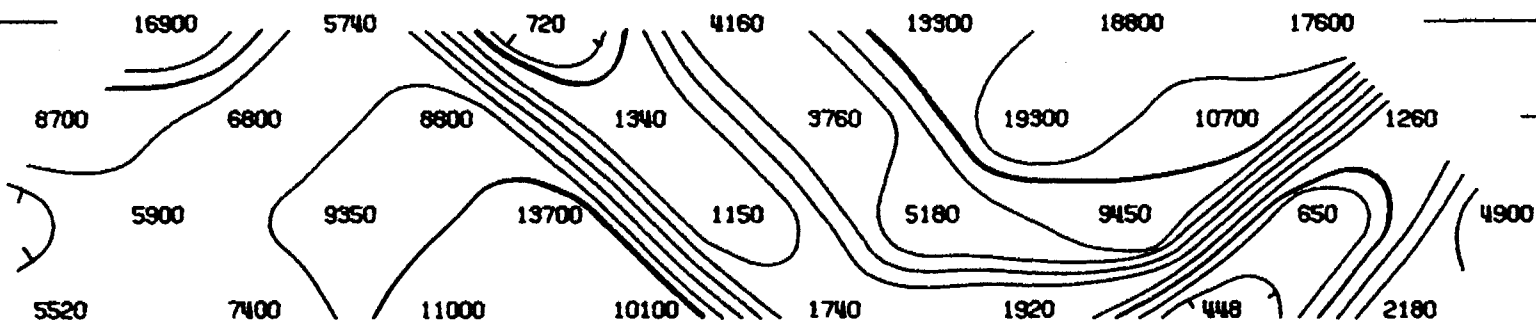
N - 3

N - 4

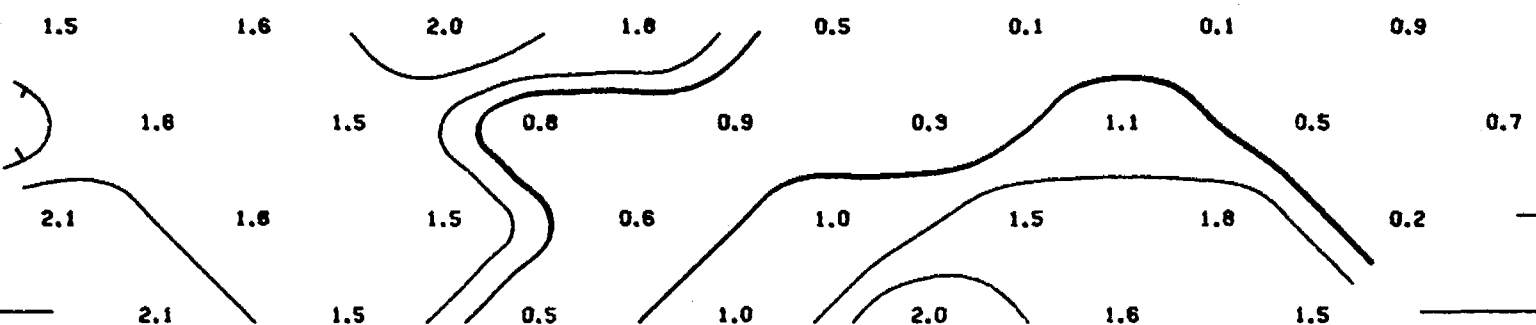
N - 4

N - 5

N - 5



N - 1	NR	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.4	NR
N - 2	0.4	0.3	0.2	0.1	0.8	0.1	0.1	0.8	0.1	
N - 3	0.2	0.2	0.2	0.4	0.2	0.1	0.2	0.2		
N - 4	0.1	0.3	0.7	0.2	0.2	0.1	0.1			



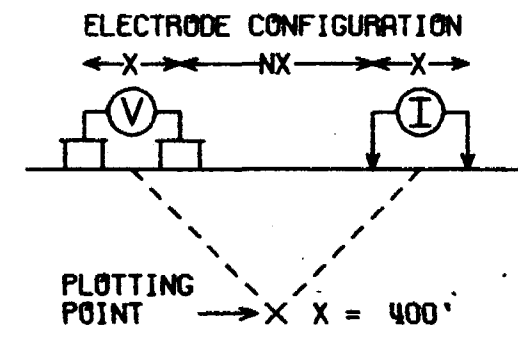
2.567

DWG. NO. - I.P. - 5814-17

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 16W



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE:



NOTE: CONTOURS AT
LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

4S 0 4N 8N 12N 16N

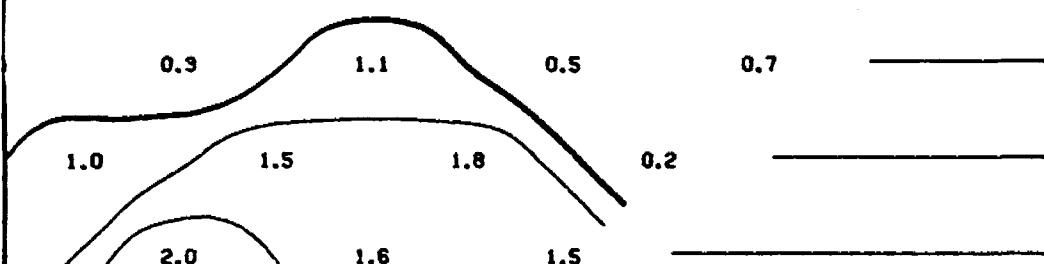
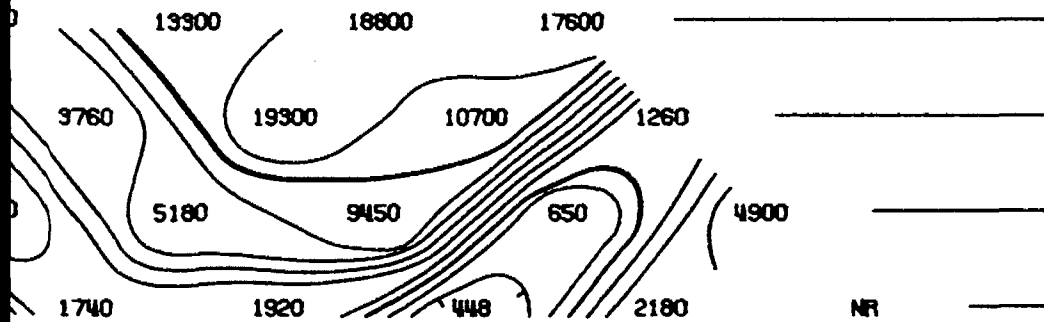
METAL FACTOR (APP.)

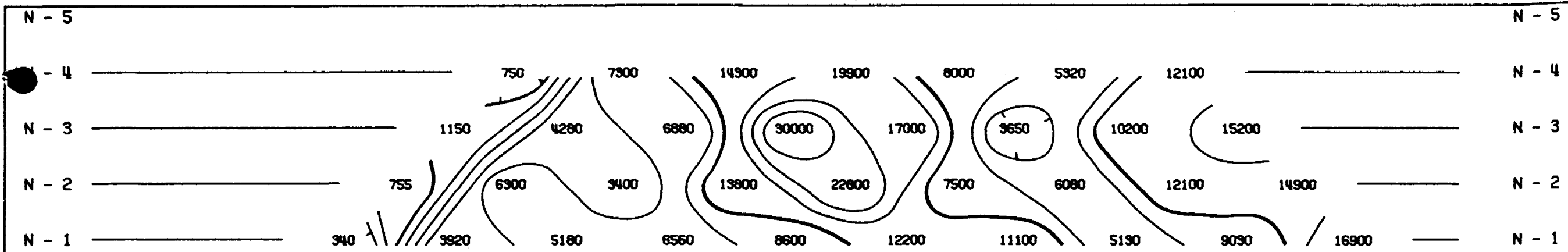
0.3	0.1	0.2	0.4	NR	N - 1
0.1	0.1	0.8	0.1		N - 2
0.2	0.1	0.2	0.2		N - 3
0.2	0.1	0.1			N - 4
					N - 5

4S 0 4N 8N 12N 16N

FREQUENCY EFFECT (APP.) IN %

0.5	0.1	0.1	0.9	NR	N - 1
0.9	1.1	0.5	0.7		N - 2
1.0	1.5	1.8	0.2		N - 3
2.0	1.6	1.5			N - 4
					N - 5





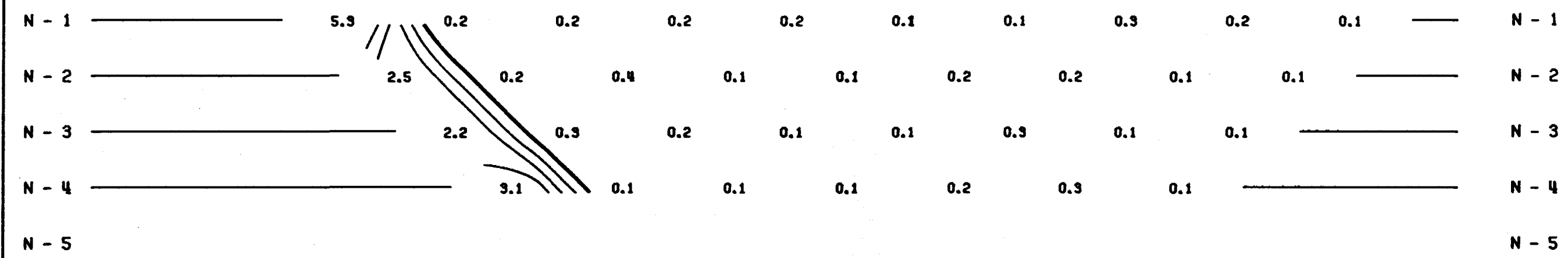
RESISTIVITY (APP.) IN OHM FEET / 2π

RESISTIVITY (APP.) IN OHM FEET / 2π

4S 3S 2S 1S 0 1N 2N 3N 4N 5N 6N 7N 8N

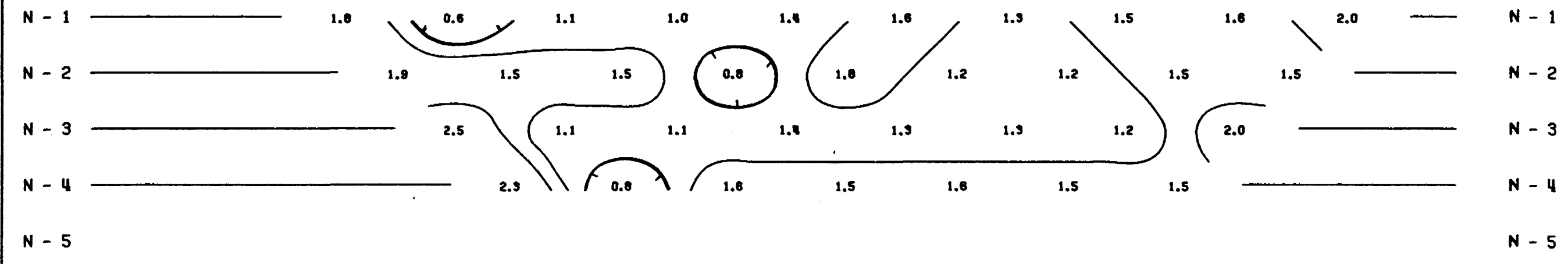
METAL FACTOR (APP.)

METAL FACTOR (APP.)



FREQUENCY EFFECT (APP.) IN %

FREQUENCY EFFECT (APP.) IN %



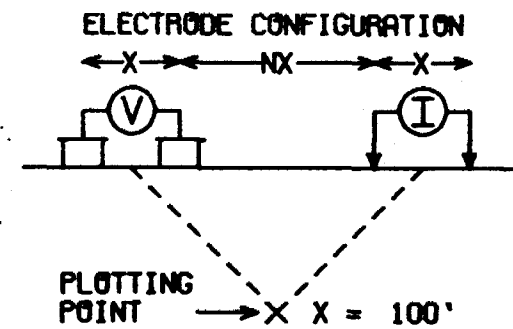
2.567

DWG. NO. - I.P. - 5814-13

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 32H



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE: 29 July 71

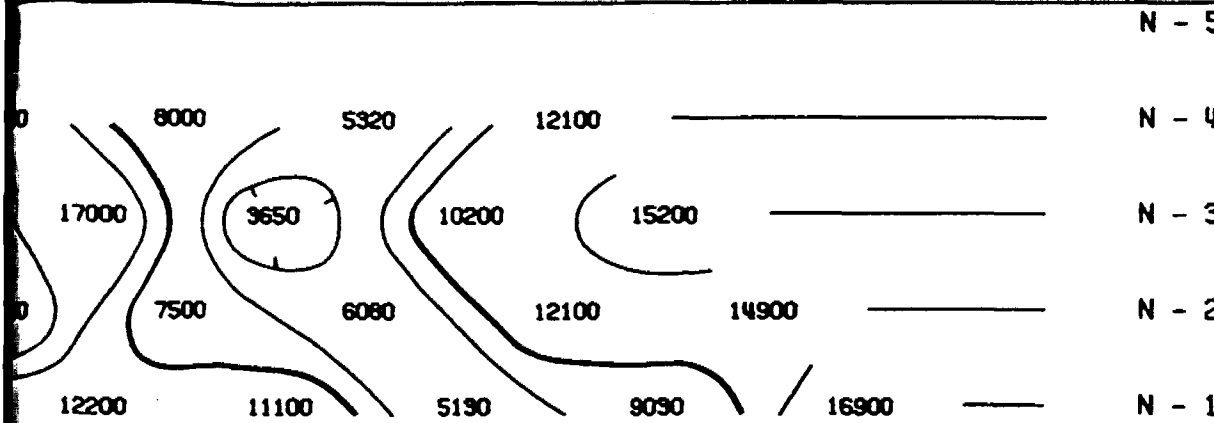


NOTE: CONTOURS AT
LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



RESISTIVITY (APP.) IN OHM FEET / 2π

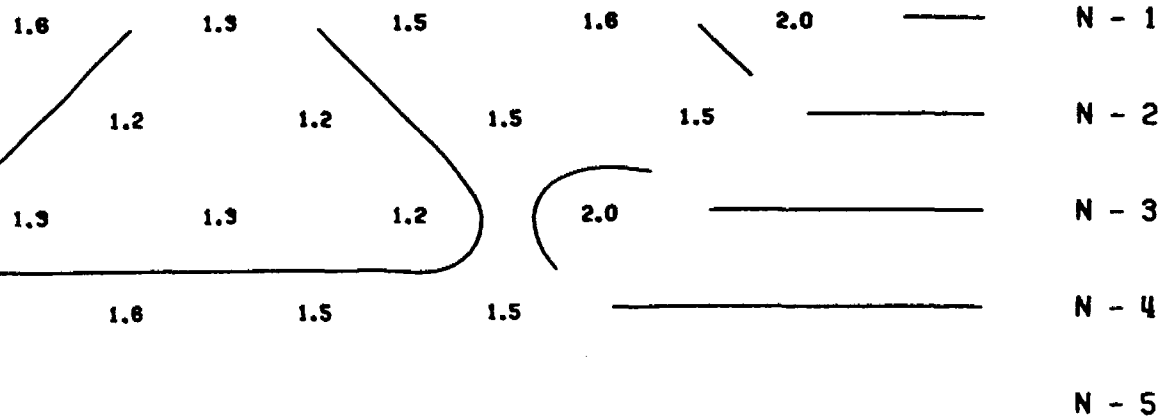
3N 4N 5N 6N 7N 8N

METAL FACTOR (APP.)

0.1	0.1	0.3	0.2	0.1	—	N - 1
0.2	0.2	0.1	0.1	—	—	N - 2
0.1	0.3	0.1	0.1	—	—	N - 3
0.2	0.3	0.1	—	—	—	N - 4
						N - 5

3N 4N 5N 6N 7N 8N

FREQUENCY EFFECT (APP.) IN %



N - 5
N - 4
N - 3
N - 2
N - 1
N - 1
N - 2
N - 3
N - 4
N - 5
N - 1
N - 2
N - 3
N - 4
N - 5

N - 5

N - 5

N - 4

N - 4

N - 3

N - 3

N - 2

N - 2

N - 1

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

RESISTIVITY (APP.) IN OHM FEET / 2π

32S

28S

24S

20S

16S

POWER LINE

12S

8S

4S

0

4N

8N

12N

16N

METAL FACTOR (APP.)

METAL FACTOR (APP.)

N - 1

N - 1

N - 2

N - 2

N - 3

N - 3

N - 4

N - 4

N - 5

N - 5

32S

28S

24S

20S

16S

12S

8S

4S

0

4N

8N

12N

16N

FREQUENCY EFFECT (APP.) IN %

FREQUENCY EFFECT (APP.) IN %

N - 1

N - 1

N - 2

N - 2

N - 3

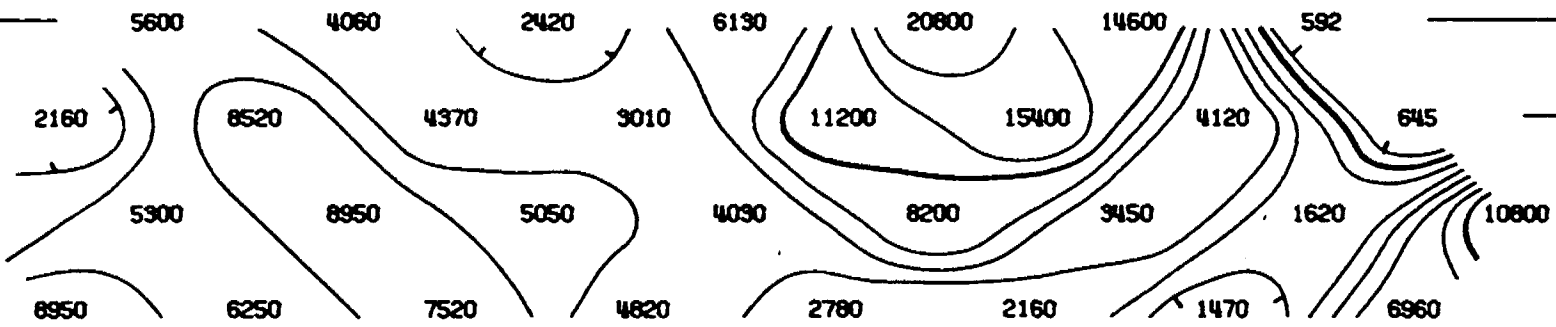
N - 3

N - 4

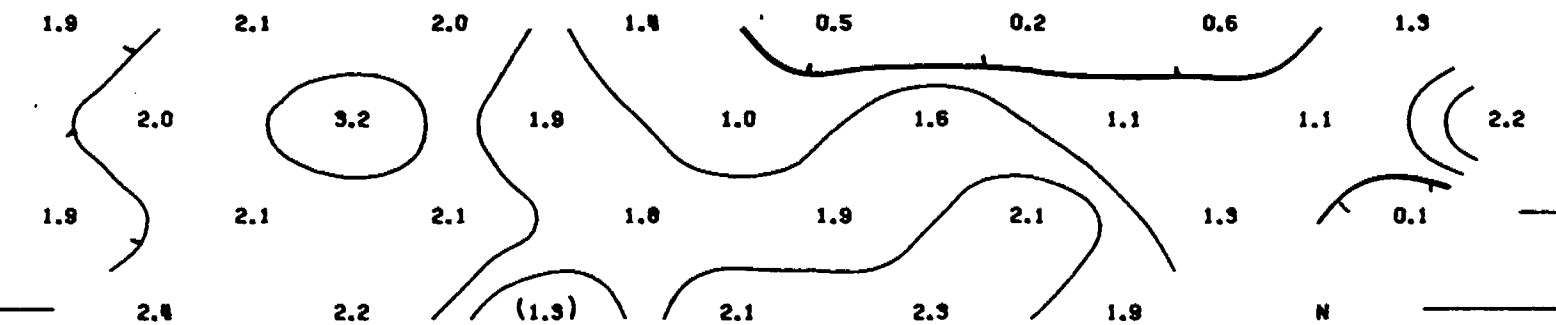
N - 4

N - 5

N - 5



N - 1	NR	0.2	0.3	0.3	0.3	0.2	0.1	0.4	0.2	NR
N - 2	0.4	0.4	0.4	0.4	0.2	0.1	0.3	0.7	0.2	
N - 3	0.9	0.3	0.5	0.6	0.1	0.1	0.3	0.2		
N - 4	0.4	0.5	(0.5)	0.3	0.1	0.1	N			



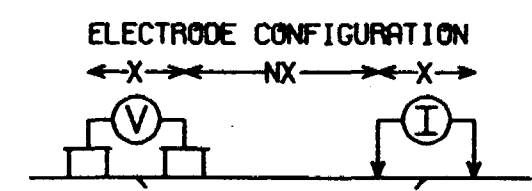
2.567

DWG. NO. - I.P. - 5814-15

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 24W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

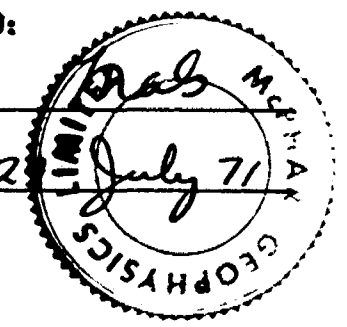
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED: _____

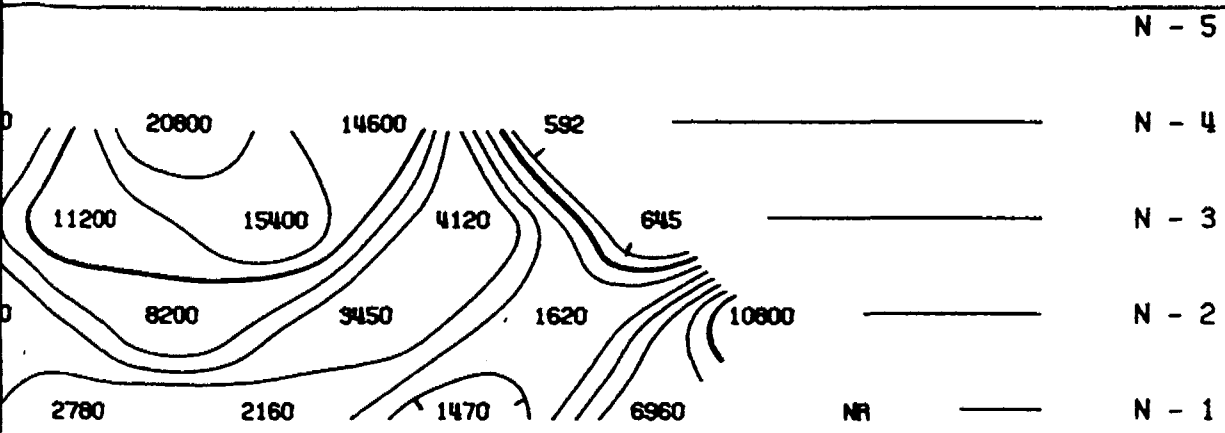
DATE: 21 July 71



McPHAR GEOPHYSICS

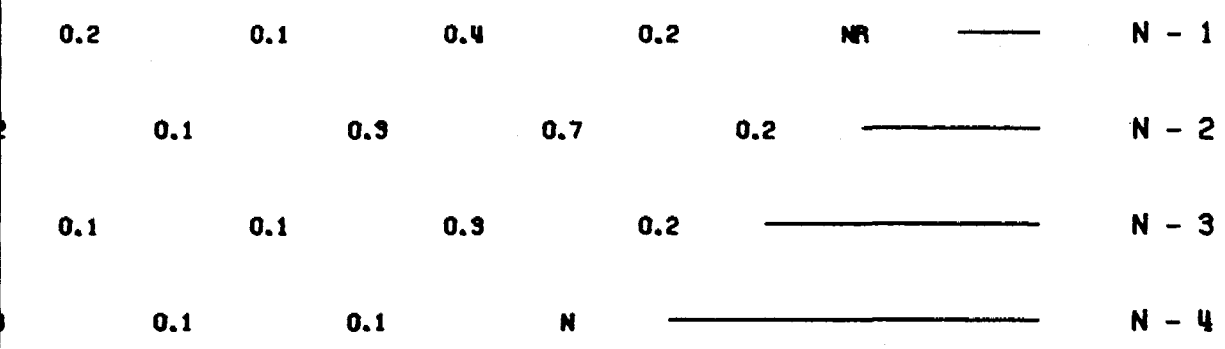
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

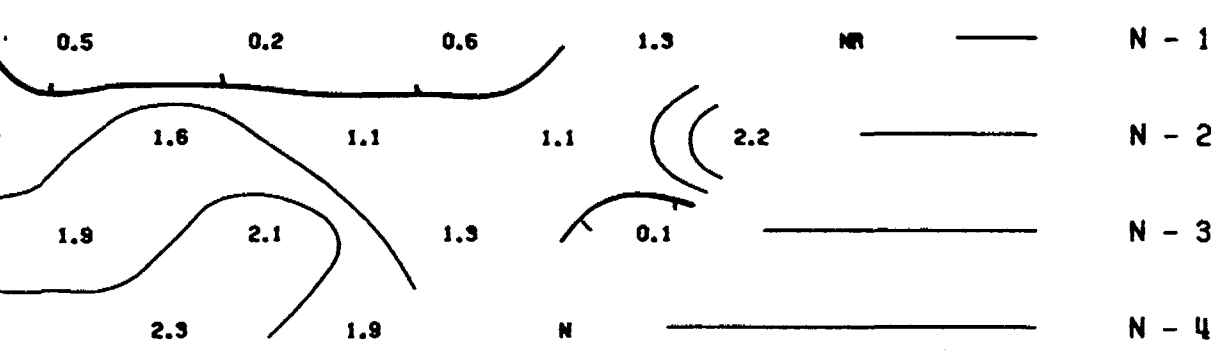


RESISTIVITY (APP.) IN OHM FEET / 2π

METAL FACTOR (APP.)



FREQUENCY EFFECT (APP.) IN %



N - 5
N - 4
N - 3
N - 2
N - 1
N - 1
N - 2
N - 3
N - 4
N - 5
N - 1
N - 2
N - 3
N - 4
N - 5

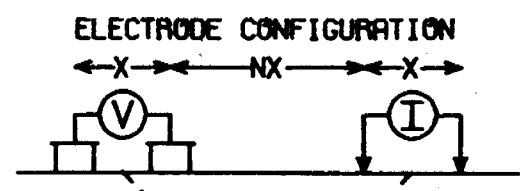
2.567

DWG. NO. - I.P. - 5814-14

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 28H



PLOTTING POINT
X X = 400'

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

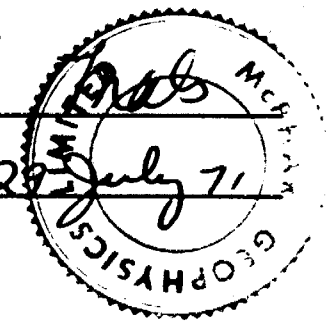
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

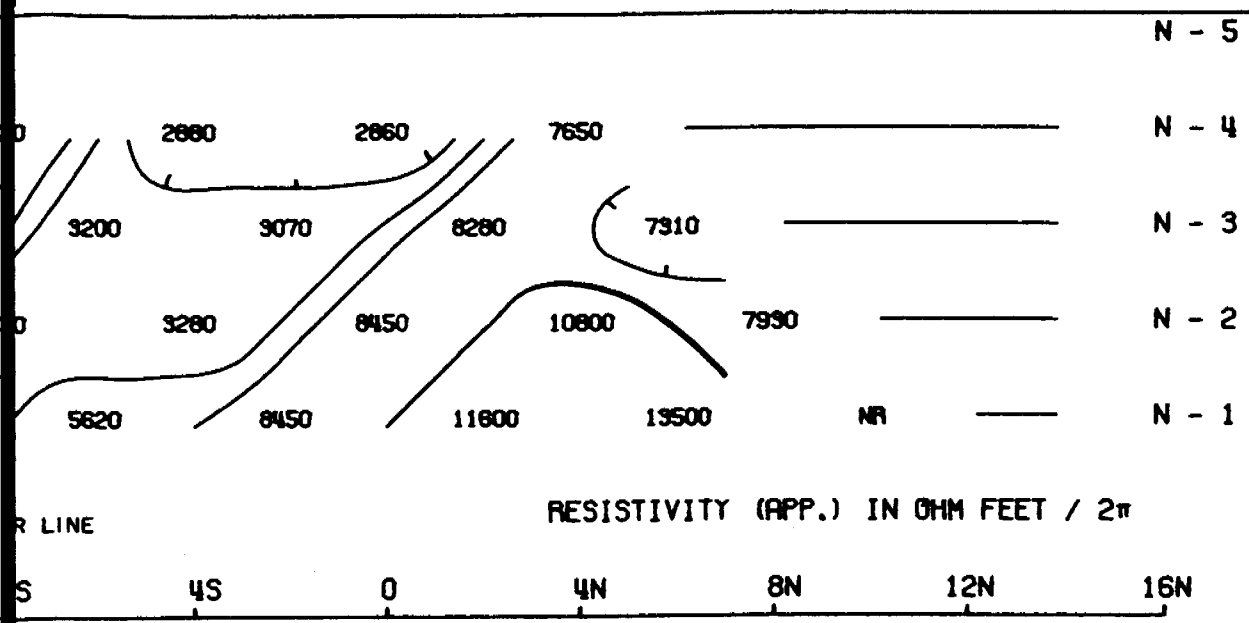
DATE: 28 July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

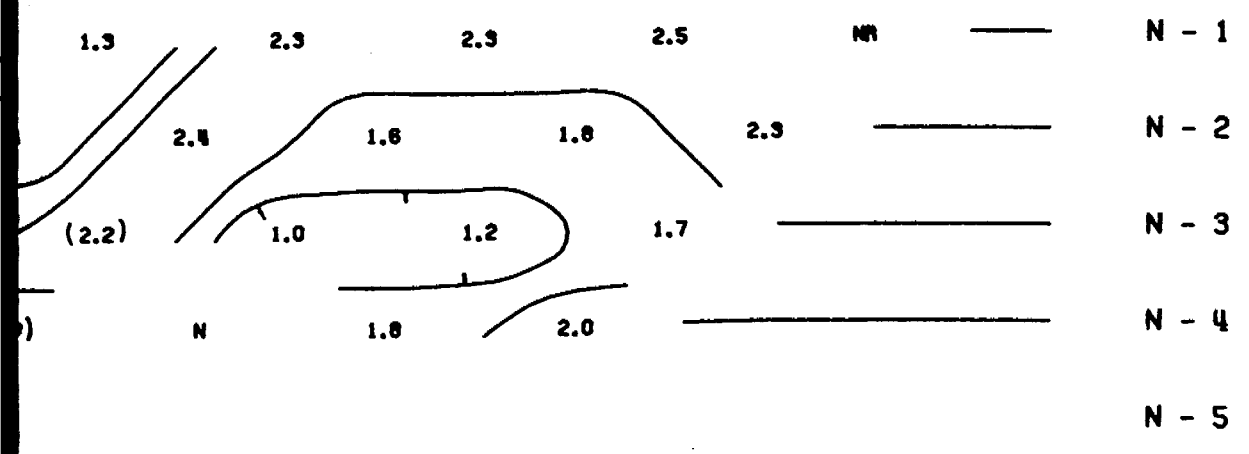


RESISTIVITY (APP.) IN OHM FEET / 2π

METAL FACTOR (APP.)

0.2	0.9	0.2	0.2	NR	N - 1
0.8	0.2	0.2	0.9		N - 2
(0.7)	0.9	0.1	0.2		N - 3
N	0.6	0.9			N - 4
					N - 5

FREQUENCY EFFECT (APP.) IN %



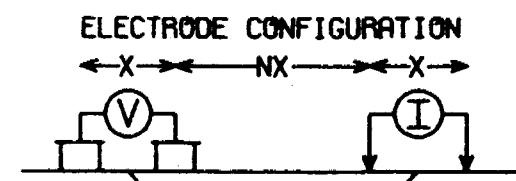
2.567

DWG. NO. - I.P. - 5814 - II

LAVA MINERALS, LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 36W



PLOTTING POINT → X X = 100'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

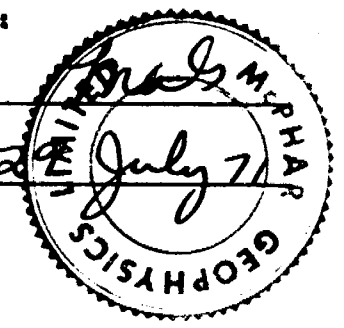
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE:

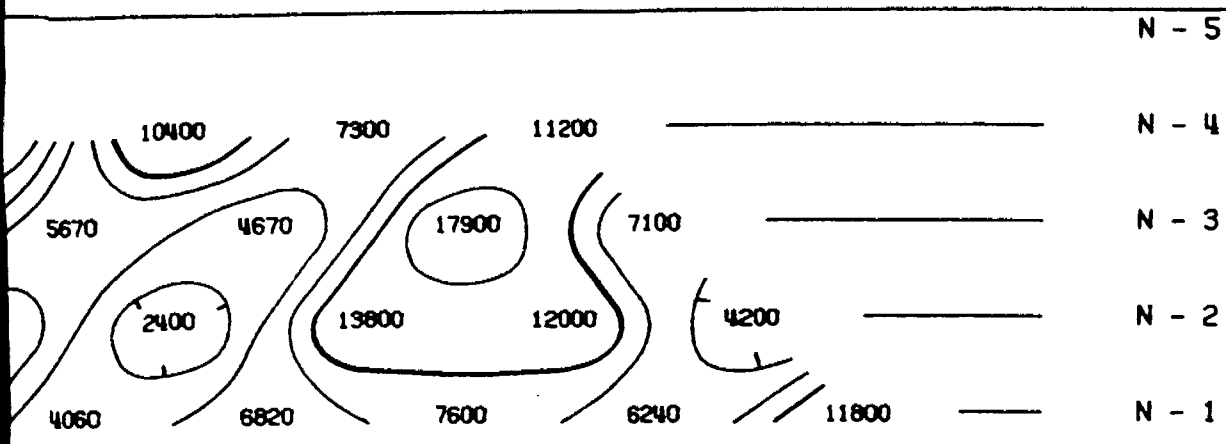


NOTE: CONTOURS AT LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

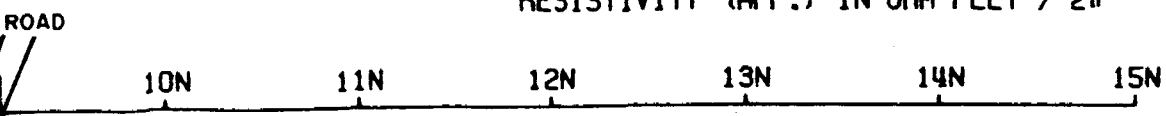
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



RESISTIVITY (APP.) IN OHM FEET / 2π



METAL FACTOR (APP.)

0.4	0.4	0.2	0.2	0.1	—	N - 1
0.6	0.2	0.2	0.9	—	—	N - 2
0.4	0.5	0.2	0.9	—	—	N - 3
0.2	0.9	0.2	—	—	—	N - 4
						N - 5

FREQUENCY EFFECT (APP.) IN %

1.5	2.5	1.8	1.5	1.4	—	N - 1
1.5	2.4	2.0	1.5	—	—	N - 2
2.1	2.4	2.8	2.1	—	—	N - 3
2.3	2.4	2.2	—	—	—	N - 4
						N - 5

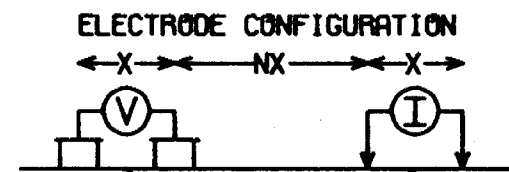
2.567

DWG. NO. - I.P. - 5814-1

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 72W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE **————**
 PROBABLE **.....**
 POSSIBLE **////**

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

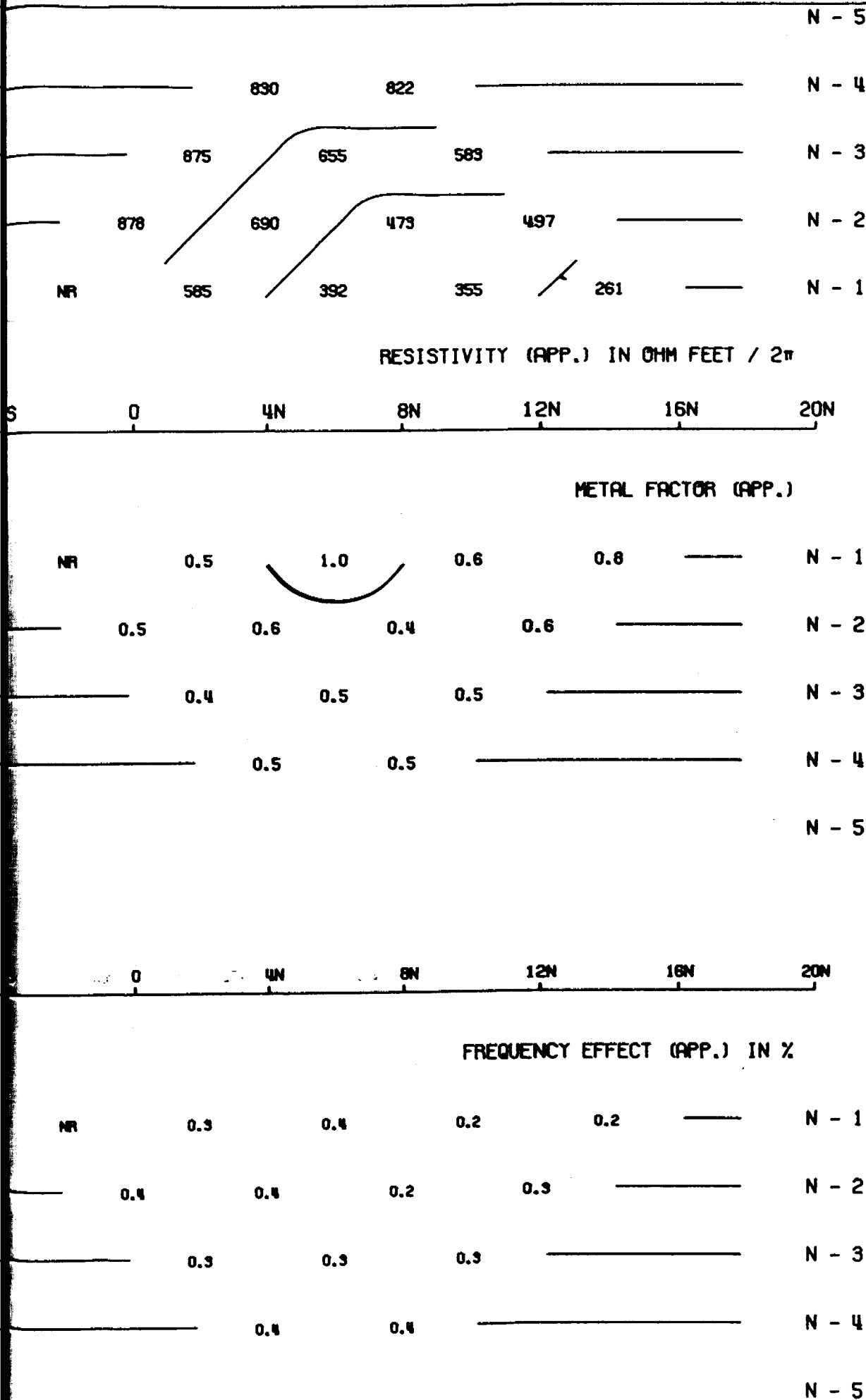
DATE: 27 July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/85 COMPUTER AND A CALCOMP PLOTTER



N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2"

285

245

5090

NR

METAL FACTOR (APP.)

N - 1

N - 2

N - 3

N - 4

N - 5

285

245

20

NR

0.2

FREQUENCY EFFECT (APP.) IN %

N - 1

N - 2

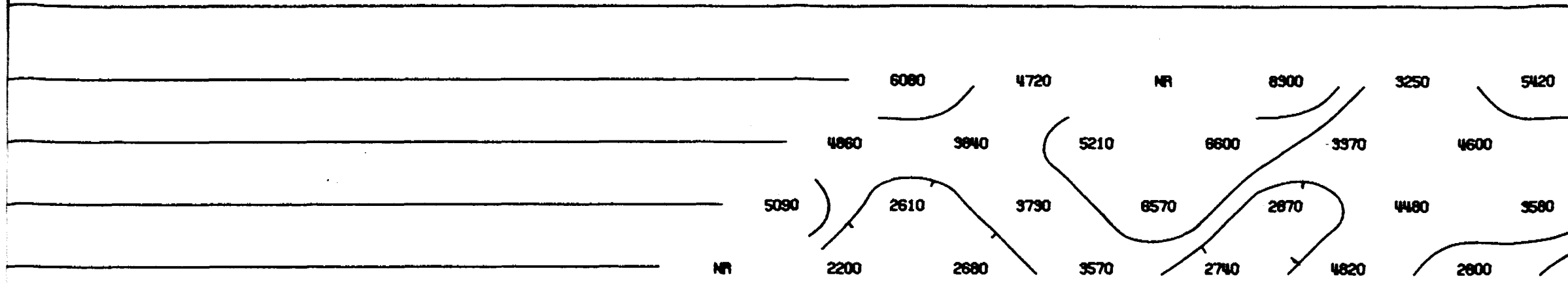
N - 3

N - 4

N - 5

NR

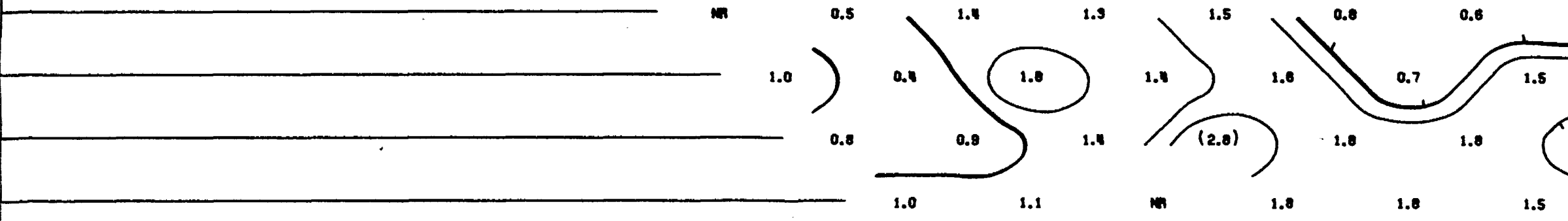
1.0



285 245 205 165 125 85 45 0 4N

	NR	0.2	0.5	0.4	0.5	0.2	0.2
	0.2	0.2	0.5	0.2	0.6	0.2	0.4
	0.2	0.2	0.3	(0.4)	0.5	0.4	
		0.2	0.2	NR	0.2	0.6	0.3

285 245 205 165 125 85 45 0 4N



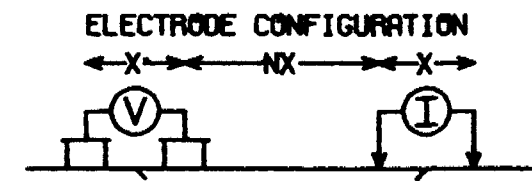
2.567

DWG. NO. - I.P. - 5814-9

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 40W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

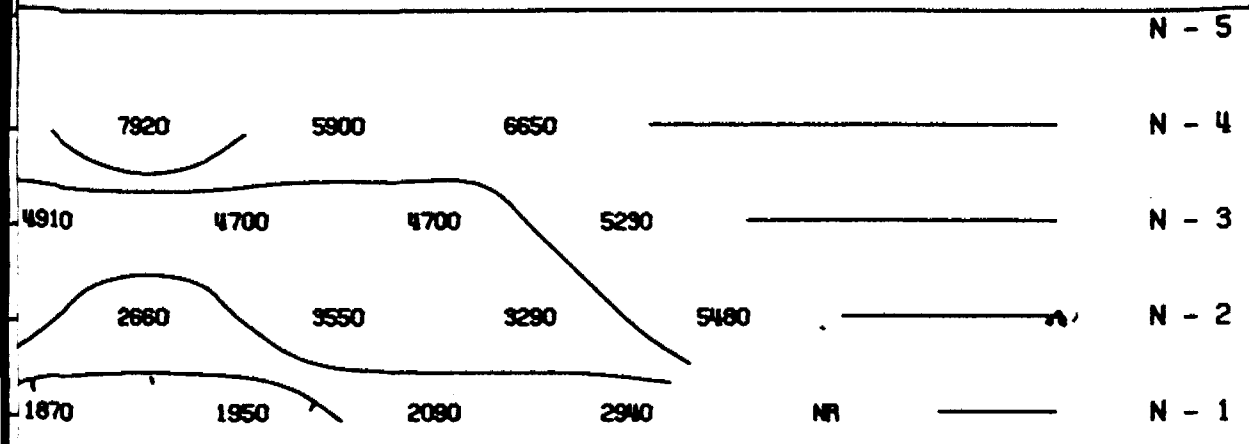
DATE: 29 July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



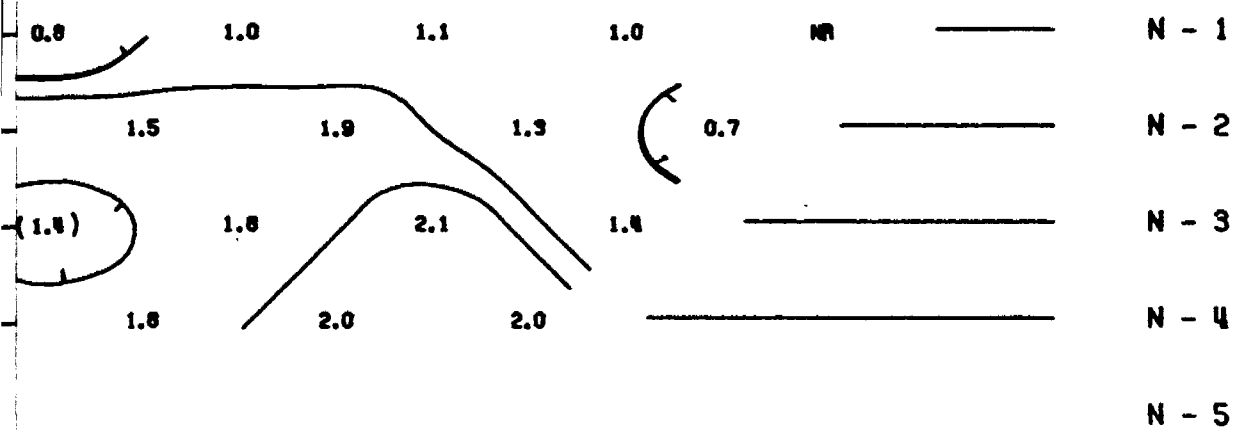
RESISTIVITY (APP.) IN OHM FEET / 2π

POWER LINE
8N 12N 16N 20N 24N 28N

METAL FACTOR (APP.)



FREQUENCY EFFECT (APP.) IN %



N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

285

245

20

4680

769

METAL FACTOR (APP.)

N - 1

0.4

N - 2

0.5

N - 3

N - 4

N - 5

285

245

20

FREQUENCY EFFECT (APP.) IN %

N - 1

1.7

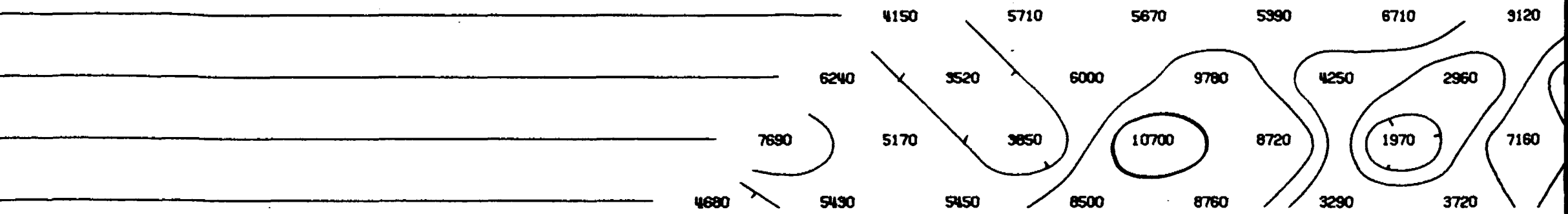
N - 2

2.0

N - 3

N - 4

N - 5



285

245

205

165

125

85

45

0

4N

HWY 144

POW

0.4

0.9

0.4

0.2

0.2

0.5

0.5

0.9

0.4

0.4

0.2

0.2

0.5

0.2

0.5

0.4

0.9

0.1

0.5

0.6

0.4

0.9

0.2

0.4

N

(0.4)

285

245

205

165

125

85

45

0

4N

1.7

1.7

2.2

1.9

2.1

1.5

1.7

2.0

1.9

1.5

1.8

2.0

0.9

1.4

3.2

1.5

1.8

1.2

2.1

1.7

1.7

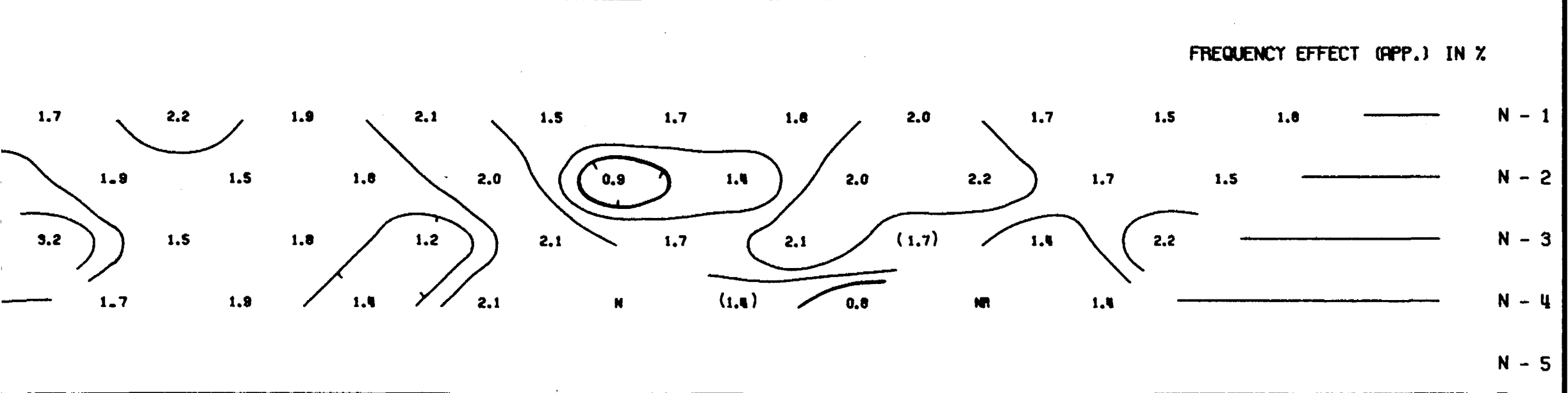
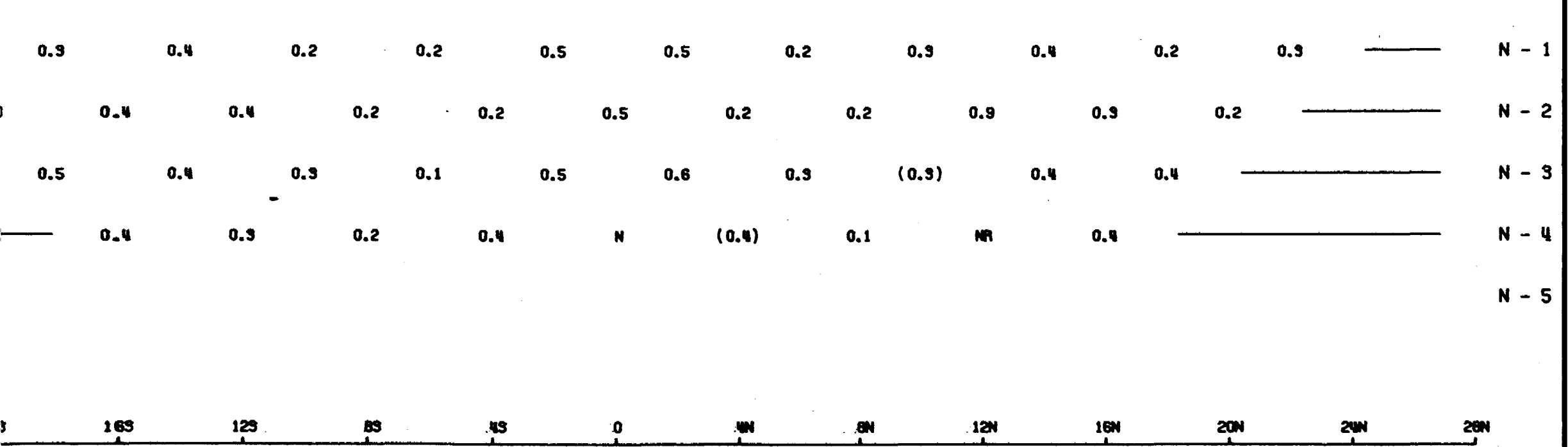
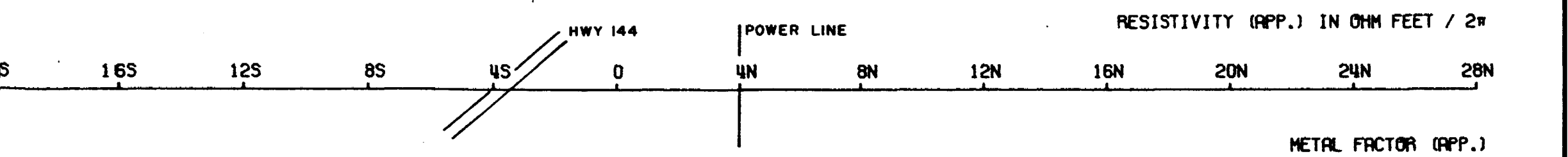
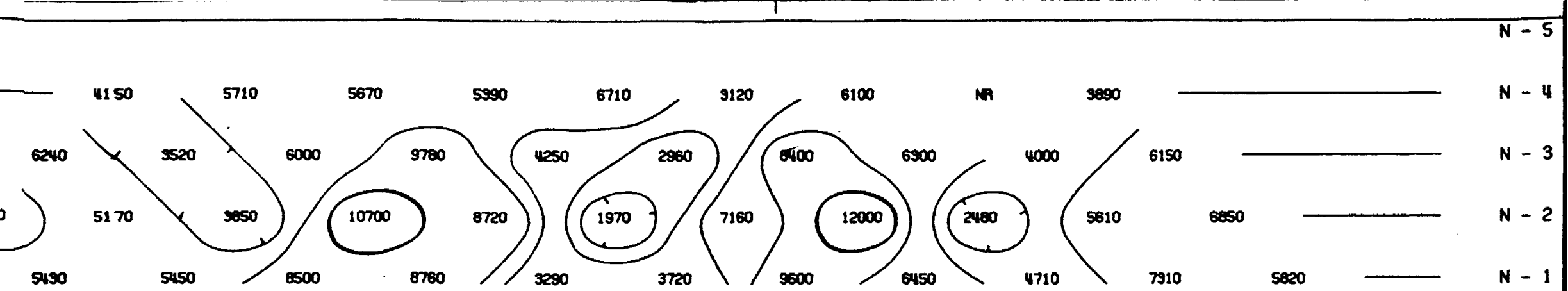
1.9

1.4

2.1

N

(1.4)



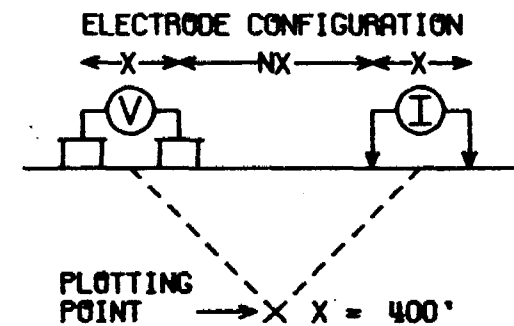
2.567

DWG. NO. - I.P. - 5814-10

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.O., ONTARIO

LINE NO. - 36W



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE: *July 71*



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

N - 5

N - 4

N - 3

N - 2

N - 1

N - 1

N - 2

N - 3

N - 4

N - 5

N - 1

N - 2

N - 3

N - 4

N - 5

6100 NR 3890

6400 6300 4000 6150

12000 2480 5610 6850

9600 6450 4710 7310 5820

RESISTIVITY (APP.) IN OHM FEET / 2π

8N 12N 16N 20N 24N 28N

METAL FACTOR (APP.)

0.2 0.3 0.4 0.2 0.3

0.2 0.9 0.3 0.2

0.3 (0.3) 0.4 0.4

0.1 NR 0.4

8N 12N 16N 20N 24N 28N

FREQUENCY EFFECT (APP.) IN %

1.8 2.0 1.7 1.5 1.8

2.0 2.2 1.7 1.5

2.1 (1.7) 1.4 2.2

0.8 NR 1.4

N - 5

5

N - 4

4

N - 3

3

N - 2

5002

N - 1

6210

1

RESISTIVITY (APP.) IN OHM FEET / 2π

285

245

20

METAL FACTOR (APP.)

N - 1

0.2

1

N - 2

0.2

N - 3

3

N - 4

4

N - 5

5

285

245

20

FREQUENCY EFFECT (APP.) IN %

N - 1

1.2

1

N - 2

2.22

N - 3

3

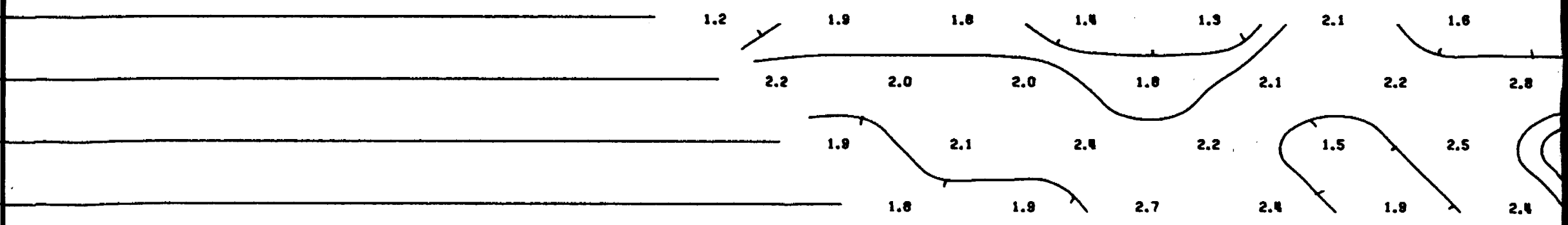
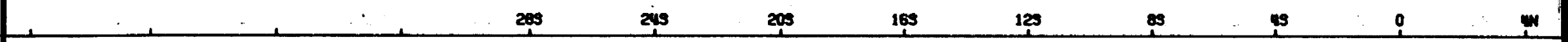
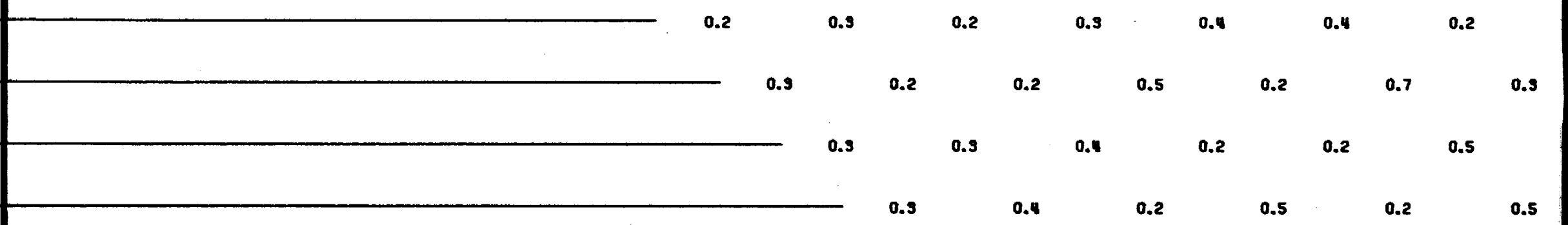
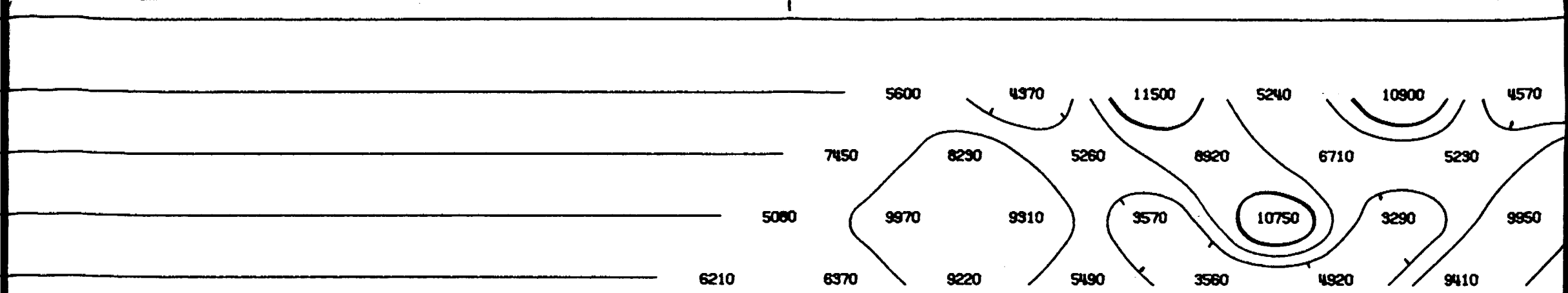
N - 4

4

N - 5

5

1
2.22



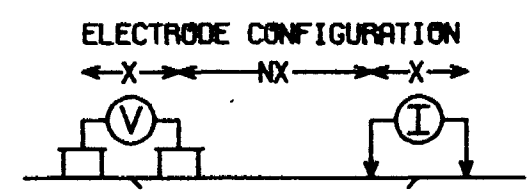
2.567

DWG. NO. - I.P. - 5814-12

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 32W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

NOTE: CONTOURS AT LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

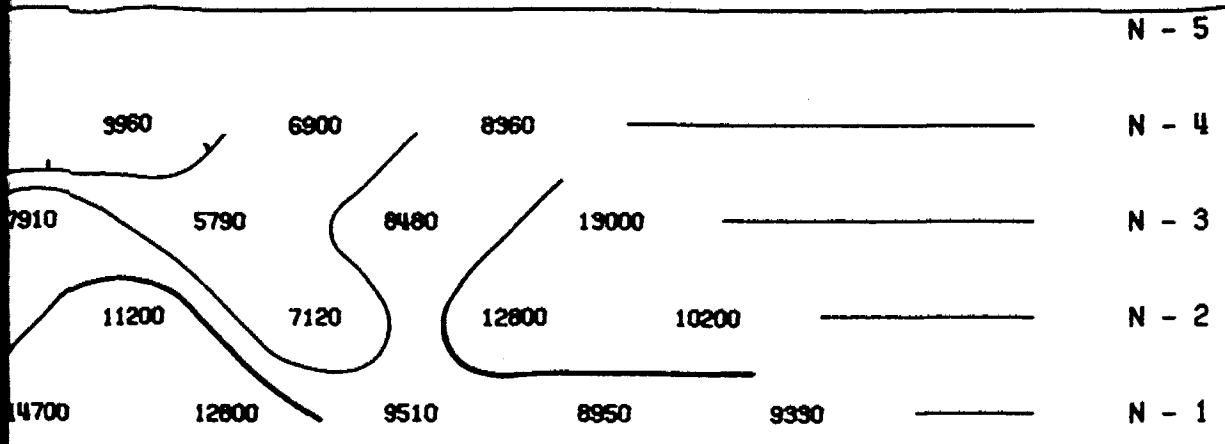
DATE: 20 July 71



McPHAR GEOPHYSICS

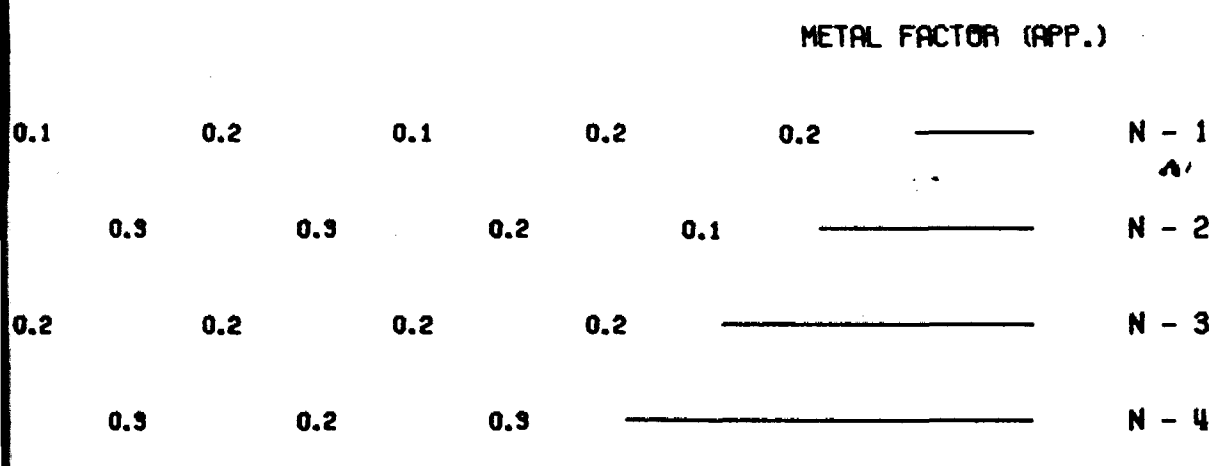
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/85 COMPUTER AND A CALCOMP PLOTTER



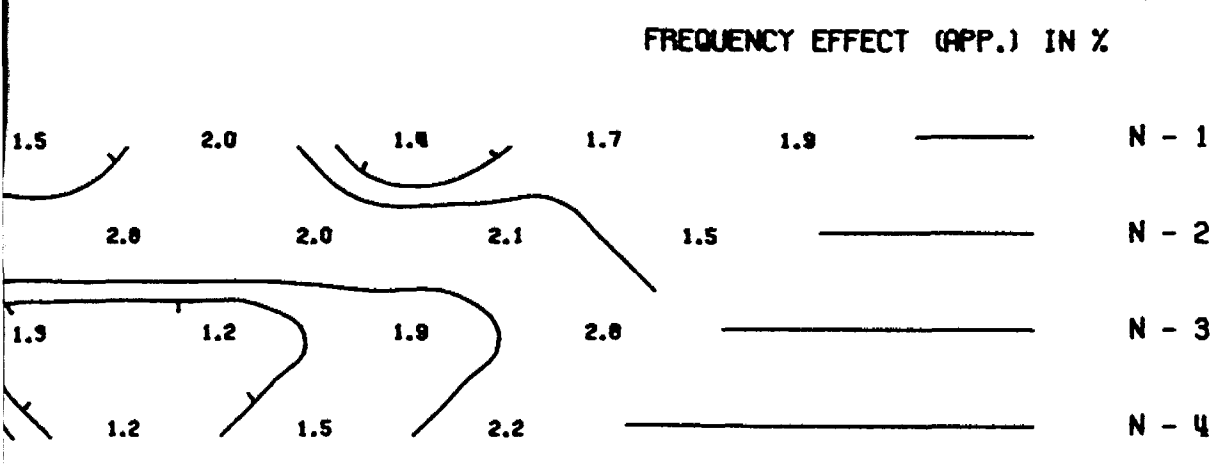
RESISTIVITY (APP.) IN OHM FEET / 2w

8N 12N 16N 20N 24N 28N



METAL FACTOR (APP.)

8N 12N 16N 20N 24N 28N



FREQUENCY EFFECT (APP.) IN %

8N 12N 16N 20N 24N 28N

N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

285

245

205

16

681

7550

9440

624

6840

NR

METAL FACTOR (APP.)

N - 1

NR

0.2

N - 2

0.2

0.2

N - 3

0.2

N - 4

0.2

N - 5

285

245

205

16

FREQUENCY EFFECT (APP.) IN %

N - 1

NR

1.1

N - 2

1.5

1.0

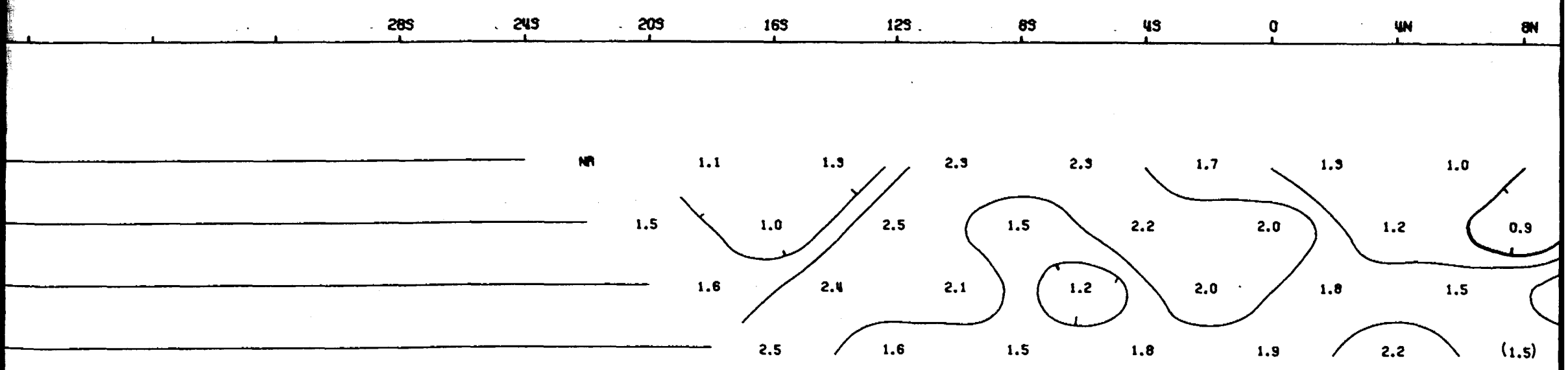
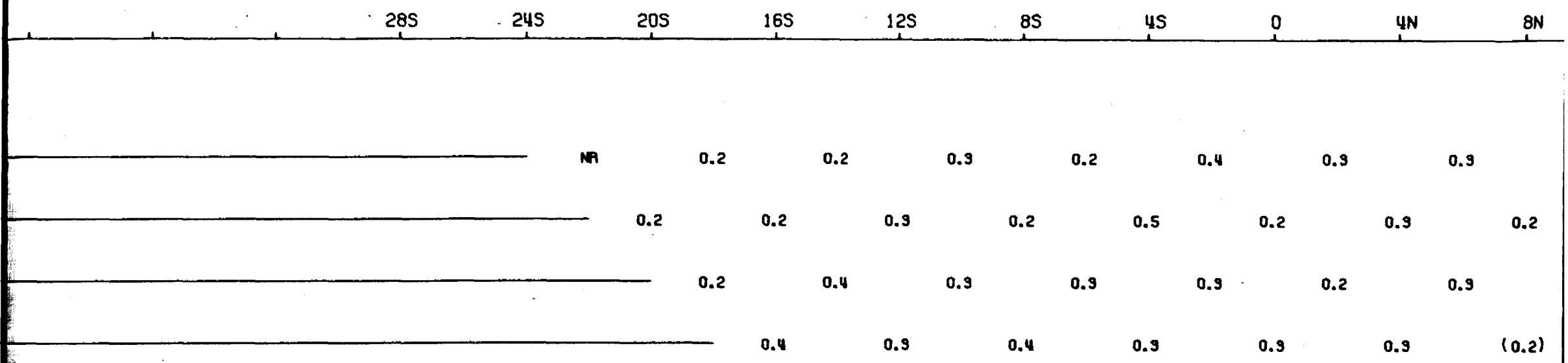
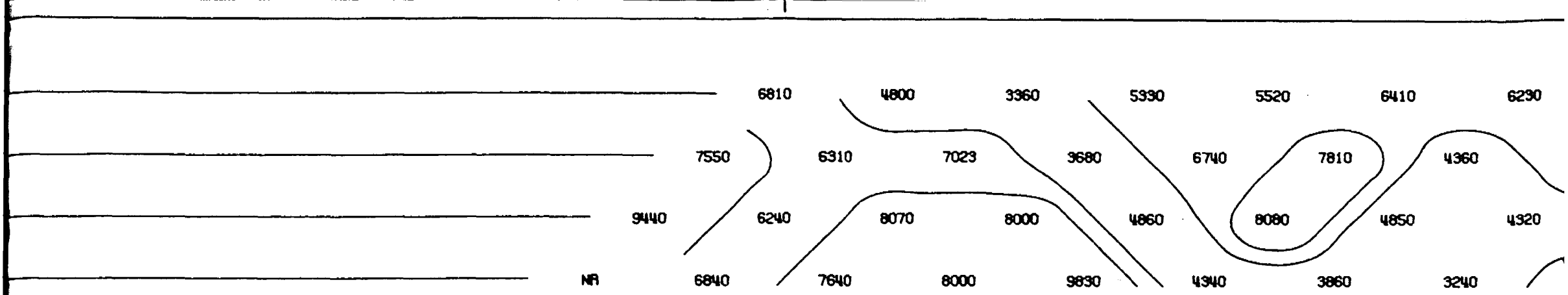
N - 3

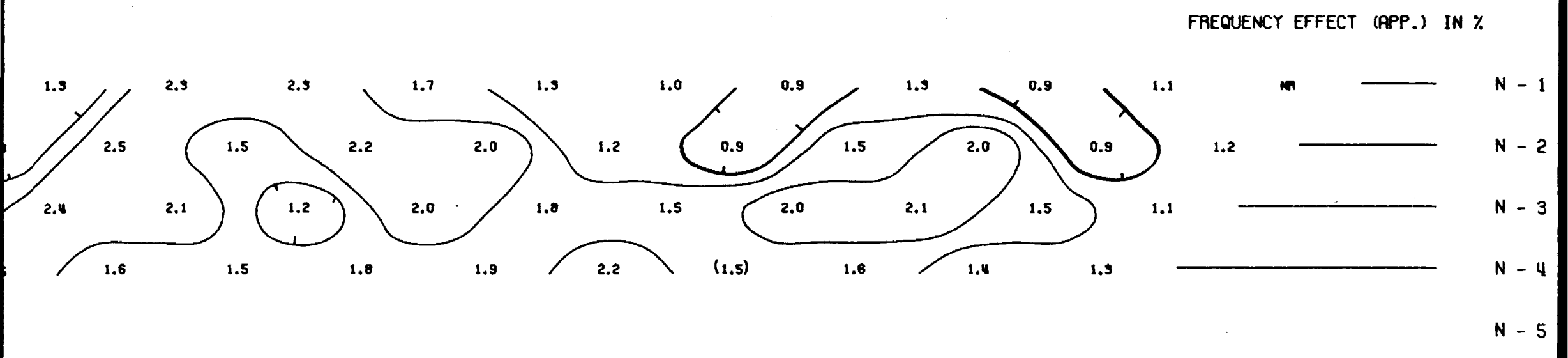
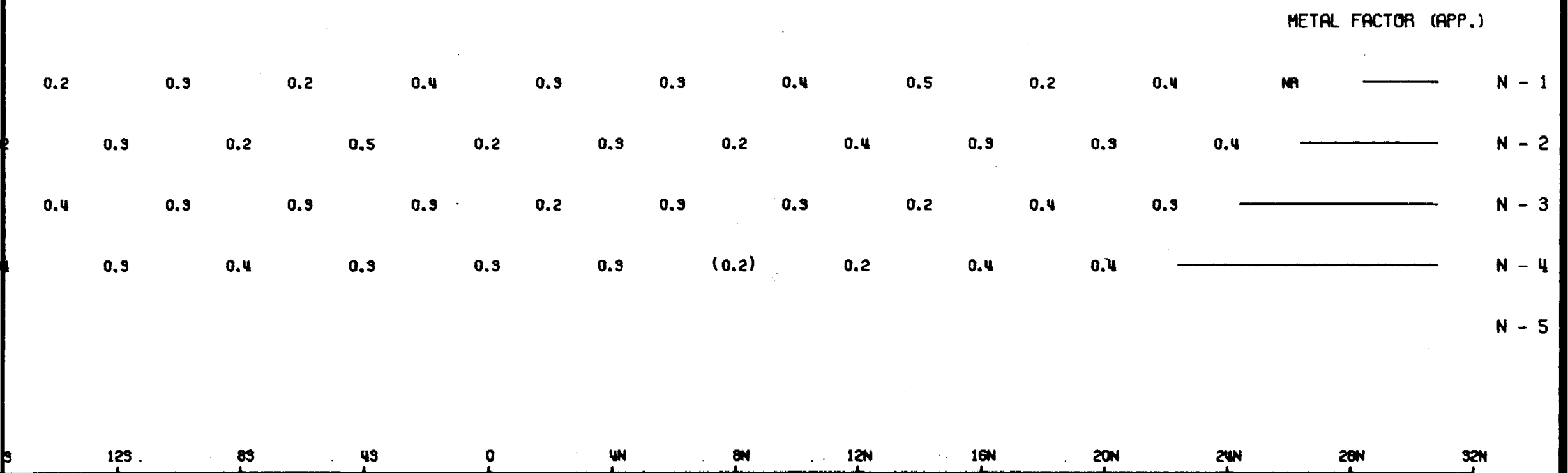
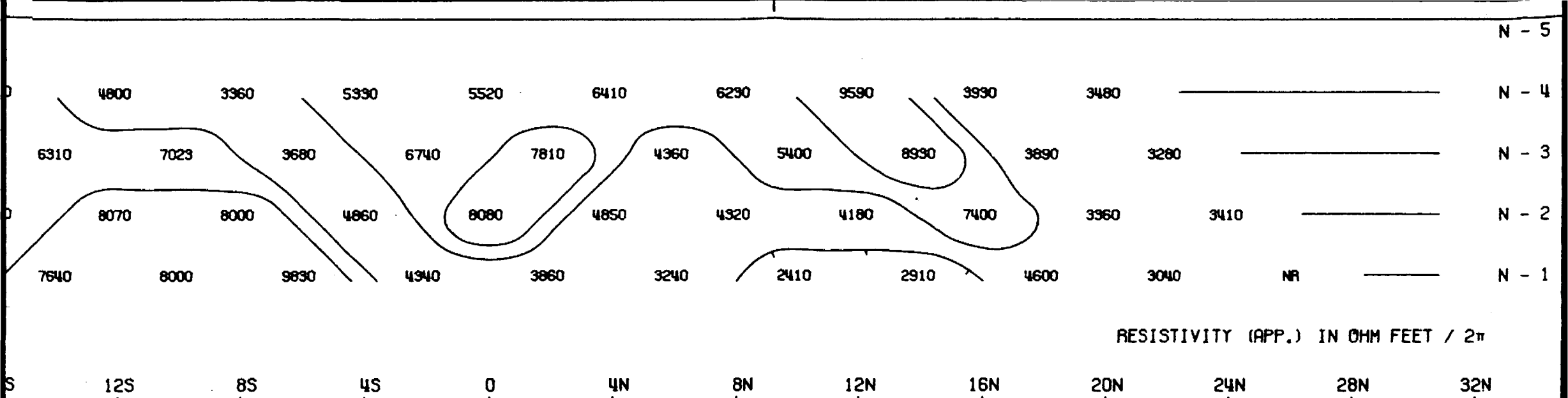
1.6

N - 4

2.5

N - 5

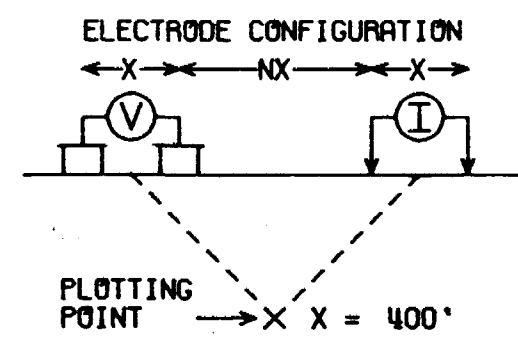




LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 52W



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE: 29 July 71

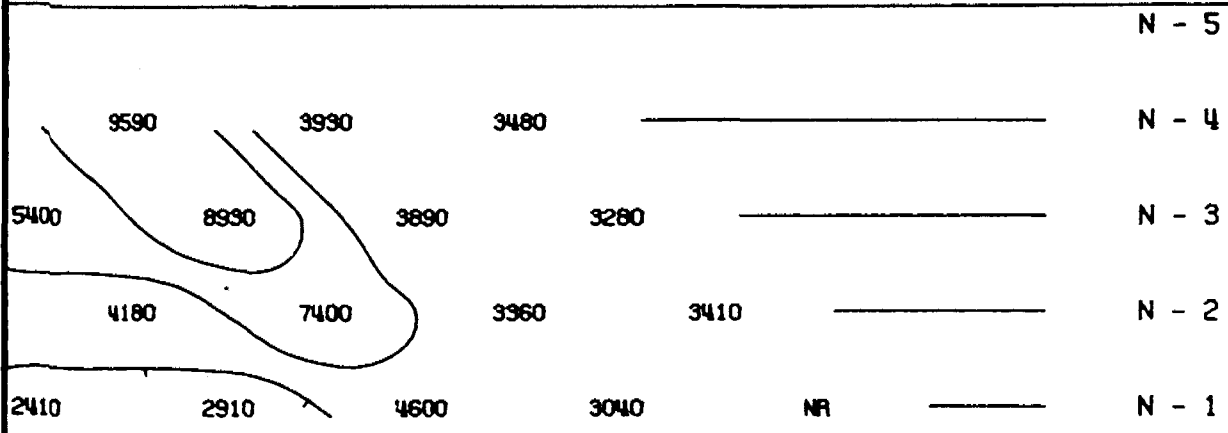


NOTE: CONTOURS AT
LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

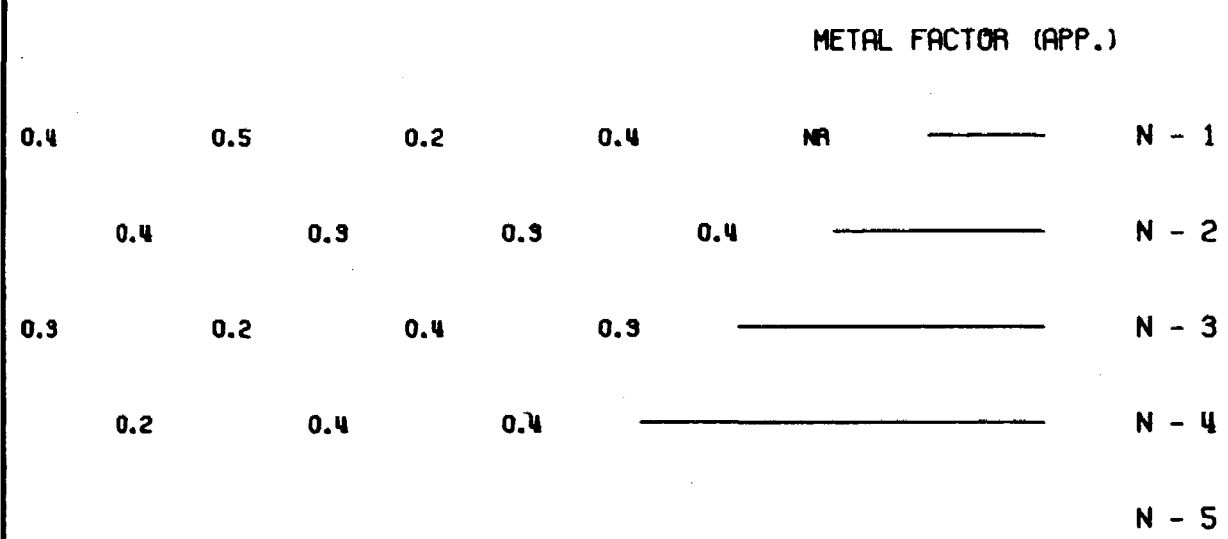
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



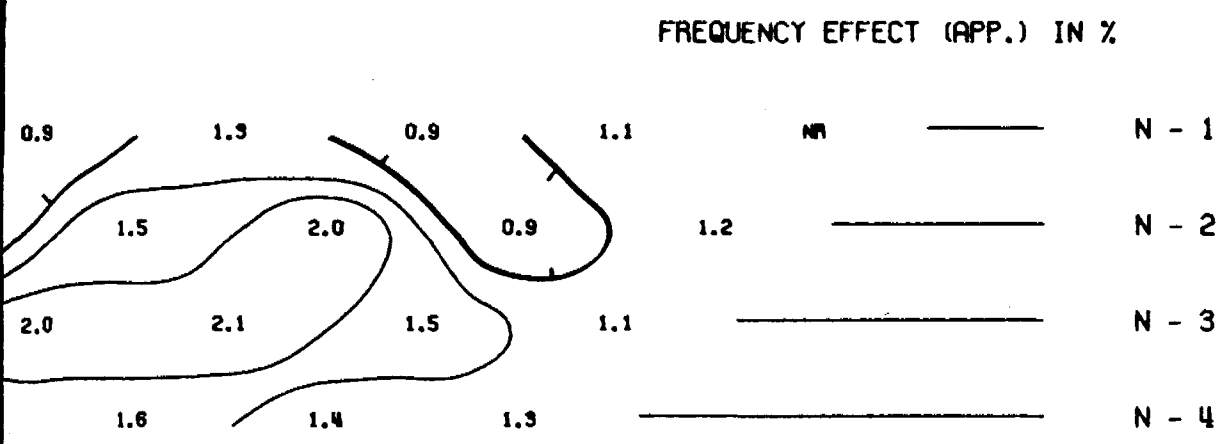
RESISTIVITY (APP.) IN OHM FEET / 2π

12N 16N 20N 24N 28N 32N



METAL FACTOR (APP.)

12N 16N 20N 24N 28N 32N

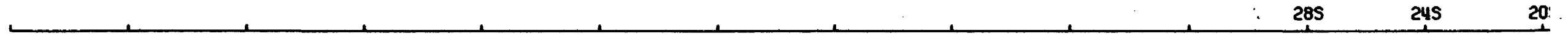


FREQUENCY EFFECT (APP.) IN %

12N 16N 20N 24N 28N 32N

N - 5	5
N - 4	4
N - 3	3
N - 2	7202
N - 1	NR 1

RESISTIVITY (APP.) IN OHM FEET / 2π



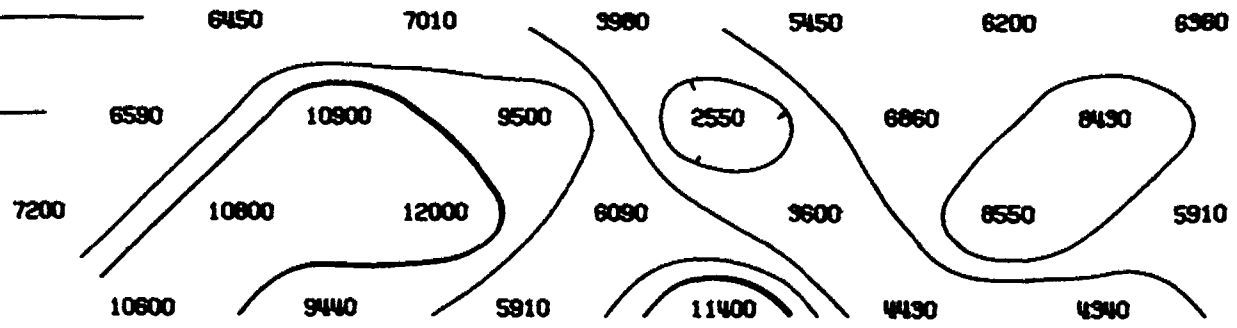
METAL FACTOR (APP.)

N - 1	NR 1
N - 2	0.12
N - 3	3
N - 4	4
N - 5	5



FREQUENCY EFFECT (APP.) IN %

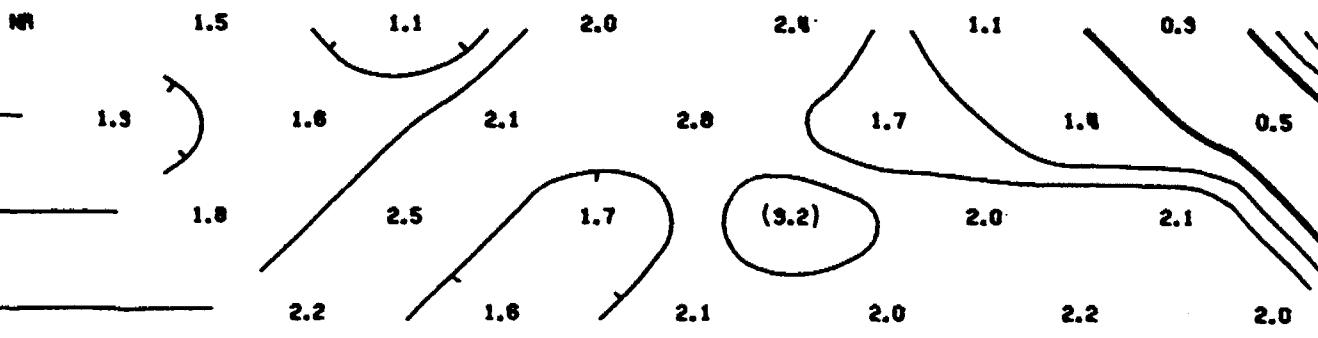
N - 1	NR 1
N - 2	1.12
N - 3	3
N - 4	4
N - 5	5

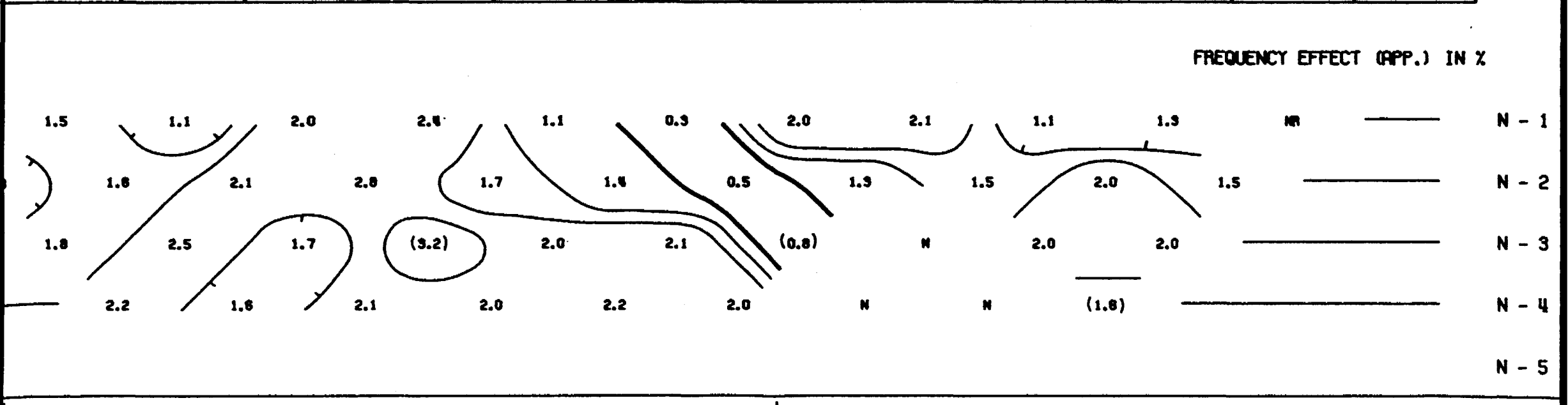
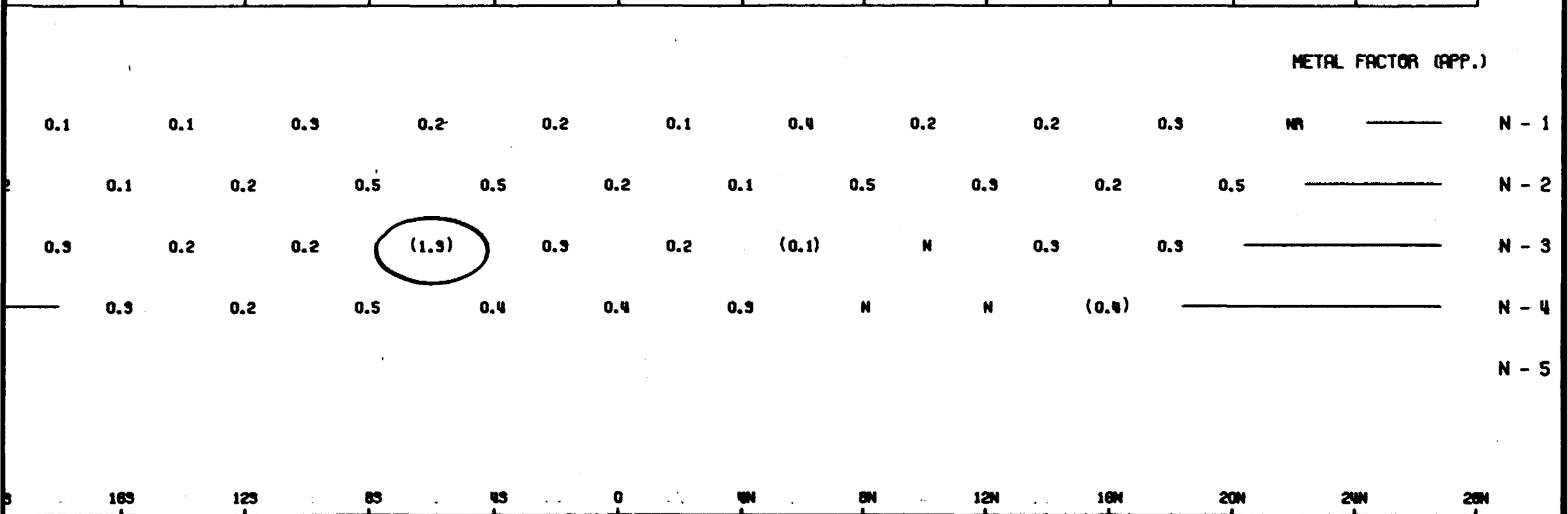
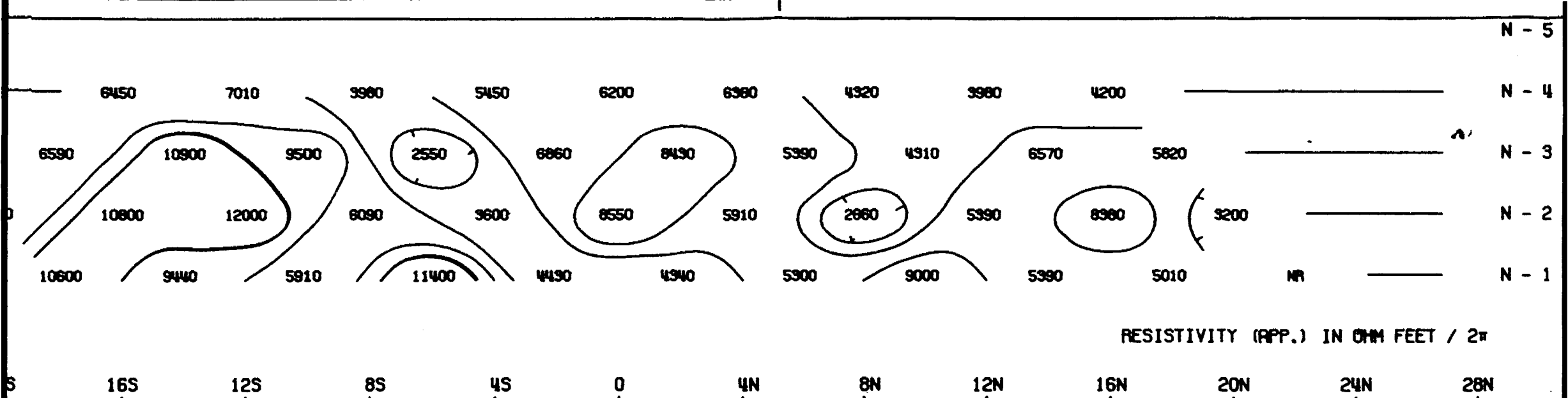


285 245 205 165 125 85 45 0 4N

NR	0.1	0.1	0.3	0.2	0.2	0.1
0.2	0.1	0.2	0.5	0.5	0.2	0.1
0.3	0.2	0.2	(1.3)	0.3	0.2	
0.3	0.2	0.5	0.4	0.4	0.3	

285 245 205 165 125 85 45 0 4N





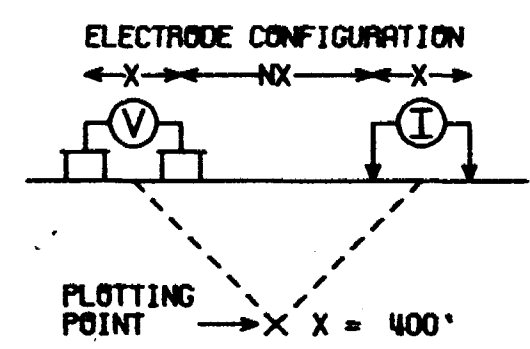
2.567

DWG. NO. - I.P. - 5814 - 7

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 48W



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED: _____

DATE: 29 July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 380/65 COMPUTER AND A CALCOMP PLOTTER

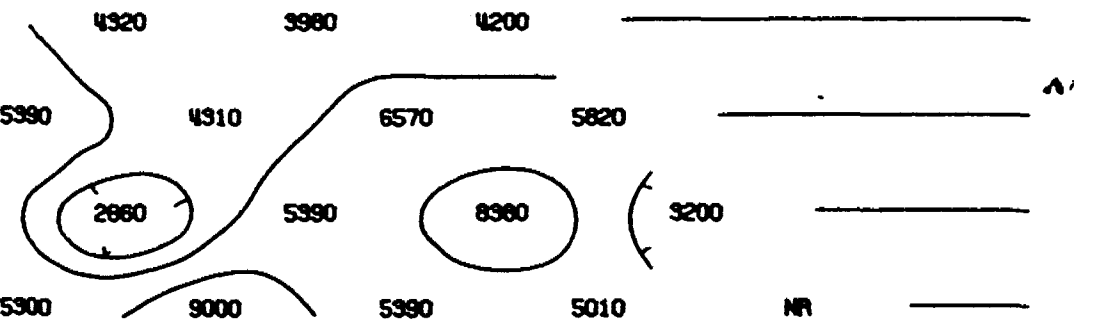
N - 5

N - 4

N - 3

N - 2

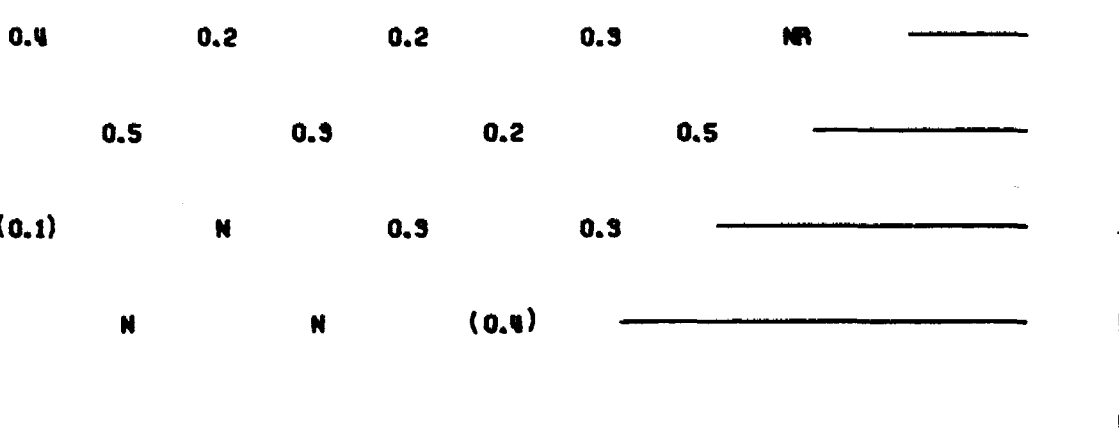
N - 1



RESISTIVITY (APP.) IN OHM FEET / 2 π

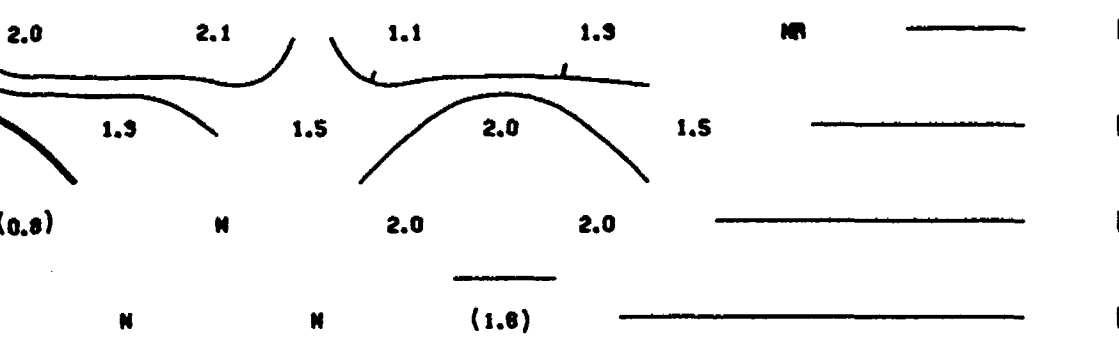
8N 12N 16N 20N 24N 28N

METAL FACTOR (APP.)



8N 12N 16N 20N 24N 28N

FREQUENCY EFFECT (APP.) IN %



N - 5

N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

285

245

375

NR

METAL FACTOR (APP.)

N - 1

N - 2

N - 3

N - 4

N - 5

285

245

0.5

NR

FREQUENCY EFFECT (APP.) IN %

N - 1

N - 2

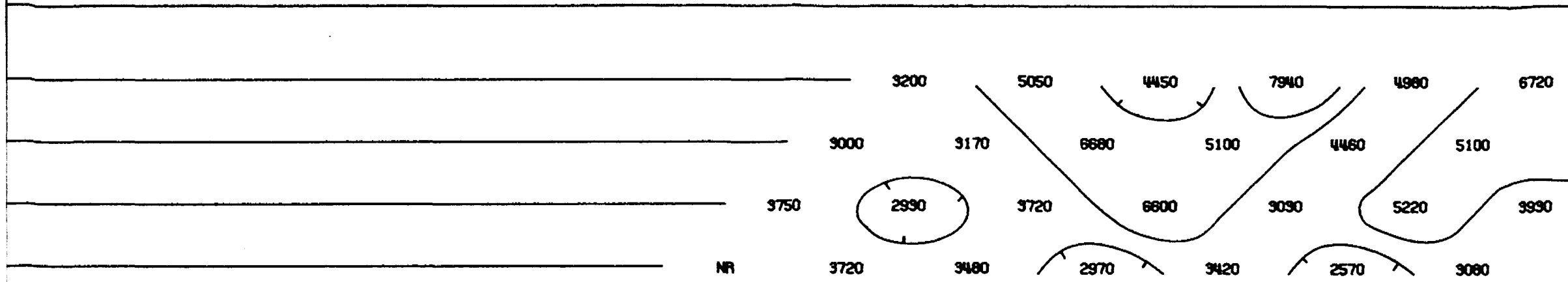
N - 3

N - 4

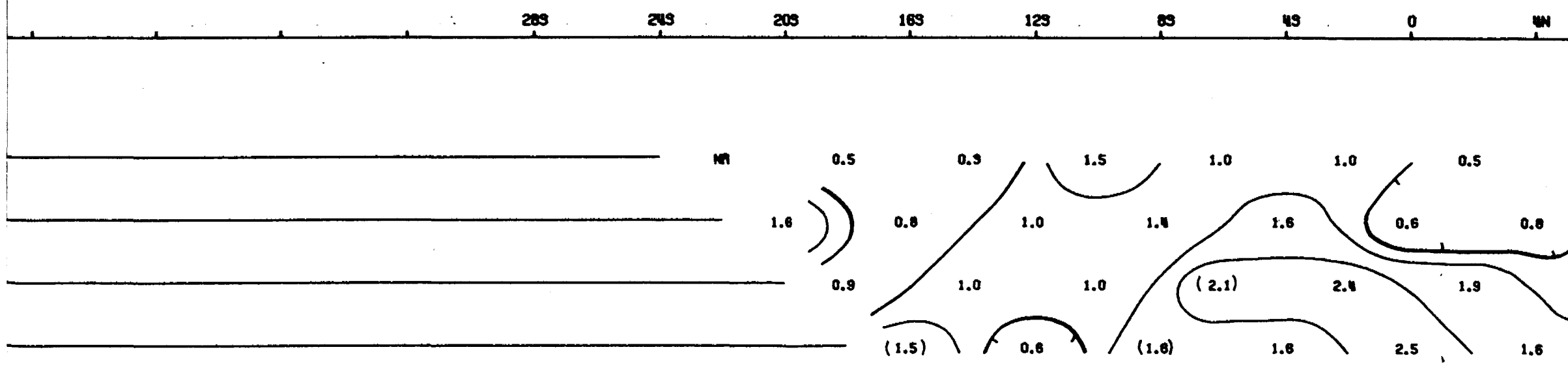
N - 5

NR

1.0



	285	245	205	165	125	85	45	0	4N
NR	0.1	0.1	0.5	0.3	0.4	0.2			
	0.4	0.3	0.3	0.2	0.5	0.1	0.2		
	0.3	0.3	0.1	(0.4)	0.5	0.4			
	(0.5)	0.1	(0.4)	0.2	0.5	0.2			



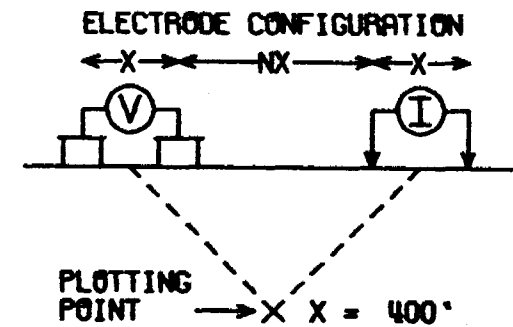
2.567

DWG. NO. - I.P. - 5814 - 8

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 44H



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED: _____

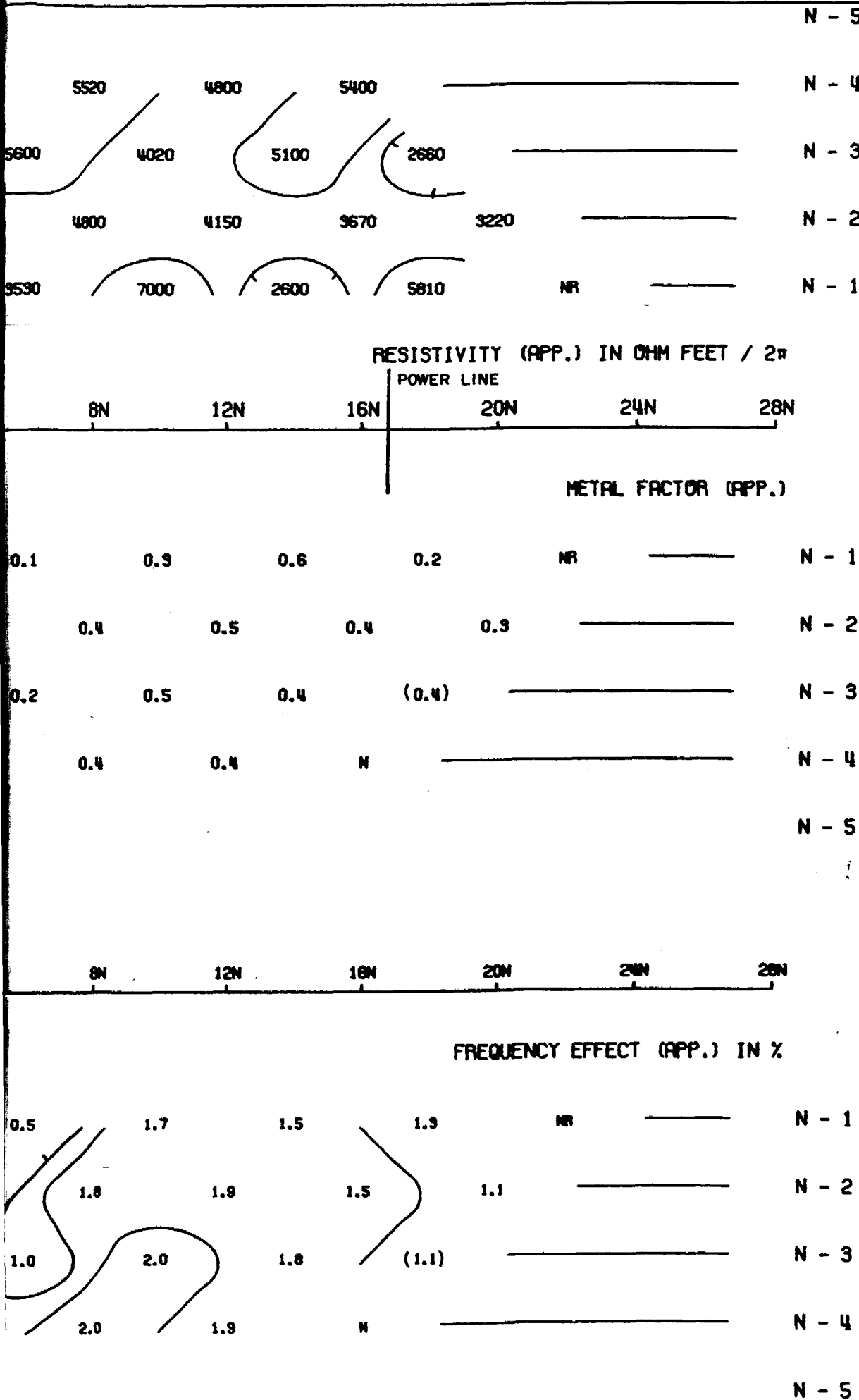
DATE: July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER



N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2W

285

245

205

165

1904

1410

1100

482

376

915

METAL FACTOR (APP.)

N - 1

0.4

0.8

N - 2

0.7

1.0

N - 3

0.8

N - 4

0.8

N - 5

285

245

205

165

FREQUENCY EFFECT (APP.) IN %

N - 1

0.4

0.3

N - 2

0.8

0.2

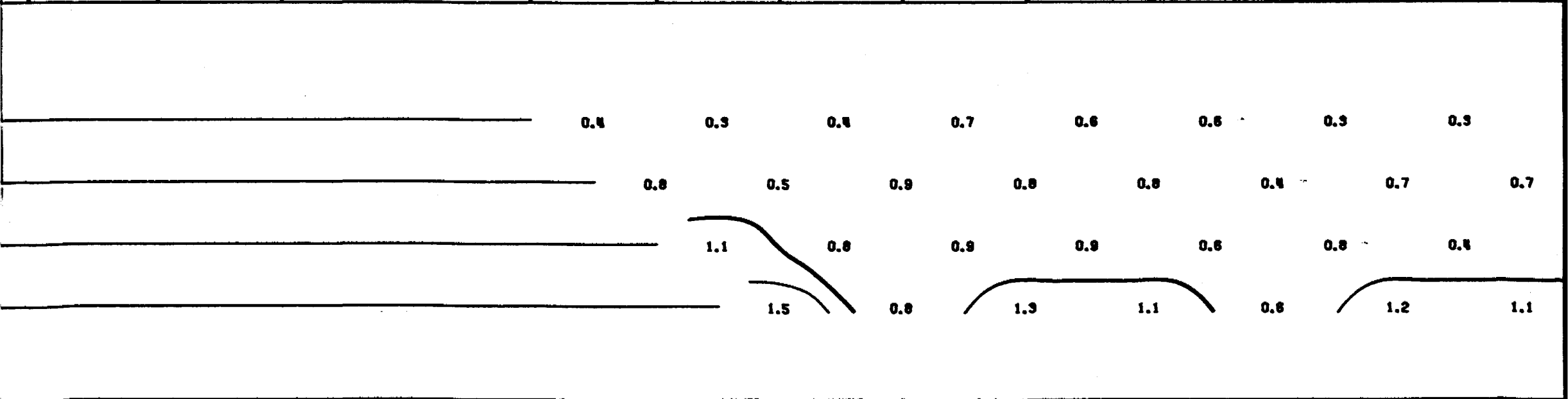
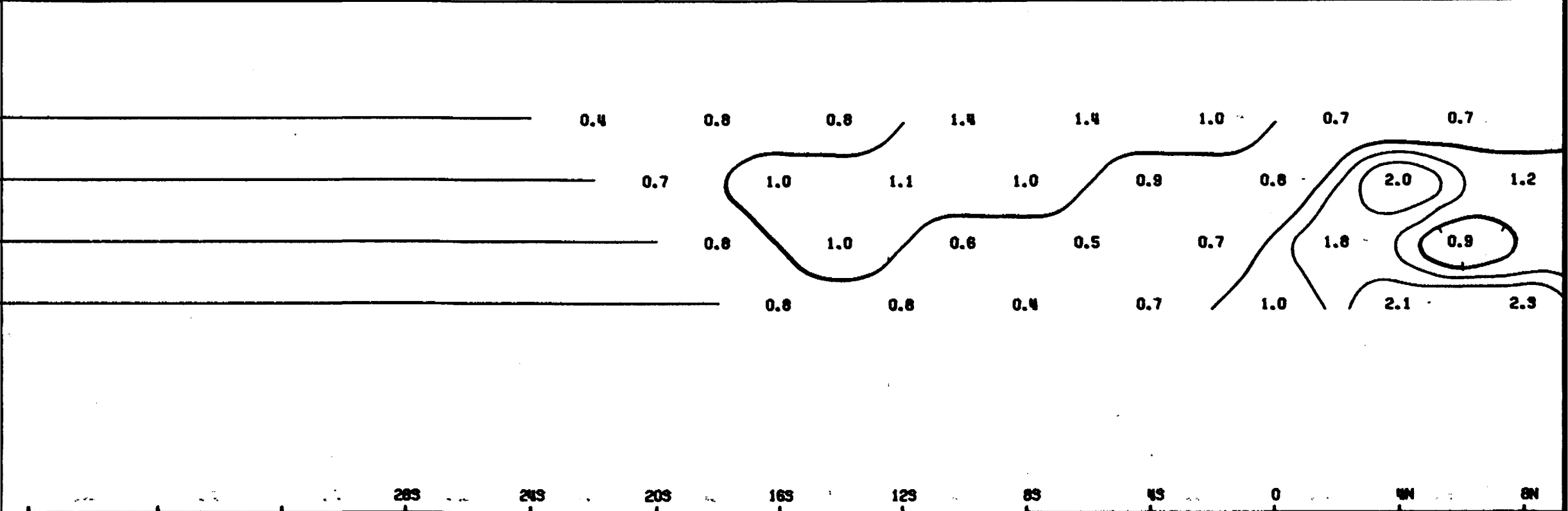
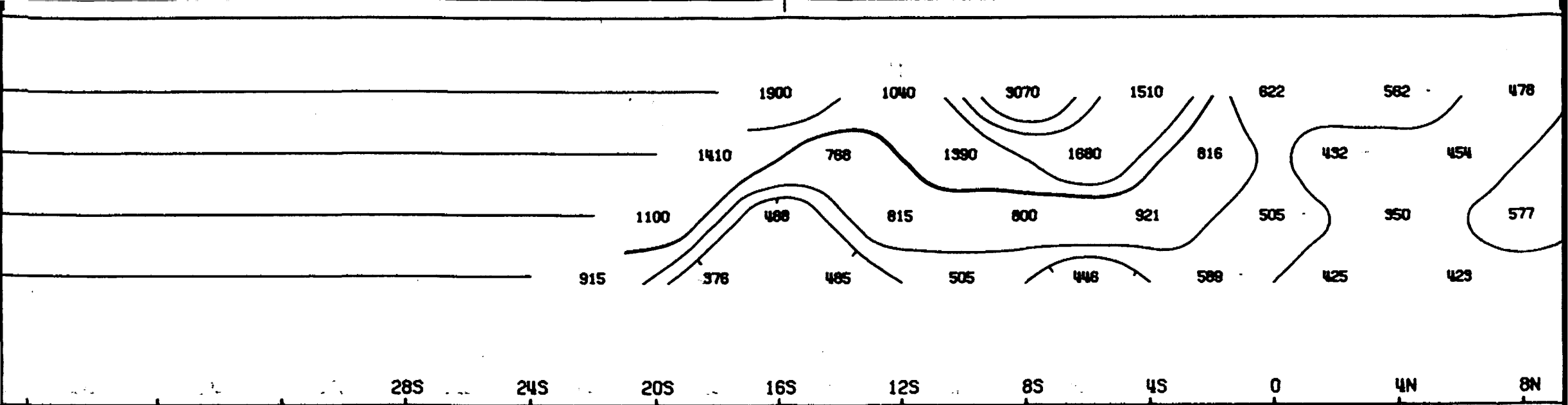
N - 3

1.1

N - 4

1.5

N - 5



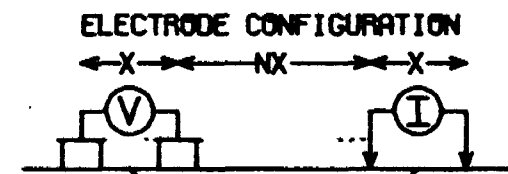
2567

DWG. NO. - I.P. - 5814-3

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.O., ONTARIO

LINE NO. - 64W



PLOTTING POINT → X X = 400'

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE:

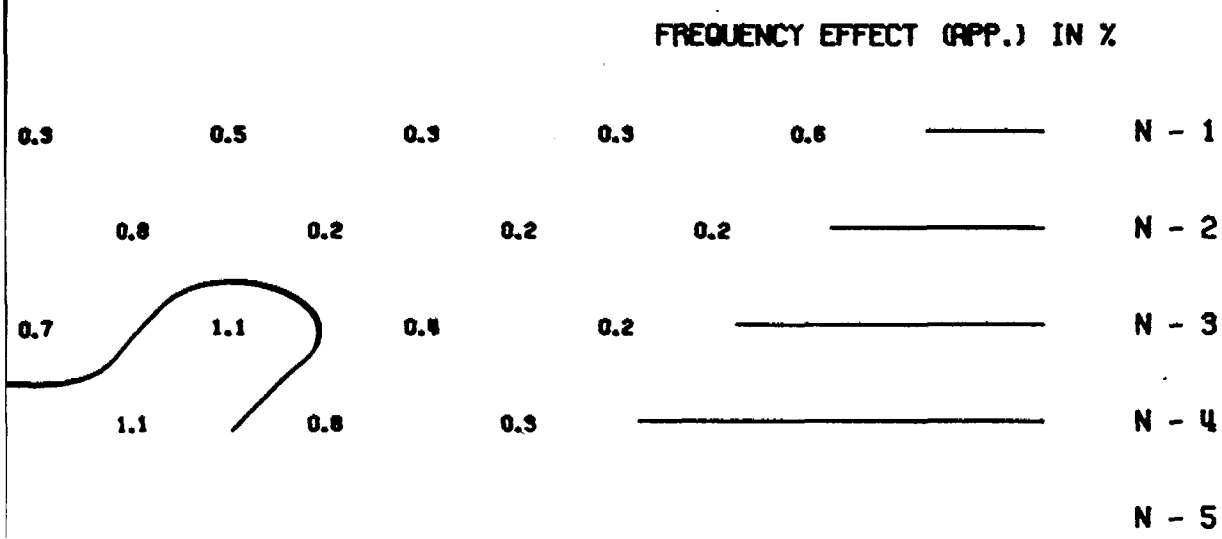
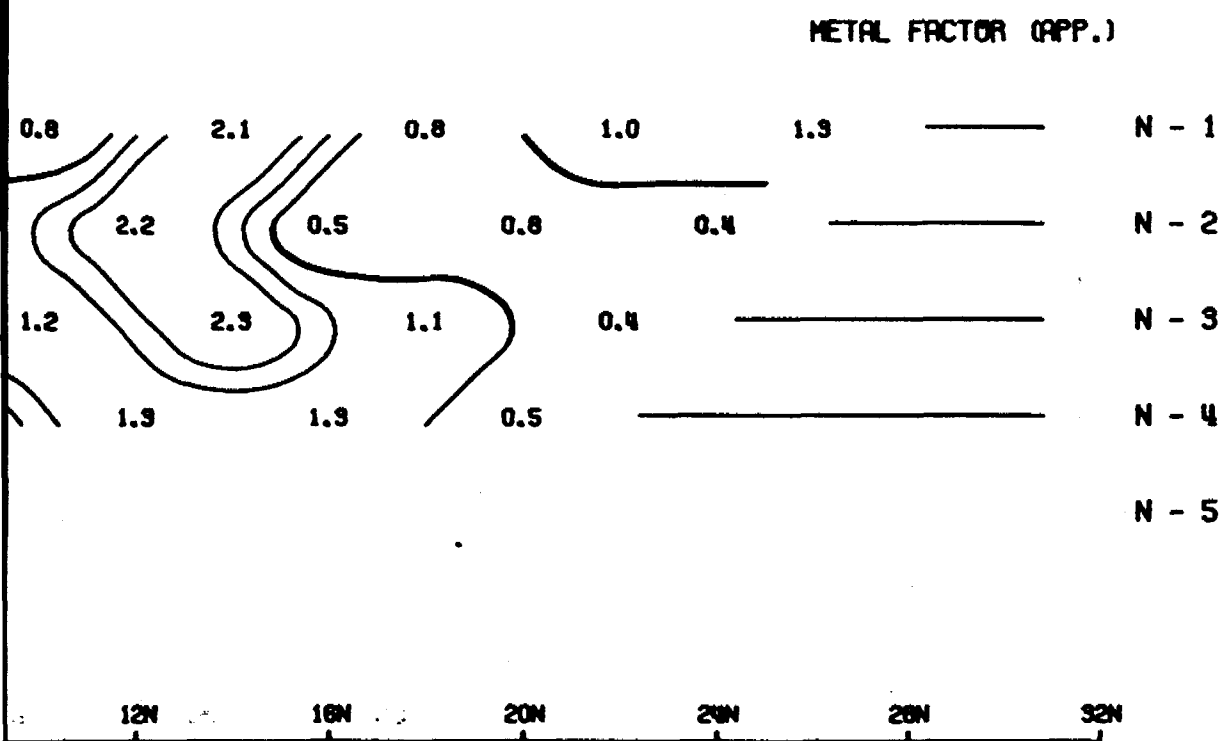
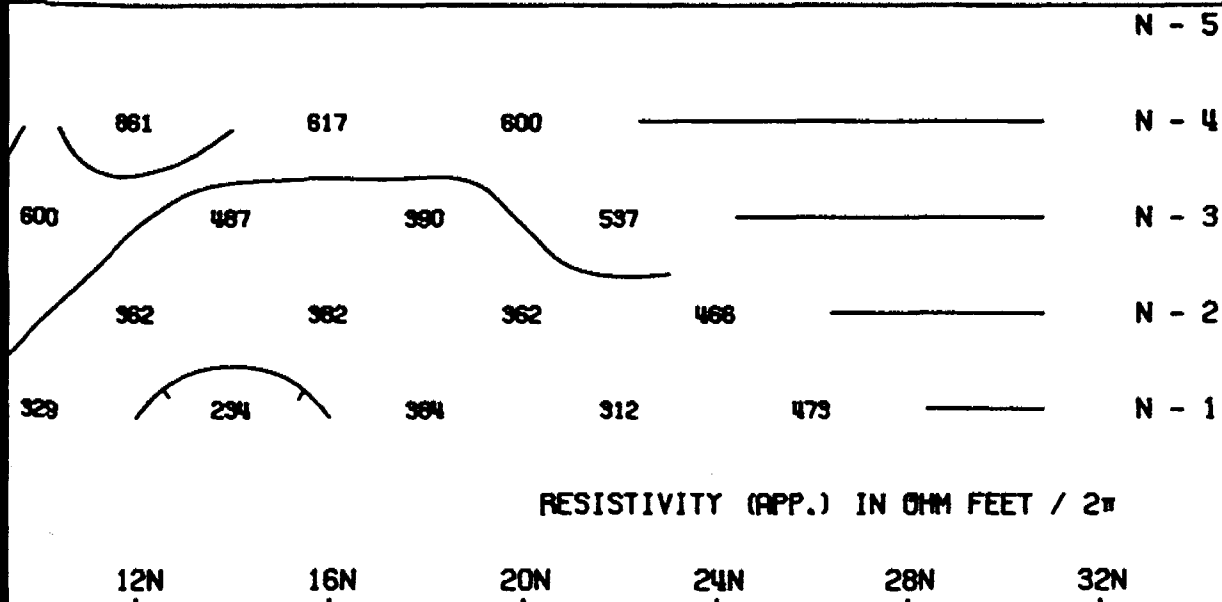


NOTE: CONTOURS AT
LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 380/85 COMPUTER AND A CALCOMP PLOTTER



N - 5

N - 4

N - 3

N - 2

N - 1

244

2570

4570

316

NR

5800

RESISTIVITY (APP.) IN OHM FEET / 2"

28S

24S

20S

16S

METAL FACTOR (APP.)

N - 1

NR

0.3

N - 2

0.3

0.4

N - 3

0.5

N - 4

0.5

N - 5

28S

24S

20S

16S

FREQUENCY EFFECT (APP.) IN %

N - 1

NR

1.5

N - 2

1.4

1.5

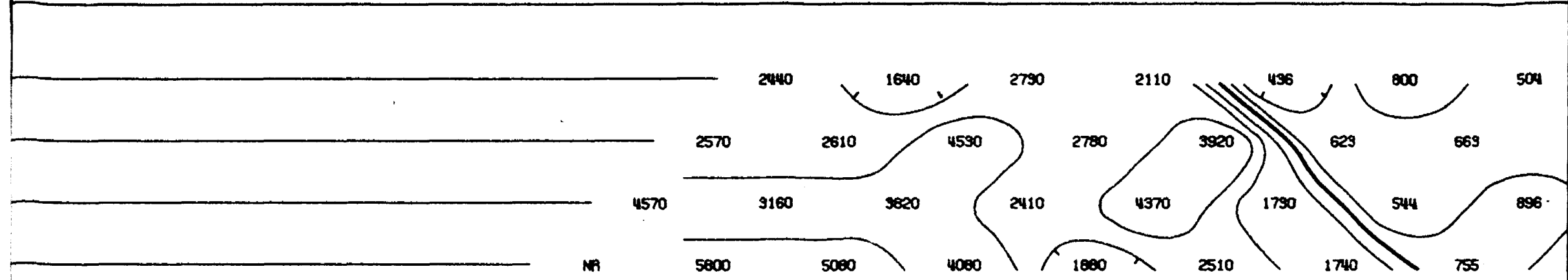
N - 3

1.2

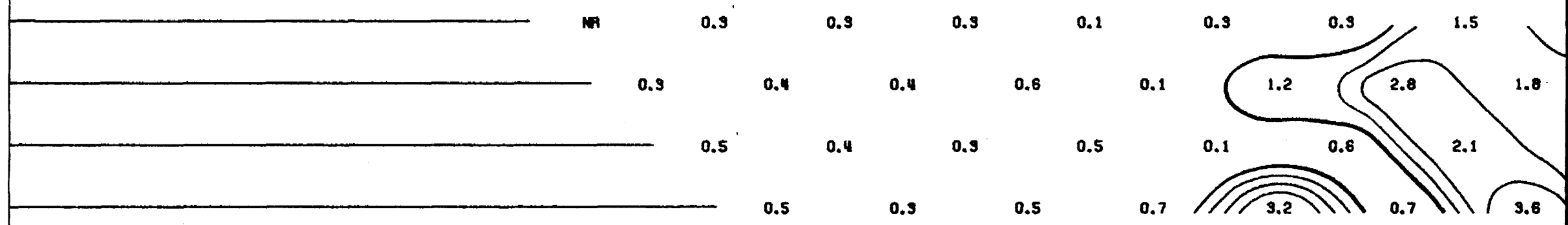
N - 4

1.5

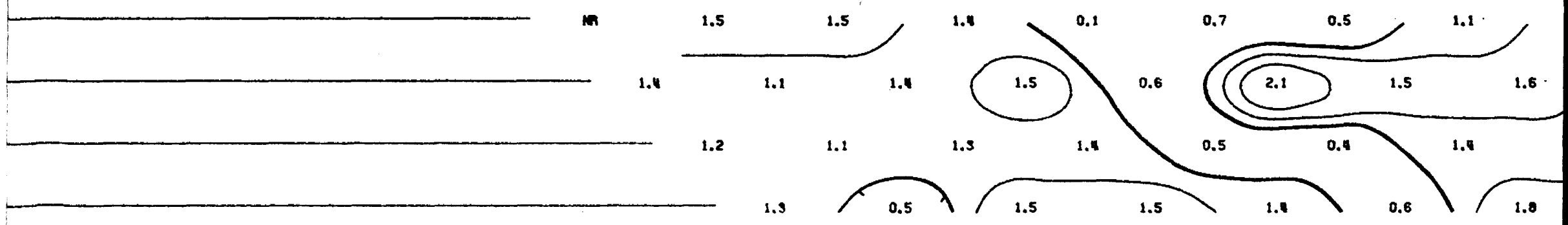
N - 5

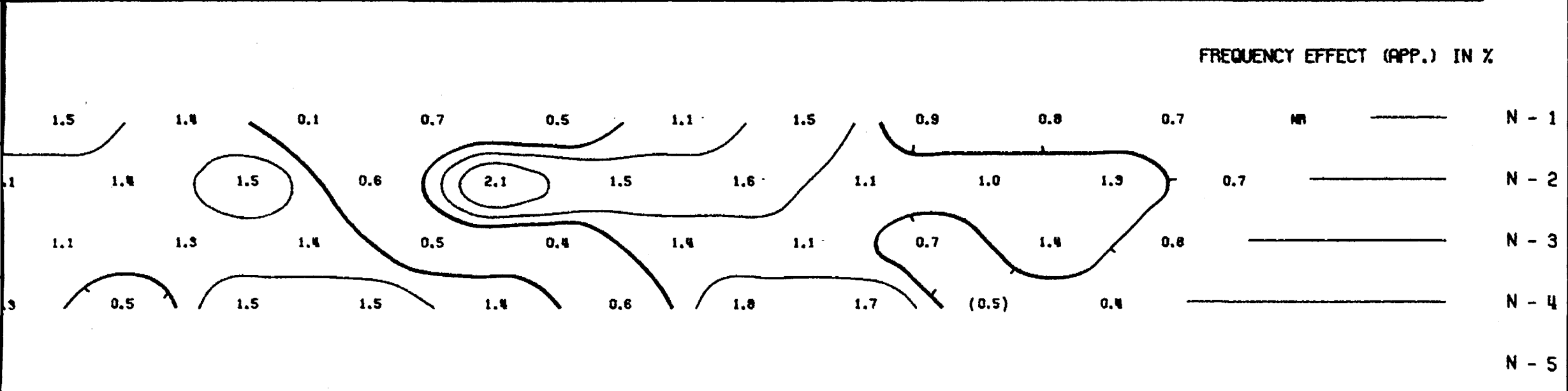
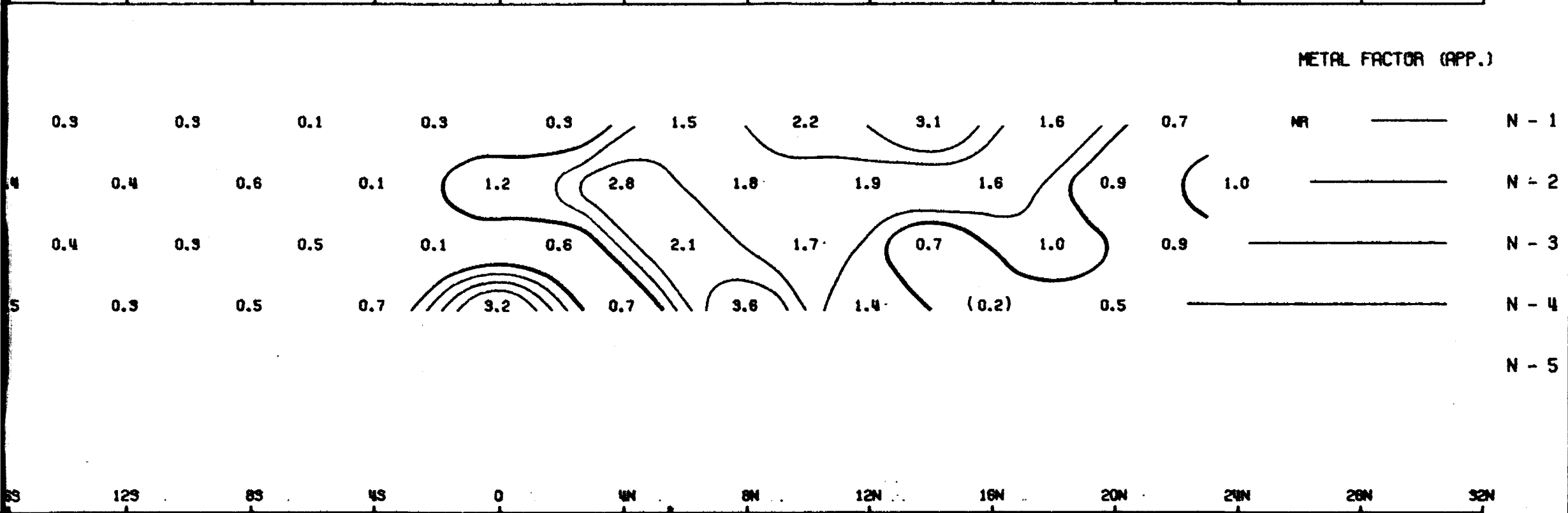
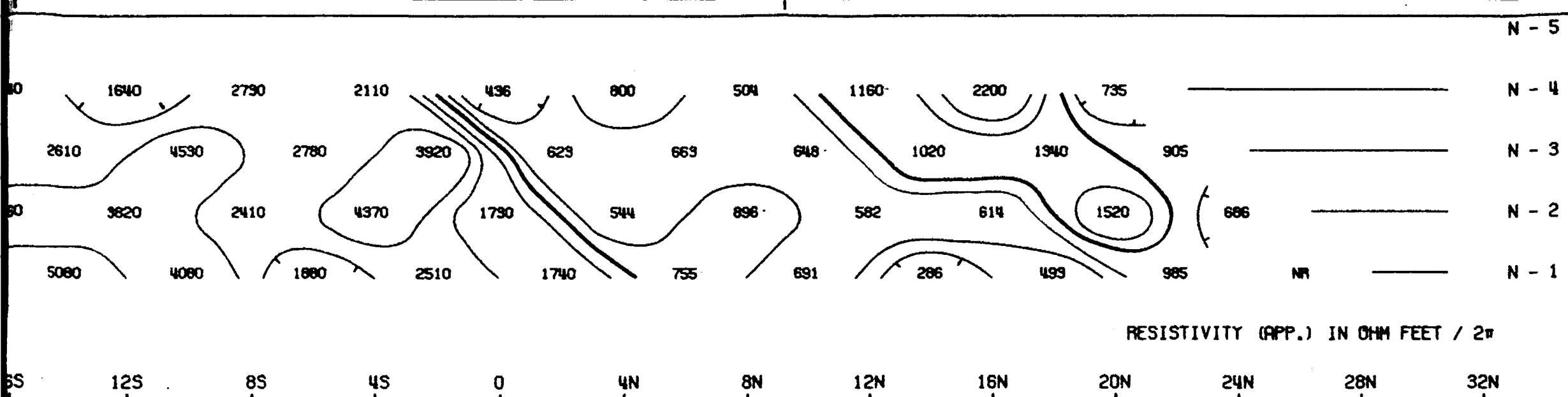


28S 24S 20S 16S 12S 8S 4S 0 4N 8N



28S 24S 20S 16S 12S 8S 4S 0 4N 8N





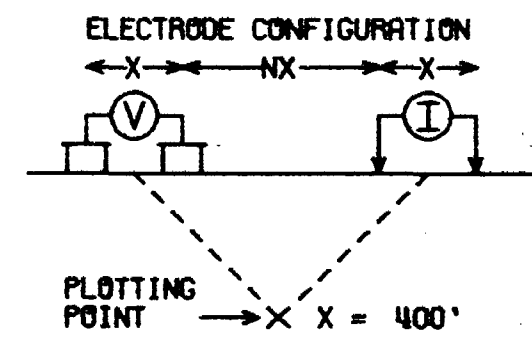
2567

DWG. NO.- I.P.-5814-4

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO.- 60W



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:



NOTE: CONTOURS AT
LOGARITHMIC INTERVALS
1.-1.5-2.-3.-5.-7.5-10

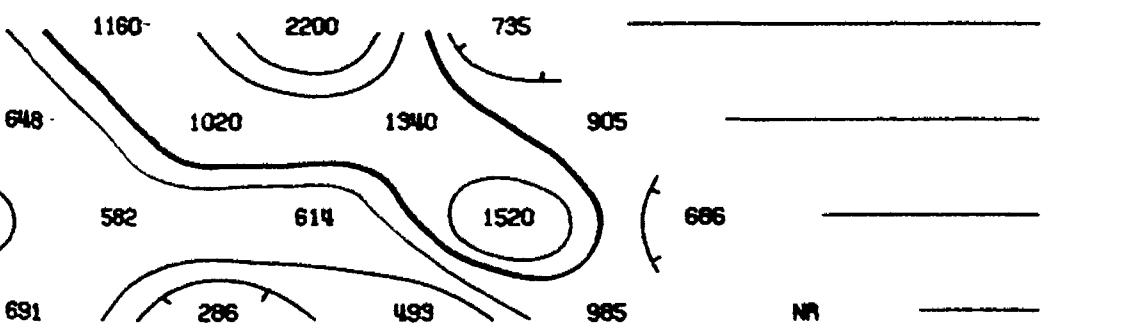
DATE: 29 July 71

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

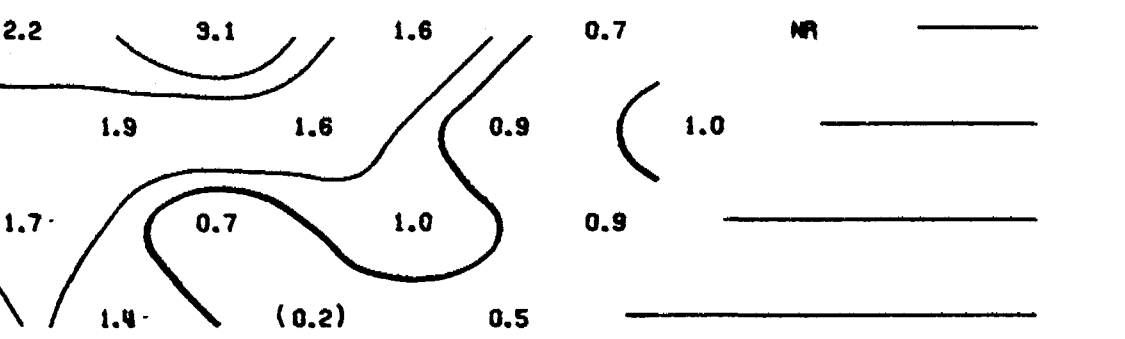
N - 5
N - 4
N - 3
N - 2
N - 1



RESISTIVITY (APP.) IN OHM FEET / 2π

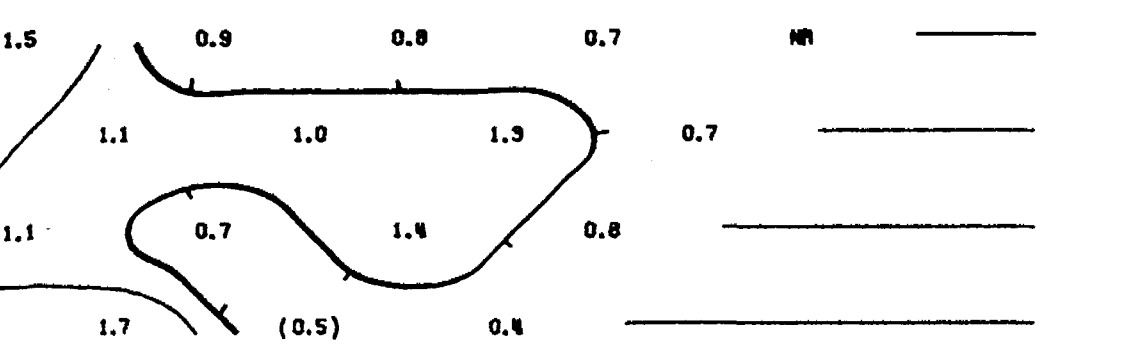
12N 16N 20N 24N 28N 32N

METAL FACTOR (APP.)



12N 16N 20N 24N 28N 32N

FREQUENCY EFFECT (APP.) IN %



N - 1
N - 2
N - 3
N - 4
N - 5

N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2P



METAL FACTOR (APP.)

N - 1

N - 2

N - 3

N - 4

N - 5



FREQUENCY EFFECT (APP.) IN %

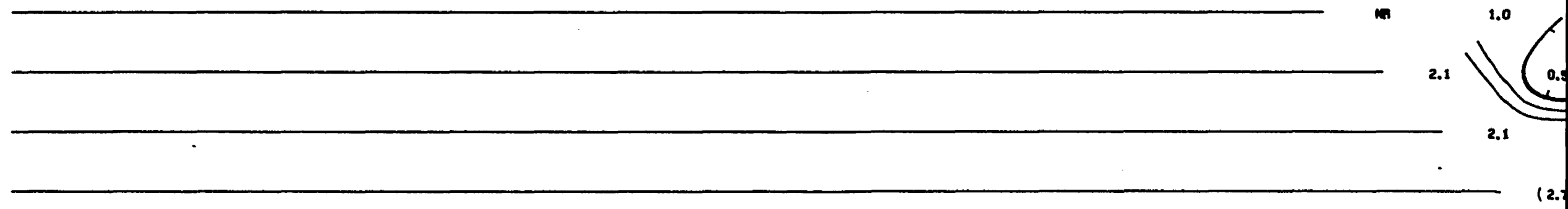
N - 1

N - 2

N - 3

N - 4

N - 5



778

8980

9850

5920

NR

672

16

0.2

0.2

0.2

(0.5)

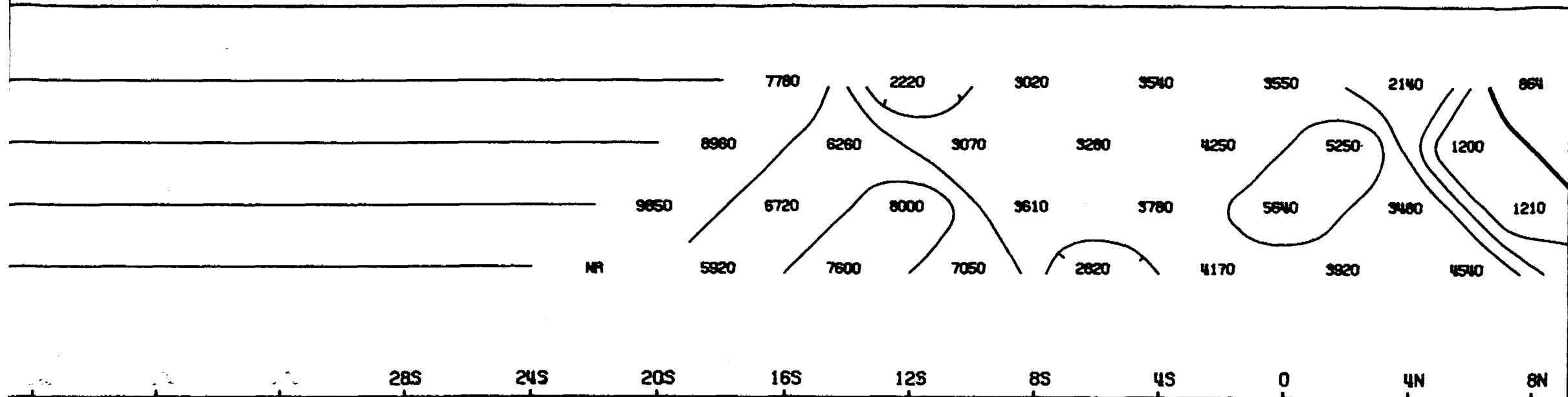
16

1.0

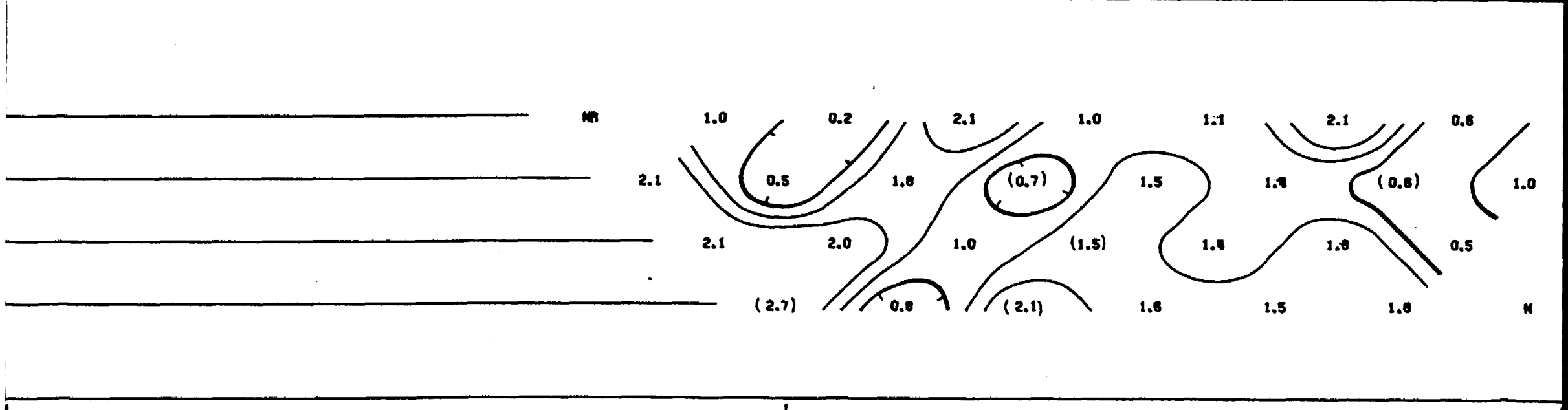
2.1

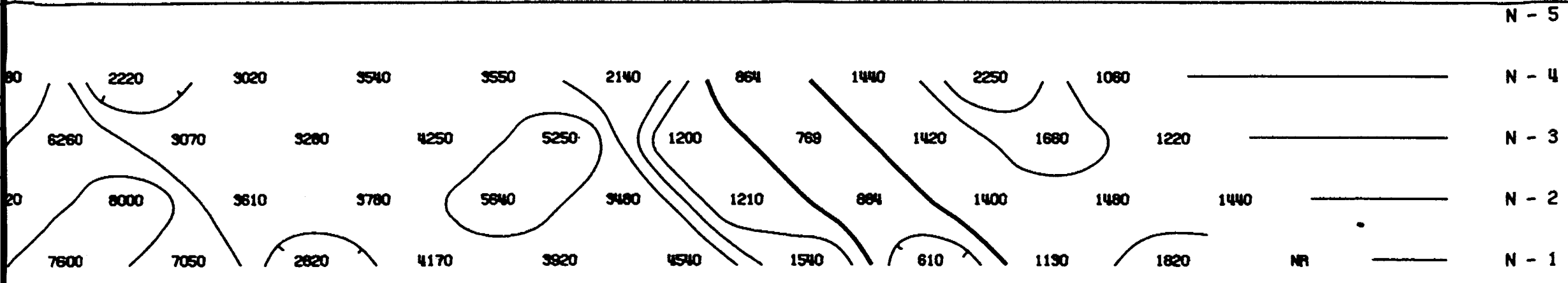
2.1

(2.7)



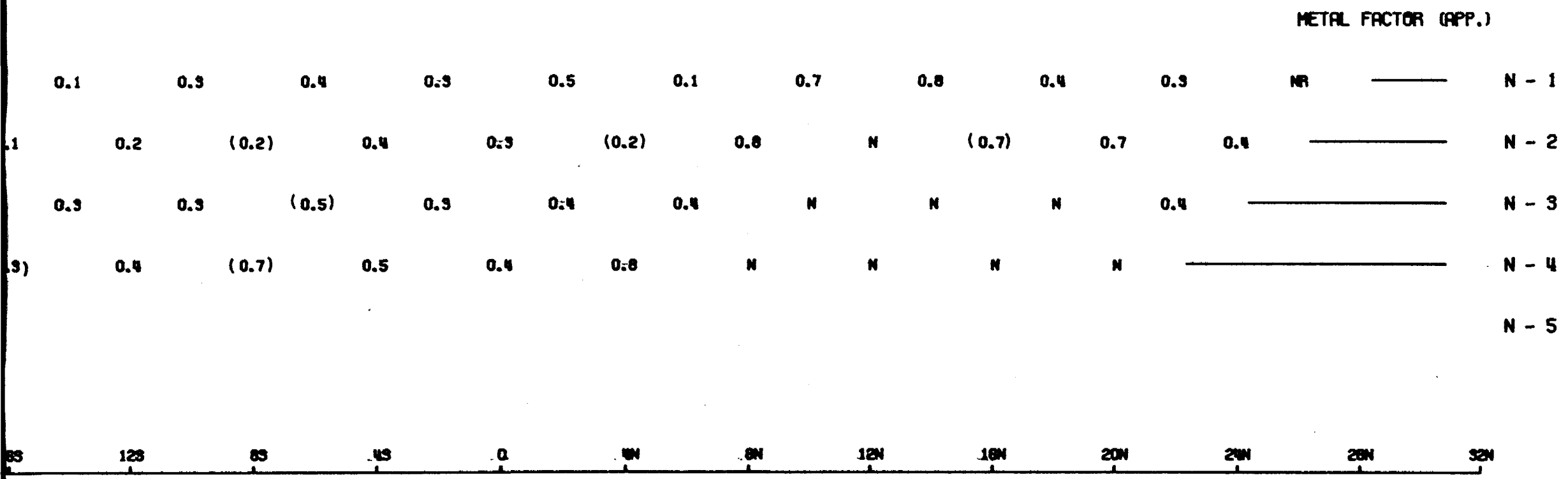
		28S	24S	20S	16S	12S	8S	4S	0	4N	8N
NR											
	NR	0.2	0.1	0.3	0.4	0.3	0.5	0.5	0.5	0.1	
		0.2	0.1	0.2	(0.2)	0.4	0.3	0.3	(0.2)	0.8	
		0.2	0.3	0.3	(0.5)	0.3	0.3	0.4	0.4	0.4	
			(0.3)	0.4	(0.7)	0.5	0.4	0.4	0.8	N	
		28S	24S	20S	16S	12S	8S	4S	0	4N	8N





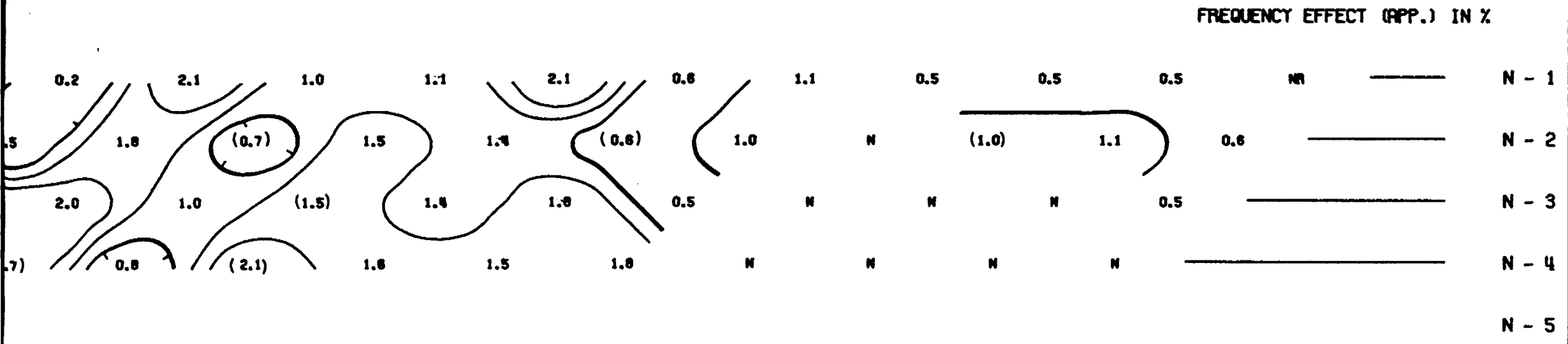
RESISTIVITY (APP.) IN OHM FEET / 2w

6S 12S 6S 4S 0 4N 8N 12N 16N 20N 24N 28N 32N



METAL FACTOR (APP.)

6S 12S 6S 4S 0 4N 8N 12N 16N 20N 24N 28N 32N



FREQUENCY EFFECT (APP.) IN %

6S 12S 6S 4S 0 4N 8N 12N 16N 20N 24N 28N 32N

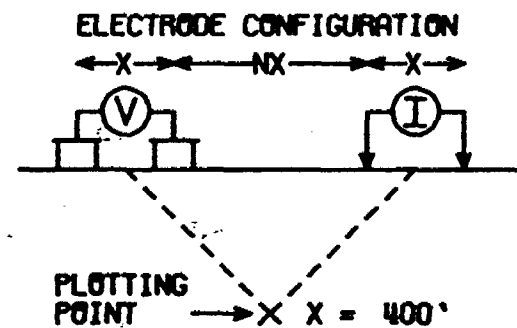
2567

DWG. NO. - I.P. - 5814-5

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 56W



SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE **————**
 PROBABLE **|||||**
 POSSIBLE **////**

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:



NOTE: CONTOURS AT
 LOGARITHMIC INTERVALS
 1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/85 COMPUTER AND A CALCOMP PLOTTER

N - 5

N - 4

N - 3

N - 2

N - 1

N - 1

N - 2

N - 3

N - 4

N - 5

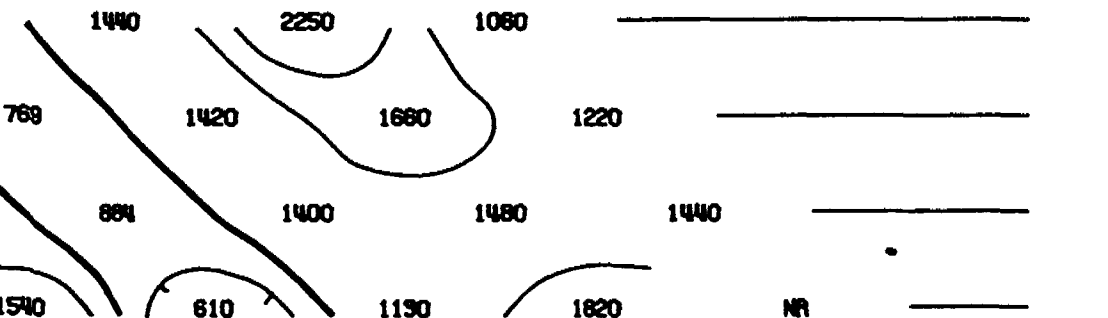
N - 1

N - 2

N - 3

N - 4

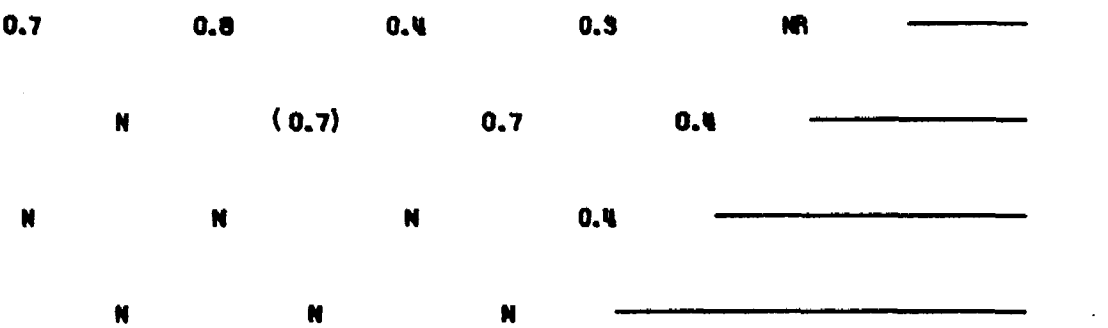
N - 5



RESISTIVITY (APP.) IN OHM FEET / 2π

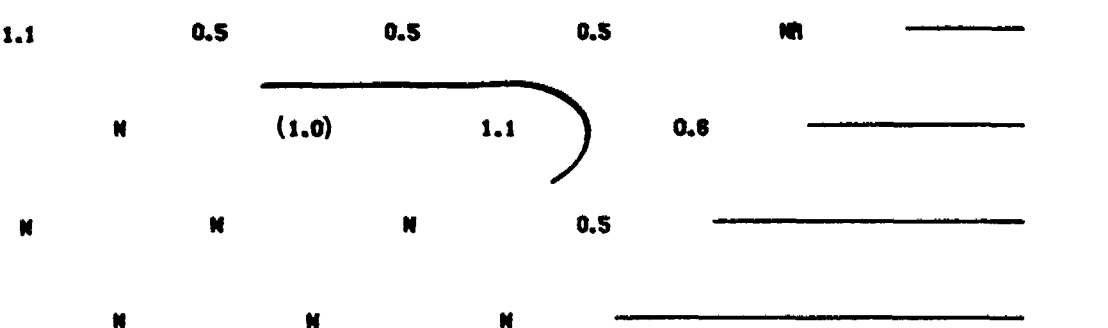
12N 16N 20N 24N 28N 32N

METAL FACTOR (APP.)



12N 16N 20N 24N 28N 32N

FREQUENCY EFFECT (APP.) IN %



N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2w



METAL FACTOR (APP.)

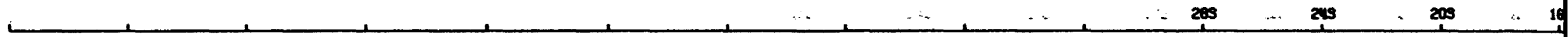
N - 1

N - 2

N - 3

N - 4

N - 5



FREQUENCY EFFECT (APP.) IN %

N - 1

N - 2

N - 3

N - 4

N - 5

2070

1070

615

640

406

282

1.5

0.7

1.1

1.1

0.7

0.7

285

245

205

165

0.6

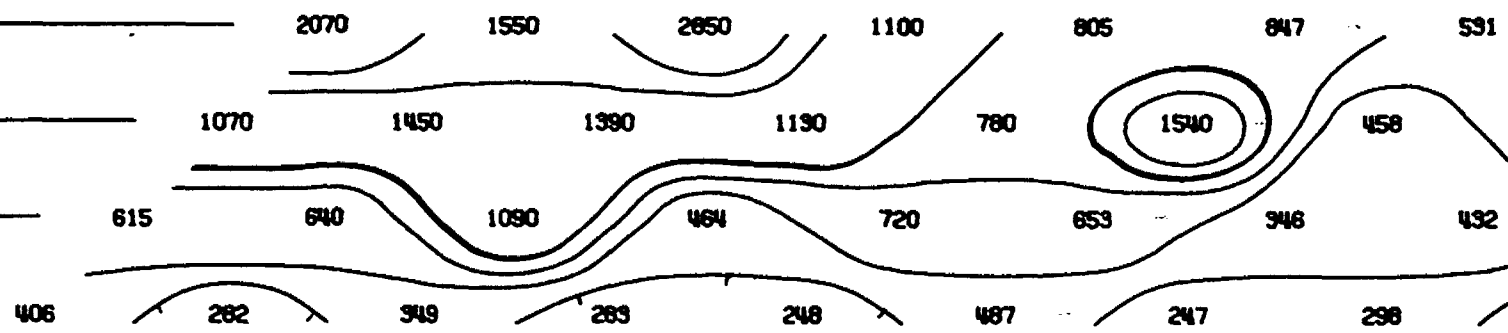
0.2

0.7

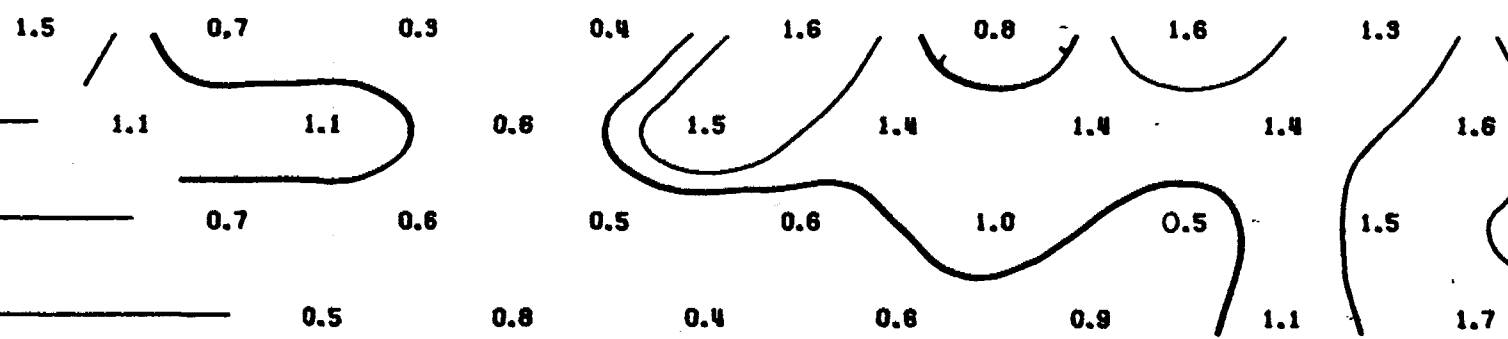
0.7

0.7

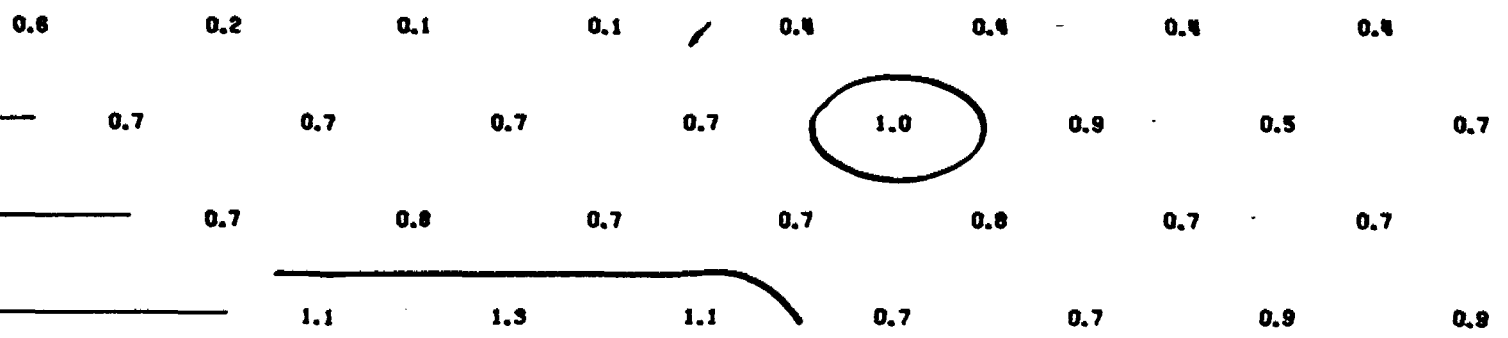
1.1

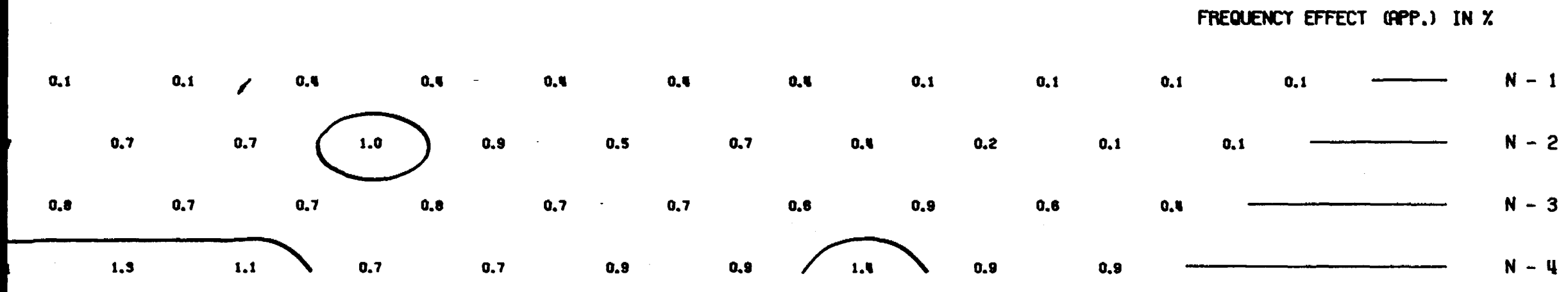
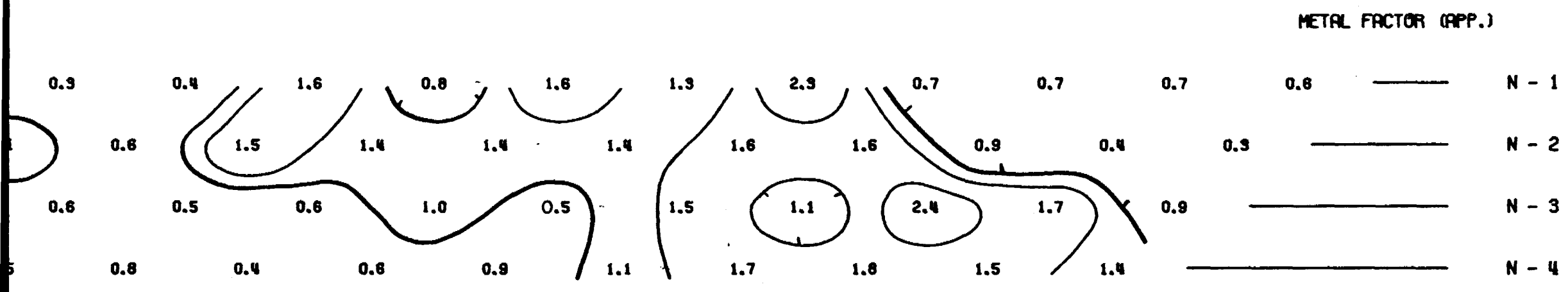
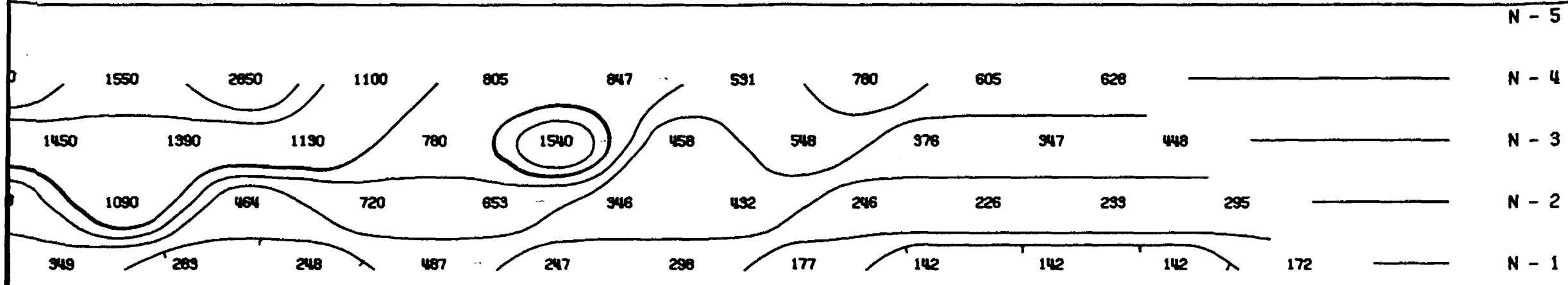


28S 24S 20S 16S 12S 8S 4S 0 4N 8N



28S 24S 20S 16S 12S 8S 4S 0 4N 8N





2567

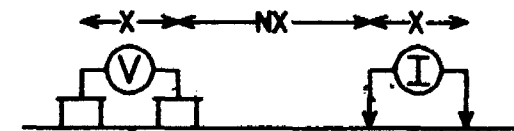



DWG. NO. - I.P. - 5814-2

LAVA MINERALS LTD.

CHESTER TOWNSHIP
SUDBURY M.D., ONTARIO

LINE NO. - 68W

ELECTRODE CONFIGURATION

PLOTting POINT
X X = 400'SURFACE PROJECTION
OF ANOMALOUS ZONESDEFINITE 
PROBABLE 
POSSIBLE 

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB 1971

APPROVED:

DATE: 29 July 71



McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED WITH AN IBM 360/65 COMPUTER AND A CALCOMP PLOTTER

N - 5

N - 4

N - 3

N - 2

N - 1

RESISTIVITY (APP.) IN OHM FEET / 2π

12N 16N 20N 24N 28N 32N

METAL FACTOR (APP.)

N - 1

N - 2

N - 3

N - 4

N - 5

12N 16N 20N 24N 28N 32N

FREQUENCY EFFECT (APP.) IN %

N - 1

N - 2

N - 3

N - 4

N - 5

0.4 0.1 0.1 0.1 0.1

0.4 0.2 0.1 0.1

0.6 0.9 0.6 0.4

1.4 0.9 0.9

ASSESSMENT WORK DETAILS

Type of Survey GEOPHYSICAL
A separate form is required for each type
 Township or Area Chester Township



900

Chief Line Cutter William R. Miller
Name
9 Foxcote Crescent, Etobicoke,
Address Ontario

Party Chief J. Mark
Name
61 Borden Street, Toronto 4, Ontario
Address

Consultant Robert A. Bell
Name
50 Hemford Crescent, Don Mills
Address

Geological field mapping by K. Kingsbury,
Name
58 Oak Avenue, Richvale,
Address Ontario

COVERING DATES

Line Cutting January, 1971
 Field February, 1971
Instrument work, geological mapping, sampling etc.
 Office July, 1971

INSTRUMENT DATA

Make, Model and Type McPhar P660 IP Unit
 Scale Constant or Sensitivity 0.3 & 5.0 Hz.
Or provide copy of instrument data from Manufacturer's brochure.
 Radiometric Background Count N/A
 Number of Stations Within Claim Group 285*
 Number of Readings Within Claim Group 2292*
 Number of Miles of Line cut Within Claim Group 18.6*
 Number of Samples Collected Within Claim Group N/A

<u>CREDITS REQUESTED</u>	<u>20 DAYS</u> <small>per claim</small>	<u>40 DAYS</u> <small>per claim</small>	<small>----- Includes</small> <small>(Line cutting)</small>
Geological Survey	<input type="checkbox"/>	<input type="checkbox"/>	
Geophysical Survey	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Show Check ✓
Geochemical Survey	<input type="checkbox"/>	<input type="checkbox"/>	

DATE August 12/71 SIGNED [Signature]

MINING CLAIMS TRAVERSED	
List numerically	
S 284546	✓
S 284547	✓
S 284548	✓
S 284549	no credit
S 284550	✓
S 284551	✓
S 284552	✓
S 284553	✓
S 284554	✓
S 284555	1/2 credits
S 284556	✓
S 284557	✓
S 284558	✓
S 284559	✓
S 284560	✓
S 284561	✓
S 284562	✓
S 284563	✓
S 284564	✓
S 284565	✓
TOTAL CLAIMS <u>20</u>	

RECEIVED
 AUG 18 1971
 PROJECTS SECTION

Send in Duplicate to:
 FRED W. MATTHEWS
 SUPERVISOR-PROJECTS SECTION
 DEPARTMENT OF MINES &
 NORTHERN AFFAIRS
 WHITNEY BLOCK
 QUEEN'S PARK
 TORONTO, ONTARIO

* Please refer to Note on Schedule "A".
Performance and coverage credits do not apply to airborne surveys

If space insufficient, attach list

SUBMISSION OF GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL SURVEYS
AS ASSESSMENT WORK

In order to simplify the filing of geological, geochemical and ground geophysical surveys for assessment work, the Minister has approved the following procedure under Section 84 (8a) of the Ontario Mining Act. This special provision does not apply to airborne geophysical surveys.

If, in the opinion of the Minister, a ground geophysical survey meets the requirements prescribed for such a survey, including:

- (a) substantial and systematic coverage of each claim
- (b) line spacing not exceeding 400 foot intervals
- (c) stations not exceeding 100 foot intervals or
- (d) the average number of readings per claim not less than 40 readings

it will qualify for a credit of 40 assessment work days for each claim so covered. It will not be necessary for the applicant to furnish any data or breakdown concerning the persons employed in the survey except for the names and addresses of those in charge of the various phases (linecutting contractor, etc.). It will be assumed that the required number of man days were spent in producing the survey to qualify for the specified credit.

Each additional ground geophysical survey using the same grid system and otherwise meeting these requirements will qualify for an assessment work credit of 20 days.

A geological survey using the same grid system, and meeting the requirements for submission of geological surveys for maximum credits will qualify for an assessment work credit of 20 days. If line cutting has not previously been reported with any other survey and is reported in conjunction with the geological survey a credit of 40 days per claim will be allowed for the survey.

Similarly, a geochemical survey using the same grid system with the average number of collected samples per claim being not less than 40 samples, and meeting the requirements for the submission of geochemical surveys for maximum credits, will qualify for an assessment work credit of 20 days. If line cutting has not previously been reported with any other survey and is reported in conjunction with the geochemical survey a credit of 40 days per claim will be allowed for the survey.

Credits for partial coverage or for surveys not meeting requirements for full credit will be granted on a pro-rata basis.

If the credits are reduced for any reason, a fifteen day Notice of Intent will be issued. During this period, the applicant may apply to the Mining Commissioner for relief if his claims are jeopardized for lack of work or, if he wishes, may file with the Department, normal assessment work breakdowns listing the names of the employees and the dates of work. The survey would then be re-assessed to determine if higher credits may be allowed under the provisions of subsections 8 and 9 of section 84 of the Mining Act.

If new breakdowns are not submitted, the Performance and Coverage credits are confirmed to the Mining Recorder at the end of the fifteen days.

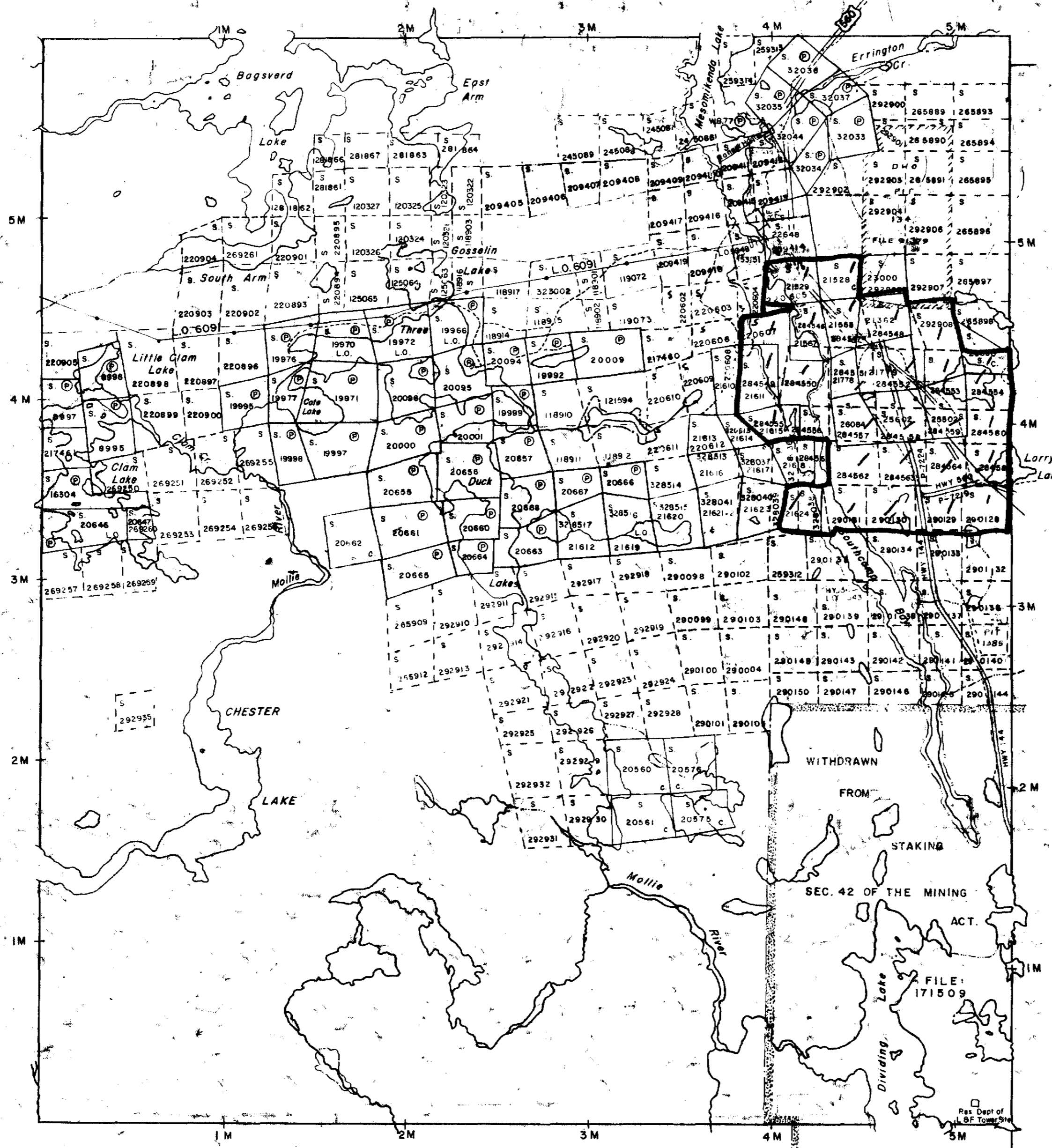
111.M

111.M

Neville Twp. (M.-888)

Yeo Twp. (M.-1188)

Bennewiss Twp. (M.-658)



Invergarry Twp. (M.-948)

THE TOWNSHIP
Claim OF *Map*
CHESTER

DISTRICT OF
 SUDBURY
 SUDBURY
 MINING DIVISION
 SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSHEG
- MINES
- CANCELLED

NOTES

400' Surface Rights Reservation around all Lakes and Rivers.
 Flooding Rights To 1200' Contour Reserved To M.E.P.C. File: 10621.

DATE OF ISSUE
 AUG 20 1971
 ONT. DEPT. OF MINES
 AND NORTHERN AFFAIRS

PLAN NO.-M.717

ONTARIO
 DEPARTMENT OF MINES
 AND NORTHERN AFFAIRS

CHESTER I.M.B.

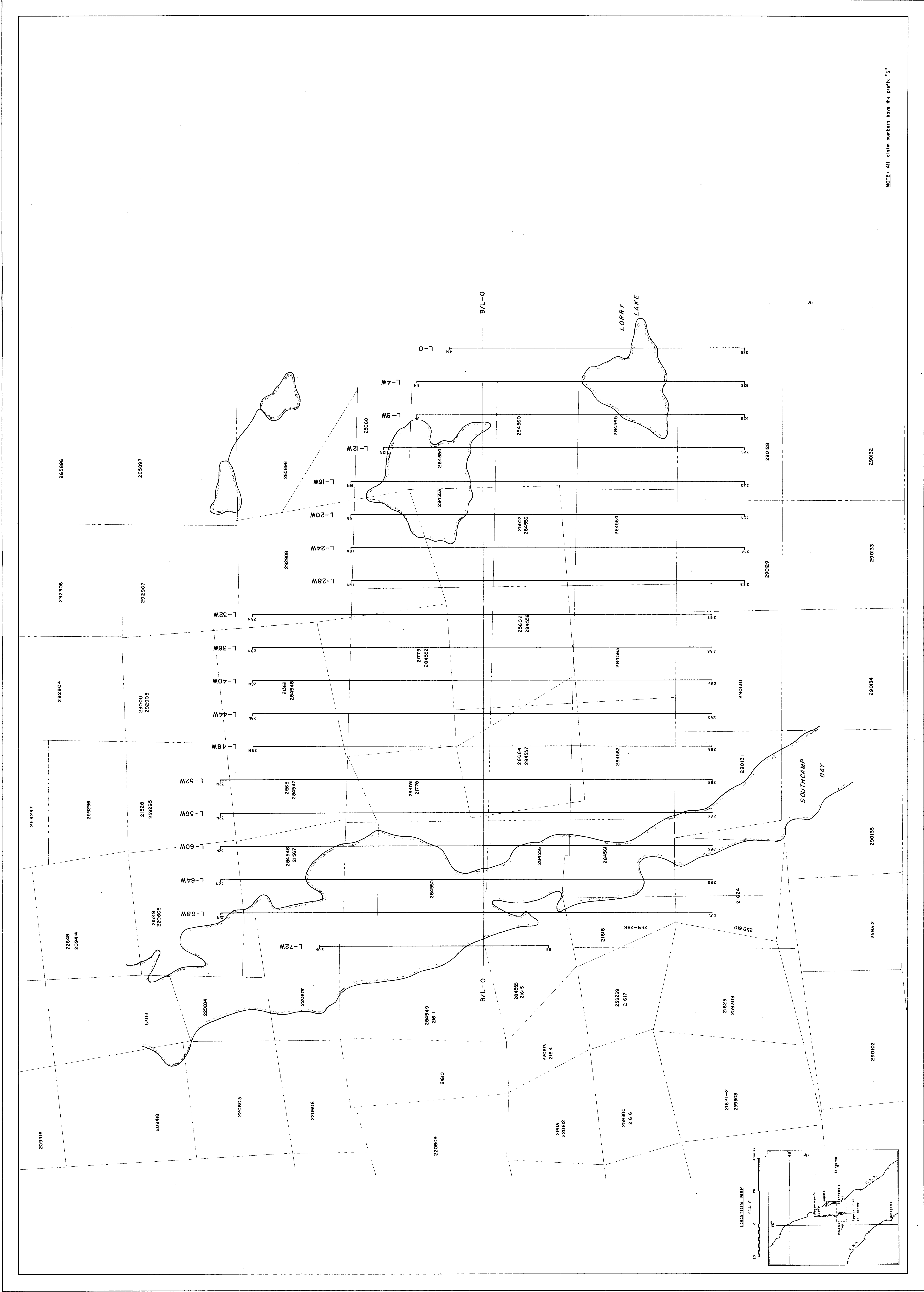
CHESTER I.M.B.



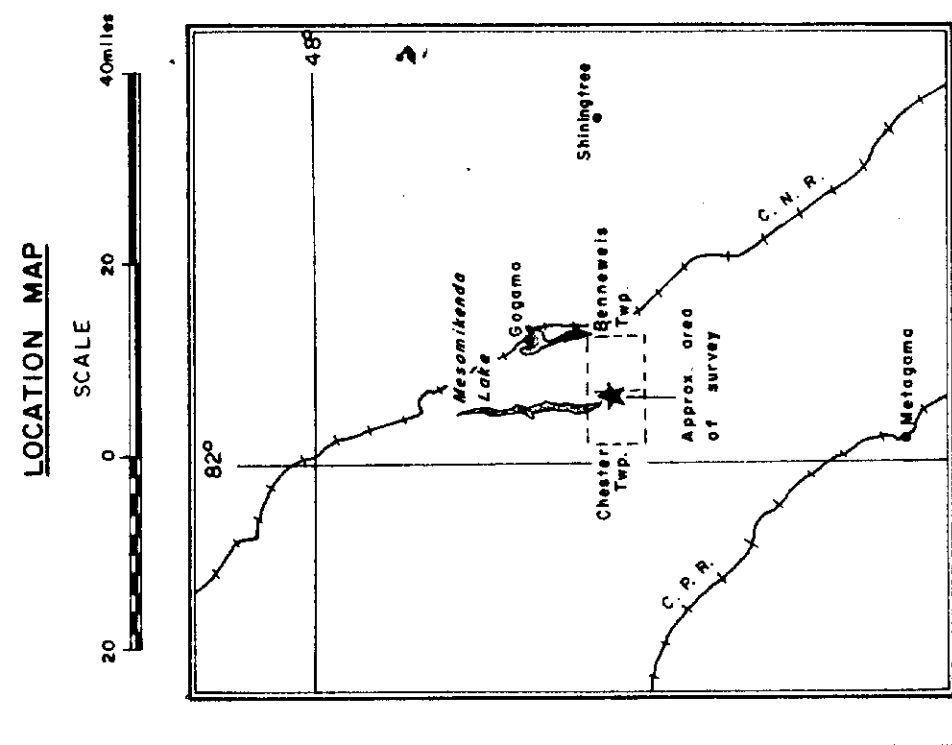
111.M

111.M

McPHAR GEOPHYSICS
INDUCED POLARIZATION AND RESISTIVITY SURVEY
PLAN MAP



NOTE: All claim numbers have the prefix "S"



LAVA MINERALS LTD.
CHESTER AND BENNEWEISS TOWNSHIPS
SUDBURY M.D., ONTARIO
SCALE
ONE INCH EQUALS FOUR HUNDRED FEET

SURFACE INDICATION
OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE
Number of the end of company
resistivity section interval

DESIGN: RJK
DATE: 10/11/77
APPROVED: [Signature]
DATE: 10/11/77

2567

