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104I/5E

REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE NUP CLAIM GROUP, SNOWDRIFT PROJECT DEASE LAKE AREA LIARD MINING DIVISION, B.C. FOR KENNCO EXPLORATIONS (WESTERN) LTD.

BY

PHILIP G. HALLOF, Ph.D.

AND

MARION A. GOUDIE, B.Sc.

NAME AND LOCATION OF PROPERTY:

SNOWDRIFT PROJECT, DEASE LAKE AREA

LIARD MINING DIVISION, B.C. 58°20'N - 130°40'W

DATE STARTED: JULY 18, 1973

DATE FINISHED: AUGUST 7, 1973

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McPHAR GEOPHYSICS LIMITED

REPORT ON THE

INDUCED POLARIZATION

AND RESISTIVITY SURVEY

ON THE

NUP CLAIM GROUP, SNOWDRIFT PROJECT

DEASE LAKE AREA

LIARD MINING DIVISION, B.C.

FOR

KENNCO EXPLORATIONS (WESTERN) LTD.

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1. INTRODUCTION

We have recently completed an Induced Polarization and Resistivity Survey on the Nup Claim Group, Snowdrift Project, Dease Lake Area, Liard M.D., B.C., for Kennco Explorations (Western) Ltd. The centre of the claim group is situated at approximately 58°20'N latitude and 130°40'W longitude.

The general geology only is available for the area. The country rocks are andesite and basalt of Triassic age, intruded by stocks of undifferentiated granitic rocks. The area is covered to a large extent by glacial deposits.

Previous work consisted of an airborne magnetic survey.

The IP survey was carried out to locate any economic deposit of metallic mineralization which might be present in the survey area. The

work was completed in August, 1973, using a McPhar P660 high power variable frequency IP unit operating at 0.3 Hz and 5.0 Hz over the following claims:

NUP: 27 to 44, 46, 55 to 74, 95, 96, 101 to 104, 109 to 126, 133 to 142, 160 Fr., 161 Fr., 162 Fr., 163 Fr.

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.
11200N	400 feet	IP 6092-1
9600N	400 feet	IP 6092-2
8000N	400 feet	IP 6092-3
6400N	400 feet	IP 6092-4
4800N	400 feet	IP 6092-5
3200N	400 feet	IP 6092-6
1600N	400 feet	IP 6092-7
800N	200 feet	IP 6092-8
00	400 feet	IP 6092-9
00	200 feet	IP 6092-10
300S	200 feet	IP 6092-11
1100S	200 feet	IP 6092-12
1900S	200 feet	IP 6092-13
2200E	200 feet	IP 6092-14

Also enclosed with this report is Dwg. I.P.P. 4913, a plan map of the Nup Claim Grid at a scale of 1" = 400'. The definite, probable and possible Induced Polarization anomalies are indicated by bars, in the manner shown on the legend, on this plan map as well as on the data plots. These bars represent the surface projection of the anomalous zones as interpreted from the location of the transmitter and receiver electrodes when the anomalous values were measured.

Since the Induced Polarization measurement is essentially an averaging process, as are all potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly, no anomaly can be located with more accuracy than the electrode interval length; i.e. when using 400' electrode intervals the position of a narrow sulphide body can only be determined to lie between two stations 400' apart, In order to definitely locate, and fully evaluate, a narrow, shallow source it is necessary to use shorter electrode intervals. In order to locate sources at some depth, larger electrode intervals must be used, with a corresponding increase in the uncertainties of location. Therefore, while the centre of the indicated anomaly probably corresponds fairly well with source, the length of the indicated anomaly along the line should not be taken to represent the exact edges of the anomalous material.

3. DISCUSSION OF RESULTS

The IP survey results indicated that the major portion of the grid from Line 11200N to Line 0 overlies relatively barren rock. Only a few very weak scattered IP anomalies were located on these lines.

From Line 300S to Line 1900S, an anomalous IP zone was partially outlined by the survey. In general, the resistivities of the underlying rocks are moderately high.

The pattern of the anomalies suggests a source of disseminated mineralization of variable concentration.

Line 300S

The anomaly extends from 2W, where it is incomplete, to 28E, varying from possible to definite. The top of the source is shallow with respect to the electrode interval except from 22W to 6E, where the source appears to be overlain by either a relatively barren rock or by a more highly resistive mineralized rock. The source could be tested at a vertical depth of 100' to 150' below 2E, 8E, 13E, 21E and 24E.

The lines to the south and Line 2200E are, in general, similar. Significant differences are described below.

Line 1100S

The source is overlain by relatively barren rock from 0 to 2W and 10E to 12E. The anomaly is incomplete to the west.

Line 1900S

The anomaly on this line is of higher magnitude than on the two lines to the north. The anomaly is incomplete to the west and the interpretation is incomplete. The pattern of the anomaly suggests that a barren capping may exist from 4E to 0 or 2E, with the anomaly continuing to the west.

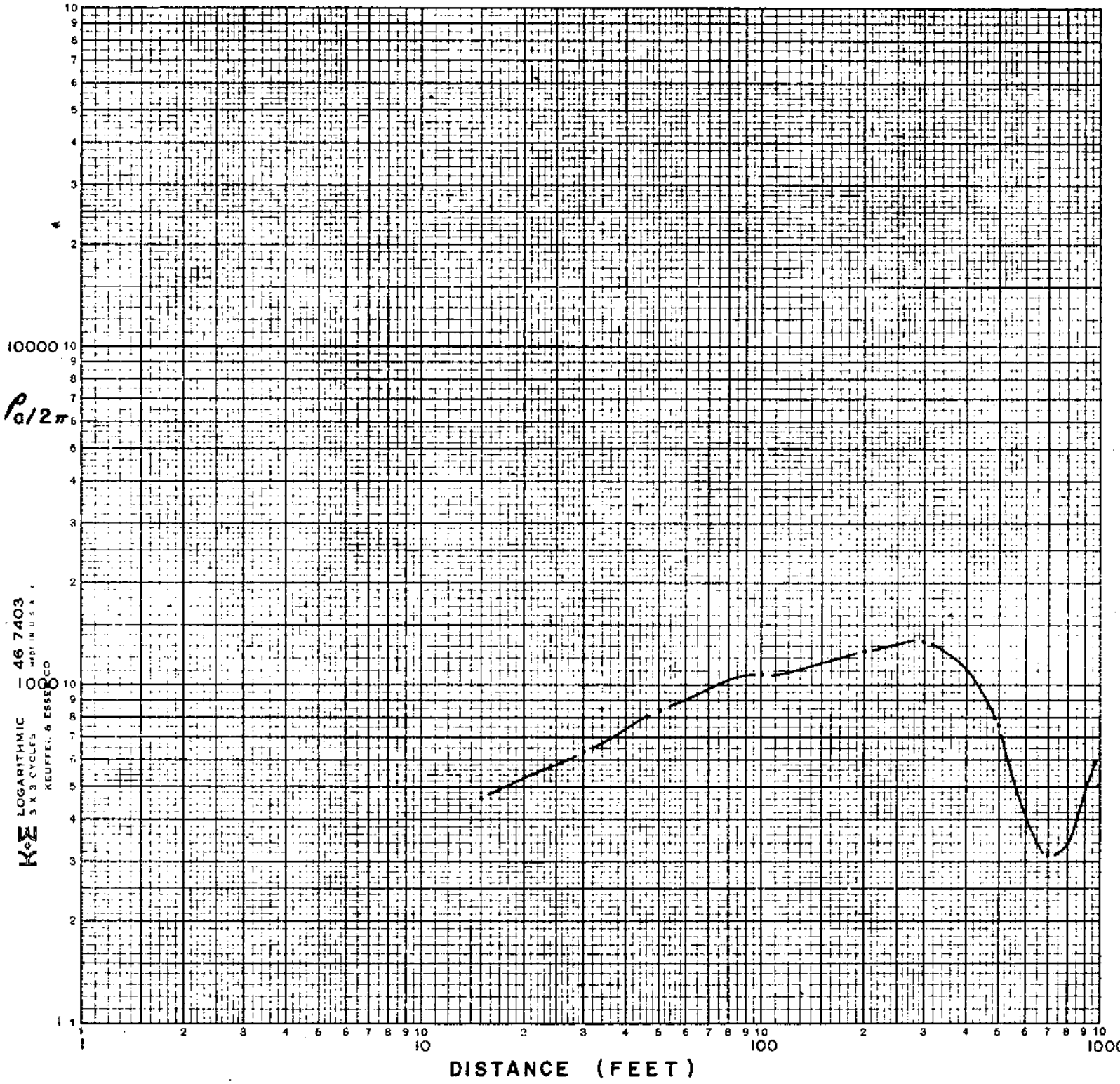
RESISTIVITY TEST

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT.

DIPOLE - DIPOLE VARIABLE "N" USING X = 100'

64N 24E - 14E



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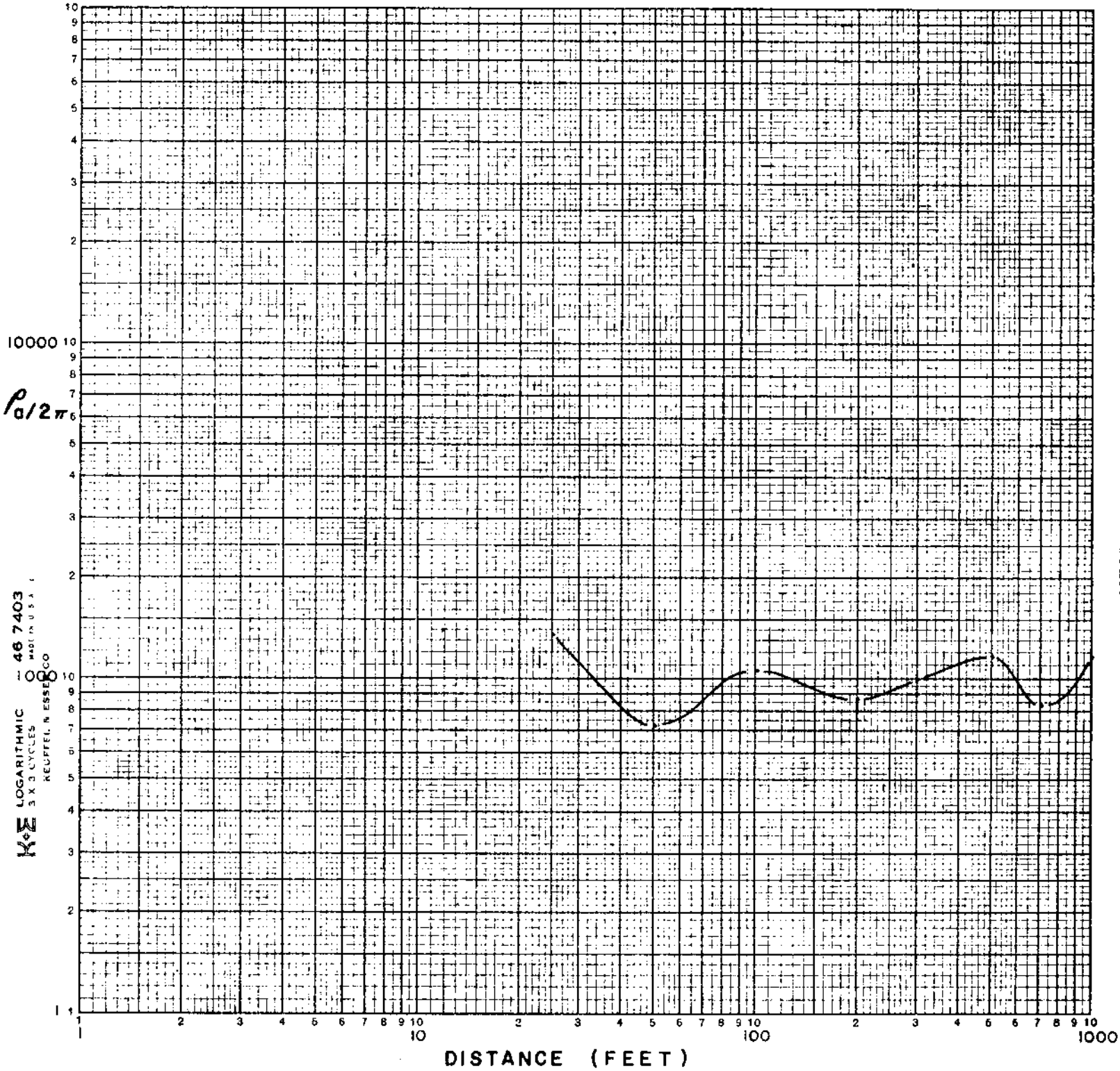
RESISTIVITY TEST

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT.

DIPOLE - DIPOLE VARIABLE "N" USING X = 100'

B.L. 40N - 30N



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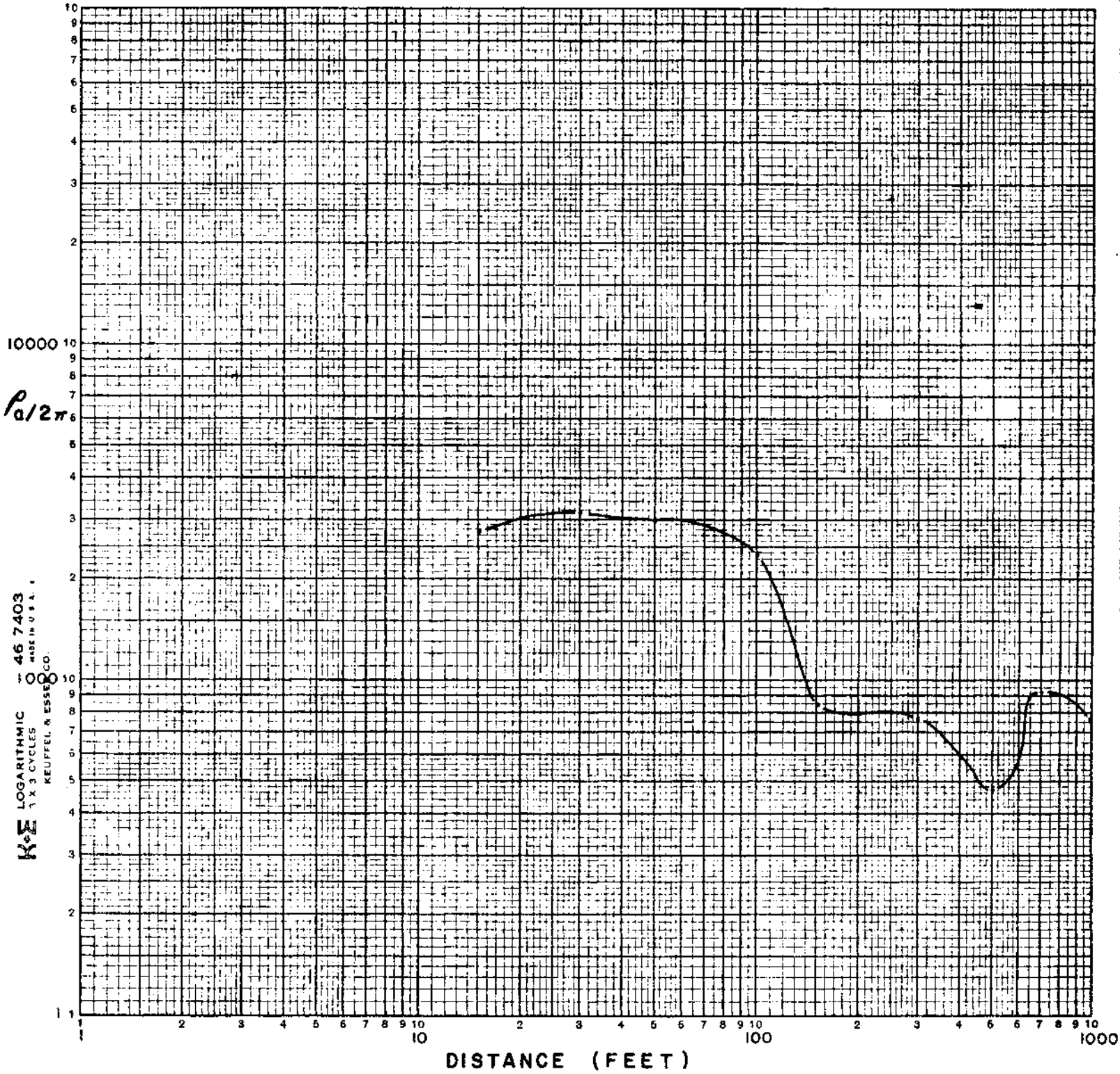
RESISTIVITY TEST

KENNCO EXPLORATIONS (WESTERN) LTD.
NUP CLAIM GROUP, SNOWDRIFT PROJECT.
DIPOLE - DIPOLE VARIABLE "N" USING X = 100'
O N/S 30E - 20E



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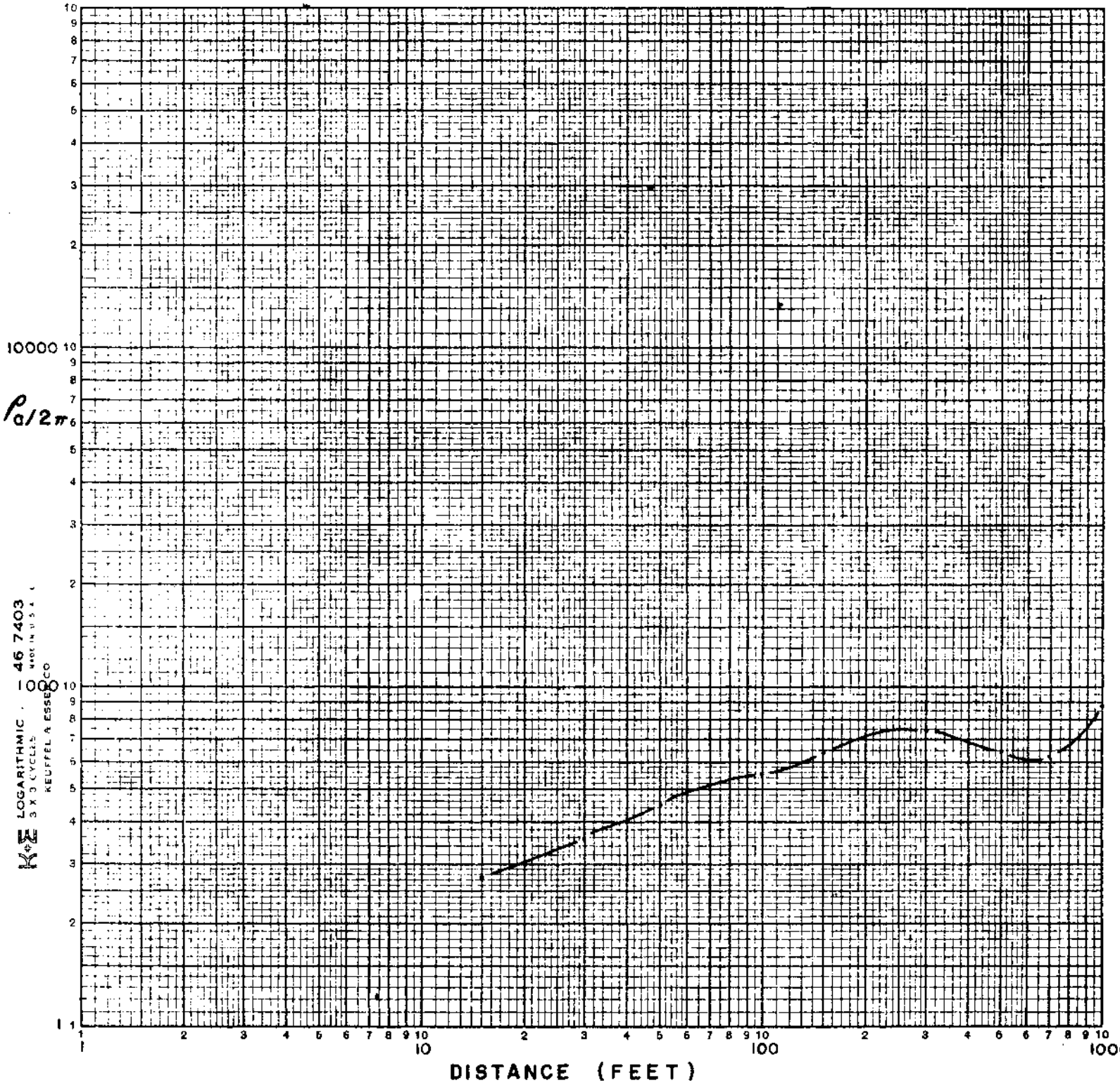
RESISTIVITY TEST

KENNCO EXPLORATIONS (WESTERN) LTD.
NUP CLAIM GROUP, SNOWDRIFT PROJECT.
DIPOLE - DIPOLE VARIABLE "N" USING X = 100'
112N 8W - 18W



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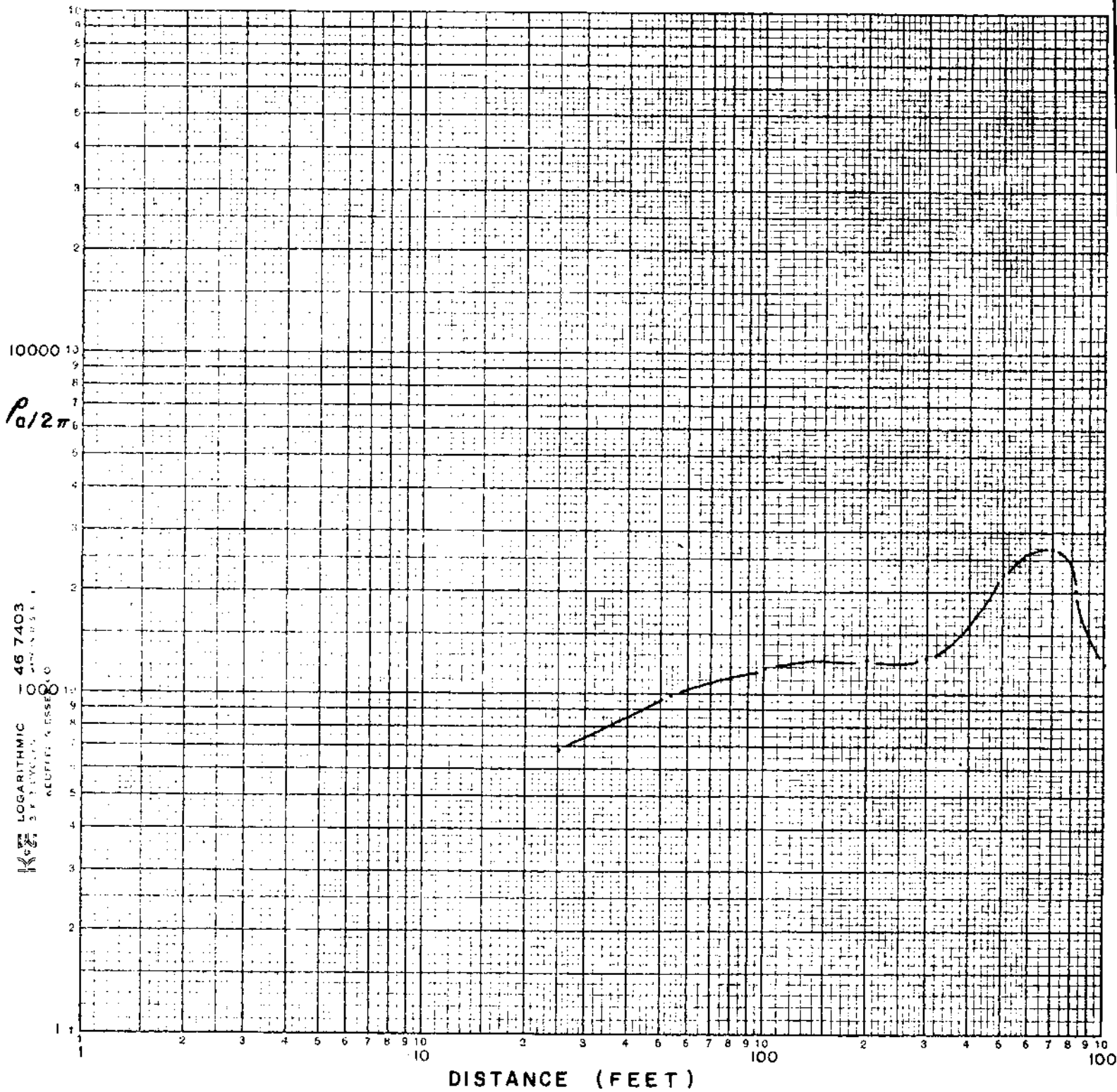
RESISTIVITY TEST

KENNCO EXPLORATIONS (WESTERN) LTD.
NUP CLAIM GROUP, SNOWDRIFT PROJECT.
DIPOLE - DIPOLE VARIABLE "N" USING X = 100'
B.L. 110N - 100N



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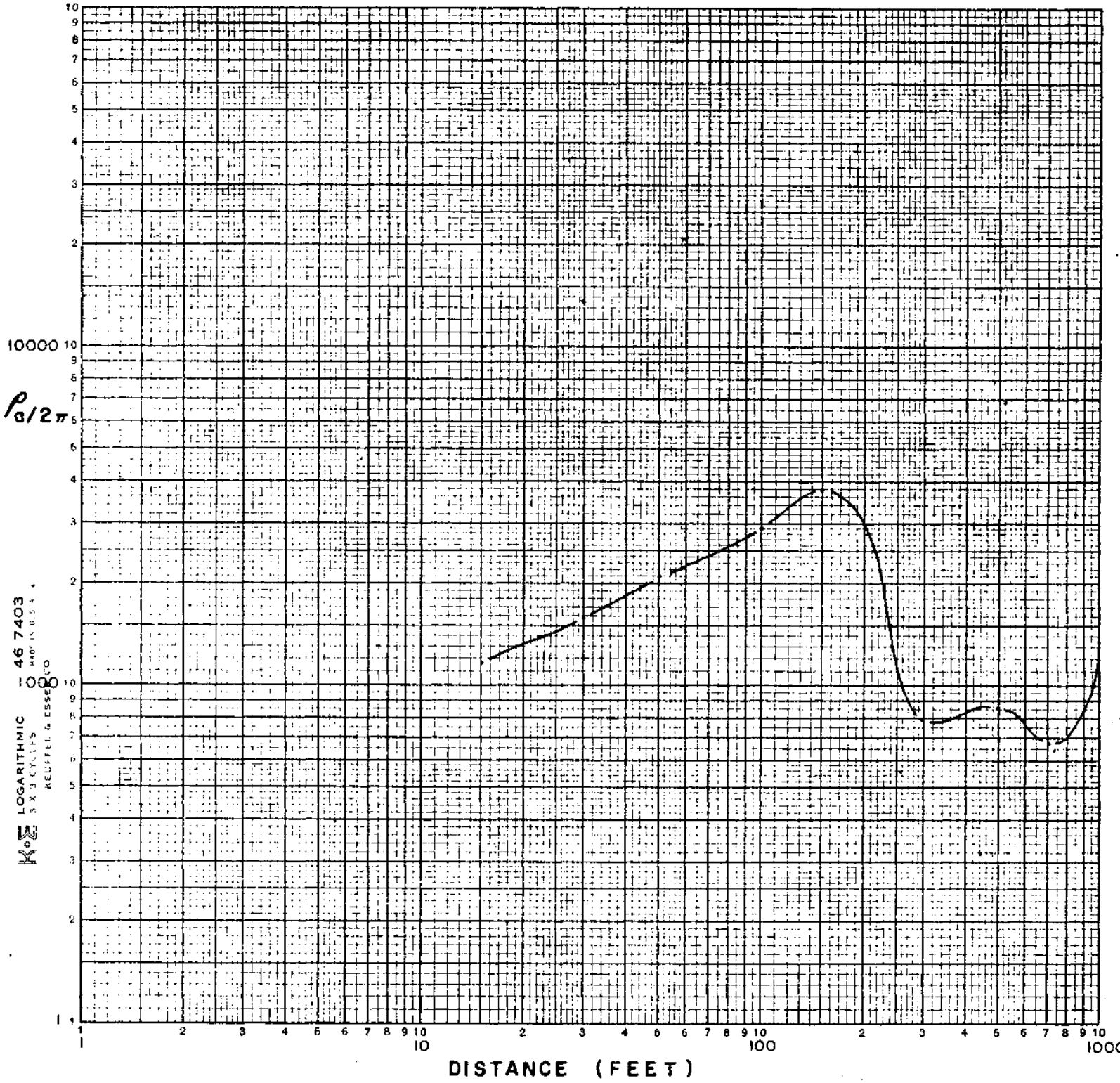
RESISTIVITY TEST

KENNCO EXPLORATIONS (WESTERN) LTD.
NUP CLAIM GROUP, SNOWDRIFT PROJECT.
DIPOLE - DIPOLE VARIABLE "N" USING X = 100'
64N 28W - 38W



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Line 2200E

This cross-line confirms the previous data and indicates that the anomalous zone extends south of Line 1900S. A narrow, barren caprock is indicated from 18S to 16S. The source of the anomaly could be tested at a vertical depth of 100' below 29S.

4. CONCLUSIONS AND RECOMMENDATIONS

The IP results indicate that the grid area from Line 0 to the north is relatively barren. An anomalous IP zone has been partially outlined south of Line 0. The zone is open to the south and west. Drill targets have been suggested on Line 300S and Line 2200E. If drilling results are encouraging, the present lines should be extended to the west and additional lines surveyed to the south to attempt to delineate the zone. Some of this work should be done using shorter electrode intervals to define the top of the source more accurately.

Included in this report are resistivity profiles which were surveyed on selected lines on the grid.

McPHAR GEOPHYSICS LIMITED

Philip G. Hallof,
Geophysicist

Marion A. Goudie,
Geologist

Dated: September 28, 1973

ASSESSMENT DETAILS

PROPERTY: NUP Claim Group
Snowdrift Project

MINING DIVISION: Liard

SPONSOR: Kennco Explorations (Western) Ltd.

PROVINCE: British Columbia

LOCATION: Dease Lake Area

TYPE OF SURVEY: Induced Polarisation

OPERATING MAN DAYS:	61	DATE STARTED:	July 18, 1973
EQUIVALENT 8 HR. MAN DAYS:	91	DATE FINISHED:	August 7, 1973
CONSULTING MAN DAYS:	3	NUMBER OF STATIONS:	339
DRAUGHTING MAN DAYS:	10	NUMBER OF READINGS:	2,850
TOTAL MAN DAYS:	104	MILES OF LINE SURVEYED:	19.6

CONSULTANTS:

Philip G. Hallof - 15 Barnwood Court, Don Mills, Ontario
Marion A. Goudie - 739 Military Trail, West Hill, Ontario

FIELD TECHNICIANS:

R. Mertens - 304 Holmes Avenue, Willowdale, Ontario
R. Henley - c/o CYHA Jericho, Vancouver, British Columbia
Plus 2 helpers supplied by client.

DRAUGHTSMEN:

B. Boden - 103 Petworth Crescent, Agincourt, Ontario
V. Young - 64 Highcourt Crescent, Scarborough, Ontario

McPHAR GEOPHYSICS LIMITED

Philip G. Hallof

Dated: September 28, 1973

INTERIM* STATEMENT OF COST

Kennco Explorations (Western) Ltd. - Nup Claim Group - IP Survey
Liard Mining Division, B.C. - Snowdrift Project.

Crew: R. Mertens - R. Henley

15-1/4 Operating days:

12	days	@ $265.00/day	$3,180.00
3-1/4	days	@ $250.00/day	812.50
2	days Travel		
2-3/4	days Bad Weather	5-3/4 days @ $100.00/day	575.00
1	day Standby		

Expenses

Air Fare (R. Henley)	53.00	
Truck Rental	25.00	
Meals	60.76	
Freight and Brokerage	110.81	
Supplies	17.67	
Telephone and Telegraph	4.05	
	271.29	
+ 10%	27.13	
		298.42
		$4,865.92

MCPHAR GEOPHYSICS LIMITED

Philip G. Hallof,
Geophysicist

* Note: This statement reflects at least 90% of the total cost; there may be a few minor charges not yet received by us and hence not included in the foregoing.

Dated: September 28, 1973

STATEMENT OF COSTS INCURRED

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
TO WIT:

In the Matter of an induced polarization survey done on the Nup. No. 1, 2, 3, 4 and 5 Groups of mineral claims in July and August of 1973.

I, R.W. Stevenson for Kennco Explorations (Western) Limited

of Vancouver

in the Province of British Columbia, do solemnly declare that the cost incurred on assessment work on the Nup No. 1, 2, 3, 4 and 5 Groups were as follows:

WAGES & BOARD

R.W. Stevenson	July 21;	Aug. 4,5	@ $ 65.00 + $10.00	$ 225.00
D.A. Yeager		Aug. 2, 4-6	@ $ 32.00 + $10.00	$ 168.00
J. Nuppumen	July 20-31;	Aug. 1,2,4-6	@ $ 40.00 + $10.00	$ 850.00
R.S. Lopaschuk	July 20-31;	Aug. 1, 4-6	@ $ 24.00 + $10.00	$ 544.00
D.R. MacKay	July 20-31;	Aug. 1,2,4-6	@ $ 23.00 + $10.00	$ 561.00
H.W. Fleming	July 27-31;	Aug. 1-6	@ $ 70.00 + $10.00	$ 880.00
GAS	16 gals.		@ $ 2.25/gal.	$ 36.00
SALT	6 cases		@ $ 15.30	$ 91.80
METAL FOIL	3 rolls		@ $ 35.00	$ 105.00
BOMBARDIER MUSKEG TRACTOR for transporting IP equipment and men on property including gasoline	July 20-31;	Aug. 1,2,4-6	@ $ 15.00/day	$ 255.00
McPHAR GEOPHYSICS contracting	July 20 to	Aug. 6		
12 days	(operating)		@ $265.00	$3,180.00
3½ days	(operating)		@ $250.00	$ 812.50
2 3/4 days	(standby)		@ $100.00	$ 275.00
BOARD - 2 men	July 19 to	Aug. 6	@ $ 10.00/day each	$ 380.00
				$8,363.30

Amount spent on Nup No.	1 Group	$1,262.00
	2	$1,352.00
	3	$2,480.00
	4	$2,318.00
	5	$ 451.30
		$8,363.30

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 11th day of October, 1973, A.D.

R. W. Stevenson

Joan Paul Sub - mining Recorder

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

CERTIFICATE

I, Philip George Hallof, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysicist residing at 15 Barnwood Court, Don Mills, Ontario.

2. I am a graduate of the Massachusetts Institute of Technology with a B.Sc. Degree (1952) in Geology and Geophysics, and a Ph. D. Degree (1957) in Geophysics.

3. I am a member of the Society of Exploration Geophysicists and the European Association of the Exploration Geophysicists.

4. I am a Professional Geophysicist, registered in the Province of Ontario, the Province of British Columbia and the State of Arizona.

5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Kennco Explorations (Western) Ltd. or any affiliate.

6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Toronto

This 28 day of September 1973

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

Philip G. Hallof, Ph.D.

Expiry Date: February 28, 1974

CERTIFICATE

I, Marion A. Goudie, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geologist residing at 739 Military Trail, West Hill, Ontario.

2. I am a graduate of the University of Western Ontario with a B.Sc. Degree (1950) in Honours Geology.

3. I am a member of the Geological Society of America.

4. I have been practising my profession for 23 years.

5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Kennco Explorations (Western) Ltd. or any affiliate.

6. The statements made in this report are based on a study of published geological literautre and unpublised private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Toronto

This 28 day of September 1973

Marion A. Goudie

Marion A. Goudie, B.Sc.

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.

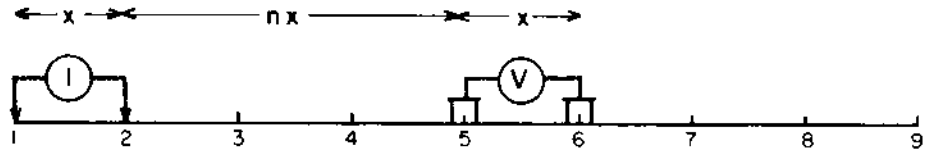
In some situations spurious noise, either man made or natural, will render it impossible to obtain a reading. The symbol "N" on the data plots indicates a station at which it is too noisey to record a reading. If a reading can be obtained, but for reasons of noise there is some doubt as to its accuracy,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

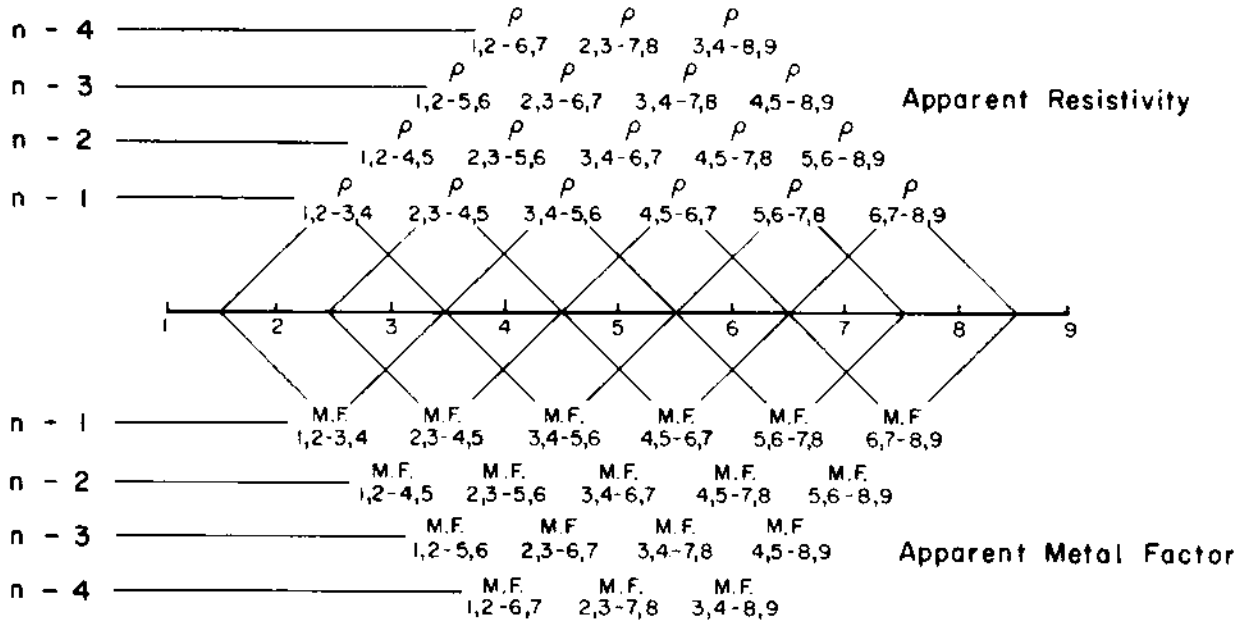
The symbol "NR" indicates that for some reason the operator did not attempt to record a reading although normal survey procedures would suggest that one was required. This may be due to inaccessible topography or other similar reasons. Any symbol other than those discussed above is unique to a particular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

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



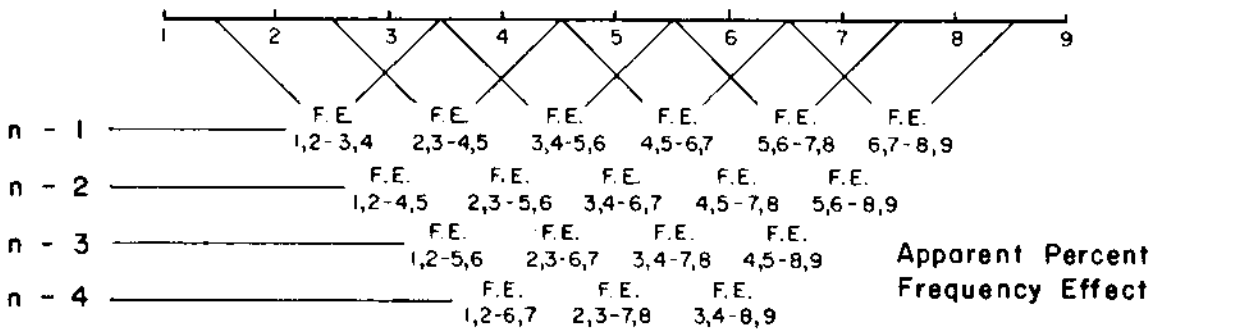
Stations on line

x = Electrode spread length
n = Electrode separation



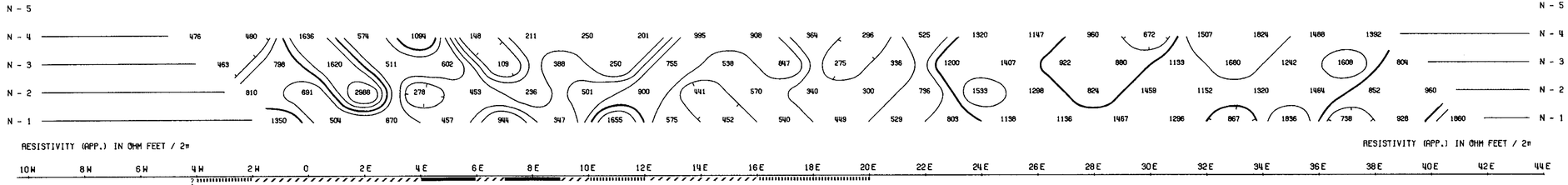
Apparent Resistivity

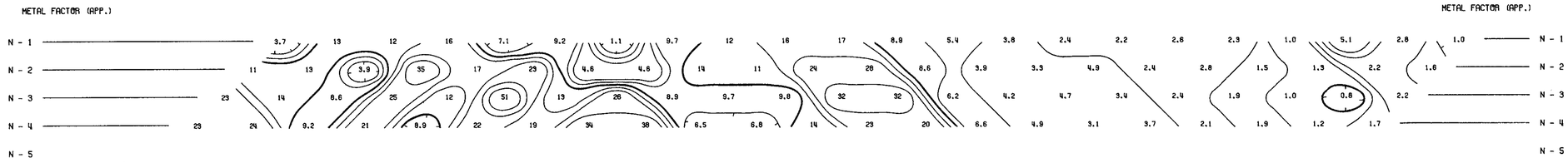
Apparent Metal Factor

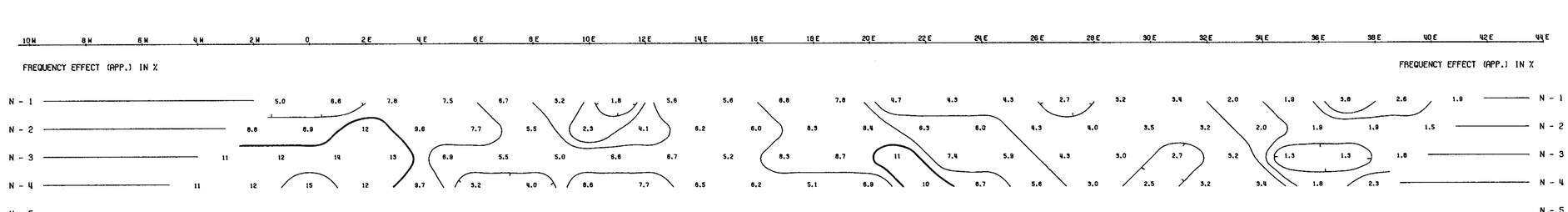


Apparent Percent Frequency Effect

Fig. A







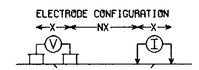
DWG. NO.- I.P.-6092-12

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 1100S

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: AUG 1973

APPROVED:

DATE: 9/27/73

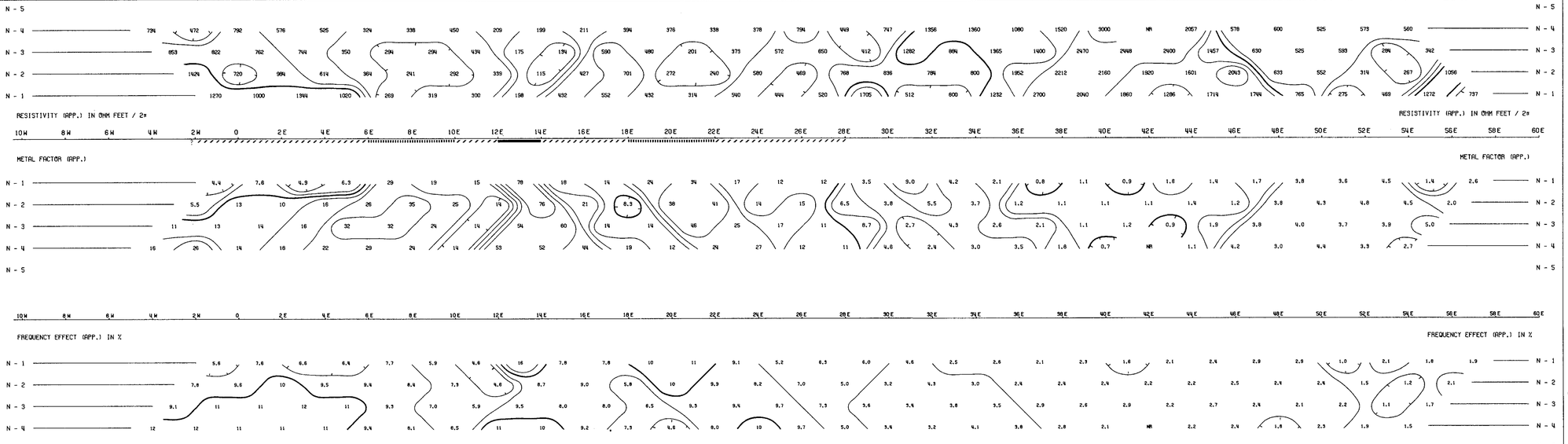
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



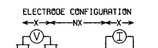
DWG. NO.- I.P.-6092-II

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 300S

ELECTRODE CONFIGURATION



PLOTTING POINT → X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: AUG 1973

APPROVED:

DATE:

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

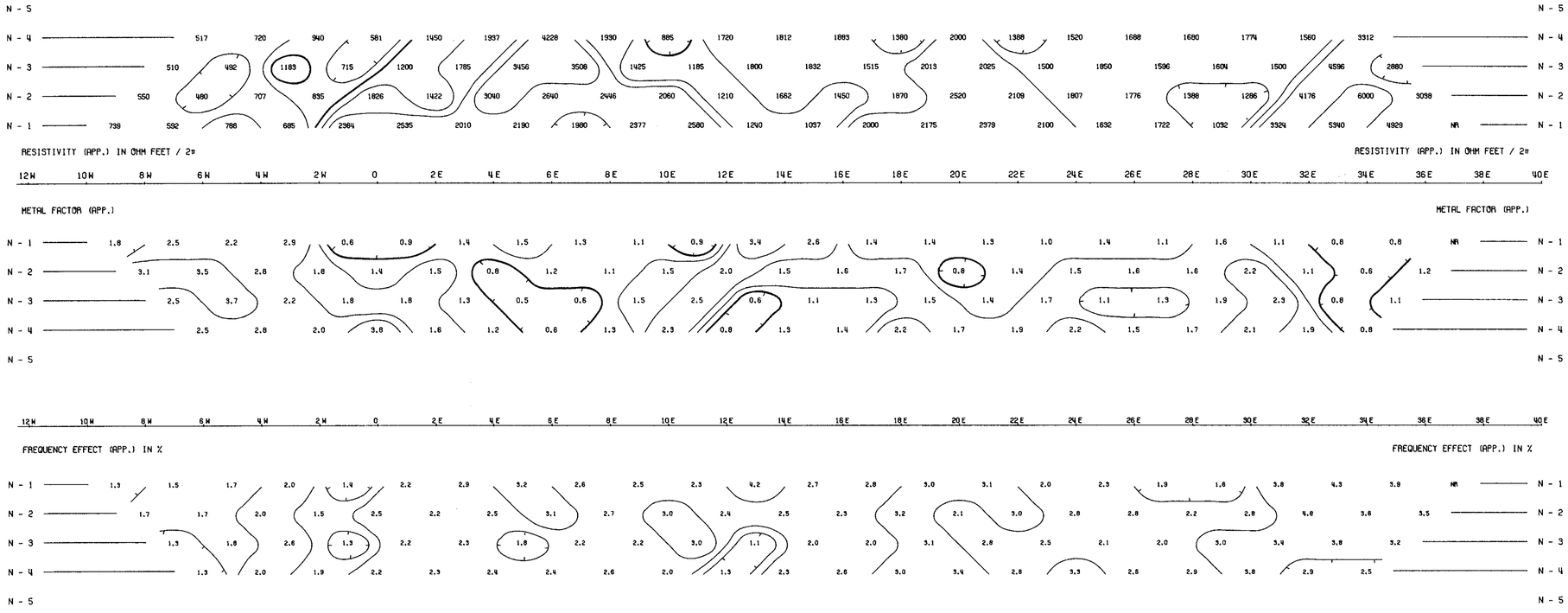
4644

Expiry Date February 28, 1974

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



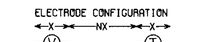
DWG. NO.- I.P.- 6092-8

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 800N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

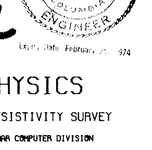
FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED

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

DATE: 4/29/74



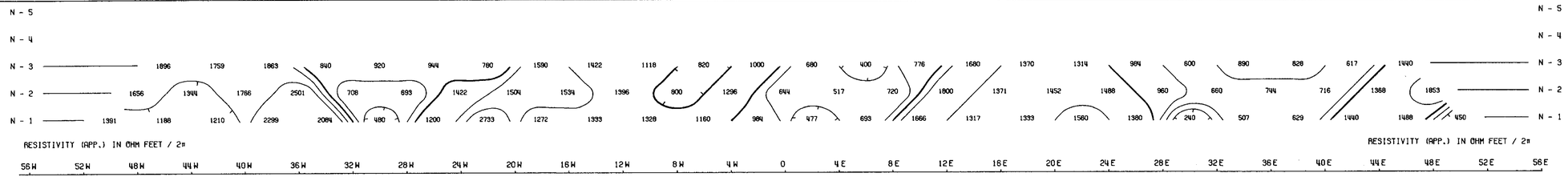
4644

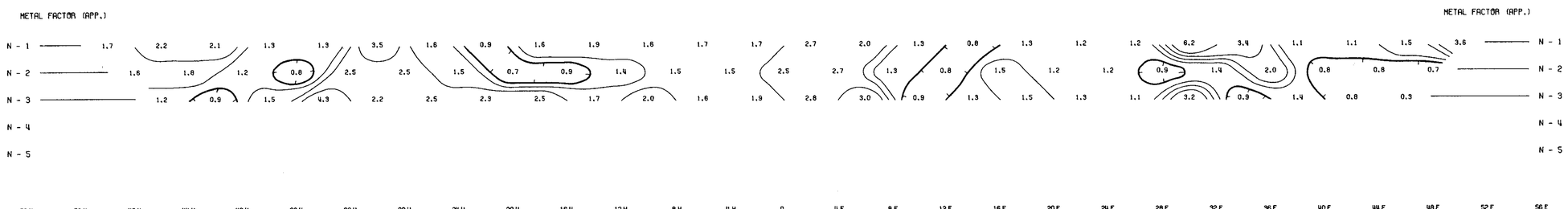
Expiry Date: February 28, 1974

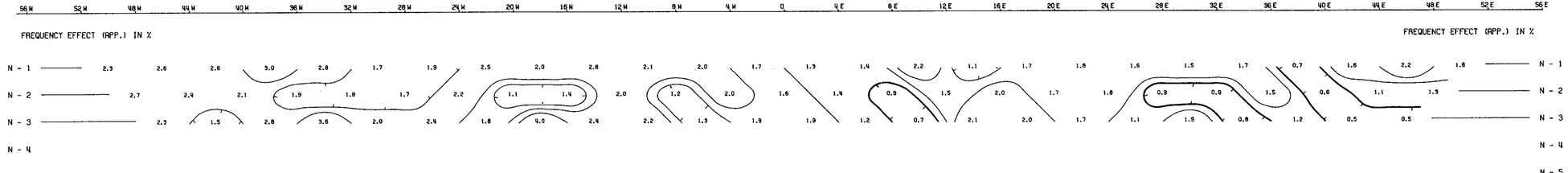
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION







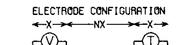
OWG. NO.- I.P.- 6092-2

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 9600N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ——————

PROBABLE ||||||||||||

POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED:

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

DATE:

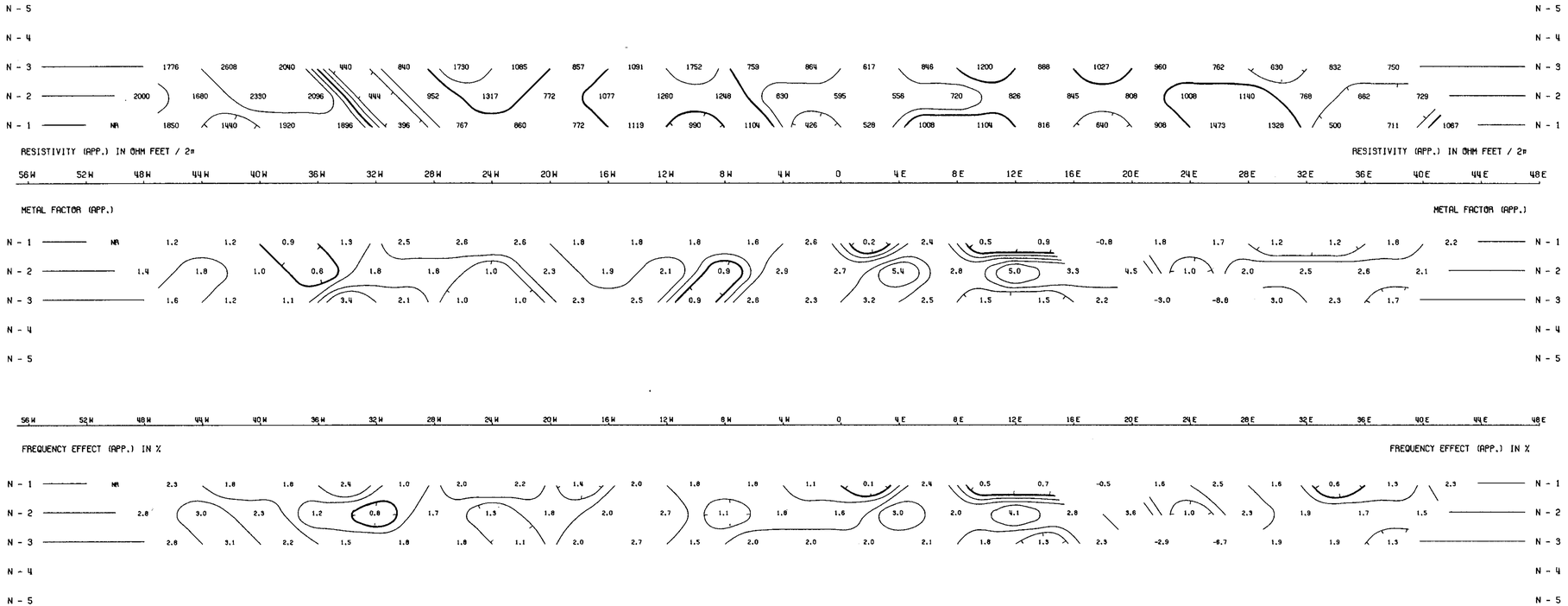
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA 9/28/73

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



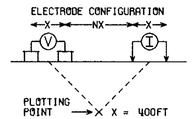
DWG. NO.- I.P.-6092-3

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 8000N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ——————

PROBABLE ||||||||||||

POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED:

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

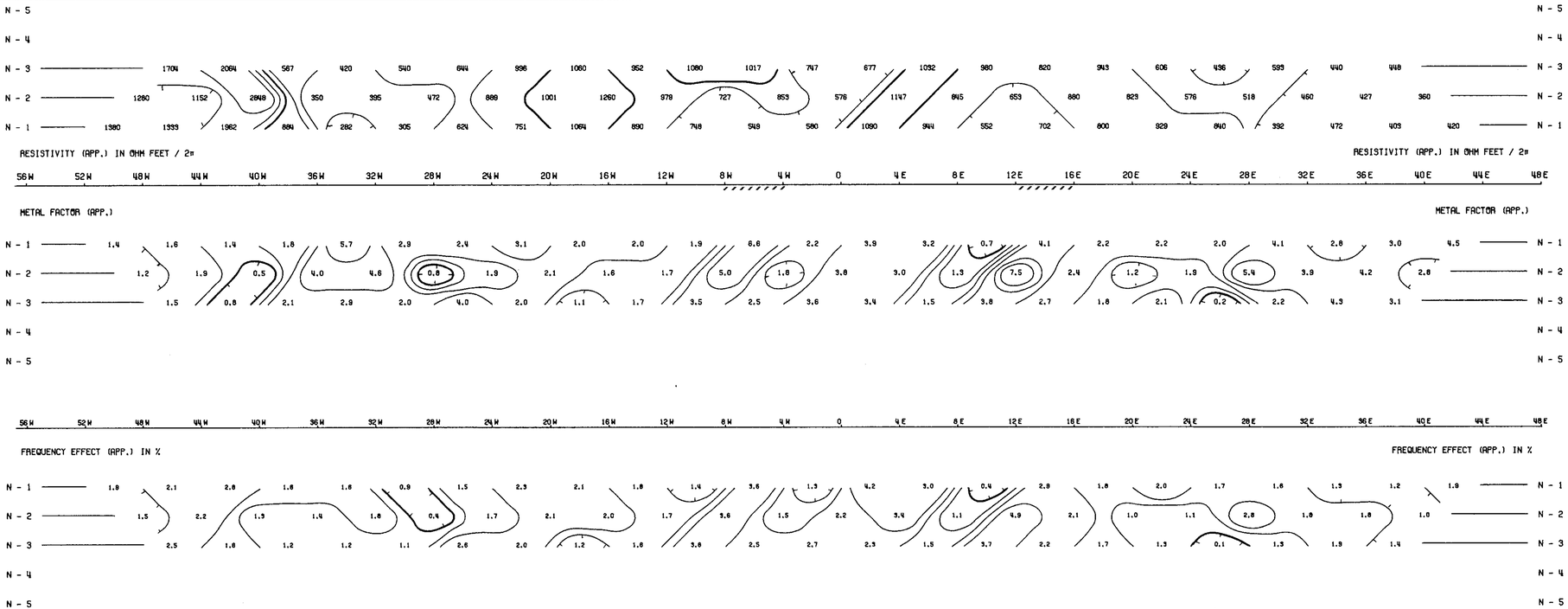
DATE: 9/28/73

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



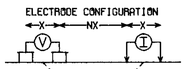
DWG. NO.- I.P.- 6092-5

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 4800N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED:

DATE:

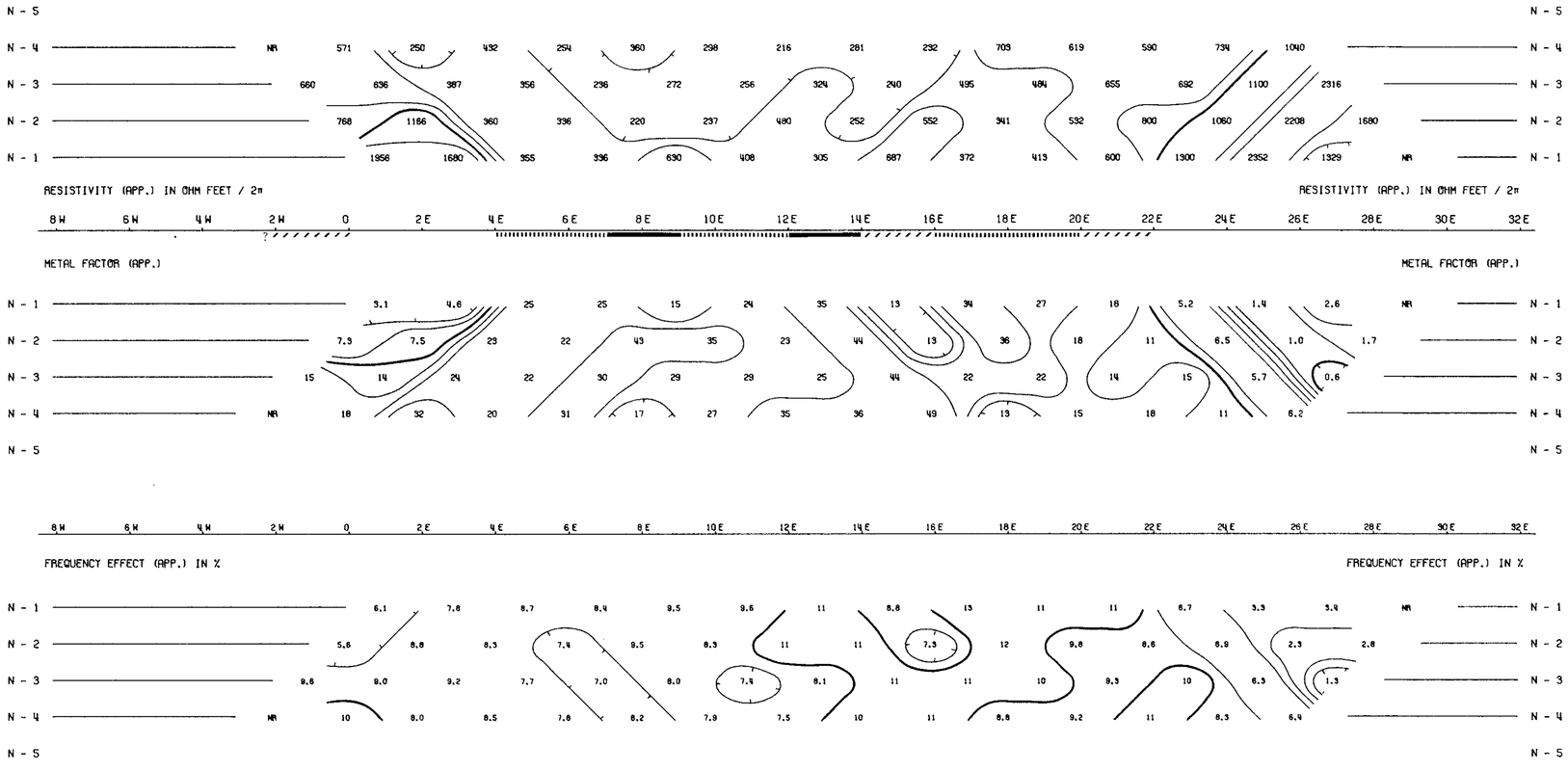
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



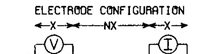
DWG. NO.- I.P.- 6092-13

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 1900S

ELECTRODE CONFIGURATION



PLOTTING POINT → X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: AUG 1973

APPROVED:

DATE: 9/10/73

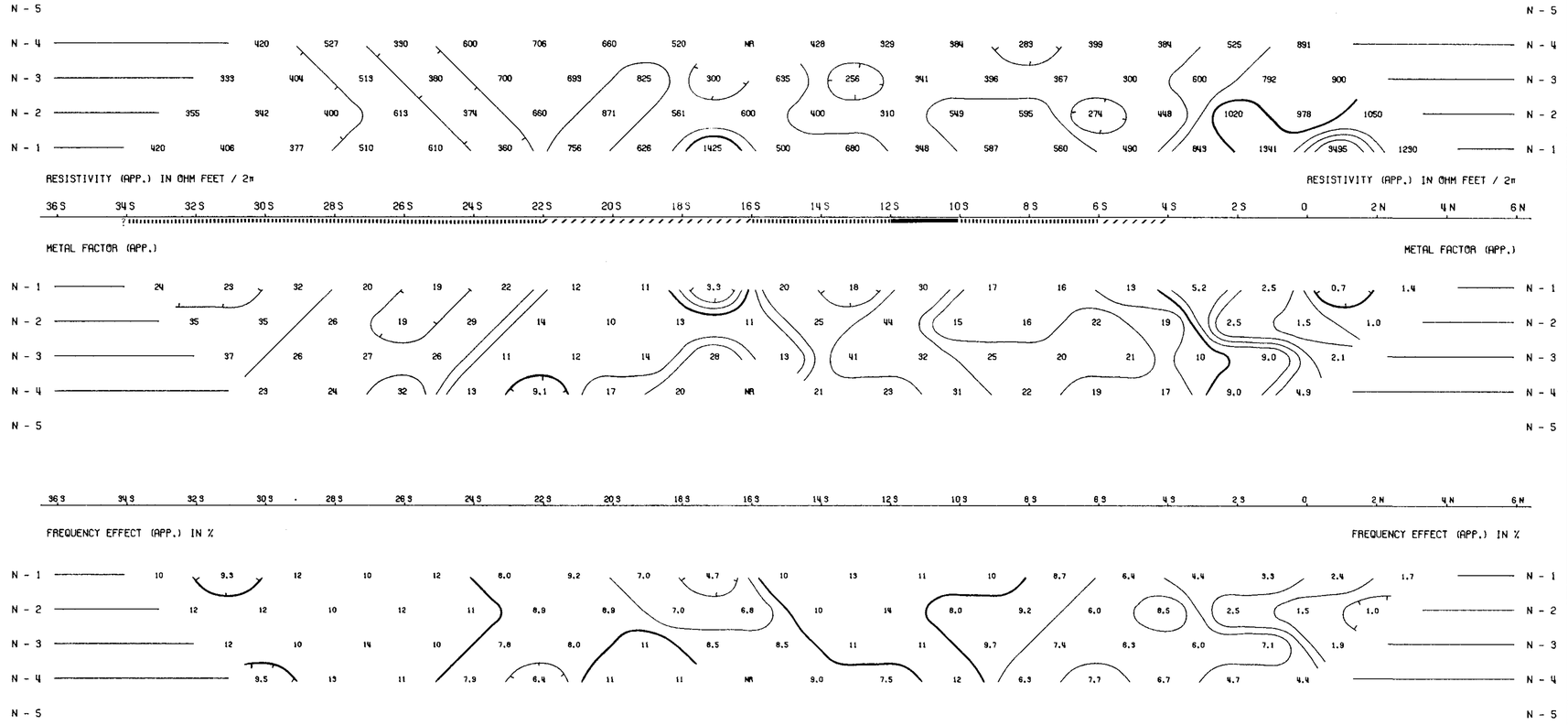
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



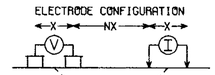
DWG. NO.- I.P.- 6092-14

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 2200E

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: AUG 1973

APPROVED:

DATE: 9/28/73

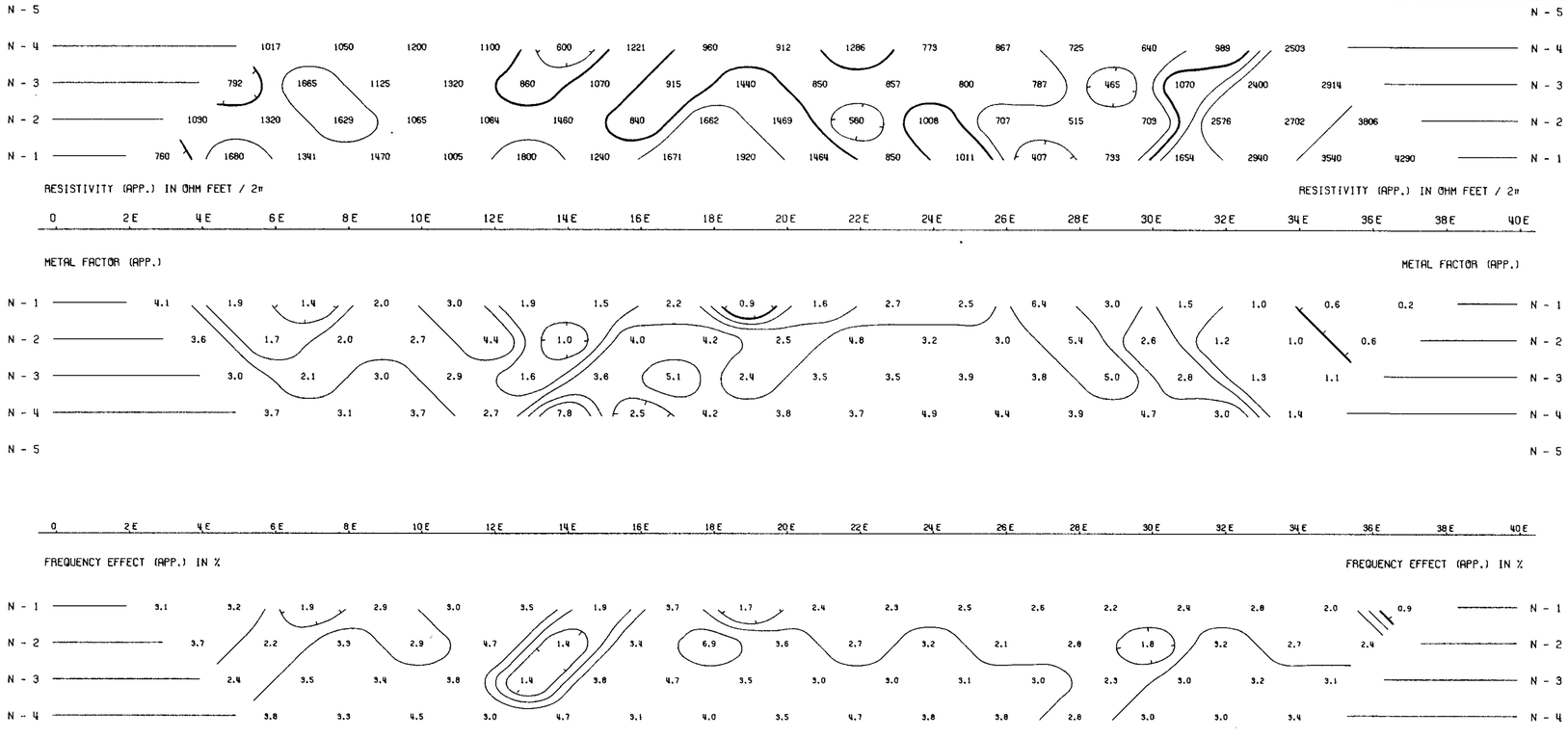
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



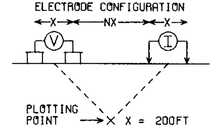
OWG. NO.- I.P.- 6092-10

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 0

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: AUG 1973

APPROVED:

DATE: 9/28/73

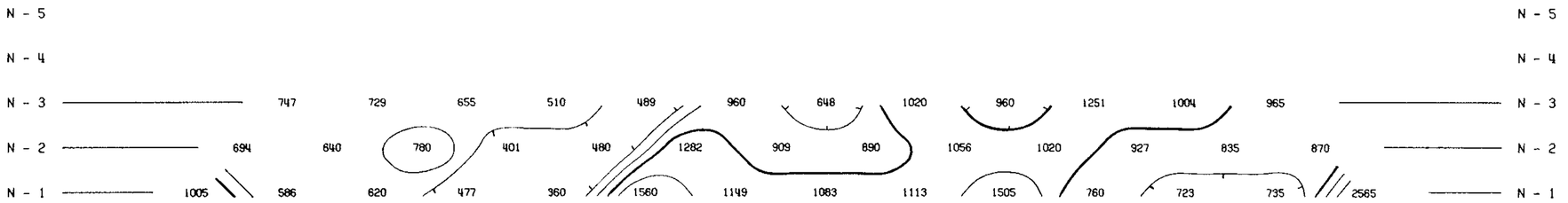
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

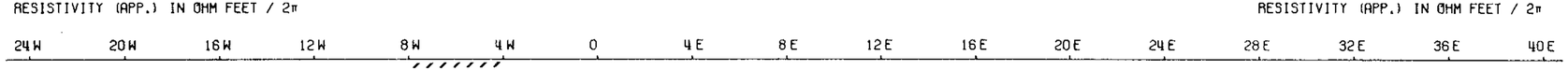
4644

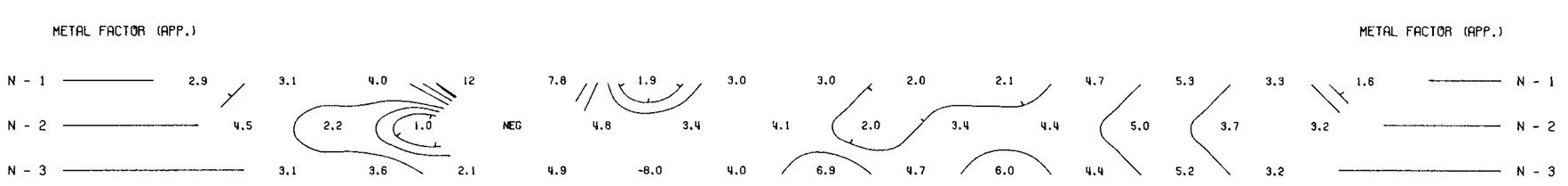
McPHAR GEOPHYSICS

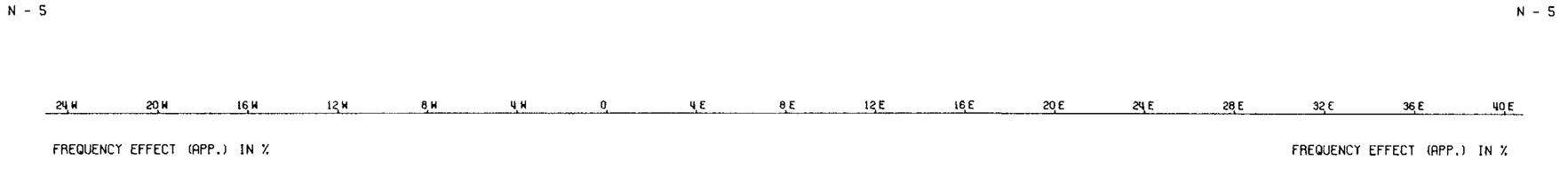
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION









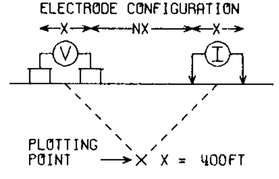
DWG. NO.- I.P.- 6092 - 9

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- Q

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ——————

PROBABLE ||||||||||||||

POSSIBLE / / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED: P. Y. Dalby

DATE: 9/28/73

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

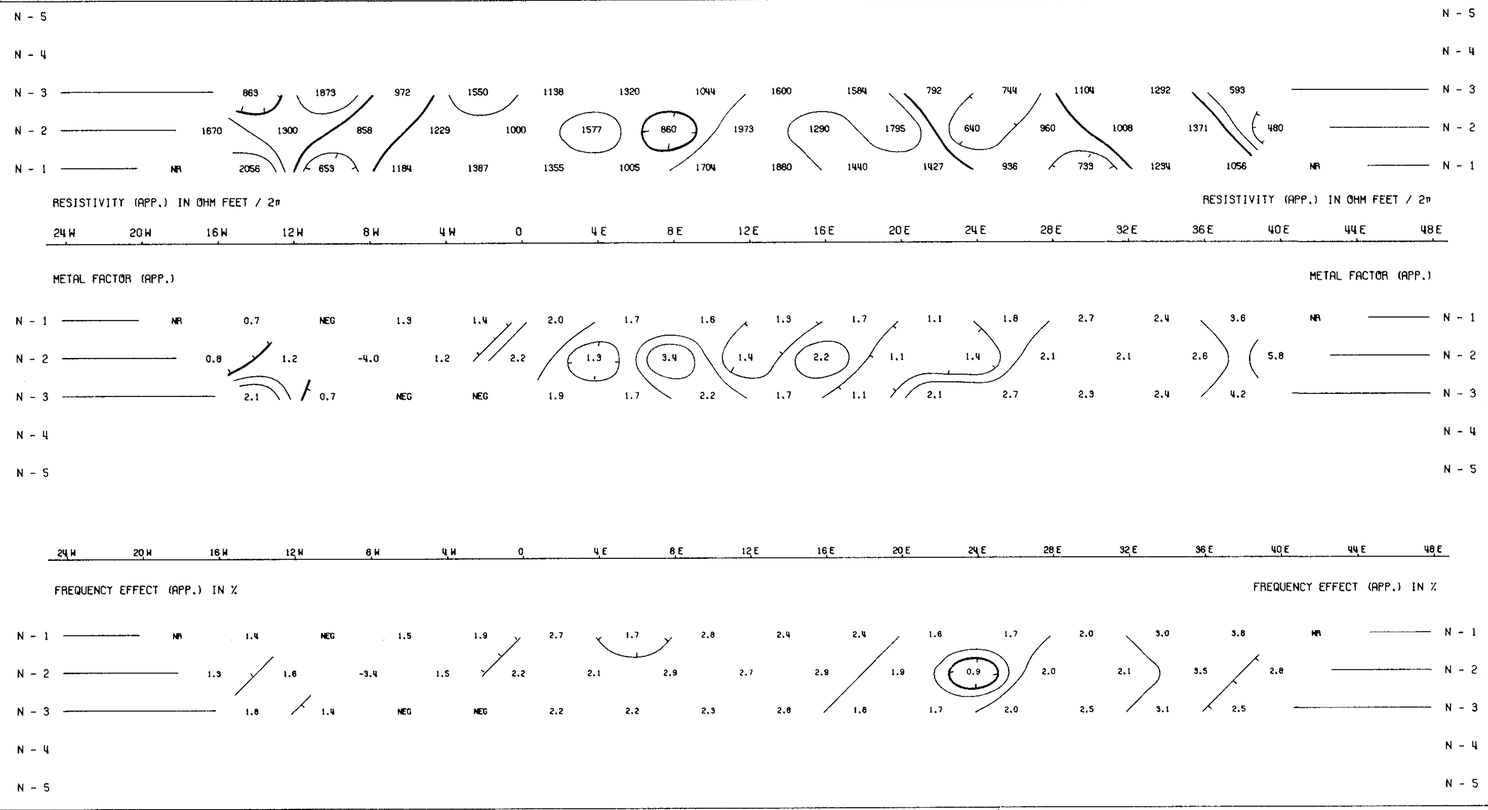
4644

PROFESSIONAL ENGINEER

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



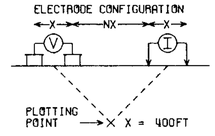
OWG. NO.- I.P.- 6092-6

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 3200N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED:

DATE: 9/28/73

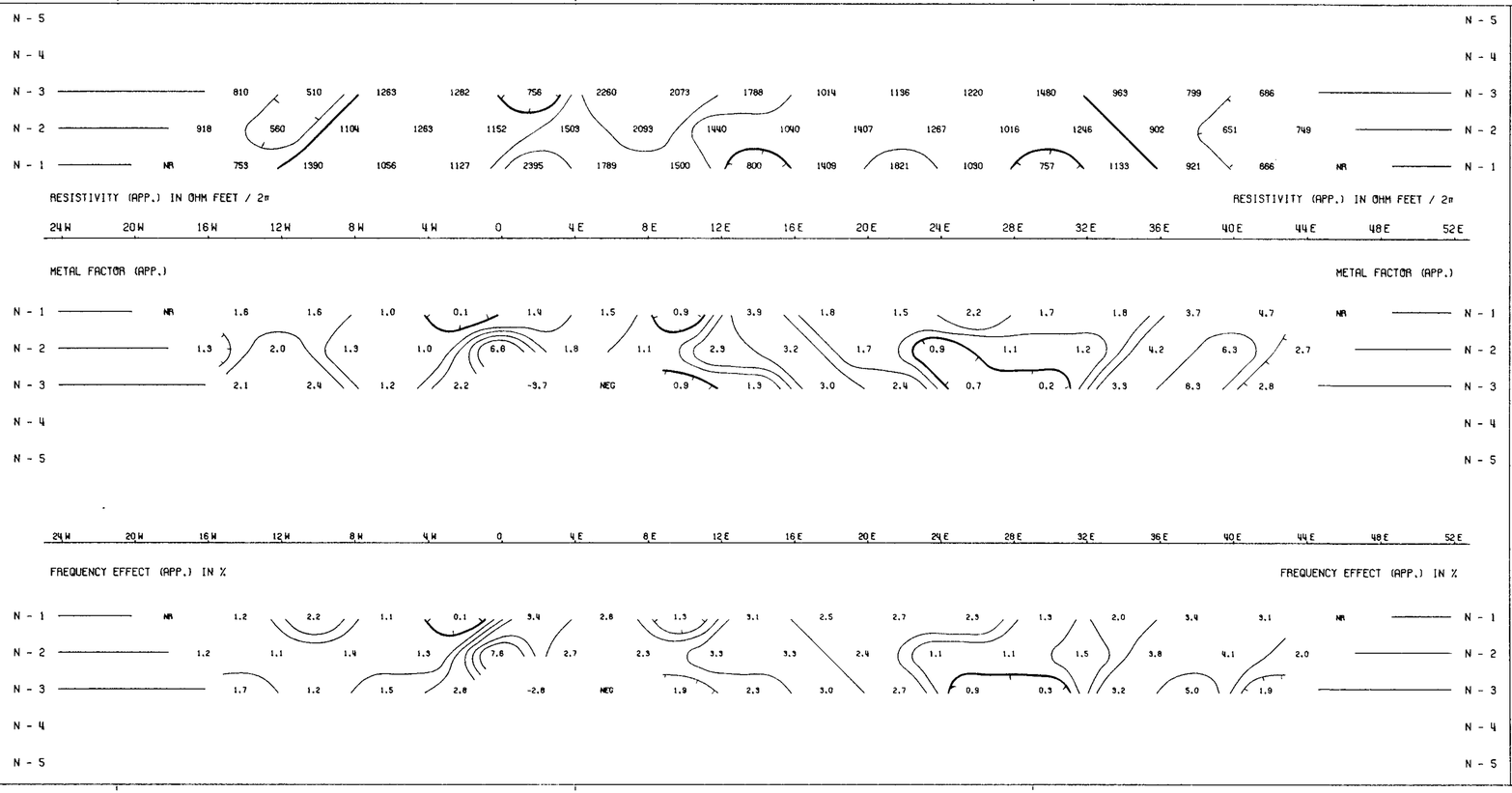
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



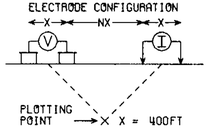
DWG. NO.- I.P.-6092-7

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 1600N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: [illegible] 1973

APPROVED:

DATE: 9/28/73

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

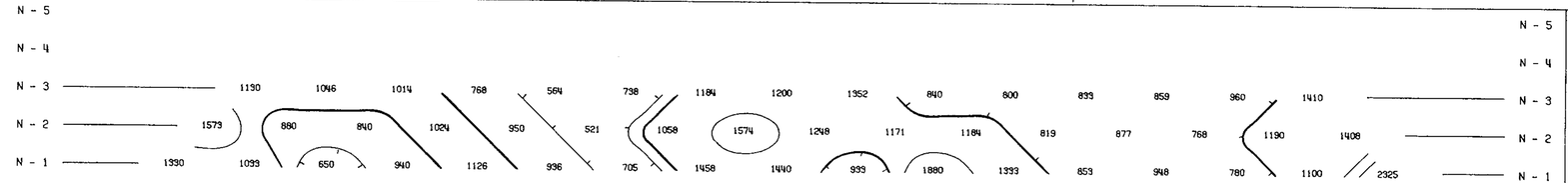
4644

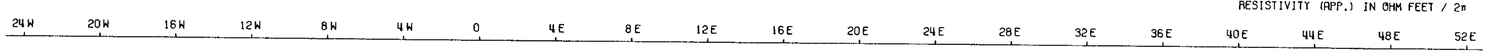
Ex ... February 25, 1974

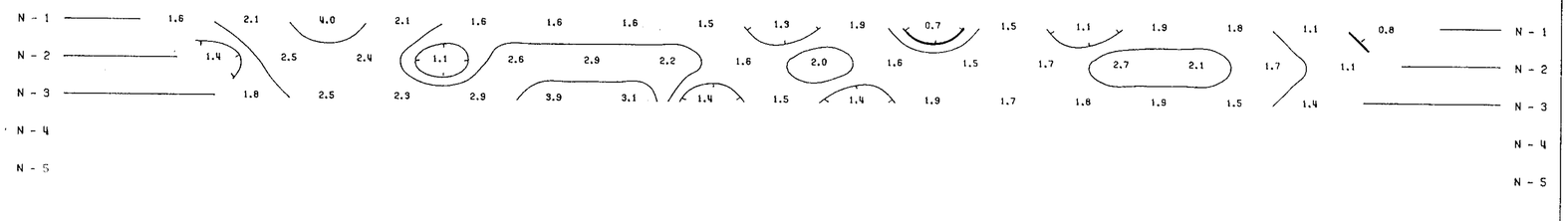
McPHAR GEOPHYSICS

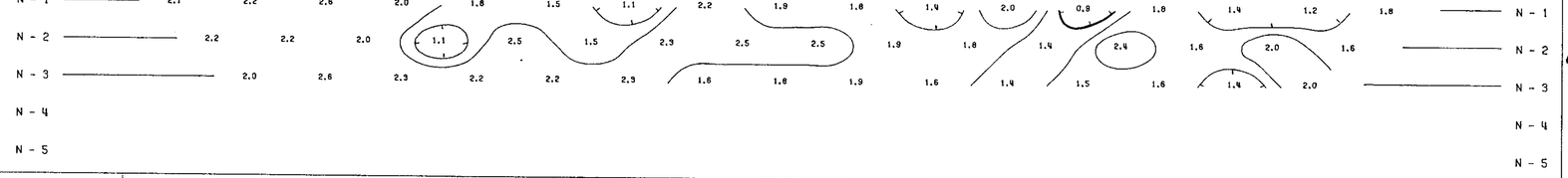
INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION









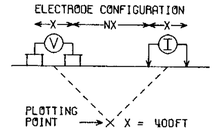
DWG. NO.- I.P.- 6092-1

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 11200N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED:

DATE: 9/28/73

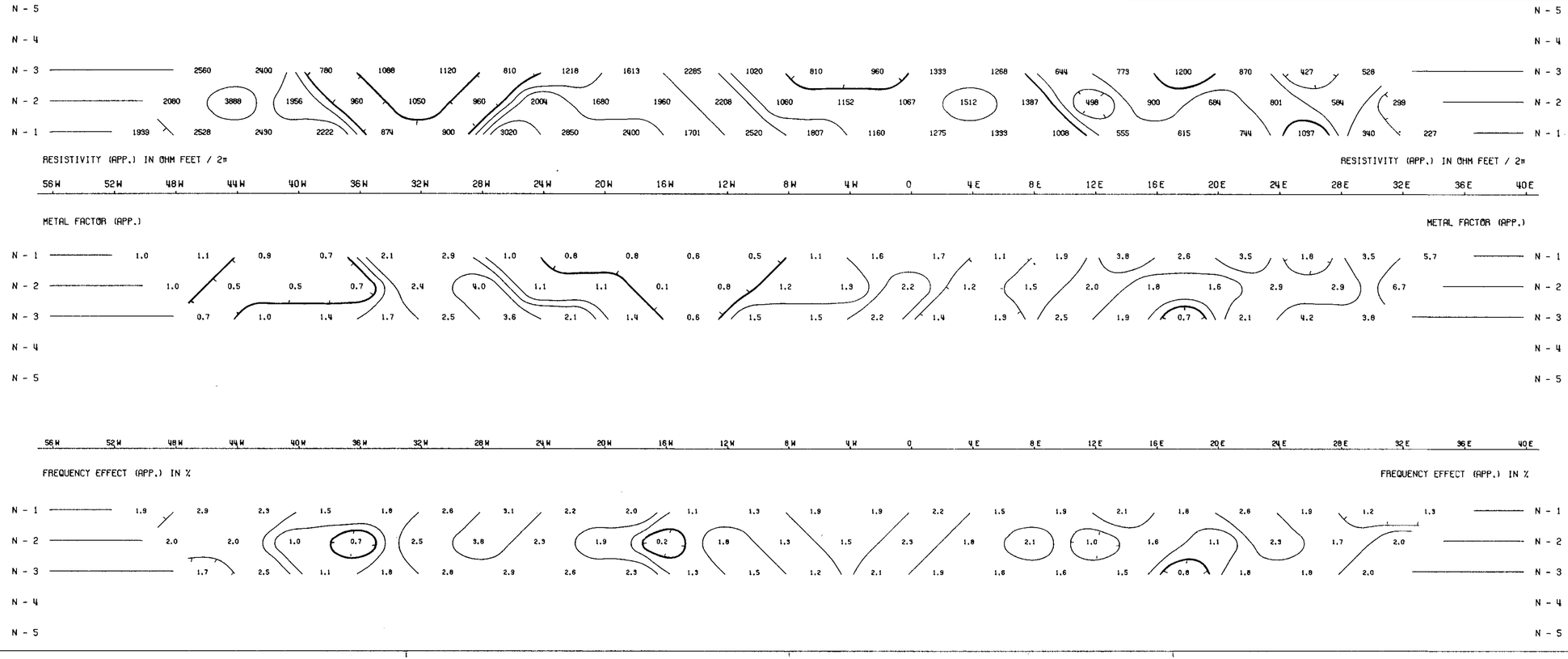
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

4644

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



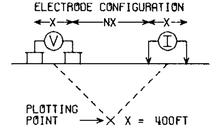
DWG. NO.- I.P.- 6092-4

KENNCO EXPLORATIONS (WESTERN) LTD.

NUP CLAIM GROUP, SNOWDRIFT PROJECT, DEASE LAKE AREA, LIARD M.D., B.C.

LINE NO.- 6400N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUL 1973

APPROVED: Dayne Peters

DATE: 9/28/73

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

4644

McPHAR GEOPHYSICS

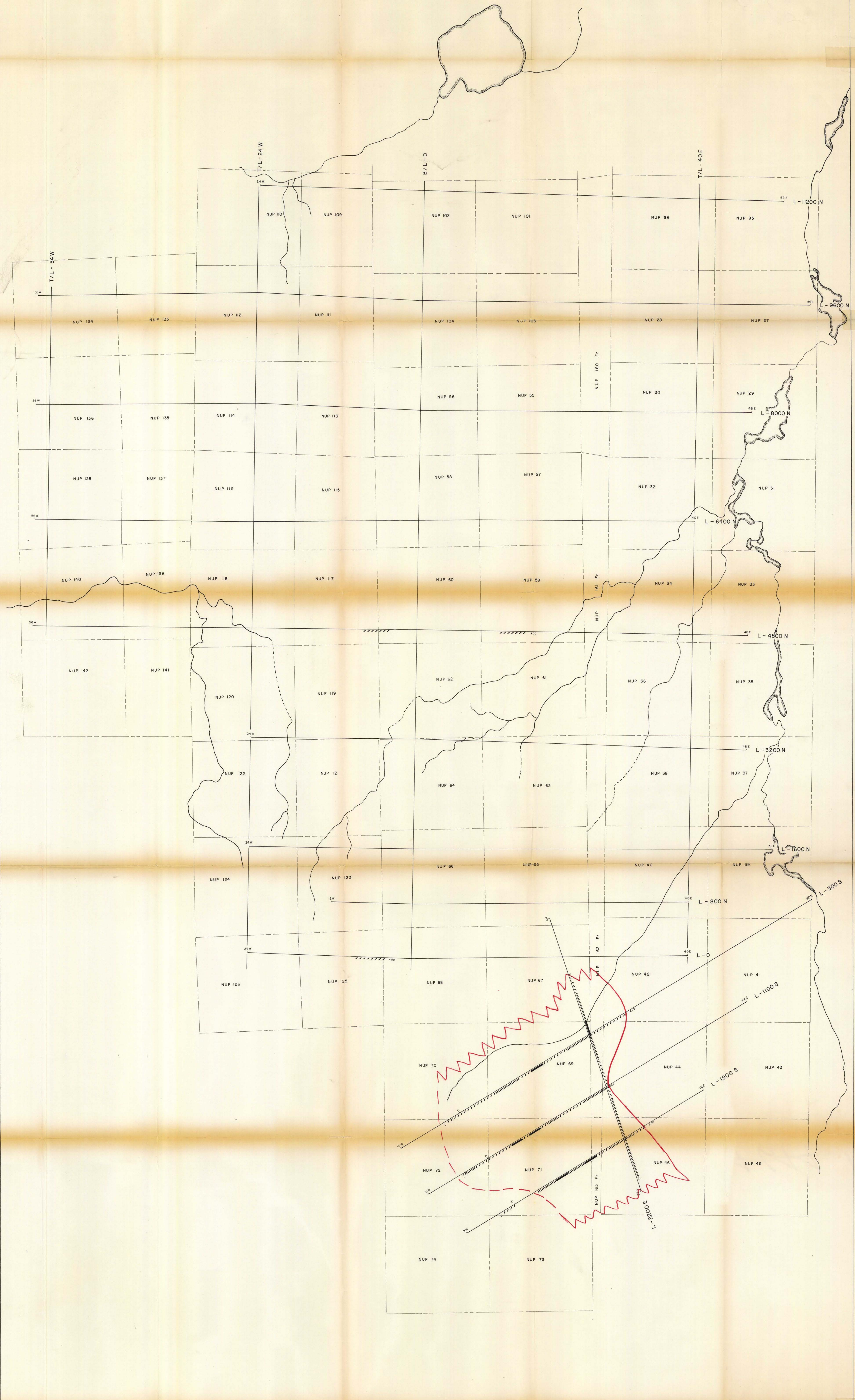
INDUCED POLARIZATION AND RESISTIVITY SURVEY

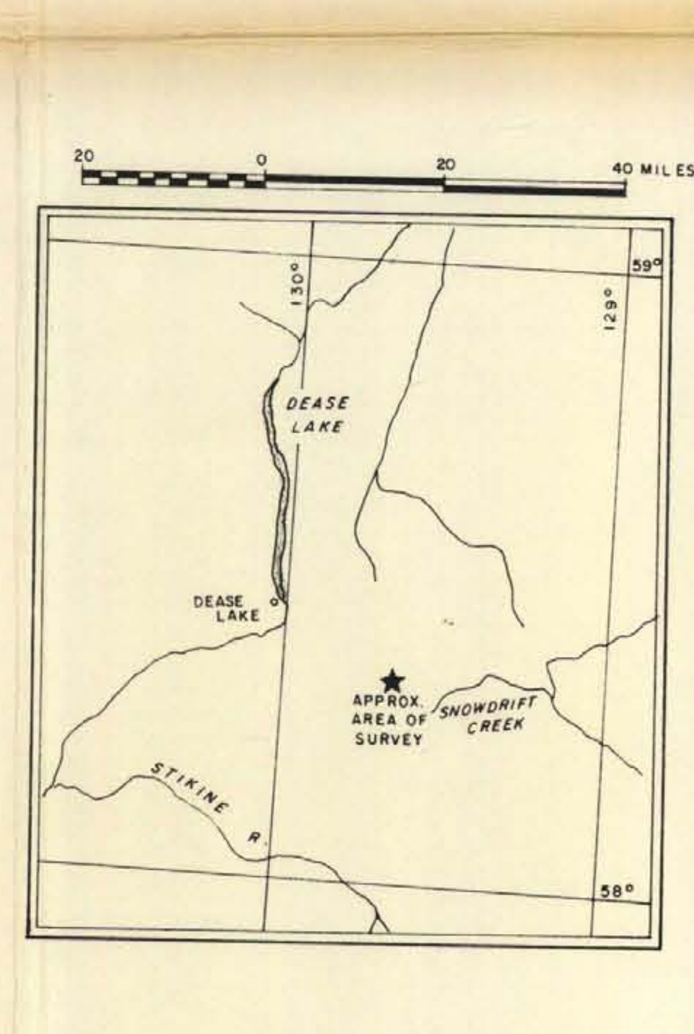
NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP





NOTE - TO ACCOMPANY GEOPHYSICAL REPORT FOR KENNCO EXPLORATIONS (WESTERN) LTD., NUP CLAIM GROUP, DEASE LAKE AREA, LIARD MINING DIVISION, BRITISH COLUMBIA, BY P. G. HALLOF, P. ENG., AND M. A. GOUDIE, GEOLOGIST.

DATED: SEPTEMBER 28, 1973

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

Number at the end of anomaly indicates spread used

KENNCO EXPLORATIONS (WESTERN) LIMITED

NUP CLAIM GROUP, SNOWDRIFT PROJECT

DEASE LAKE AREA, LIARD M.D., B.C.

SCALE

ONE INCH EQUALS FOUR HUNDRED FEET

OUTLINE OF ANOMALOUS I.P. ZONES.

4644 M1

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — APPROVED: PHILIP G. HALLOF — 9/28/73

Expiry Date: February 25, 1974

DWG. I.P.P. - 4913