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REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY OF THE KOVAL PROJECT, CALEY LAKE AREA, PATRICIA MINING DIVISION, ONTARIO FOR LONG LAC MINERAL EXPLORATION LTD.

McPHAR GEOPHYSICS

REPORT ON THE
INDUCED POLARIZATION
AND RESISTIVITY SURVEY
OF THE
KOVAL PROJECT, CALEY LAKE AREA,
PATRICIA MINING DIVISION, ONTARIO
FOR
LONG LAC MINERAL EXPLORATION LTD.

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1. INTRODUCTION

As requested by Mr. D.G. Sheehan, exploration manager for Long Lac Mineral Exploration Ltd., we have carried out a combined Induced Polarization and Resistivity survey of the Company's Koval Property. The property is situated in northwestern Ontario, about 25 miles southwest of Pickle Lake and is accessible by light aircraft.

According to information provided by the Company, the immediate area is underlain primarily by Precambrian felsic volcanics with minor sediments. These formations have a general northeast strike and vertical or sub-vertical dip.

The property is of interest because of the presence of gold-sulphide and antimony showings. The present survey was intended to locate and delimit the various sulphide zones in order to guide future drilling.

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2. PRESENTATION OF RESULTS

The induced polarization and resistivity results are shown on the following data plots in the manner described in the notes preceding this report.

Line	Electrode Intervals	Dwg. No.
62E	200 feet	IP 6266-1
58E	200 feet	IP 6266-2
54E	200 feet	IP 6266-3
50E	200 feet	IP 6266-4
46E	200 feet	IP 6266-5
42E	200 feet	IP 6266-6
38E	200 feet	IP 6266-7
36E	200 feet	IP 6266-8
34E	200 feet	IP 6266-9
32E	200 feet	IP 6266-10
30E	200 feet	IP 6266-11
28E	200 feet	IP 6266-12
26E	200 feet	IP 6266-13
24E	200 feet	IP 6266-14
22E	200 feet	IP 6266-15
20E	200 feet	IP 6266-16
18E	200 feet	IP 6266-17
8E	200 feet	IP 6266-18
6E	200 feet	IP 6266-19
4E	200 feet	IP 6266-20

Line	Electrode Intervals	Dwg. No.
2E	200 feet	IP 6266-21
0	200 feet	IP 6266-22
2W	200 feet	IP 6266-23
4W	200 feet	IP 6266-24
6W	200 feet	IP 6266-25
8W	200 feet	IP 6266-26
10W	200 feet	IP 6266-27
12W	200 feet	IP 6266-28
14W	200 feet	IP 6266-29
16W	200 feet	IP 6266-30
18W	200 feet	IP 6266-31
20W	200 feet	IP 6266-32
22W	200 feet	IP 6266-33
24W	200 feet	IP 6266-34
26W	200 feet	IP 6266-35
28W	200 feet	IP 6266-36
30W	200 feet	IP 6266-37
34W	200 feet	IP 6266-38
36W	200 feet	IP 6266-39
38W	200 feet	IP 6266-40
40W	200 feet	IP 6266-41
42W	200 feet	IP 6266-42
44W	200 feet	IP 6266-43

Line	Electrode Intervals	Dwg. No.
46W	200 feet	IP 6266-44
48W	200 feet	IP 6266-45
50W	200 feet	IP 6266-46

Also enclosed with this report is Dwg. I.P.P. 5046, a plan map of the Koval Project Grid at a scale of 1" = 200'. 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 200' electrode intervals the position of a narrow sulphide body can only be determined to lie between two stations 200' 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.

The topography and geological information shown on Dwg. I.P.P. 5046 has been taken from maps made available by the staff of Long Lac Mineral Exploration Ltd.

3. DISCUSSION OF RESULTS

The geophysical survey has shown the presence of numerous anomalies; most of these can be correlated into zones varying in length from a few hundred feet to over a mile. Each zone is described separately below.

Zone A

Zone A occurs in the extreme eastern part of the grid and has been traced from Line 46E to Line 62E, still open to the east. On most lines, the anomaly consists of a narrow concentrated source within a broad zone of weaker mineralization. The source appears to be shallow on Line 54E (i.e. less than 200 feet deep) and steeply dipping.

The IP anomaly correlates with a magnetic high of about 600 gammas relief from Line 48E to Line 56E. The only outcrops in this area occur on Line 50E and there is no indication of previous work such as drilling.

If the source of the zone is not evident from the outcrops on Line 50E, then a drill test would be warranted. An angle hole is recommended to pass under station 7S, Line 54E at a vertical depth of 150' to 200'. If possible, the anomaly should be detailed with 100-foot dipoles before carrying out the drill test.

Zone B

Zone B is situated in the northeastern corner of the grid, from Line 42E to Line 50E. It appears to be broad, shallow and weak but the anomalies are incomplete and the data would have to be extended farther north for a more complete evaluation.

There is no significant magnetic correlation except on Line 50E and there are no bedrock exposures in the vicinity. A drill test is not warranted at this time.

Zone C

Zone C has been traced across the north part of the grid from Line 18E to Line 38E and is still open in both directions. The eastern part of the zone is weak and may terminate a short distance east of the surveyed area; to the west, Zone C may represent the extension of either Zone H or Zone G.

The strongest IP responses were obtained on Line 26E and Line 28E; on Line 26E the source is shallow and narrow (i.e. less than 200 feet) and appears to have a steep northerly dip.

The IP anomaly correlates with a linear magnetic high of over 1000 gammas relief, with the strongest coincidence on Line 24E and Line 26E. Evidently there are no outcrops within the general vicinity of the zone.

A drill test is warranted on either Line 24E or Line 26E, to pass under station 9S at a vertical depth of 150' - 200'.

Zone D

Zone D is situated a few hundred feet south of Zone C and extends from Line 28E to Line 34E. The IP response is only of moderate magnitude and there is no obvious magnetic correlation. As with Zone C, there are no outcrops in the immediate vicinity.

A drill test may be warranted on Line 28E (under 5N at 150'-200') but does not merit a high priority.

Zone E

Zone E is located immediately southwest of Zone D and may in fact represent a continuation of Zone D. There is no significant magnetic expression except perhaps on Line 26E. The zone occurs along the northern edge of a series of acid volcanic outcrops.

Drilling is probably warranted on Line 22E, using an inclined hole to pass under station 1N at a vertical depth of 200' - 250'.

Zone F

This weak feature has been traced from Line 22E to Line 34E and is still open to the west. The magnetometer survey results indicate a weak "high" of 300-400 gammas relief on Line 22E and Line 26E. There are several outcrops of acid volcanics near the centre of the zone but evidently there is no indication of the cause of the weak IP anomalies. Drilling is not warranted at this time.

Zone G

Zone G trends in a northeasterly direction across the central part of the property, from Line 14W to Line 4E and is still open to the east. There is good magnetic correlation on the eastern part of the zone, especially on Line 0 and Line 2E.

The strongest IP response was obtained on Line 0 where the source appears to be shallow and narrow, relative to the 200-foot electrode intervals. There is a noticeable increase in the depth of burial on Line 6W and Line 8W. Outcrops (and trenches?) are most abundant in this section of the property, including exposures of sulphide iron formation at Line 14W and Line 2W. While this may be the source of the IP anomalies, a drill test may still be warranted on Line 0, using an inclined hole to pass under station 0 at a vertical depth of 150' - 200'.

Zone H

Zone H occurs about 600 feet north of Zone G and extends across most of the property, from Line 50W to Line 2E, still open in both directions. Throughout most of its length, the response is of low to moderate magnitude but becomes strong near the eastern end. The western part of the zone is generally shallow and narrow, with local increases in the depth of burial as on Line 34W; the eastern part is generally wider and deeper.

The IP zone coincides with a narrow, intermittent magnetic anomaly for most of its length, with strong magnetic responses on Line 0, Line 10W, Line 14W and Line 30W. There are several outcrops of acid volcanics on the eastern and central sections of the zone, but none along the western half. The source of the IP anomalies is probably largely or partly magnetic sulphide iron formation, but drilling may still be warranted. The following two locations are suggested: a) Line 8W, under 5N at 200' - 250'; and b) Line 40W, under 11S at 150' - 200'.

Zone I

This short zone is probably an extension of Zone G. The IP response is weak and there is no significant magnetic expression. A drill test may be warranted if encouraging results are obtained elsewhere; the suggested location is on Line 26W, under 12S at 200' - 250'.

Zone J

This short zone is situated in the southwest corner of the property, in an area of fairly abundant outcrop but little or no magnetic relief. If a drill test is carried out, a short hole should be drilled on Line 30W to test the shallow weak anomaly centred at 23S.

Zone K

Zone K is parallel to Zone H and about 700 feet to the north. It appears to be continuous from at least Line 50W to Line 36W, then discontinuous to about Line 20W. The source appears to be shallow and narrow and could be better defined by detailing with shorter electrode intervals. The zone is coincident with a linear magnetic feature, with up to 10,000 gammas relief on Line 34W, suggesting a band of iron formation but there are no outcrops along the zone. A drill test is recommended on Line 40W to pass under station 3S at a depth of 150' - 200'.

Zone L

Two weak anomalies in the extreme northwest corner of the property have been tentatively correlated into Zone L. The grid would have to be extended farther west to evaluate the importance of this feature.

4. SUMMARY AND RECOMMENDATIONS

The Induced Polarization and Resistivity survey on the Koval Project has been successful in detecting 12 anomalous zones. Some of these are extremely long and suggest the presence of lithologic units such as sulphide iron formation (Zone G, Zone H and Zone K); others are of limited strike length (Zone B, Zone E and Zone F). Most of the zones are roughly parallel, trending ENE on the western part of the property and E-W on the eastern part.

In a few cases, the IP anomalies appear to correlate with small exposures of sulphide iron formation but in most cases the source is not known. Consequently a drilling program is warranted to determine the nature of the source material. The following initial holes are recommended, with further drilling to be dictated by the results.

A) First Priority

1. Zone A; Line 54E, under 7S at 150' - 200'
2. Zone C; Line 24E or Line 26E, under 9N at 150' - 200'.
3. Zone G; Line 0, under 0 at 150' - 200'
4. Zone H; Line 8W under 5N at 200' - 250'
5. Zone H; Line 40W, under 11S at 150' - 200.
6. Zone K; Line 40W, under 3S at 150' - 200.

B) Second Priority

1. Zone D; Line 28E, under 5N at 150' - 200'
2. Zone F; Line 22E, under 1N at 200' - 250'
3. Zone I ; Line 26W, under 12S at 200' - 250'
4. Zone J; Line 30W, under 23S at 150' - 200'.

Qualifications

63.1167

2.1312

McPHAR GEOPHYSICS COMPANY

Robert A. Bell.

Robert A. Bell,
Geologist/Geophysicist

D. J. Misener

D. J. Misener,
Geophysicist

Dated: February 28, 1975

ASSESSMENT DETAILS

PROPERTY: Koval Project

MINING DIVISION: Patricia

SPONSOR: Long Lac Mineral Exploration Ltd.

PROVINCE: Ontario.

LOCATION: Caley Lake Area

TYPE OF SURVEY: Induced Polarization

OPERATING MAN DAYS:	108	DATE STARTED: September 27, 1974
EQUIVALENT 8 HR. MAN DAYS:	162	DATE FINISHED: November 22, 1974
CONSULTING MAN DAYS:	5	NUMBER OF STATIONS: 694
DRAUGHTING MAN DAYS:	10	NUMBER OF READINGS: 4412
TOTAL MAN DAYS:	177	MILES OF LINE SURVEYED: 24.16

CONSULTANTS:

Robert A. Bell, 55 Roanoke Road, Don Mills, Ontario.
D.J. Misener, River Street, P.O.Box 714, Sutton, Ontario.

FIELD TECHNICIANS:

R. Mertens, 23 Meadow Court, Guelph, Ontario.
G. Brunne, Port Loring, Ontario.
Plus 2 Helpers:
T. Cooper, General Delivery, Loring, Ontario.
R. Quesnel, 470 Sentenal Road, Downsview, Ontario.

DRAUGHTSMEN:

V. Young, 64 Highcourt Crescent, Scarborough, Ontario.
R. Peer, 10 Caratob Court, Apt. 402, Agincourt, Ontario.
N. Lade, 299 Jasper Avenue, Oshawa, Ontario.
R. Koenig, 3125 Lawrence Ave. E. Apt. 702, Scarborough, Ontario.

McPHAR GEOPHYSICS COMPANY

Robert A. Bell

Robert A. Bell,
Geologist/Geophysicist

Dated: February 28, 1975

2.1934

McPHAR GEOPHYSICS

NOTES ON THE THEORY, METHOD OF FIELD OPERATION AND PRESENTATION OF DATA FOR THE INDUCED POLARIZATION METHOD

Induced Polarization as a geophysical measurement refers to the blocking action or polarization of metallic or electronic conductors in a medium of ionic solution conduction.

This electro-chemical phenomenon occurs wherever electrical current is passed through an area which contains metallic minerals such as base metal sulphides. Normally, when current is passed through the ground, as in resistivity measurements, all of the conduction takes place through ions present in the water content of the rock, or soil, i.e. by ionic conduction. This is because almost all minerals have a much higher specific resistivity than ground water. The group of minerals commonly described as "metallic", however, have specific resistivities much lower than ground waters. The induced polarization effect takes place at those interfaces where the mode of conduction changes from ionic in the solutions filling the interstices of the rock to electronic in the metallic minerals present in the rock.

The blocking action or induced polarization mentioned above, which depends upon the chemical energies necessary to allow the ions to give up or receive electrons from the metallic surface, increases with the time that a d. c. current is allowed to flow through the rock; i. e. as ions pile up against the metallic interface the resistance to current flow increases. Eventually, there is enough polarization in the form of excess ions at the interfaces, to appreciably reduce the amount of current flow through the metallic particle. This polarization takes place at each of the infinite number of solution-metal interfaces in a mineralized rock.

When the d. c. voltage used to create this d. c. current flow is cut off, the Coulomb forces between the charged ions forming the polarization cause them to return to their normal position. This movement of charge creates a small current flow which can be measured on the surface of the ground as a decaying potential difference.

From an alternate viewpoint it can be seen that if the direction of the current through the system is reversed repeatedly before the polarization occurs, the effective resistivity of the system as a whole will change as the frequency of the switching is changed. This is a consequence of the fact that the amount of current flowing through each metallic interface depends upon the length of time that current has been passing through it in one direction.

The values of the per cent frequency effect or F. E. are a measurement of the polarization in the rock mass. However, since the measurement of the degree of polarization is related to the apparent resistivity of the rock mass it is found that the metal factor values or M. F. are the most useful values in determining the amount of polarization present in the rock mass. The MF values are obtained by normalizing the F. E. values for varying resistivities.

The induced polarization measurement is perhaps the most powerful geophysical method for the direct detection of metallic sulphide mineralization, even when this mineralization is of very low concentration. The lower limit of volume per cent sulphide necessary to produce a recognizable IP anomaly will vary with the geometry and geologic environment of the source, and the method of executing the survey. However, sulphide mineralization of less than one per cent by volume has been detected by the IP method under proper geological conditions.

The greatest application of the IP method has been in the search for disseminated metallic sulphides of less than 20% by volume. However, it has also been used successfully in the search for massive sulphides in situations where, due to source geometry, depth of source, or low resistivity of surface layer, the EM method can not be successfully applied. The ability to differentiate ionic conductors, such as water filled shear zones, makes the IP method a useful tool in checking EM anomalies which are suspected of being due to these causes.

In normal field applications the IP method does not differentiate between the economically important metallic minerals such as chalcopyrite, chalcocite, molybdenite, galena, etc., and the other metallic minerals such as pyrite. The induced polarization effect is due to the total of all electronic conducting minerals in the rock mass. Other electronic conducting materials which can produce an IP response are magnetite, pyrolusite, graphite, and some forms of hematite.

In the field procedure, measurements on the surface are made in a way that allows the effects of lateral changes in the properties of the ground to be separated from the effects of vertical changes in the properties. Current is applied to the ground at two points in distance (X) apart. The potentials are measured at two other points (X) feet apart, in line with the current electrodes is an integer number (n) times the basic distance (X).

The measurements are made along a surveyed line, with a constant distance (nX) between the nearest current and potential electrodes. In most surveys, several traverses are made with various values of (n); i.e. (n) = 1, 2, 3, 4, etc. The kind of survey required (detailed or reconnaissance) decides the number of values of (n) used.

In plotting the results, the values of the apparent resistivity, apparent per cent frequency effect, and the apparent metal factor measured for each set of electrode positions are plotted at the intersection of grid lines, one from the center point of the current electrodes and the other from the center point of the potential electrodes. (See Figure A.) The resistivity values are plotted above the line as a mirror image of the metal factor values below. On a second line, below the metal factor values, are plotted the values of the per cent frequency effect. In some cases the values of per cent frequency effect are plotted as superscripts of the metal factor value. In this second case the frequency effect values are not contoured. The lateral displacement of a given value is determined by the location along the survey line of the center point between the current and potential electrodes. The distance of the value from the line is determined by the distance (nX) between the current and potential electrodes when the measurement was made.

The separation between sender and receiver electrodes is only one factor which determines the depth to which the ground is being sampled in any particular measurement. The plots then, when contoured, are not section maps of the electrical properties of the ground under the survey line. The interpretation of the results from any given survey must be carried out using the combined experience gained from field results, model study results and theoretical investigations. The position of the electrodes when anomalous values are measured is important in the interpretation.

In the field procedure, the interval over which the potential differences are measured is the same as the interval over which the electrodes are moved after a series of potential readings has been made. One of the advantages of the induced polarization method is that the same equipment can be used for both detailed and reconnaissance surveys merely by changing the distance (X) over which the electrodes are moved each time. In the past, intervals have been used ranging from 25 feet to 2000 feet for (X). In each case, the decision as to the distance (X) and the values of (n) to be used is largely determined by the expected size of the mineral deposit being sought, the size of the expected anomaly and the speed with which it is desired to progress.

The diagram in Figure A demonstrates the method used in plotting the results. Each value of the apparent resistivity, apparent metal factor, and apparent per cent frequency effect is plotted and identified by the position of the four electrodes when the measurement was made. It can be seen that the values measured for the larger values of (n) are plotted farther from the line indicating that the thickness of the layer of the earth that is being tested is greater than for the smaller values of (n); i. e. the depth of the measurement is increased. When the F. E. values are plotted as superscripts to the MF values the third section of data values is not presented and the F. E. values are not contoured.

The actual data plots included with the report are prepared utilizing an IBM 360/75 Computer and a Calcomp 770/763 Incremental Plotting System. The data values are calculated, plotted, and contoured according to a programme developed by McPhar Geophysics. Certain symbols have been incorporated into the programme to explain various situations in recording the data in the field.

The IP measurement is basically obtained by measuring the difference in potential or voltage (ΔV) obtained at two operating frequencies. The voltage is the product of the current through the ground and the apparent resistivity of the ground. Therefore in field situations where the current is very low due to poor electrode contact, or the apparent resistivity is very low, or a combination of the two effects; the value of (ΔV) the change in potential will be too small to be measurable. The symbol "TL" on the data plots indicates this situation.

In some situations spurious noise, either man made or natural, will render it impossible to obtain a reading. The symbol "N" on the data plots indicates a station at which it is too noisey to record a reading. If a reading can be obtained, but for reasons of noise there is some doubt as to its accuracy, the reading is bracketed in the data plot ( ).

In certain situations negative values of Apparent Frequency Effect are recorded. This may be due to the geologic environment or spurious electrical effects. The actual negative frequency effect value recorded is indicated on the data plot, however the symbol "NEG" is indicated for the corresponding value of Apparent Metal Factor. In contouring negative values the contour lines are indicated to the nearest positive value in the immediate vicinity of the negative value.

The symbol "NR" indicates that for some reason the operator did not attempt to record a reading although normal survey procedures would suggest that one was required. This may be due to inaccessible topography or other similar reasons. Any symbol other than those discussed above is unique to a particular situation and is described within the body of the report.

METHOD USED IN PLOTTING DIPOLE-DIPOLE INDUCED POLARIZATION AND RESISTIVITY RESULTS

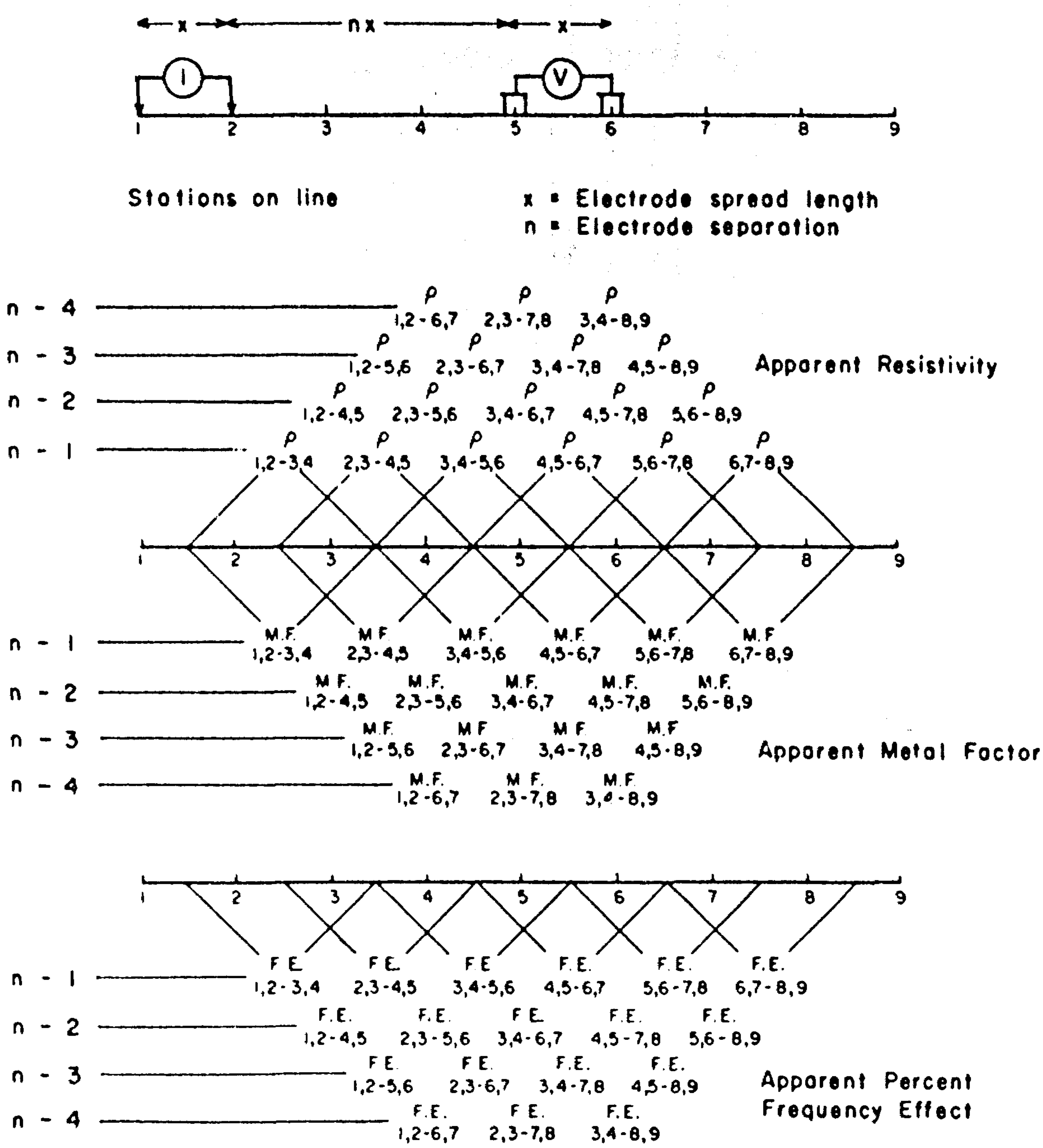

Fig. A

52007SE0021 52007SE0013 CALEY LAKE

900

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OCT 1 1975
PROJECTS UNIT

...GICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey: Geophysical

Township or Area: Pickle Lake Area

Claim holder(s): Little Long Lac Mines Ltd.

Author of Report: Robert A. Bell + D.J. Misener

Address: 65 Roanoke Road, Don Mills + PO Box 7M, Sutton; Ont.

Covering Dates of Survey: Sept. 27 1974 – Nov 22 1974
(linecutting to office)

Total Miles of Line cut: use of existing grid.

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer ______ Electromagnetic ______ Radiometric ______
(enter days per claim)

DATE: Oct 1, 1975 SIGNATURE: [signature]
Author of Report or Agent

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
PA	384709
PA	384708
PA	384689
PA	384690
PA	384691
PA	384692
PA	384693
PA	384694
PA	384695
PA	384696
PA	384697
PA	384711
PA	384712

If space insufficient, attach list

TOTAL CLAIMS 13

OFFICE USE ONLY

PROJECTS SECTION 63.1168

Res. Geol. ______ Qualifications 2.1392

Previous Surveys 2.1935 May survey done in 1974

Checked by ______ date ______

GEOLOGICAL BRANCH ______

Approved by LD date ______

GEOLOGICAL BRANCH ______

Approved by ______ date ______

File 2.1934

MINISTRY OF NATURAL RESOURCES
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MAY 25 1976
RESIDENT GEOLOGIST'S OFFICE
SIOUX LOOKOUT

RECEIVED
OCT 1 1975
PROJECTS UNIT

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL
TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey: Geophysical

Township or Area: Pickle Lake Area

Claim holder(s): Little Long Lac Mines Ltd.

Author of Report: Robert A. Bell + D.J. Misener

Address: 65 Roanoke Road, Don Mills + PO Box 714, Sutton; Ont.

Covering Dates of Survey: Sept. 27 1974 – Nov 22 1974
(linecutting to office)

Total Miles of Line cut: use of existing grid

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
--Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer ______ Electromagnetic ______ Radiometric ______
(enter days per claim)

DATE: Oct 1, 1975 SIGNATURE: Alex Mohok
Author of Report or Agent

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
PA	384709
PA	384708
PA	384689
PA	384690
PA	384691
PA	384692
PA	384693
PA	384694
PA	384695
PA	384696
PA	384697
PA	384711
PA	384712

TOTAL CLAIMS 13

OFFICE USE ONLY

PROJECTS SECTION

Res. Geol. ______ Qualifications 2.1933

Previous Surveys ______

Checked by ______ date ______

GEOLOGICAL BRANCH ______

Approved by ______ date ______

GEOLOGICAL BRANCH ______

Approved by ______ date ______

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations: I.P. 230 — Number of Readings: 1470

Station interval: 100 feet.

Line spacing: 200 feet.

Profile scale or Contour intervals: 1.0 - 1.5 - 2.0 - 3.0 - 5.0 - 7.5 - 10.0 Logarithmic Intervals.
(specify for each type of survey)

MAGNETIC

Instrument:

Accuracy - Scale constant:

Diurnal correction method:

Base station location:

ELECTROMAGNETIC

Instrument:

Coil configuration:

Coil separation:

Accuracy:

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency:
(specify V.L.F. station)

Parameters measured:

GRAVITY

Instrument:

Scale constant:

Corrections made:

Base station value and location:

Elevation accuracy:

INDUCED POLARIZATION – RESISTIVITY

Instrument: Mephar P660

Time domain: not applicable — Frequency domain: Sequencial transmission cont.

Frequency: .031 - 5.0 Hz. — Range: not known.

Power: 30 - 700 volts ; max current at full voltage 5 amps - min current at full voltage 30 milliamps

Electrode array: dipole - dipole in line.

Electrode spacing: 200 feet.

Type of electrode: metal stakes.

2.1934

ASSESSMENT WORK BREAKDOWN

1. Type of Survey .... Induced Polarization
2. Township or Area .... Pickle Lake Area
3. Numbers of Mining Claims Traversed by Survey ... Pa 384709 ... Pa 384708
   Pa 384789, Pa 384790, Pa 384791, Pa 384792, Pa 384793,
   Pa 384794, Pa 384795, Pa 384796, Pa 384797, Pa 384711
   Pa 384712
4. Number of Miles of Line Cut ... use of existing grid ... Flown

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RESIDENT GEOLOGIST'S OFFICE
SIOUX LOOKOUT

*5. Number of Stations Established 1470
*6. Make and type of Instrument Used ..... Mcphar P660
*7. Scale Constant or Sensitivity ...... ~~[illegible]~~
*8. Frequency Used and Power Output ... 0.31 - 5.0 Hz .... 30-700 volts.

9. Summary of Assessment Credits (details on reverse side)

   Total 8 hour Technical Days (Include Consultants, Draughting etc.) 59

   Total 8 hour Line-Cutting Days ...... ✓

   Calculation for claims being filed for assessment

   59 (Technical) x 7 = 413 + — (Line-cutting) = 413 ÷ 13 (Number of claims) = 32 days on 10 claims, 31 days on 3 claims. (Assessment credits per claim)

The dates listed on this form represent working time spent entirely within the limits of the above listed claims ☐ Check
If otherwise, please explain .. Dates listed are for time spent on the entire claim group (as shown on the accompanying map). Time spent on the claims being filed for assessment is a little over ⅓ of the total time spent on the group.

Dated: ... Oct 1 ... 1975 ...... Signed: ... Alex Motzok

Note: (A) * Complete only if applicable.
(B) Complete list of names, addresses and dates on reverse side.
(C) Submit separate breakdown for each type of survey.
(D) Submit in duplicate.

2.1934

ASSESSMENT WORK BREAKDOWN

1. FIELD WORK

Type of Work	Name & Address	Dates Worked	Number of 8 hour days
Field Technician	R. Mertens 23 Meadow Court, Guelph, Ont.		40.5
Field Technician	G. Brunns Port Loring, Ont.		40.5
Helper	J. Cooper General Delivery Loring, Ont.		40.5
Helper	R. Quesnel 470 Sentinel Road, Downsview Ont.		40.5

2. CONSULTANTS

Name & Address	Dates Worked (specify in field or office)	Number of 8 hour days
Robert A. Bell 55 Roanoke Road Don Mills, Ont.	office	2.5
D.J. Misener River Street PO Box 214 Sutton Ont.	office	2.5

3. DRAUGHTSMAN, TYPING, OTHERS (specify)

Name & Address	Type of Work	Dates Worked	Number of 8 hour days
V. Young 64 Highcourt Cres. Scarborough	Draughtsman		2.5
R. Peer 10 Cornish Court Apt 303 Agincourt, Ont.	Draughtsman		2.5
N. Lode 299 Jasper Ave. Oshawa Ont.	Draughtsman		2.5
R. Koenig 3125 Lawrence Ave E Apt 902 Scarborough, Ont	Draughtsman		2.5

TOTAL 8 HOUR TECHNICAL DAYS 177
for entire claim group.

4. LINE-CUTTING

Name	Address	Dates Worked	Number of 8 hour days

TOTAL 8 HOUR LINE-CUTTING DAYS /

Ontario

Ministry of
Natural
Resources

MINISTRY OF NATURAL RESOURCES
RECEIVED
MAY 20 1976
RESIDENT GEOLOGIST'S OFFICE
SIOUX LOOKOUT

May 18, 1976

Our file number 2.1934
Your file number

Mr. H. L. Bell
Mining Recorder
Ministry of Natural Resources
Box 669
Court House
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

Re: Mining Claims Pa. 384689 et al, Caley Lake and Matapesatakun Bay (Lake St. Joseph), File 2.1934

The Geophysical (Induced Polarization) assessment work credits as listed with my Notice of Intent dated April 23, 1976 have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours very truly,

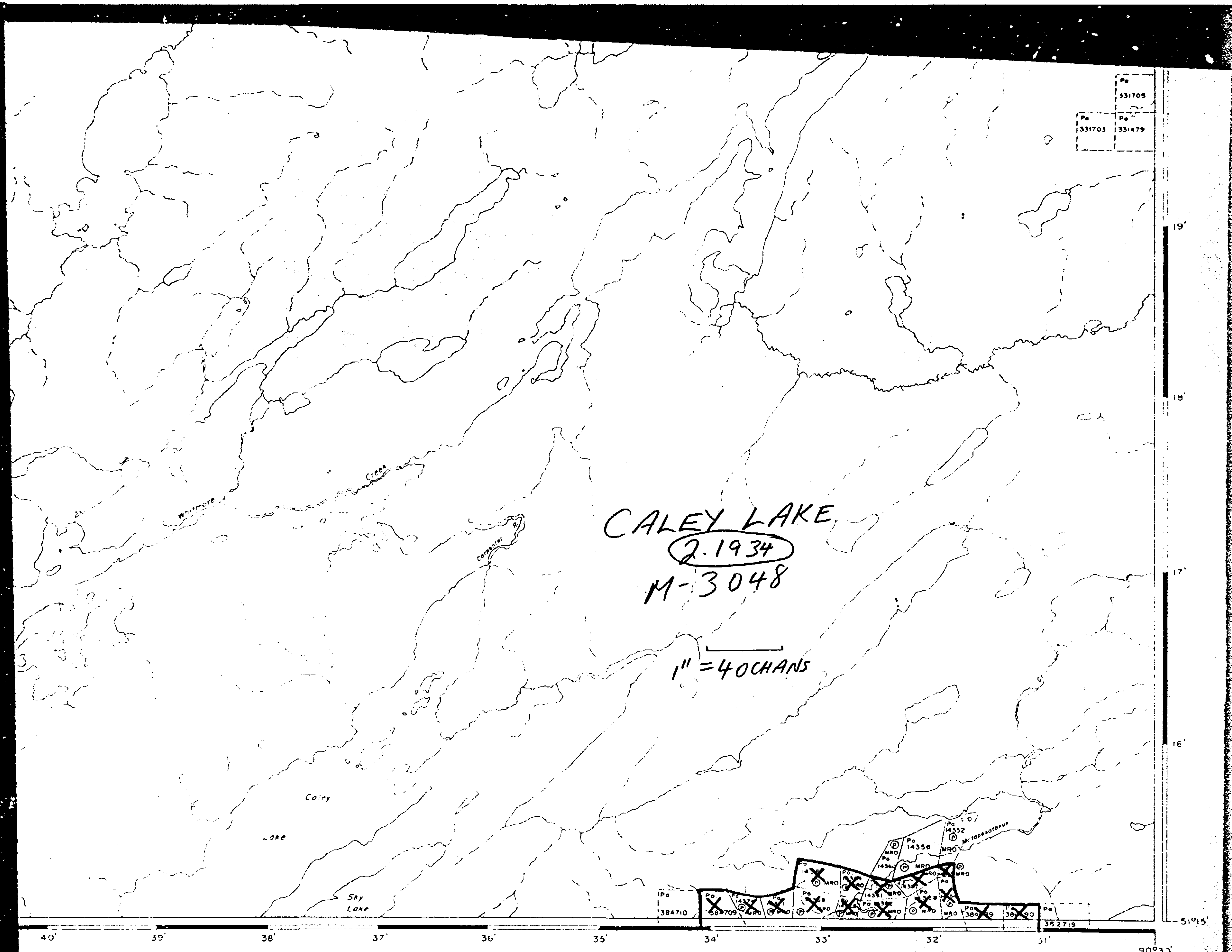
J. R. McGinn
Director
Lands Administration Branch

Whitney Block, Room 1617
Queen's Park
Toronto, Ontario
M7A 1X1
Phone: 416-965-6918

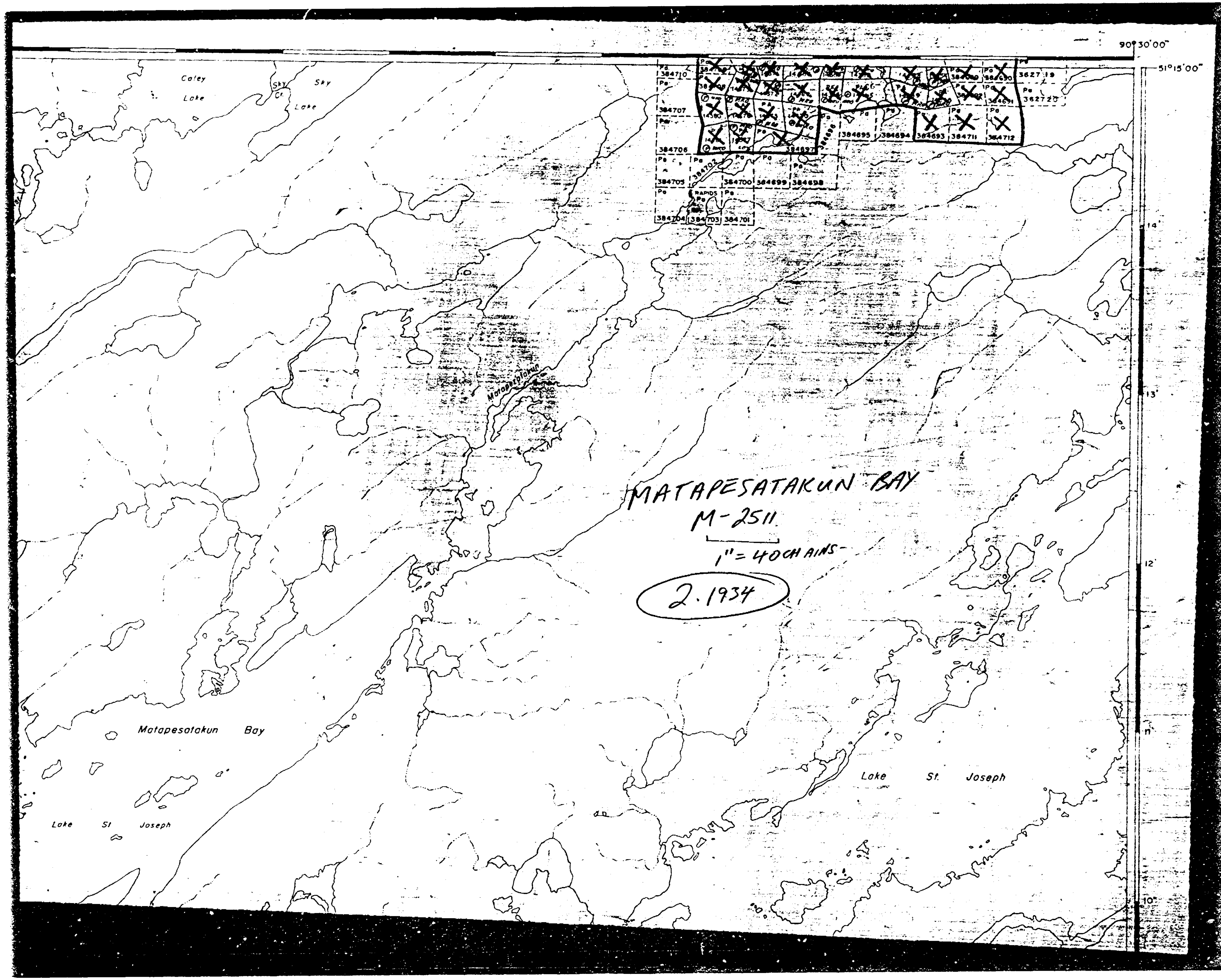
OJ/mw

cc: Little Long Lac Mines Ltd.
Toronto, Ontario
Attn: Mr. G. Alex Motzok

cc: Resident Geologist
Sioux Lookout, Ontario



METAPESATAKUN BAY M-2511

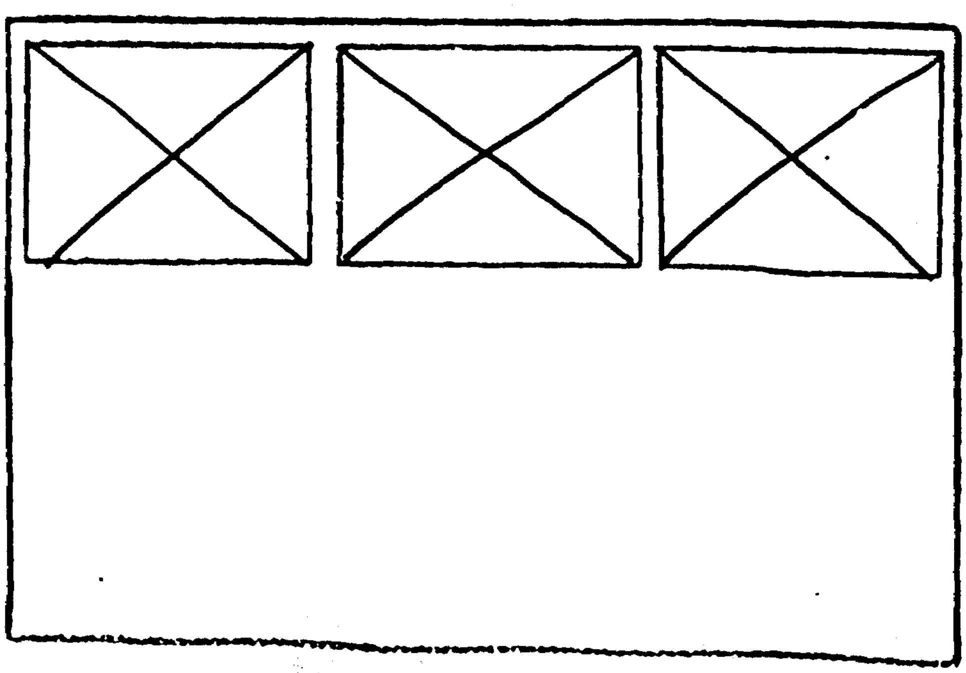


90°30'00"
51°15'00"
Caley Lake
Sky Lake
Sky Cr.
384710
384707
384706
384705
384704
384703
384701
384700
384699
384698
384695
384694
384693
384711
384712
362719
362720
RAPIDS
Matapesatakun
14'
13'
12'
11'
10'
MATAPESATAKUN BAY
M-2511
1" = 40 CHAINS
2.1934
Matapesatakun Bay
Lake St Joseph
Lake St. Joseph

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52Ø/07SE-0013,#1,#2

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE (X)



FOR ADDITIONAL

INFORMATION

SEE MAPS:

52Ø/07SE-0013 #3-24

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

Number at the end of anomaly indicates electrode interval

LONG LAC MINERAL EXPLORATION LIMITED

KOVAL PROJECT

CALEY LAKE – PATRICIA M.D. ONTARIO

SCALE

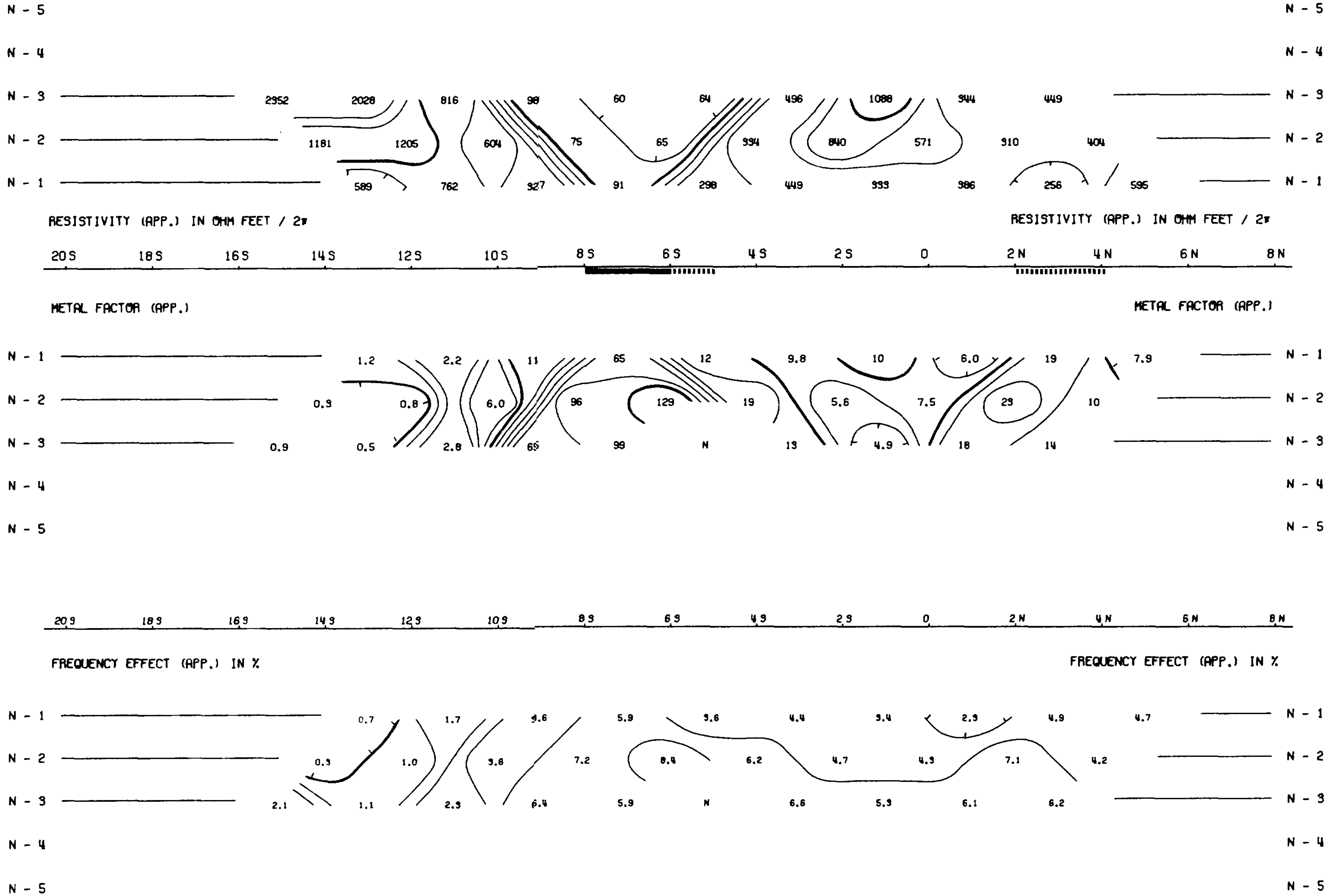
One inch = 200'

MINISTRY OF NATURAL RESOURCES
RECEIVED
MAY 25 1976
RESIDENT GEOLOGIST'S OFFICE
SIOUX LOOKOUT

DRAWN: F.R. PEER
DATE: DEC. 1974
APPROVED:
D. J. MISENER
DATE:

52Ø/07SE-0013,#1

DWG. I.P.P.–5046



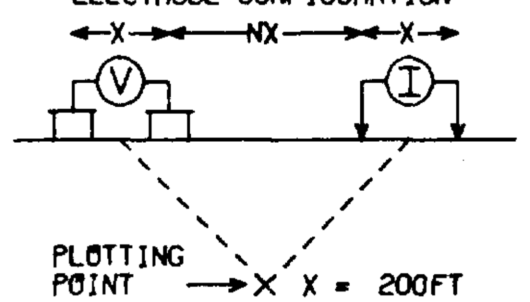
DWG. NO.- I.P.- 6266-1

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 62E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE:

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

Mc PHAR GEOPHYSICS

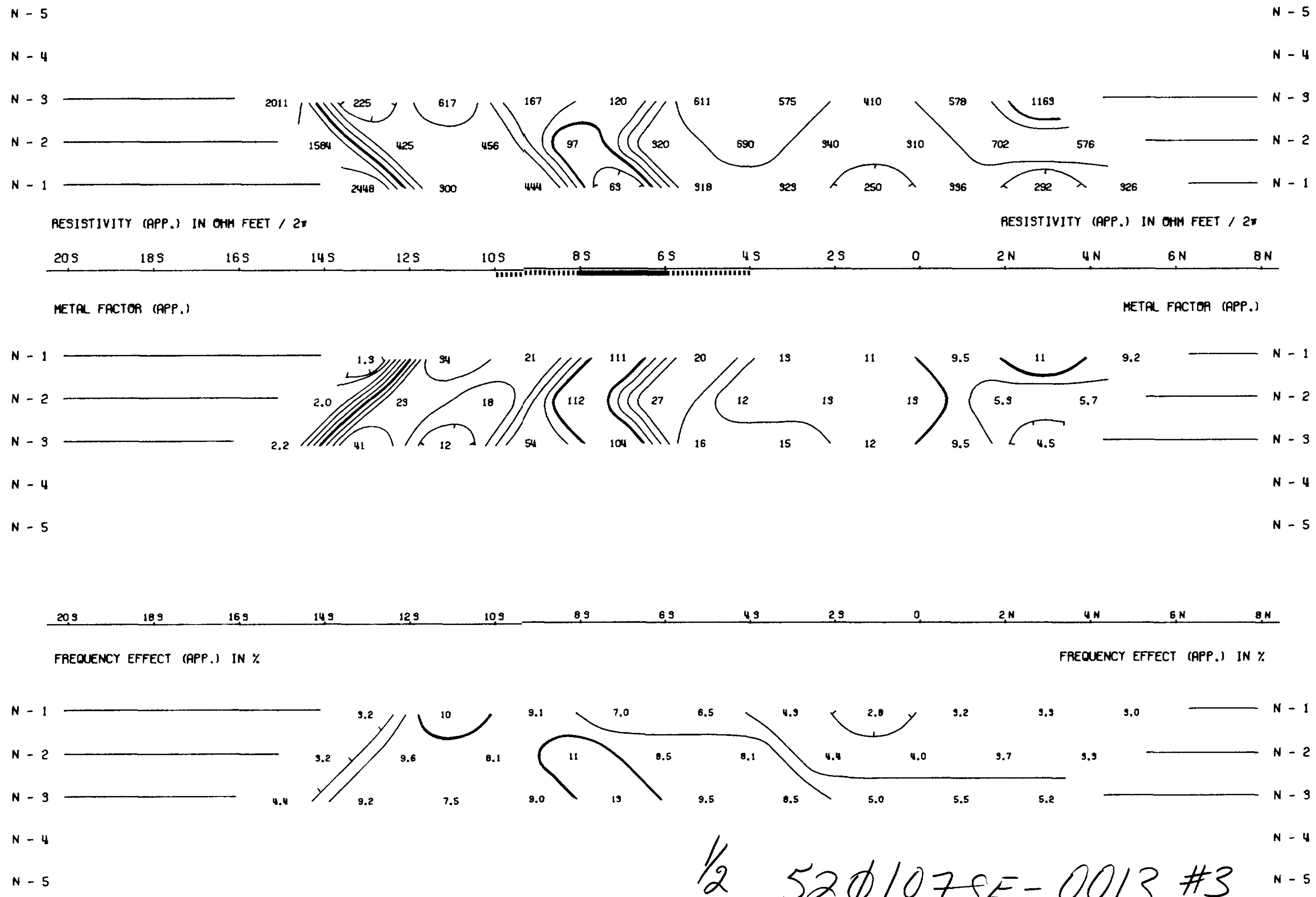
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52007SE0021 52007SE0013 CALEY LAKE

210

1/2 52Ø/07SE - 0013, #2



DWG. NO.- I.P.-6266-3

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 54E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬
PROBABLE ||||||||||
POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE: 6 Mar 1975

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 PRODUCE BY MCPHAR COMPUTER DIVISION

1/2 52Ø/07SE-0013, #3

220

DWG. NO.- I.P.-6266-5

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 46E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬

PROBABLE ||||||||||

POSSIBLE / / / / /

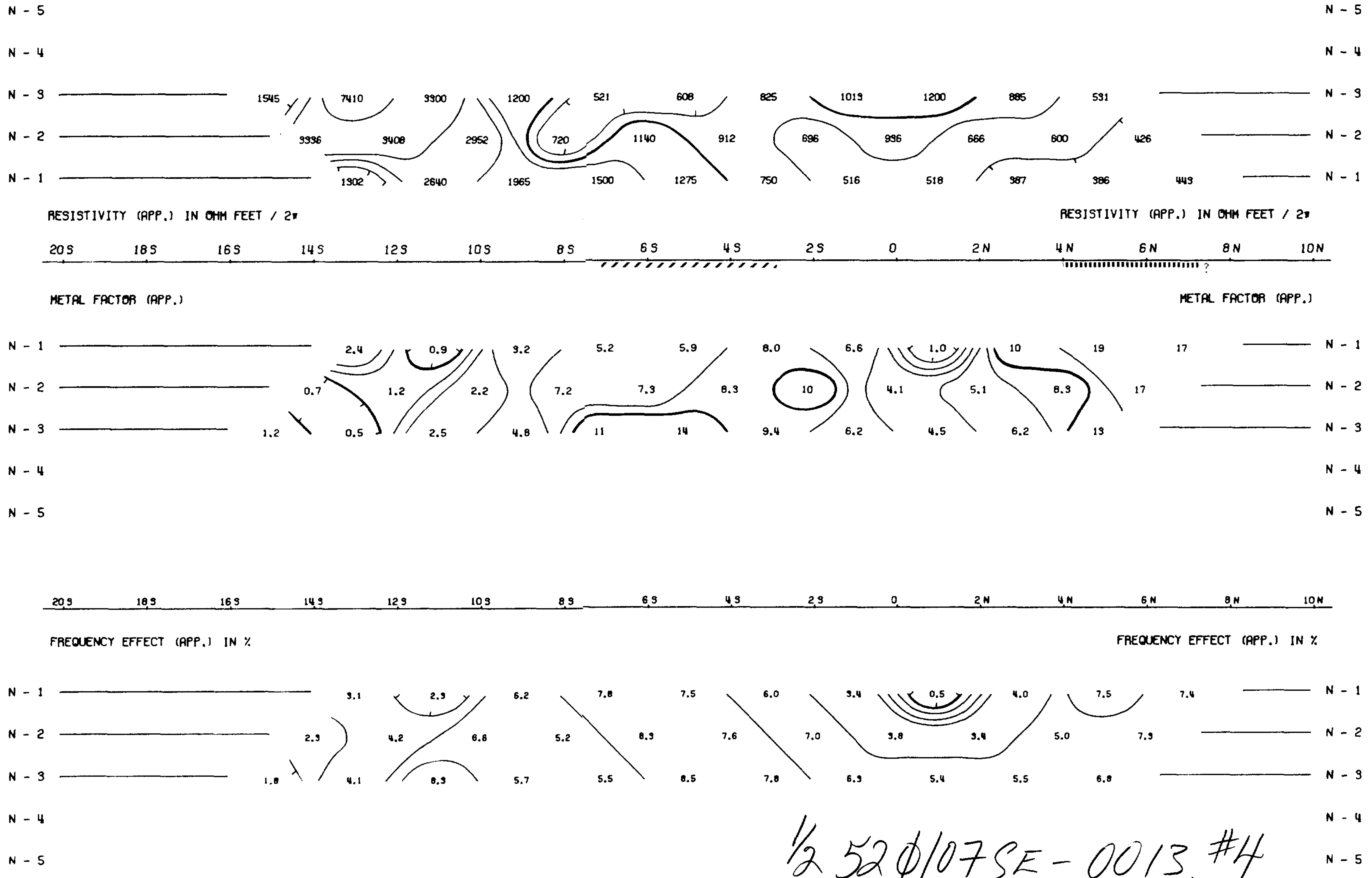
FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE:

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



1/2 52Ø/07SE-0013, #4

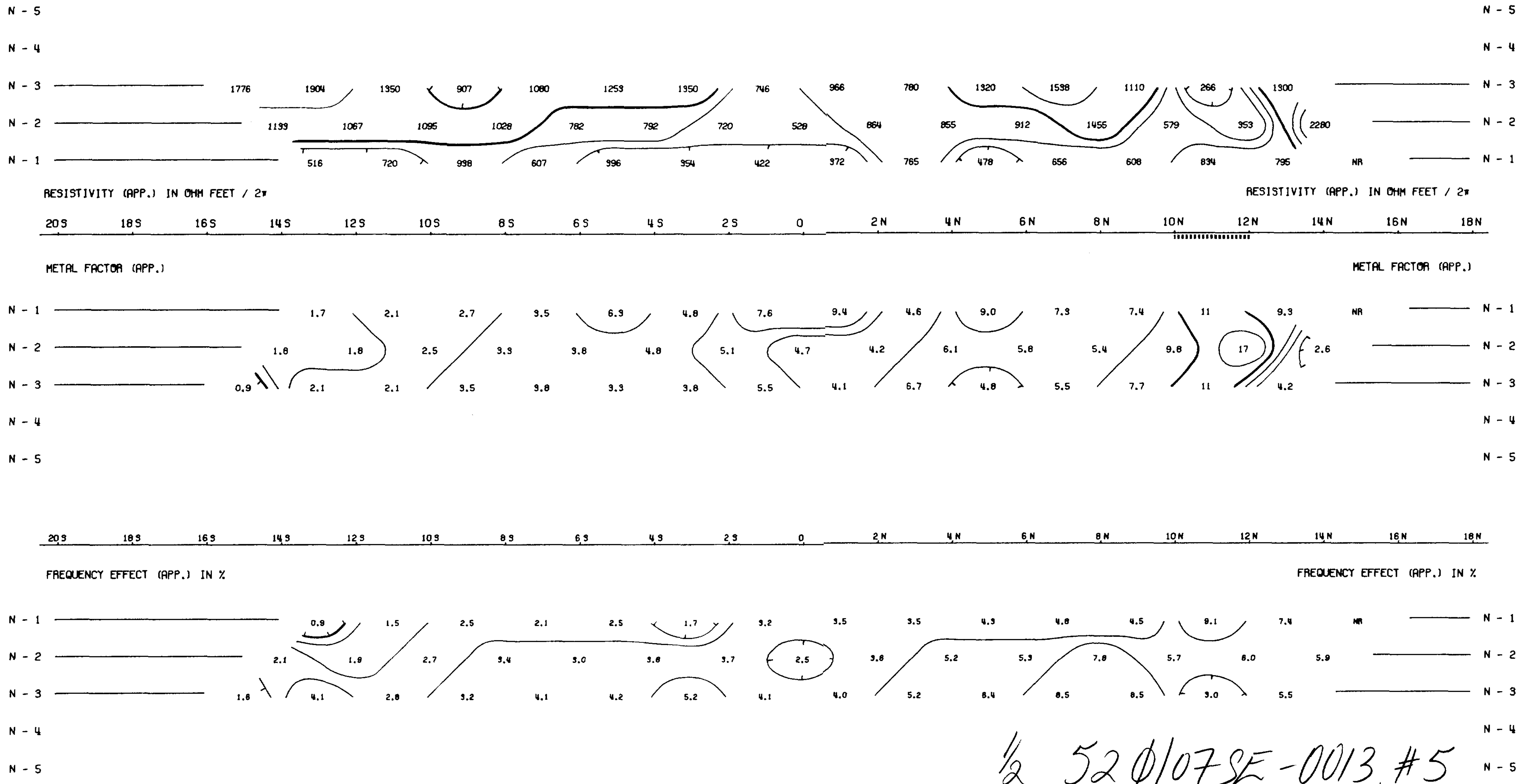
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52007SE0021 52007SE0013 CALEY LAKE

230



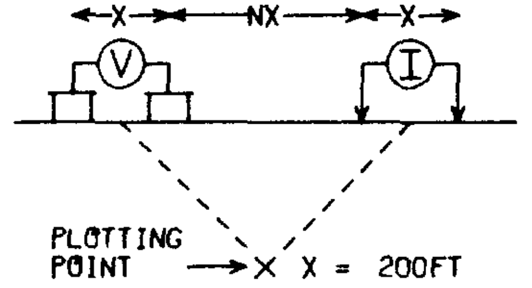
DWG. NO.- I.P.- 6266-7

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 38E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE:

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

McPHAR GEOPHYSICS

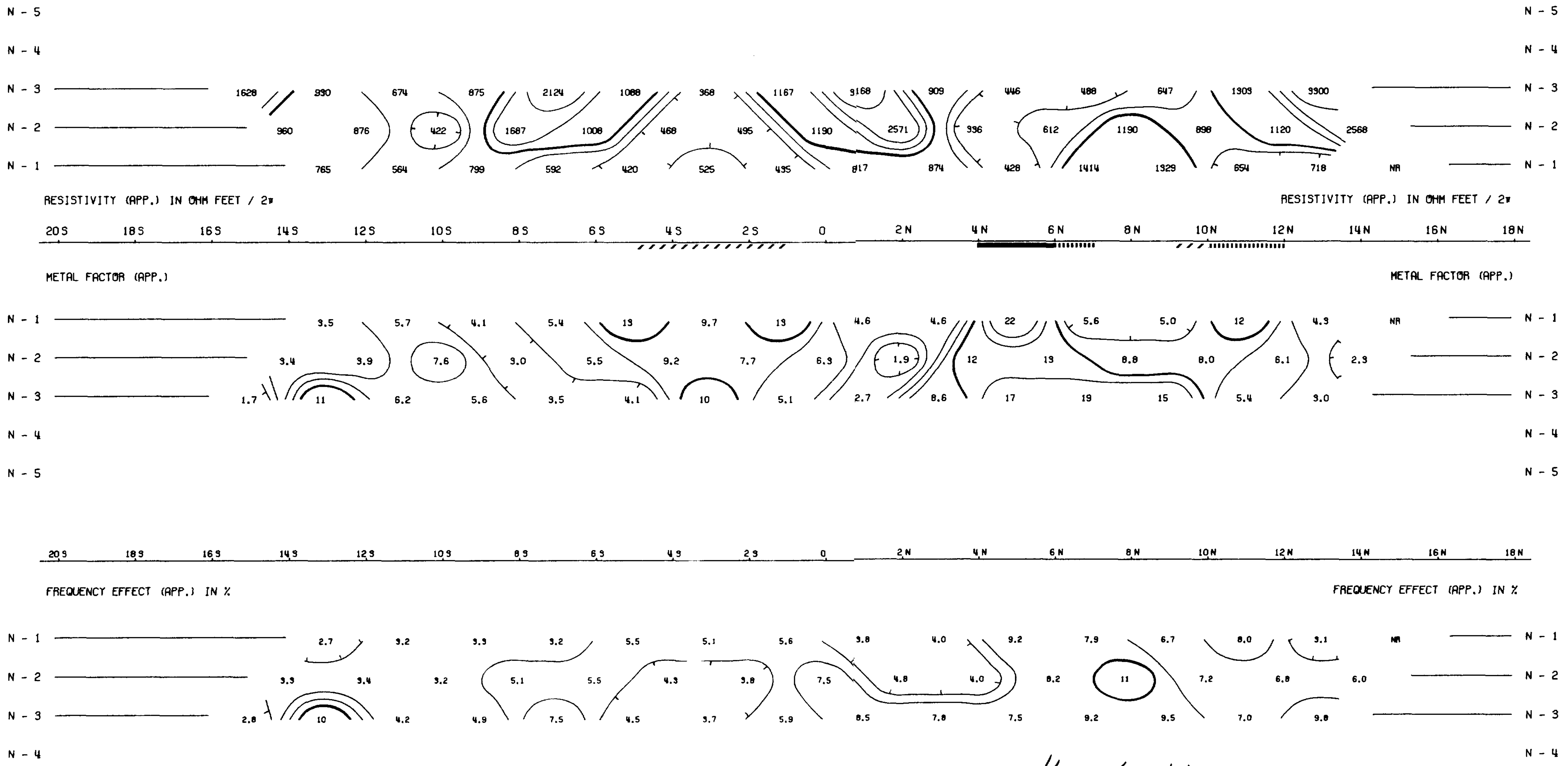
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52O07SE0021 52O07SE0013 CALEY LAKE

240

1/2 52∅/07SE-0013, #5



DWG. NO.- I.P.-6266-9

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 34E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE:

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

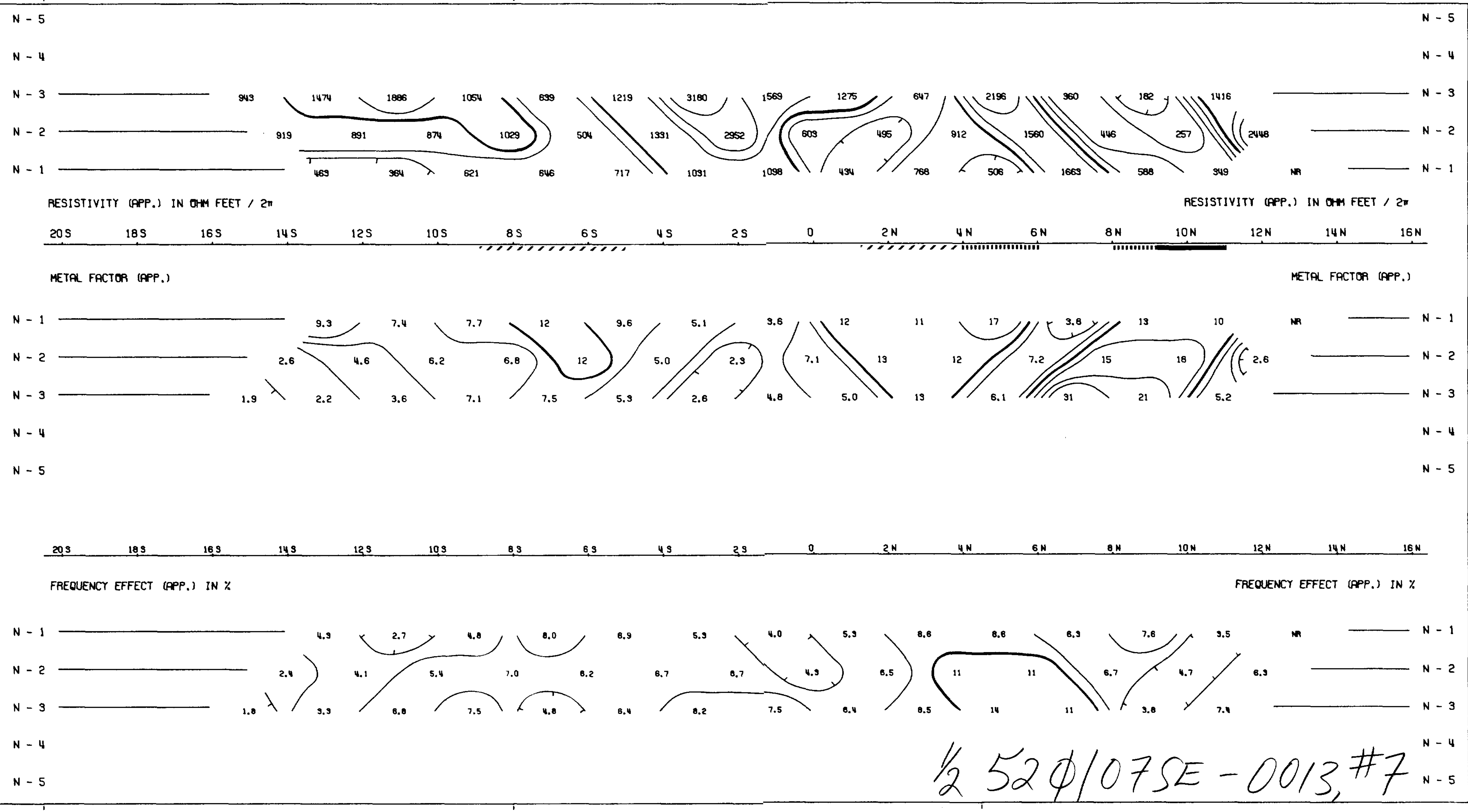
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION

1/2 520/07SE-0013, #6

250



1/2 52Φ/07SE-0013, #7

DWG. NO.- I.P.- 6266-11

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 30E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE

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

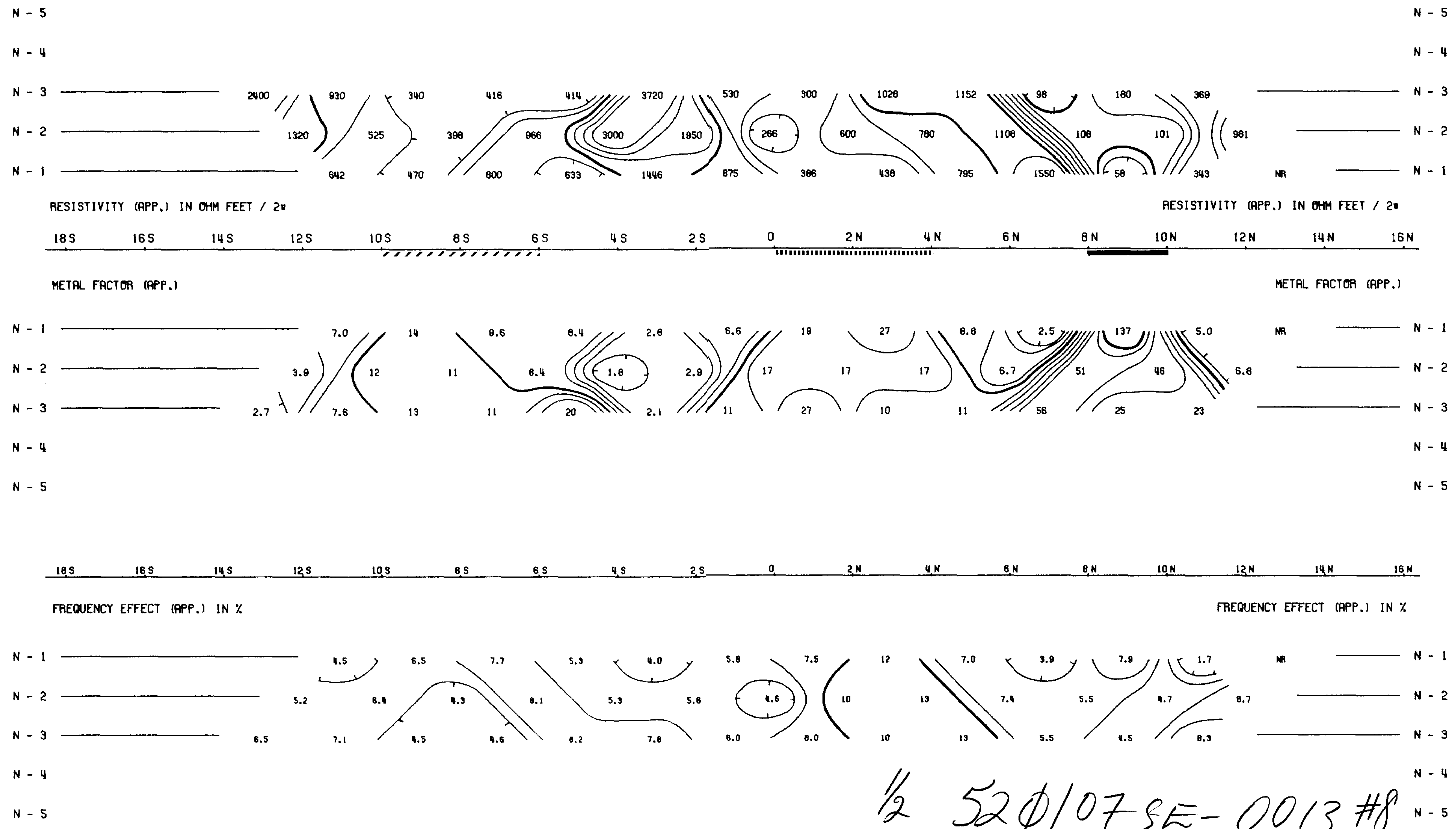
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52007SE0021 52007SE0013 CALEY LAKE

260



DWG. NO.- I.P.- 6266-13

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 26E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE:

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

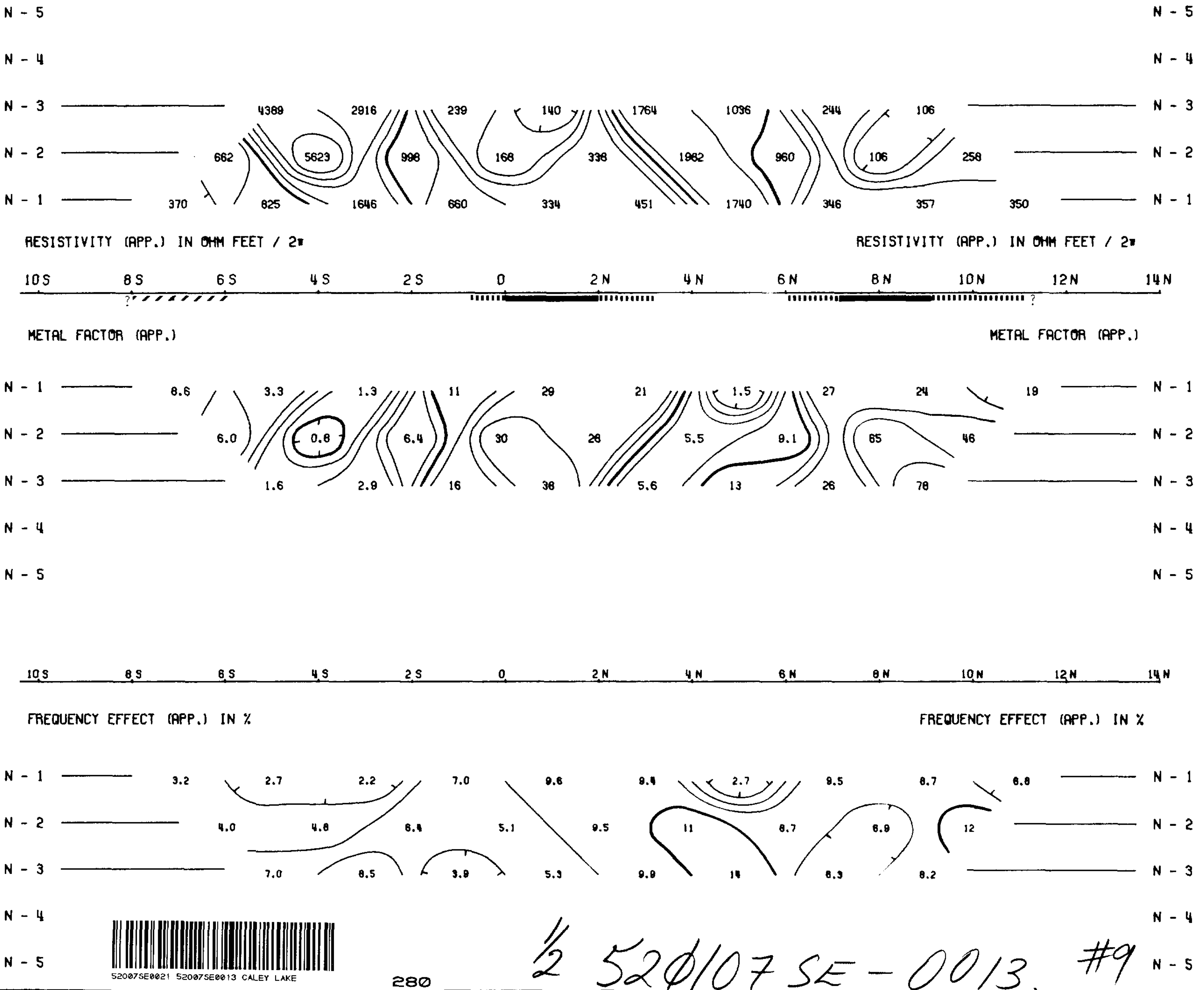
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY McPHAR COMPUTER DIVISION

1/2 520107SE-0013 #8

270



DWG. NO.- I.P.- 6266-15

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 22E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

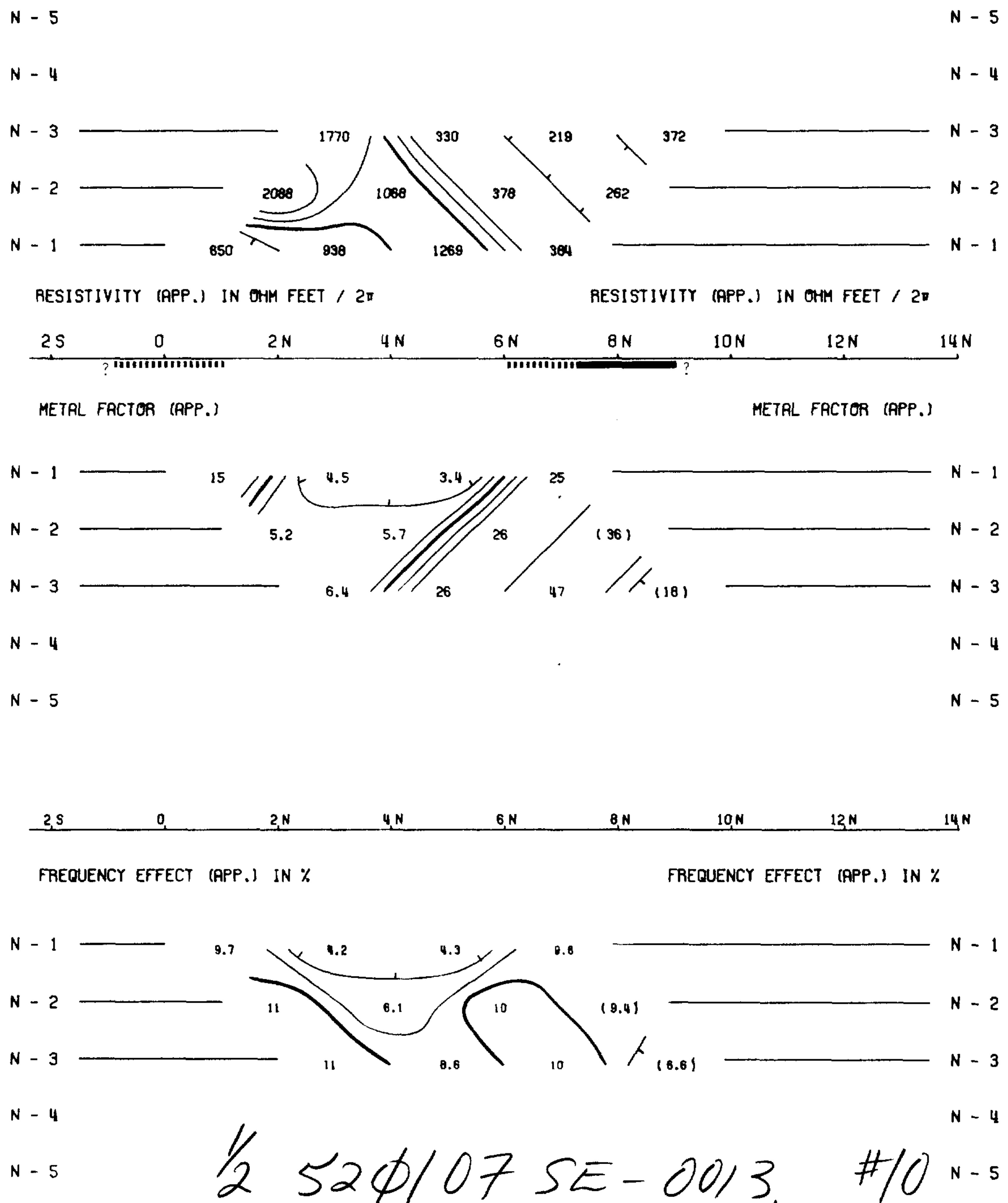
DATE: March 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.- 6266-17

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 18E

ELECTRODE CONFIGURATION
←X→←NX→←X→
V I
PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE: Mar 4/75

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

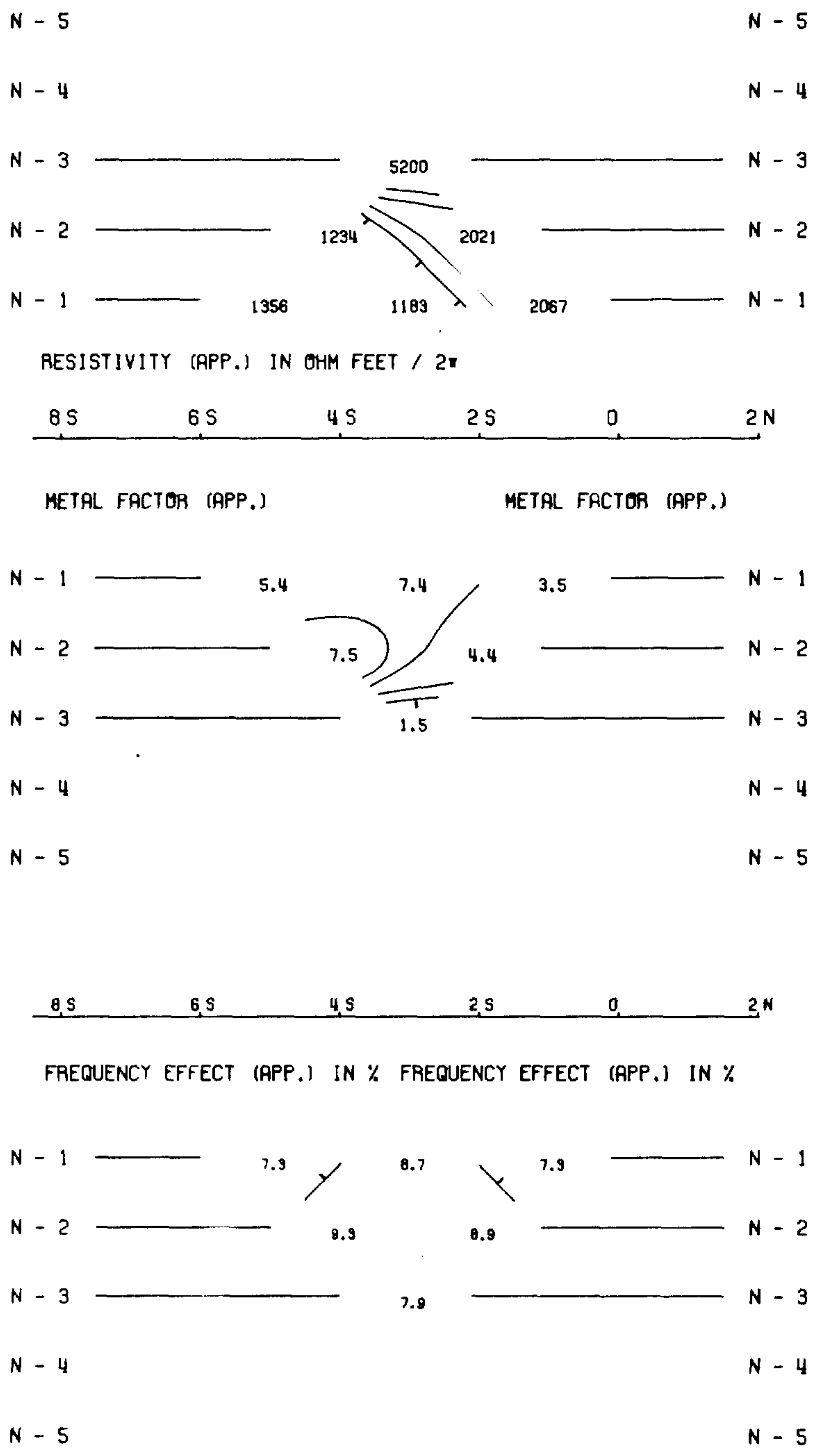
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION

52007SE0021 52007SE0013 CALEY LAKE

290

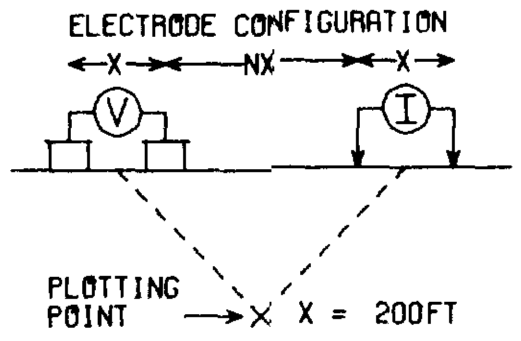


DWG. NO.- I.P.-6266-19

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 6E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

DATE: Mar 4/75

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

Mc PHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

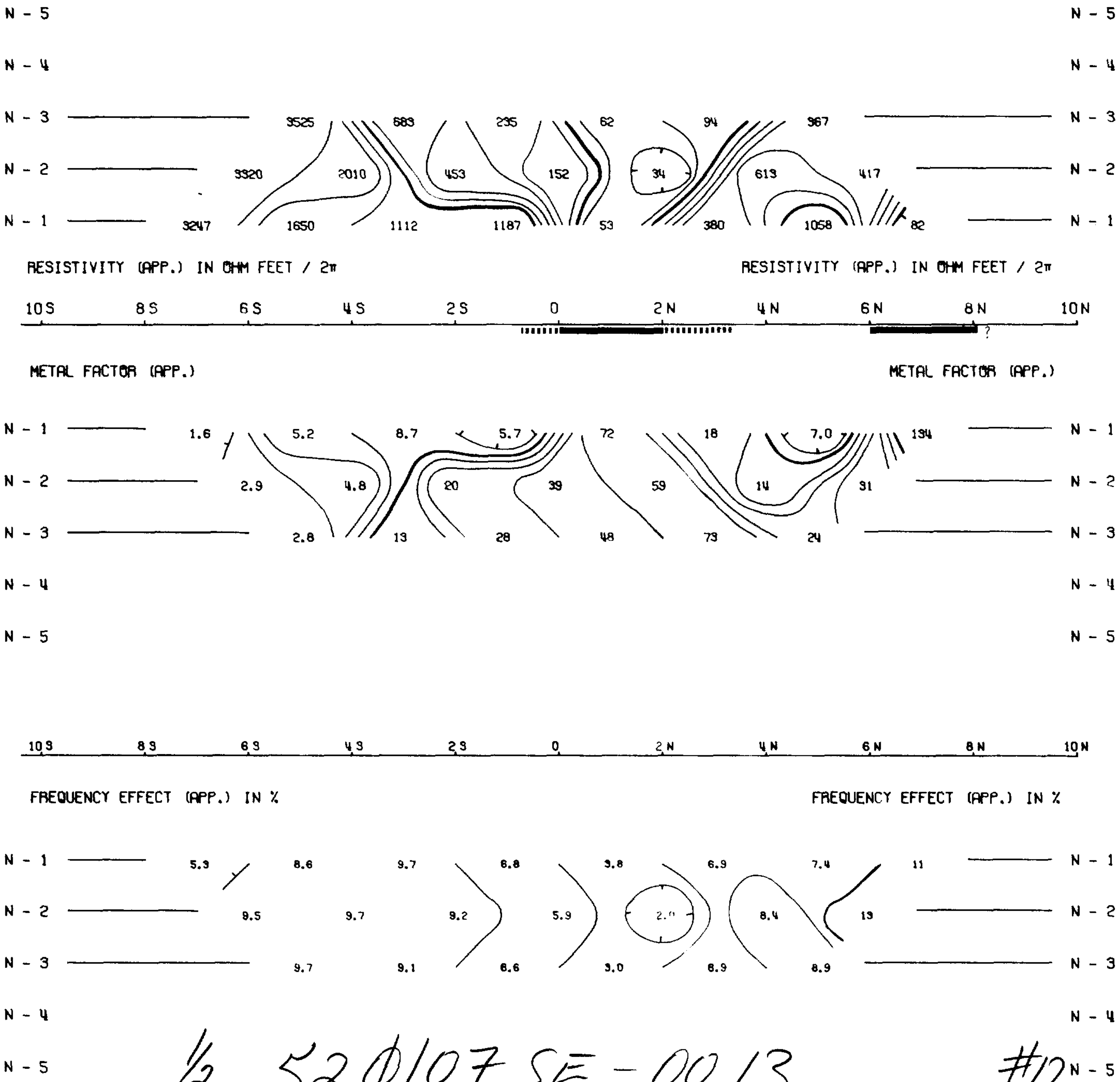
300

1/2 52Ø/07SE-0013 #11

DWG. NO.- I.P.-6266-21

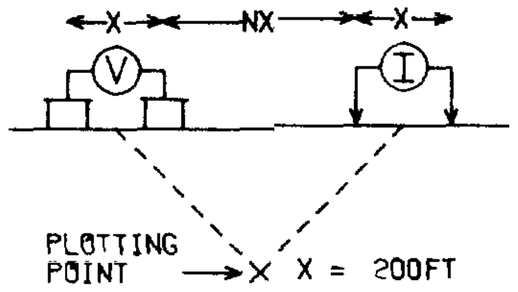
LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.



LINE NO.- 2E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED: [signature]

DATE: Mar 4/75

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

McPHAR GEOPHYSICS

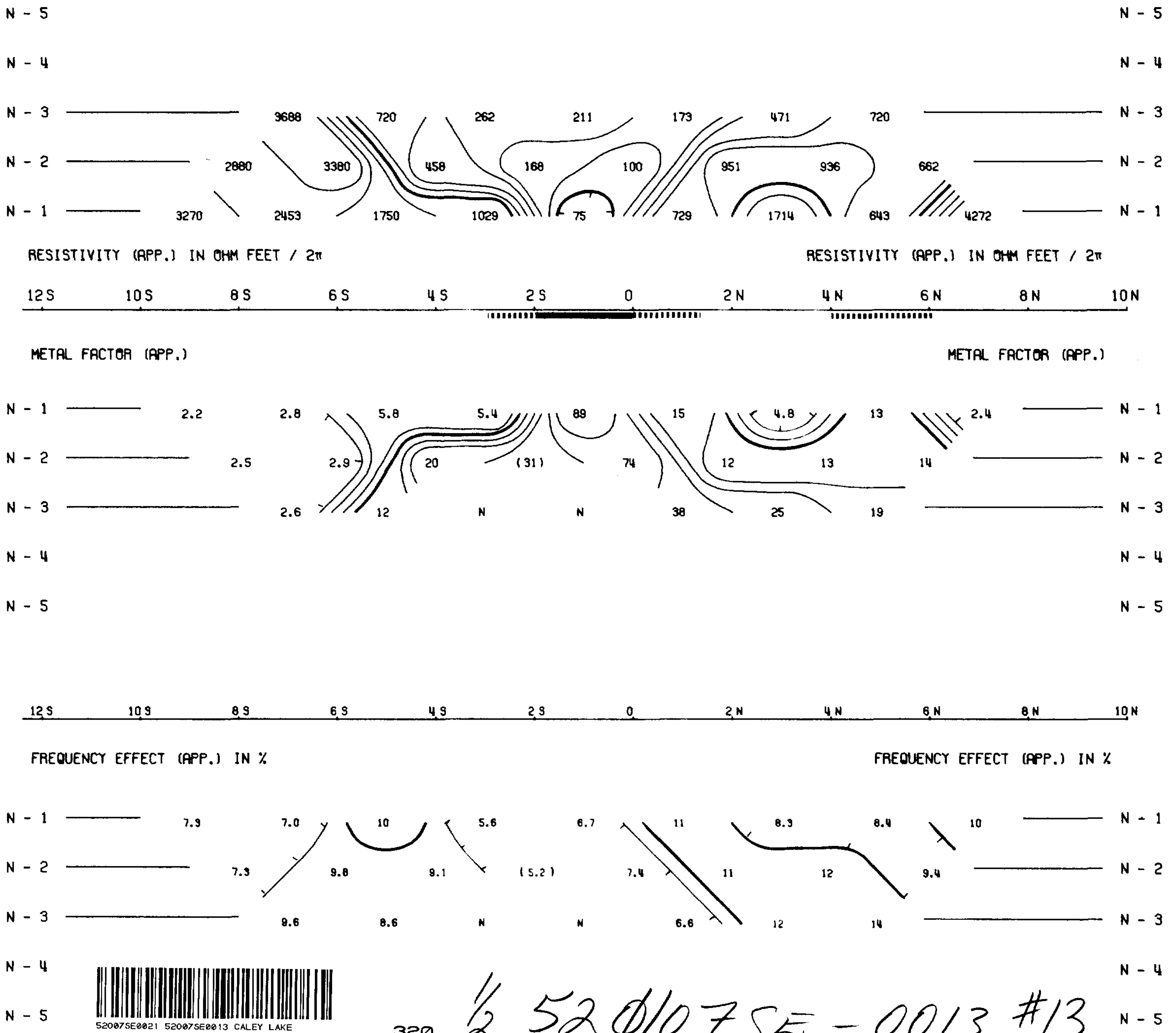
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

1/2 52Ø/07 SE-0013, #12

52007SE0021 52007SE0013 CALEY LAKE

310



52007SE0021 52007SE0013 CALEY LAKE

320 1/2 52Ø/07SE-0013 #13

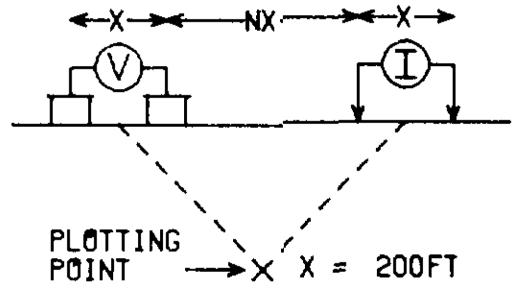
DWG. NO.- I.P.-6266-23

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 2W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED

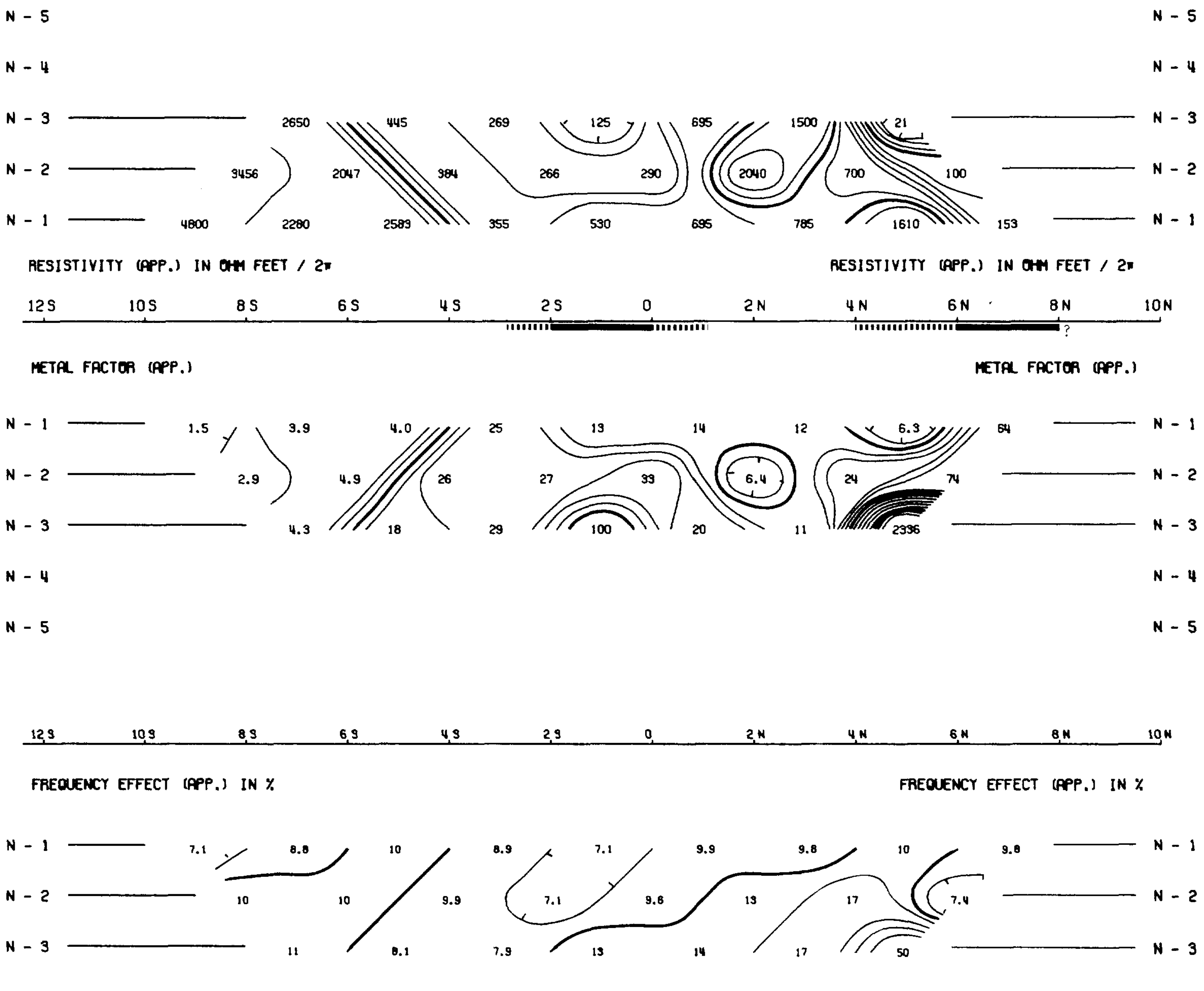
DATE Nov 4175

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 PRODUCE BY MCPHAR COMPUTER DIVISION



330 1/2 52Ø107SE-0013, #14

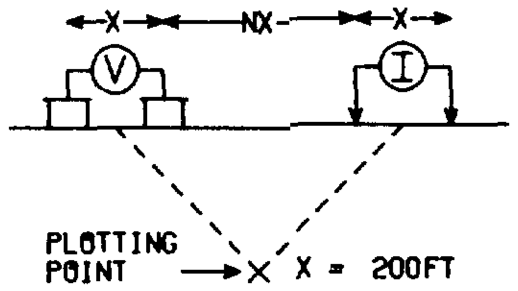
DWG. NO.- I.P.-6266-25

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 6W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED: DJM

DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION

DWG. NO.- I.P.- 6266-27

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 10W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

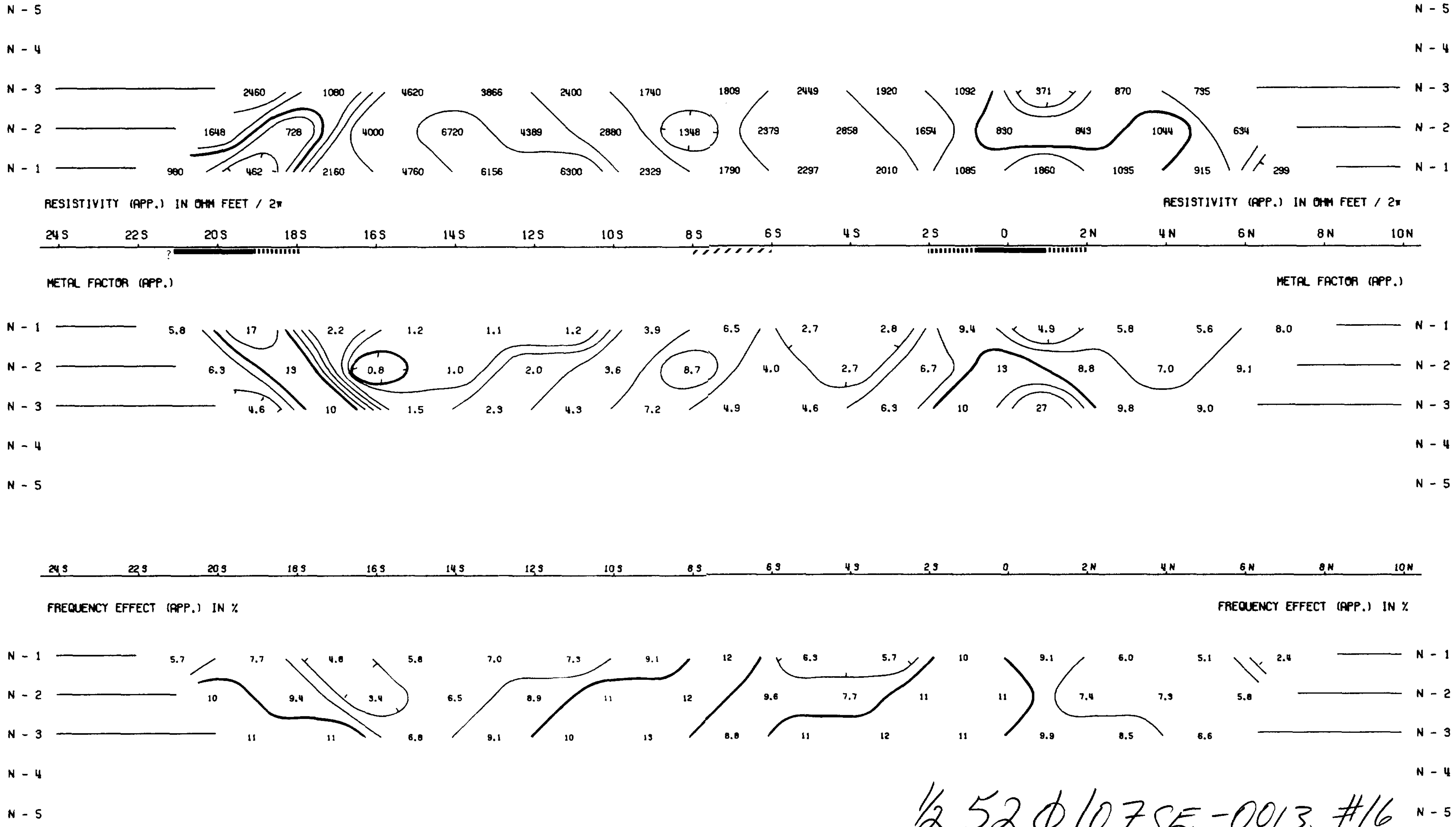
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-6266-29

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 14W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

DATE: March 1975

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

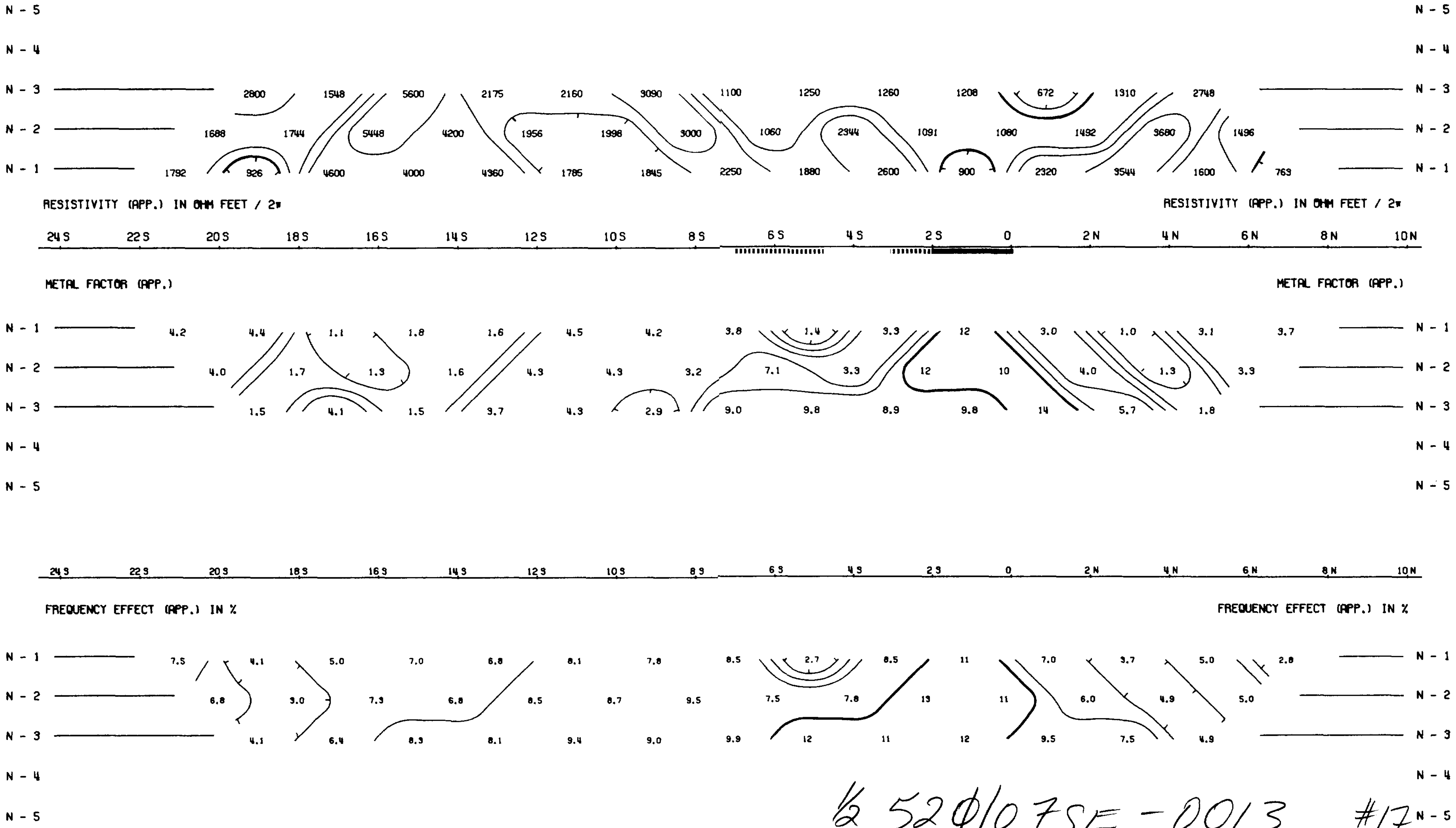
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

1/2 52Ø/07SE-0013, #16

350



2 52Ø/07SE-0013 #17

DWG. NO.- I.P.-6266-31

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 18W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

DATE: Mar 4/75

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

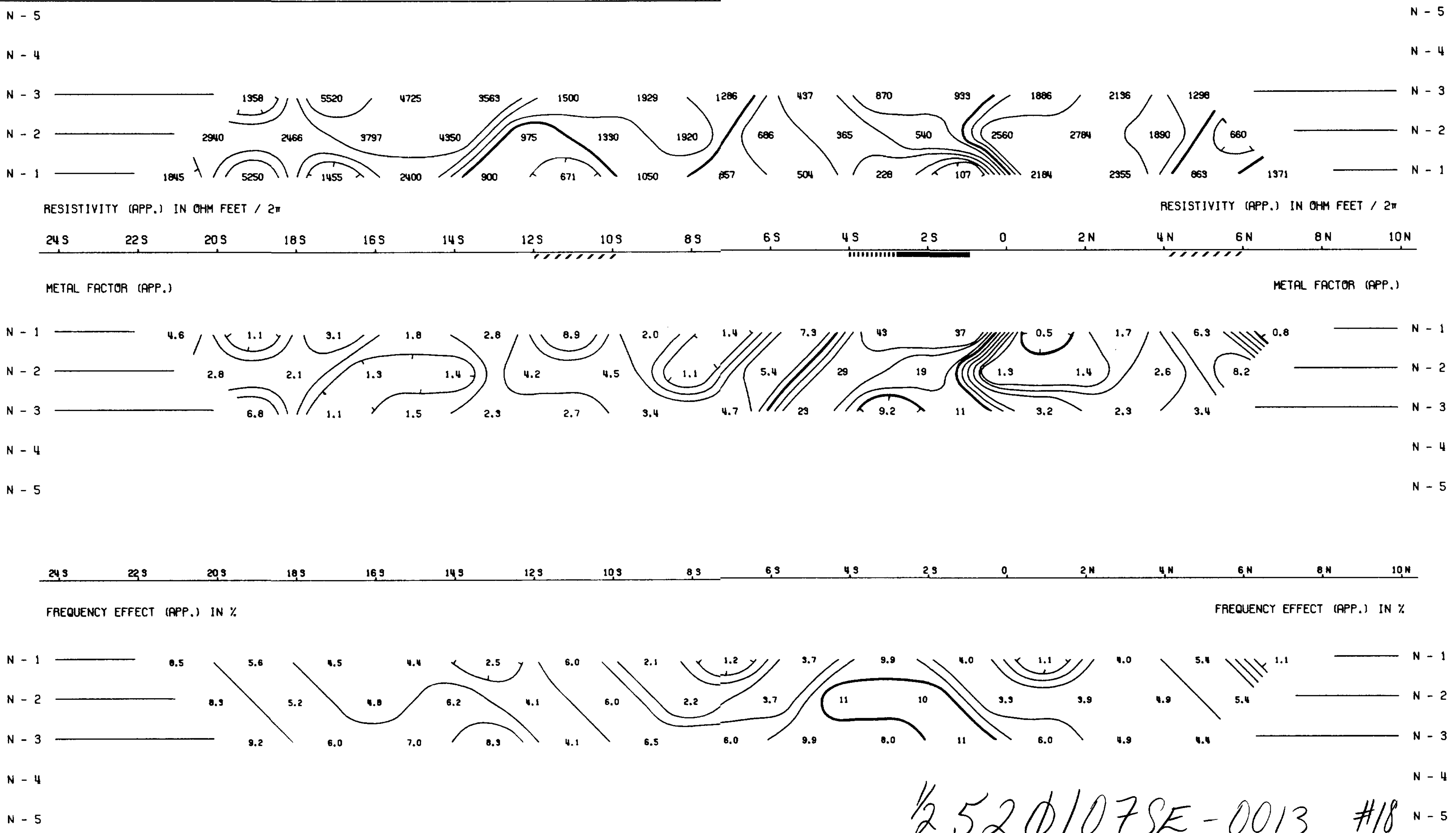
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52007SE0021 52007SE0013 CALEY LAKE

360



1/2 52O1O7SE-0013, #18

DWG. NO.- I.P.-6266-33

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 22W

ELECTRODE CONFIGURATION

X — NX — X

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

DATE:

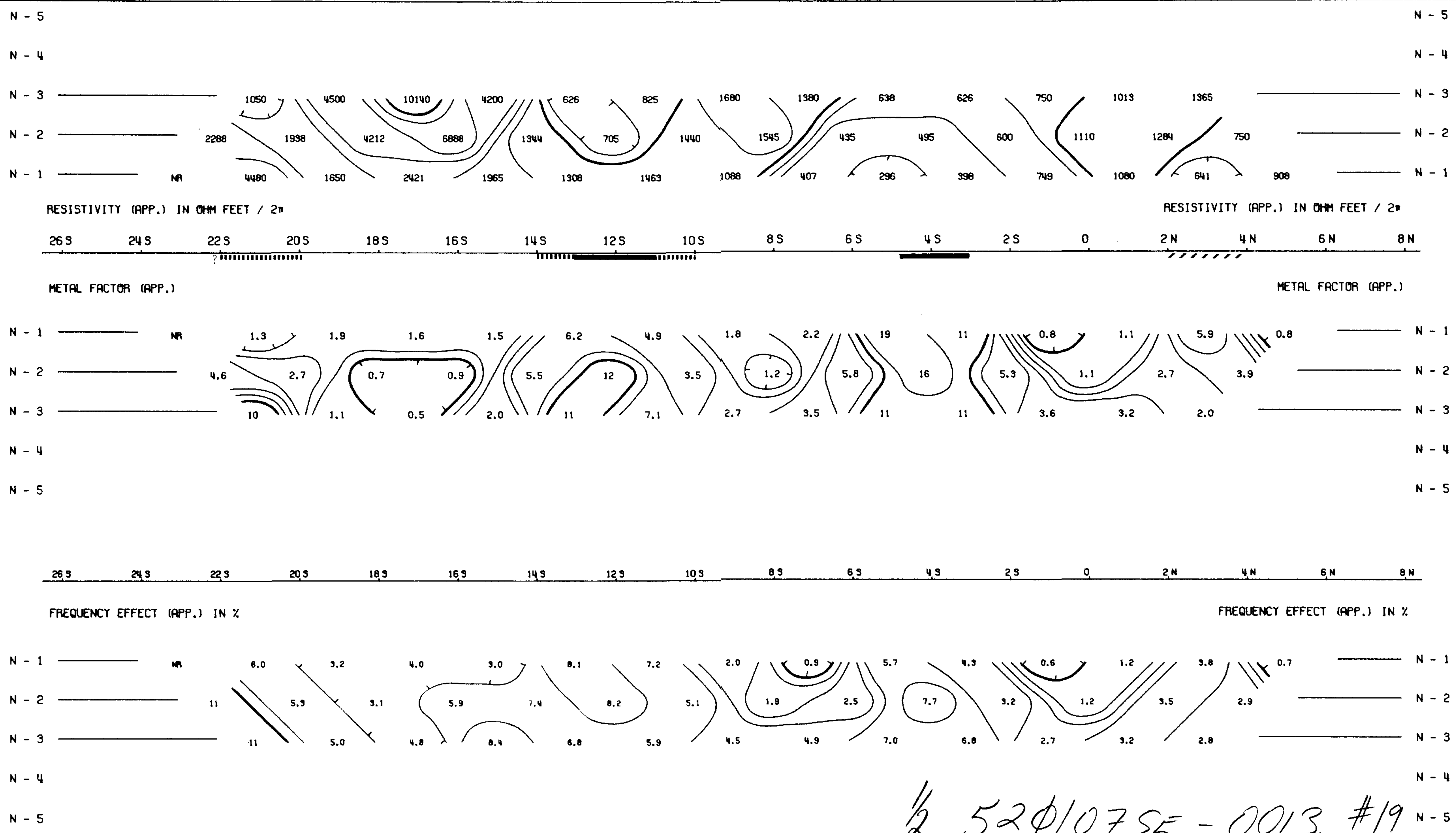
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY McPHAR COMPUTER DIVISION

370



52007SE0021 52007SE0013 CALEY LAKE

380

1/2 52Ø/07SE-0013, #19

DWG. NO.- I.P.- 6266-35

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 26W

ELECTRODE CONFIGURATION

X — NX — X

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬

PROBABLE ||||||||||

POSSIBLE //////

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

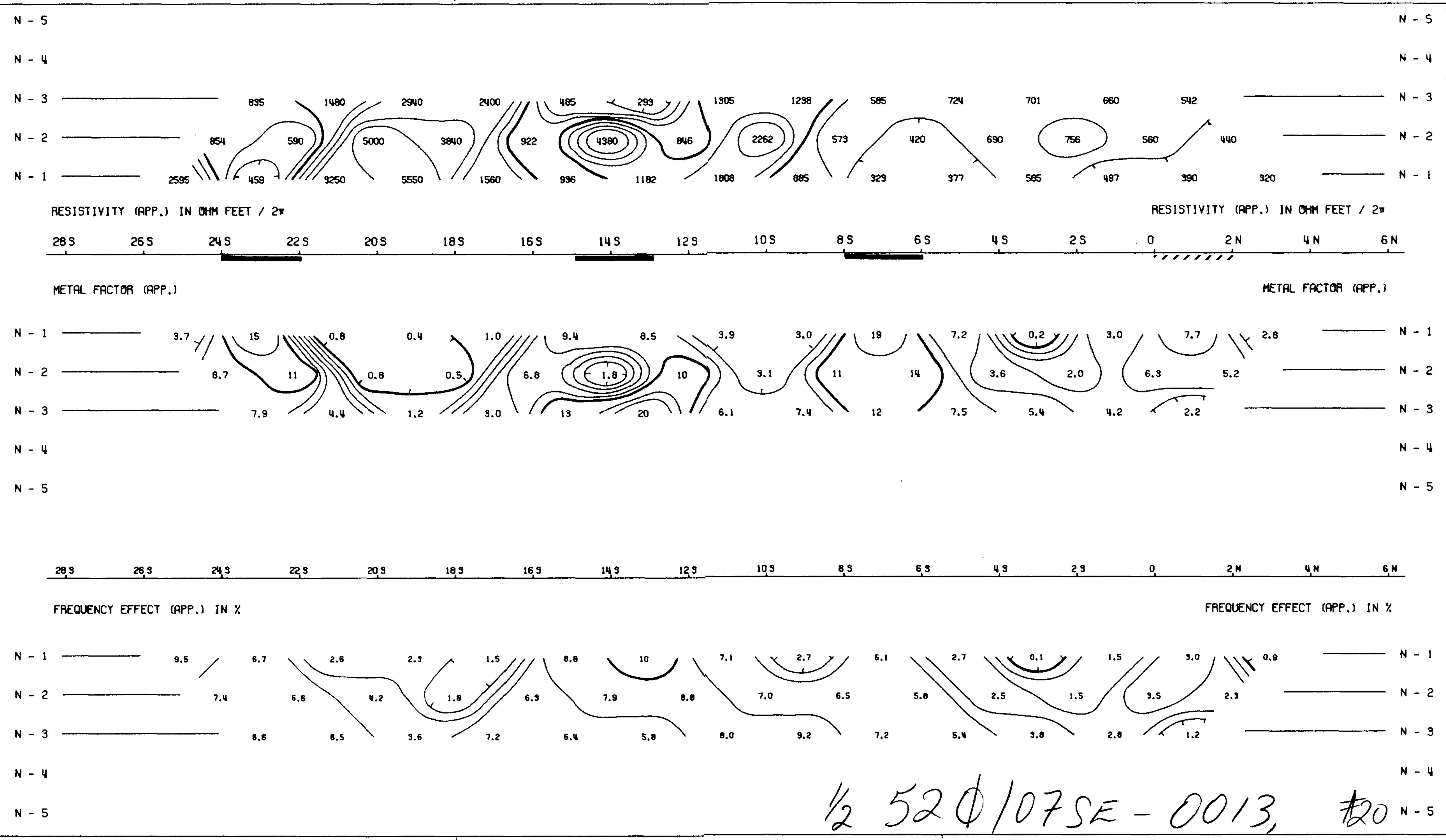
DATE: Mar 4/77

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.- 6266-37

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 30W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

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

DATE:

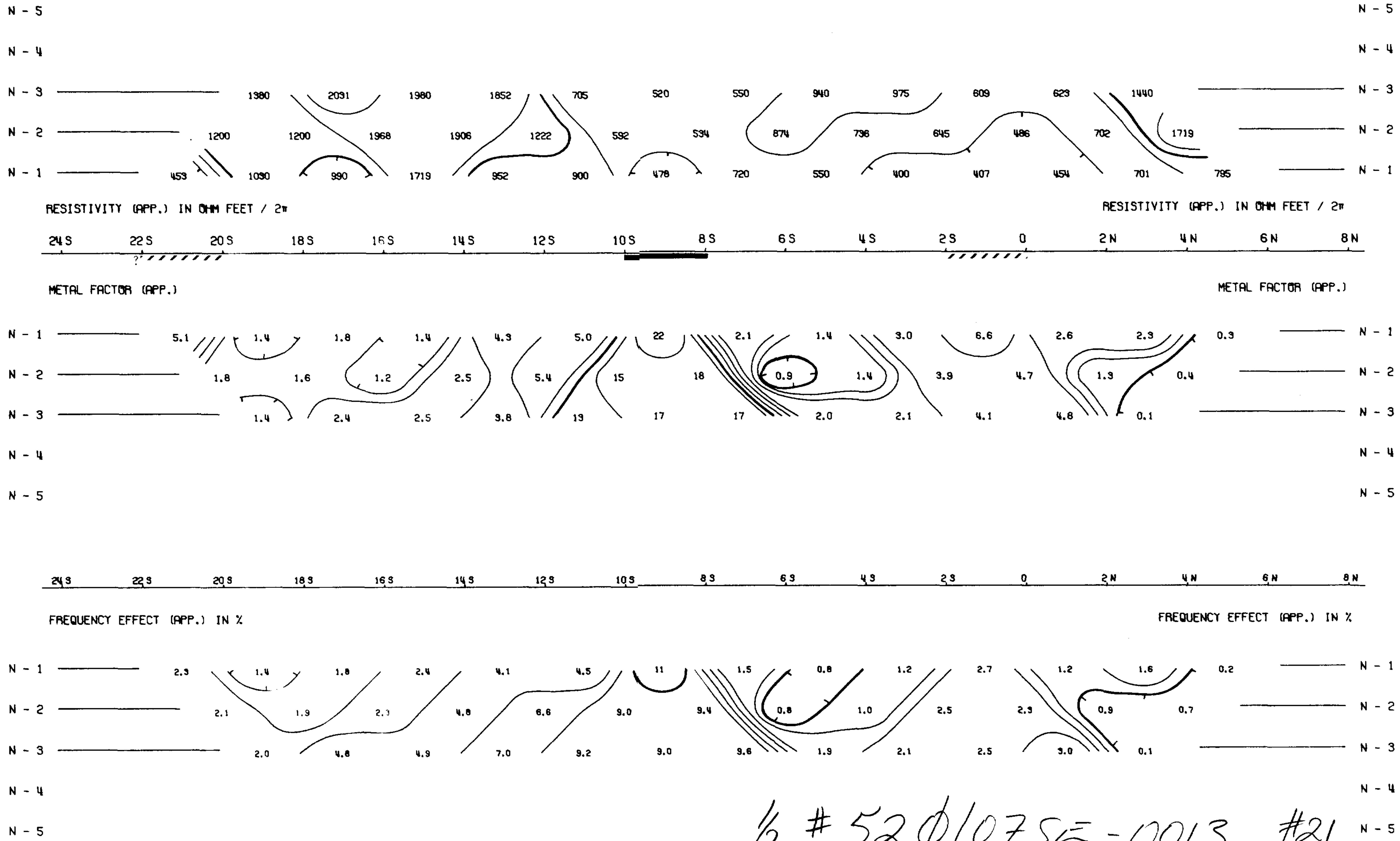
Mc PHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52O07SE0021 52O07SE0013 CALEY LAKE

390



DWG. NO.- I.P.- 6266-39

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 36W

ELECTRODE CONFIGURATION

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

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

DATE: Mar 4/75

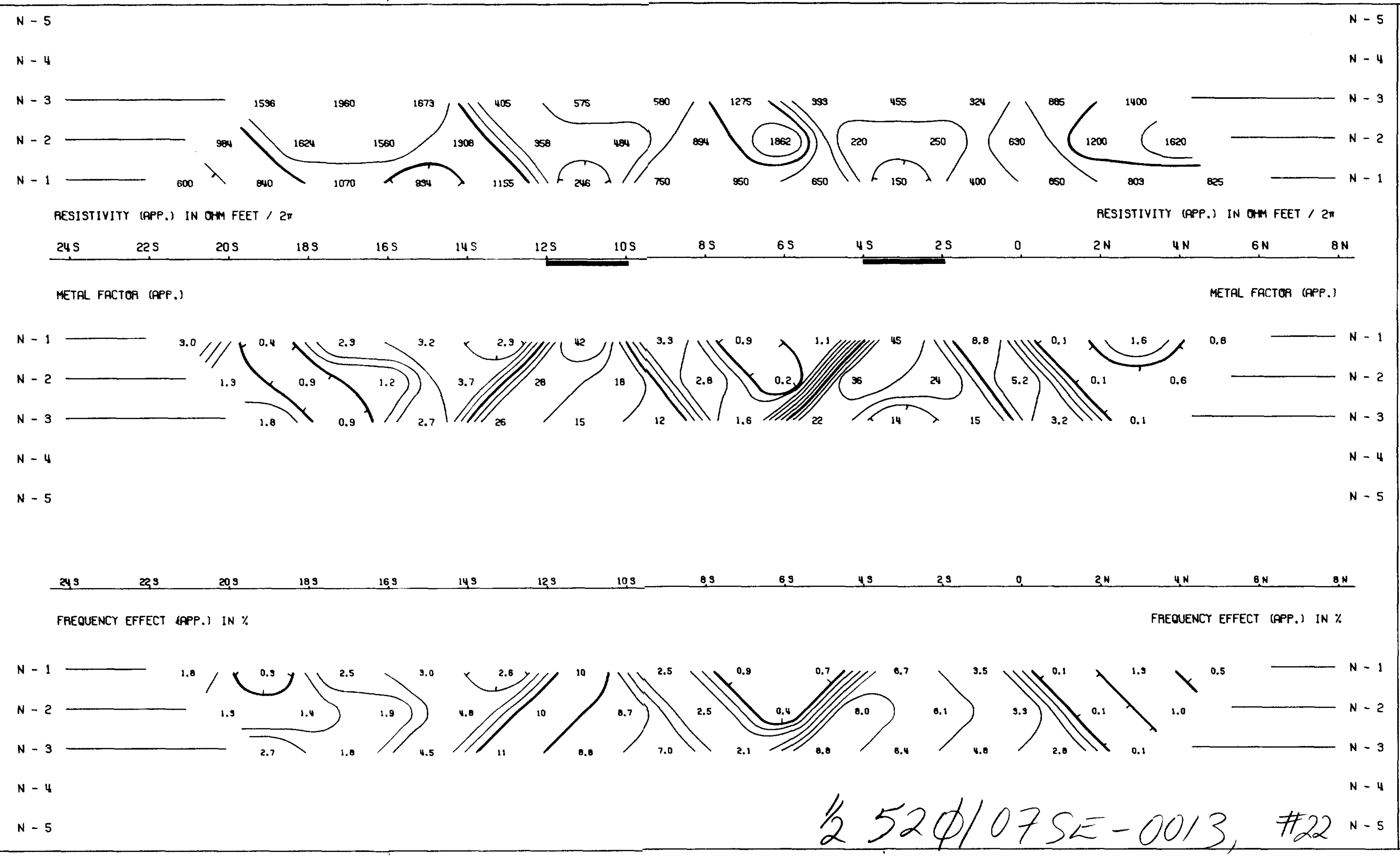
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION

400

1/2 #520/07SE-0013, #21



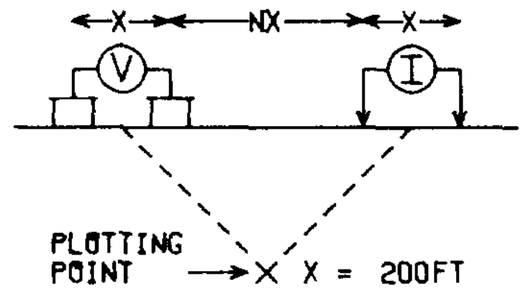
DWG. NO.- I.P.-6266-41

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 40W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

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

DATE: Mar 4/75

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

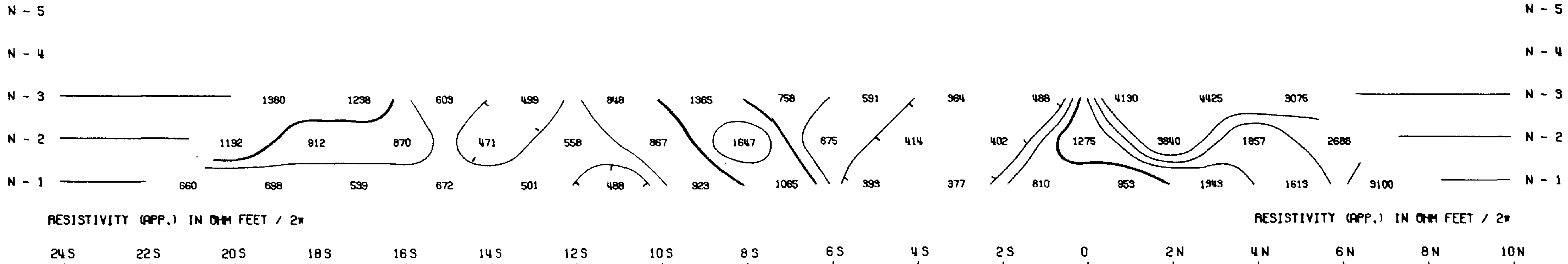
NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

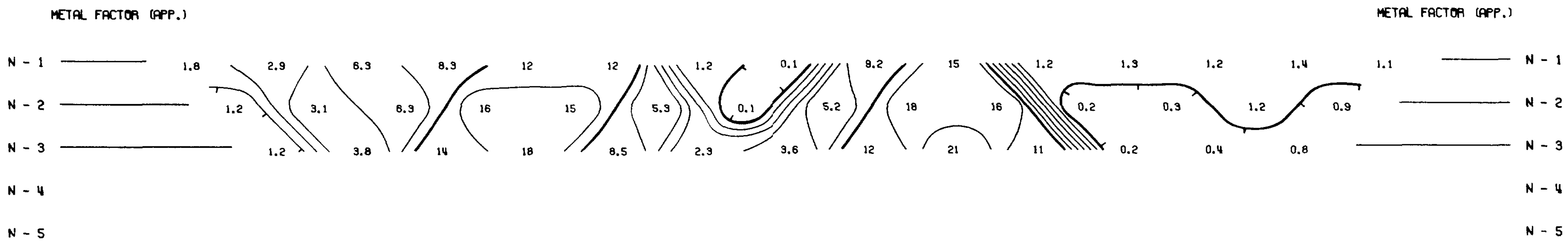
2 52O/07SE-0013, #22

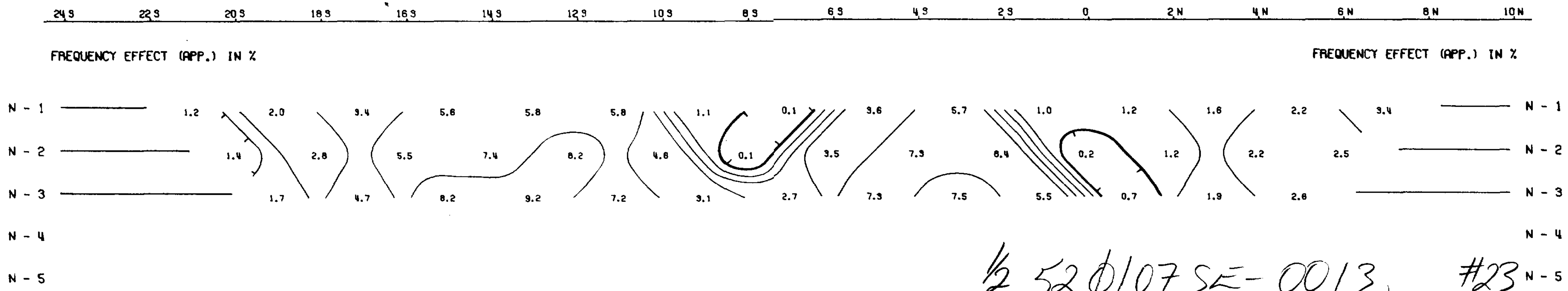
DWG. NO.- I.P.-6266-43

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

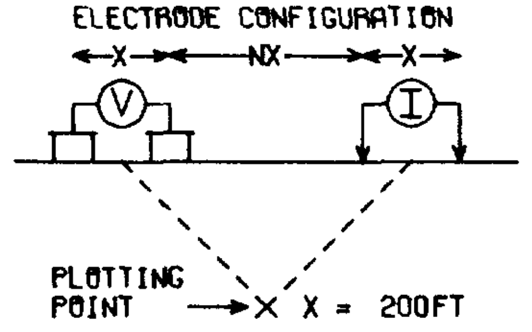






LINE NO.- 44W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬
PROBABLE ||||||||||
POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

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

DATE: Mar 4/75

McPHAR GEOPHYSICS

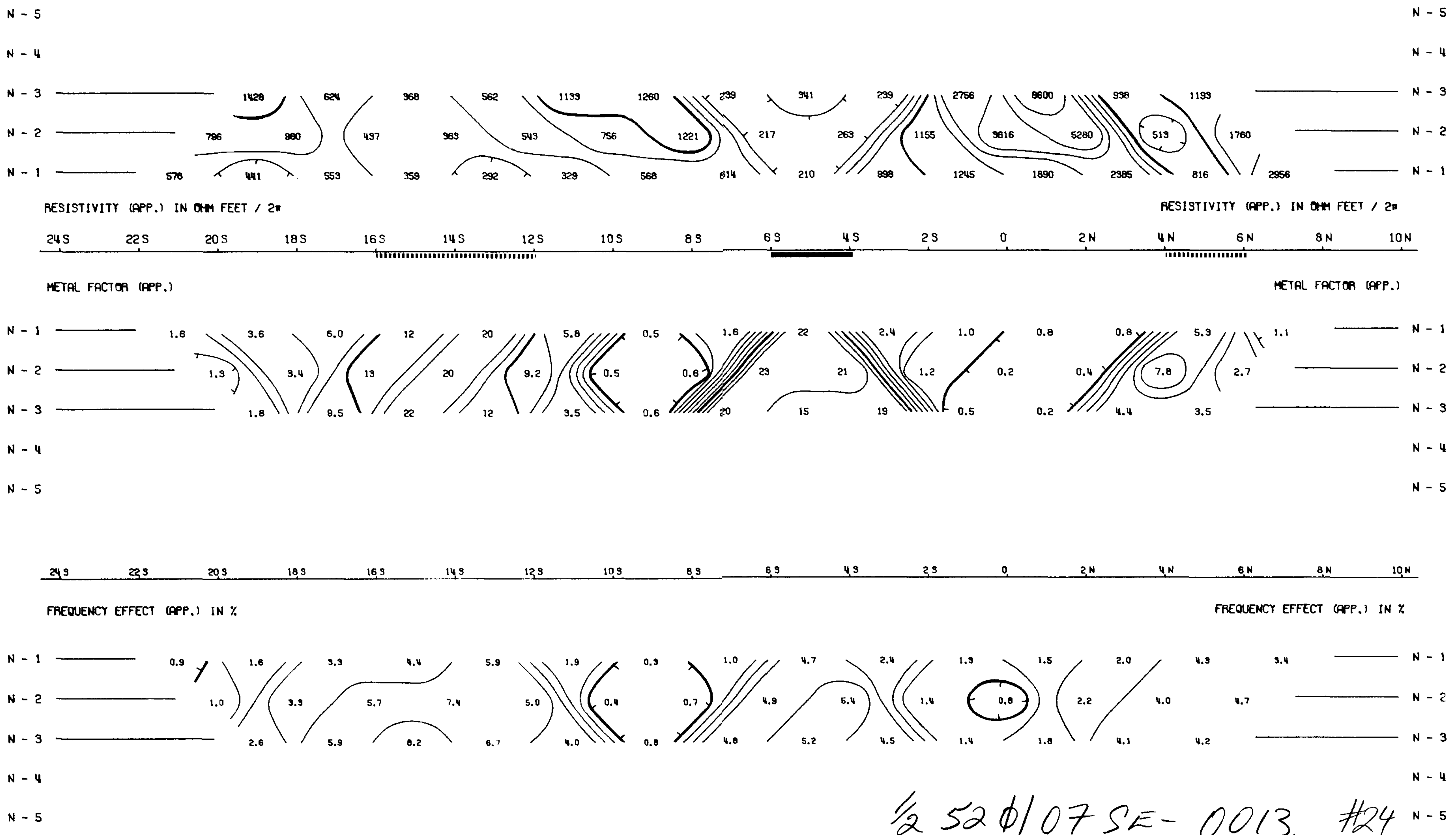
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

52O07SE0021 52O07SE0013 CALEY LAKE

420

1/2 52O/07SE-0013, #23



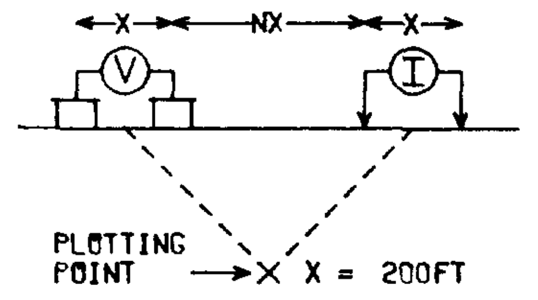
DWG. NO.- I.P.- 6266-45

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 48W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

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

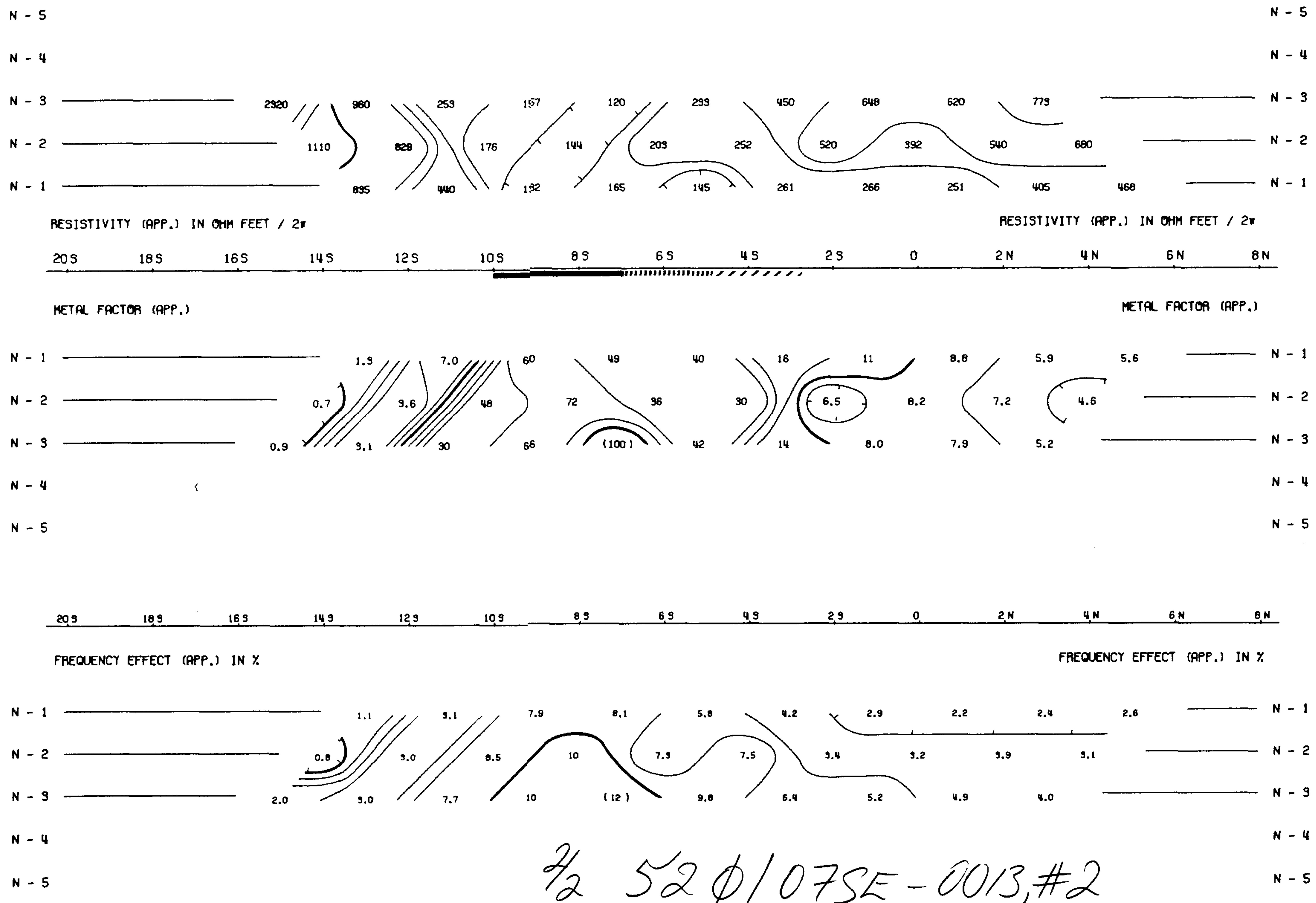
DATE:

Mc PHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION

430



2/2 52O/07SE-0013,#2

DWG. NO.- I.P.- 6266-2

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 58E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

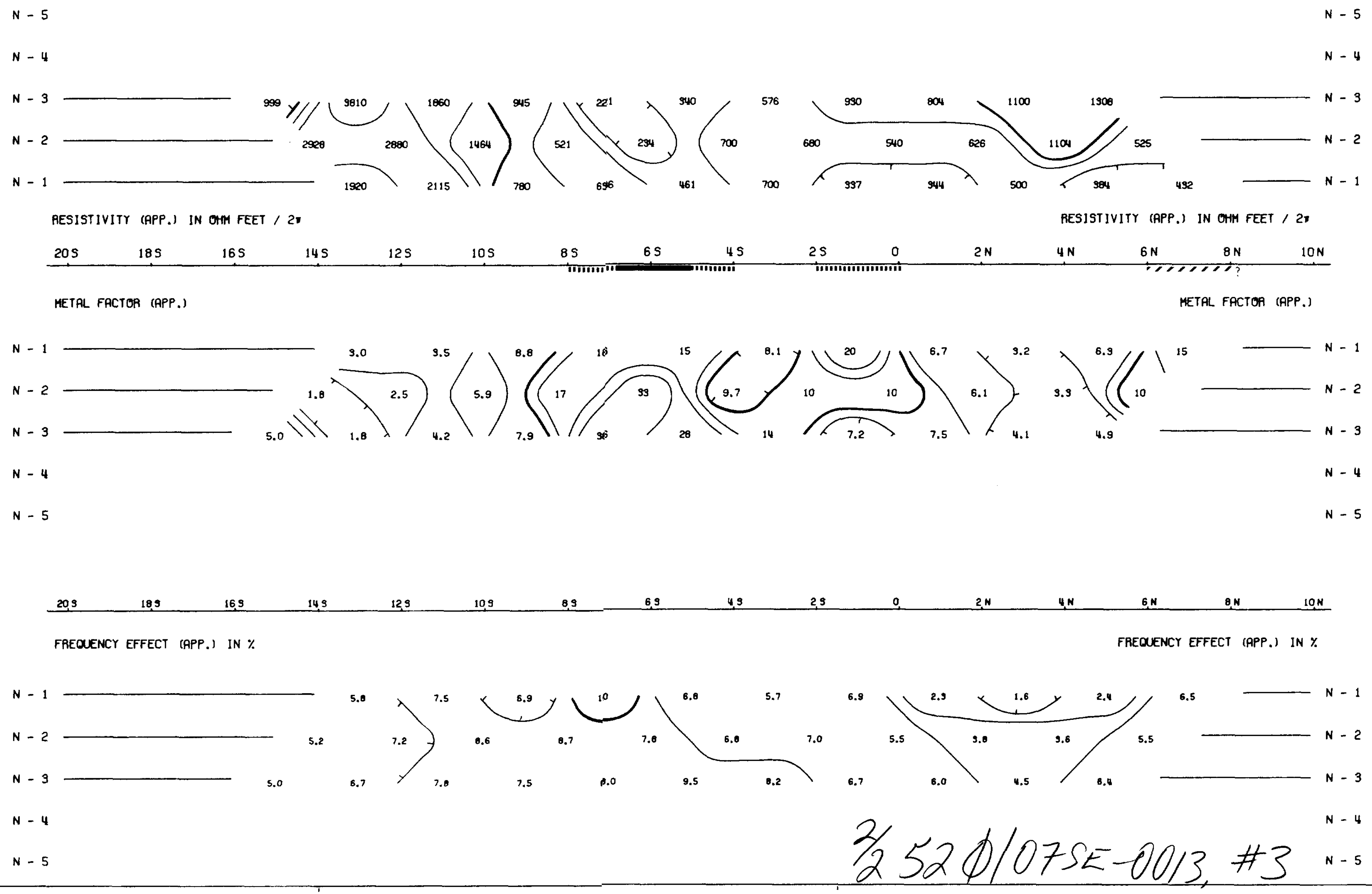
DATE: 0 Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.- 6266-4

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 50E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED

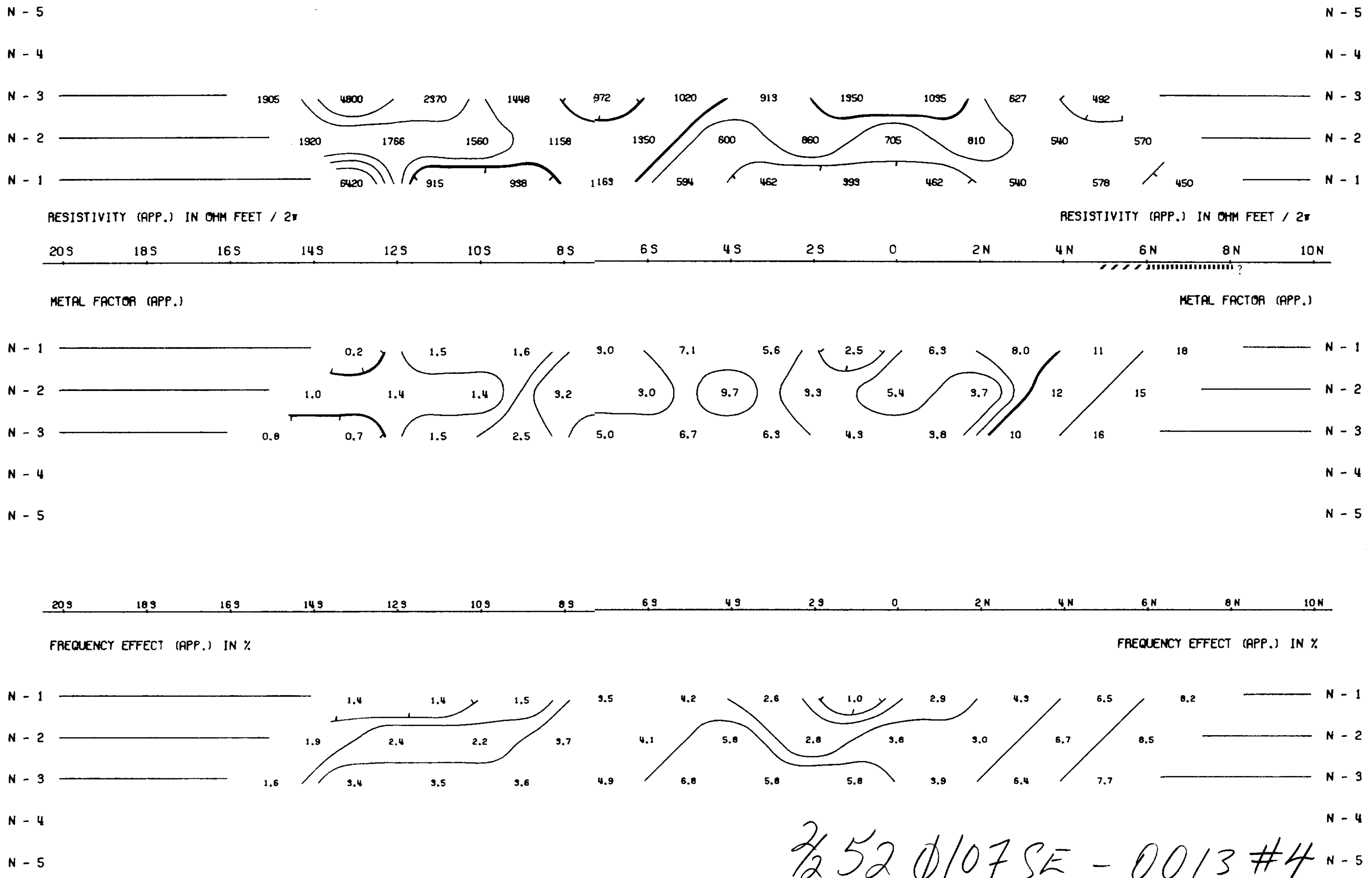
DATE

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-6266-6

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 42E

ELECTRODE CONFIGURATION

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

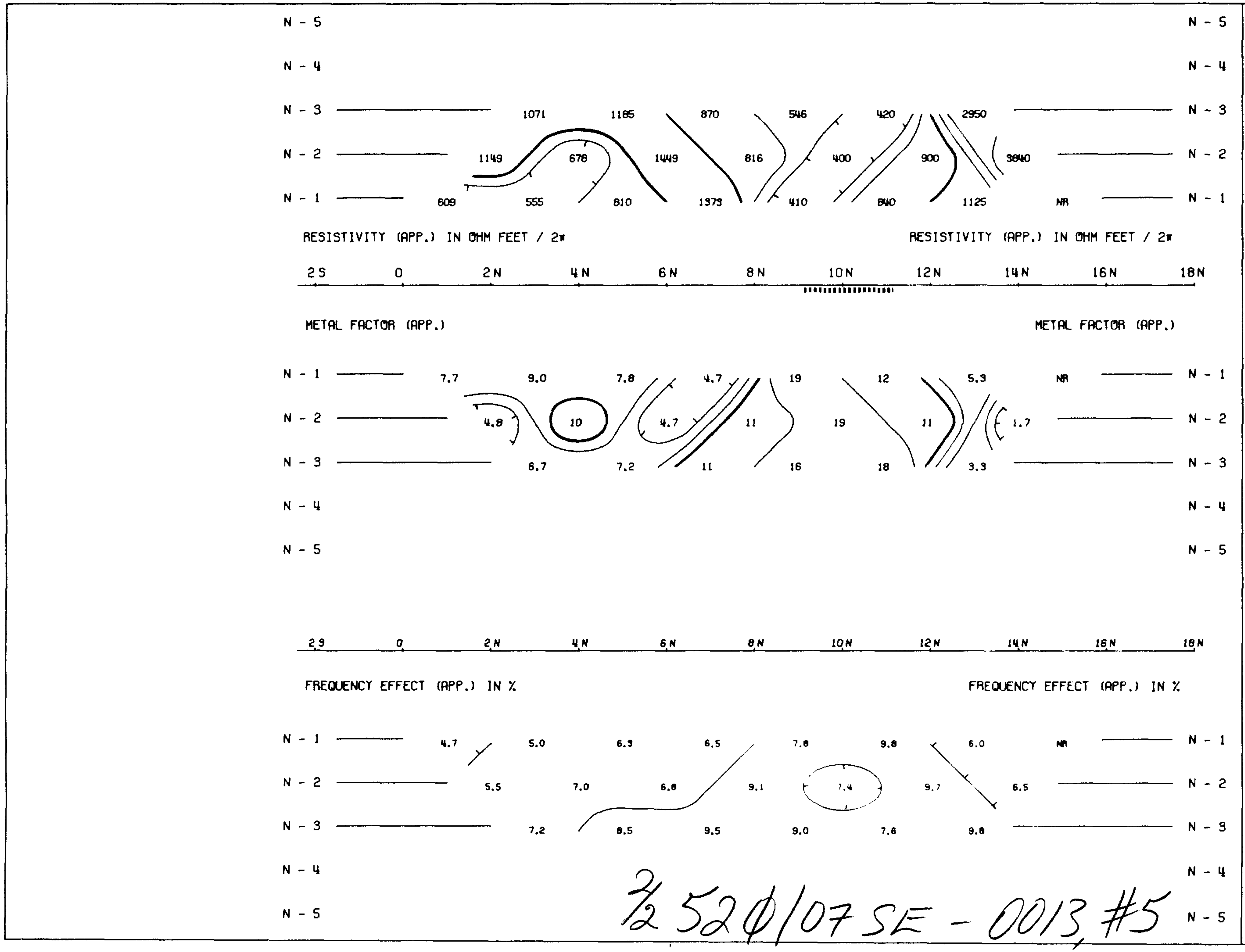
DATE:

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-6266-8

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 36E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

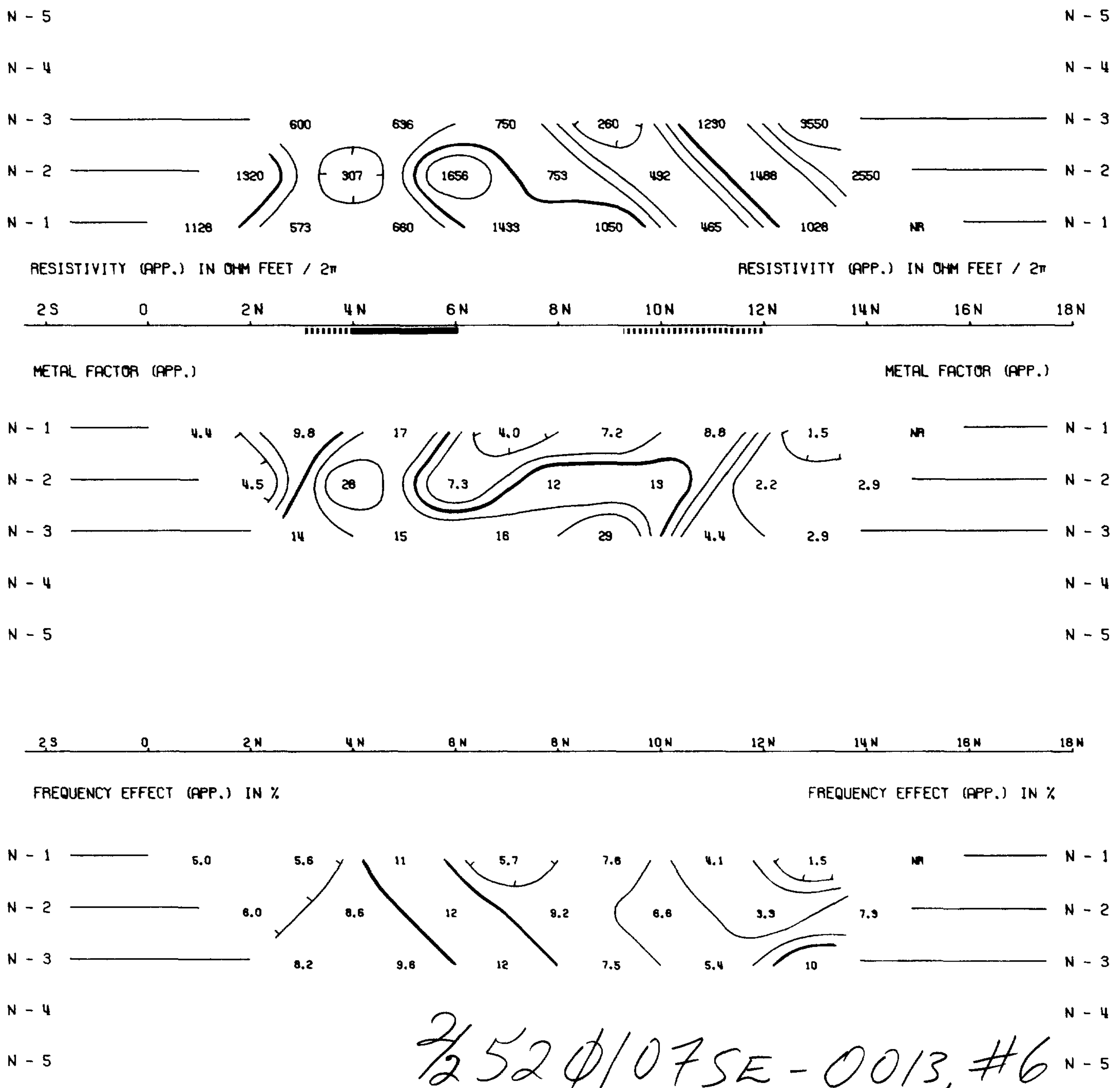
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

DATE: Mar 4 /75

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.- 6266-10

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 32E

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

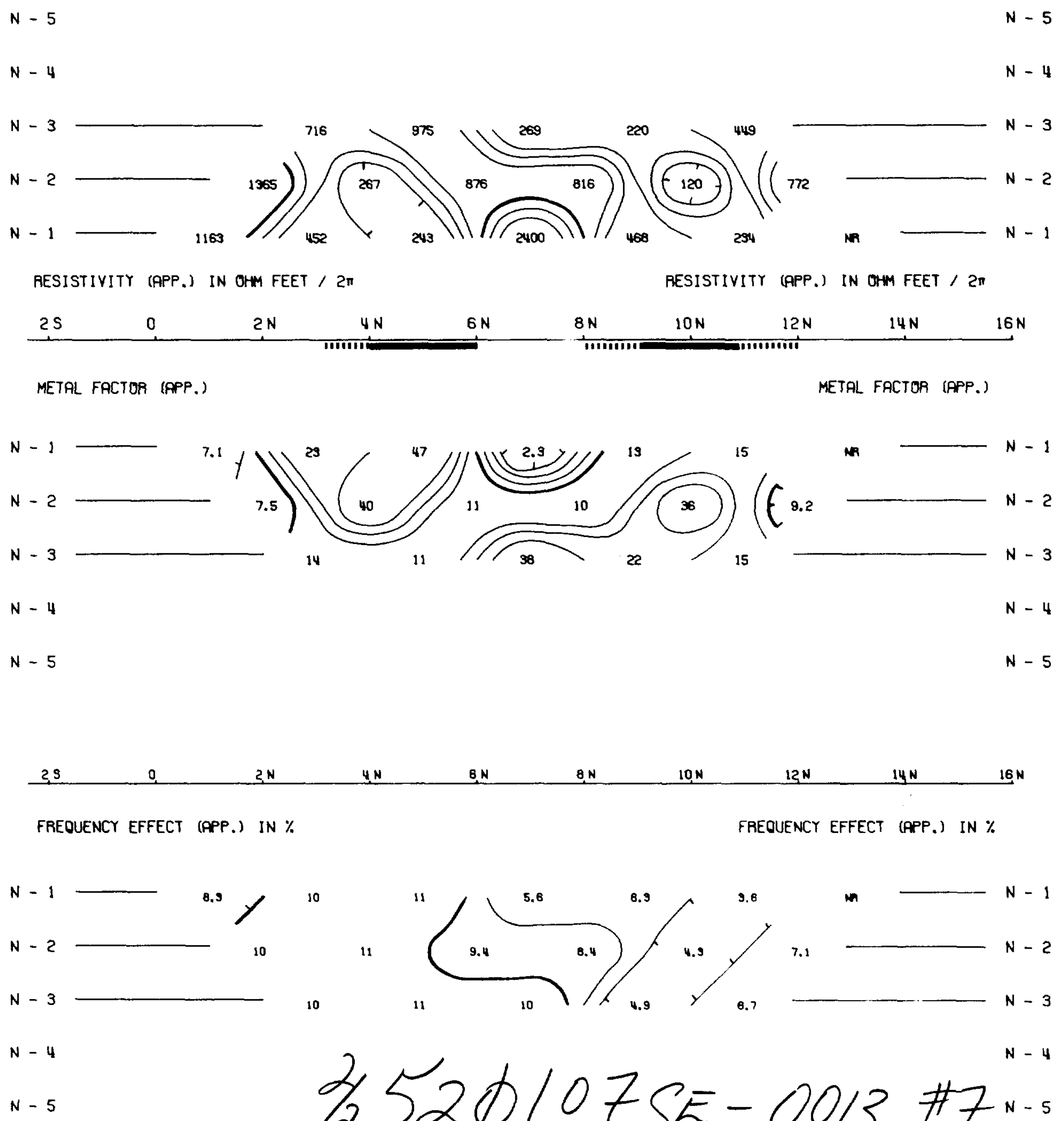
DATE:

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 PRODUCE BY MCPHAR COMPUTER DIVISION



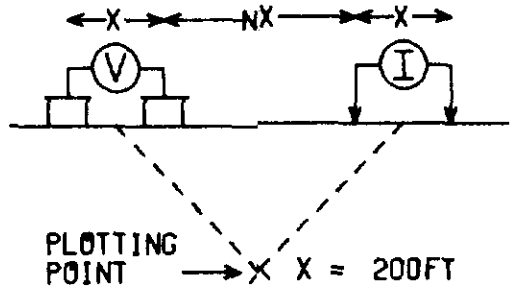
½ 52∅107SE-0013, #7

DWG. NO.- I.P.-6266-12

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 28E



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

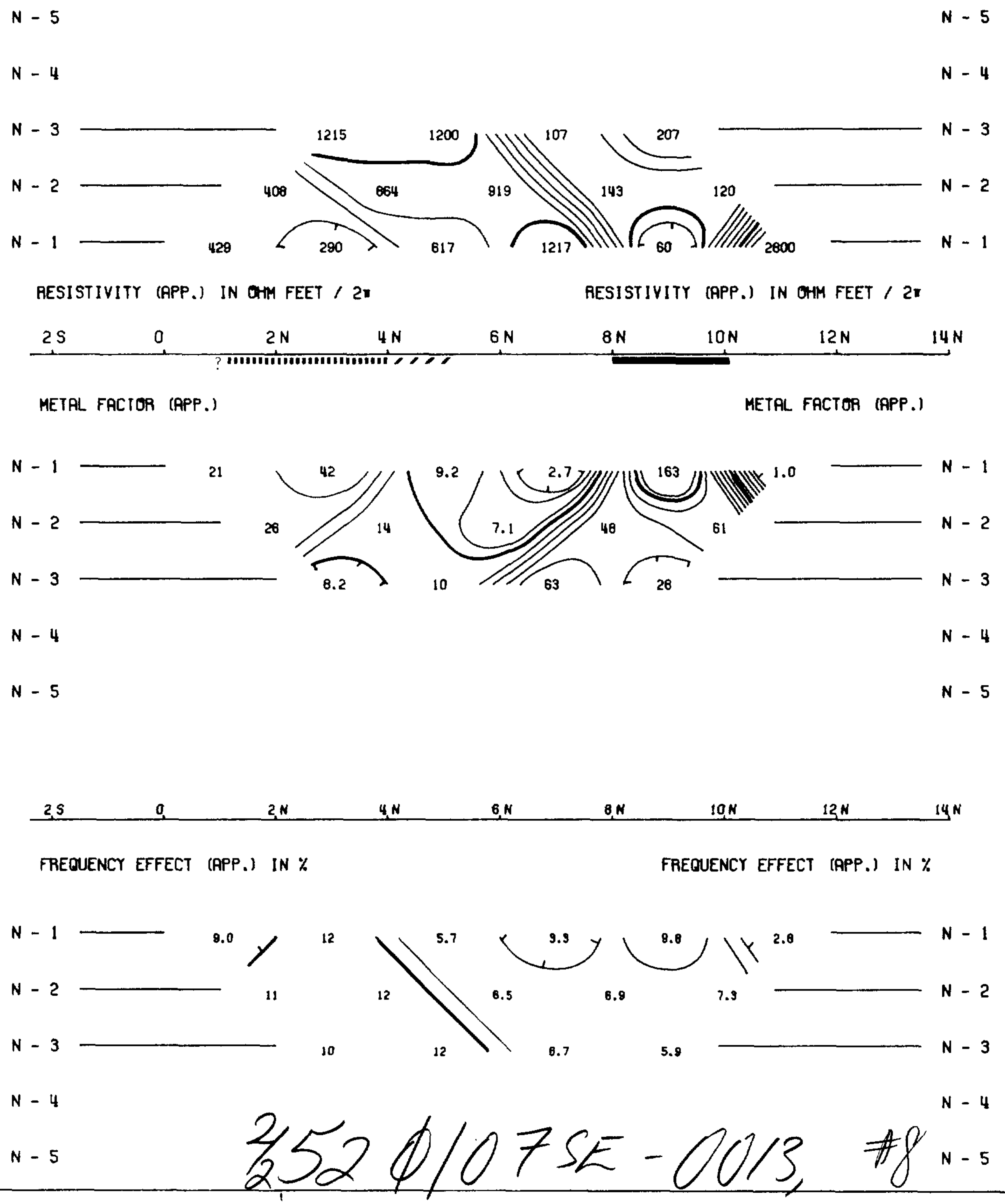
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



252O/07SE-0013, #8

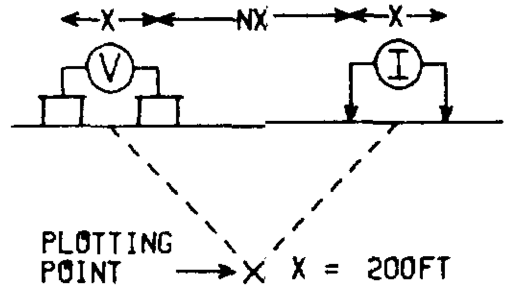
DWG. NO.- I.P.-6266-14

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 24E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

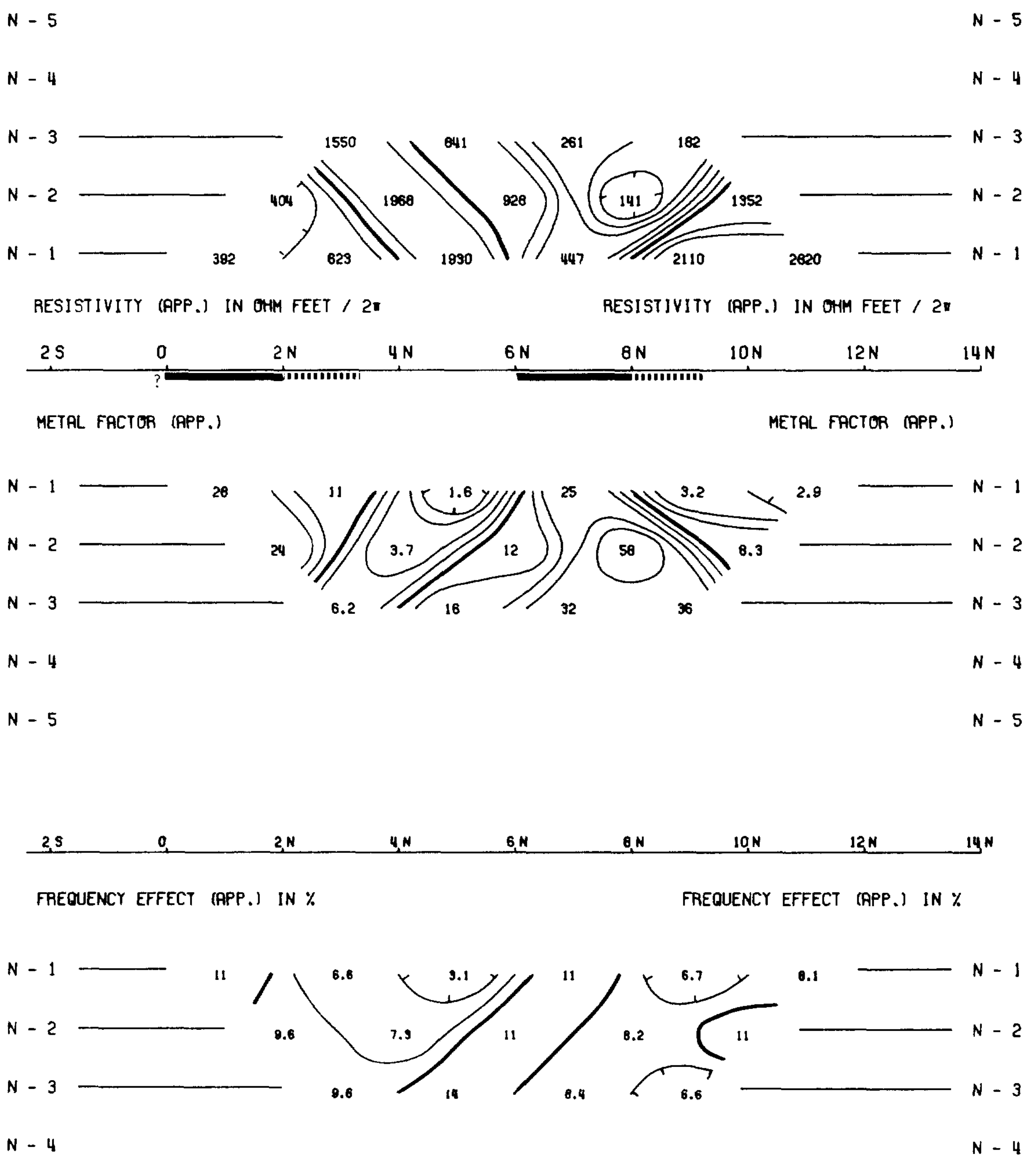
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52Ø107SE-0013, #9

DWG. NO.- I.P.-6266-16

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 20E

ELECTRODE CONFIGURATION

←X→←NX→←X→

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED:

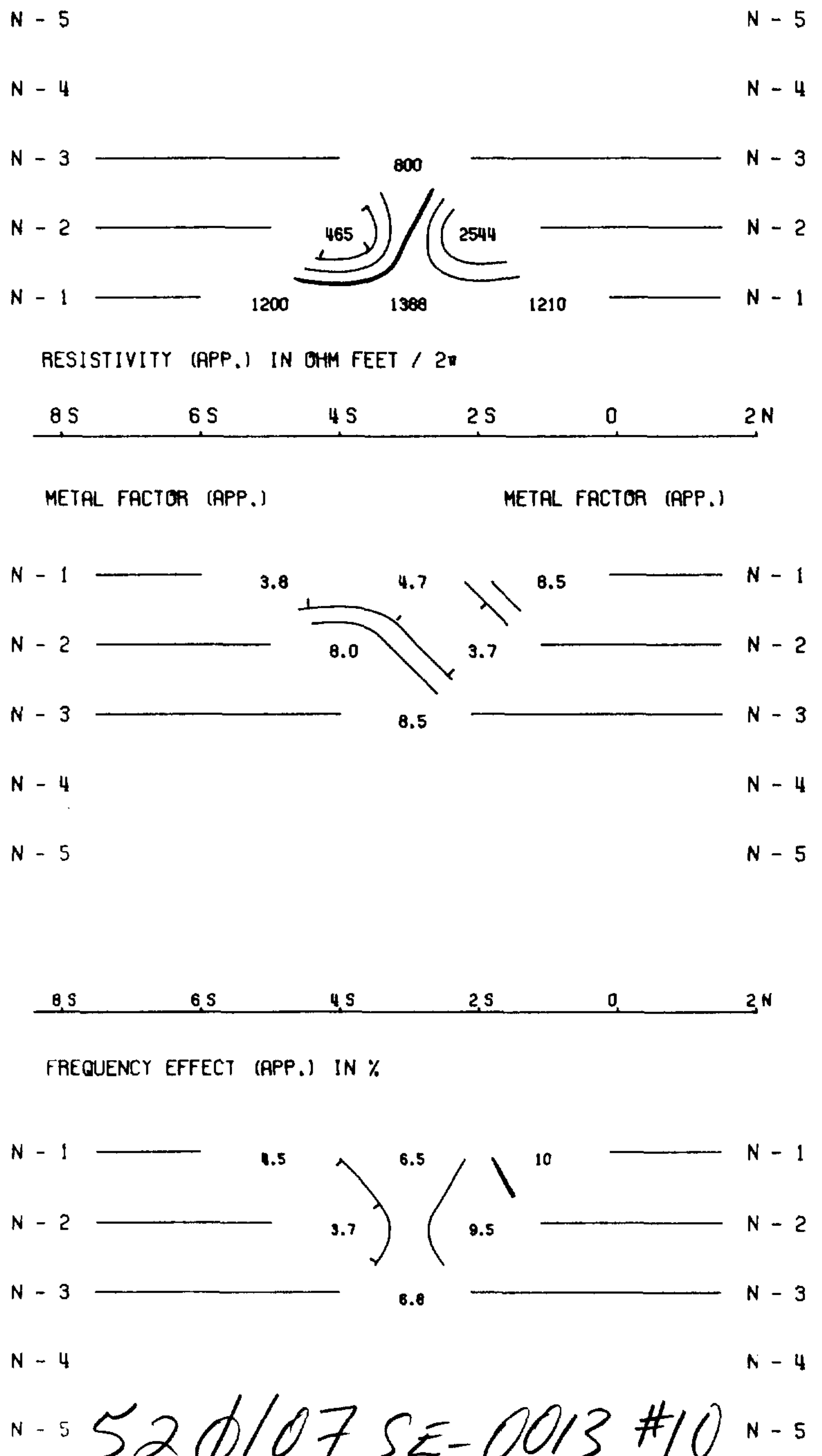
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52Ø/07SE-0013,#10

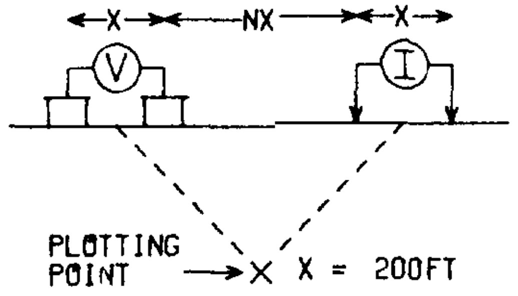
DWG. NO.- I.P.-6266-18

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 8E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

APPROVED: DM

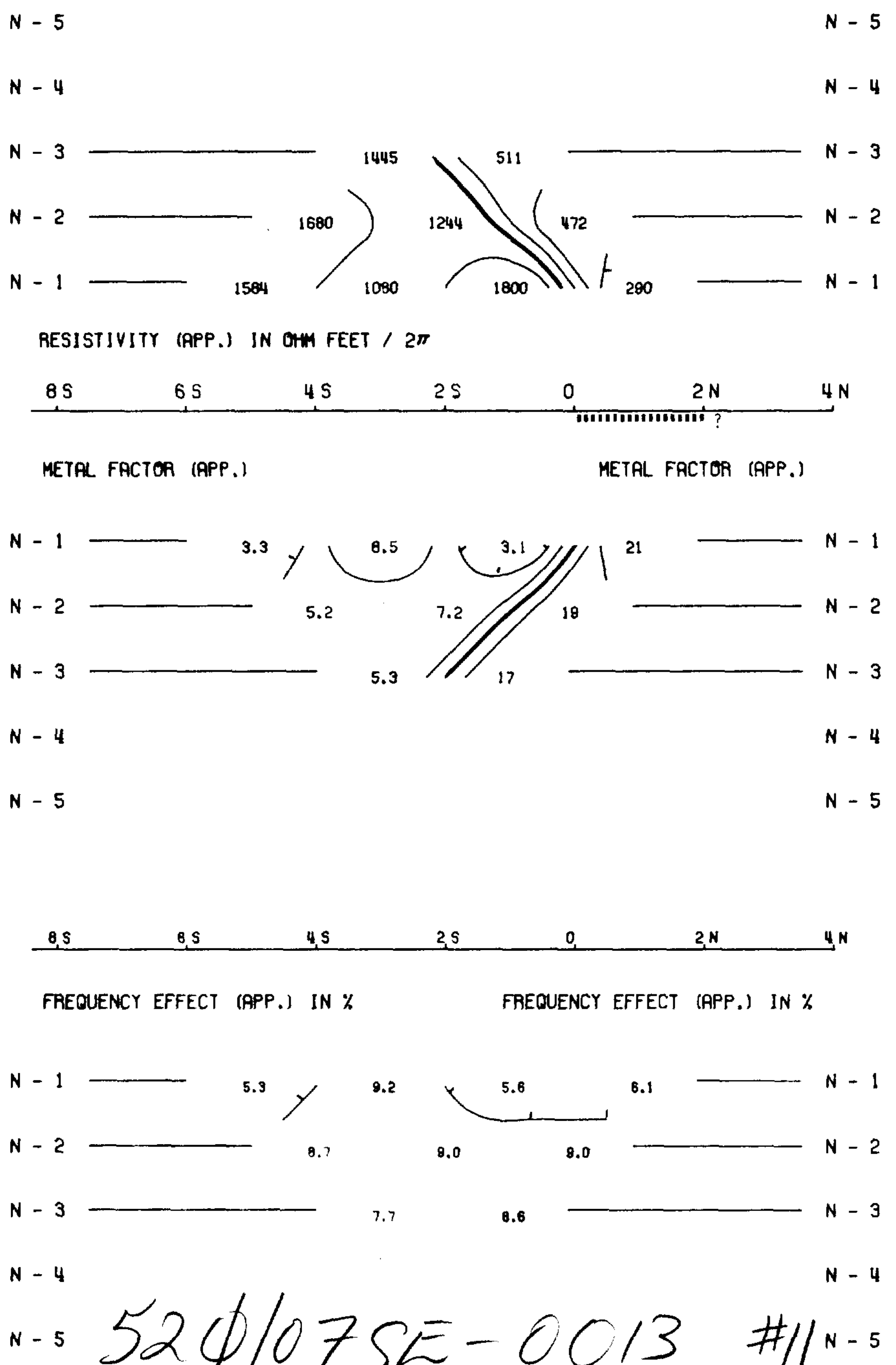
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52Ø/07SE-0013 #11

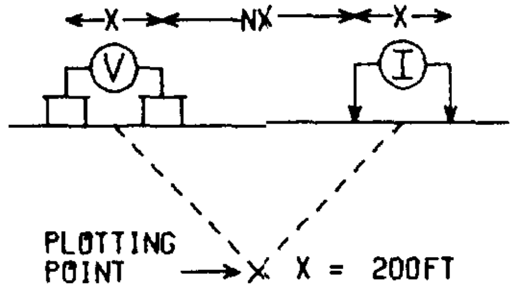
DWG. NO.- I.P.-6266-20

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 4E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV 1974

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

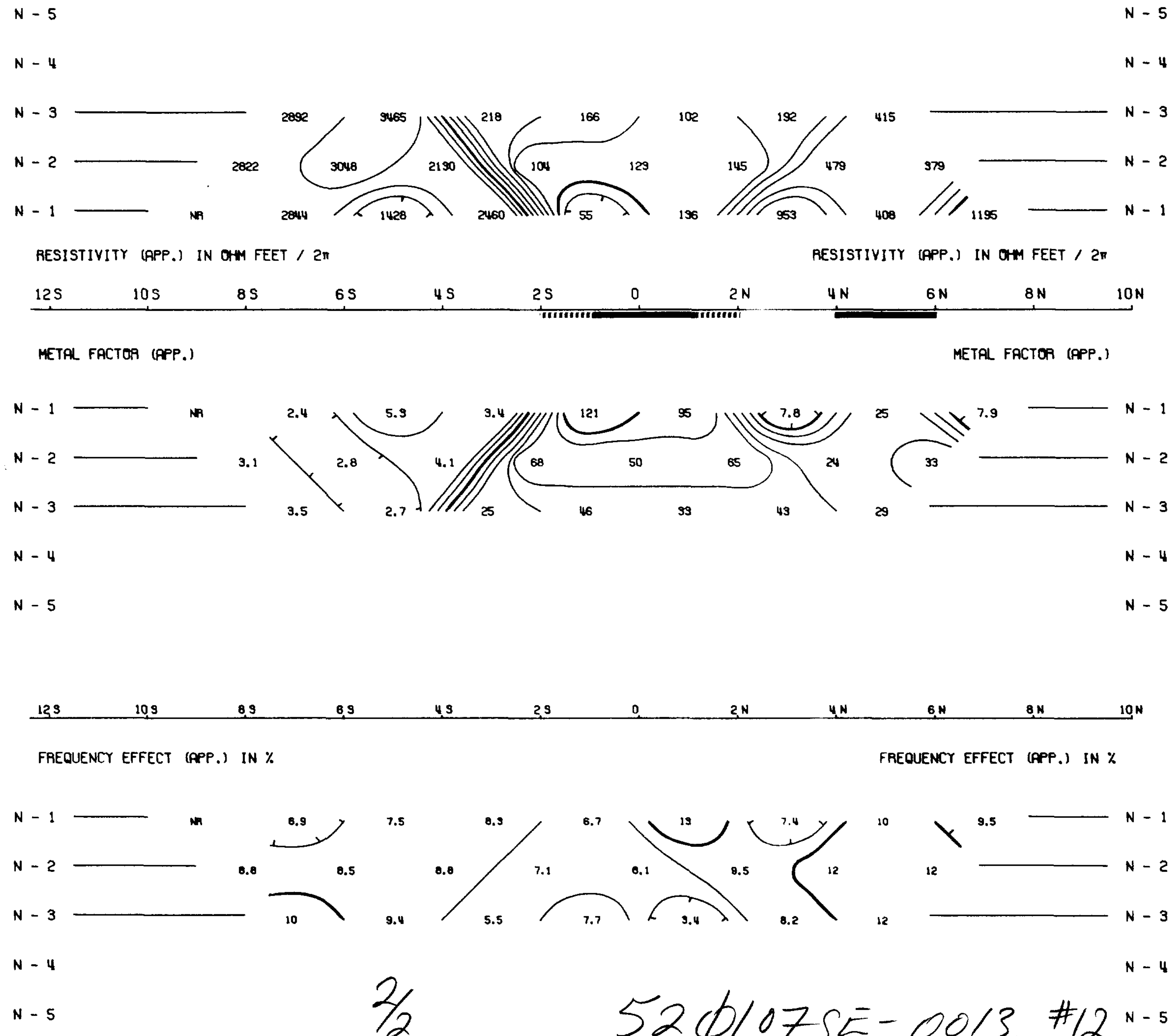
APPROVED:

DATE: Mar 4/75

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 520/07SE-0013, #12

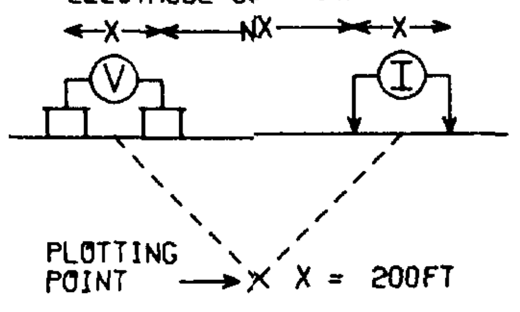
DWG. NO.- I.P.-6266-22

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 0

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED

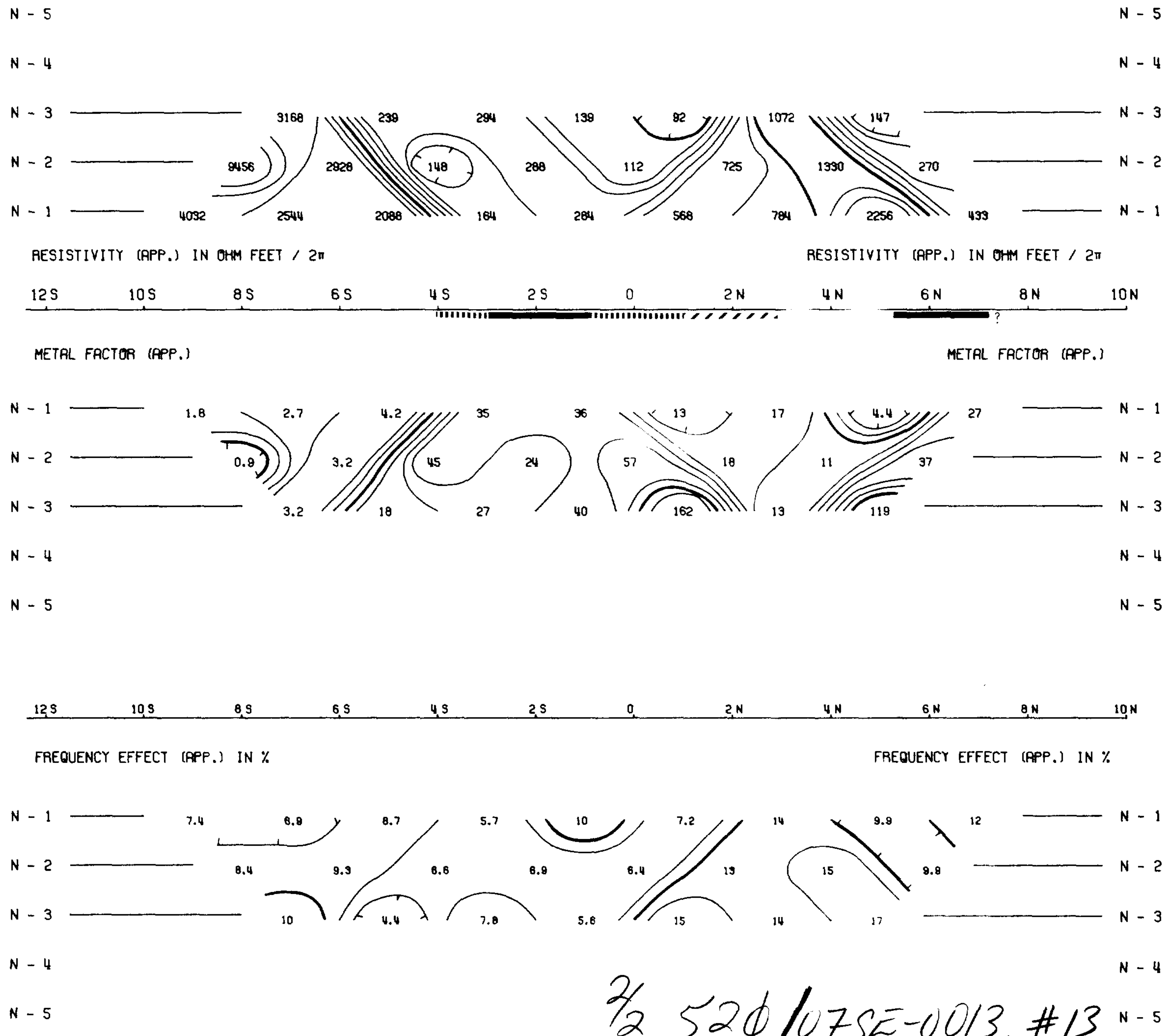
DATE Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 520/07SE-0013, #13

DWG. NO.- I.P.-6266-24

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 4W

ELECTRODE CONFIGURATION

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

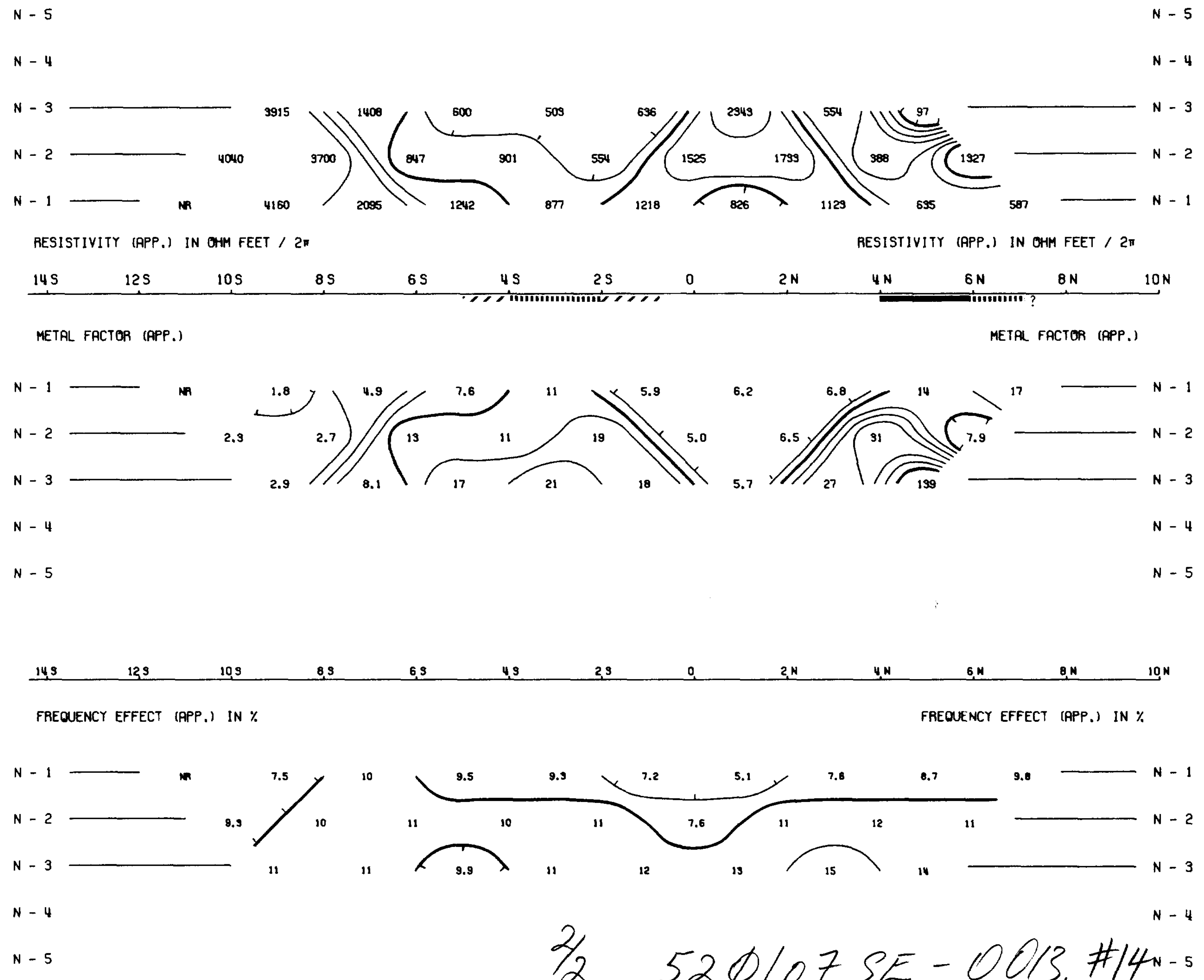
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52Ø/07 SE-0013, #14

DWG. NO.- I.P.-6266-26

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 8W

ELECTRODE CONFIGURATION

X NX X

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

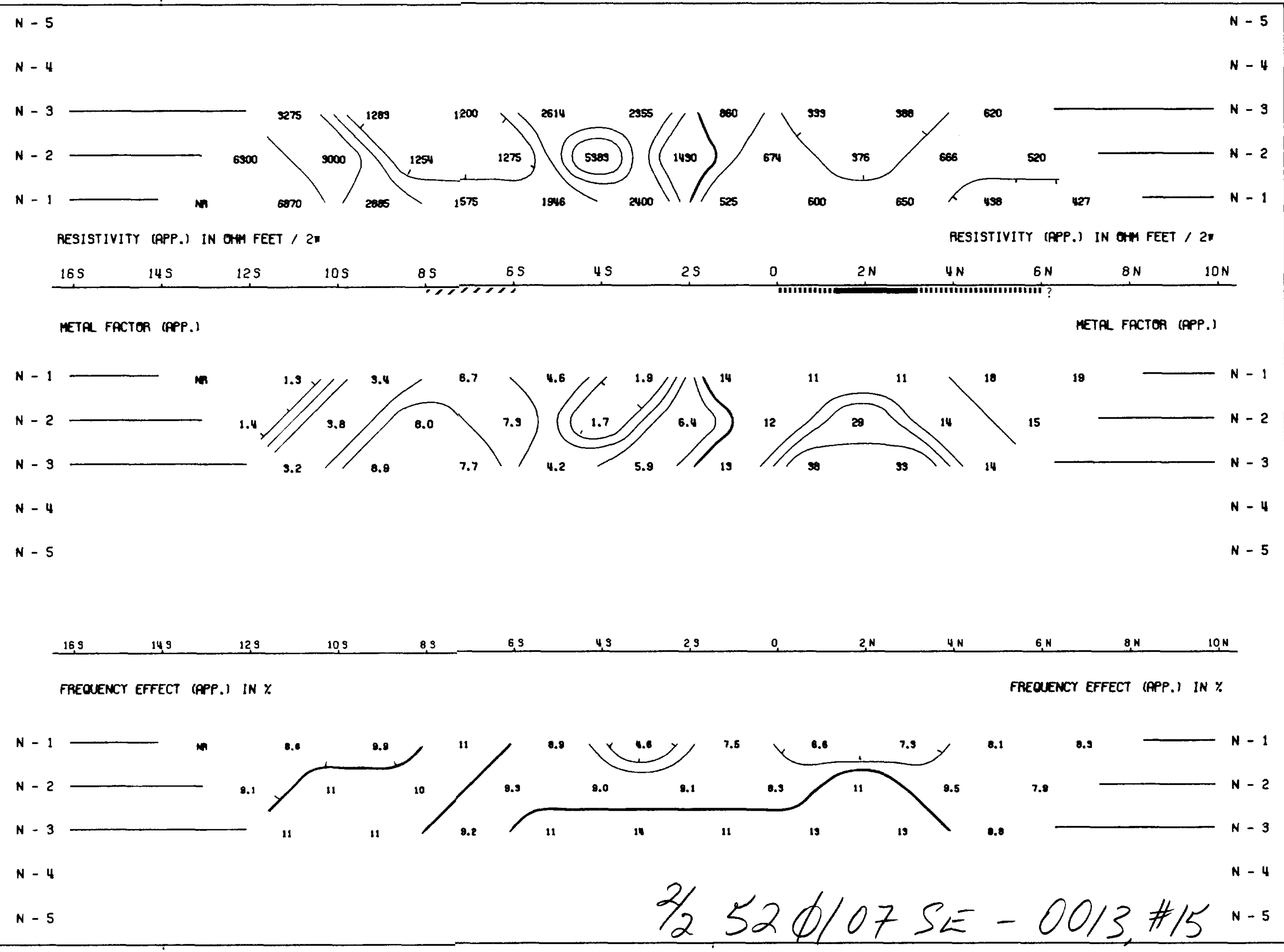
DATE: Mar 4175

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52Ø/07 SE - 0013, #15

DWG. NO.- I.P.- 6266-28

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 12W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

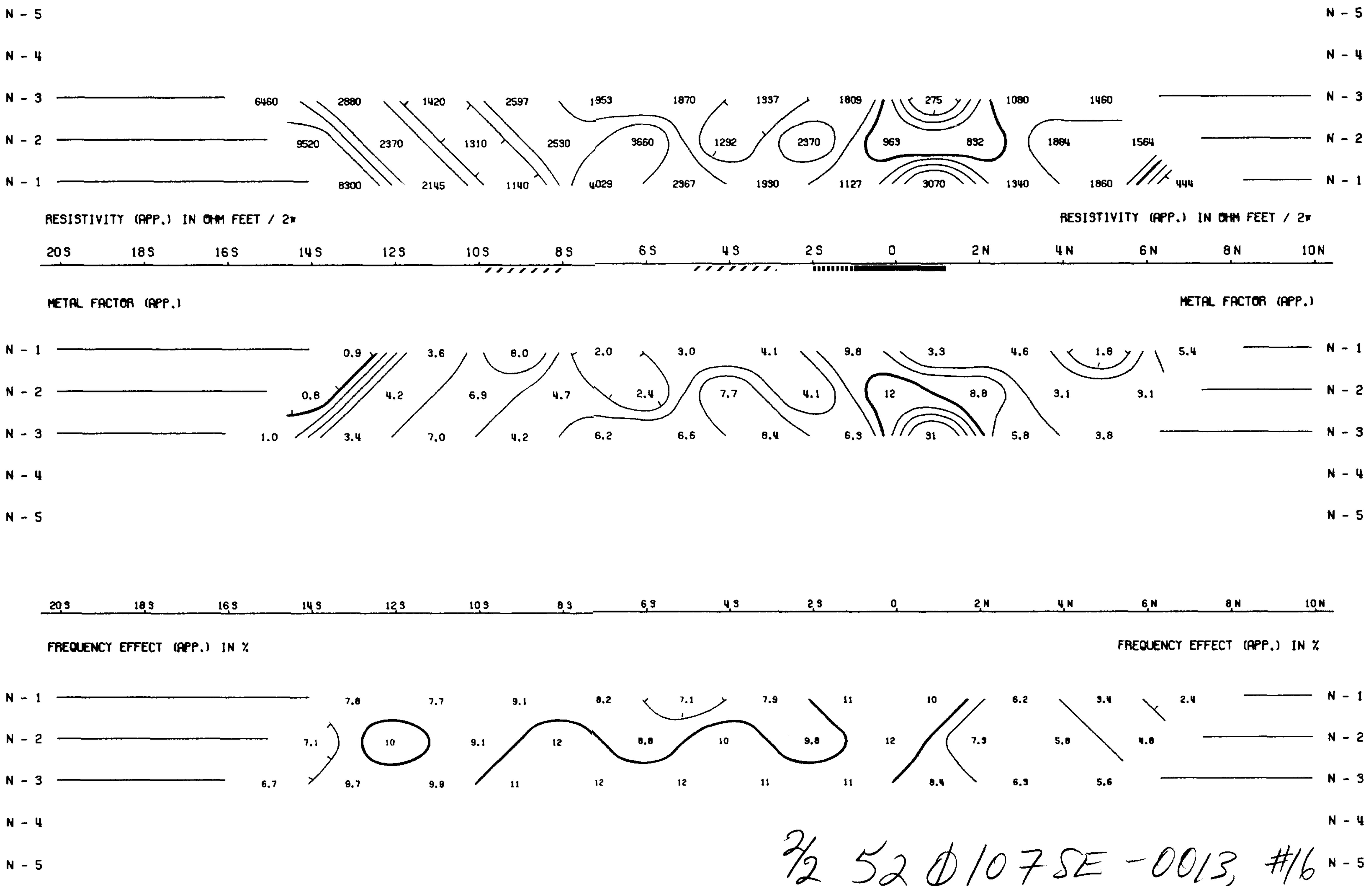
DATE:

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 PRODUCE BY McPHAR COMPUTER DIVISION



2/2 52O107SE-0013, #16

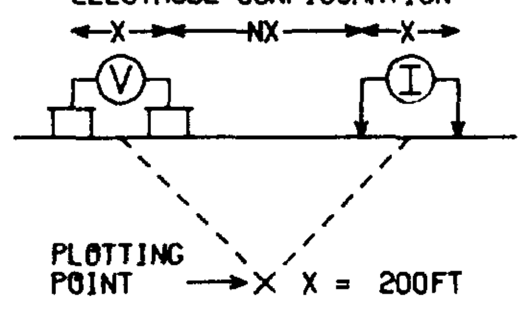
DWG. NO.- I.P.-6266-30

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 16W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

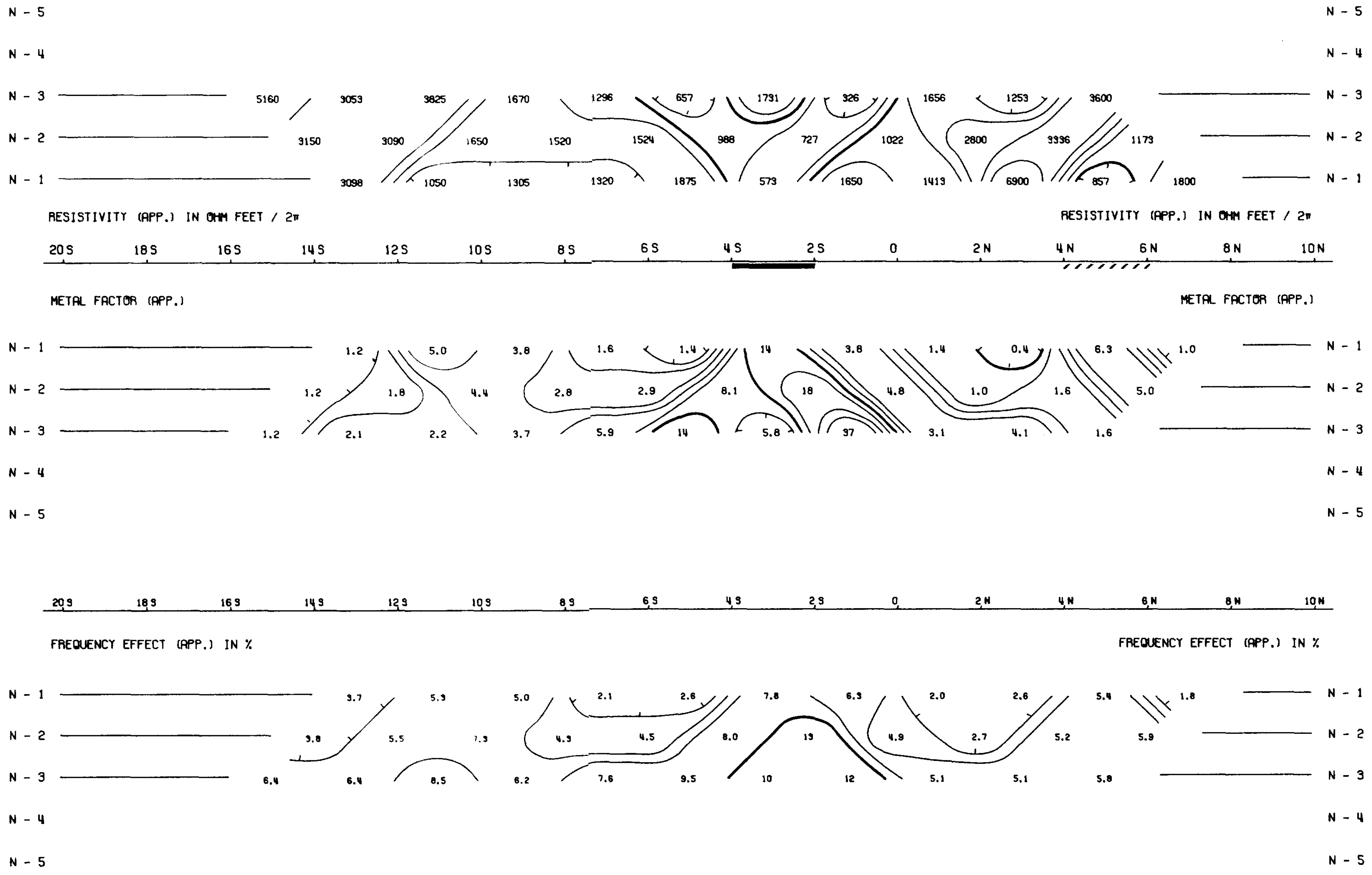
DATE:

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 PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-6266-32

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 20W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED: DJM

DATE: Mar 4 75

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 PRODUCE BY MCPHAR COMPUTER DIVISION

2/2 52 O 107SE-0013, #17

2/2 52Ø/07SE-0013, #18

DWG. NO.- I.P.-6266-34

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 24W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

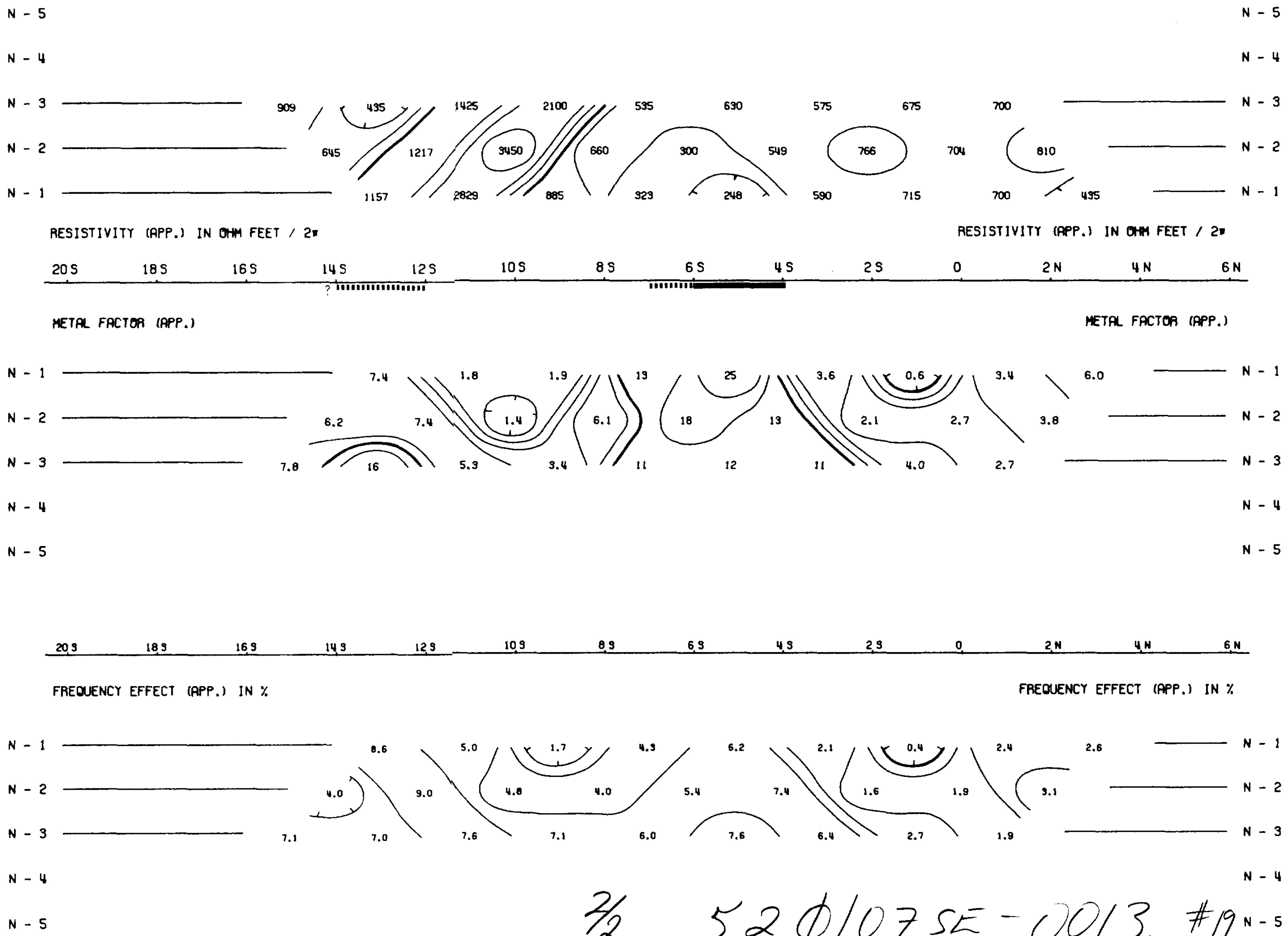
DATE: Mar 4/75

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 PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 520/07SE-0013, #19

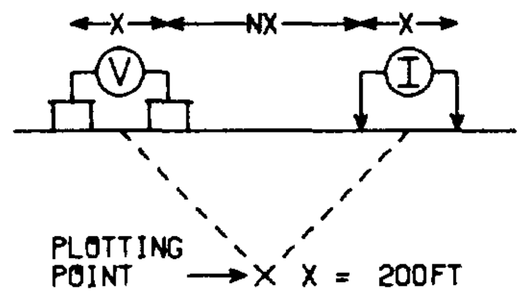
DWG. NO.- I.P.-6266-36

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 28W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

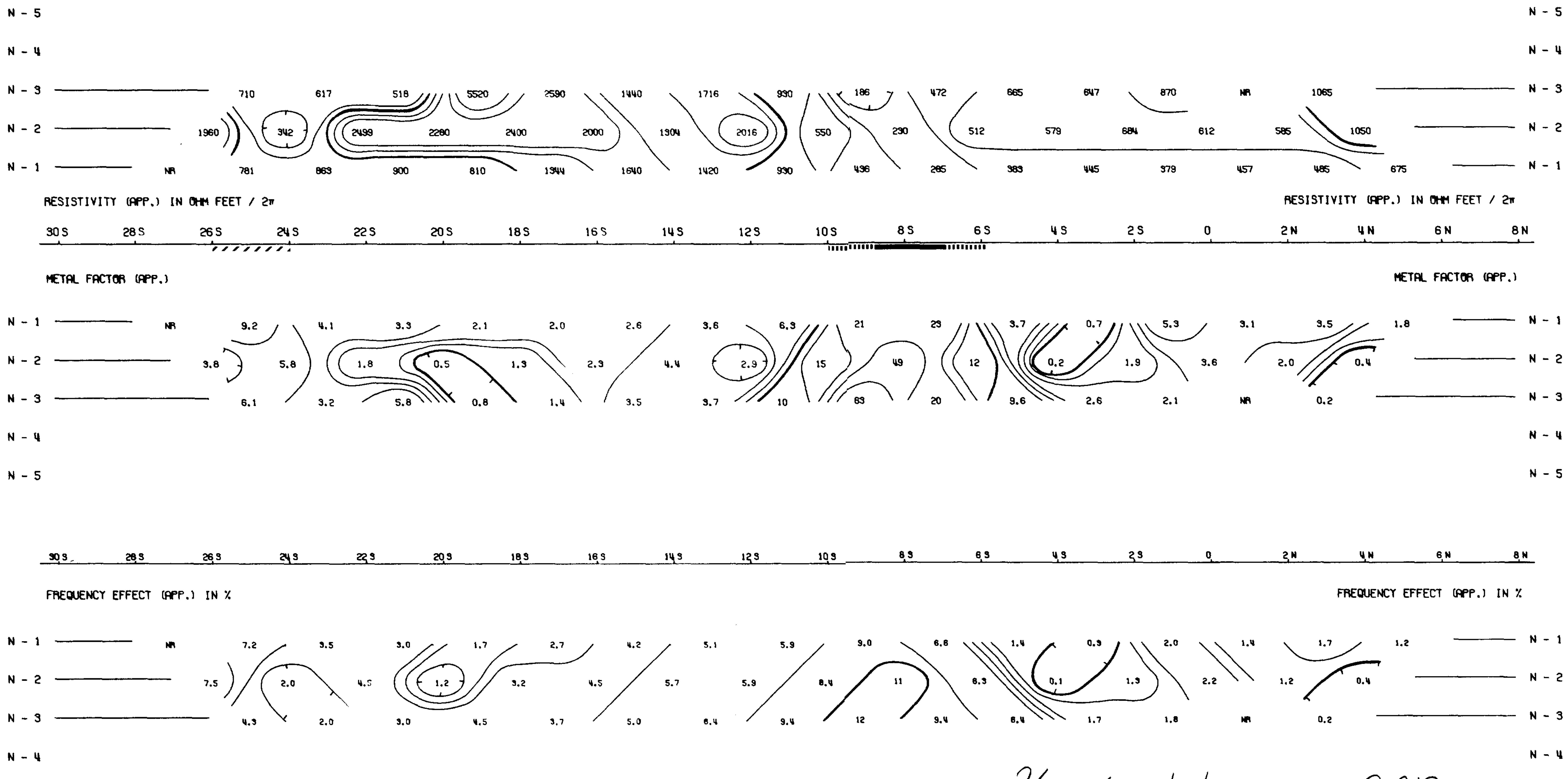
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

DATE: Mar 4,75

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52∅/07SE-0013, #20

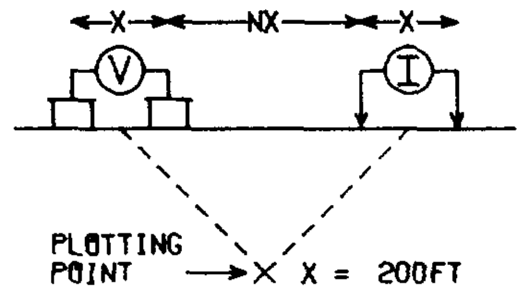
DWG. NO.- I.P.-6266-38

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 34W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

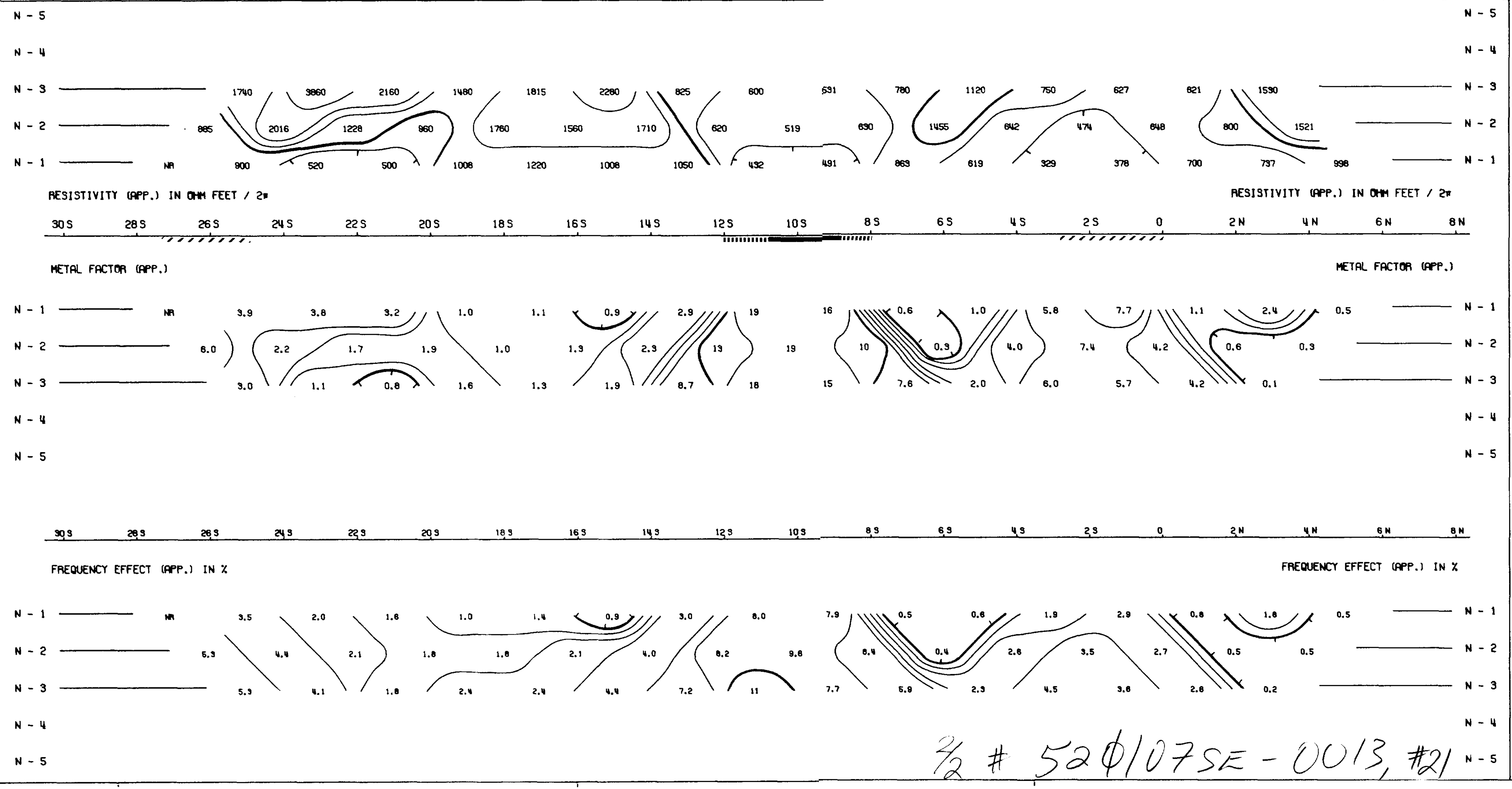
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

DATE: Mar 4/75

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.- 6266-40

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 38W

ELECTRODE CONFIGURATION

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

DATE: Mar 4/75

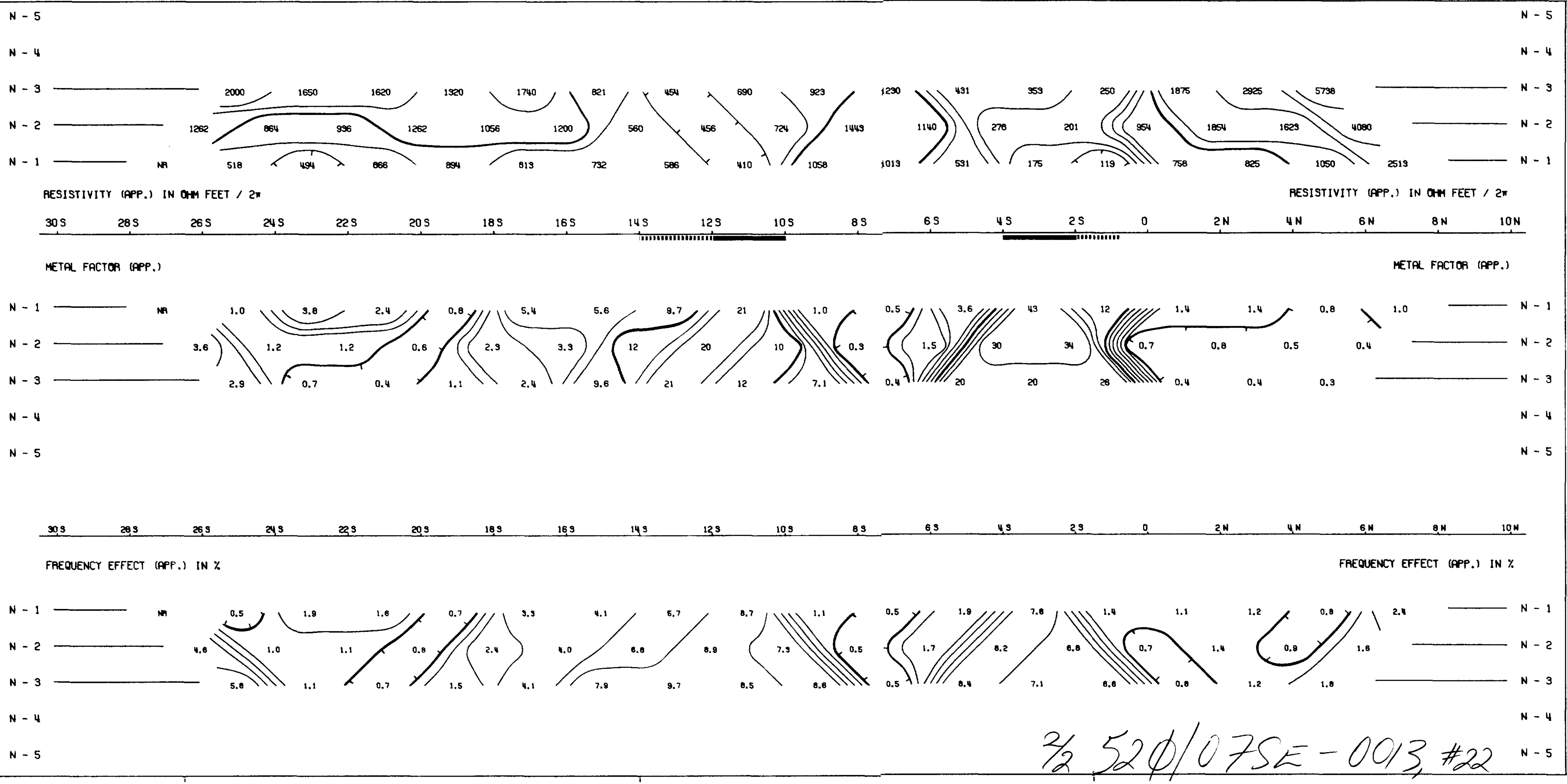
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1,-1.5-2,-3,-5,-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY McPHAR COMPUTER DIVISION

2/2 # 52O07SE-0013, #21

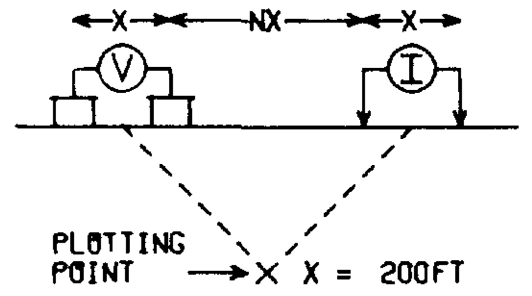


DWG. NO.- I.P.- 6266-42

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D.
ONTARIO.

LINE NO.- 42W



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬
PROBABLE ||||||||||
POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED: [signature]

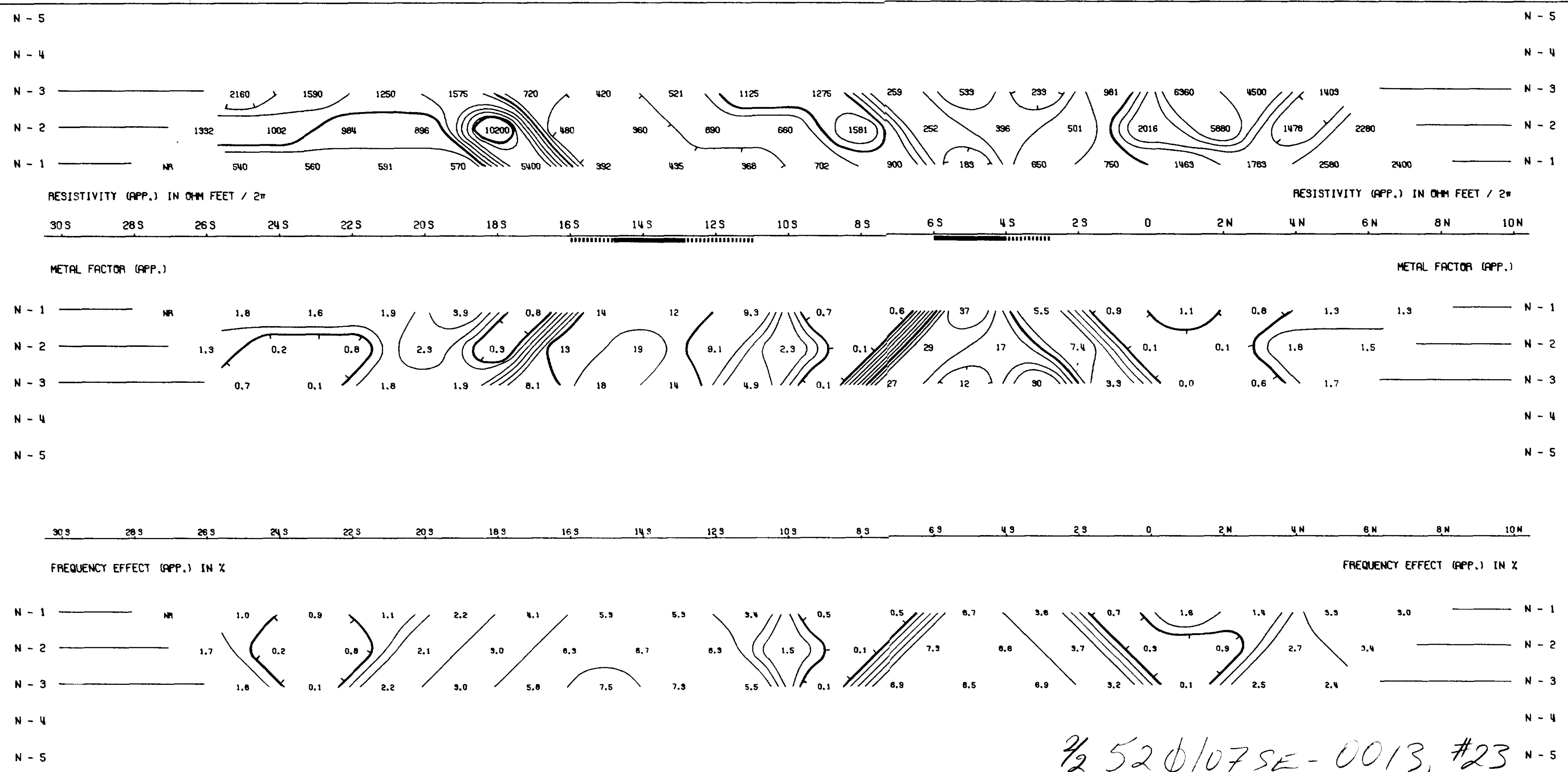
DATE: Mar 4/75

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 PRODUCE BY McPHAR COMPUTER DIVISION



2/2 52Ø/07SE-0013, #23

DWG. NO.- I.P.-6266-44

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 46W

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

APPROVED:

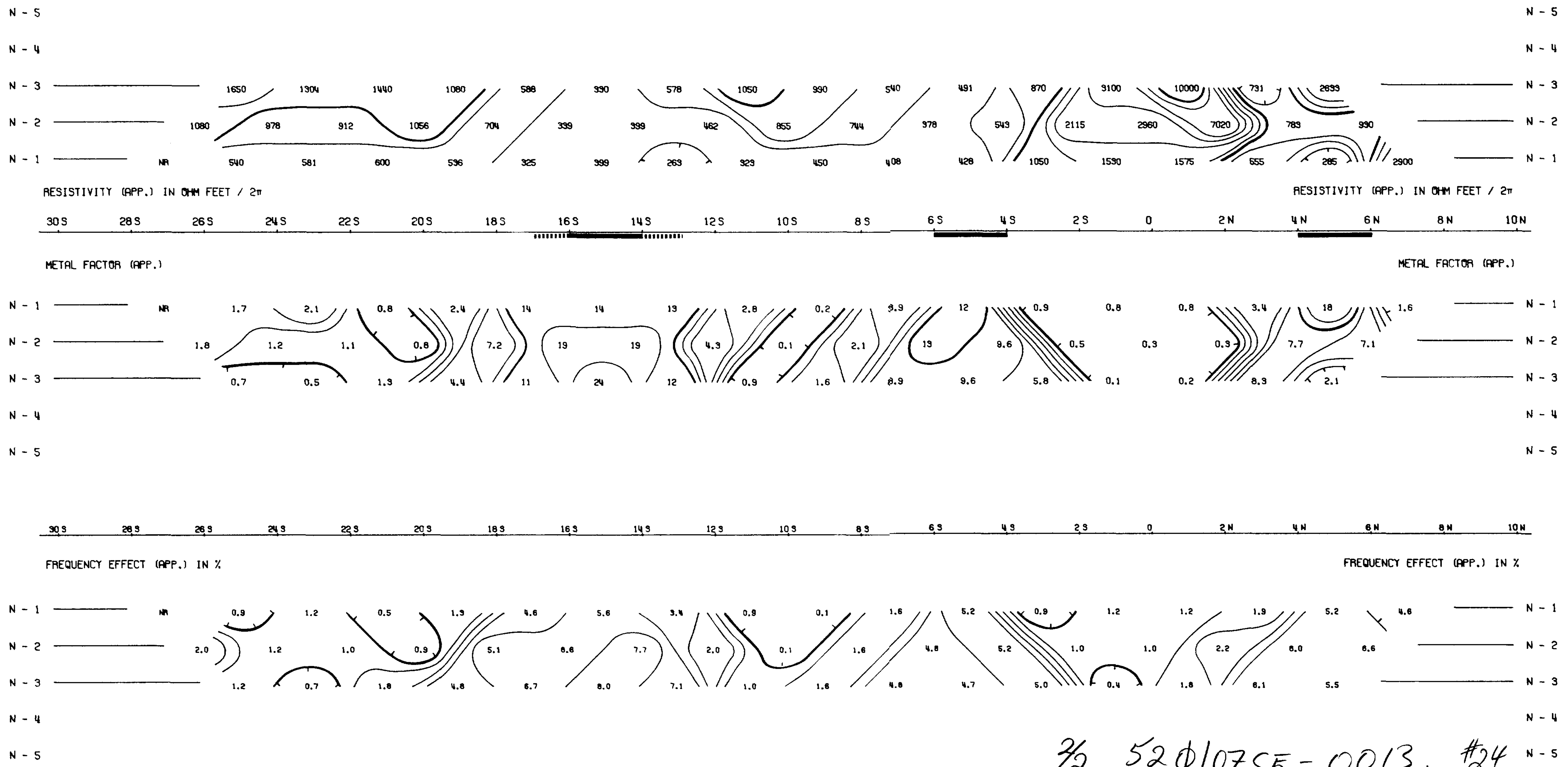
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

DATE: Mar 4/75

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCE BY MCPHAR COMPUTER DIVISION



2/2 52Φ/07SE-0013, #24

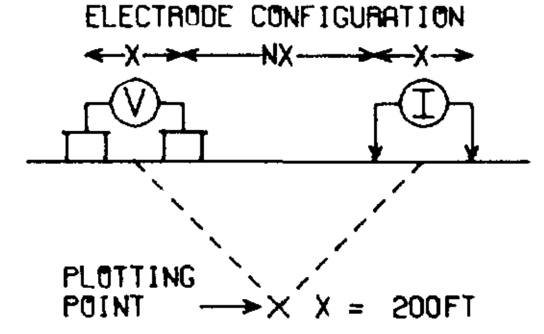
DWG. NO.- I.P.-6266-46

LONG LAC MINERAL EXPLORATION LTD.

KOVAL PROJECT, CALEY LAKE AREA, PATRICIA M.D. ONTARIO.

LINE NO.- 50W

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1974

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 PRODUCE BY MCPHAR COMPUTER DIVISION