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REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE CHELASLIE PROPERTY, PROJECT 1005, (W.T. CLAIMS), BURNS LAKE AREA OMINECA MINING DIVISION, B.C. FOR NORANDA EXPLORATION CO. LTD. (N.P.L.)

BY

DAVID K. FOUNTAIN, P. ENG.

NAME AND LOCATION OF PROPERTY

CHELASLIE PROPERTY, PROJECT 1005

(W.T. CLAIMS), BURNS LAKE AREA, B.C.

OMINECA MINING DIVISION, B.C. - 53°28'N - 125°32'W

DATE STARTED: OCTOBER 4, 1972

DATE FINISHED: OCTOBER 10, 1972

TABLE OF CONTENTS

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.

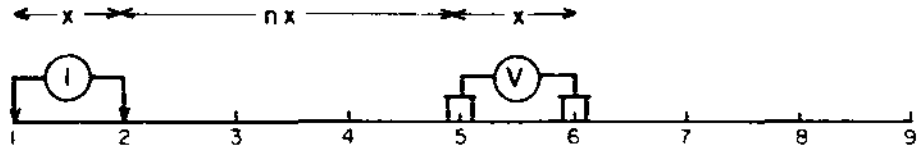
In some situations spurious noise, either man made or natural, will render it impossible to obtain a reading. The symbol "N" on the data plots indicates a station at which it is too noisey to record a reading. If a reading can be obtained, but for reasons of noise there is some doubt as to its accuracy,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

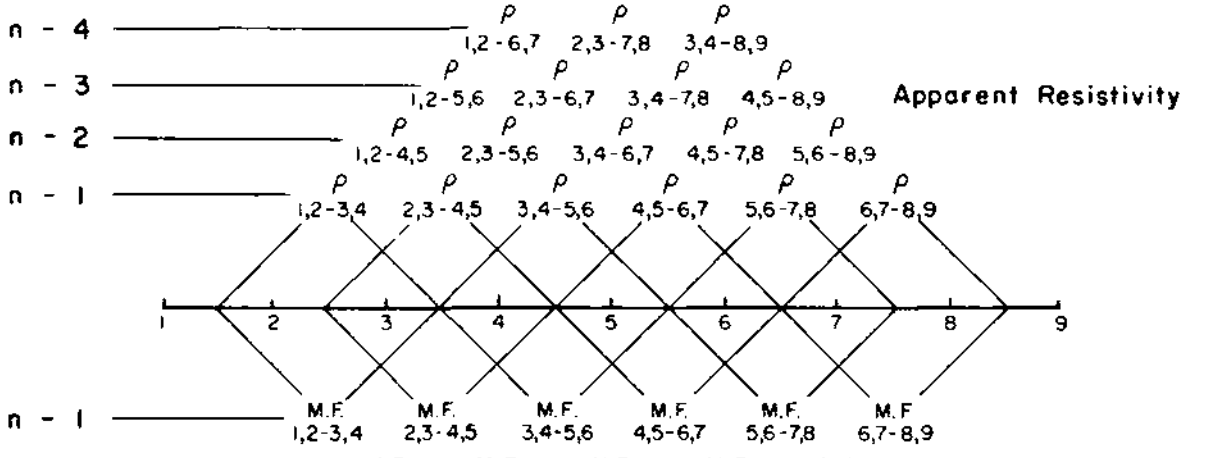
The symbol "NR" indicates that for some reason the operator did not attempt to record a reading although normal survey procedures would suggest that one was required. This may be due to inaccessible topography or other similar reasons. Any symbol other than those discussed above is unique to a particular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

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



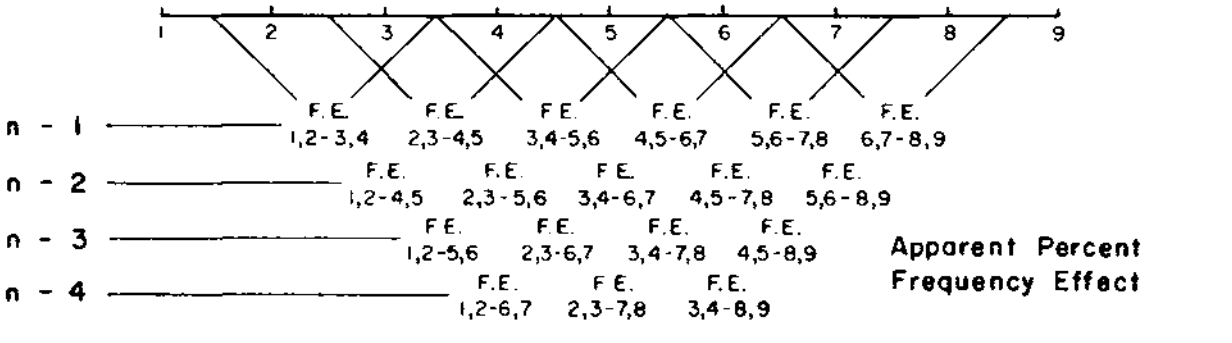
Stations on line

x = Electrode spread length
n = Electrode separation



Apparent Resistivity

Apparent Metal Factor



Apparent Percent Frequency Effect

Fig. A

McPHAR GEOPHYSICS LIMITED

REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE CHELASLIE PROPERTY, PROJECT 1005 (W.T. CLAIMS) BURNS LAKE AREA OMINECA MINING DIVISION, B.C. FOR NORANDA EXPLORATION COMPANY LIMITED (N.P.L.)

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1. INTRODUCTION

During October 1972, an Induced Polarisation and Resistivity survey was carried out on the Chelaslie Property, Project 1005, of Noranda Exploration Company, Limited in the Burns Lake Area, Omineca Mining Division, British Columbia. The property is located approximately 58 miles south-southeast of Burns Lake, B.C., and approximately two and one half miles north of the Chelaslie Arm at approximately 53°28' N latitude and 125°32' W longitude.

Access to the property is by float plane or helicopter, and the local topography is rolling hills with some steep slopes. Relief on the property is between 3,300 feet and 4,000 feet.

The W.T. claim group was staked in July of 1970 on the basis of encouraging reconnaissance geochemical values. Additional claims were staked and line cutting, magnetometer surveying, IP surveying and a soil geochemical program were carried out in 1971. Work conducted during the 1972 field season included detailed geologic mapping, and the IP survey work discussed in this report.

Outcrop information is limited on the Chelaslie Property. Intrusive dioritic rocks outcrop to the west and east of Dog Lake as well as in the area immediately southeast of the lake. In the sourthern portion of the claim group, meta-sediments are reported and sporadic outcropping of porphyry latites are noted occurring mainly in the central and southern portions of the grid. Andesite and aplite dykes have also been mapped within the claim area.

The purpose of the Induced Polarization and Resistivity survey was to outline any zones of metallic sulphide mineralization which may be of economic value.

A McPhar variable frequency IP unit operating at 0.3 Hz and 5.0 Hz was employed for the survey. The dipole-dipole electrode array was used with 400' dipoles, and readings were taken at two dipole separations, (n = 1 and 2).

The geophysical survey work discussed in this report was carried out on the following claims of the Chelaslie Property.

Claim No.	Record Number	Mining Division
WT 3	89552	Omineca
WT 9	89558	Omineca
WT 10	89559	Omineca
WT 11	89560	Omineca
WT 12	89561	Omineca
WT 13	99332	Omineca
WT 14	99333	Omineca
WT 15	99334	Omineca
WT 28	99604	Omineca
WT 29	99605	Omineca
WT 30	99606	Omineca
WT 2 Fr	89563	Omineca
WT 3 Fr	89564	Omineca
WT 4 Fr	89565	Omineca
WT 5 Fr	99619	Omineca
WT 10 Fr	99624	Omineca
WT 11 Fr	99625	Omineca

The claims are registered in the name of Noranda Exploration Company, Limited (No Personal Liability).

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.
11300N	400 feet	IP 6040-1
10400N	400 feet	IP 6040-2
9200N	400 feet	IP 6040-3
8400N	400 feet	IP 6040-4
8000N	400 feet	IP 6040-5
7600N	400 feet	IP 6040-6
7200N	400 feet	IP 6040-7
6800N	400 feet	IP 6040-8
6000N	400 feet	IP 6040-9

Also enclosed with this report is Dwg. I.P.P. 3566, a plan map of the Chelaslie 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.

The location of survey lines relative to claim boundaries, the name and relative positions of the claims and the geologic data indicated on the maps and discussed in the report, are based upon information supplied by Noranda Exploration Company, Limited.

3. DISCUSSION OF RESULTS

Nine lines on the Chelaslie Property were surveyed with the Induced Polarization method. The survey was conducted on a reconnaissance basis using 400 foot dipoles and reading only two dipole separations (n = 1 and 2).

The results of the IP survey are characterized by relatively high values of apparent resistivity and correspondingly low background values of apparent Metal Factor. No significantly large zones of distinctly anomalous IP response were indicated although areas of possibly anomalous apparent Frequency Effect response have been outlined. Along the western portion of the grid, an area of weakly anomalous IP response is outlined. The zone is open to the west and has its greatest lateral extent within the grid area on Line 7600N, Line 8000N, and Line 8400N.

Anomalous response of this magnitude would suggest a broad zone of weakly disseminated metallic mineralization. Stronger narrow responses within this broad zone are indicated centered at depth beneath 68E on Line 6000N and near surface between 72E and 76E on Line 8400N.

More complete IP survey coverage, reading four dipole separations (n = 1, 2, 3, 4) and extending the survey coverage to the west would be required to properly evaluate the anomalies.

4. SUMMARY AND CONCLUSIONS

The broad zone of weakly anomalous IP response outlined on the western portion of the grid would suggest weakly disseminated metallic mineralization. More complete IP survey coverage, reading four dipole separations (n = 1, 2, 3, 4) and extending the effective survey coverage to the west would be required to properly evaluate and delimit the anomalies.

Further work in the form of diamond drilling or trenching would only be warranted if there were supporting geological and or geochemical information and if weakly disseminated mineralization could be of economic significance.

McPHAR GEOPHYSICS LIMITED

David K. Fountain, P. Eng.
Geophysicist

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

Dated: December 15, 1972

Expiry Date: April 25, 1973

ASSESSMENT DETAILS

PROPERTY: Chelaslie Property — MINING DIVISION: Omineca

SPONSOR: Noranda Exploration Co. Ltd. — PROVINCE: British Columbia

LOCATION: Burns Lake Area

TYPE OF SURVEY: Induced Polarization

OPERATING MAN DAYS:	14	DATE STARTED:	October 4, 1972
EQUIVALENT 8 HR. MAN DAYS:	21	DATE FINISHED:	October 19, 1972
CONSULTING MAN DAYS:	2	NUMBER OF STATIONS:	103
DRAUGHTING MAN DAYS:	3	NUMBER OF READINGS:	460
TOTAL MAN DAYS:	26	MILES OF LINE SURVEYED:	7.12

CONSULTANTS:

David K. Fountain, 62 Patina Drive, Willowdale, Ontario.

FIELD TECHNICIANS:

R. Mertens, 304 Holmes Avenue, Willowdale, Ontario.
J. Wowchuck, 4238 Winifred Street, Burnaby, B.C.
Plus Extra Labour:
J. Remillard, 288 Gildford Street, St. James Assinaboyn, Winnipeg, Manitoba
R. Bing, 174 Seymour Street, Kamloops, B.C.

DRAUGHTSMEN:

B. Boden, 58 Glencrest Blvd. Toronto 16, Ontario.
R. Koenig, 508 Cosburn Avenue, Toronto 6, Ontario.
F. Hurst, 230 Woburn Avenue, Toronto 12, Ontario.

McPHAR GEOPHYSICS LIMITED

David K. Fountain, P. Eng.
Geophysicist

PROFESSIONAL ENGINEER OF BRITISH COLUMBIA D. K. FOUNTAIN

Dated: December 15, 1972

Survey Date: April 25, 1973

STATEMENT OF COST

Noranda Exploration Co. Ltd.
Chelaslie Claim

Crew: R. Mertens - J. Wowchuck

3½ days Operating		@ $240.00/day	$ 840.00
1½ days Travel 1 day Bad Weather	2½ days	@ $100.00/day	250.00

Expenses (prorated on elapsed days @ 6/58)

Air Fares	19.96	
Excess Baggage	4.46	
Taxis	1.33	
Vehicle Expense	.71	
Meals and Accommodation	27.41	
Freight and Brokerage	43.02	
Supplies	2.55	
Telephone and Telegraph	4.97	
	104.41	
+10%	10.44	
		114.85

Extra Labour (prorated on elapsed days @ 6/58)

	217.24	
+20%	43.45	
		260.69
		$1,465.54

McPHAR GEOPHYSICS LIMITED

David K. Fountain, P. Eng.
Geophysicist

PROVINCE OF BRITISH COLUMBIA ENGINEER

Dated: December 15, 1972

CERTIFICATE

I, David Kirkman Fountain, of the City of Toronto, Province of Ontario, do certify that:

1. I am a geophysicist residing at 62 Patina Drive, Willowdale 428, Ontario.

2. I am a graduate of the University of Toronto with a Bachelor of Applied Science Degree in Engineering Physics (Geophysics).

3. I am a member of the Society of Exploration Geophysicists, the European Association of Exploration Geophysicists and the Canadian Institute of Mining and Metallurgy.

4. I am a Registered Professional Engineer in the Provinces of British Columbia, Manitoba and Ontario, a Registered Professional Geophysicist in the Province of Alberta and a Registered Professional Geologist in the State of California, and have been practising my profession for eleven years.

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

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

Dated at Toronto

This 15th day of December, 1972.

PROFESSIONAL ENGINEER PROVINCE OF ONTARIO D. K. FOUNTAIN

David Kirkman Fountain, B.A.Sc., P. Eng.

Date: April 25, 1973

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of a statement of exploration expenses on 28 contiguous mineral claims in the Omineca Mining Division, having record numbers; 89550; 89552; 89558 to 89565; 99332 to 99335; 99593; 99595 to 99596; 99602 to 99606; 99608; 99619; 99620; 99623 to 99625 WT Claims

I, John E. Harrison, (F.M.C. 109121 issued April 28th, 1972) of P.O. Box 2169, Smithers, B. C. agent for Noranda Exploration Company, Limited (No Personal Liability) (F.M.C. 109102 issued April 28th, 1972) of 1050 Davie Street, Vancouver 5,

of

in the Province of British Columbia, do solemnly declare that the costs of line preparation for and an induced polarization survey on the above claims were:

1. Line Preparation

- from contract (P. Bland & F. Bland Sep. 27-Oct. 4/72)	$ 837.50	
- field costs		
- 10 man days @ $10.00/man day	100.00	
- transportation		
- Trans-Provincial Airlines (Beaver)	336.00	
		1,273.50

2. Induced Polarization Survey

- McPhar statement	1,465.54	
- field costs		
- 28 man days @ $10.00/man day	280.00	
- transportation		
- Trans-Provincial Airlines (Beaver & Otter) October 4 & October 10, 1972	923.00	
		2,668.54

3. Supervision

- G. E. Dirom 2 days @$75.00/day	150.00
	$4,092.04

Of this amount $4,000.00 is being claimed for assessment credit.

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 Town of Smithers, in the Province of British Columbia, this 28th day of May, 1973, A.D.

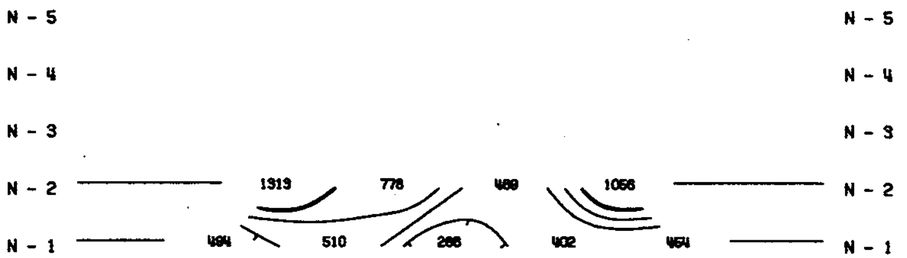
John Harrison

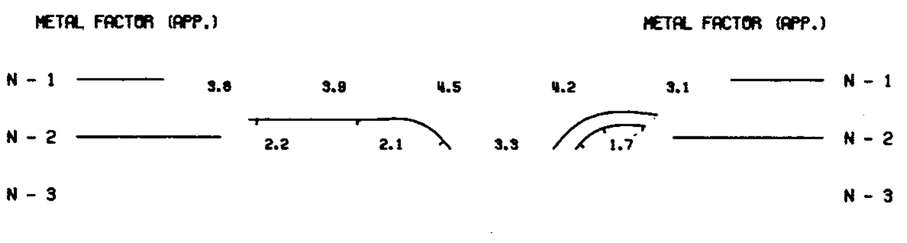
A Commissioner for taking Affidavits for British Columbia or ~~A Notary Public in and for the Province of British Columbia.~~

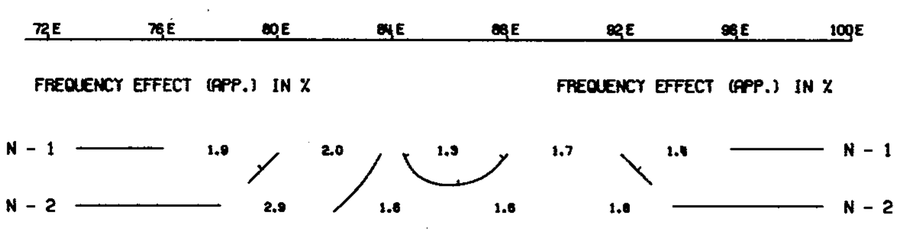
In the Matter of

Statutory Declaration

(CANADA EVIDENCE ACT)







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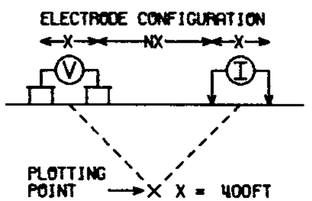
DWG. NO.- I.P.- 6040 - I

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 11300N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: 1972

APPROVED:

DATE:

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

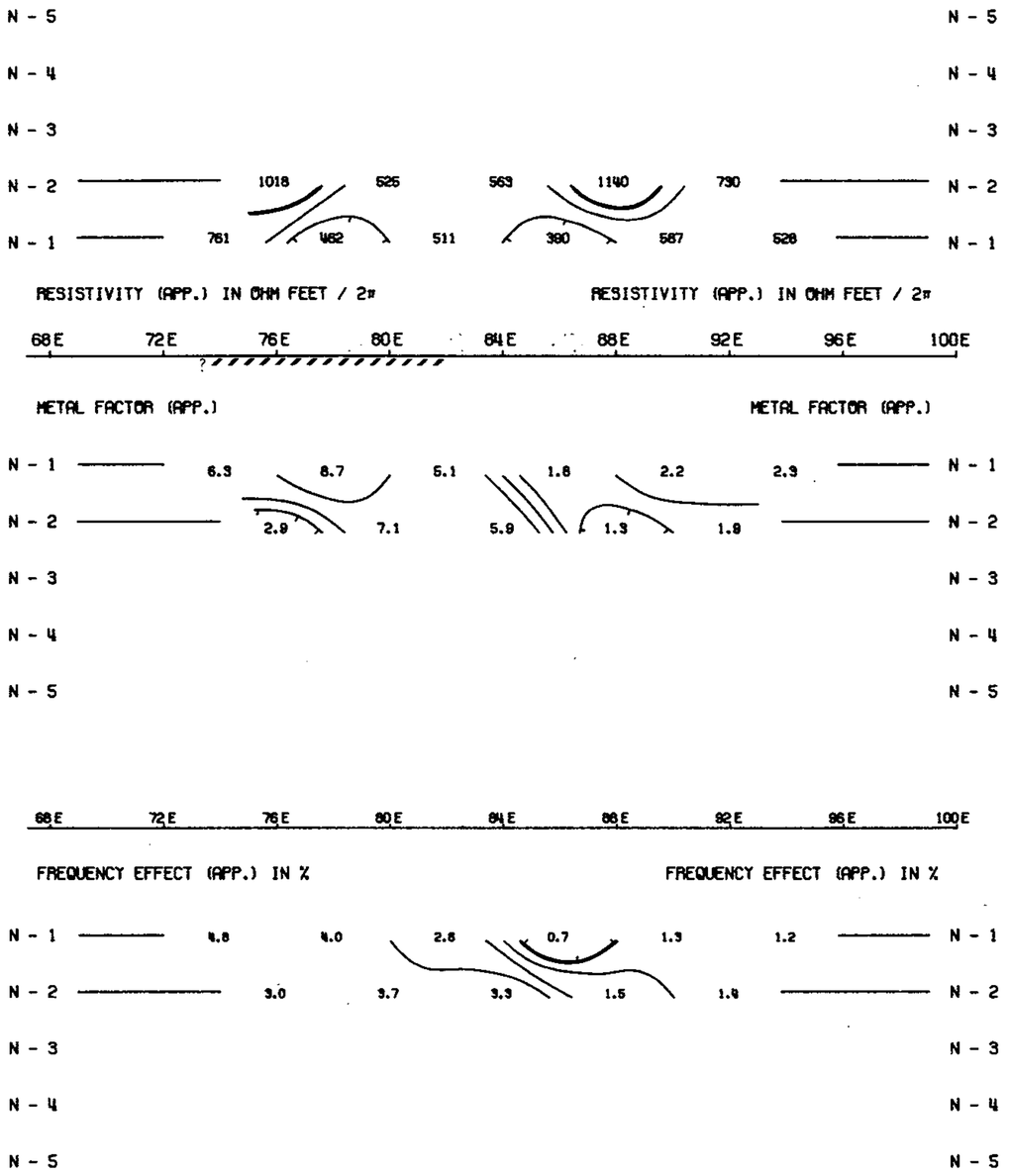
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

Expiry Date: April 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



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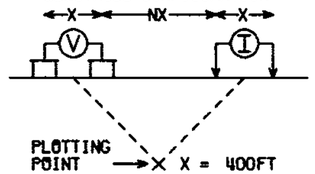
DWG. NO.- I.P.- 6040-2

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 10400N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

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

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1972

APPROVED:

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

DATE: 5/12/73

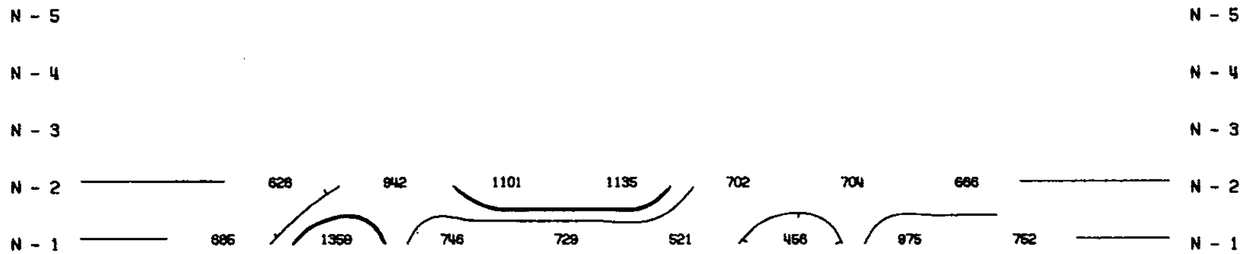
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

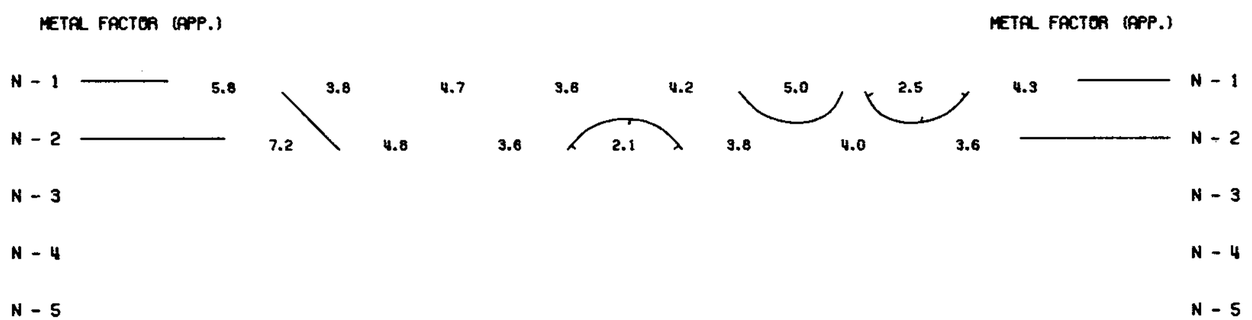
Expiry Date April 25, 1973

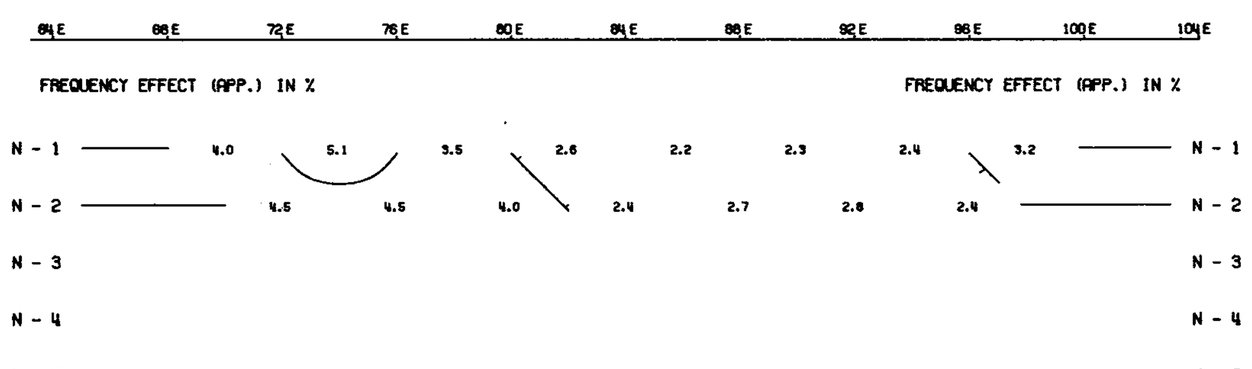
McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION







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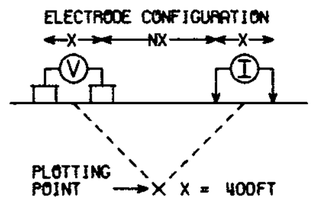
DWG. NO.- I.P.- 6040-3

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 9200N



SURFACE PROJECTION
OF ANOMALOUS ZONES

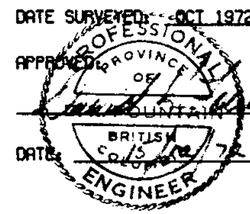
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1972

APPROVED:

DATE:



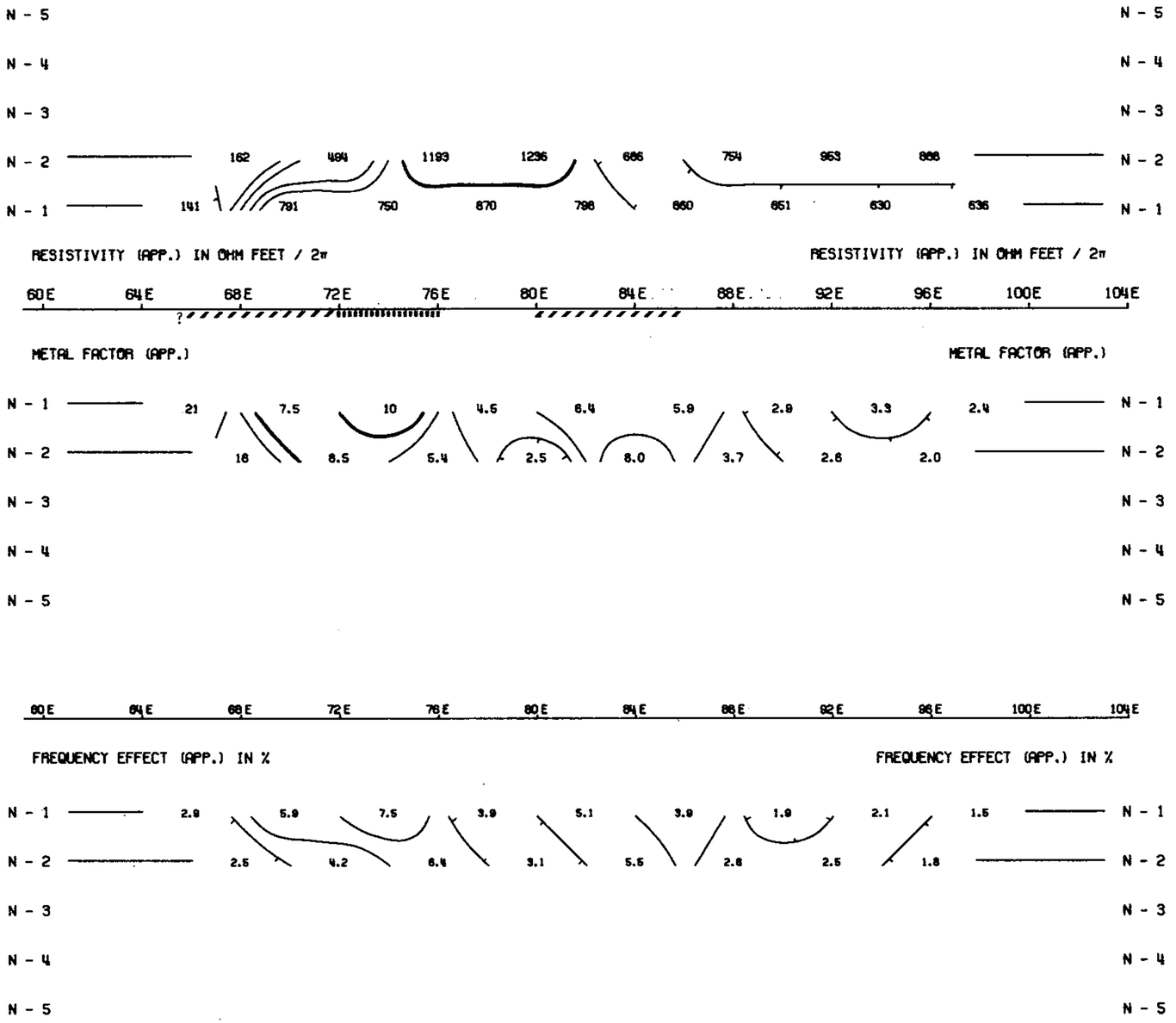
Expiry Date: April 25, 1973

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



4403

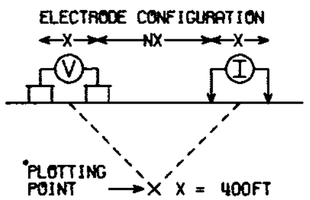
DWG. NO.- I.P.- 6040-4

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 8400N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

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

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: NOV. 1972

APPROVED:

DATE:

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

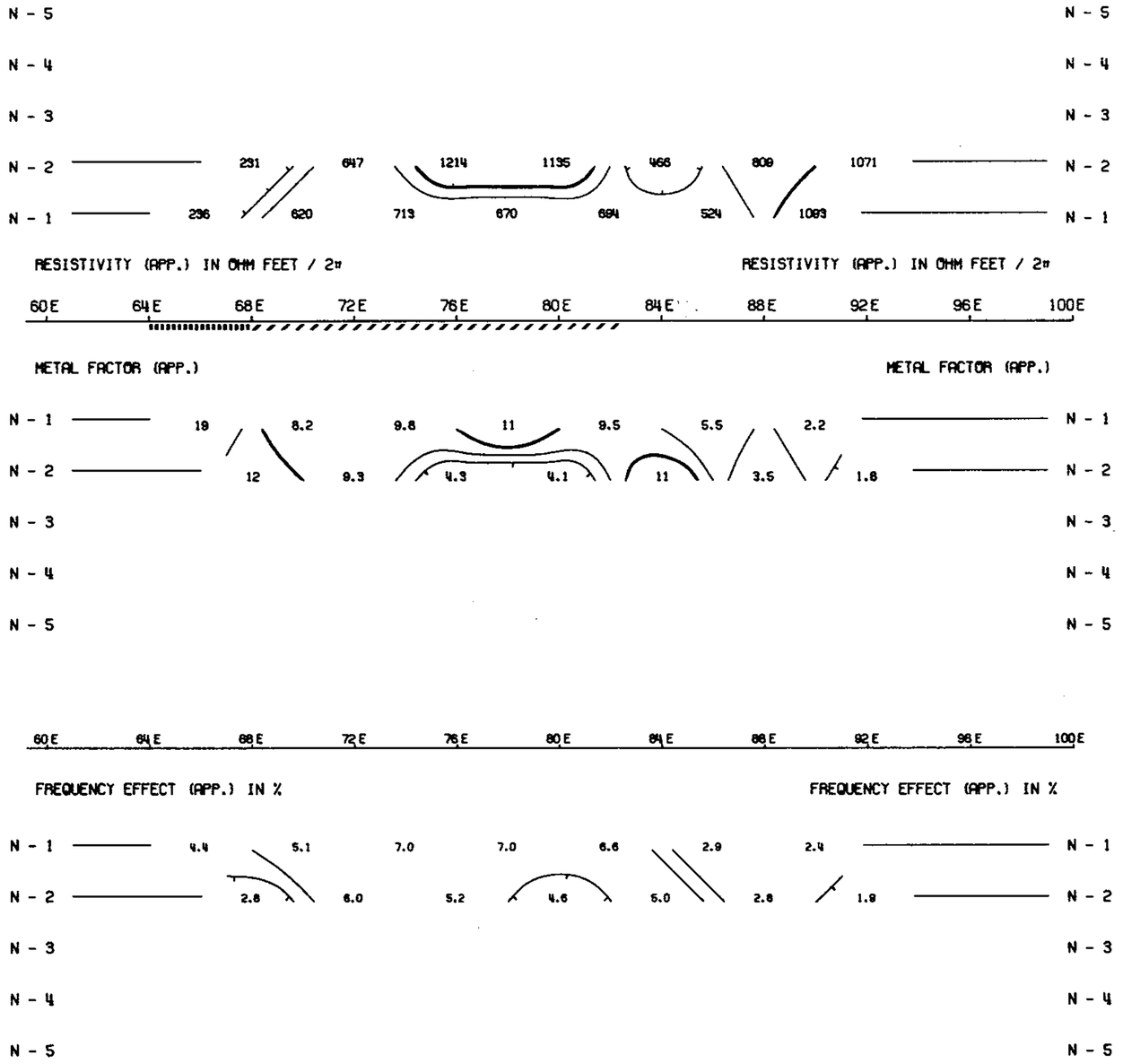
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. MOUNTAIN

Expiry Date: April 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



4403

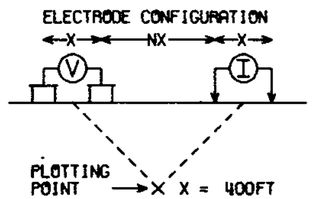
DWG. NO.- I.P.-6040-5

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA 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: OCT. 1972

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

APPROVED:

DATE:

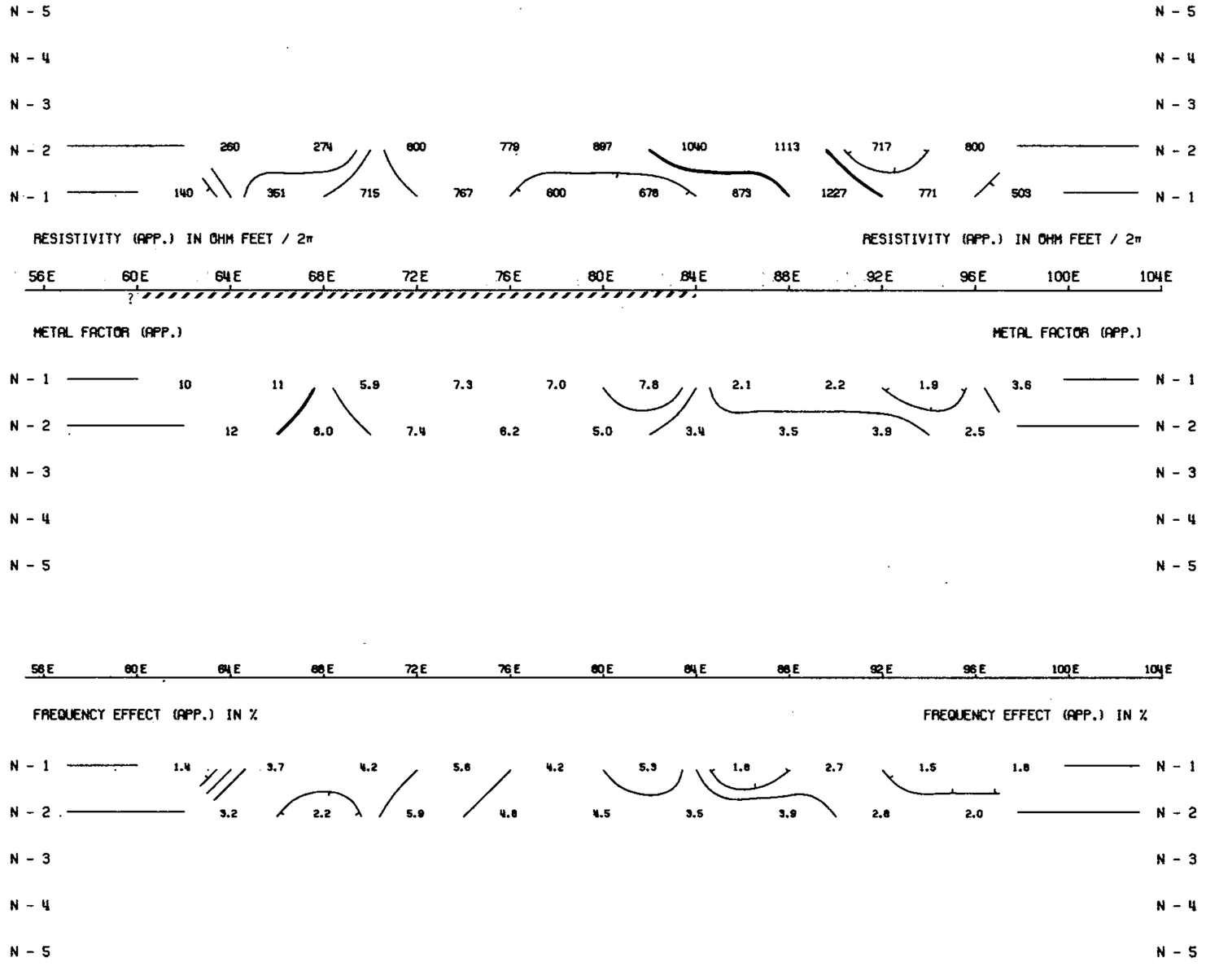
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

Expiry Date April 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



4403

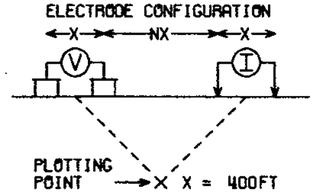
DWG. NO.- I.P.- 6040-6

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 7600N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ▬▬▬▬

PROBABLE ▪▪▪▪▪▪▪▪▪▪▪▪▪

POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1972

APPROVED:

DATE:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. K. FOUNTAIN

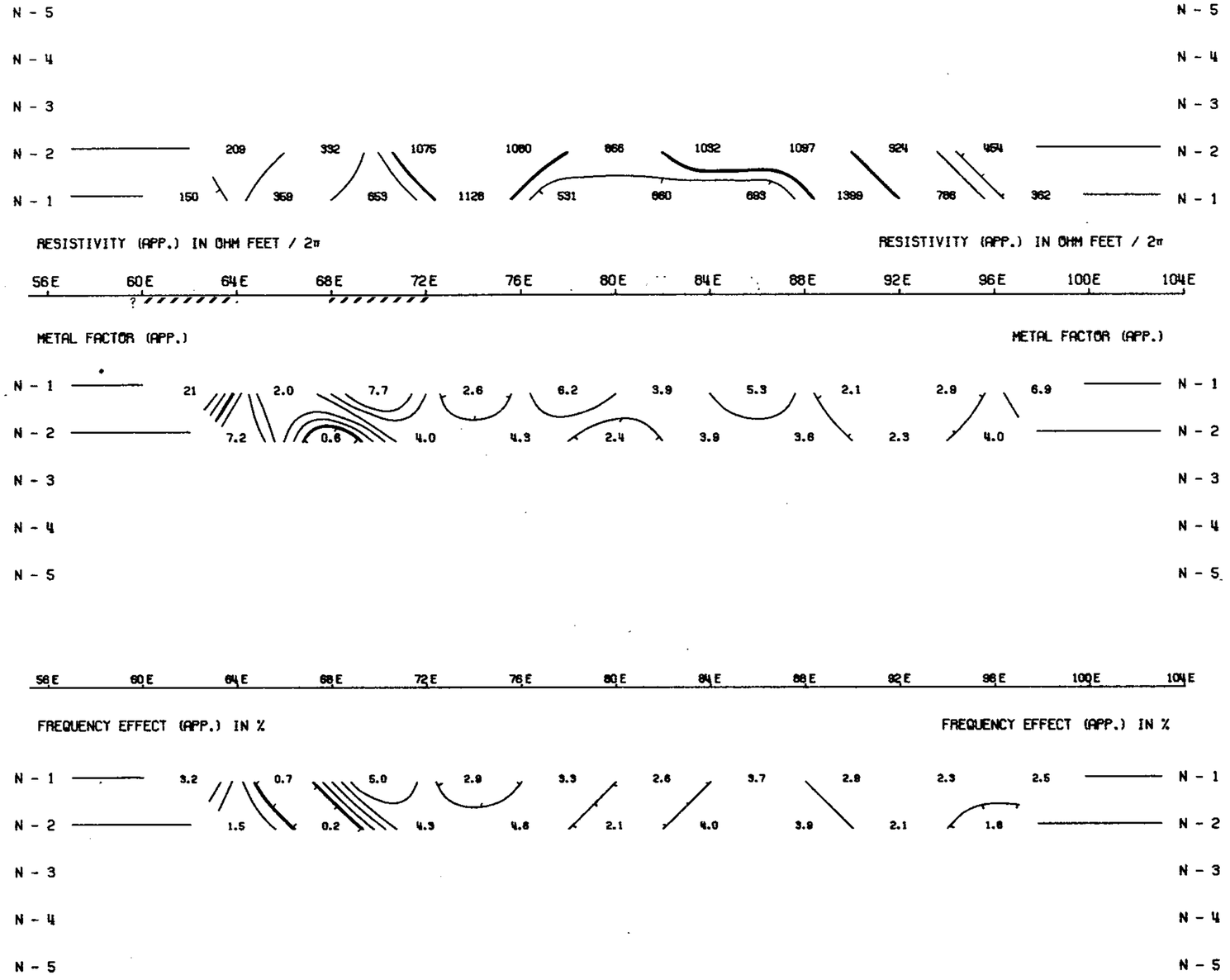
Expiry Date April 25 1973

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



4403

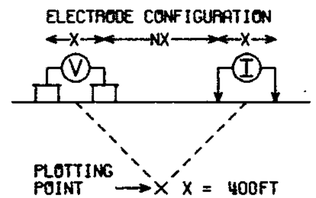
DWG. NO.- I.P.- 6040-7

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 7200N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

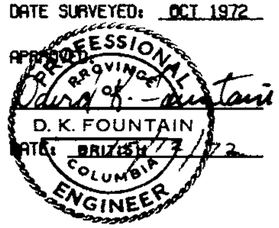
DEFINITE ——————
PROBABLE ....
POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1972

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

APPROVED:



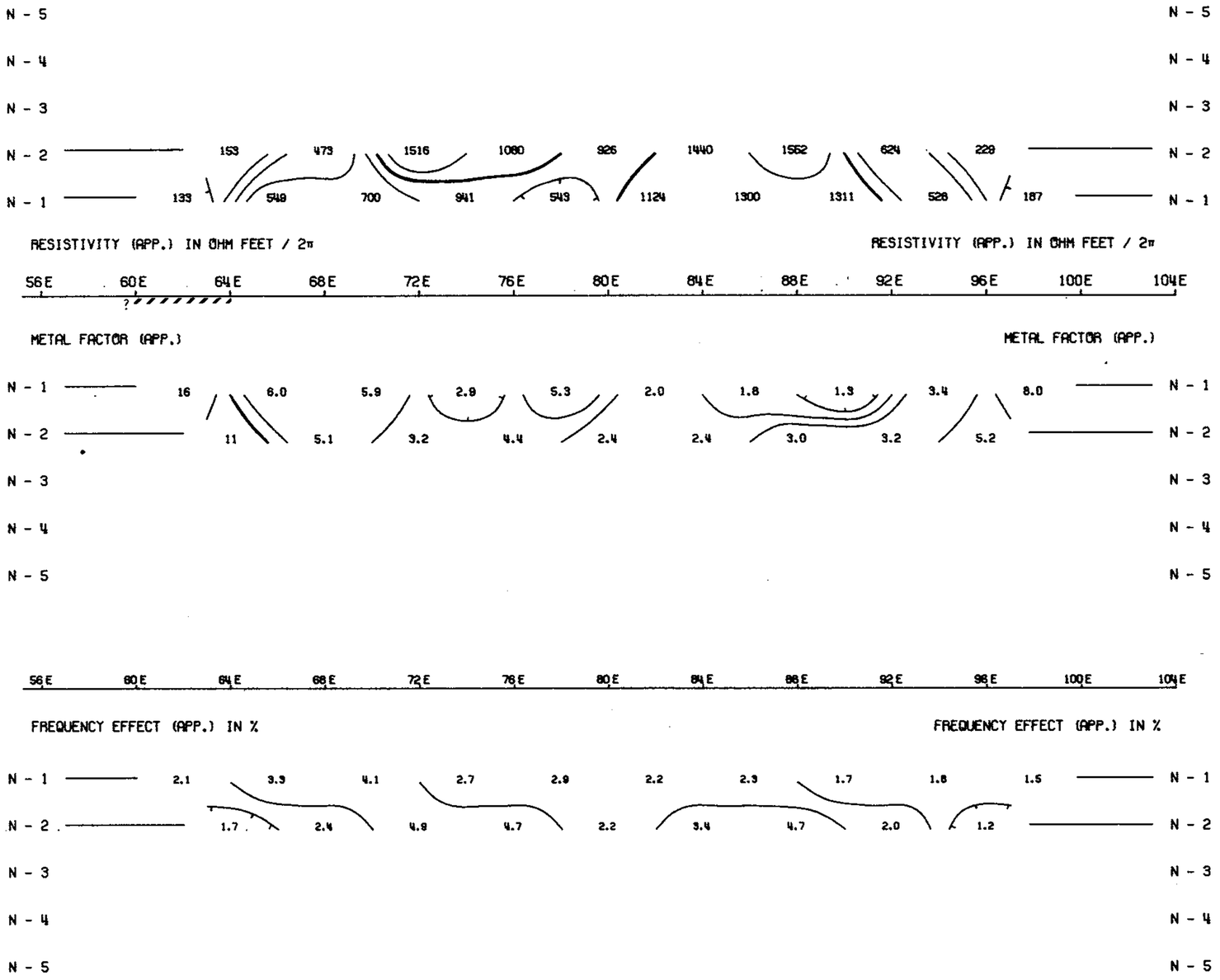
DATE: DEC 15 / 72

Expiry Date: April 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



4403

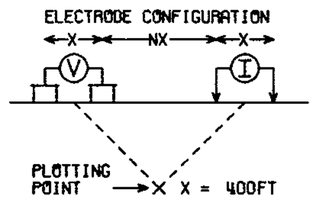
DWG. NO.- I.P.- 6040-8

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 6800N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ——————

PROBABLE ....

POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1972

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

APPROVED: D.K. FOUNTAIN

DATE: APR 25 1973

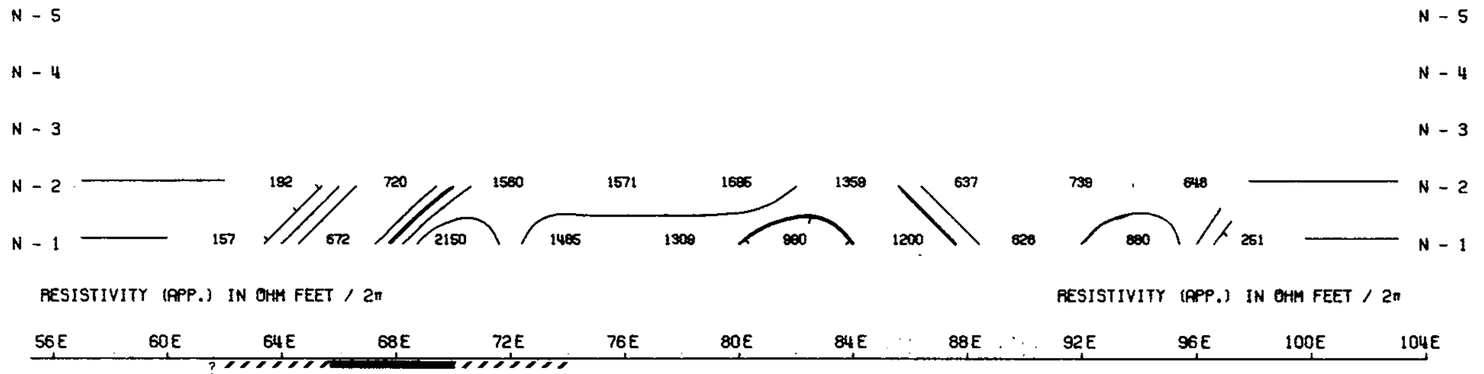
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

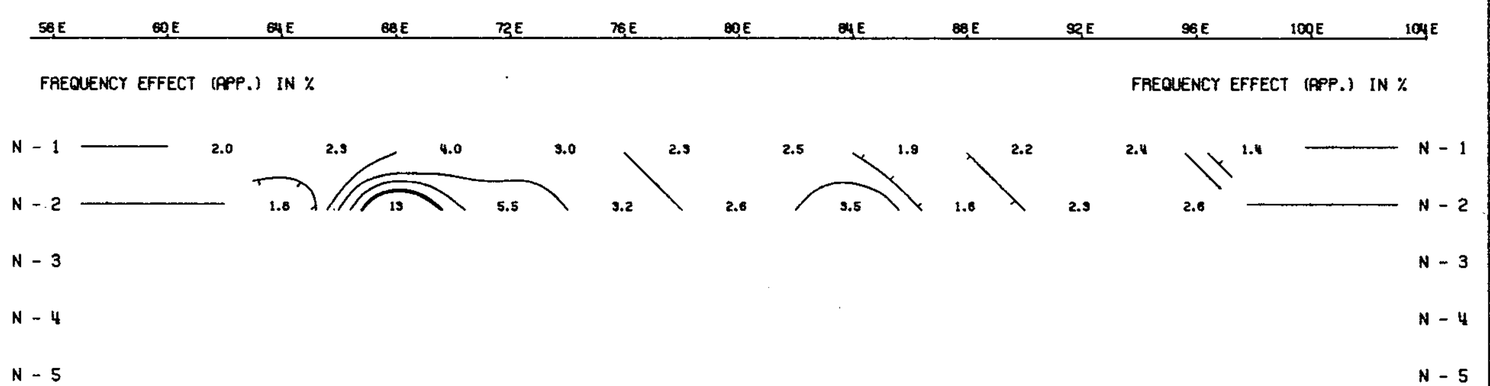
Survey Date: April 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION





4403

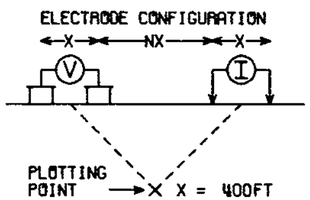
DWG. NO.- I.P.- 6040-9

NORANDA EXPLORATION COMPANY LIMITED.

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,
OMINECA M.D., B.C.

LINE NO.- 6000N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: OCT 1972

APPROVED:

DATE:

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

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

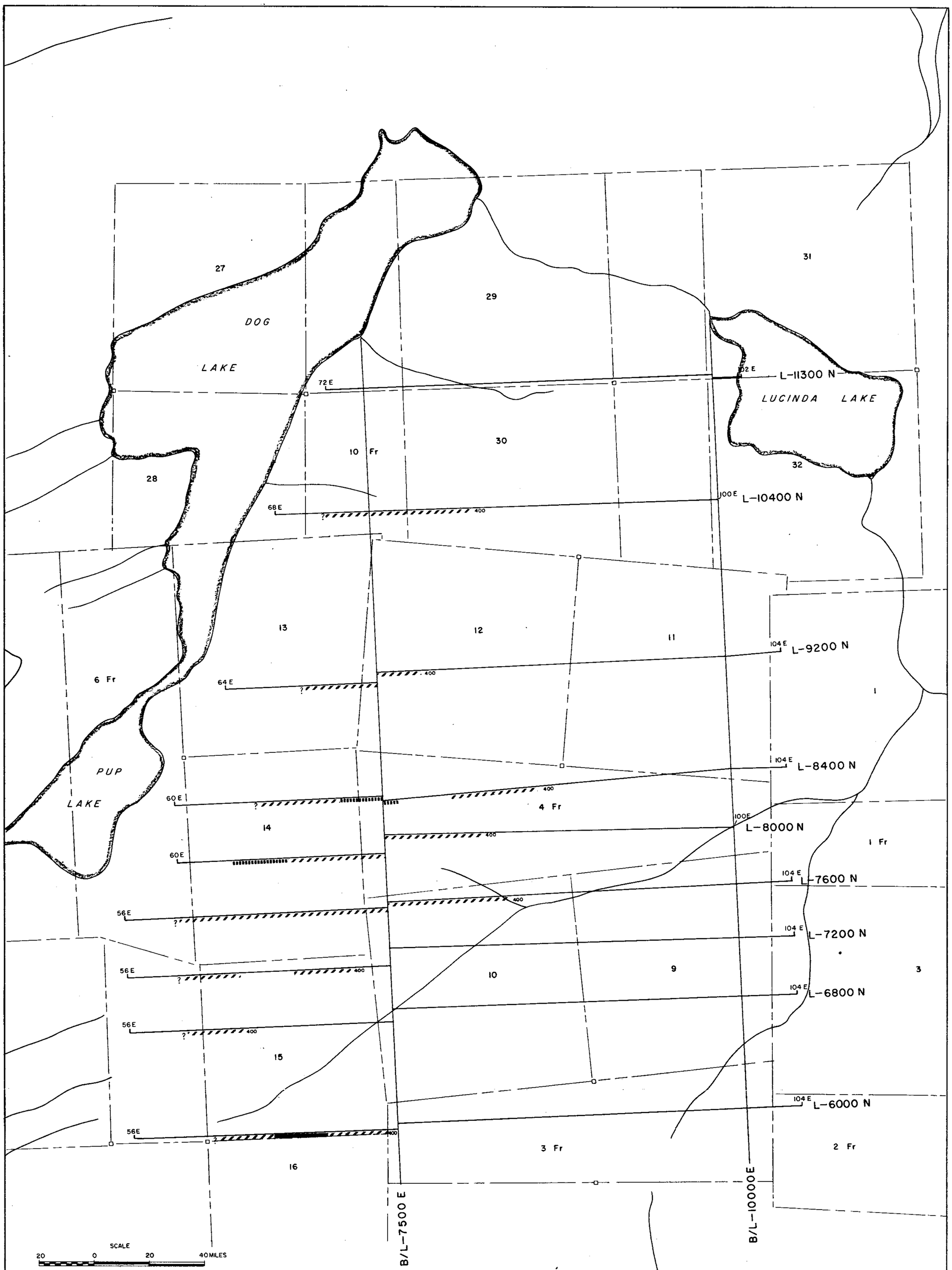
NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION

DWG. IPP-3566

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



NOTE TO ACCOMPANY GEOPHYSICAL REPORT FOR NORANDA EXPLORATION COMPANY LIMITED ON PROJECT 1005, CHELASLIE PROP., W.T. CLAIMS OMINECA M.D., B.C. BY D.K. FOUNTAIN, P. ENG. DATED: DECEMBER 15, 1972

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

Numbers at the end of the anomalies indicate electrode interval

NORANDA EXPLORATION COMPANY LIMITED

PROJECT 1005, CHELASLIE PROPERTY, W.T. CLAIMS,

OMINECA M.D. – B.C.

SCALE

One inch = 400 feet

DRAWN BY:
DATE: OCT. 1972
APPROVED:
D.K. FOUNTAIN
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
DATE: Dec. 15/72
Expiry Date: April 30, 1973

DWG. IPP - 3566