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GEOPHYSICAL SURVEYS AT KENMORE I, II AND WILD HORSE PROSPECTS EATERINGINNA 1:100 000 SHEET

BY

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DEPARTMENT OF MINES
SOUTH AUSTRALIA

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Rept.Bk.No. 73/146
G.S. No. 5151
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GEOPHYSICAL SURVEYS AT KENMORE PARK AND WILD HORSE PROSPECT

Eateringinna 1:100,000 sheet

ABSTRACT

Induced Polarisation surveys were conducted at Kenmore I, Kenmore II and Wild Horse Prospects. (Eateringinna 1:100,000 sheet). Very low frequency electromagnetic results were also taken at Kenmore I and II.

At Kenmore I, anomalous frequency effects were found to coincide with anomalous geochemical copper values.

At Kenmore II anomalous frequency effects were detected to the north of the nose of the jasper capped ridge.

Further south, conductive zones coincide with the jasper capping and with its projected trend, although the width of these zones is greater than the mapped width of the jasper.

Well defined anomalous frequency effect values were obtained at Wild Horse prospect, although displaced about 200 feet from a geochemical copper anomaly.

Drilling targets are suggested for the more significant frequency effect positions.

INTRODUCTION

Kenmore Park is situated in the north west of South Australia just south of the South Australia - Northern Territory border. (see drawing No.73-209). Investigations within this area have been carried out since 1967 after chrysoprase was found locally.

This report concerns surveys carried out at Kenmore I, Kenmore II and Wild Horse Prospects. The locations of these prospects are shown on drawing No. 73-209.

The surveys, conducted during October and early November 1972, were requested by the Metallic Minerals Section.

At Kenmore Park, previous Induced Polarisation data at Kenmore II (Nelson and Taylor 1972) located an area giving anomalous frequency effects. The present survey aimed at following the strike shown by this frequency effect zone in the hope that further anomalous areas be detected.

At Kenmore I and Wild Horse prospects, copper anomalies of up to 250 and 300 ppm respectively were to be investigated.

GEOLOGY

a) Regional Geology

The area containing the Kenmore and Wild Horse prospects is predominantly a flat sandy plain approximately 2000 feet above sea level. Some topographical relief is provided by small hills and granite inselbergs.

The geology of the Kenmore sheet is described by Barnes, Conor and Pain (1971). A plan is presented illustrating the main geological features. (drawing No. 73-209).

Crystalline metamorphic and igneous rocks underlie much of the region and are often covered by superficial Quaternary sediments. The metamorphic rocks (gneisses and gneissic granites) form a tightly folded series conformably enclosing lenticular shaped bodies of nickeliferous clays. These bodies are often characterised by a jasper capping, which gives rise to low ridges, usually rising less than 20 feet above the surrounding plain.

A fuller description of the regional geology is being prepared by C. Conor et.al.

b) Local Geology

Kenmore II

Kenmore II has been mapped in detail by A.M. Pain and a report is being prepared. The outcrop geology is shown on drawing No.73-212. Structurally, Kenmore II is thought to consist of a series of acid gneisses enclosing a conformable layer of nickeliferous clay, and folded into a tight anticline plunging at about 50^{o} to the north. The clay is capped by a nickiliferous jasper which, being resistant to weathering, gives rise to a low ridge. The latter has been precipitated in the uppermost part of the clay, which is itself the weathering product of a basement rock of unknown type. (A.M. Pain and C.H.H. Conor, pers. comm.)

Geochemical results, in addition to showing high nickel values over the jasper capped area, also isolate anomalous copper values forming a halo some 400 to 800 feet from the jasper.

About 2½ miles south of the nose of the Kenmore II prospect, and along the strike of the western limb of the fold structure, lies a further jasper capped body. This area was originally called the Eremophila prospect. Results obtained over this area are included in the Sections referring to Kenmore II.

Kenmore I

A nickeliferous clay, similar to that observed at Kenmore II, appears to follow the keel of a tight, northerly plunging fold.

Induced Polarisation results were taken over a lenticular, north-south striking, geochemical copper anomaly of about 250 ppm. situated north-north west of the fold apex. (see drawing No.73-211). A report on the geology of this area is being prepared by A.M. Pain.

Wild Horse Prospect

The prospect, located in 1972, was found by sampling on the Eateringinna Regional Geochemical Soil Sample Traverse No.3 (ERGSST No3.)

Further localised geochemical sampling for copper found values of up to 350 ppm. The area has been locally mapped on a 1" reps. 100' scale by A.M. Pain (drawing No. 73-210) who is preparing a report.

Basic granulite and quartzo-feldspathic gneiss occur as strata dipping west at about 50^{o}. Numerous dolerite dykes occur. Minor amounts of copper carbonate have been found on joint and fracture surfaces in basic granulite outcrops.

PREVIOUS GEOPHYSICAL WORK

Various grids have been used for the previous geophysical surveys. Using drawing No. S10234 the relative positions of the grids can be ascertained. Part of the Chrysophrase Bore grid is illustrated on drawing No. 73-211 (Kenmore I). The extension of this grid southwards is shown on drawing No. S10234. Line 99 of the Chrysophrase Bore grid is plotted on drawing No. 73-208 (Kenmore II) thus tying the grids together.

Kenmore II

Ground magnetic and Induced Polarisation readings were taken over part of this area in 1969, (McPharlin 1970) when no significant frequency effects were observed. Nelson and Taylor (1972) conducted further magnetic and Induced Polarisation (I.P.) surveys outside the original grid area and also took some Very Low Frequency electromagnetic (V.L.F. em.) and resistivity readings. The I.P data isolated a zone of anomalous frequency effects striking approximately north-south. Nelson and Taylor also showed that the V.L.F. em. results could be used to outline the nickeliferous clay zone.

Induced Polarisation results, at Eremophila, were obtained by Taylor (1971) and showed high frequency effects associated with low resistivity values. However, when checked using a different receiver (Nelson and Taylor 1972) the anomalous frequency effects did not reproduce and it was considered that inductive coupling over the conductive zone was responsible for the anomaly.

Kenmore I

Magnetic and Induced Polarisation surveys were conducted over a localised grid covering the known zone containing nickeliferous clays. (McPharlin and Taylor 1968). A magnetic anomaly was located and was considered as being due to a metamorphosed banded iron formation. Since it was possible that this band could be a highly metamorphosed folded sill of basic igneous rocks, induced polarisation measurements were taken to test for the occurance of sulphide mineralisation at the contact zones. Some frequency effect anomalies were detected.

The magnetic results obtained by McPharlin and Taylor were later recontoured using a closer contour interval and examined by Gerdes (Miller and Gerdes 1970).

Further ground magnetic, total intensity, results taken on the Chrysophrase Bore grid (Gerdes 1971) were aimed at locating areas of ultra-basic material, and to establish the structural relationships of the basic material.

THE FIELD METHODS AND RESULTS

a) Instrument data and Techniques

Induced polarisation measurements, using frequencies of 3 and 0.3 Hz, were taken using a McPhar P660 receiver and, initially, an Austral Induced Polarisation Transmitter. This latter instrument became unservicable during the survey and a low power Geoscience transmitter was then used. Readings were taken using the dipole-dipole electrode configuration with the dipole spacing at 50 or 100 feet, depending on the penetration and detail required.

V.L.F. e.m. results were taken with a Geonics EM16 instrument, which used a primary signal of 15.5 K.Hz. produced at North West Cape, Australia.

b) Application of Techniques

Kenmore II

Geochemical results show a copper anomaly forming a halo 400 to 800 feet from the jasper capping near its nose, the stronger part of the anomaly running down the Western limb of the fold. It was thus considered that this limb would provide the better chance of locating mineralisation.

I.P. results over most of the area covered by the geochemical anomaly had previously been obtained (Nelson and Taylor 1972) and lines were positioned to cover the area south of this zone.

Since no geochemical anomaly was detected in the area to be surveyed (much of which, because of sand coverage, was not suitable for geochemical sampling) the mineralisation, if it existed, was presumed to lie about 600 feet from the jasper. It was hoped that the low resistivity material under the jasper capping would provide a guide for positioning the I.P. traverses in areas covered by sand.

Initially a line previously surveyed by Nelson and Taylor was reoccupied using a smaller dipole spacing. Good correlation of the results was obtained and two further lines were surveyed, both of which detected the low resistivity zone associated with the nickeliferous clay. However, a third line (line 5600N) did not detect a clear boundary which could be identified with the clay and the line was resurveyed using a larger dipole spacing, thus providing greater coverage and penetration. Similar ooncluslons were reached.

One further line was surveyed using a 50 foot dipole spacing (5200N) south of which 100 foot dipole spacings were used to ensure penetration through increasing depths of sand. Large areas having high conductivity were observed.

These conductive values suggested the possibility that, in these zones, the dipole spacing was still too small to provide sufficient penetration through the low resistivity cover.

Two Schulumberger soundings were conducted in an attempt to identify the vertical resistivity succession and the depth to the basement. The locations of the soundings are shown on drawing No. 73-208.

Sounding A (line 800S) indicated increasingly conductive material to a depth of about 150 feet where a high resistance basement is encountered. Sounding B (line 4000S) shows a similar resistivity pattern but with a shallower depth to the resistive basement (100 feet).

It is thus considered that I.P. results using 100 ft dipole spacing should provide information on the basement rocks.

The smaller number of lines on the eastern limb of the fold is due to lack of significant frequency effects, and the consideration that this limb has a lower chance of containing mineralisation.

V.L.F. em. results, at 50 foot intervals, were taken over a localised area just north of the nose of Kenmore II. These readings were intended to enable trend lines to be evaluated.

Kenmore I and Wild Horse Prospects

At both of these prospects the I.P. lines were positioned to cross geochemical copper anomalies.

Apart from two lines on Kenmore I surveyed using 100 ft dipole spacings, spacings of 50 feet were used, since rocks outcrop in both areas, and resolution of any anomaly which may occur was considered more important than the increased penetration which would be provided by a larger spacing.

V.L.F. em. readings, at 50 feet intervals, were taken primarily to see if correlation could be observed between any resistivity boundaries which could be associated with the geo-chemical anomaly.

INTERPRETATION

Kenmore II. Induced Polarisation Resulsts (Resistivity)

Results are presented from the surveys reported by Nelson and Taylor (1972) and McPharlin (1970) as well as those obtained during the present survey.

Drawing Nos. 73-214 & 73-208 present plots of the major resistivity zones for the areas to the north and south of line 0 respectively. The values were obtained by a qualitative interpretation of the sectional plots of resistivity.

The more significant features of drawing No. 73-214 are listed below.

1) Three low resistivity zones (less than 50 ohm metres) which, in general, enclose the known and probable positions of nickeliferous clay.

2) A more resistive band separating the northern conductive zone from the remaining two conductive zones.

3) Fairly rapidly increasing resistivity values to the north of the nose of the nickeliferous clay.

4) Very low resistivity values (less than 4 ohm metres) in the south west of the area, possibly indicating an old river channel.

To the west of the northern conductive zone, areas of epidote float indicate shearing, Resistivity values in this area, as seen on the sectional contours, show decreasing values indicative of a shear zone.

South of line 0 (drawing No. 73-208) low resistivity values were encountered as far as line 5600S. On the remaining lines resistance values increased towards their ends.

Frequency Effects

Results from the present survey, and those obtained by Nelson and Taylor (1972) have been plotted on drawing Nos. 73-213 and 73-208 (north and south of line 0, respectively).

The frequency effects discussed in the report by McPharlin (1970) were taken using a different receiver from that used in the above surveys and are considered unreliable due to inductive coupling over conductive zones.

Drawing No. 73-213 illustrates three zones having frequency effect values of over 3%. The northernmost zone (extending between lines 11000N and 1600N) was located during the present survey and the remaining two zones by the survey conducted by Nelson and Taylor (1972). Of these latter two zones only the westernmost zone was considered significant since the eastern zone is contained within resistive rocks.

The present survey also located a small frequency effect anomaly of just over 2% on line 4000N using 100 foot dipole spacing. The anomolous position was reoccupied using a 50 foot dipole spread and, although the small anomaly was repeated, further similar values on the eastern end of the line showed that these values can be obtained elsewhere and, hence, are not considered anomalous.

Apart from one reading of 2.4% on line 8000S, no significant frequency effects were encountered south of line 0.

In order to obtain better delineation of the anomalous frequency effect zone in the northern area a north-south line was centred on the anomaly along 300W. A further north-south line was centred at 200W. Both lines indicate anomalous frequency effects at 11000N, although also indicating other anomalous areas which do not coincide.

On the east-west lines, line 11000N shows anomalous frequency effects at 350W coincident with a zone of increased conductivity, and at an estimated depth of around 100 feet.

Very Low Frequency Electromagnetic Results (V.L.F. e.m.)

V.L.F. e.m. results were taken at 50 feet intervals on lines 10000N to 12400N. The In-phase results are plotted and contoured on drawing No.73-206, and as indicated, show three fairly distinct boundaries and a general northwest to southeast trend. A similar trend is also indicated by the resistivity results in this area.

Kenmore I Induced Polarisation Results (Resistivity and Frequency Effects)

Resistivity and frequency effects are plotted on drawing No.73-211. Several anomalous frequency effect values were observed, each corresponding fairly well with a geochemical copper anomaly.

A suggested depth for a vertical body having a true frequency effect of 25% and being about 25 feet wide would be about 100 feet.

A close look at the sectional plots of apparent resistivity and frequency effects indicates that the anomalous frequency effects are also generally coincident with a resistive feature. On line 8400 N the frequency effects appear to be associated with a resistivity boundary.

Several high frequency effects are also observed which do not appear to be related to geochemical anomalies. These are particularly noticable on line 132N. It is known that, within resistive rocks, small quantities of magnetic increases their frequency effect. This is because magnetite, which has a resistivity of between 1 and 1000 ohm metres, is electronically conducting. It appears that, on some lines, frequency effects due to magnetite may have been observed at Kenmore I and a comparison between frequency effects and magnetic data was carried out.

On lines 128N and 132N (Chrysophrase Bore grid) results of total magnetic intensity measurements, obtained by Gerdes (1971), were compared with frequency effect values obtained on these lines, (drawing Nos.73-204 & 73-205) both of which are on very resistive rocks.

On line 132N, high frequency effects at the western end of the line (at 13700E) correspond with high magnetic intensity measurements and could well be caused by magnetite.

An interesting feature of the graph is the lowering of magnetic intensity with increasing frequency effects at 14500E. This frequency effect anomaly position corresponds fairly well to that of a geochemical anomaly.

The 4% frequency effects on line 128N could also be due to magnetite since the magnetic intensity is similar to that found on the central position of line 132N.

Apart from a possible error in the magnetic intensity values, no explanation is given for the large increase in these values at 1500E, frequency effects at this position being fairly small.

Very Low Frequency Electromagnetic Results

V.L.F. em. results, presented as contours of the first derivative, are presented on drawing No. 73-207. Slight correlation with the resistivity data can be observed although trends are necessarily linear owing to the nature of the survey.

Wild Horse Prospect

Results from the three I.P. lines each show anomalous frequency effect values which are, however, displaced about 200 feet west of the geochemical copper anomaly. (see drawing No. 73-210).

The rocks in this area dip about 50^{o} to the west. Assuming the geochemical anomaly position is at the outcrop of the bed containing the source of the anomaly, and that the frequency effects would be located more directly above their source, a depth of around 200 feet is indicated. Weathering occurs to at least a depth of 100 feet and frequency effects are unlikely to result from minerals within this oxidised zone.

Comparing the field profiles of frequency effects with theoretical profiles, a depth of 100 feet is indicated for a body which is 2 electrode spacings wide (100 feet) and with a true frequency effect of 25% dipping at 45^{o}. However, model solutions for bodies at greater depths are not available.

CONCLUSIONS

At Kenmore I, anomalous frequency effects have been obtained which coincide with a geochemical copper anomaly. Resistivity values are fairly high and characteristic of gneissic type rocks.

At Kenmore II, south of the area where data was obtained by Nelson and Taylor (1972), a well defined conductive zone attributable to the nickeliferous clay was followed only for a short distance. Further south, the conductive zone broadened considerably although including the areas of jasper capping.

At the Wild Horse Prospect, a well defined zone of anomalous frequency effects was observed on each of the three lines surveyed. The anomaly was displaced about 200 feet from a geochemical anomaly, probably due to the westerly dip of the mineralised band.

RECOMMENDATIONS

Drilling targets are suggested on the frequency effect anomalies on Kenmore I, Kenmore II and Wild Horse Prospect. These are listed below in order of preference for each prospect.

	Estimated Vertical depth required to intersect body
Kenmore I	
Line 8400N at 350W	100 feet
Line 6400N at 650W	100 feet
Kenmore II	
Line 11000 N at 350 W	100 feet
Line 11600 N at 200 W	100 feet
Wild Horse Prospect	
Line 1400N at 350W	200 feet
Line 800N at 350W	200 feet

Owing to the displacement between the geochemical and geophysical anomalies and to the dip of the structures it is suggested that the drill holes at Wild Horse prospect be located about 500W and dip eastwards at about 45^{o}.

GLOSSARY

Barnes, L.C., Conor, C.H.H. and Pain, A.M., 1971. Progress Report Nickel Exploration. S.A. Dept. Mines Rept. Bk. No. 71/183.

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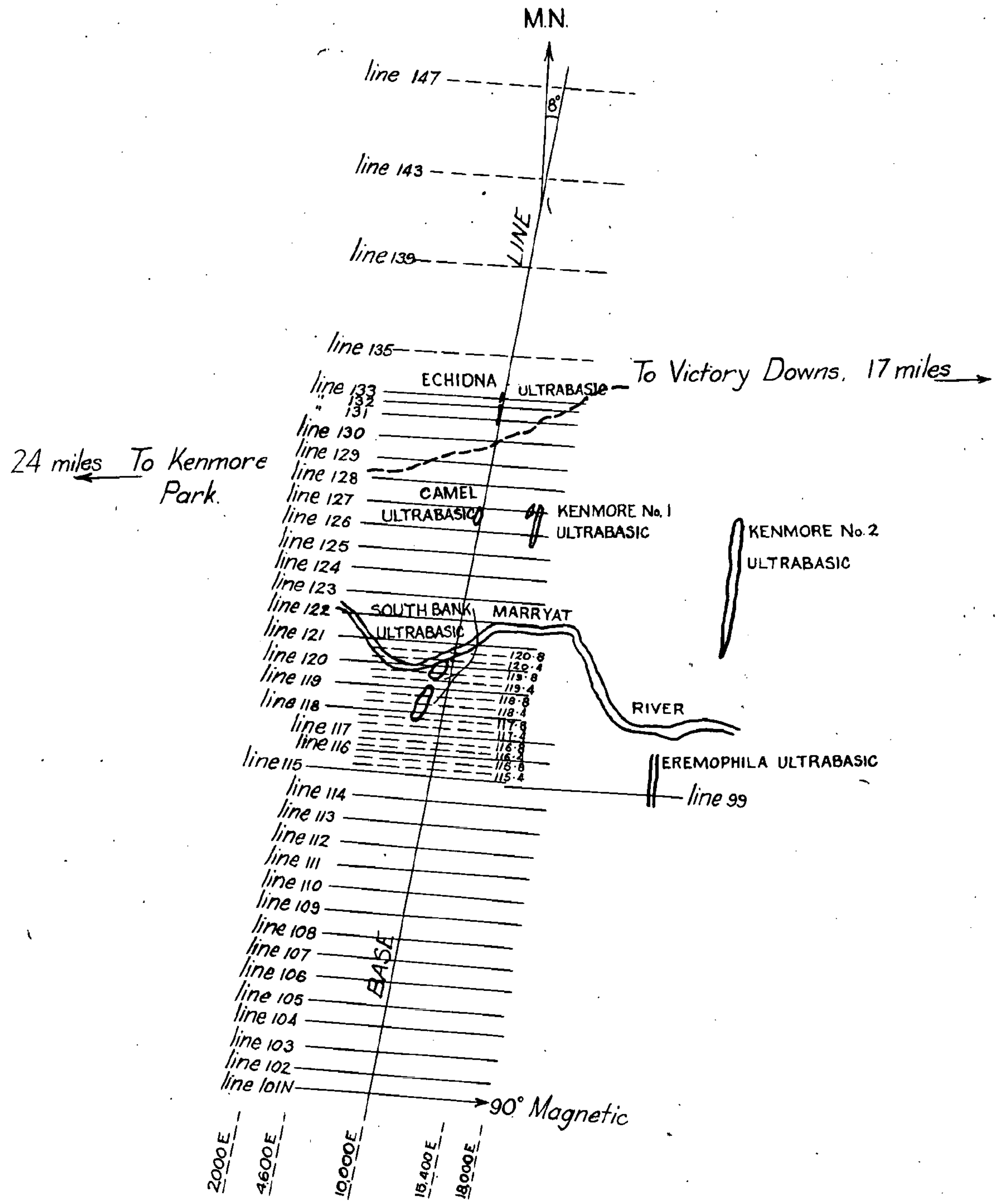
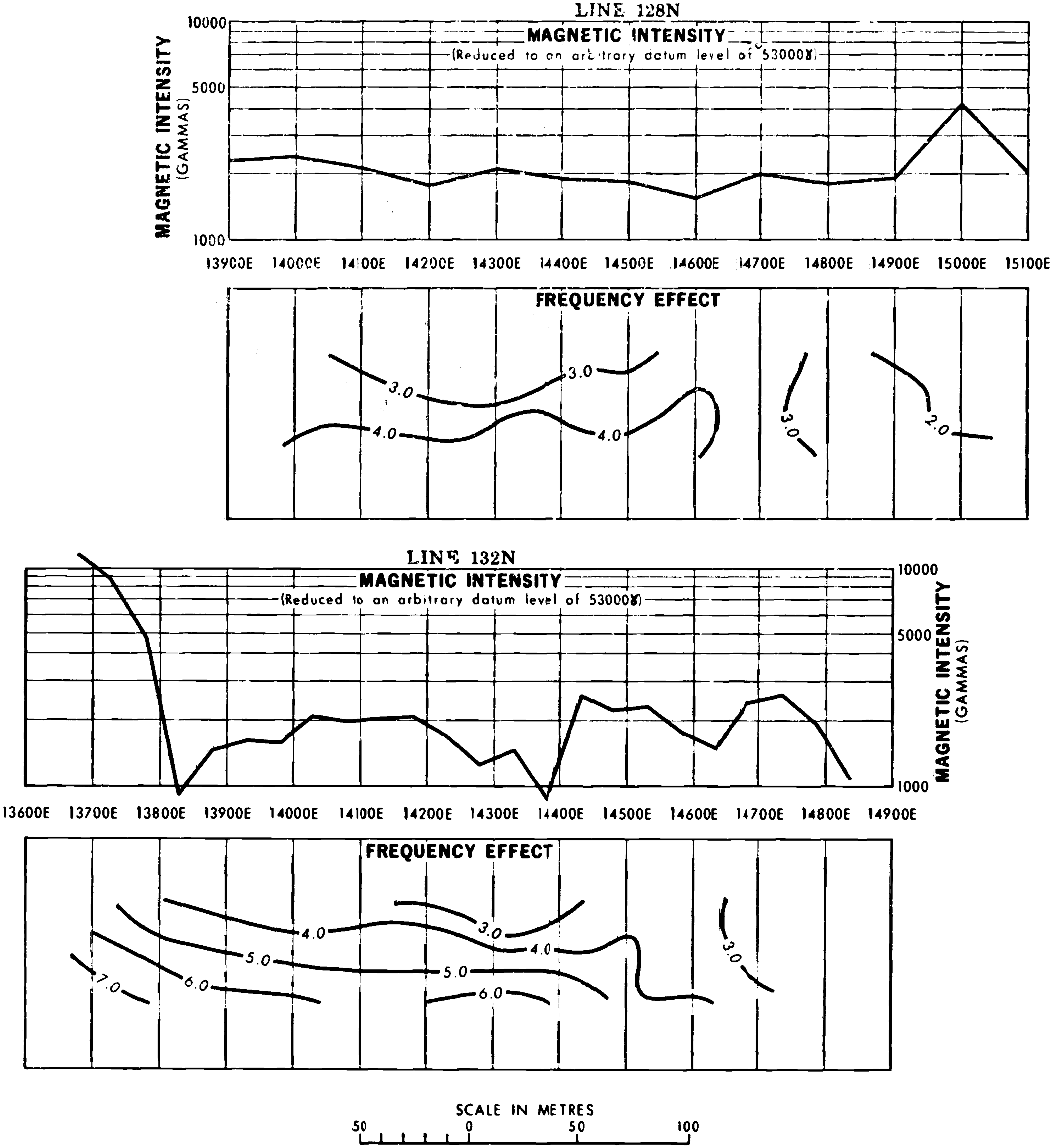


EXPLORATION GEOPHYSICS SECTION	**DEPARTMENT OF MINES – SOUTH AUSTRALIA**	Scale: 1 INCH = 2 MILES
Compiled: W.E.W.	GEOPHYSICAL SURVEYS AT KENMORE PARK AND WILD HORSE PROSPECT	Date: 28TH MARCH 1973
Drn. M.S. Ckd A.F.	KENMORE PARK THE CHRYSOPHRASE BORE GRID (AFTER R.A. GERDES 1971)	Drg. No. S10234 Aa

1M-2.70 A1810



73–204 Del.C.R.S. MRR138

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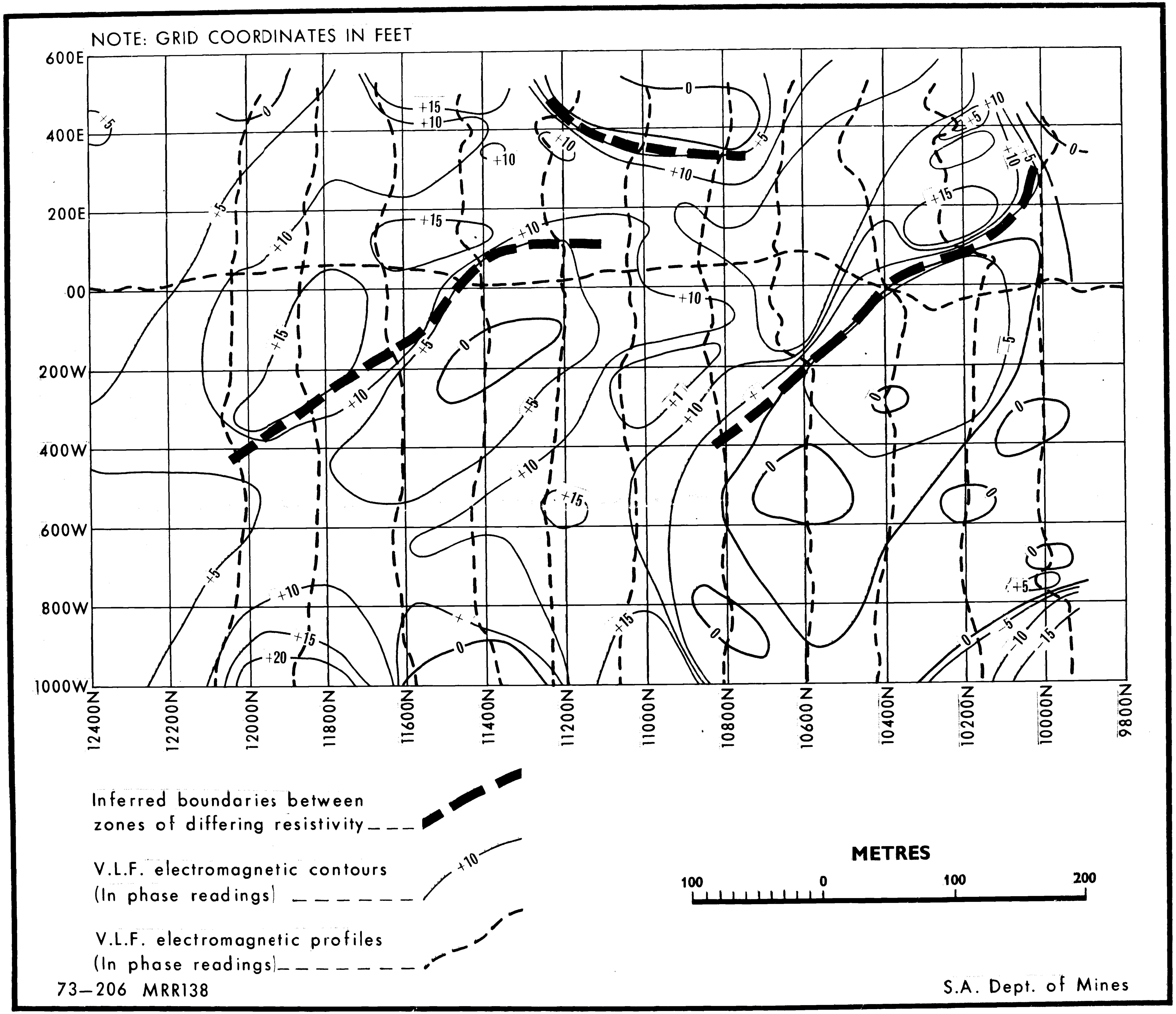

Fig. 9
Kenmore II Prospect
V.L.F. Electromagnetic Results

W.J.E. 73-206/4
Aa
28-5-74

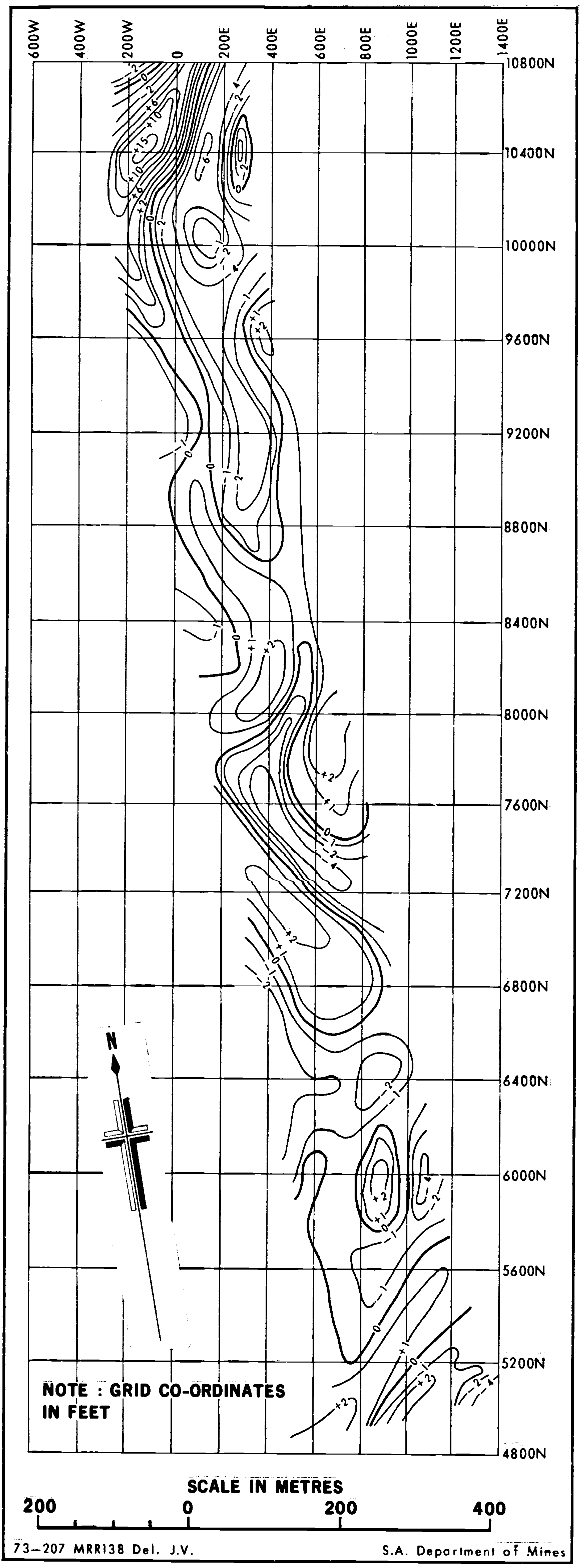

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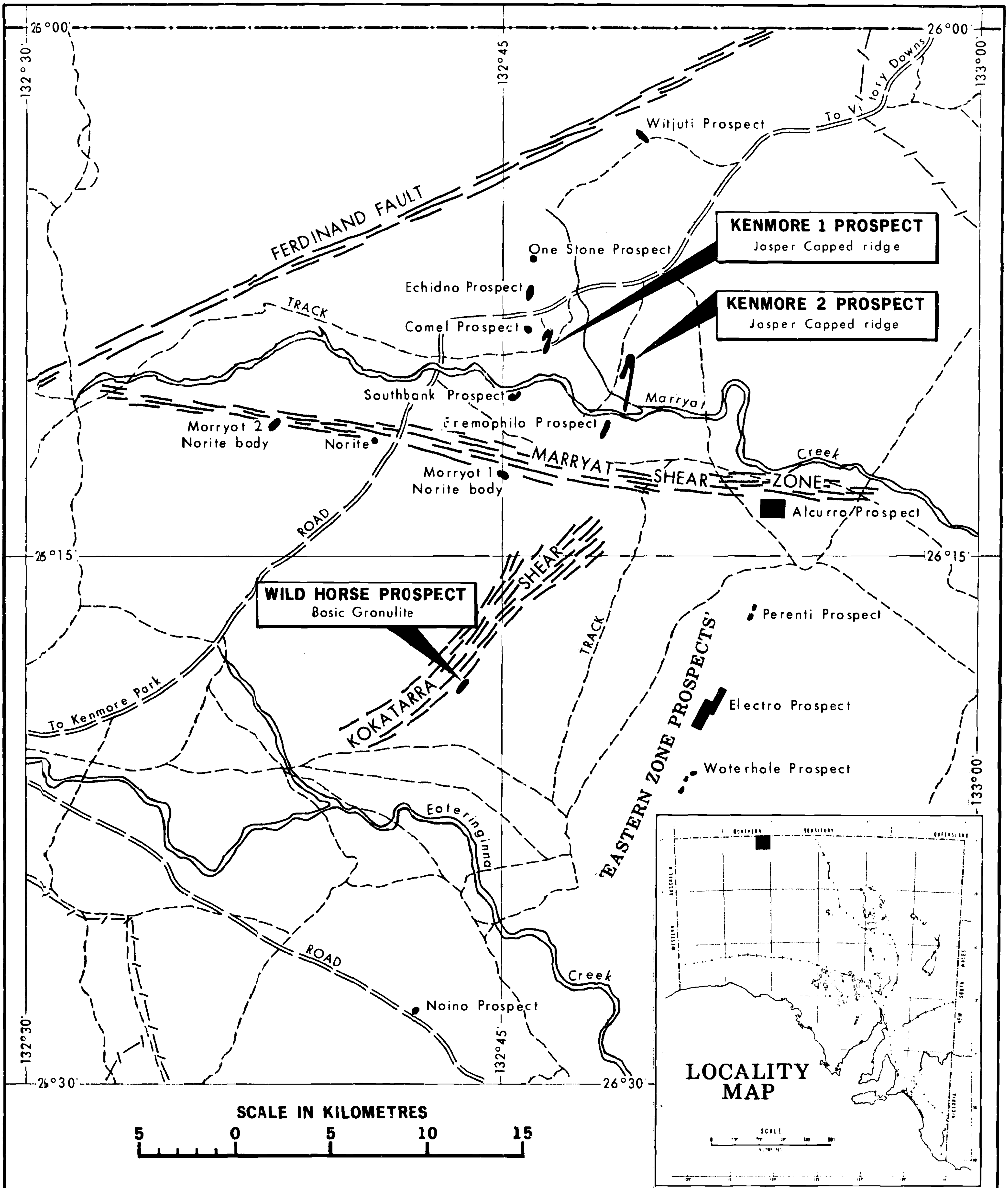
Fig. 11 Kenmore I Prospect
First derivative contours of V.F.L.
Electromagnetic results MRR138

J.V. 73-207 4 Ad 24 May 1974

Fig. 6 Resistivity and Frequency Effect Results
Kenmore 2 Prospect



73–209 MRR138 Del. J.V.

S.A. Department of Mines

Fig.4 Plan Showing Geological, Geochemical and Geophysical Results of Wild Horse Prospect

W.J.E. 73-210/4
A8
24.5.71

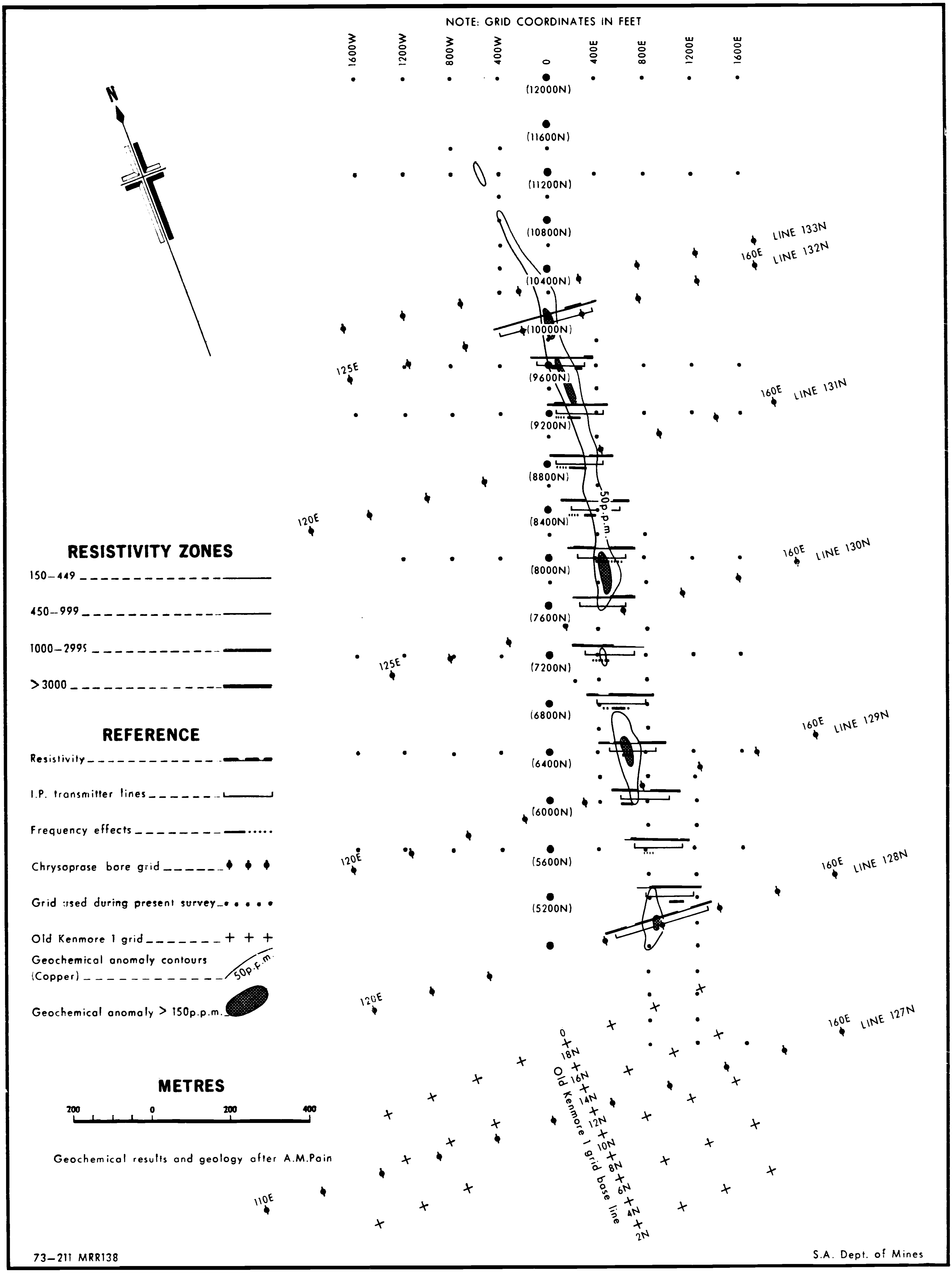


Fig 3 Location and interpretation of I.P. Results. Kenmore 1 Prospect

WJE 73-211/4
Aa
3-6-74

Fig 2 GEOLOGICAL PLAN OF KENMORE II PROSPECT

MRR 138

T.S. 73-212/4

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PLAN SHOWING FREQUENCY EFFECT ZONES -
LINES NORTH OF LINE 0
KENMORE 2 PROSPECT
GEOPHYSICAL SURVEY KENMORE PARK & WILD HORSE PROSPECT

MRR 138

73-213/4

Aa

9-5-74

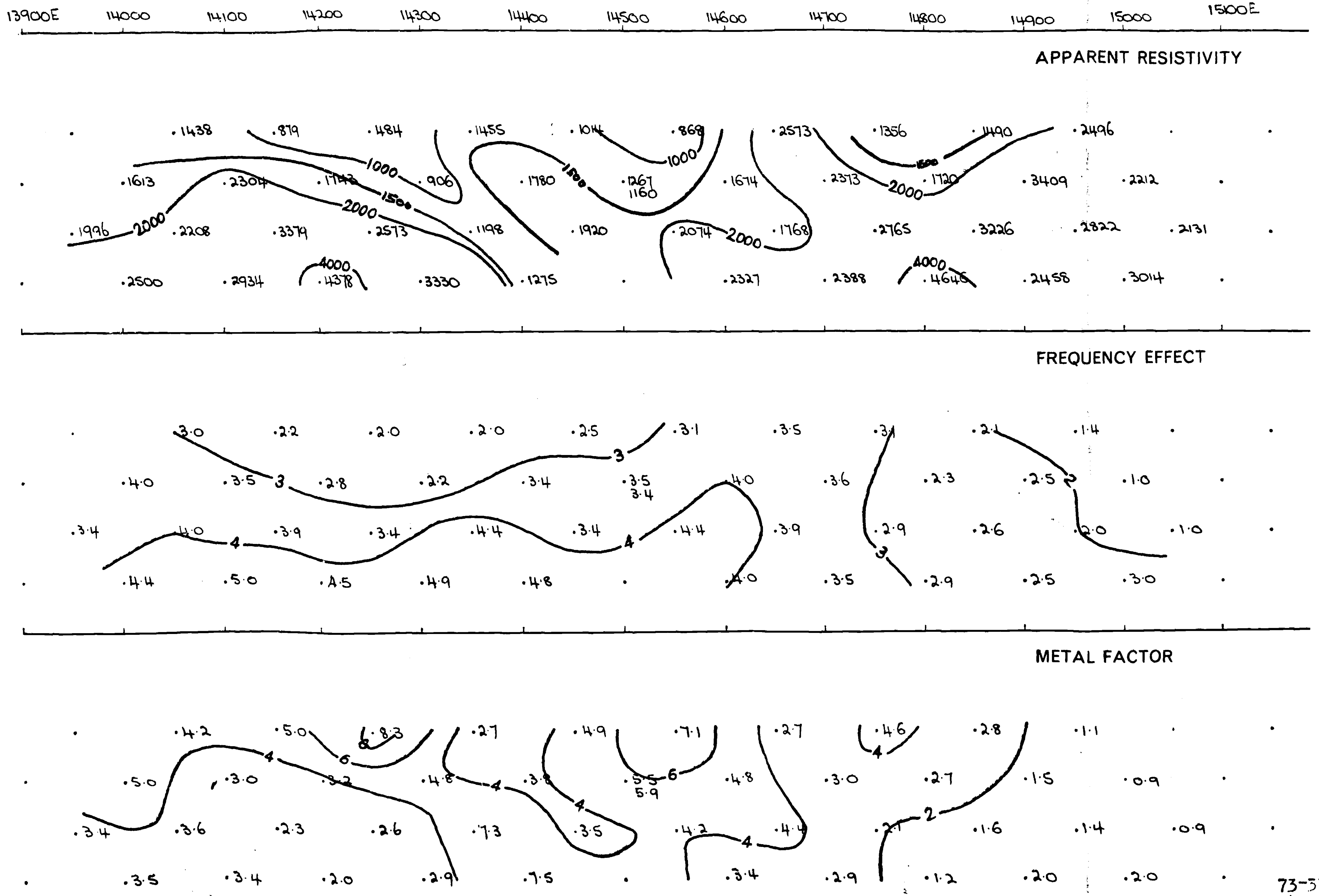
Fig. 7 PLAN OF RESISTIVITY ZONES–LINES NORTH OF LINE OO
KENMORE 2 PROSPECT

MRR 138

T.S. 73-214/4 Aa

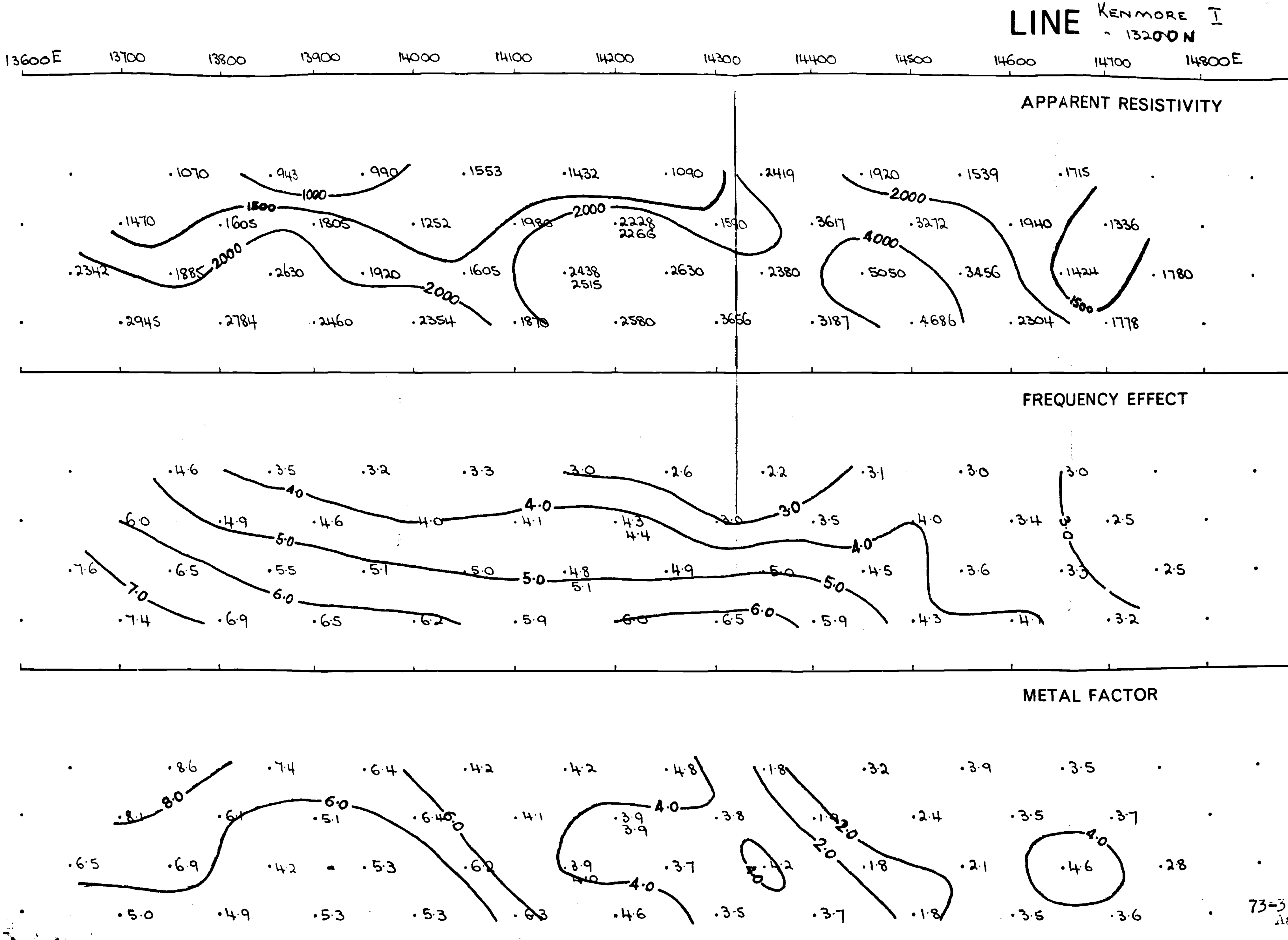
27 May 1974

LINE
Kenmore I
12800 N



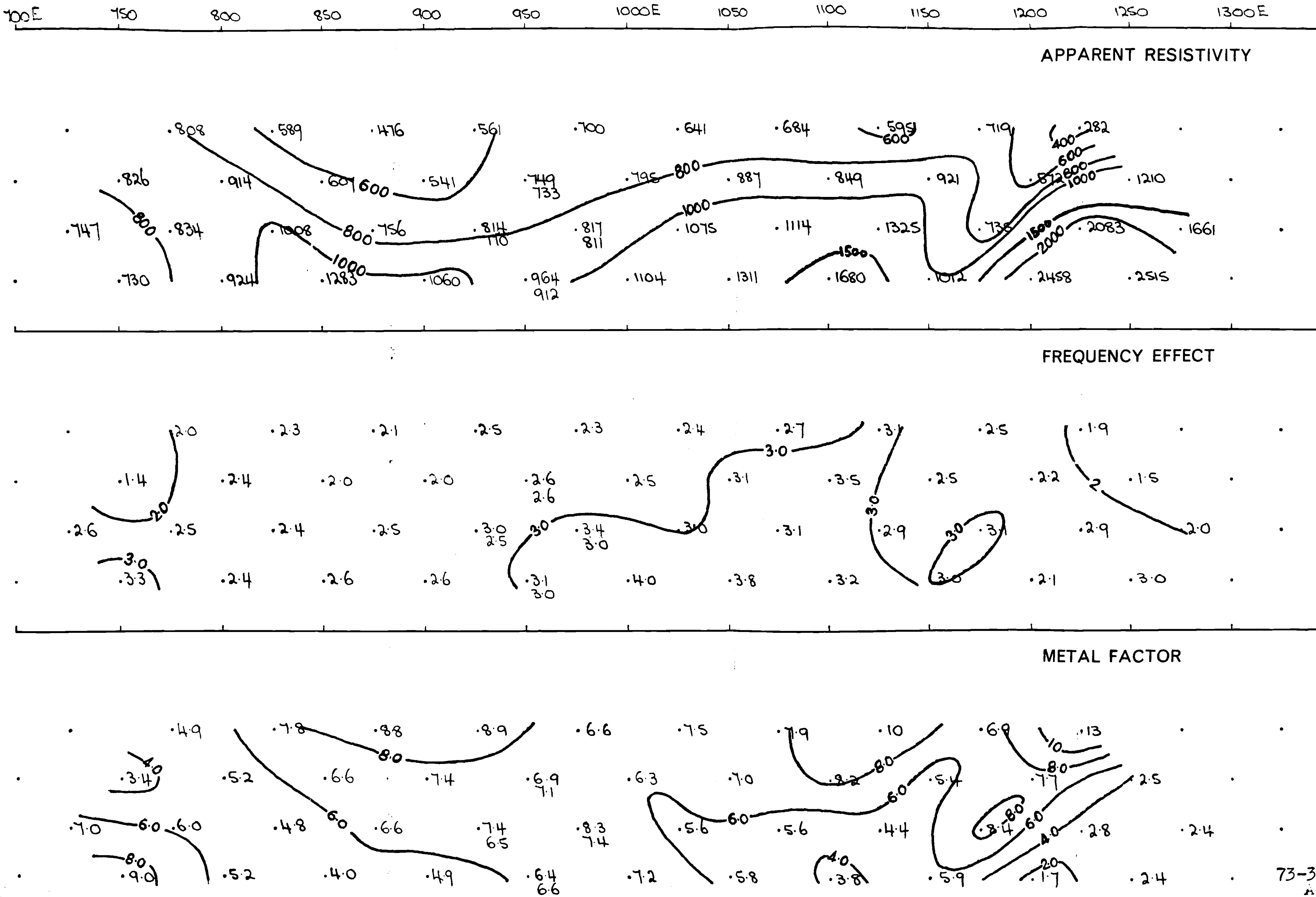
SCALE 1" reb. 100'

73-371/1
Aa


LINE KENMORE I - 13200N
13600E
13700
13800
13900
14000
14100
14200
14300
14400
14500
14600
14700
14800E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR

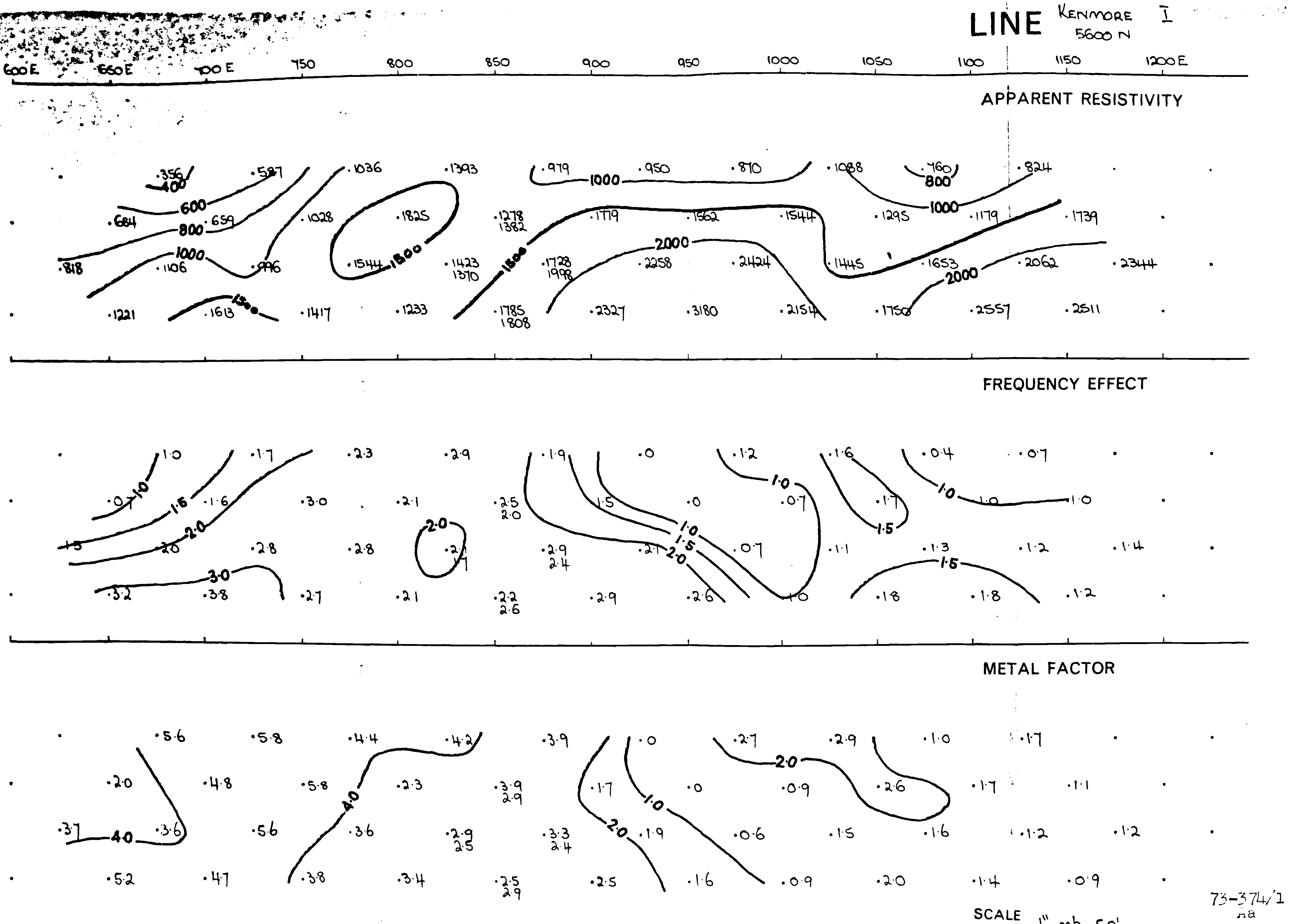
73-372/1
Aa

LINE KENMORE I
5200 N



73-373/1

SCALE 1" reb. 50'



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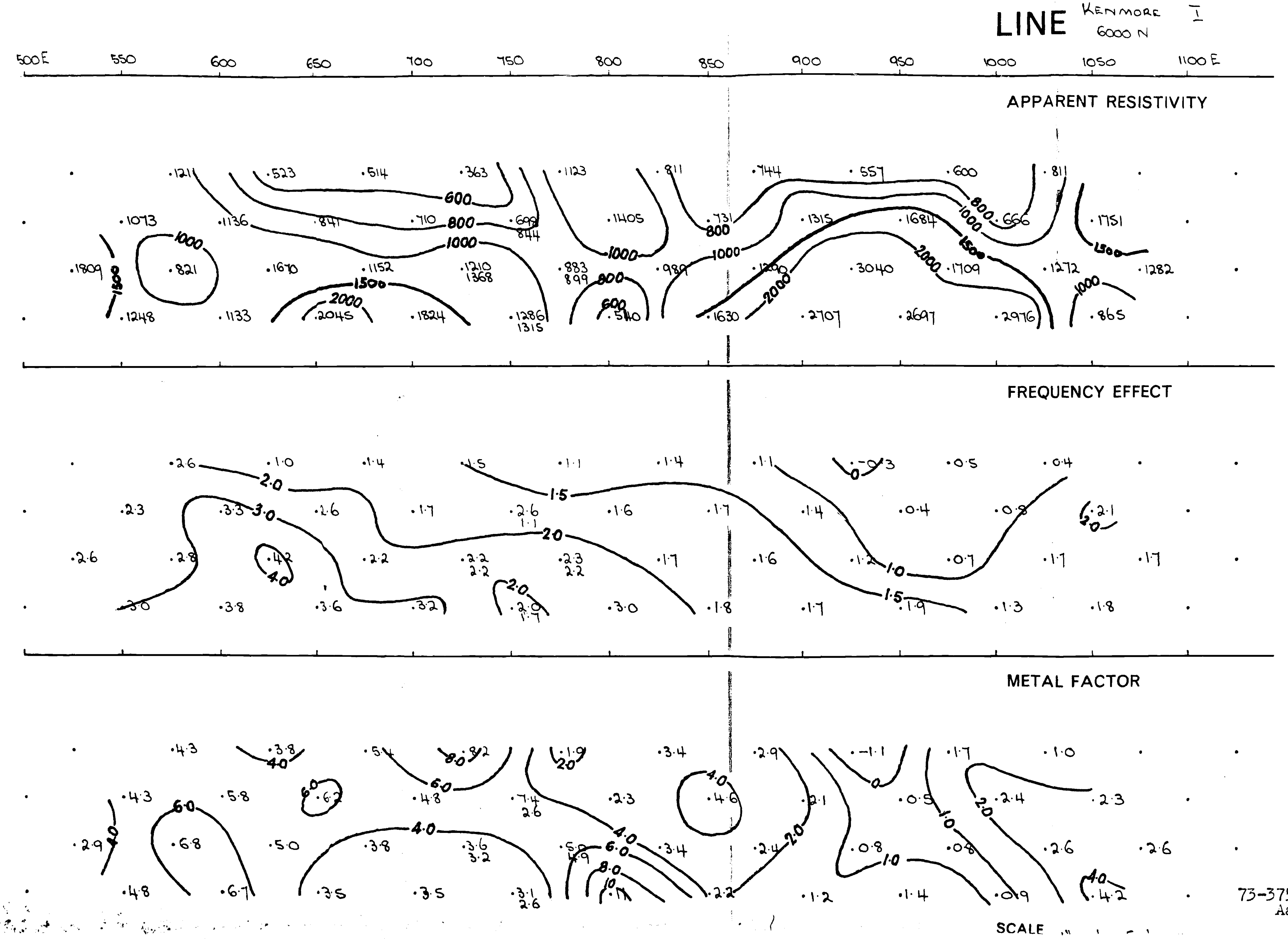

73-375/1
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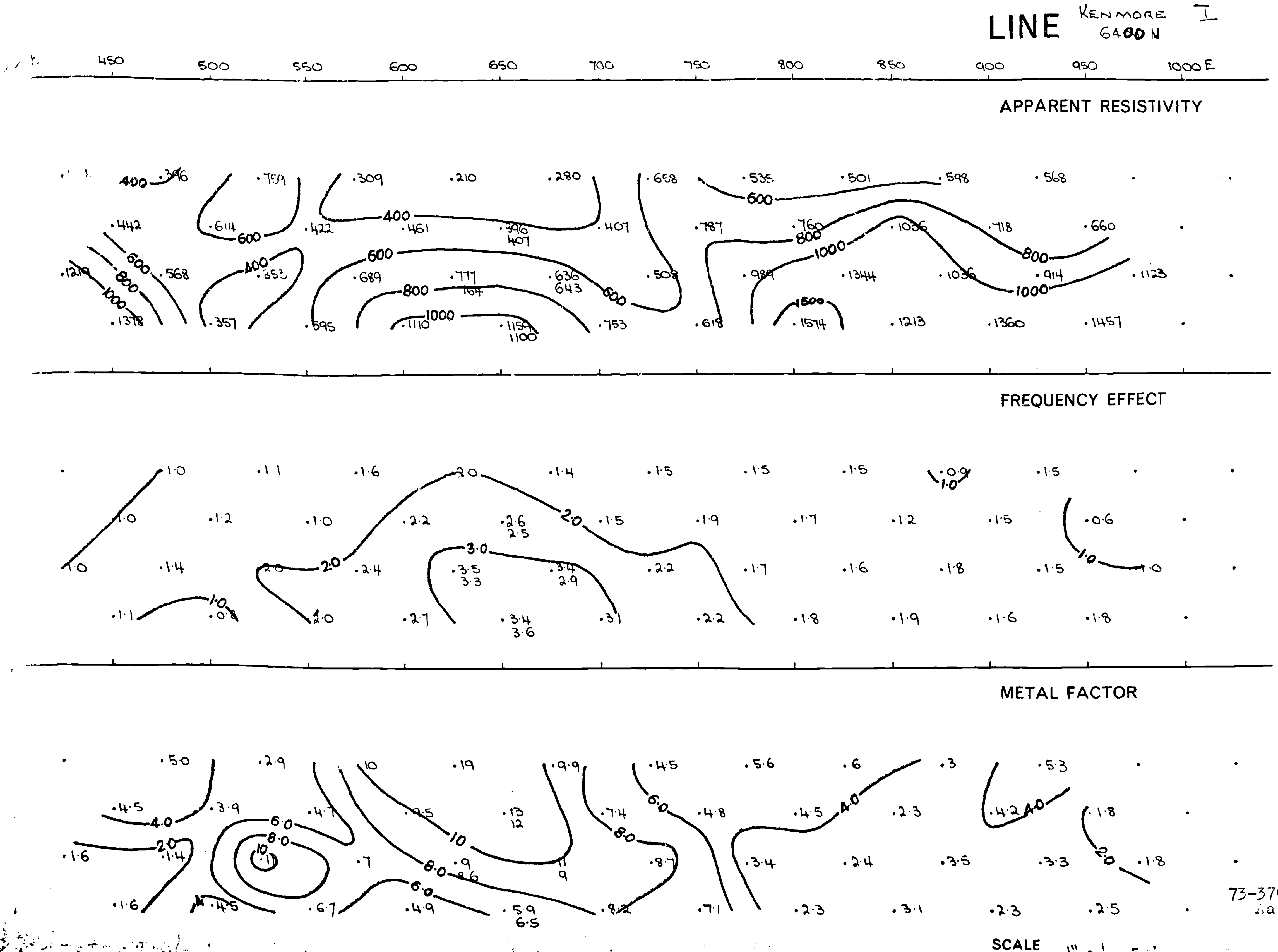
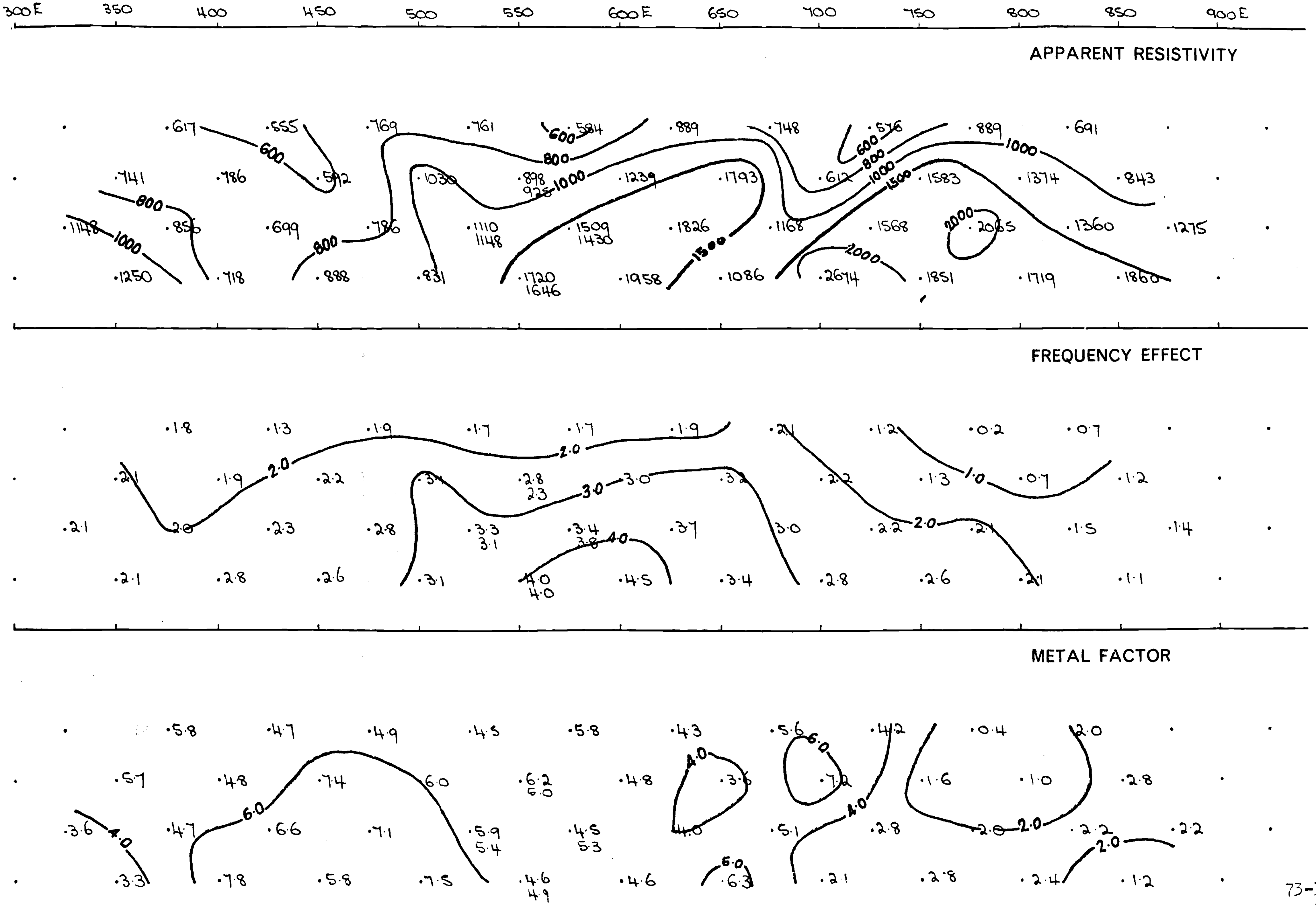
SCALE



LINE
KENMORE I
6400 N
450 500 550 600 650 700 750 800 850 900 950 1000 E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE

73-376/1
Aa

LINE Kenmore I 6800 N

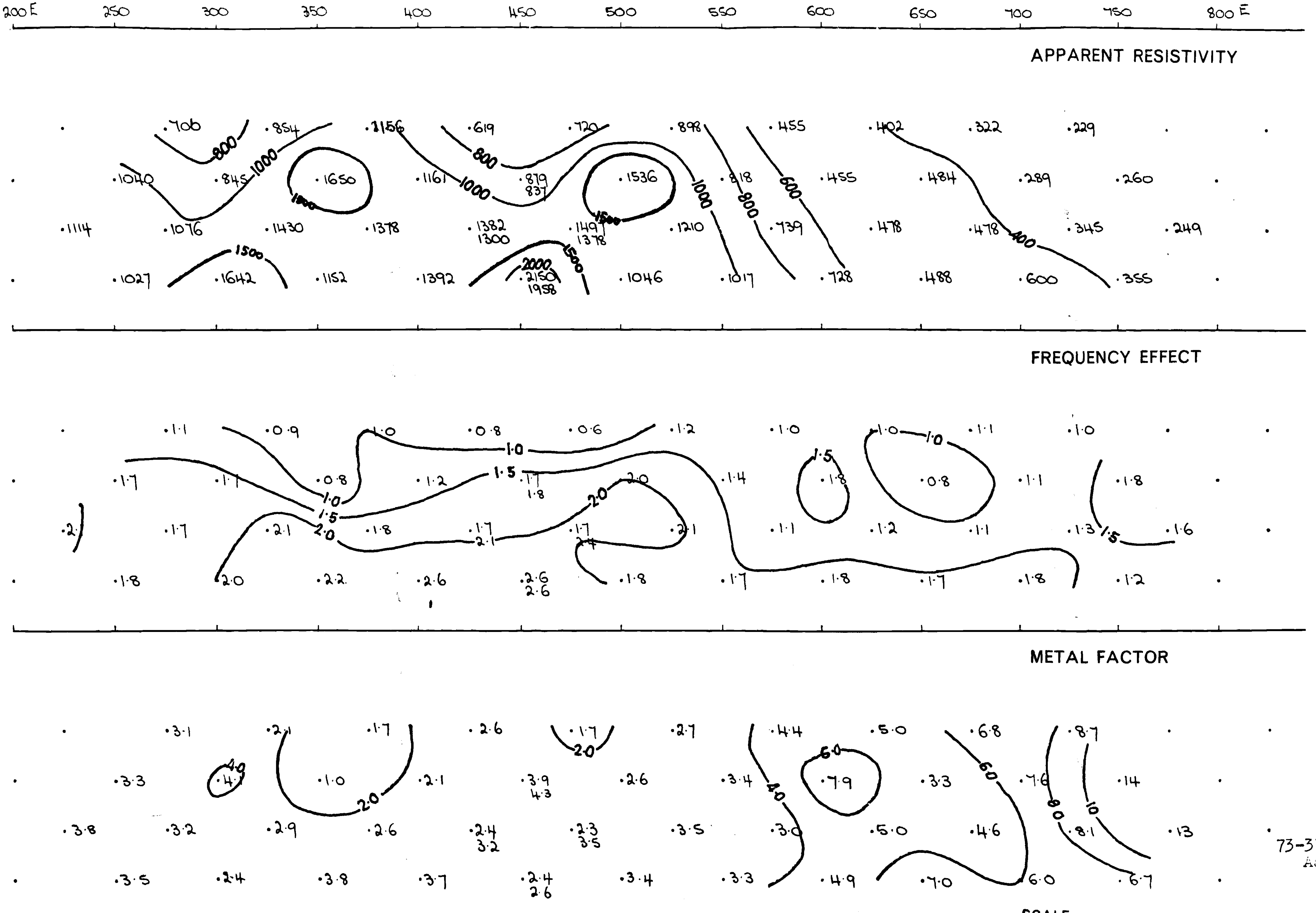


SCALE 1" rep. 50'

S.A. Department of Mines

73-377/1

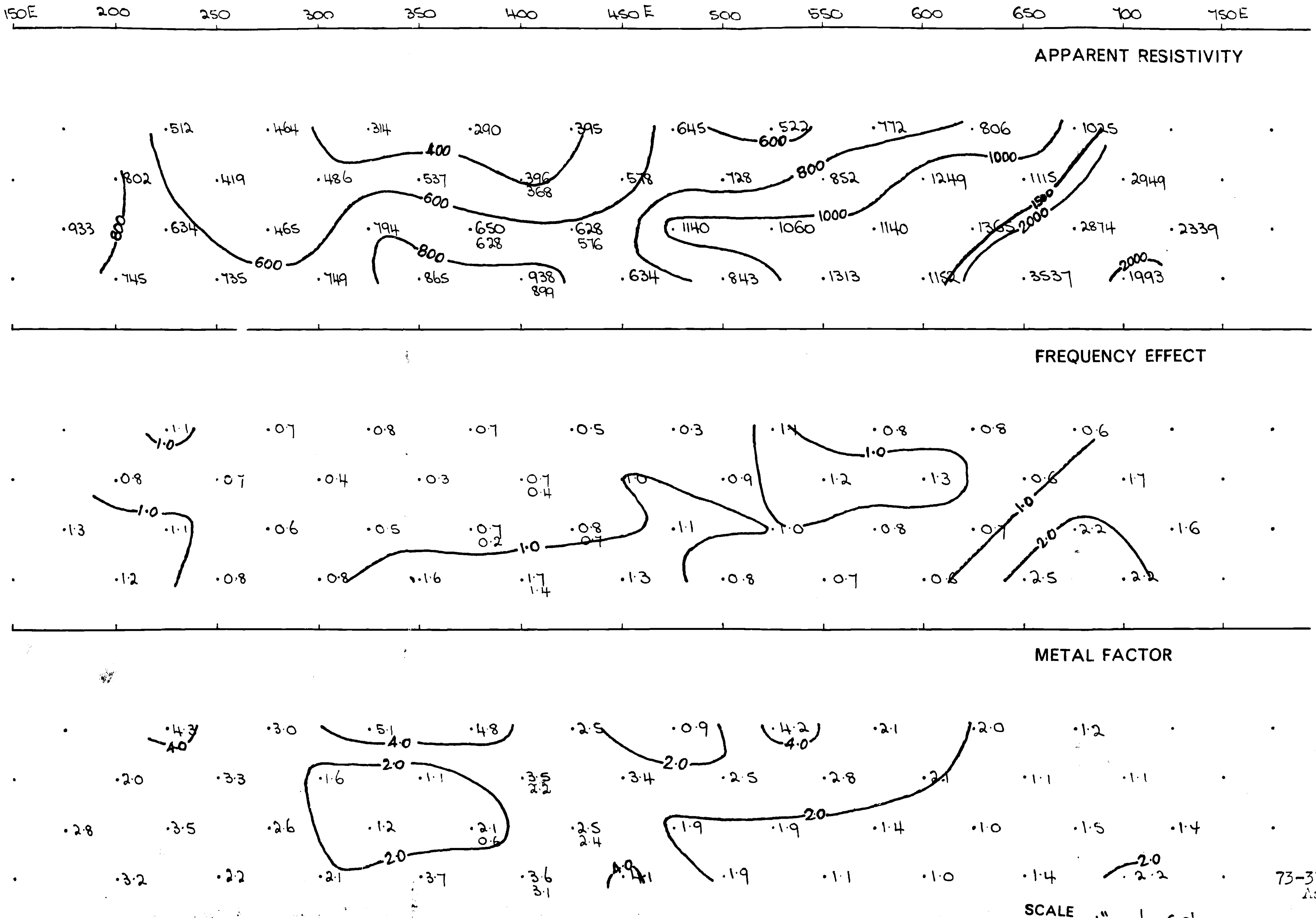
LINE Kenmore I 7200 N



SCALE 1" reb 50'

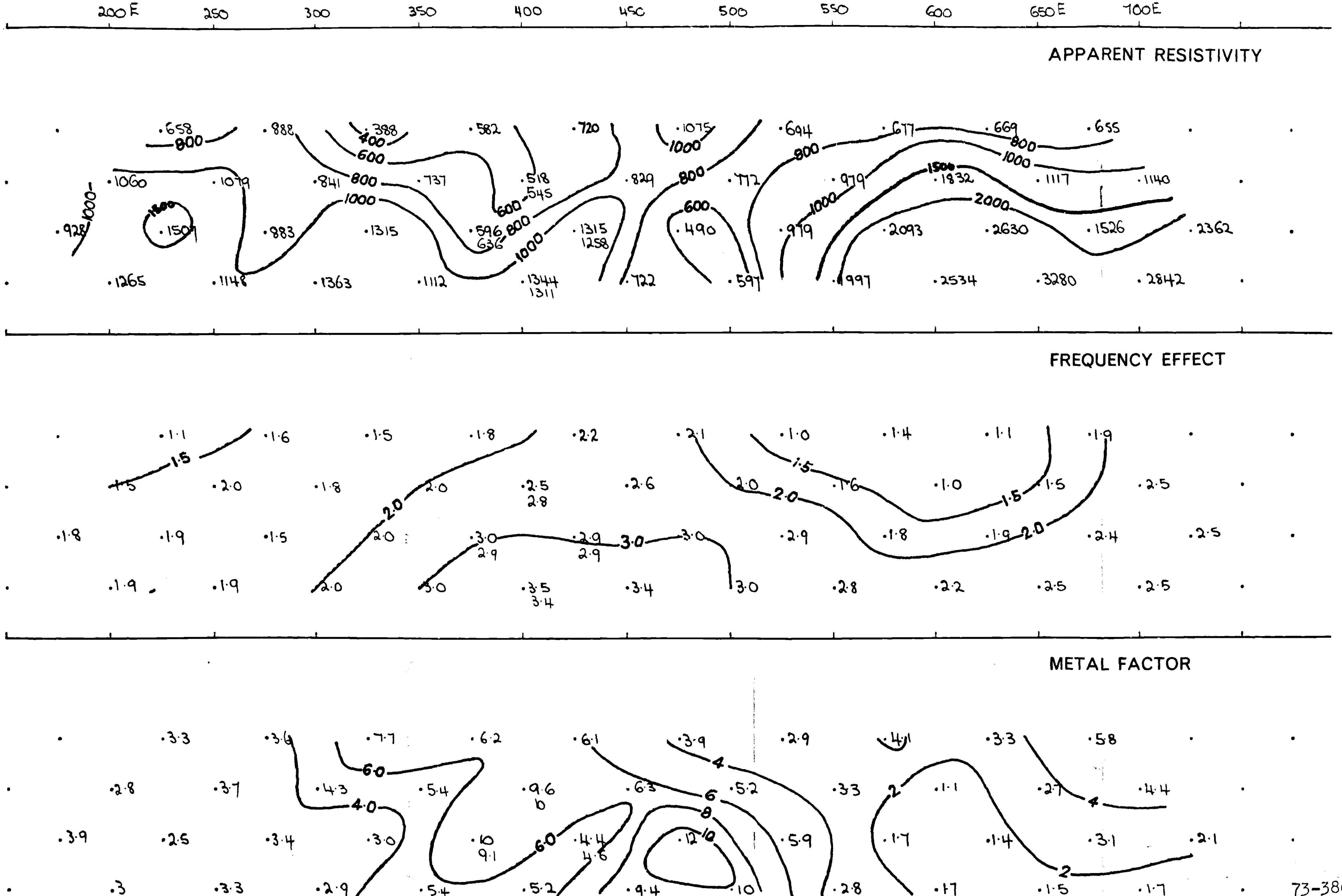
73-378/1 Aa

LINE Kenmore I
7600 N



73-379/1

LINE KENMORE I 8000 N



73-380/1

SCALE 1" rep. 50'

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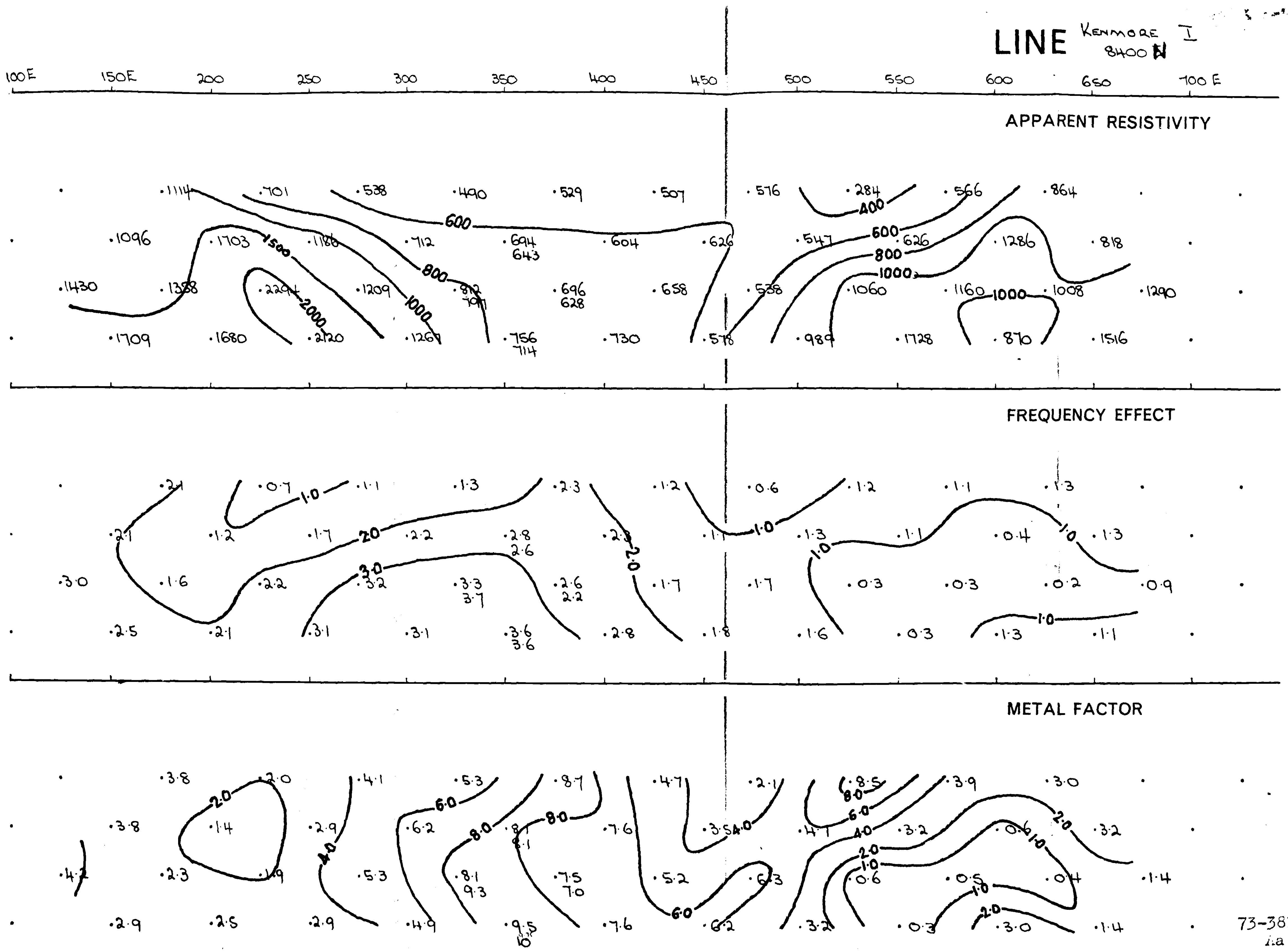
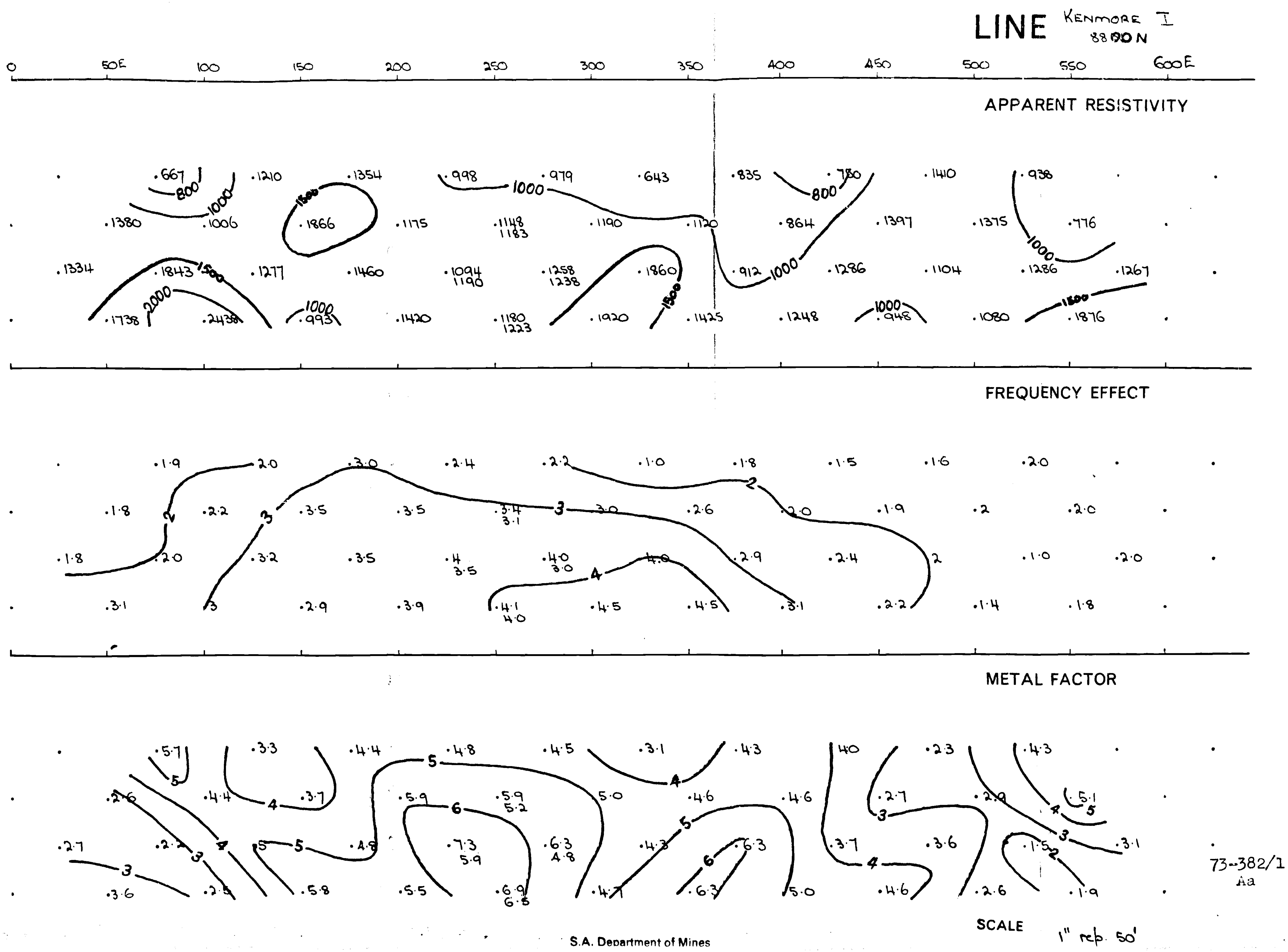
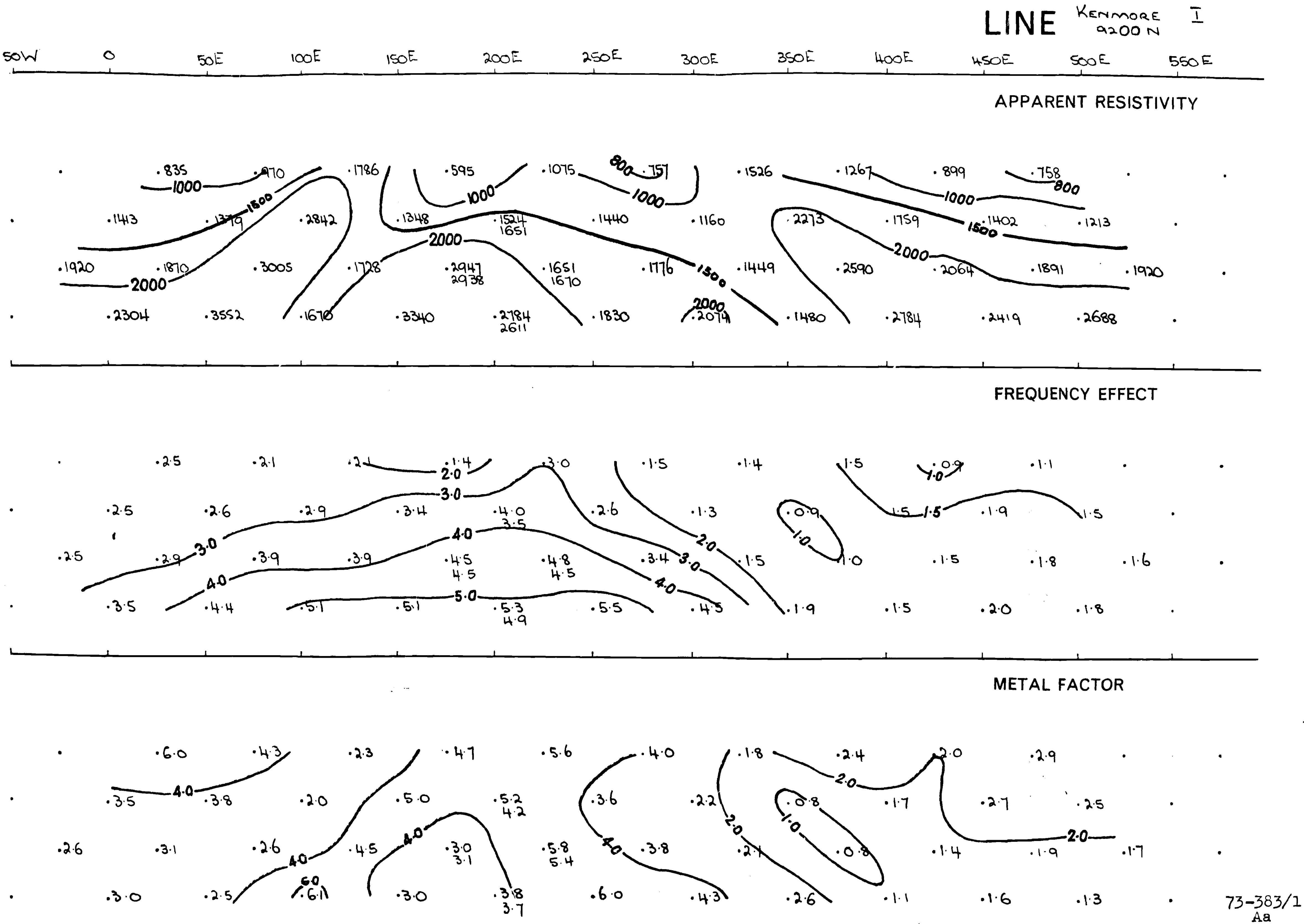


73-381/1

SCALE 1" reb 50'

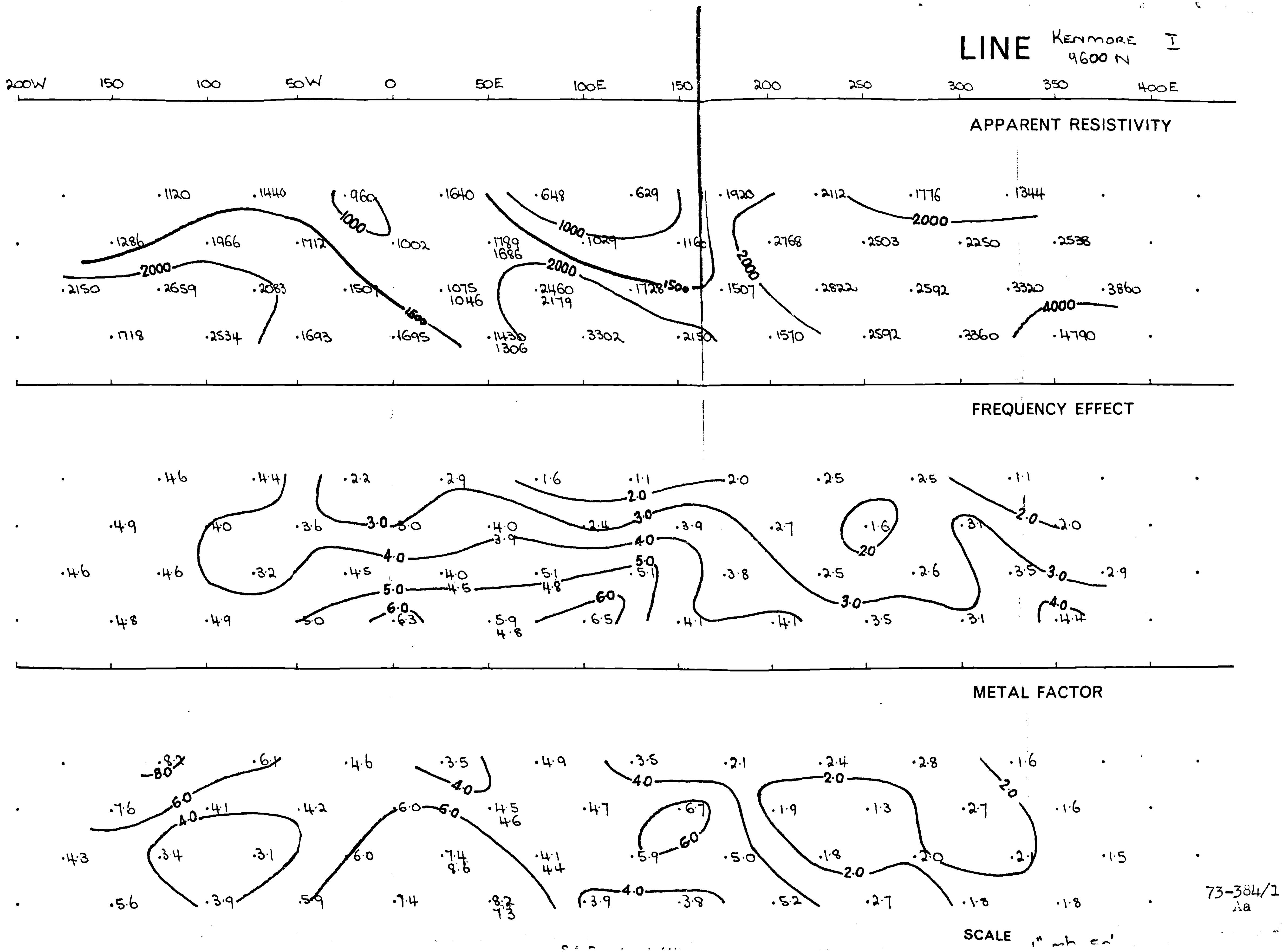
S.A. Department of Mines


LINE KENMORE I 8800N
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
73-382/1 Aa
SCALE 1" rep. 50'
S.A. Department of Mines

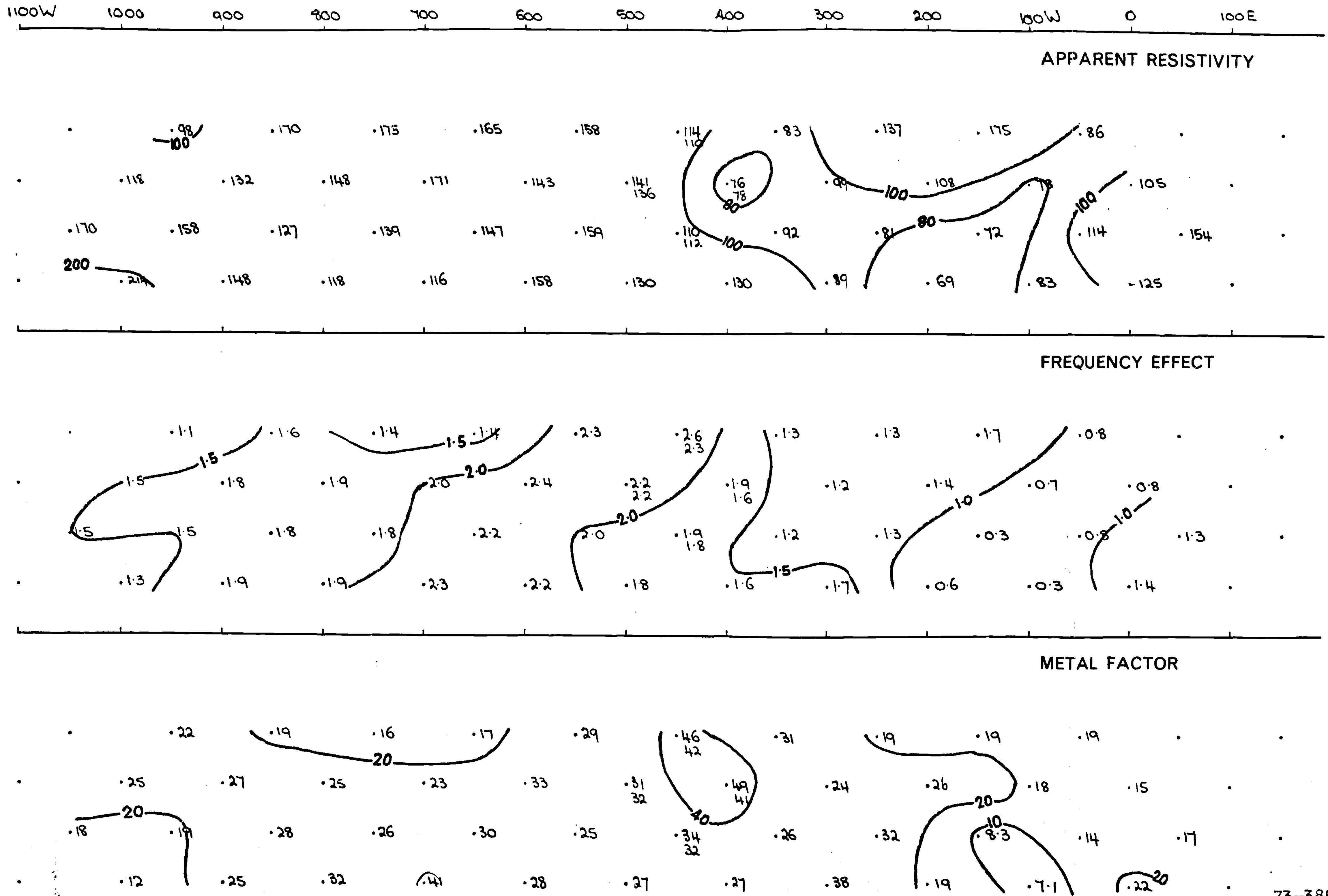


SCALE

S.A. Department of Mines


LINE
KENMORE I
9600 N
200W
150
100
50W
0
50E
100E
150
200
250
300
350
400E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE
73-384/1
Aa

LINE Kenmore II
10400 N

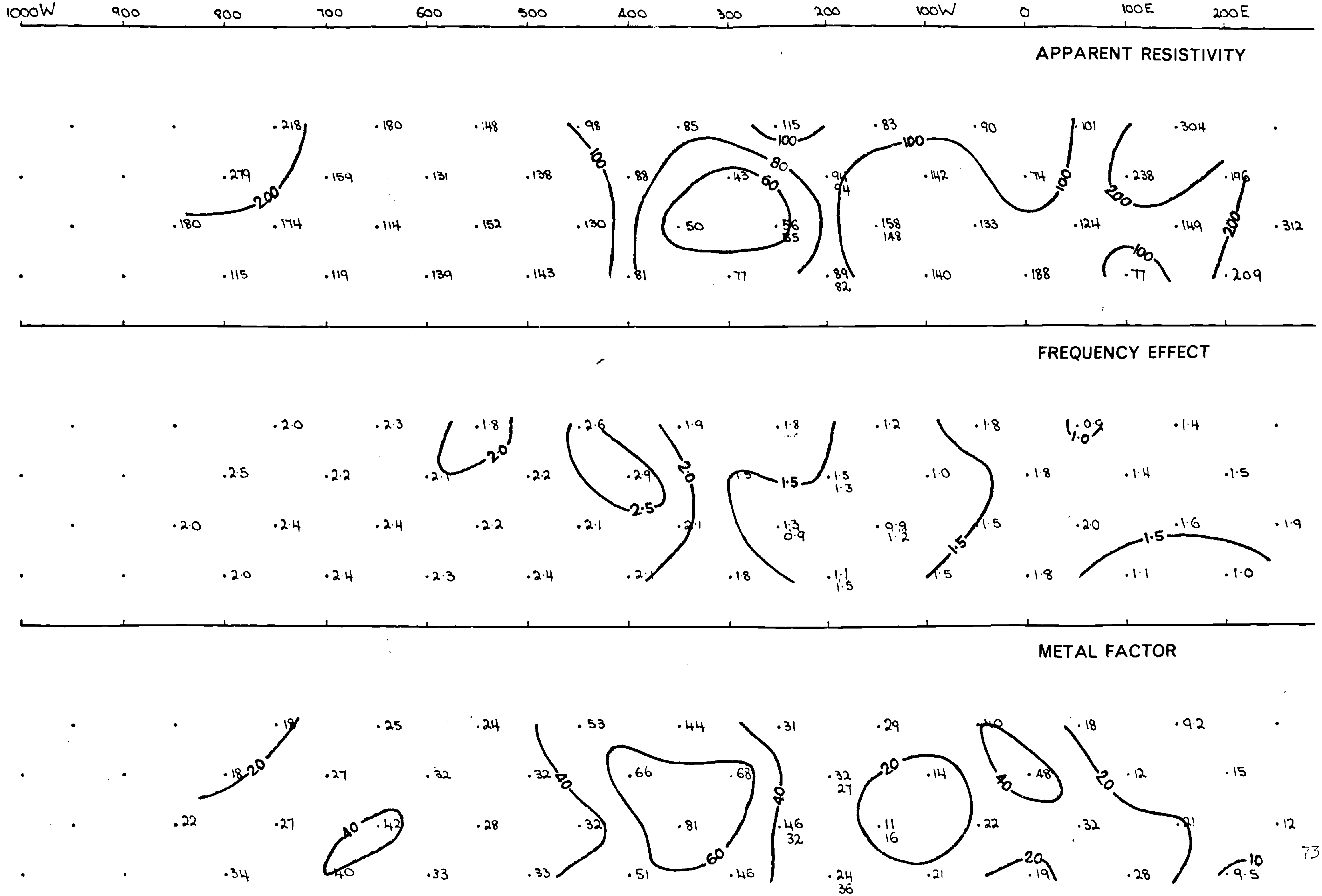


SCALE 1" rep. 100'

S.A. Department of Mines

73-385/1
Aa

LINE Kenmore II 10600 N

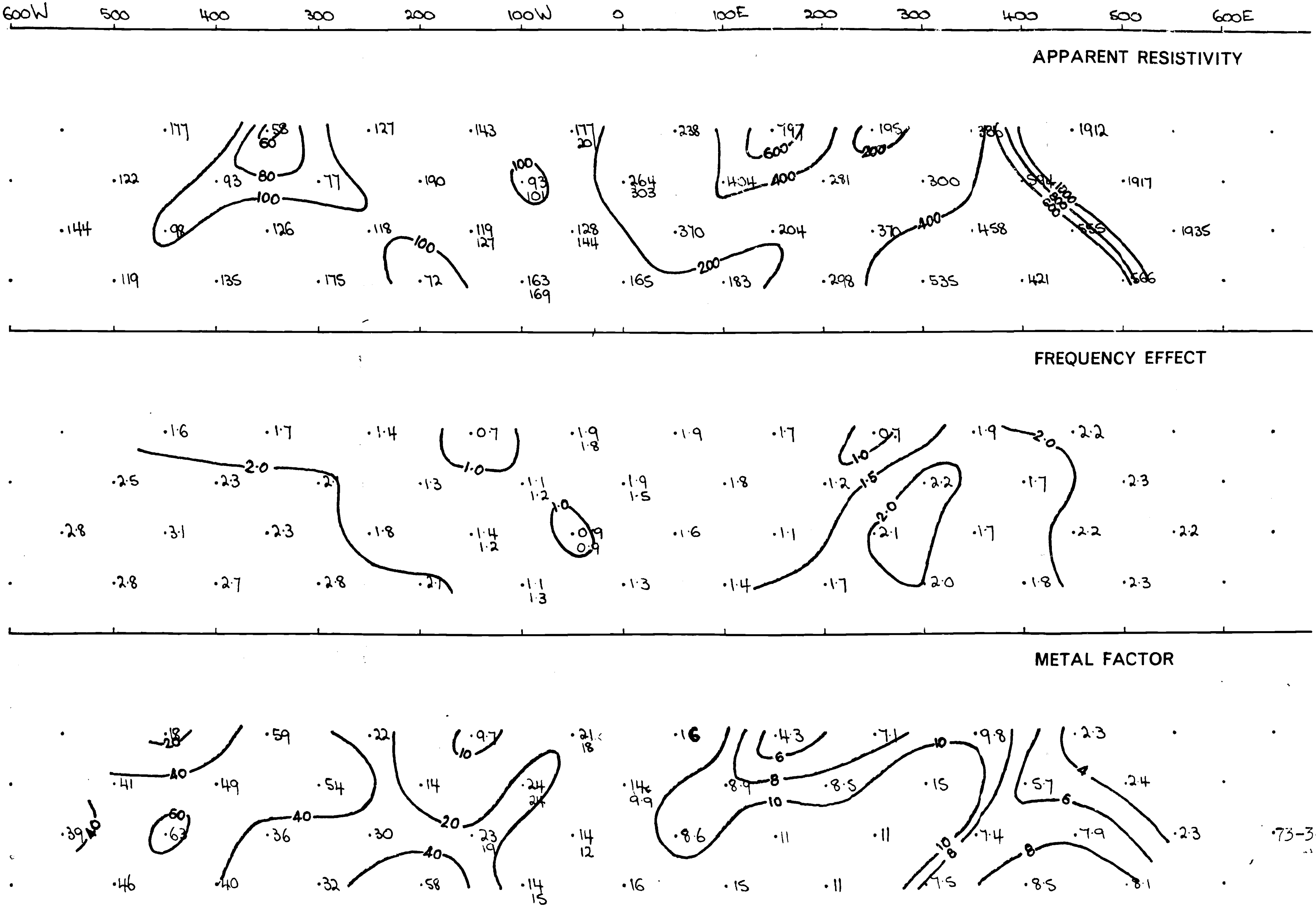


SCALE 1" rep. 100'

73-386/1

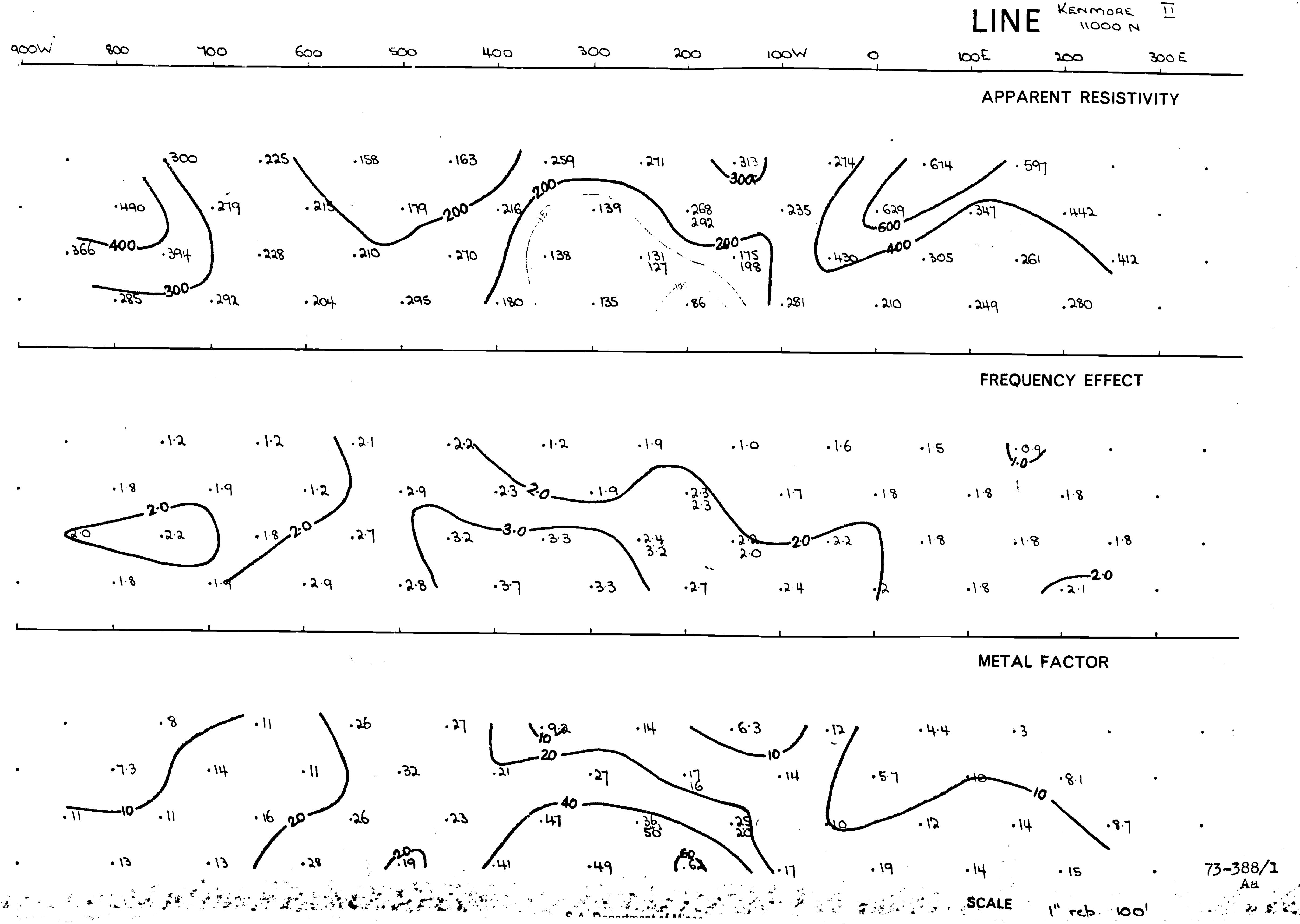
S.A. Department of Mines

LINE Kenmore II 10800 N

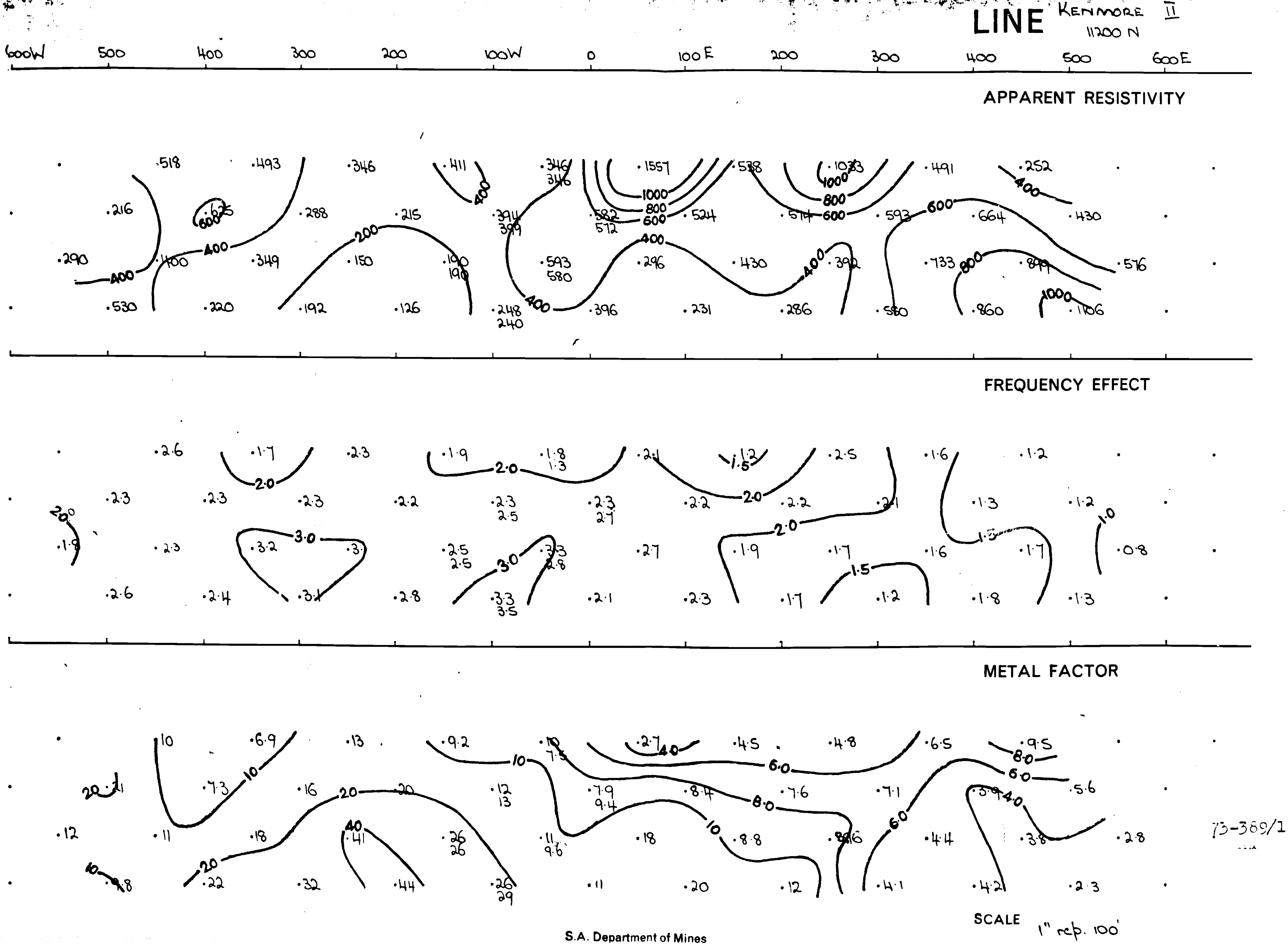


SCALE 1" rep. 100'

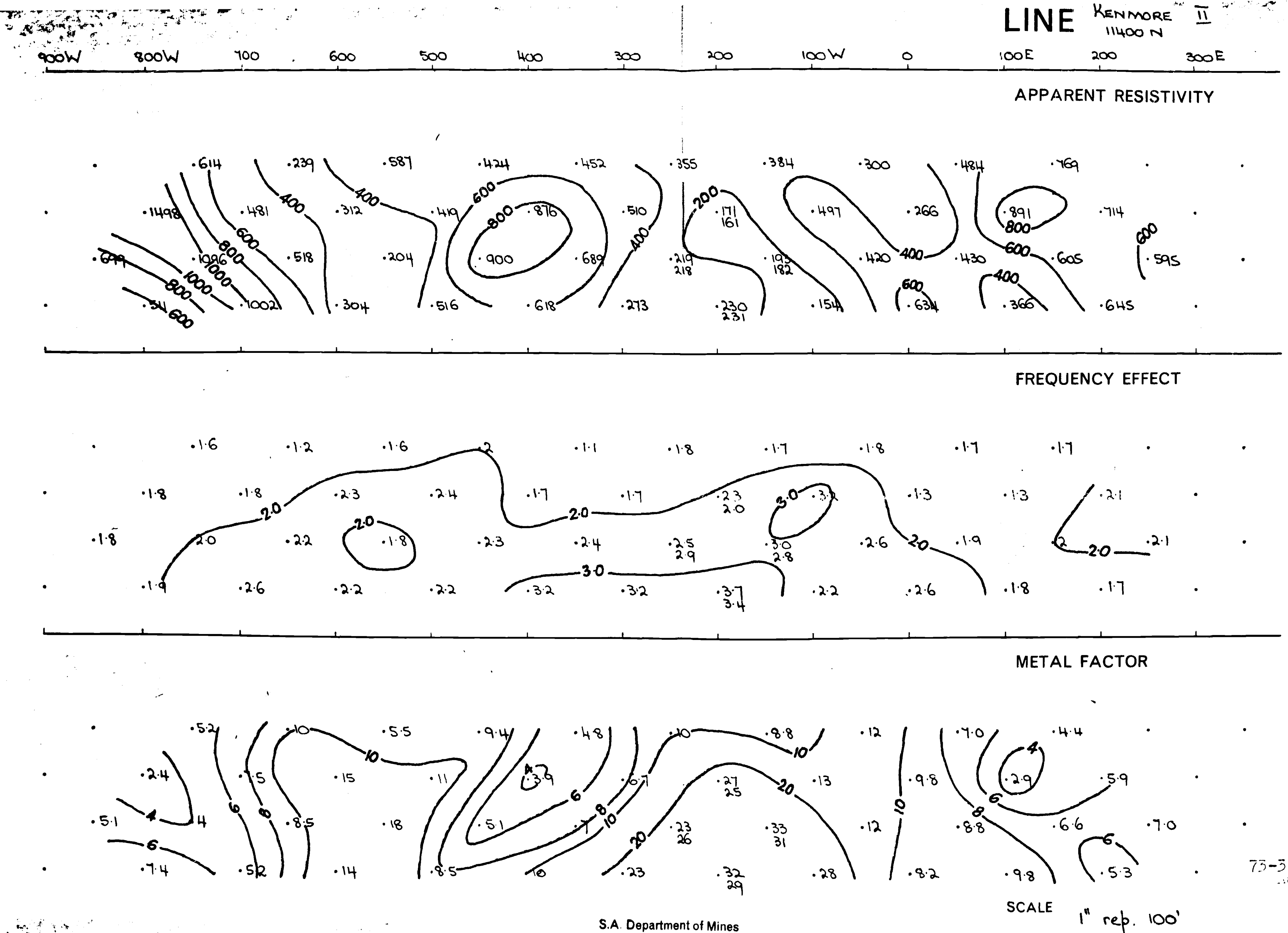
73-387/1



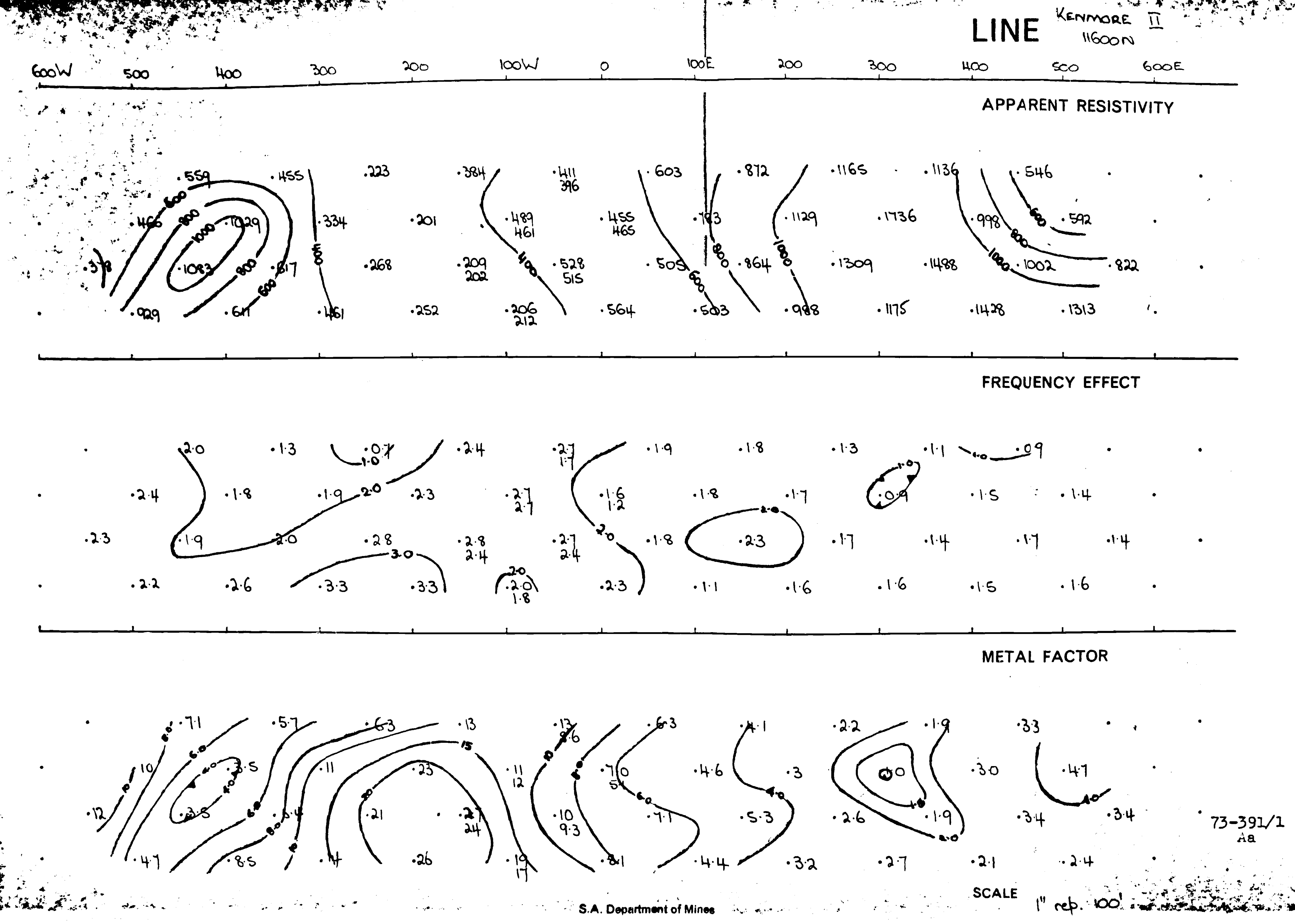
LINE KENMORE II 11000 N
900W 800 700 600 500 400 300 200 100W 0 100E 200 300E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE 1" reb. 100'
73-388/1
Aa

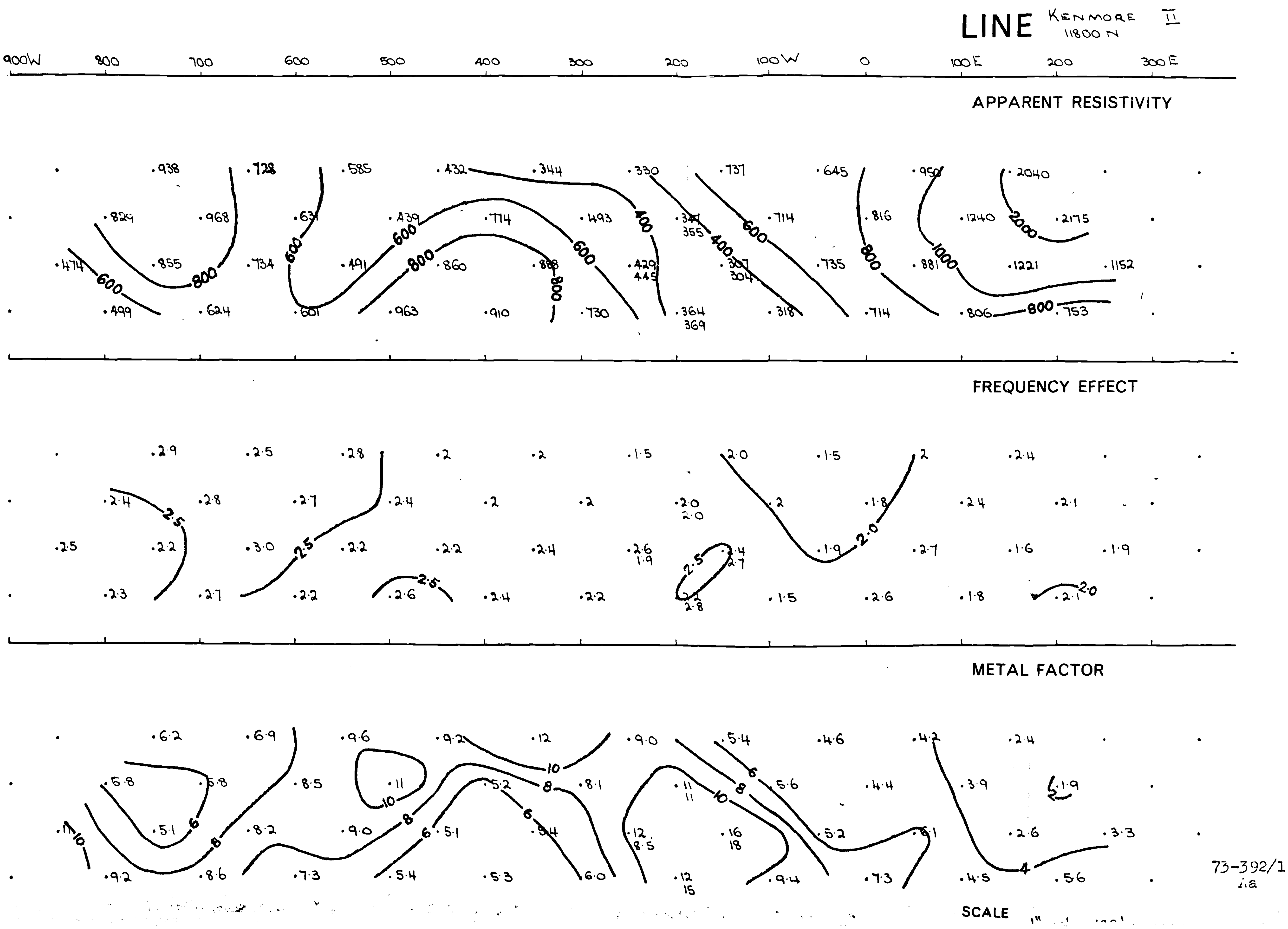


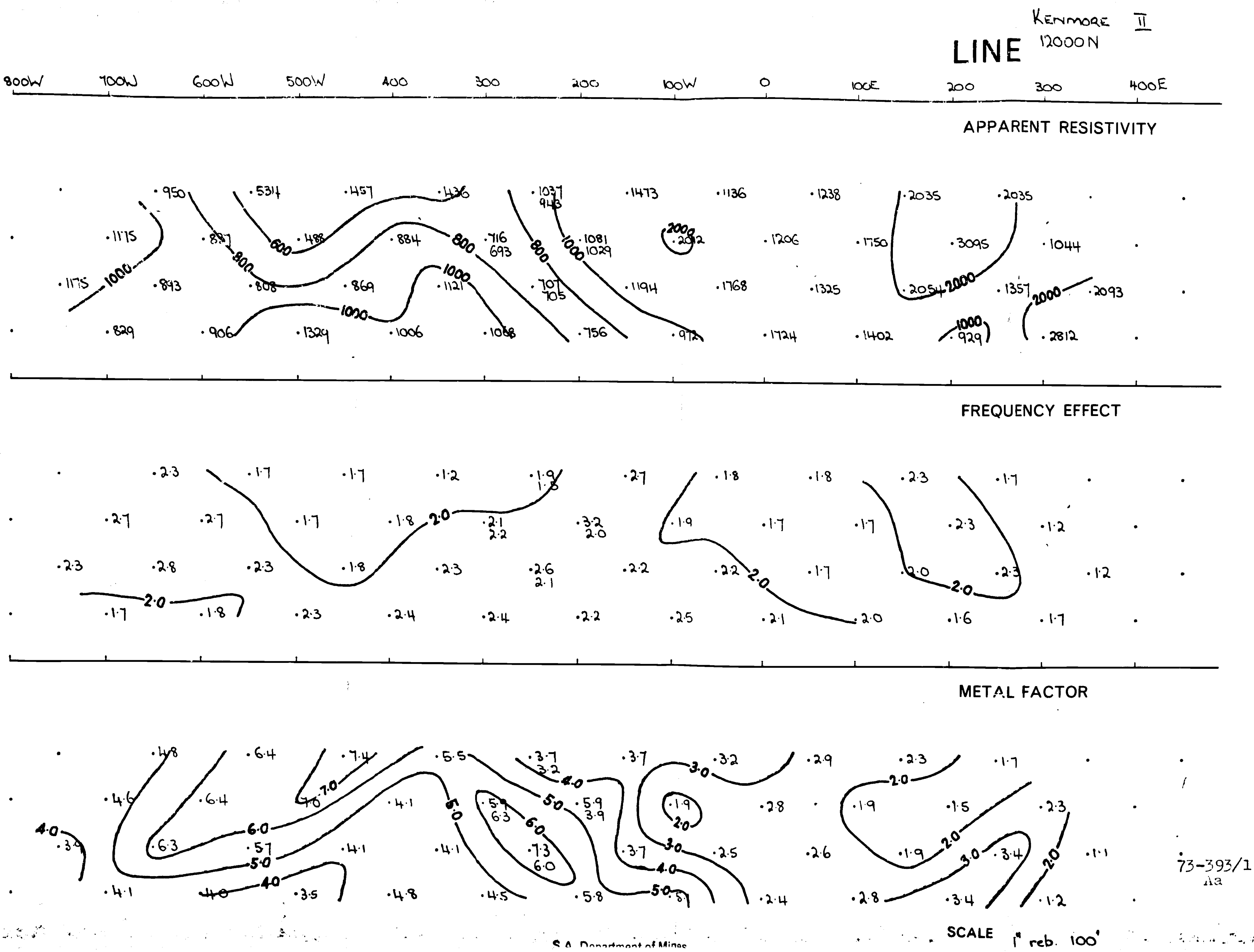
S.A. Department of Mines


LINE KENMORE II
11400 N
900W 800W 700 600 500 400 300 200 100W 0 100E 200 300E
APPARENT RESISTIVITY
614 239 587 424 452 355 384 300 484 769
1498 481 312 419 876 510 171 161 497 266 891 714
699 1096 518 204 900 689 219 218 193 182 420 430 605 595
54 1002 304 516 618 273 230 231 154 634 366 645
200 400 600 800 1000
FREQUENCY EFFECT
1·6 1·2 1·6 2 1·1 1·8 1·7 1·8 1·7 1·7
1·8 1·8 2·3 2·4 1·7 1·7 2·3 2·0 3·2 1·3 1·3 2·1
1·8 2·0 2·2 1·8 2·3 2·4 2·5 2·9 3·0 2·8 2·6 1·9 2 2·1
1·9 2·6 2·2 2·2 3·2 3·2 3·7 3·4 2·2 2·6 1·8 1·7
2·0 3·0
METAL FACTOR
5·2 10 5·5 9·4 4·8 10 8·8 12 7·0 4·4
2·4 5 15 11 3·9 6·7 27 25 13 9·8 2·9 5·9
5·1 4 8·5 18 5·1 23 26 33 31 12 8·8 6·6 7·0
7·4 52 14 8·5 10 23 32 29 28 8·2 9·8 5·3
4 6 8 10 20
SCALE 1" rep. 100'
S.A. Department of Mines

73-390/1


LINE
KENMORE II
11600N
600W 500 400 300 200 100W 0 100E 200 300 400 500 600E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
73-391/1
Aa
SCALE 1" rep. 100'
S.A. Department of Mines


LINE KENMORE II
11800 N
900W 800 700 600 500 400 300 200 100W 0 100E 200 300E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE
73-392/1



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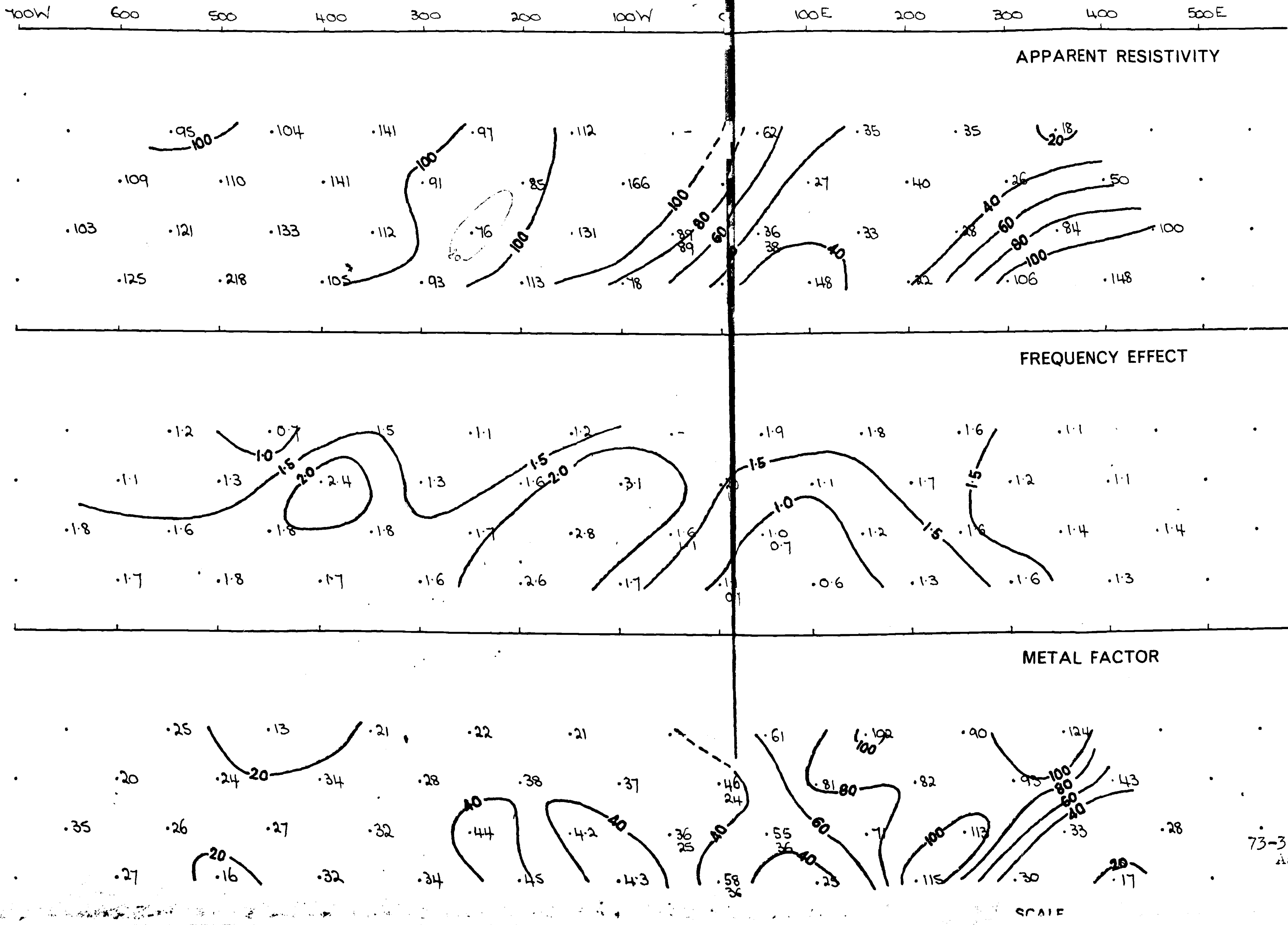
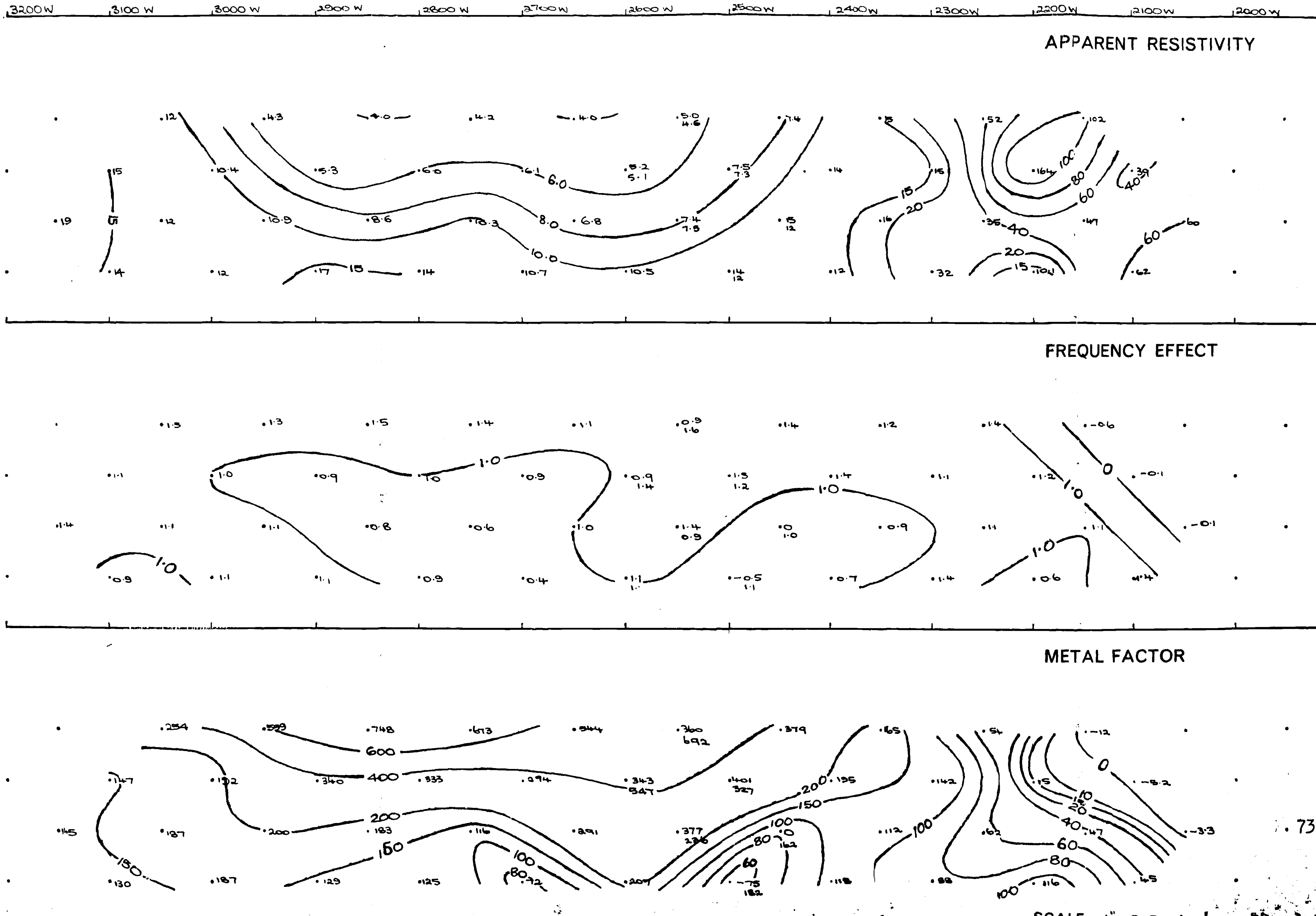
LINE KENMORE II 10000 N



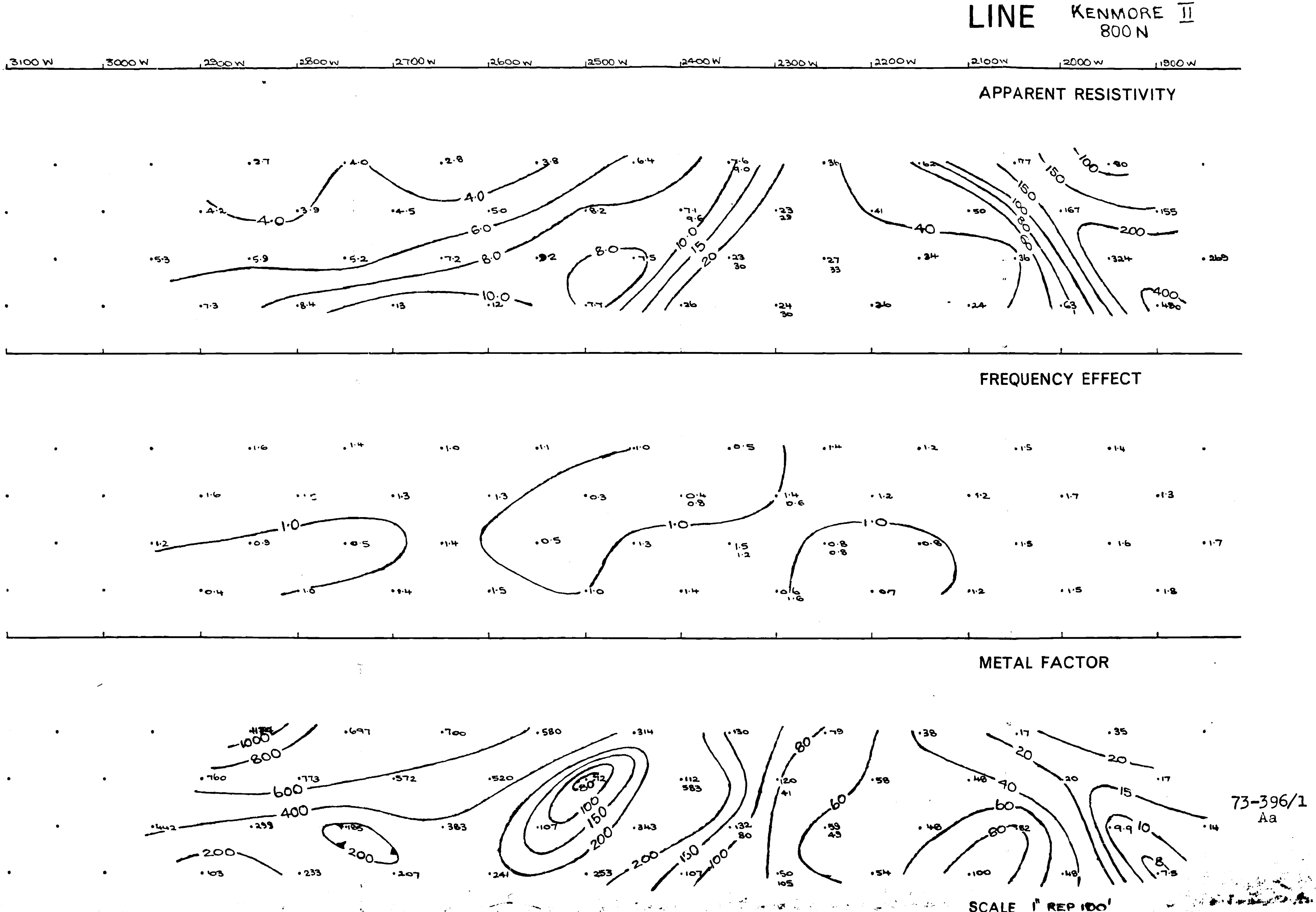
73-394/1
Aa

LINE KENMORE II
000 N

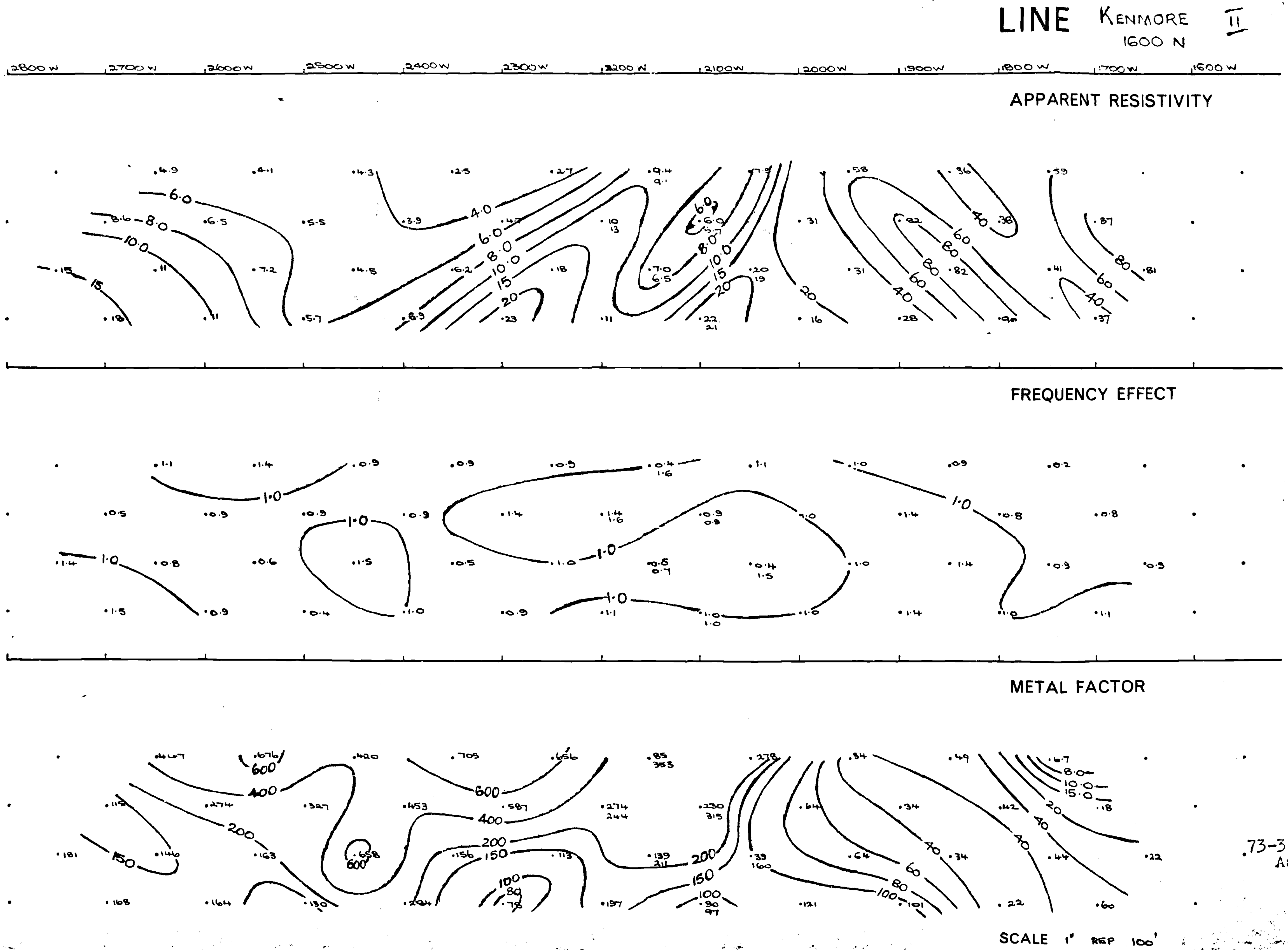


73-395/1
Aa

S.A. Department of Mines


LINE KENMORE II 800 N
3100 W
3000 W
2900 W
2800 W
2700 W
2600 W
2500 W
2400 W
2300 W
2200 W
2100 W
2000 W
1900 W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE 1" REP 100'

73-396/1
Aa



73-397/1
Aa

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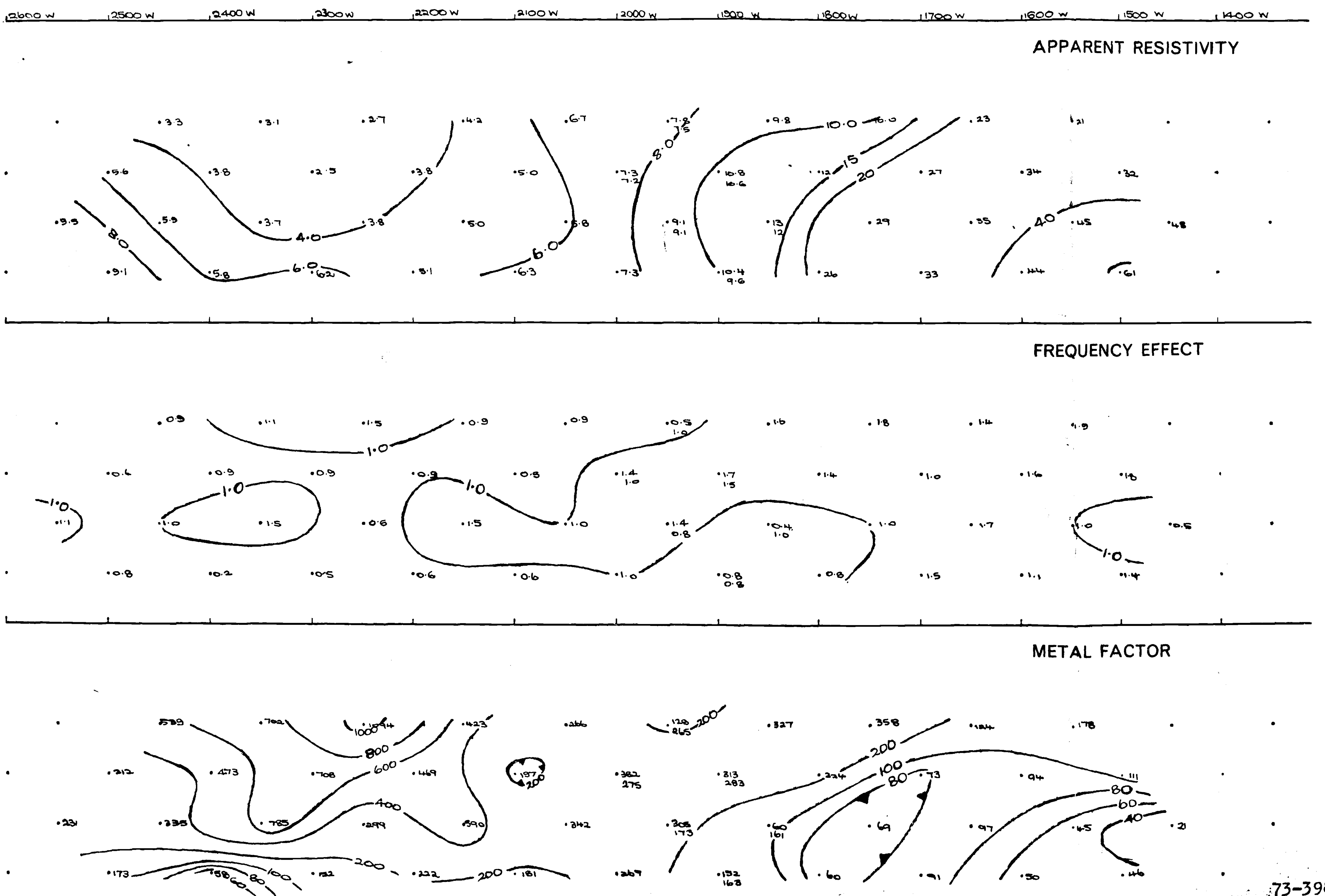
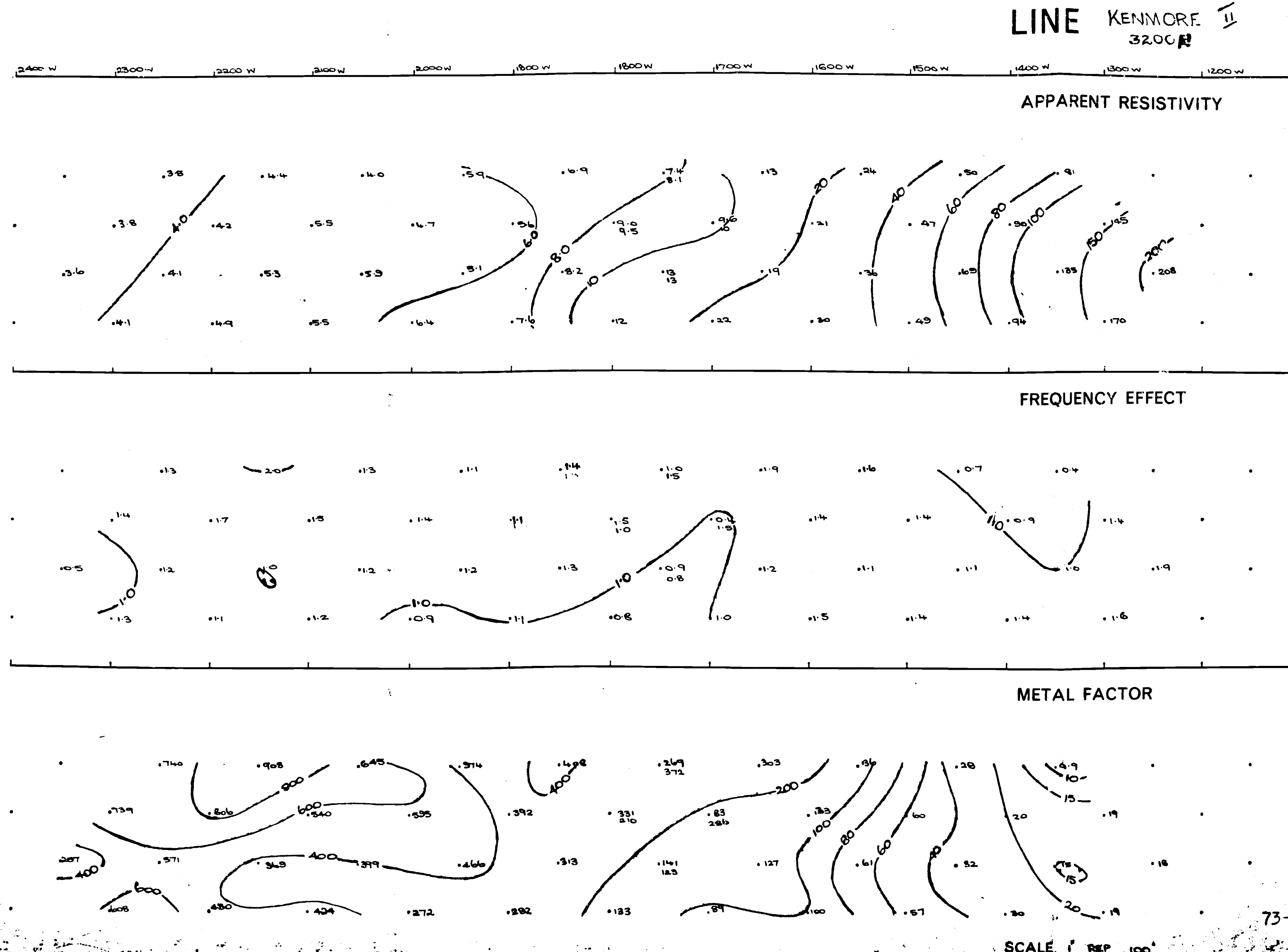
LINE KENMORE II
2400 N



SCALE 1" REP 100'

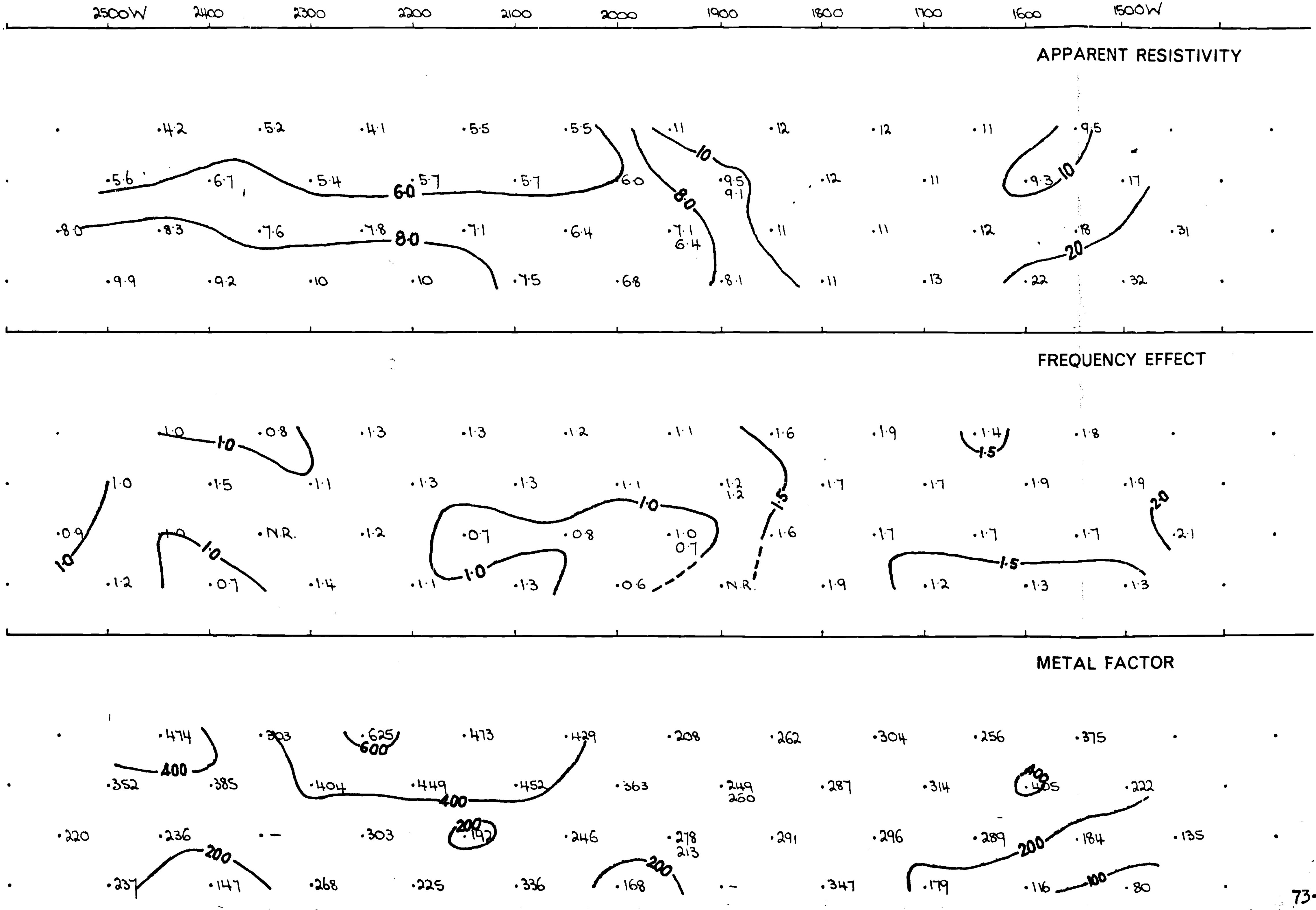
73-398/1
Aa



73-399/1
Aa

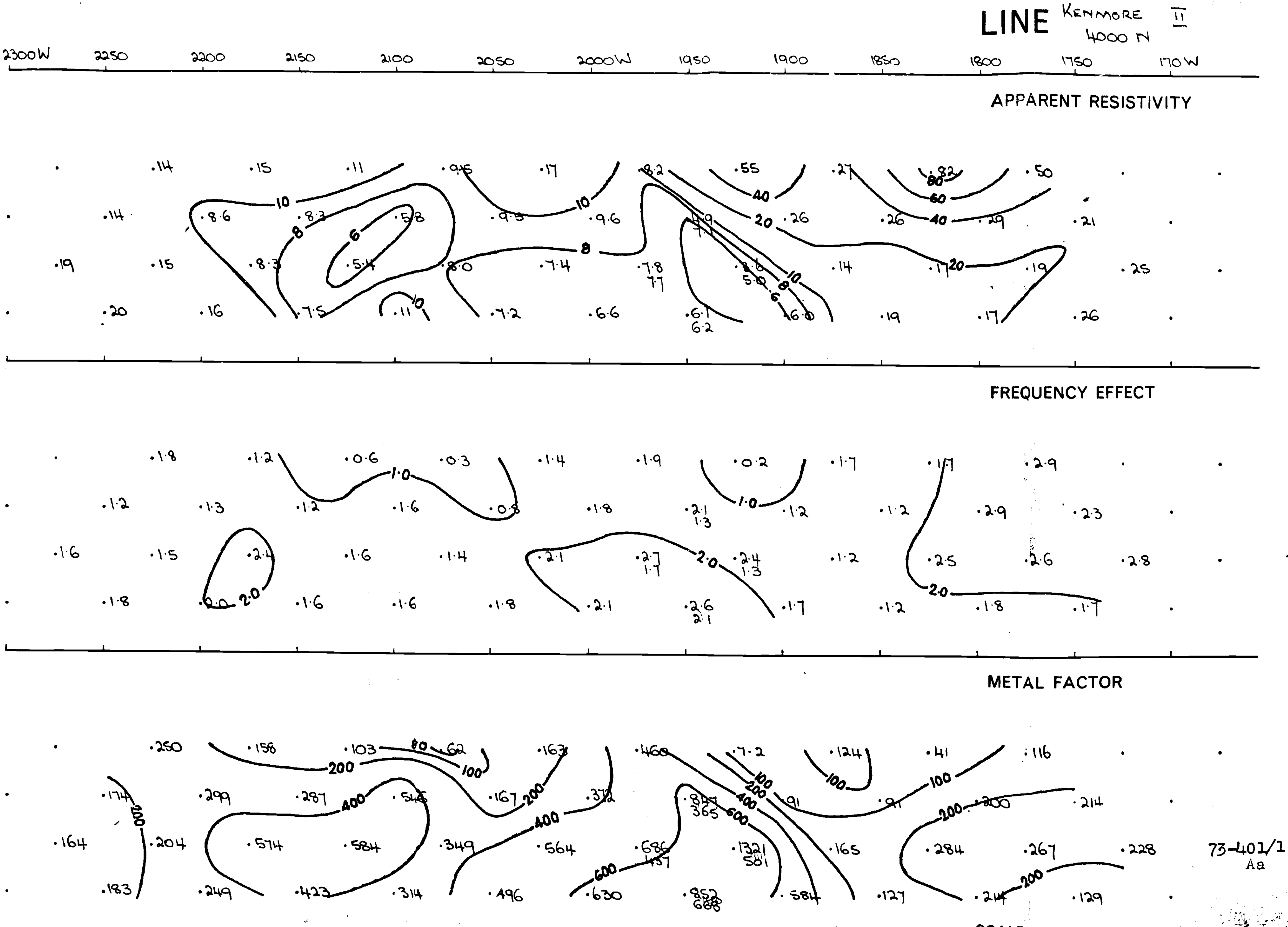
S.A. Department of Mines

LINE KENMORE II 3600 N



SCALE 1" = 100'

73-400/1
Aa

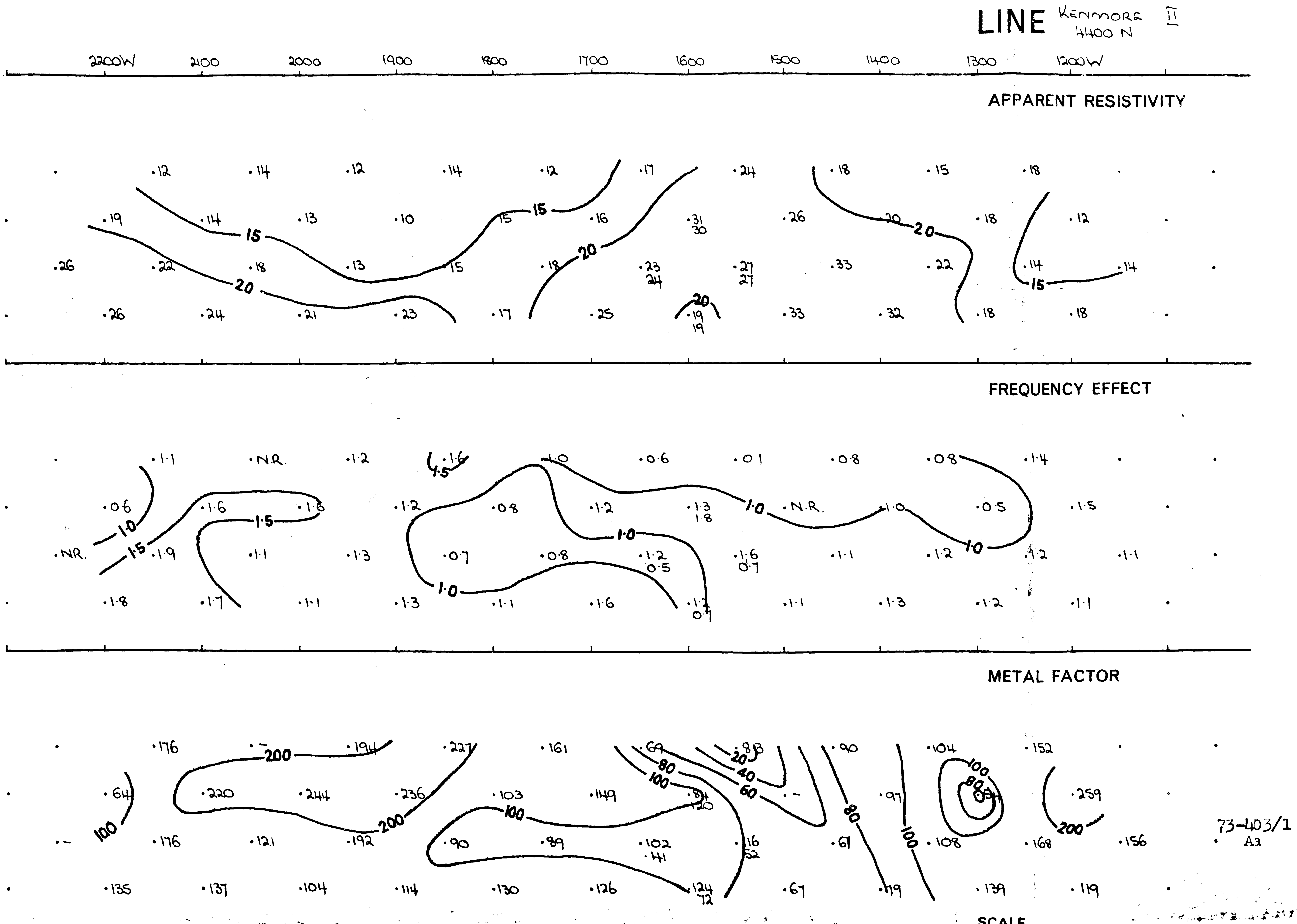


S.A. Department of Mines

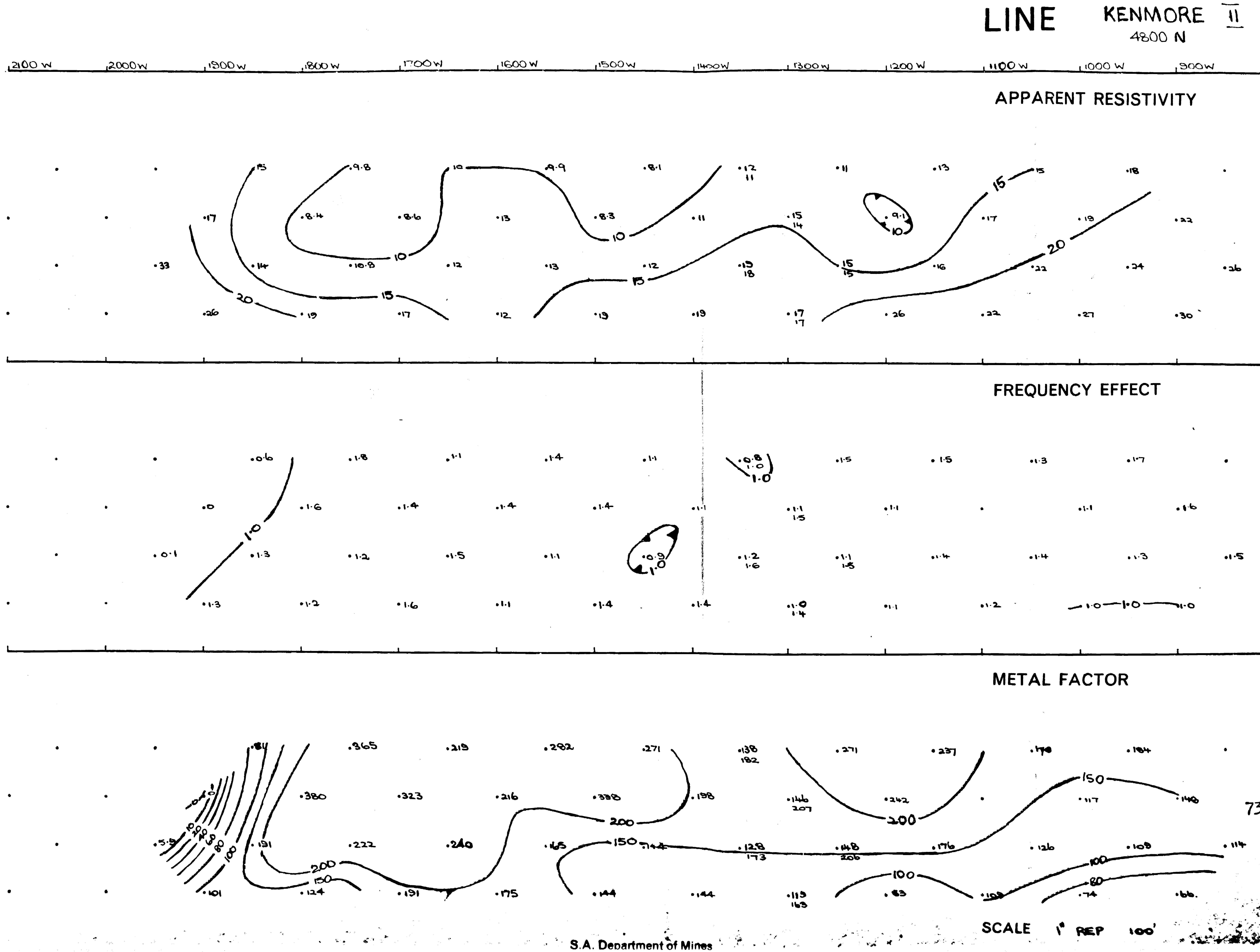

LINE
KENMORE II
4000 N
1400 1300 1200 1100 1000W 900 800 700 600 500W 400 300 200 100W 0 100E 200 300 400 500E 600 700 800 900E 1000E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE
73-402/1

FRAME 2 1132

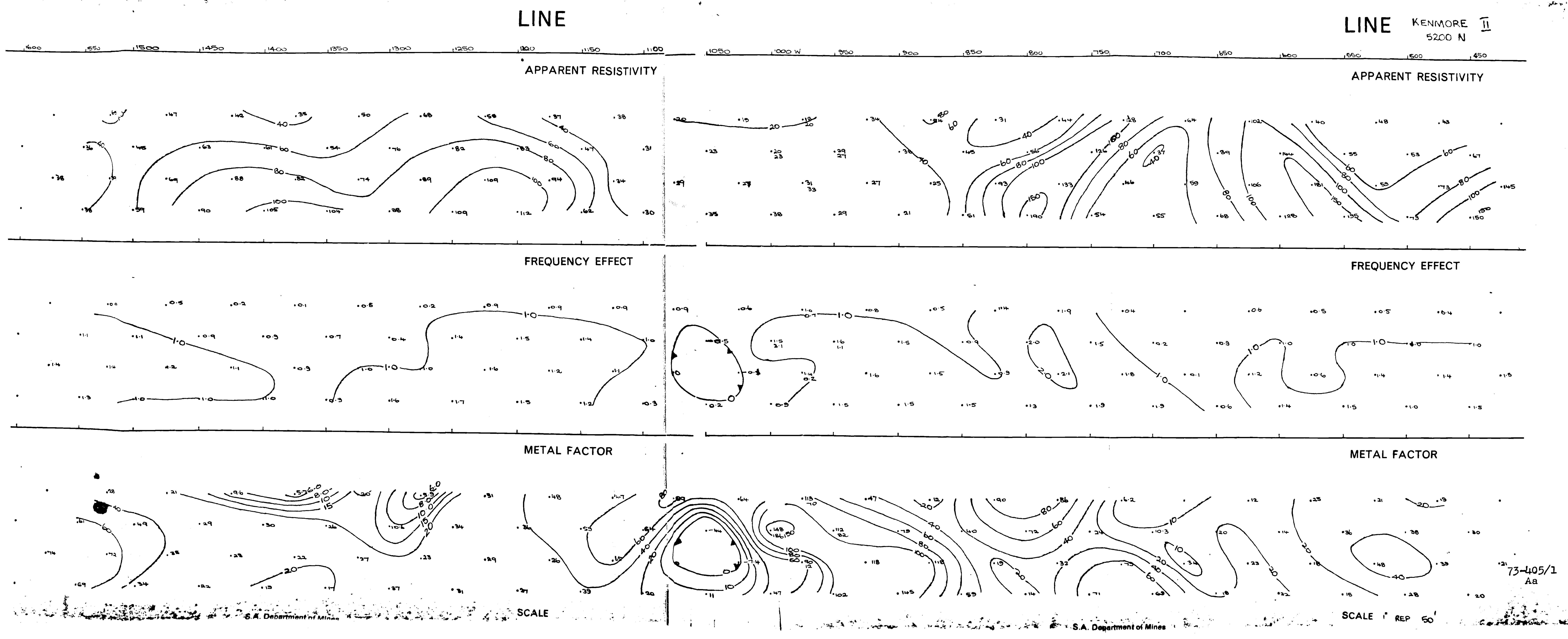
10 CENTIMETRES ON ORIGINAL DRAWING

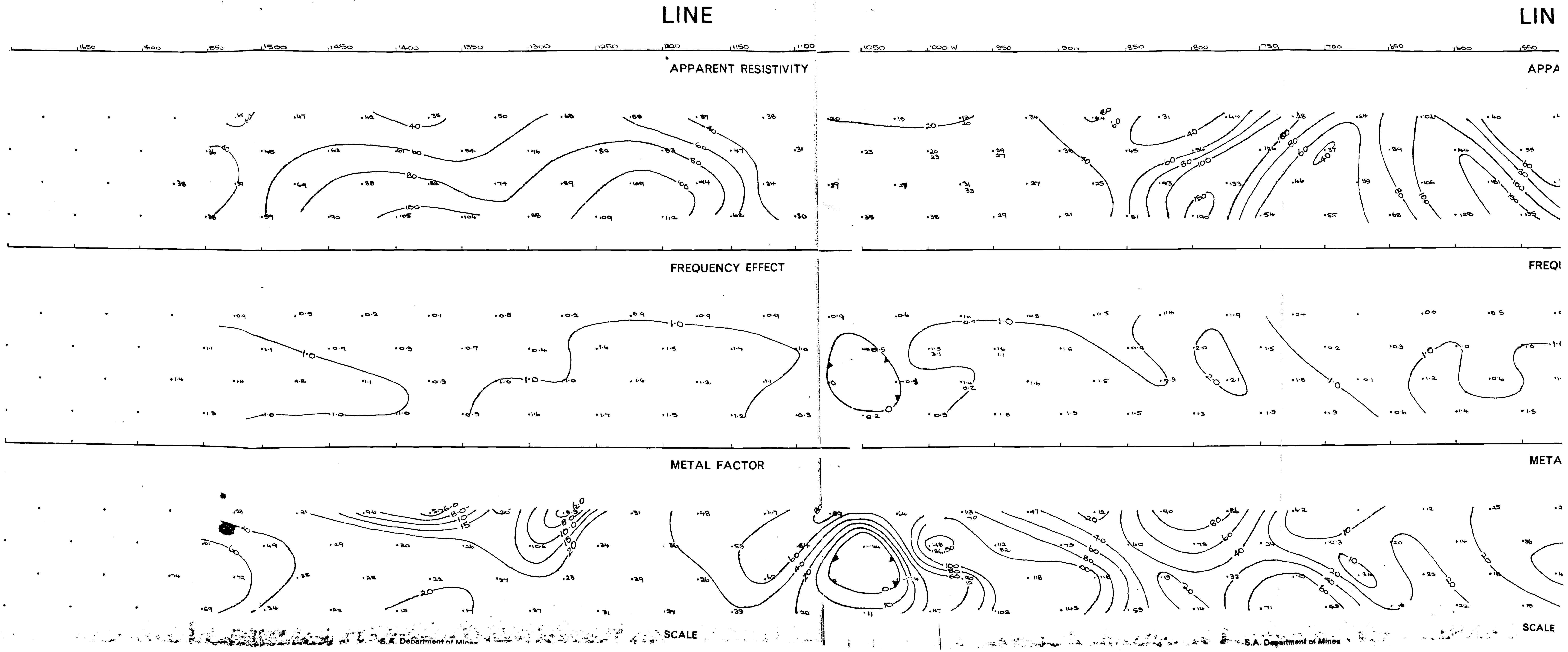


LINE Kenmore II
4400 N
2200W
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE
73-403/1
Aa


LINE KENMORE II
4800 N
2100 W 2000 W 1900 W 1800 W 1700 W 1600 W 1500 W 1400 W 1300 W 1200 W 1100 W 1000 W 900 W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE 1" REP 100'
S.A. Department of Mines

73-404/1
Aa

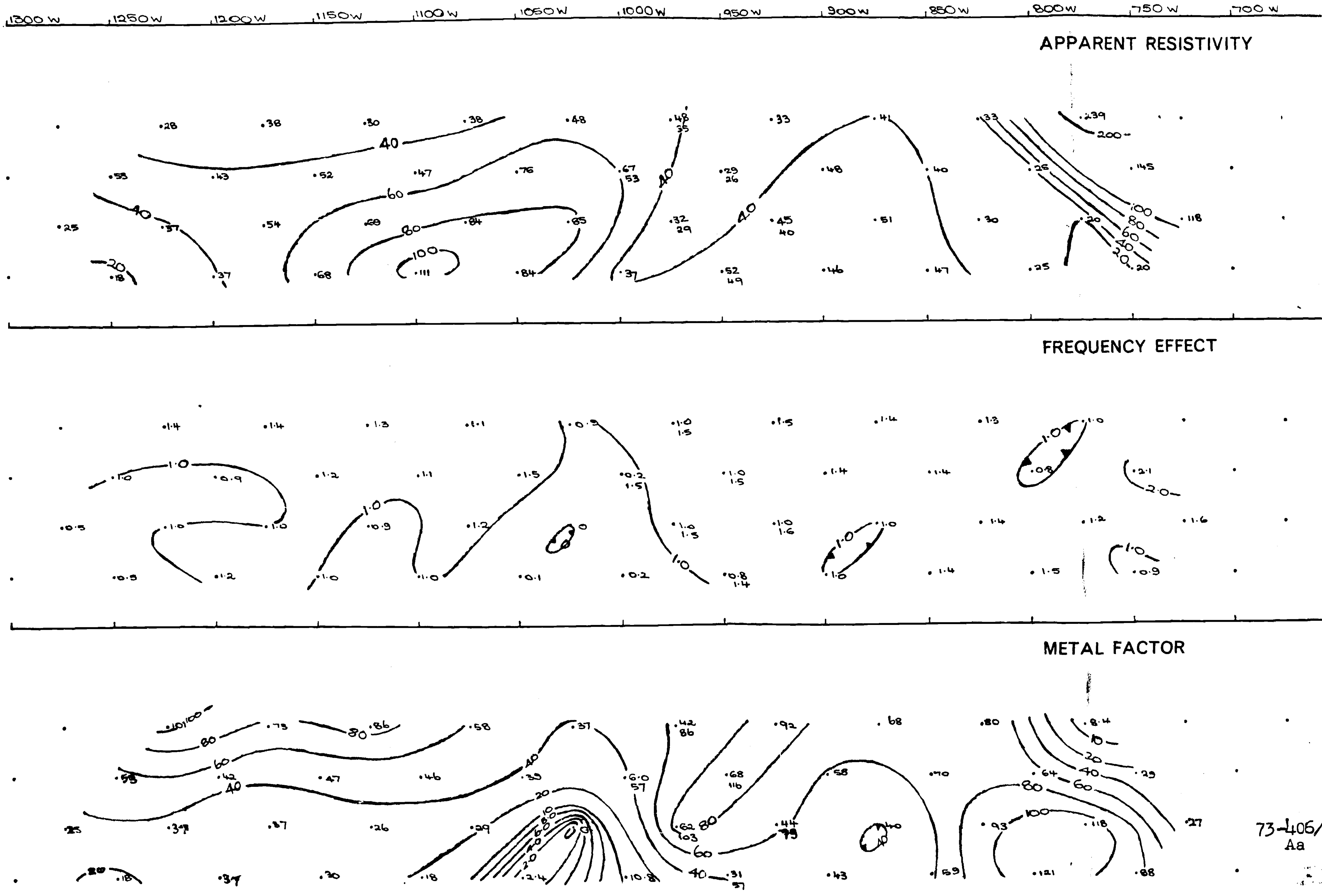

LINE
LINE KENMORE II
5200 N
APPARENT RESISTIVITY
APPARENT RESISTIVITY
FREQUENCY EFFECT
FREQUENCY EFFECT
METAL FACTOR
METAL FACTOR
SCALE
S.A. Department of Mines
SCALE 1" REP 50'
S.A. Department of Mines
73-405/1
Aa



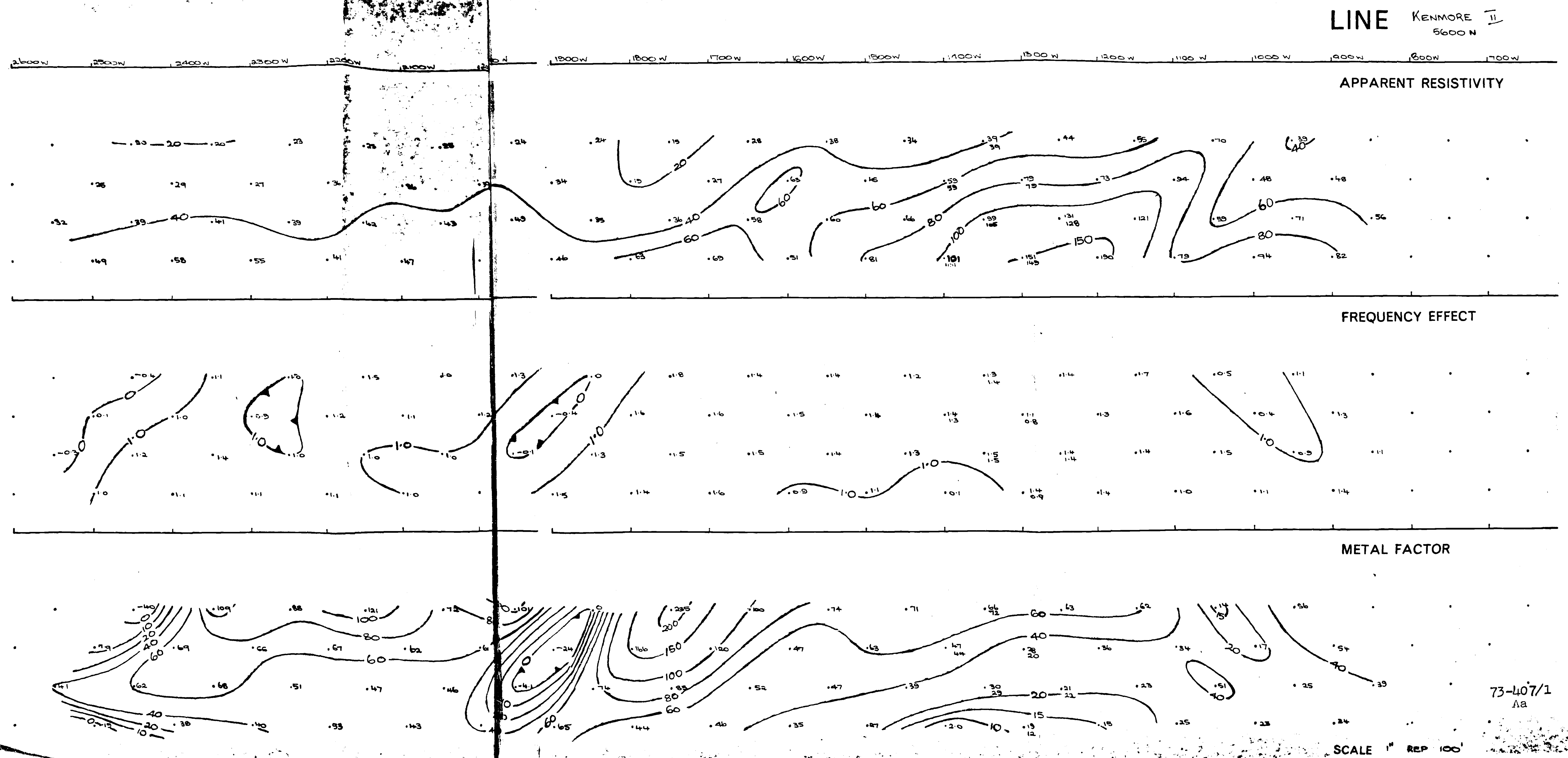
1132 FRAME 2

10 CENTIMETRES ON ORIGINAL DRAWING

LINE KENMORE II
5600 N

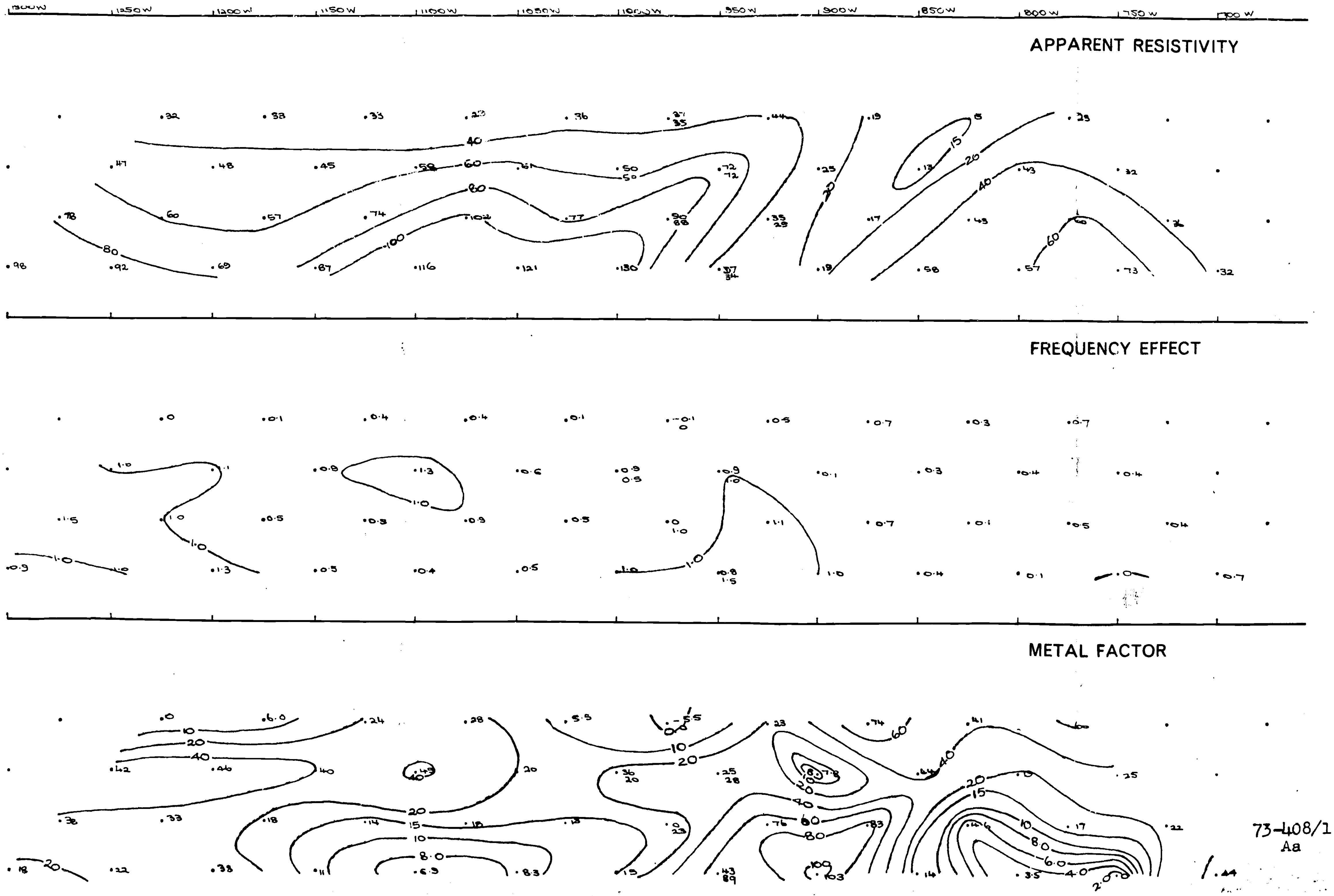


73-406/1
Aa

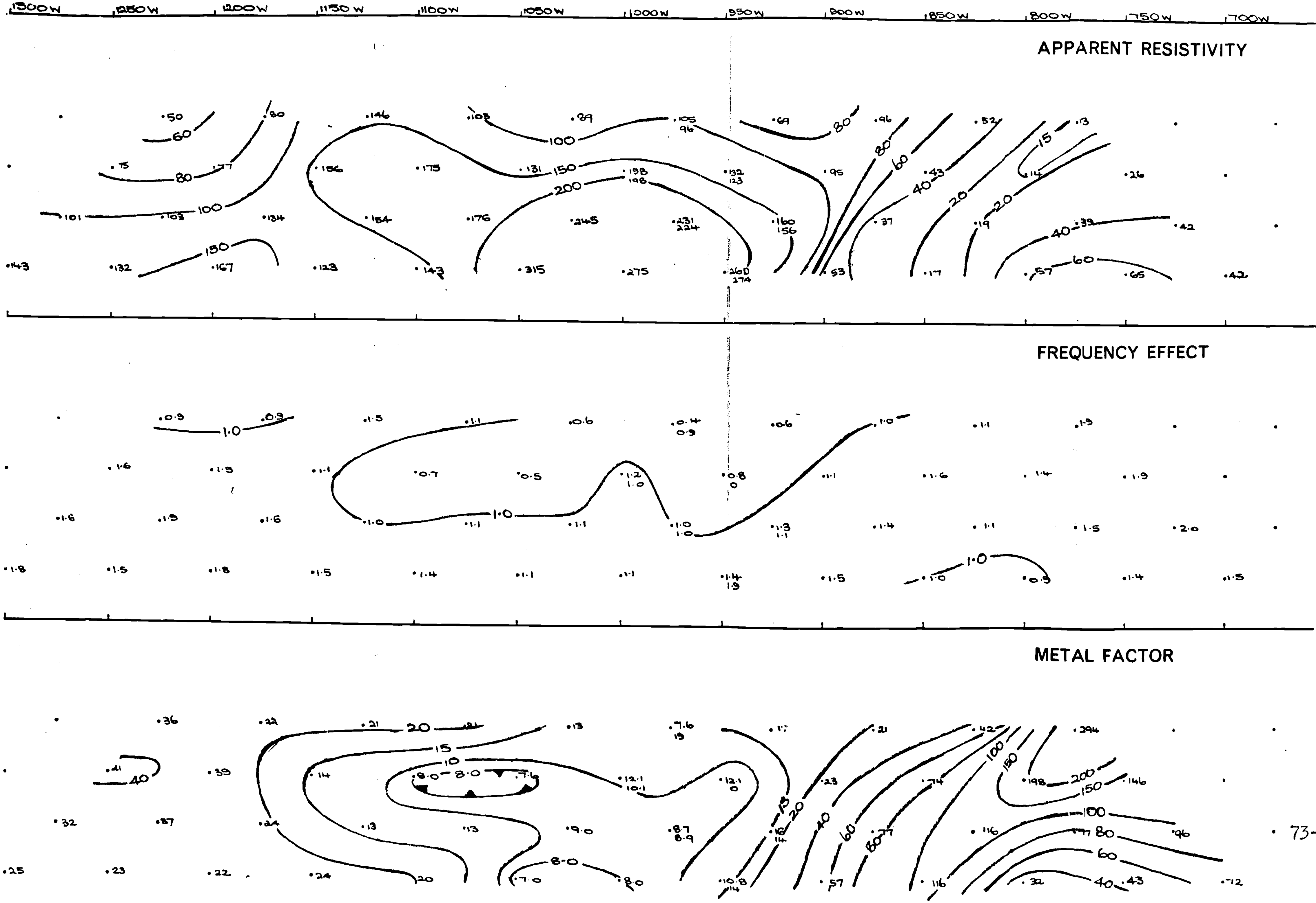


LINE KENMORE II
5600 N
2600W 2500W 2400W 2300W 2200W 2100W 2000W 1900W 1800W 1700W 1600W 1500W 1400W 1300W 1200W 1100W 1000W 900W 800W 700W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
73-407/1
Aa
SCALE 1" REP 100'

LINE KENMORE II
6000 N



LINE KENMORE II
6400 N

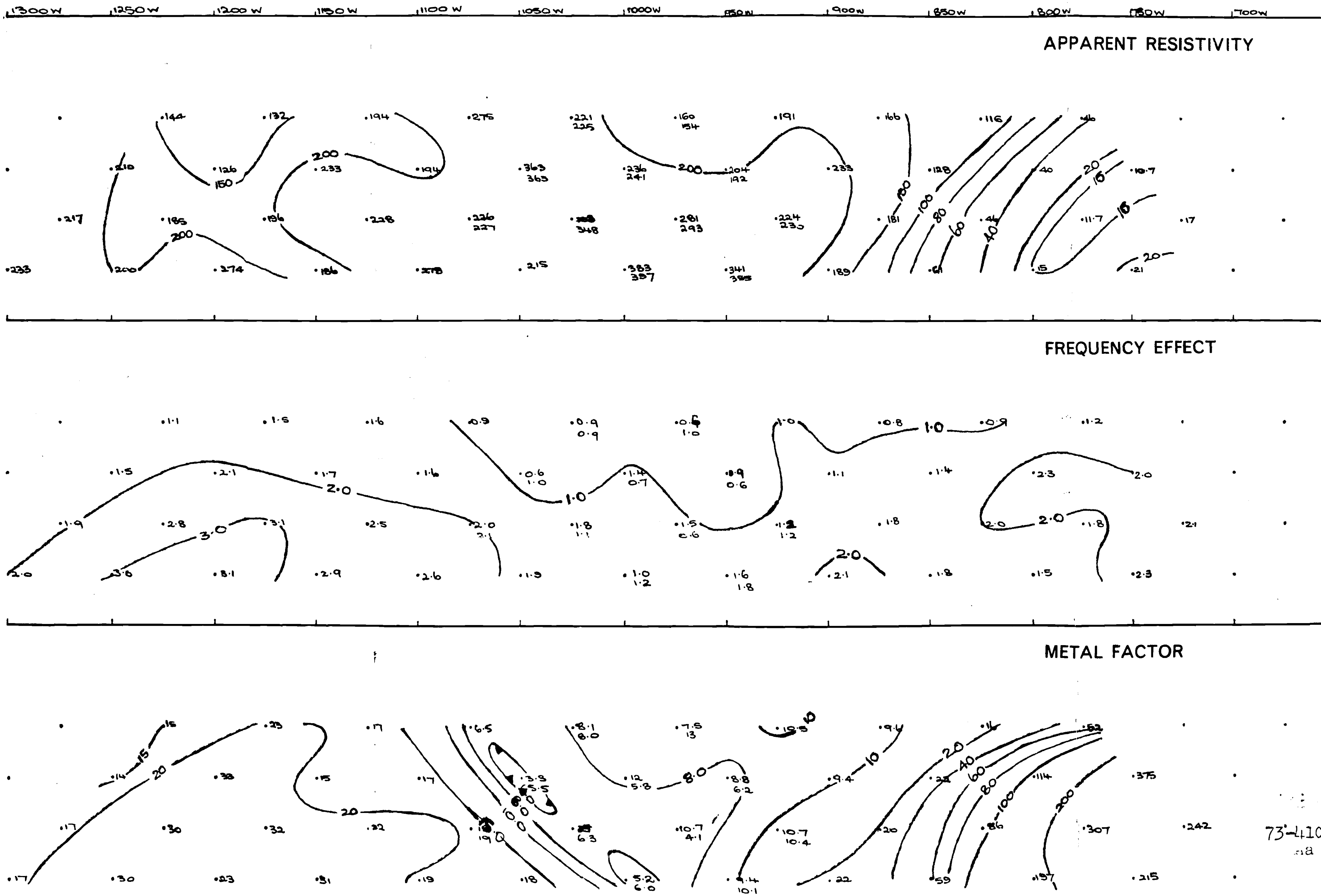


SCALE 1" REP 50'

73-409/1

S.A. Department of Mines

LINE KENMORE II
6800 N.

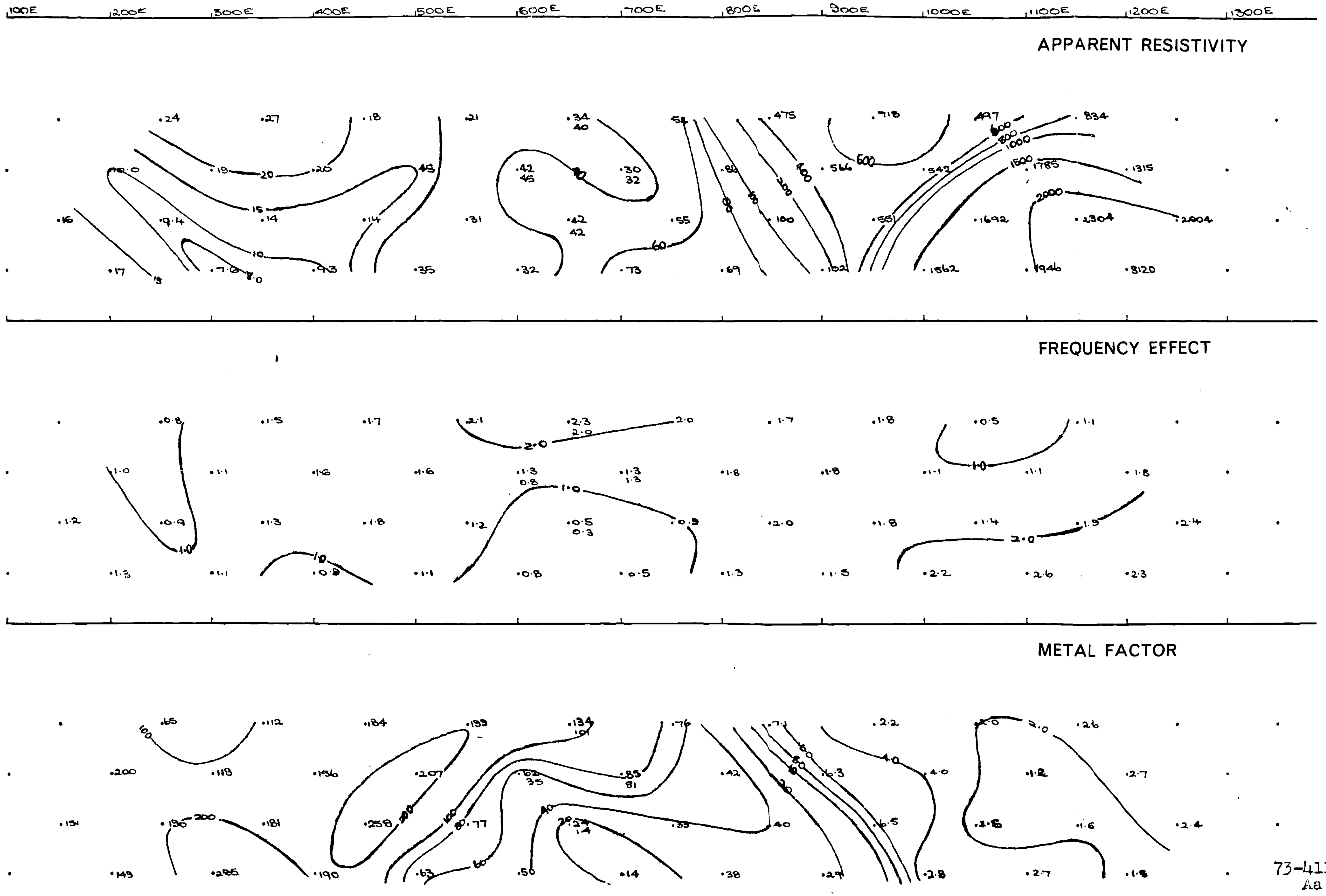


SCALE 1" reps 50'

73-410/1

S.A. Department of Mines

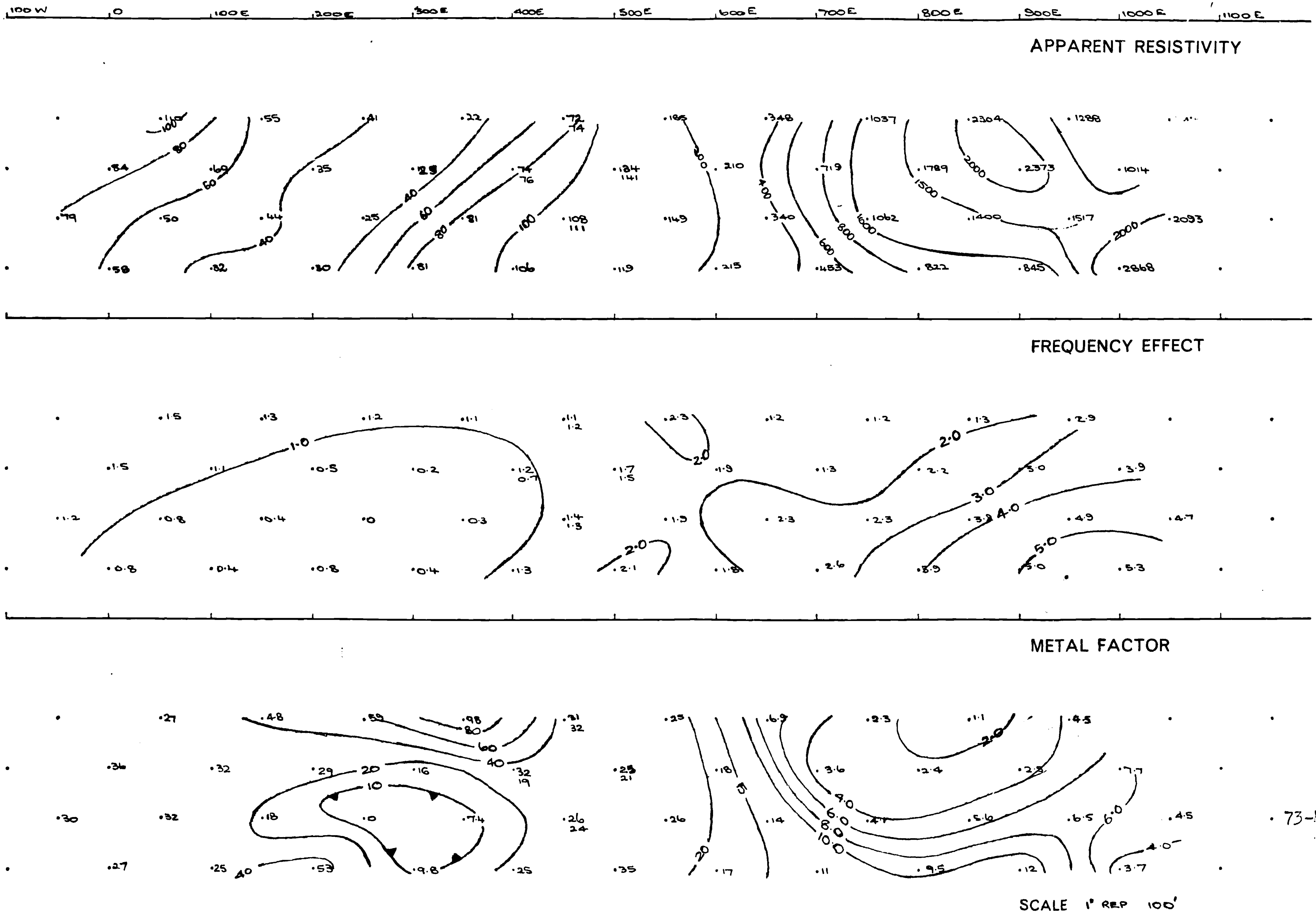
LINE KENMORE II 7600 N



73-411/1
Aa

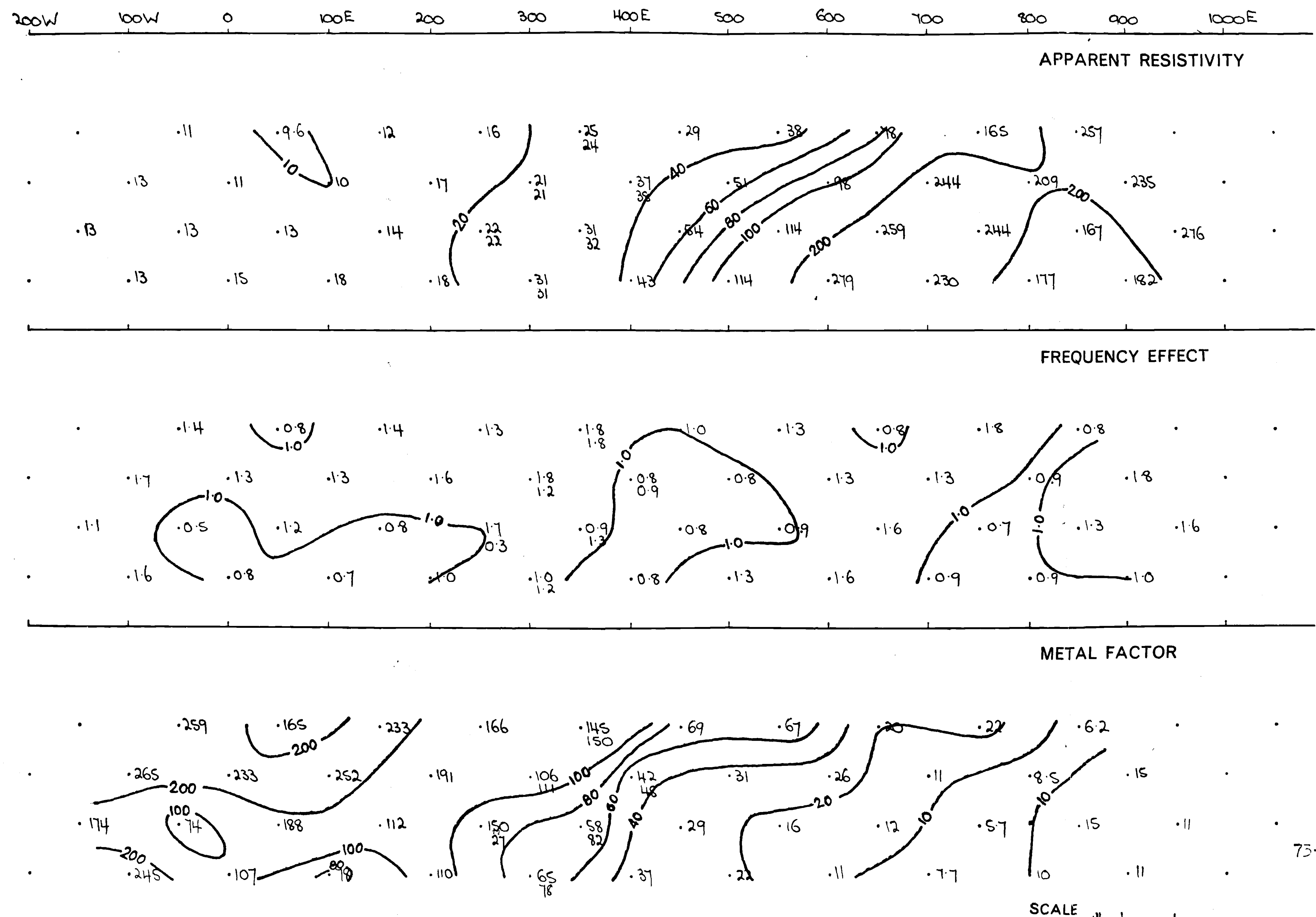
SCALE 1" REP 100'

LINE KENMORE II
9600 N



73-112/1
4a

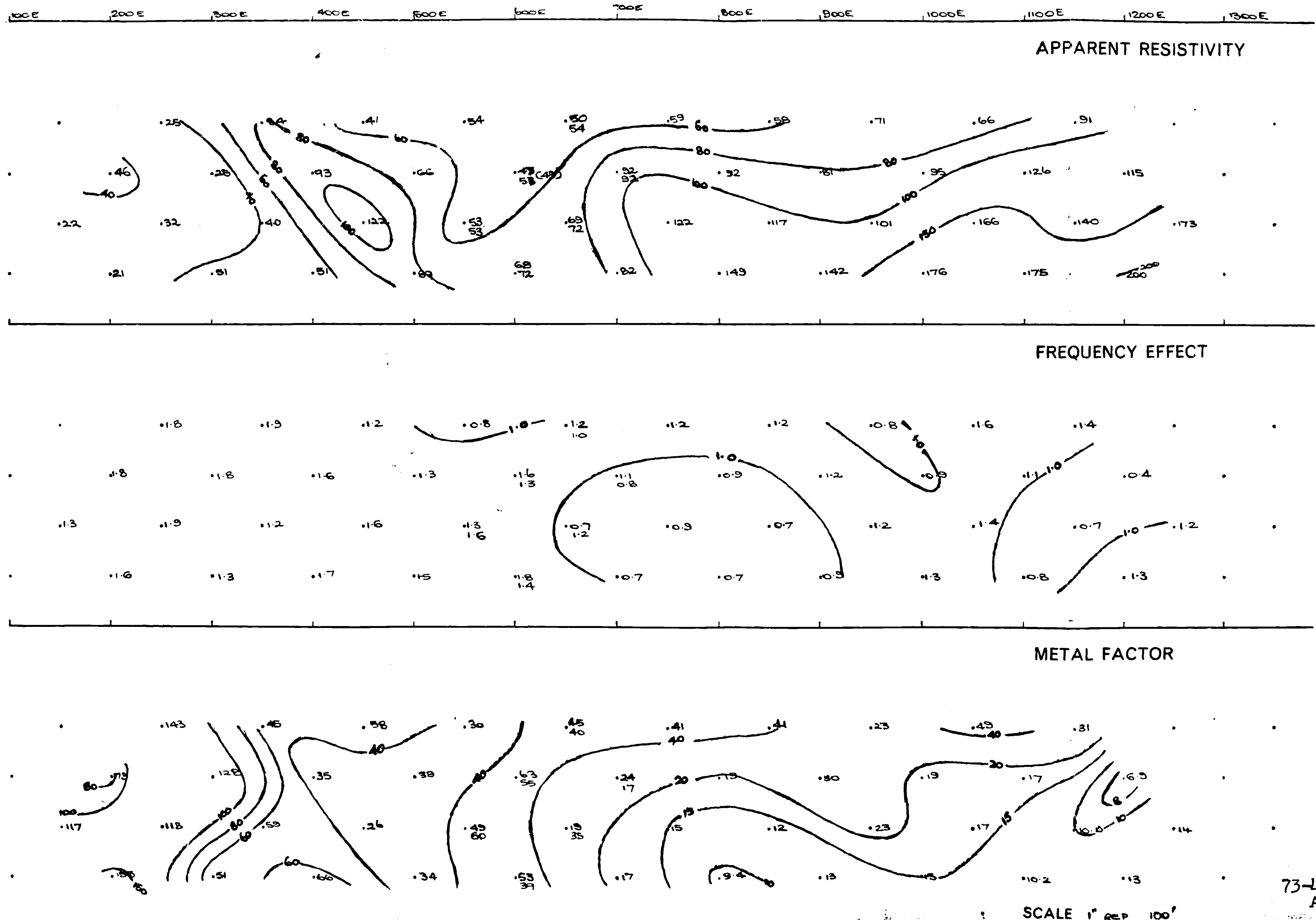
LINE Kenmore II 800 N



75-413/1

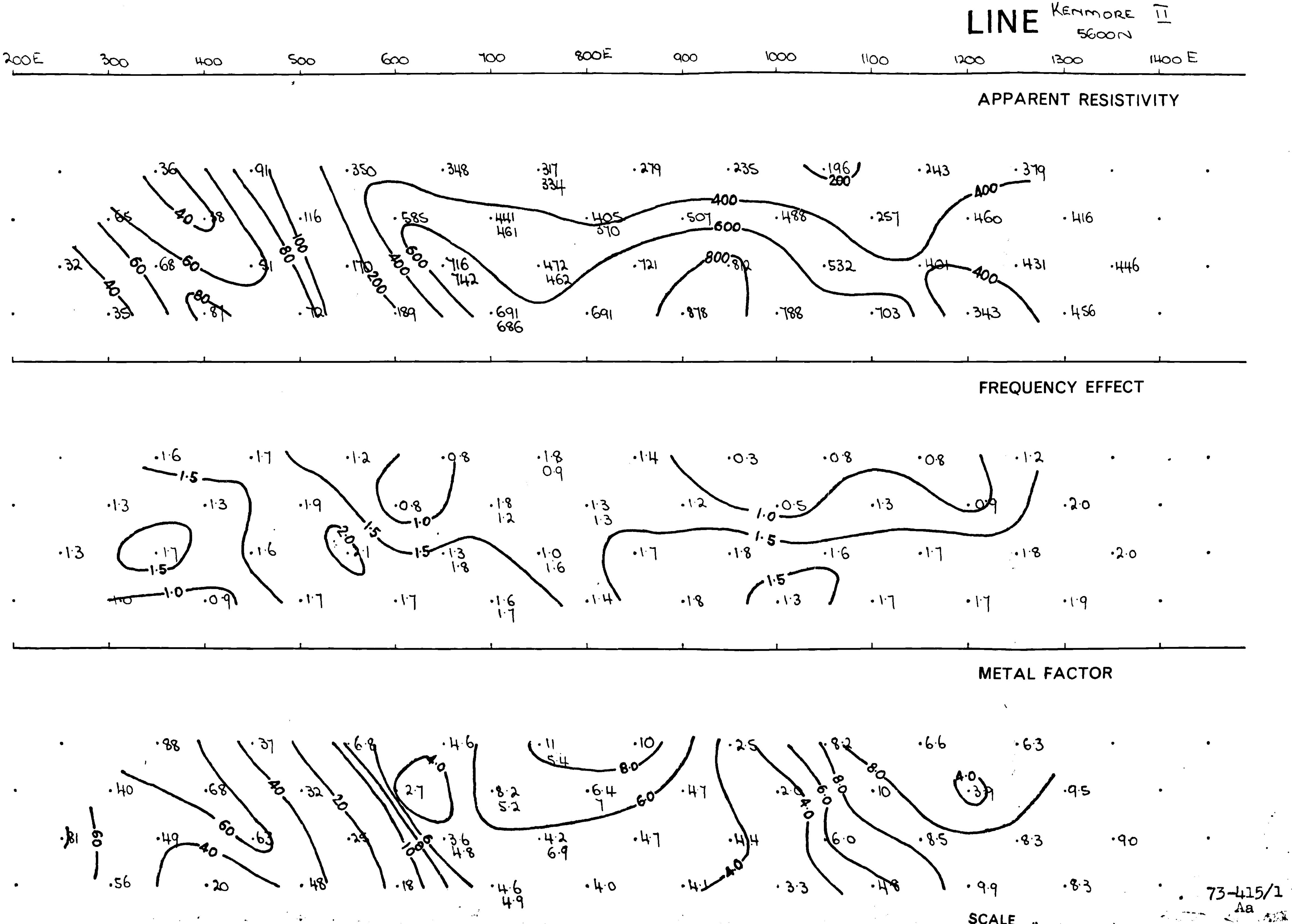
S.A. Department of Mines

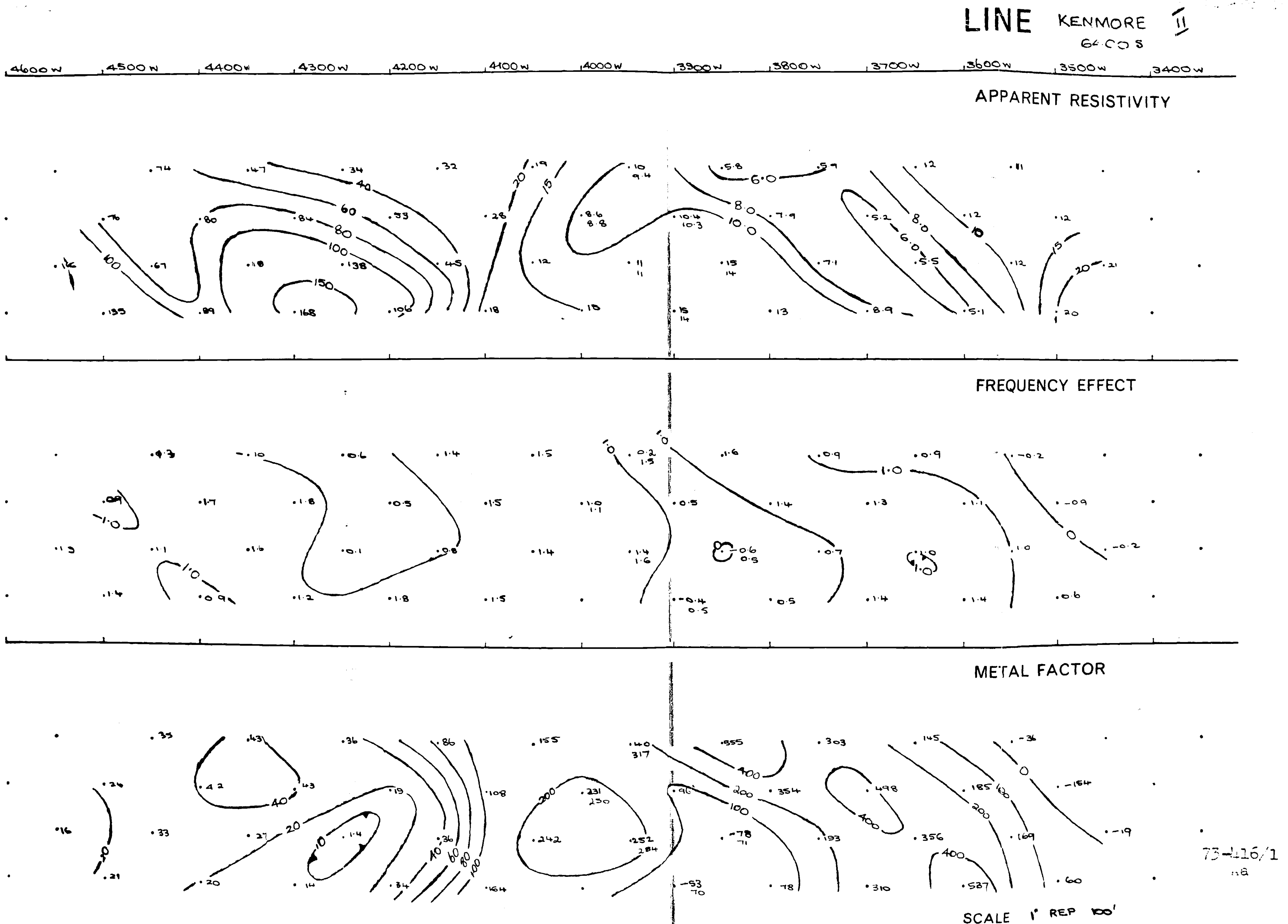
LINE KENMORE II 2400 N



73-424/1
Aa

S.A. Department of Mines


LINE KENMORE II 5600N
200E
300
400
500
600
700
800E
900
1000
1100
1200
1300
1400 E
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
73-415/1 Aa
SCALE



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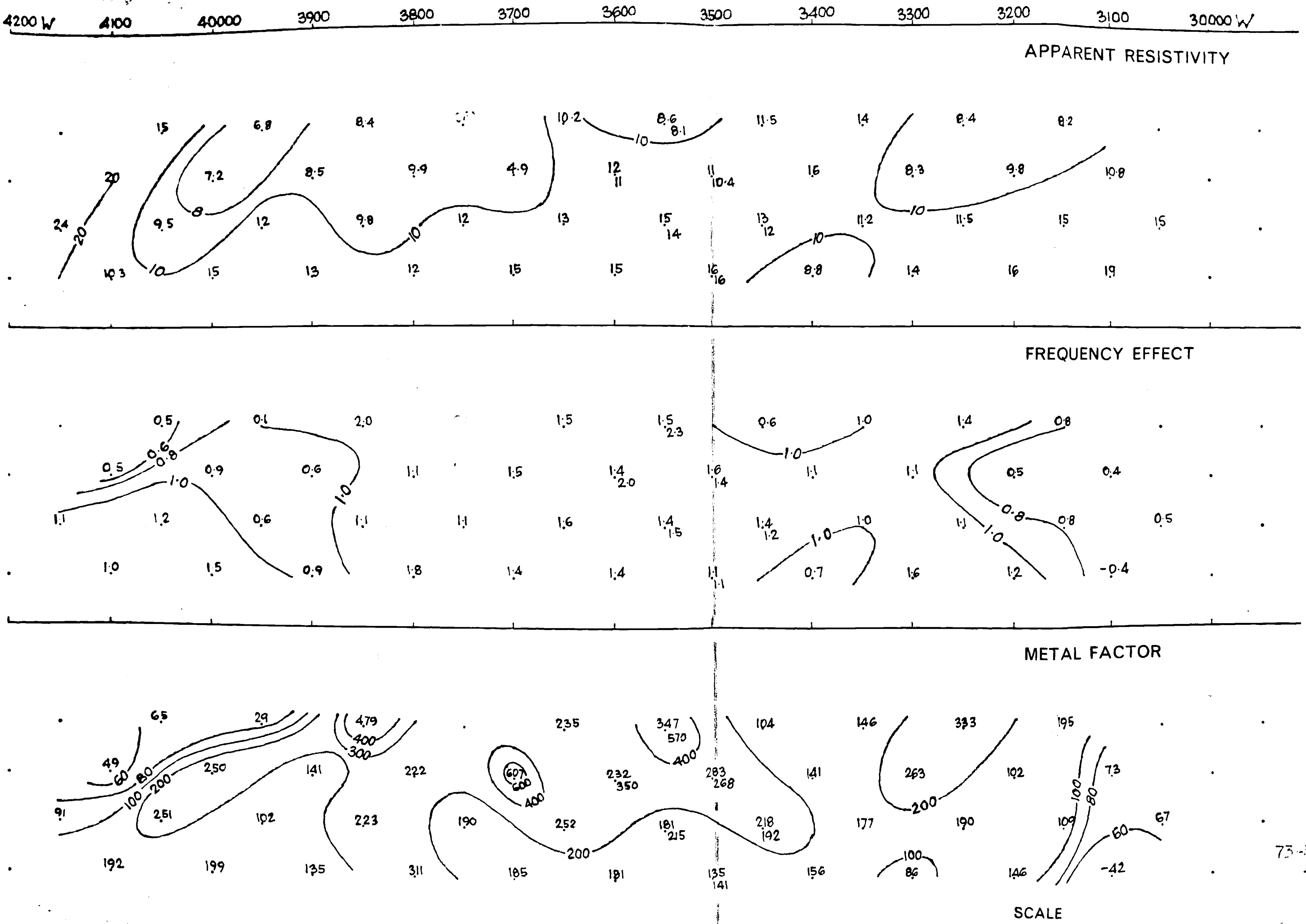
LINE KENMORE II
5600 S



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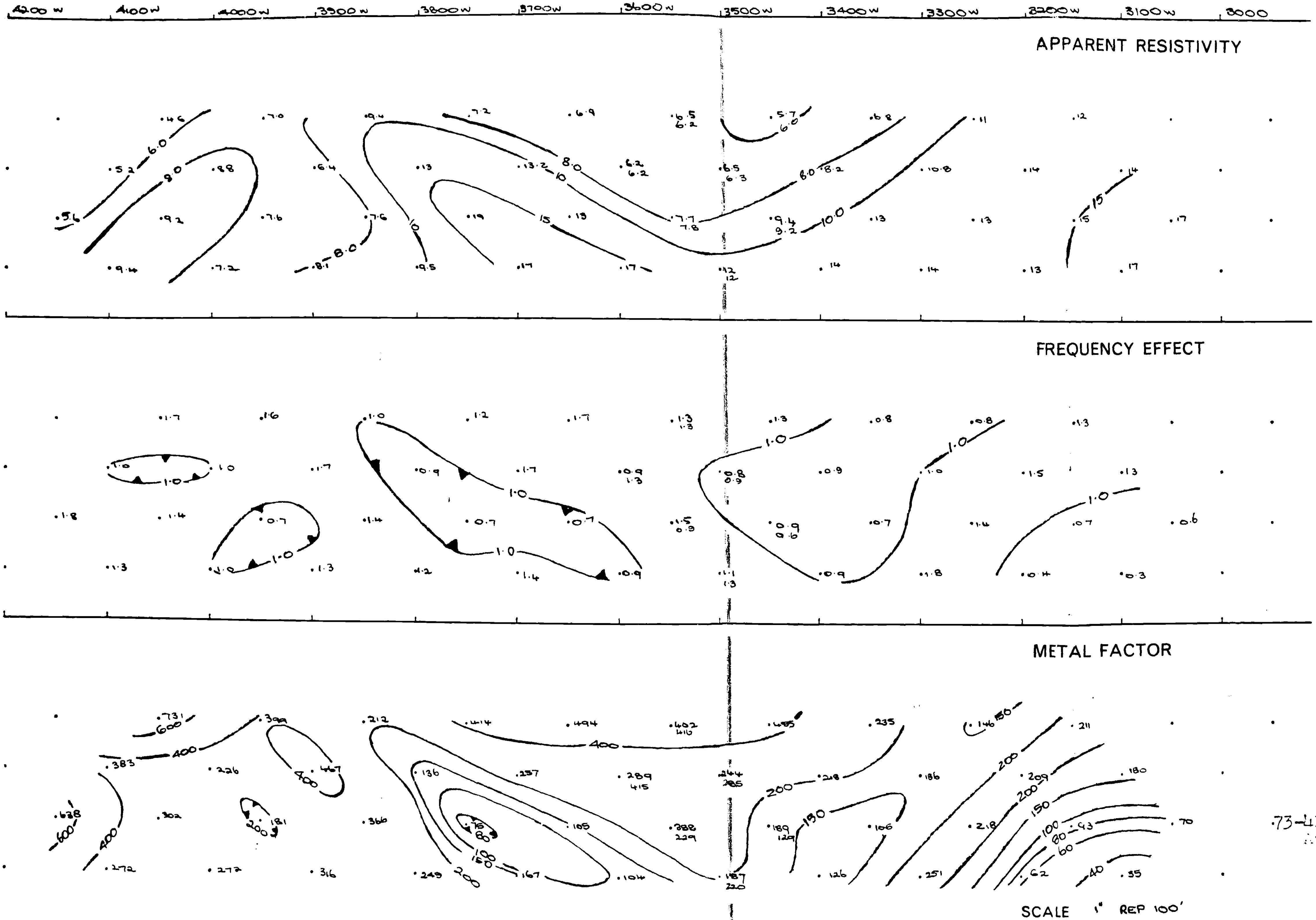
73-117/1

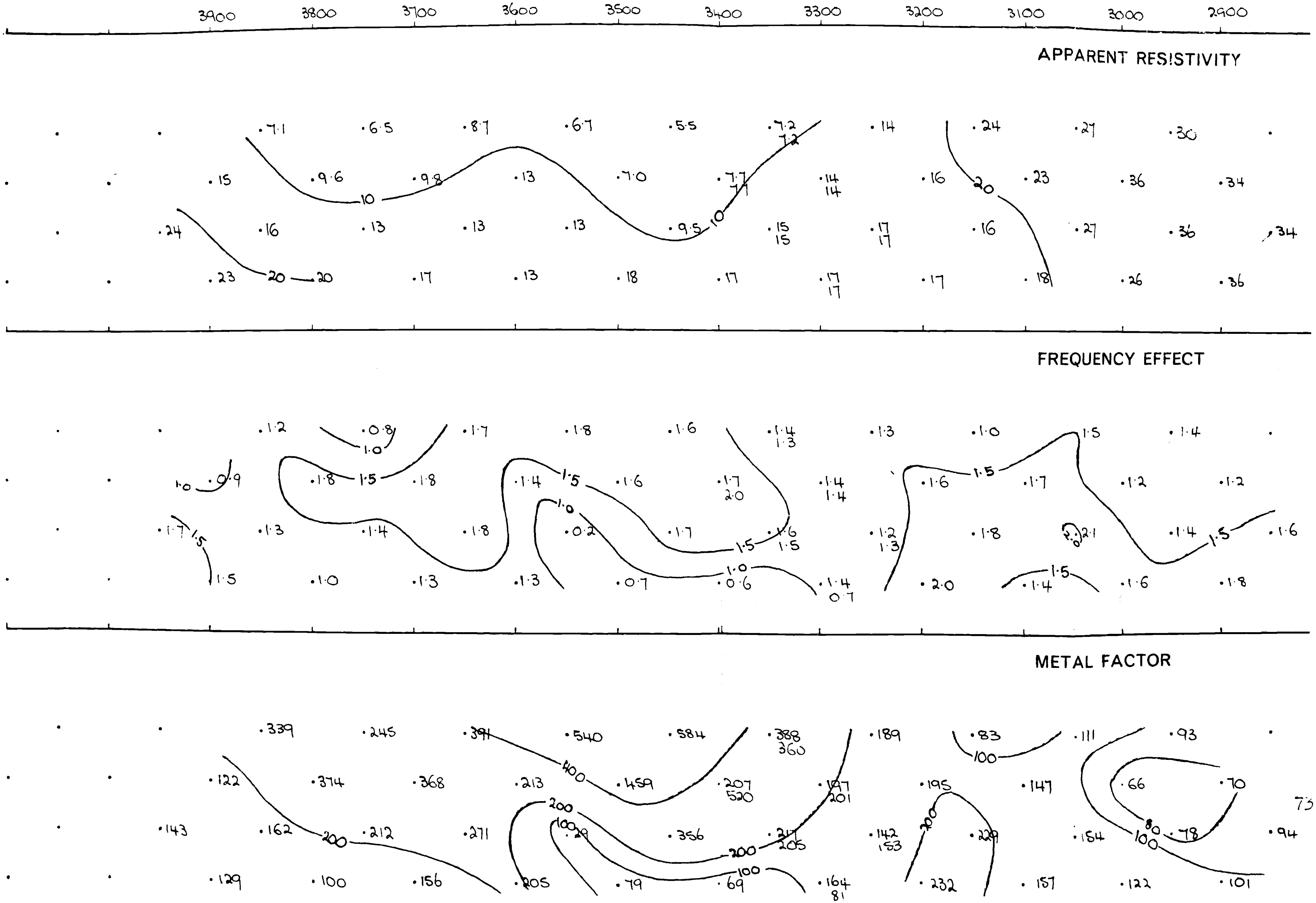
LINE KENMORE II 4800 S



73-418/1

S.A. Department of Mines

LINE Kenmore II 4000 S



73-419/1 Aa

SCALE 1" = 100'

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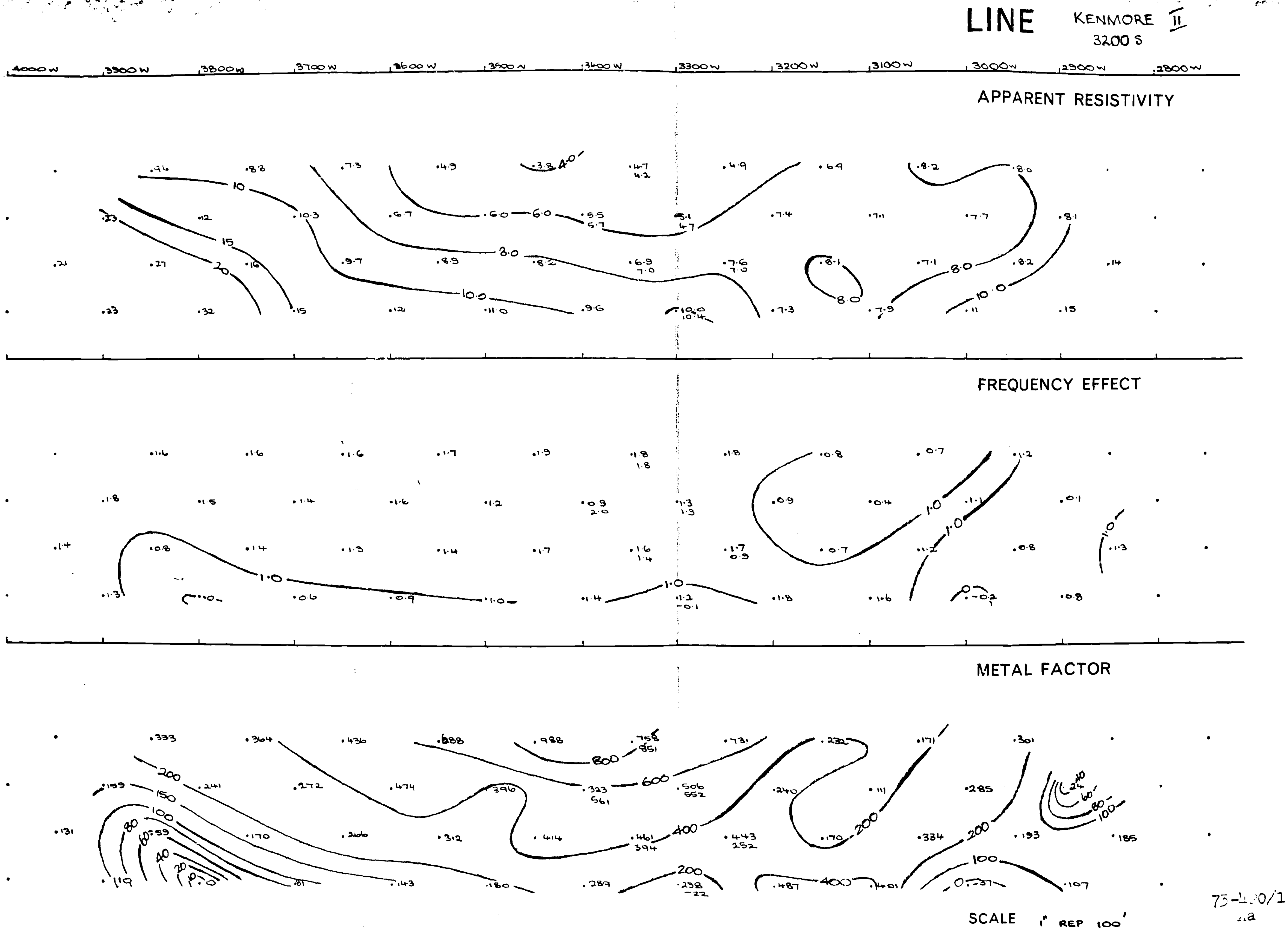

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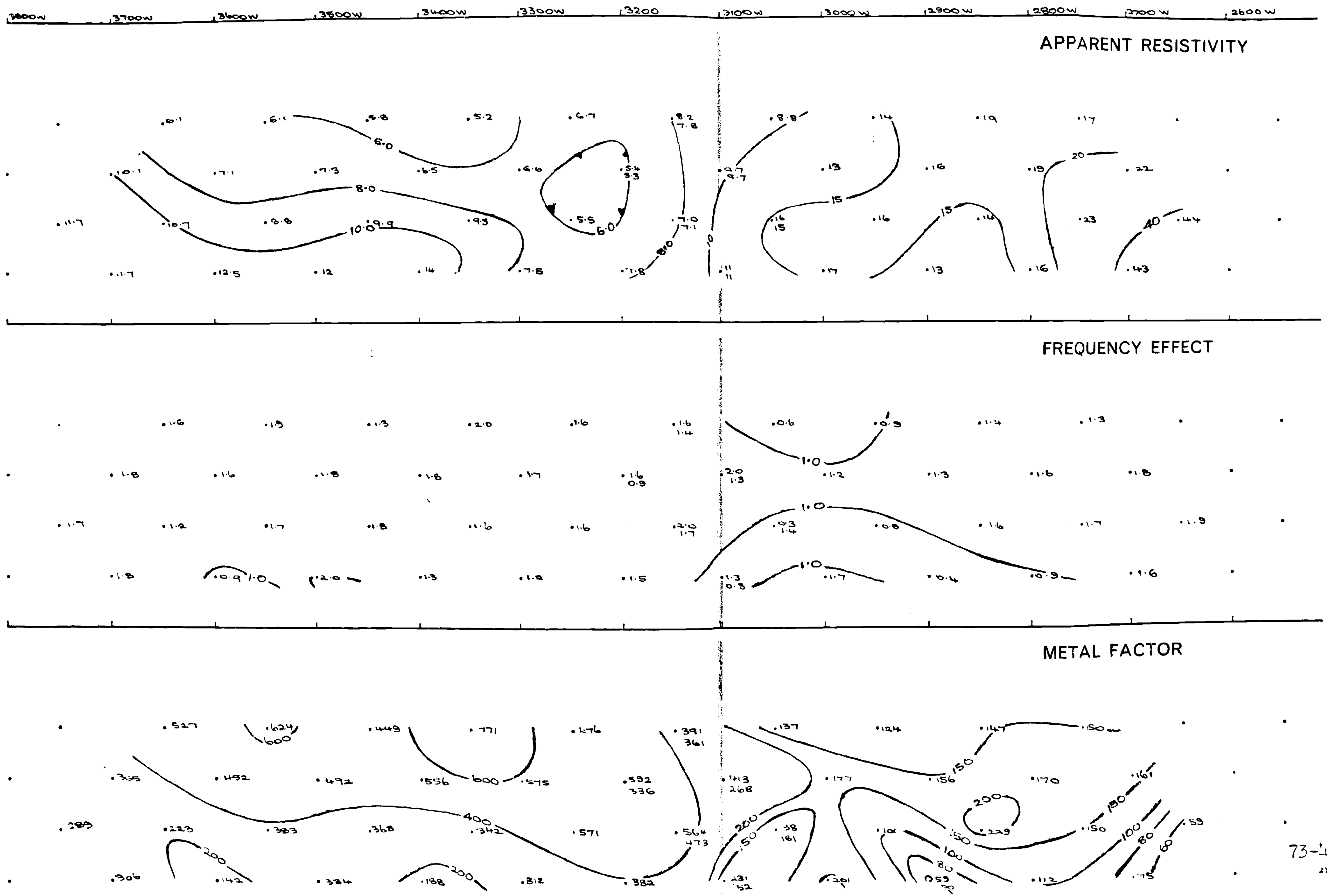
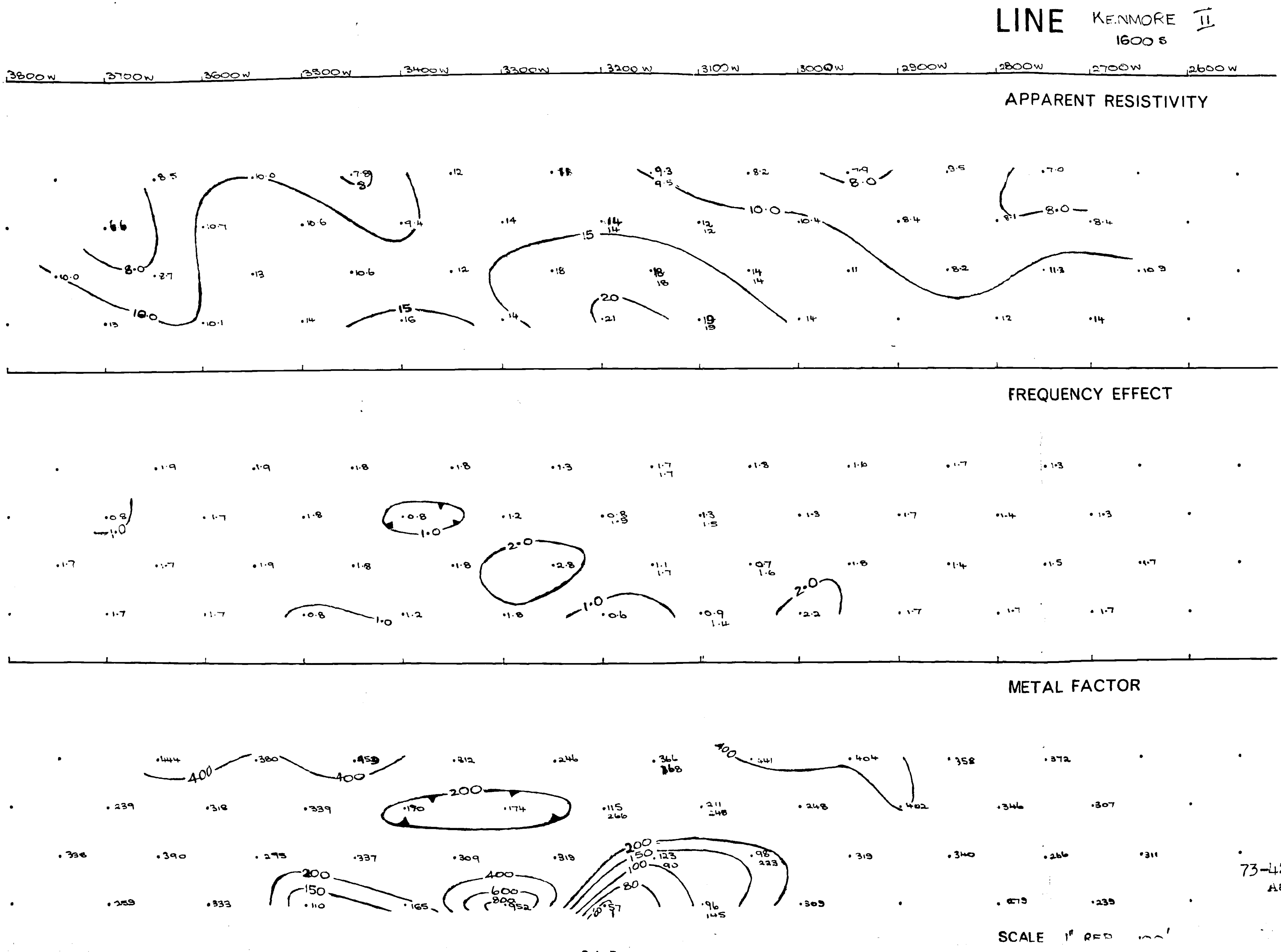
LINE KENMORE II
2400 S



73-421/1

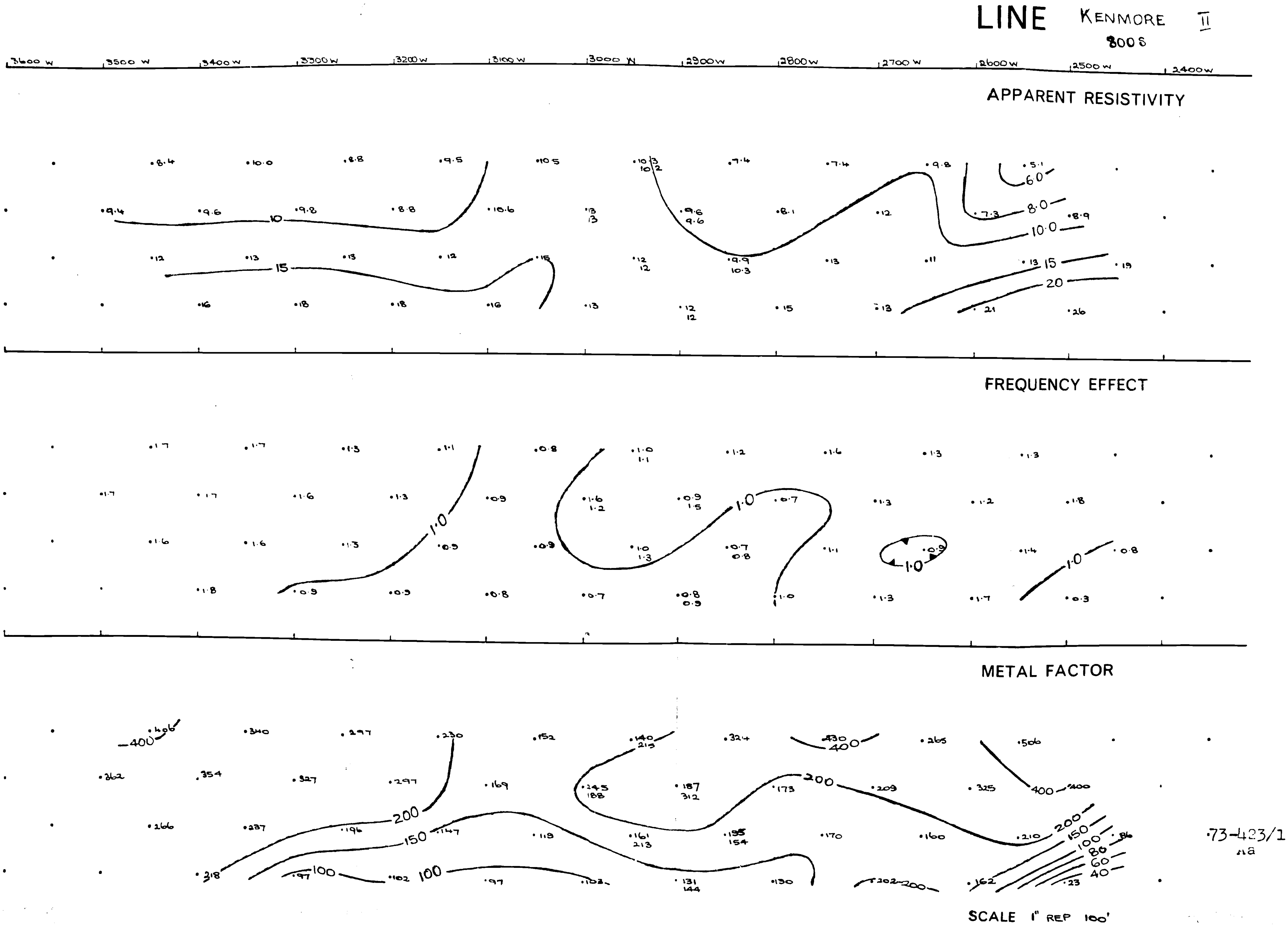
SCALE 1" REP 100'

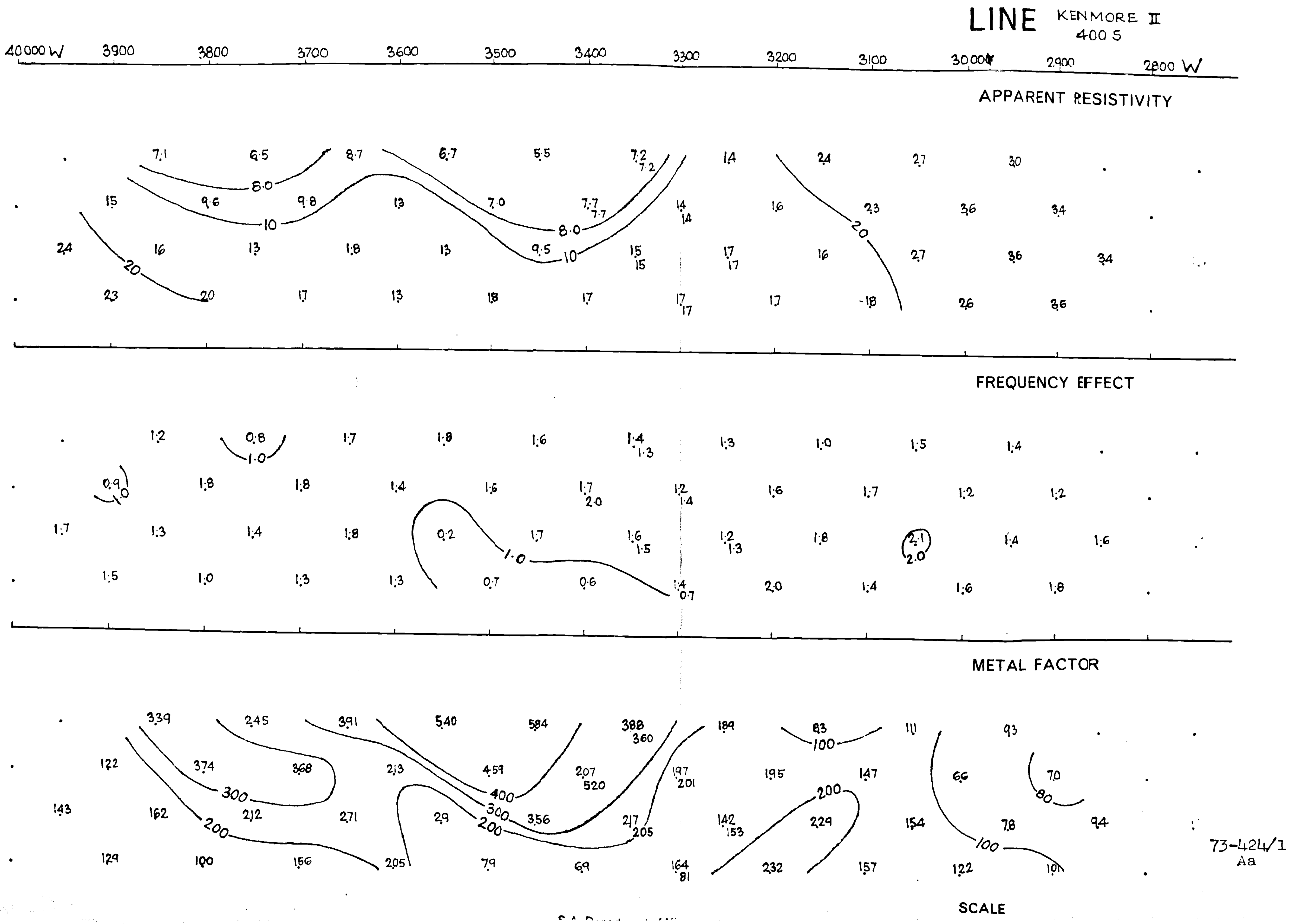
S.A. Department of Mines

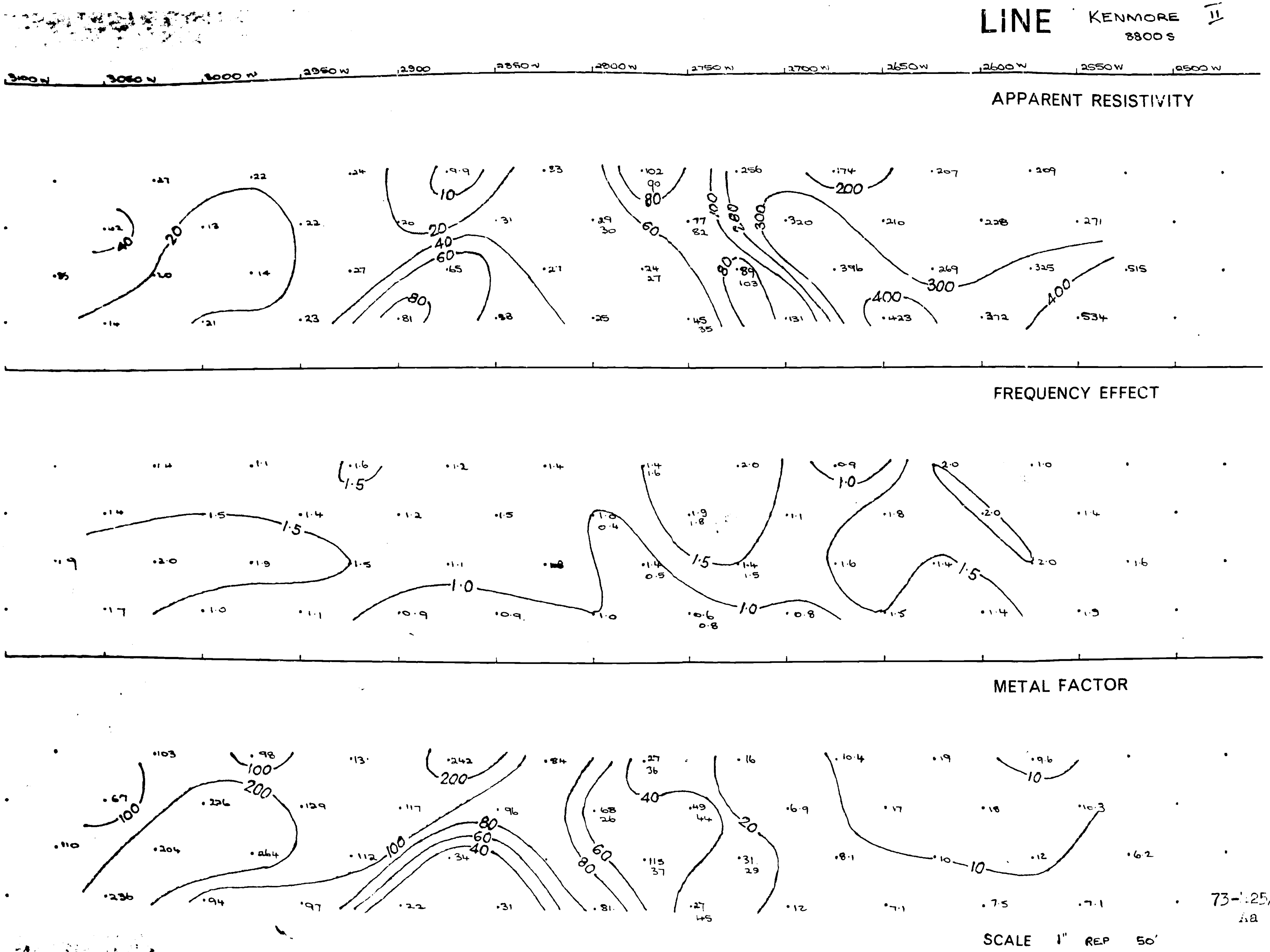


LINE KENMORE II
1600 S
3800 W
3700 W
3600 W
3500 W
3400 W
3300 W
3200 W
3100 W
3000 W
2900 W
2800 W
2700 W
2600 W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE 1" PER 100'

73-422/1
Aa

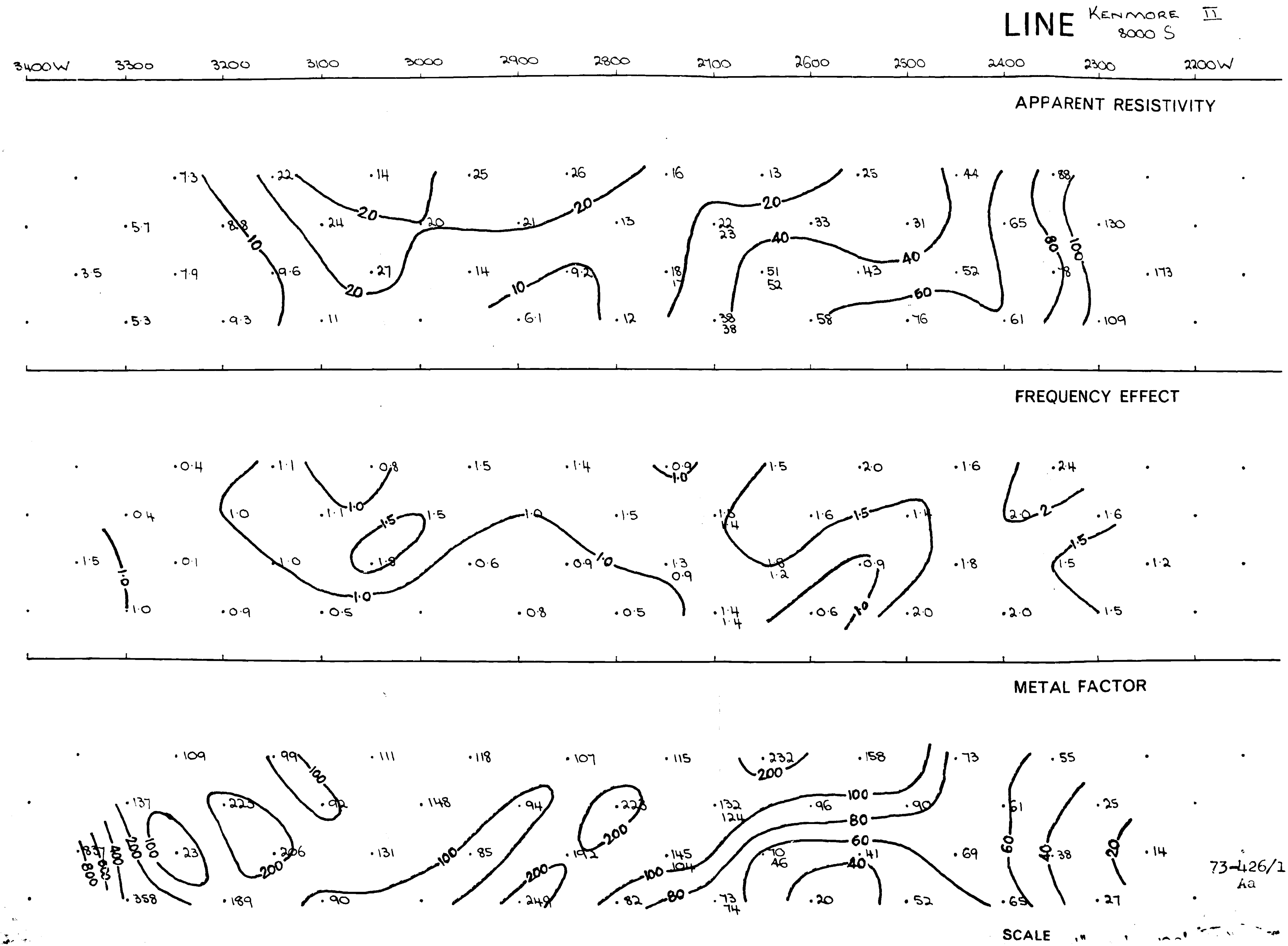

LINE KENMORE II
800S
3600 W
3500 W
3400 W
3300 W
3200 W
3100 W
3000 W
2900 W
2800 W
2700 W
2600 W
2500 W
2400 W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE 1" REP 100'
73-423/1


LINE KENMORE II
400 S
40000 W 3900 3800 3700 3600 3500 3400 3300 3200 3100 3000 2900 2800 W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE
73-424/1
Aa

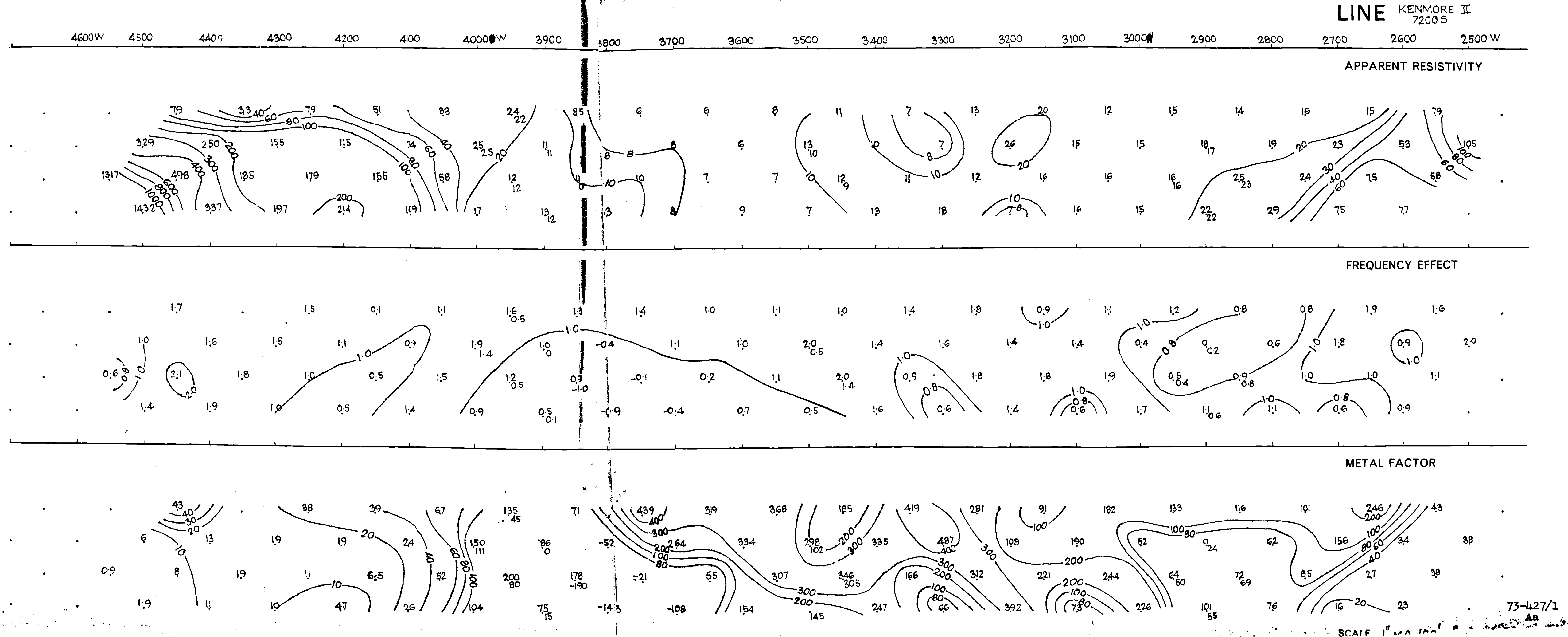


73-125/1

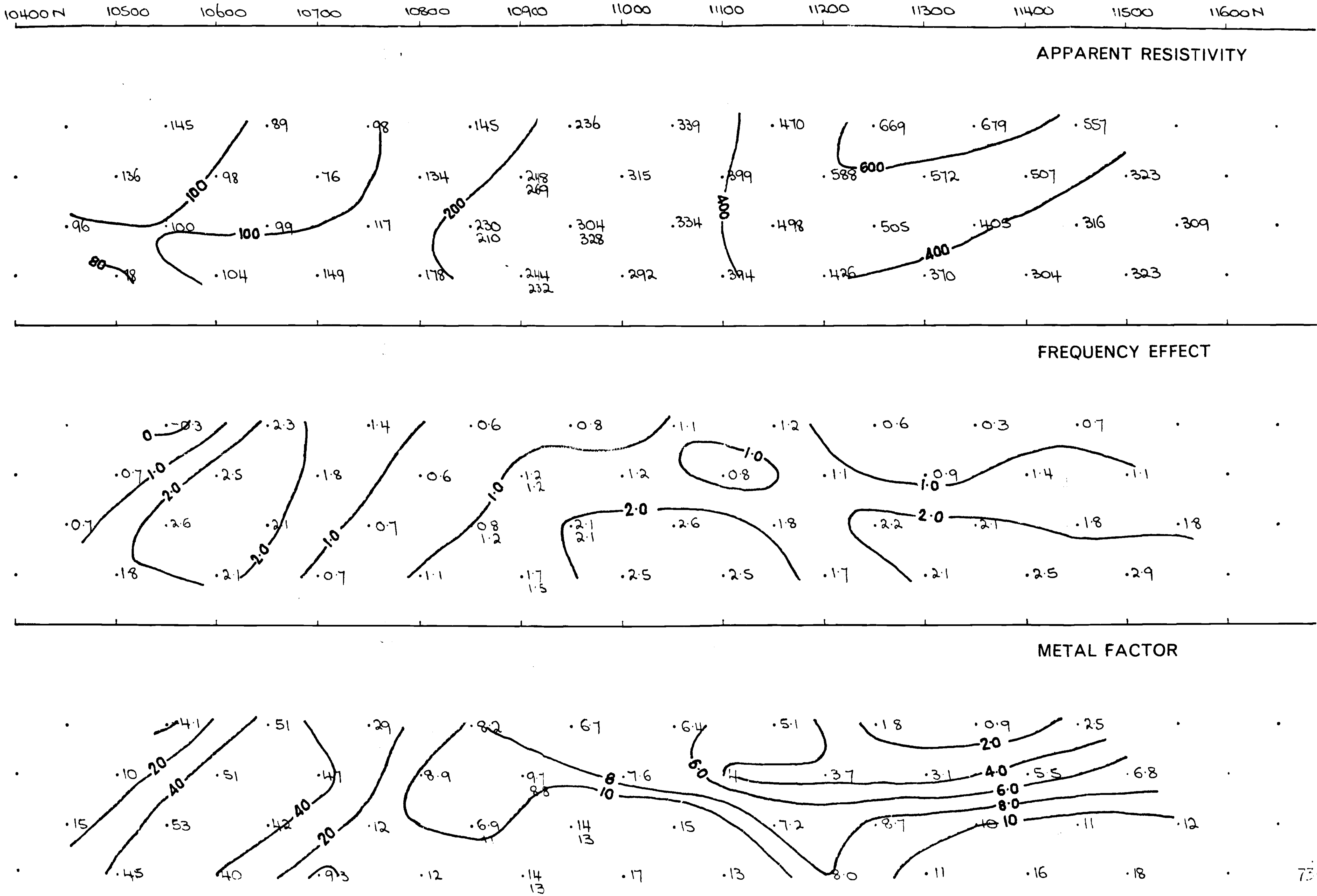
S.A. Department of Mines



LINE KENMORE II 8000 S
3400W
3300
3200
3100
3000
2900
2800
2700
2600
2500
2400
2300
2200W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
SCALE
73-426/1
Aa


LINE KENMORE II 7200 S
4600 W
4500
4400
4300
4200
400
4000 W
3900
3800
3700
3600
3500
3400
3300
3200
3100
3000
2900
2800
2700
2600
2500 W
APPARENT RESISTIVITY
FREQUENCY EFFECT
METAL FACTOR
73-427/1

LINE Kenmore II 200 W



73-428/1

SCALE 1" rep. 100'

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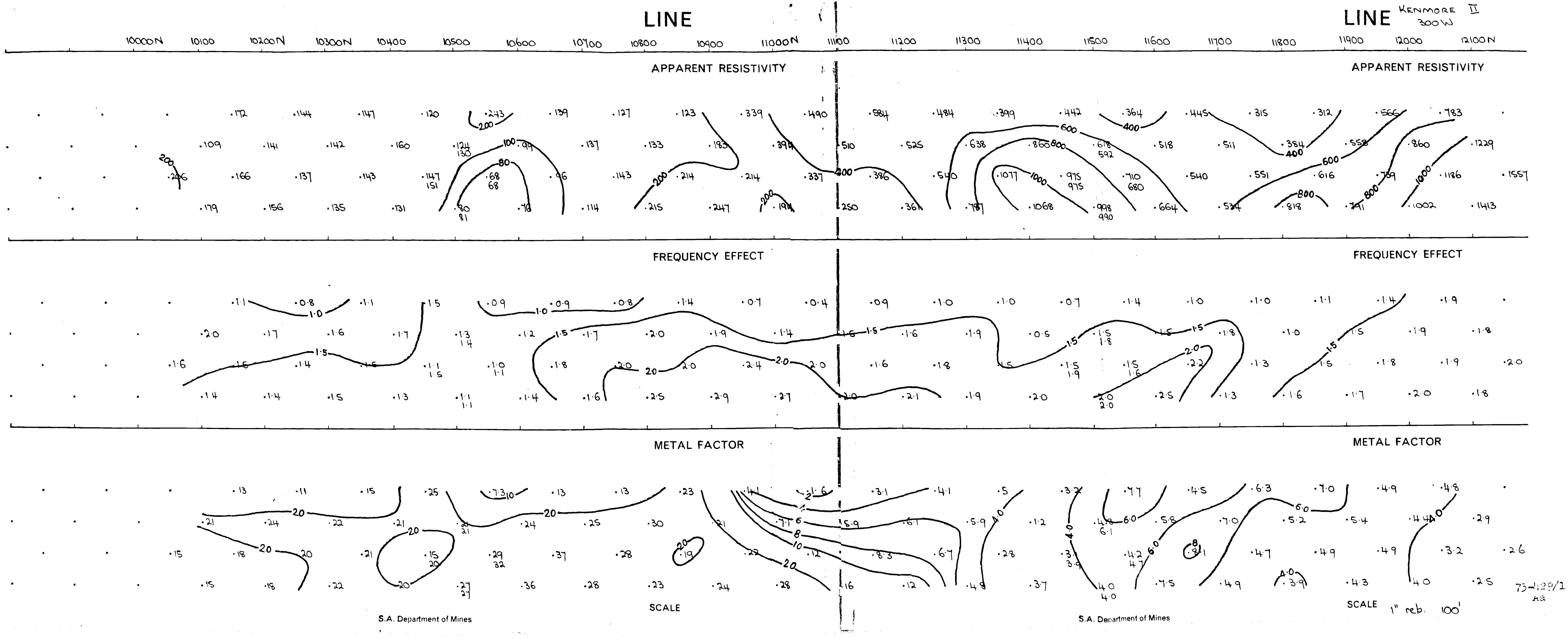
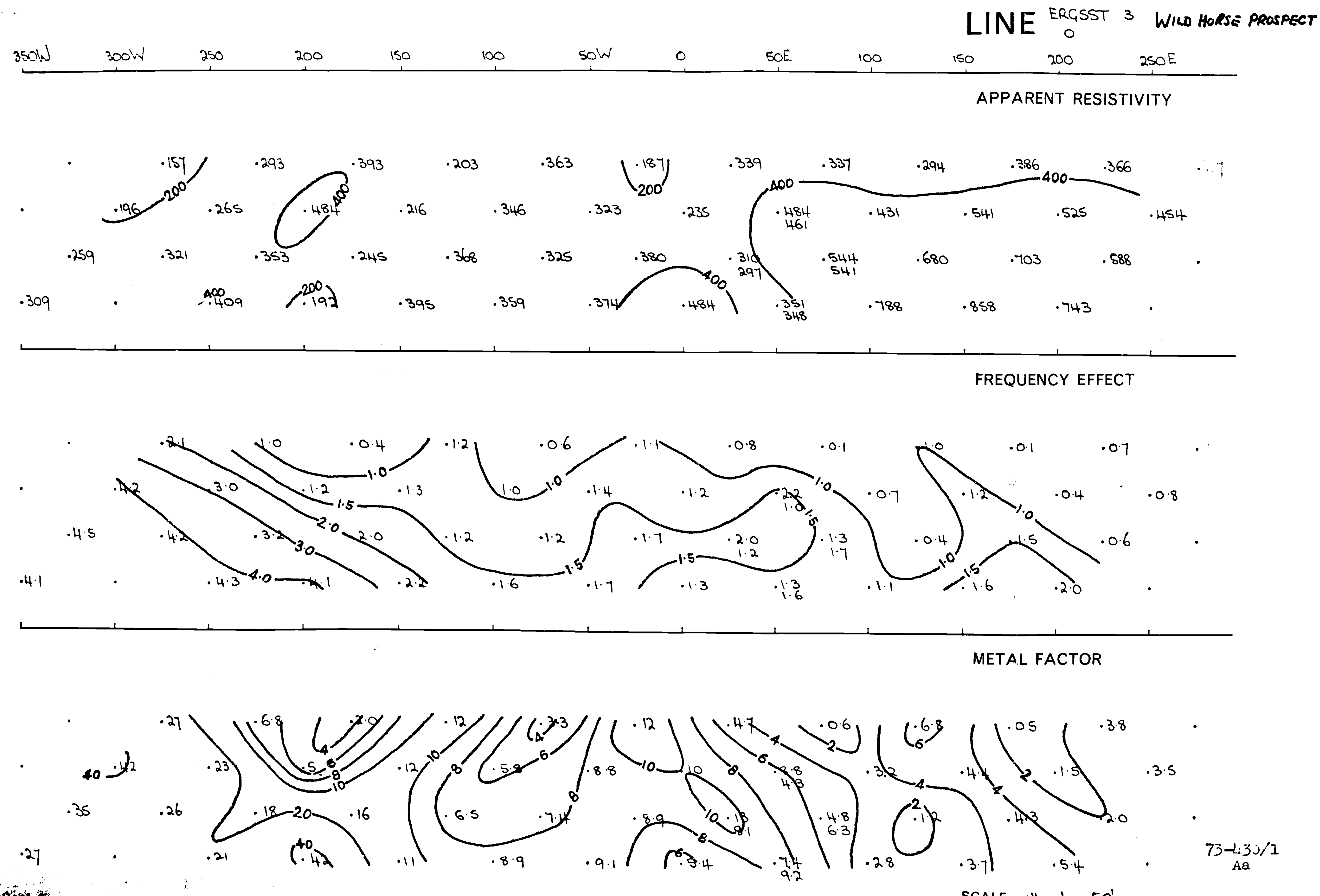
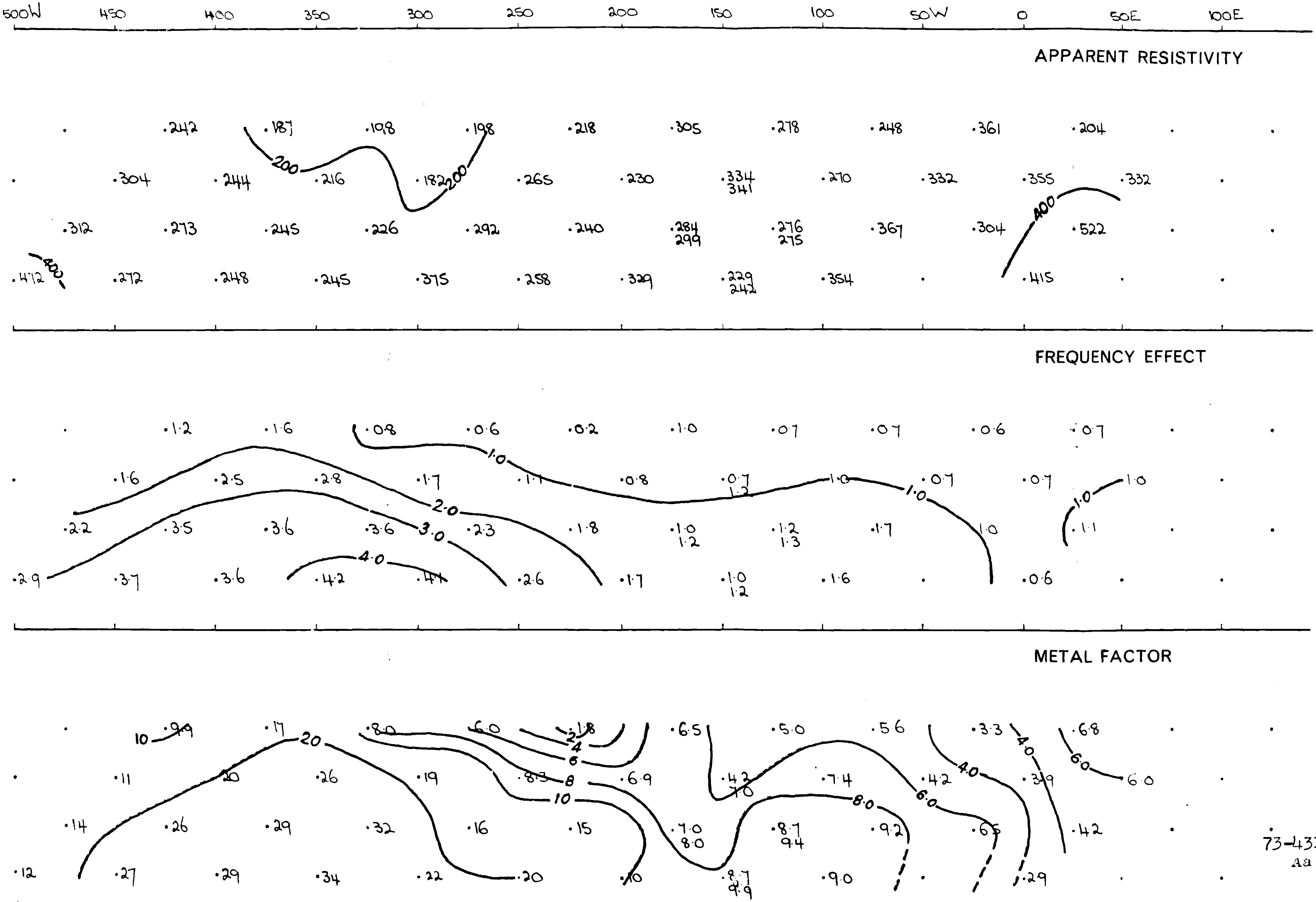

LINE
LINE
KENMORE II
300W
10000N
10100
10200N
10300N
10400
10500
10600
10700
10800
10900
11000N
11100
11200
11300
11400
11500
11600
11700
11800
11900
12000
12100N
APPARENT RESISTIVITY
APPARENT RESISTIVITY
FREQUENCY EFFECT
FREQUENCY EFFECT
METAL FACTOR
METAL FACTOR
S.A. Department of Mines
SCALE
S.A. Department of Mines
SCALE 1" reb. 100'
75-129/1
A3



S.A. Department of Mines

LINE ERGSST 800 N 3 WILD HORSE PROSPECT



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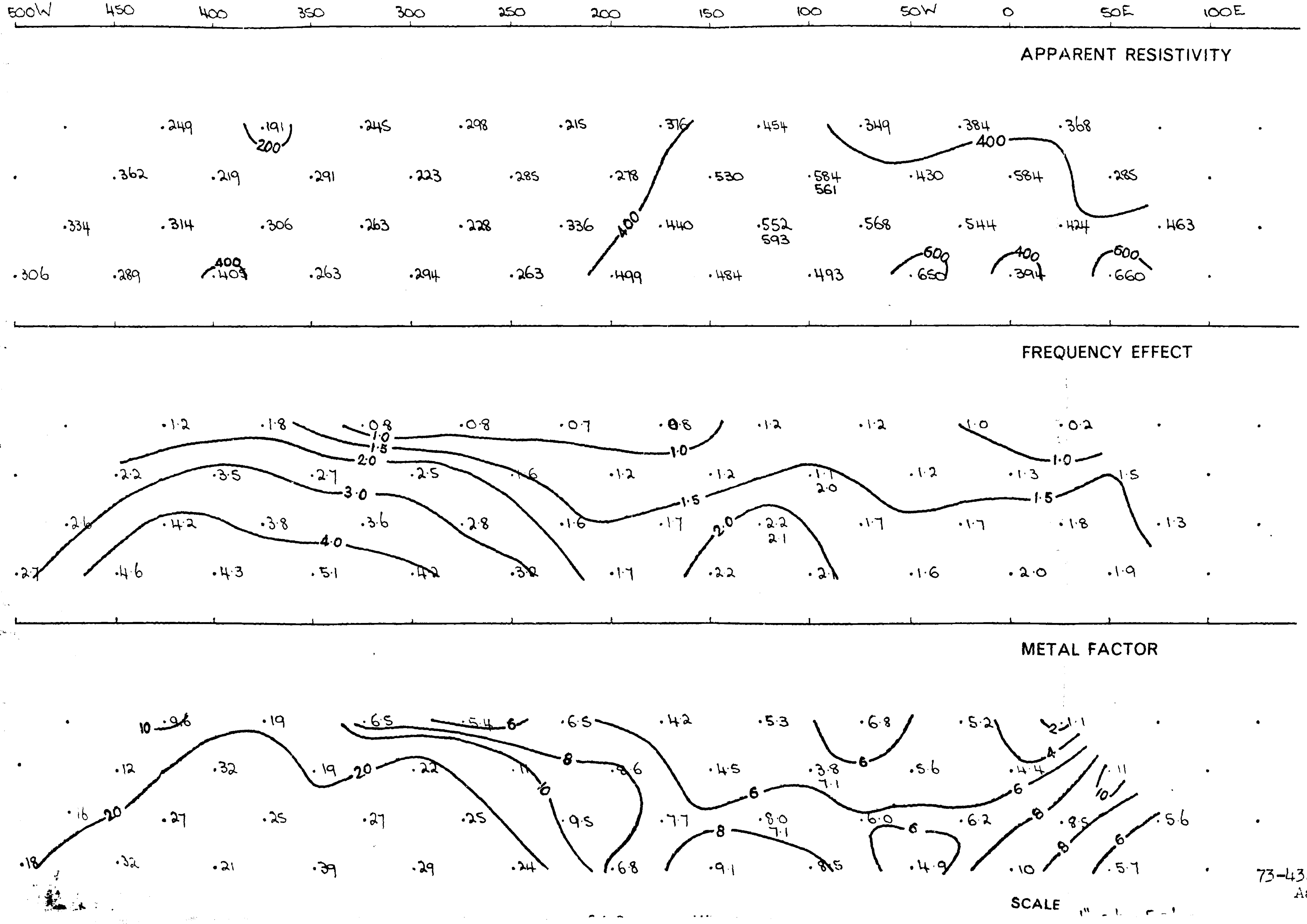
SCALE 1" reb. 50'

LINE ERGSST 3 WILD HORSE PROSPECT
1400 N



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