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REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE CHATAWAY CLAIM GROUP KAMLOOPS AND NICOLA MINING DIVISIONS, BRITISH COLUMBIA FOR INTERNATIONAL MOGUL MINES LTD.

BY

PHILIP G. HALLOF, Ph.D.

AND

ASHTON W. MULLAN, P.Eng.

NAME AND LOCATION OF PROPERTY:

CHATAWAY CLAIM GROUP

KAMLOOPS AND NICOLA MINING DIVISIONS, B.C. 50°N, 120°W - SW

DATE STARTED: APRIL 25, 1972

DATE FINISHED: JUNE 2, 1972

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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

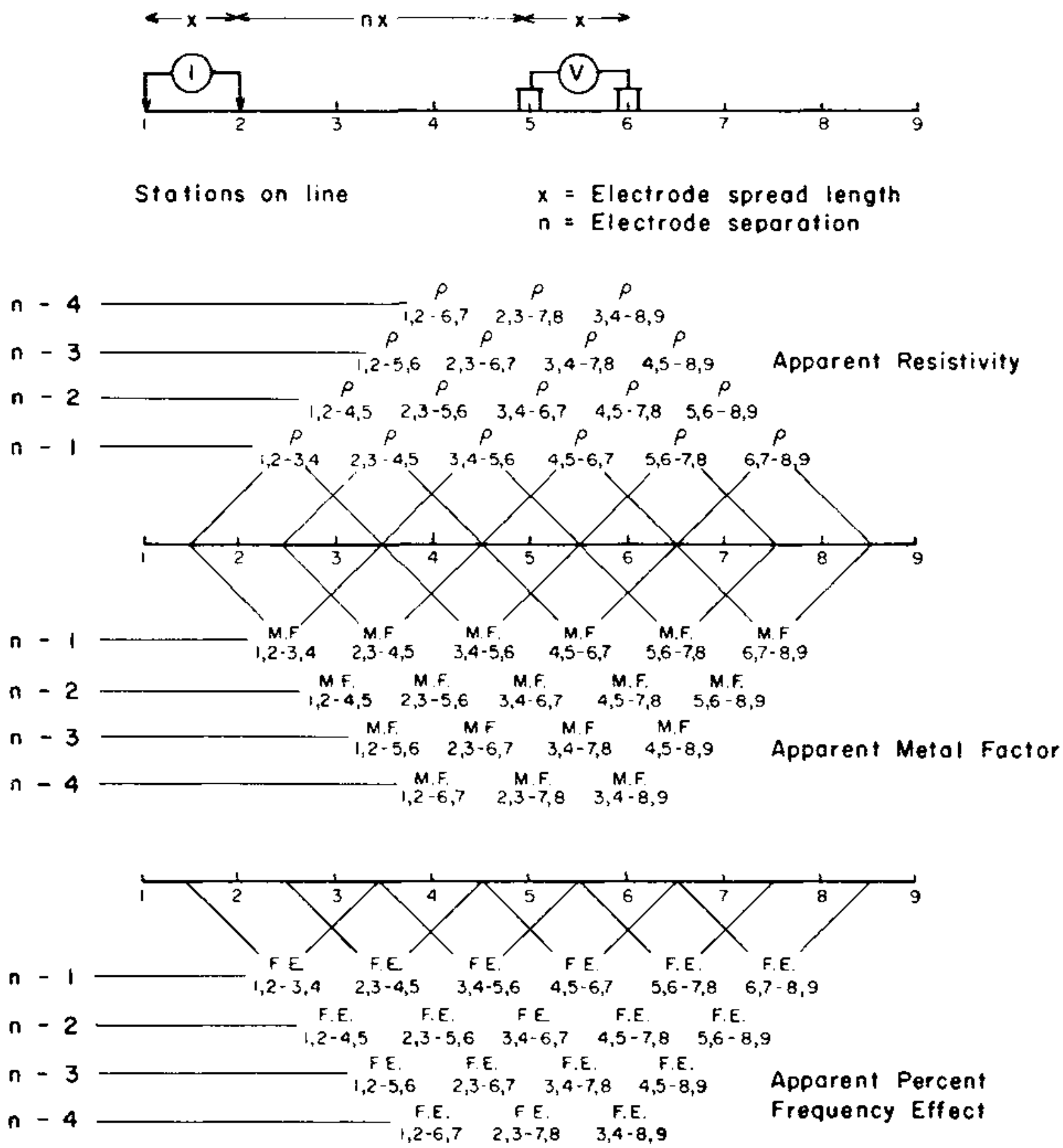

Fig. A

McPHAR GEOPHYSICS LIMITED

REPORT ON THE INDUCED POLARIZATION AND RESISTIVITY SURVEY ON THE CHATAWAY CLAIM GROUP, KAMLOOPS AND NICOLA MINING DIVISIONS, BRITISH COLUMBIA FOR INTERNATIONAL MOGUL MINES LTD.

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1. INTRODUCTION

At the request of International Mogul Mines Ltd., we have completed a Reconnaissance Induced Polarization and Resistivity survey on portions of the Chataway Claim Group during May and June of 1972.

The Chataway Claim Group lies in the southwest quadrant of the one degree quadrilateral whose southeast corner is at 50°N/120°W. The claim group lies south and east of Roscoe Lake; the southeast corner of the claim group lies at approximately 50° 21'N/120° 53'W.

There has been a considerable amount of exploration work previously completed on the Chataway Claim Group. The area of interest is underlain by the Bethsaida Granodiorite, the Bethlehem Granodiorite and the Guichon Granodiorite. There is very little rock exposure on the claim group, but some outcrops have been noted in the stream valleys.

Some disseminated copper mineralisation has been observed and these visible occurrences have been explored and extended by trenching, percussion drill holes and diamond drill holes. Some previous Induced Polarization work has also been done in the area.

The general area is of obvious interest as the possible location of a large volume of low-grade copper mineralization that might be of commercial value. The Induced Polarization and Resistivity survey described here was planned to further check areas of known interest and to extend exploration into areas that had not previously been examined.

2. CLAIMS

The Induced Polarization and Resistivity survey covered a portion of the Chataway Claim Group. The claims are shown on the enclosed plan map, Dwg. No. Misc. 2884. The listing of claims actually covered by the survey is shown in the Table.

3. PRESENTATION OF RESULTS

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

a) Chataway Grid

Line	Electrode Intervals	Dwg. No.
281N	400'	IP 5940-1
238N	400'	IP 5940-2
	200'	IP 5940-3
230N	400'	IP 5940-4
222N	400'	IP 5940-5

Line	Electrode Intervals	Dwg. No.
214N	400'	IP 5940-6
206N	400'	IP 5940-7
198N	400'	IP 5940-8
	300'	IP 5940-9
190N	400'	IP 5940-10
182N	400'	IP 5940-11
174N	400'	IP 5940-12
168N	200'	IP 5940-13
160N	200'	IP 5940-14
136N (West)	300'	IP 5940-15
136N (East)	300'	IP 5940-16

b) 500 East Base Line Grid

580N	400'	IP 5941-1
	300'	IP 5941-2
572N	400'	IP 5941-3
564N	400'	IP 5941-4
	200'	IP 5941-5
556N	400'	IP 5941-6
548N	200'	IP 5941-7
540N	200'	IP 5941-8
532N	200'	IP 5941-9
524N	200'	IP 5941-10

Line	Electrode Intervals	Dwg. No.
516N	200'	IP 5941-11
508N	200'	IP 5941-12
500N	200'	IP 5941-13

Also enclosed with this report are plan maps of the Chataway Claim Group at a scale of 1" = 400'.

North Part	Dwg. No. I.P.P. 4846-1
Central Part	Dwg. No. I.P.P. 4846-2
South Part	Dwg. No. I.P.P. 4846-3

The definite, probable and possible Induced Polarization anomalies are indicated by bars, in the manner shown on the legend, on these plan maps 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 pin-point 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 topographic information shown on Dwgs. I. P. P. 4846-1, -2, -3 has been taken from maps made available by the staff of International Mogul Mines Ltd.

4. DISCUSSION OF RESULTS

The "porphyry copper" type ore bodies in the Highland Valley Area of British Columbia contain only small concentrations of sulphide mineralization (2.0% to 6.0%). In most cases, therefore, the IP anomalies measured over the disseminated metallic mineralization are low in magnitude. As explained in the Appendix to this report, even weak IP anomalies can be of economic importance, if the metallic minerals causing the IP effects all contain copper.

The previous IP surveys on the Chataway Claim Group have shown the widespread presence of zones of weak metallic mineralization of small lateral extent. This general picture has been confirmed by the trenching and drilling.

The results from the Induced Polarization survey described here are much the same. There are numerous weak anomalies interpreted on the data plots and shown on the plan maps. The magnitude of these weak IP anomalies suggests the presence of very disseminated metallic mineralization (1% to 3%). The width of the anomalies is not great and it is difficult to correlate them from line to line.

There are a few places where the anomalies located are definite enough to warrant further investigation.

a) Chataway Grid - Line 238N to Line 222N

This anomalous zone was located by the previous Induced Polarization surveys. The zone strikes northeast-southwest and it may extend farther to the northeast. The most definite anomaly was located at 258E to 266E on Line 238N, using 400' electrode intervals.

The anomaly was checked using 200' electrode intervals, but the data was not complete. The anomaly is not strong and it occurs in an area of very low resistivities. Some depth to the top of the source is indicated.

In order to better locate and evaluate the best part of the anomaly, it would be necessary to survey a few closely spaced lines using 300' electrode intervals.

b) Chataway Grid - Line 160N to Line 136N

This anomalous zone lies at the southeast corner of the grid. It has been outlined by the previous IP surveys and the present survey confirms the strike extent of the zone.

c) 500 East Base Line Grid - Line 540N to Line 508N

This area of the grid has not been previously surveyed. There are weak IP anomalies shown on most of the lines, but as in the case on the Chataway Grid it is difficult to correlate the anomalies from line to line. The most definite anomalies are at Line 540N, 491E to 501E and at Line 508N, 492E to 500E.

The anomalies are low in magnitude, but definite. They could be better evaluated using shorter electrode intervals and/or shifted electrode positions and by surveying closely spaced adjacent lines.

5. CONCLUSIONS AND RECOMMENDATIONS

The recently completed Induced Polarization and Resistivity survey on the Chataway Claim Group has not located any definite IP anomalies, of considerable lateral extent, that could be due to disseminated metallic mineralization of the "porphyry copper" type. However, some weak IP anomalies were outlined. A few of these correlate with known copper mineralization and therefore they may warrant further investigation.

Elsewhere in the Highland Valley Area it has been found that weak IP anomalies can be due to weakly disseminated pyrite or chalcopyrite mineralization in the bed-rock. However, it has also been found in a few places that the weak IP effects can be due to small concentrations of metallic mineralization (pyrite or magnetite) within specific beds in the overburden.

The following areas warrant some further investigation:-

a) Chataway Grid - Line 238N to Line 222N

This zone was known from previous IP work and a few holes have already been drilled to test the anomaly. If the source of the weak IP effects is not known from this drilling, further investigation may be warranted.

b) Chataway Grid - Line 160N to Line 136N

This zone correlates with known copper showings from outcrop and trenches. Numerous holes have also been drilled. If the mineralization intersected is of economic interest, it may be desirable to extend the drilling to the northeast and the southwest.

c) 500 East Base Line Grid - Line 540N to Line 508N

These anomalies are in a part of the Chataway Claim Group that has not previously been investigated. The anomalies are among the most definite that have been located in all of the work in the area. Some further detailed measurements have been recommended to better evaluate the source of the anomalies.

Alternatively, a few short holes could be drilled on Line 540N and Line 500N to determine the nature of the mineralization causing the IP anomalies measured.

McPHAR GEOPHYSICS LIMITED

Philip G. Hallof,
Geophysicist.

Ashton W. Mullan,
Geologist.

Dated: June 26, 1972

ASSESSMENT DETAILS

PROPERTY: **Chataway Claim Group**

SPONSOR: **International Mogul Mines Ltd.**

LOCATION: **Highland Valley Area**

TYPE OF SURVEY: **Induced Polarization**

MINING DIVISION: **Kamloops and Nicola**

PROVINCE: **British Columbia**

OPERATING MAN DAYS:	90	DATE STARTED:	April 25, 1972
EQUIVALENT 8 HR. MAN DAYS:	135	DATE FINISHED:	June 2, 1972
CONSULTING MAN DAYS:	4	NUMBER OF STATIONS:	569
DRAUGHTING MAN DAYS:	8	NUMBER OF READINGS:	5271
TOTAL MAN DAYS:	147	MILES OF LINE SURVEYED:	33.1

CONSULTANTS:

Philip G. Hallof, 15 Barnwood Court, Don Mills, Ontario.
Ashton W. Mullan, 1440 Sandhurst Place, West Vancouver, B.C.

FIELD TECHNICIANS:

J. Marsh, 118 Spencer Avenue, Toronto 3, Ontario.
R. Mertens, 304 Holmes Avenue, Willowdale, Ontario.
S. Dunbar, 4687 Langara Avenue, Vancouver 8, B.C.
T. Williams, Box 635, Kamloops, B.C.

Plus Extra Labourers:-
Michael O'Donnell, General Delivery, Kamloops, B.C.
Steve Hlusiak, Box 635, Kamloops, B.C.
Norman Theberge, Box 1736, Merritt, B.C.
Steve John, Box 635, Kamloops, B.C.
Craig Brown, Box 128, Merritt, B.C.
Marc Theberge, Box 32, Ashcroft, B.C.

DRAUGHTSMEN:

R. Peer, 38 Torrens Avenue, Toronto 6, Ontario.
B. Marr, 19 Kenewen Court, Toronto 16, Ontario.
N. Lade, 299 Jasper Avenue, Oshawa, Ontario.

McPHAR GEOPHYSICS LIMITED

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Philip G. Hallof,
Geophysicist.

Dated: June 26, 1972

STATEMENT OF COST

International Mogul Mines Ltd. - Chataway Claim Group
Kamloops and Nicola Mining Division, B.C.

Crew:-	April 24-30	- J. Marsh & R. Mertens
	May 1-24	- J. Marsh & Scott Dunbar
	May 25 - June 2/72	- J. Marsh & Tim Williams

23.81 miles - 400' electrode intervals)	@ $350.00/mile	8,470.00
.39 miles - 300' electrode intervals)		
5.34 miles - 200' electrode intervals	@ $405.00/mile	2,162.70
5½ days Detail @ $435.00/day		2,392.50
Crew Meals		1,800.00
		14,825.20

Breakdown of Cost

22½ days	Operating	@ $246.72/day	5,551.20
5½ days	Detail Operating	@ $435.00/day	2,392.50
6½ days	Preparation) 11½ days	@ $100.00/day	1,150.00
1½ days	Bad Weather)		
3½ days	Standby)		
½ day	Breakdown		N.C.
			9,093.70

Crew Expenses

Truck Rental	683.86	
Vehicle Expense	150.79	
Meals	1,800.00	
Telephone and Telegraph	4.09	
Supplies	58.09	
	2,696.83	
Plus 10%	269.68	
	2,966.51	2,966.51
Extra Labour	2,304.06	
Plus 20%	460.81	
	2,76[illegible]	2,764.87
		$14,825.08

McPHAR GEOPHYSICS LIMITED

Philip G. Hallof
Geophysicist

Dated: June 26, 1972

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 29
day of June 1992.

Jill Susser

British Columbia
British Columbia

Sub-mining Recorder

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, (Toronto) 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 International Mogul Mines Limited 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 26th day of June 1972

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Philip G. Hallof, Ph.D.

Date: February 26, 197?

CERTIFICATE

I, Ashton W. Mullan, of the City of Vancouver, in the Province of British Columbia, hereby certify:

1. That I am a geologist and a fellow of the Geological Association of Canada with a business address at Suite 811, 837 West Hastings Street, Vancouver, B.C.

2. That I am registered as a member of the Association of Professional Engineers of the Provinces of Ontario and British Columbia.

3. That I hold a B.Sc. degree from McGill University.

4. That I have been practising my profession as a geologist for about twenty 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 International Mogul Mines Limited 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 26th day of June 1972

A. W. Mullan, B.Sc., P.Eng.

PROFESSIONAL ENGINEER
PROVINCE
A. W. MULLAN
BRITISH COLUMBIA

APPENDIX

EXPECTED IP ANOMALIES FROM "PORPHYRY COPPER" TYPE ZONES OF DISSEMINATED SULPHIDE MINERALIZATION

Our experience in other areas has shown that the induced polarization method can be successfully used to locate, and outline, zones of disseminated sulphide mineralization of the "porphyry copper" type. In most cases the interpretation of the IP results is simple and straightforward. The results shown in Figure 1 and Figure 2 are typical.

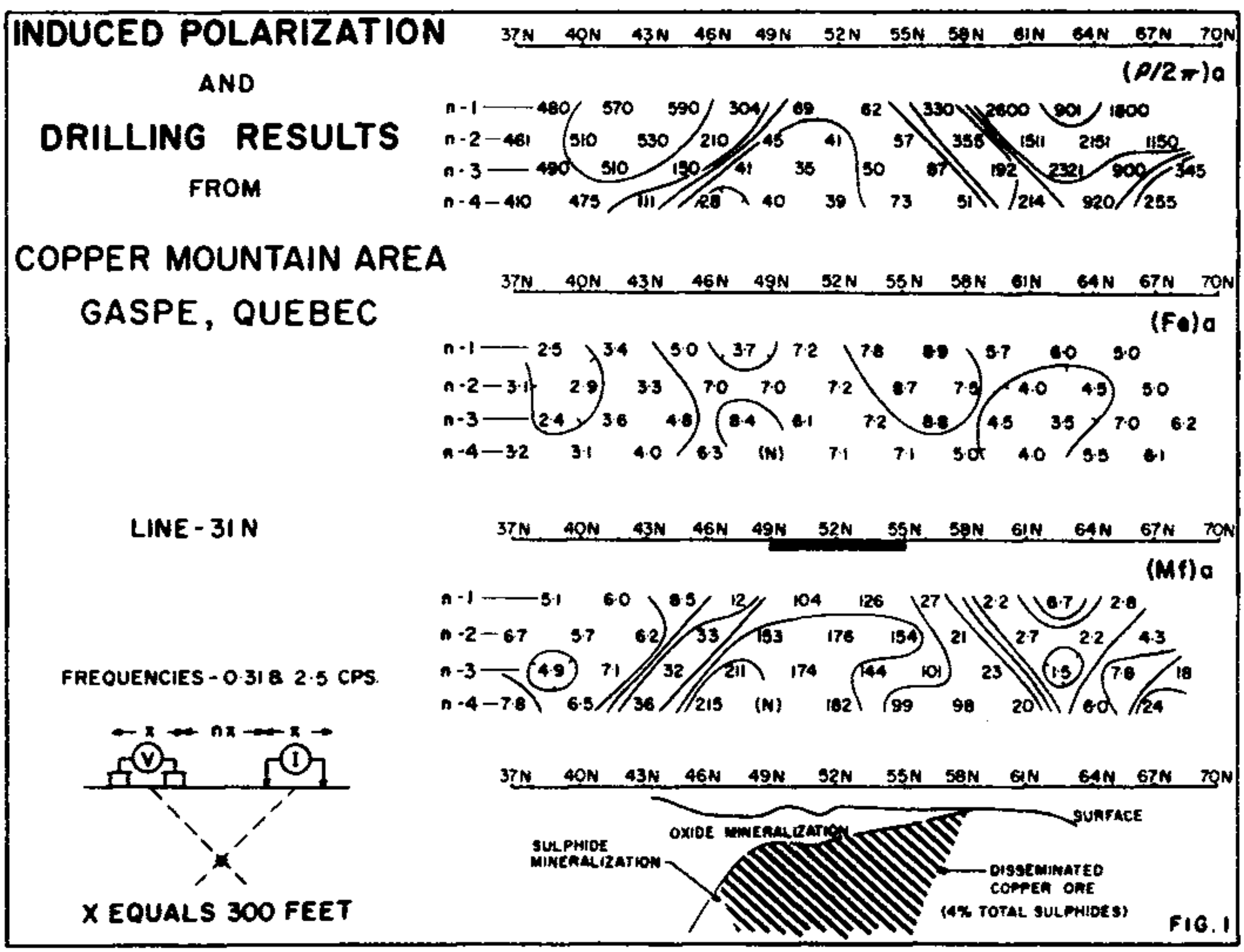


FIG. 1

The source of the moderate magnitude IP anomaly shown in Figure 1 contains approximately 4% metallic mineralization. The zone is of limited lateral extent and enough copper is present to make the mineralization "ore grade". The presence of the surface oxidation can be seen in the fact that the apparent IP effects increase for n = 2.

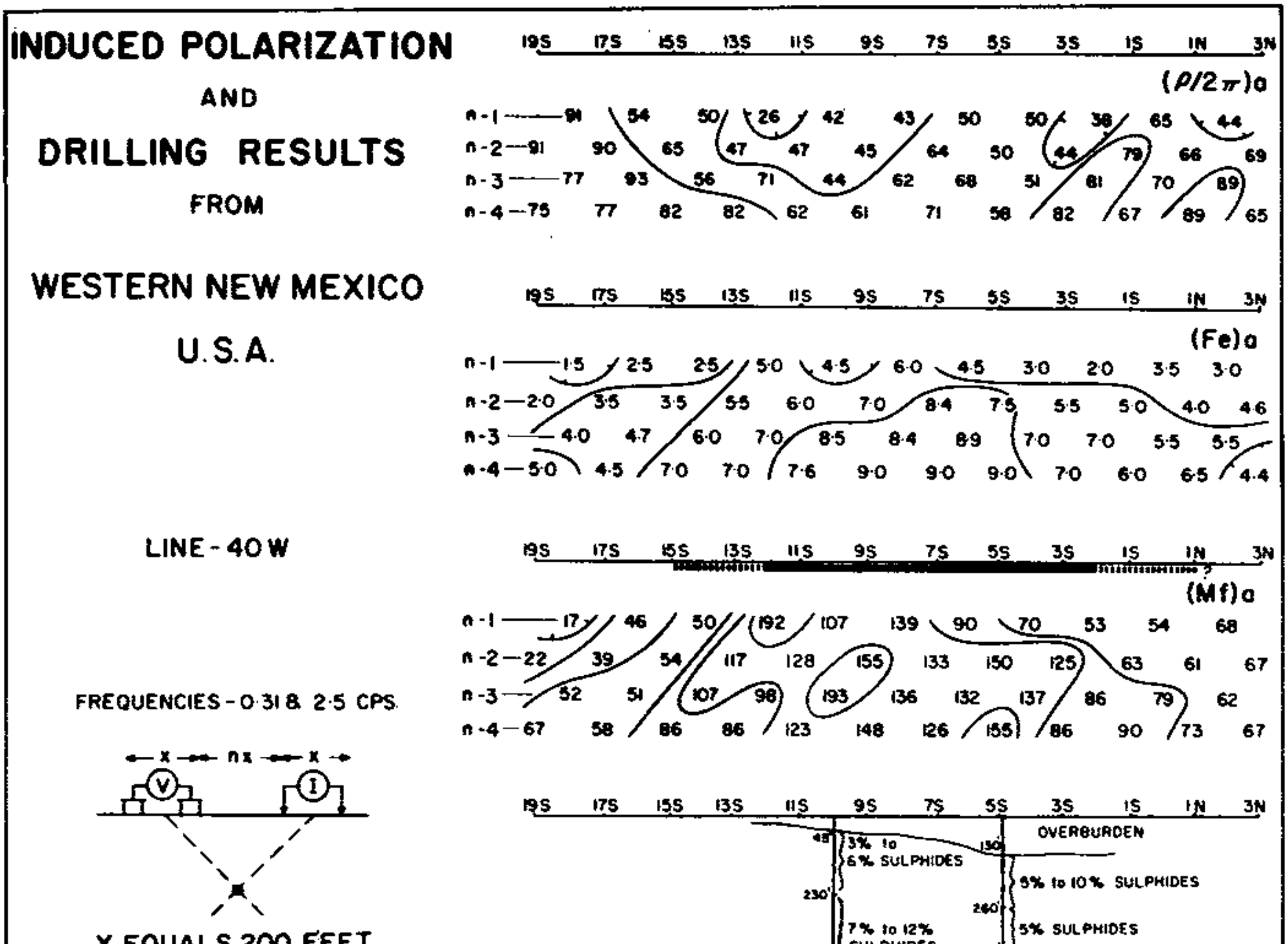


FIG. 2

The IP anomaly shown in Figure 2 has about the same magnitude as that described above. It should be noted that appreciably greater concentrations of metallic mineralization are present; further, there is little or no copper present. These results illustrate the fact that IP results can not be used to determine the exact amount of metallic mineralization present or to determine the economic importance of a mineralized zone. In some geologic situations zoning is present; the zones of mineralization of greatest economic value may contain less total metallic mineralization than other zones in the same general area.

In the proper geologic environment, the method will detect even very low concentrations of metallic mineralization. The IP results shown in Figure 3 located the ore zone at the Brenda Property near Peachland, B. C. The zone contains 1. 0 to 1. 5 per cent metallic mineralization; however, the mineralization is "ore grade" because only molybdenite and chalcopyrite are present.

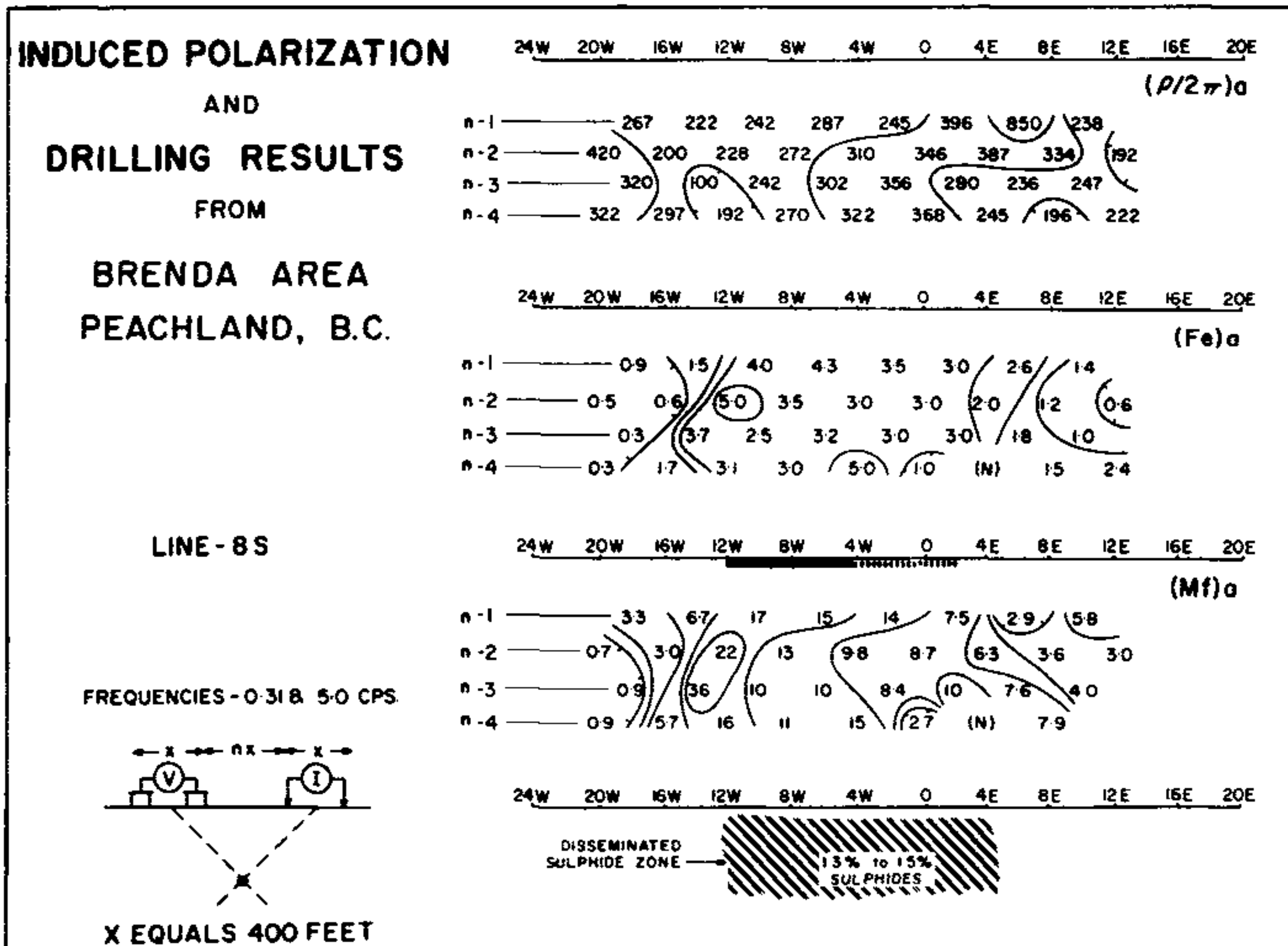


FIG. 3

TABLE "A"

LIST OF CLAIMS HELD BY CHATAWAY EXPLORATION COMPANY LIMITED

NAME OF CLAIM		RECORD NO.	MINING DIVISION
SHO 5		20593	Nicola
SHO 6		20594	Nicola
SHO 1		34912	Kamloops
SHO 2		34913	"
SHO 3		34914	"
SHO 4		34915	"
SHO 9 Fr.		34916	"
SHO 11		34918	"
TAM 11 Fr.		69948	"
STAD 1		38806	"
STAD 2		38807	"
STAD 3		38808	"
STAD 4		38809	"
STAD 5		38810	"
STAD 6		38811	"
STAD 7		38812	"
STAD 8		38813	"
STAD 9 Fr.		40367	"
GLEN 1		70117	"
GLEN 2 Fr.		70118	"
GLEN 10 Fr.		73957	"
DJ	20 Fr.	70200	"
"	21 Fr.	70201	"
"	22 Fr.	70202	"
CAT	1	25371	"
"	2	25372	"
"	3	25373	"
"	4	25374	"
"	5	25375	"
"	6	25376	"
"	7	25377	"
"	8	25378	"
MOSS	1	38777	"
"	2	38778	"
"	3	40456	"
"	4	40457	"
"	5	40458	"
"	6	40459	"

NAME OF CLAIM	RECORD NO.	MINING DIVISION
WIZ 5	10673	Nicola
" 6	10674	"
" 10	20585	"
11	20586	"
WIS 7	18722	"
" 8	18723	"
" 9 Fr.	18724	"
TAM 1	69951	Kamloops
" 2	69949	"
" 3	69950	"
" 10 Fr.	69947	"
DJ 1	70188	"
" 2	70189	"
" 7	70190	"
" 8	70191	"
" 9	70192	"
" 10	70193	"
" 11	70194	"
" 12	70195	"
" 13	70196	"
" 14	70197	"
" 15	70198	"
" 16	70199	"
VAL 3	25327	"
" 4	25328	"
" 5	38802	"
" 6	65791	"
" 7	38804	"
" 8	38805	"
" 10 Fr.	101255	"
MOSS 7	40460	"
" 8	40461	"
" 6 Fr.	66625	"
" 8 Fr.	66626	"
TRISH 1	25333	"
" 2	25334	"
" 3	25335	"
" 4	25336	"
" 5	25337	"
" 6	25338	"
" 7	25339	"
" 8	25340	"
MAB 2 Fr.	31282	"
" 3 Fr.	31283	"
" 4 Fr.	31284	"
" 5 Fr.	47693	"
" 6 Fr.	47694	"
" 7 Fr.	47695	"

NAME OF CLAIM		RECORD NO.	MINING DIVISION
VAL	1	25325	Kamloops
"	2	25326	"
MOON	1	25349	"
"	2	25350	"
"	3	25351	"
"	4	25352	"
"	5	25353	"
"	6	25354	"
"	7	25419	"
"	8	25420	"
SUN	1	25429	"
"	2	25430	"
JAY	1	25395	"
"	2	25396	"
"	3	25397	"
"	4	25398	"
"	5	25399	"
"	6	25400	"
CAP	1 Fr.	47577	"
"	2 Fr.	47578	"
"	3 Fr.	47579	"
"	4 Fr.	47580	"
CECE	3 Fr.	101254	"
PH	1	49514	Nicola
"	2	49515	"
"	3	49516	"
"	4	49517	"
"	5	49518	"
"	6	49519	"
"	7	49520	"
"	8	49521	"
PRO	1	17329	"
"	2	17330	"
"	3	17331	"
"	4	17332	"
SHO	10	34917	Kamloops
"	12	34919	"
"	13	34920	"
"	14	38728	"
"	15	38729	"
"	16	38730	"
"	17	38731	"
"	18	38732	"
"	19	38733	"
"	20	38734	

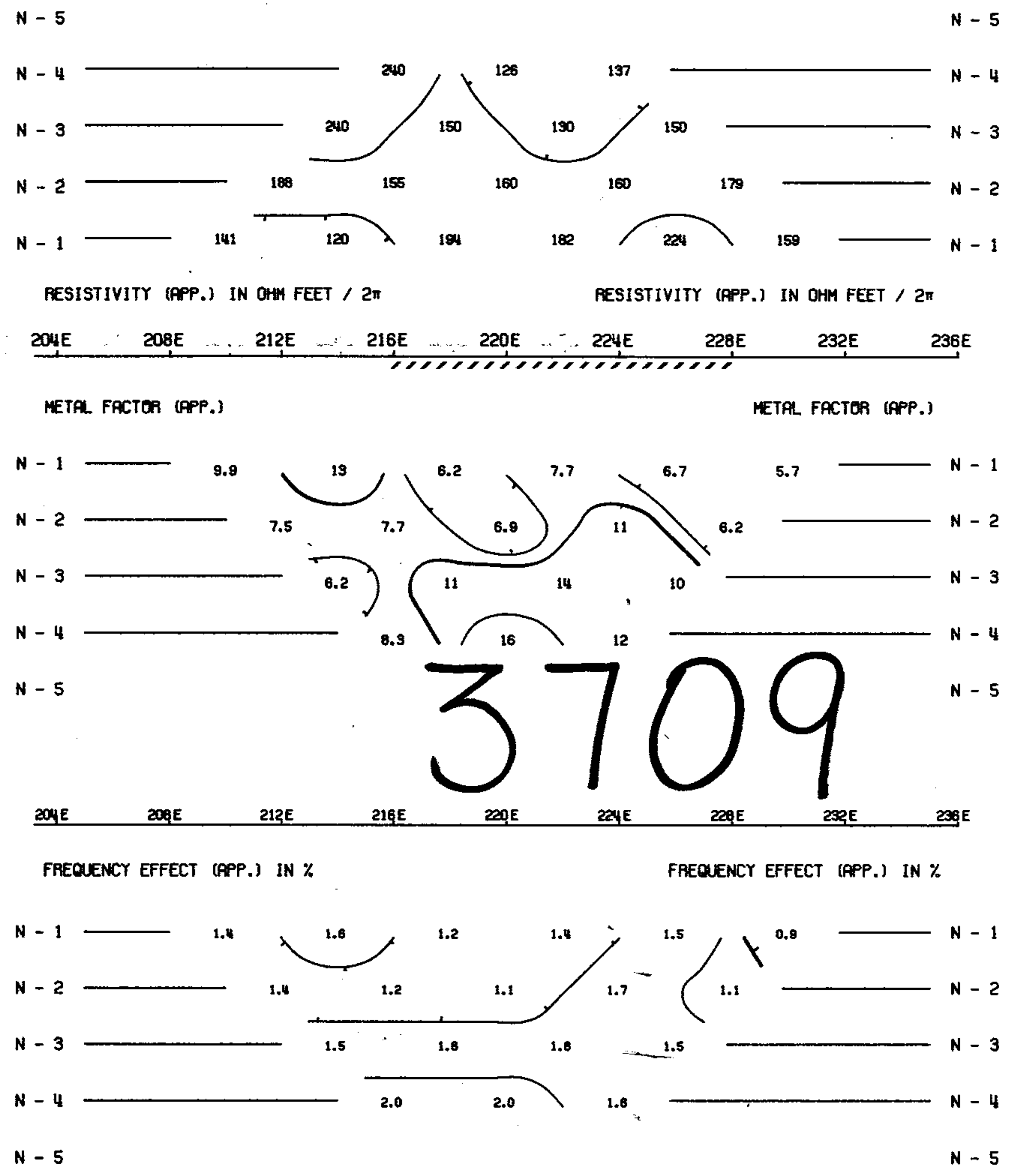
NAME OF CLAIM		RECORD NO.	MINING DIVISION
SHO ⓞ	23	63975	Kamloops
"	24	63976	"
"	25	63977	"
"	26	63978	"
"	27	63979	"
TAM	12 Fr.	69945	"
"	14Fr.	69946	"
GLEN	3	70119	"
"	4	70120	"
"	5	70121	"
"	6	70122	"
"	7 Fr.	70123	"
"	8 Fr.	70124	"
"	9 Fr.	70125	"
"	11 Fr.	73958	"
"	12 Fr.	73959	"
"	13 Fr.	73960	"

DWG. NO.- I.P.-5940-1

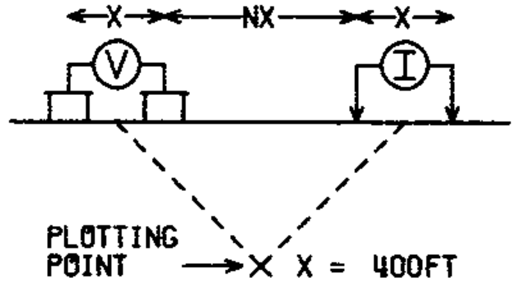
INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 281N



ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: JUNE 197

APPROVED:

DATE:

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

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PHILIP G. HALLOF

Expiry Date: February 25, 1973

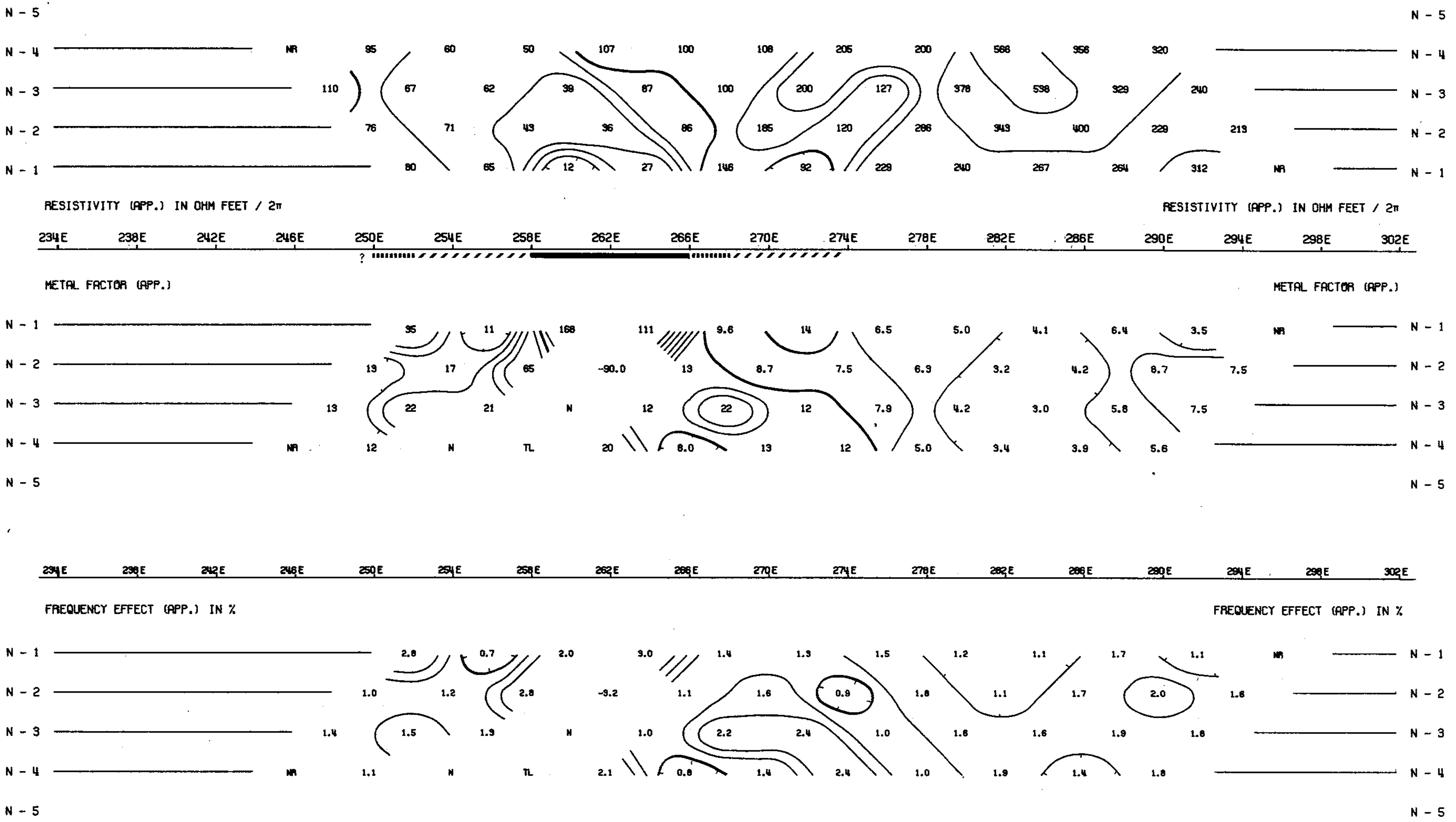
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #6

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #7



DWG. NO.- I.P.-5940-2

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 238N

ELECTRODE CONFIGURATION

X — NX — X

PLOTTING POINT → X   X = 400FT

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: FEB.1972

APPROVED:

DATE: 6/21/72

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

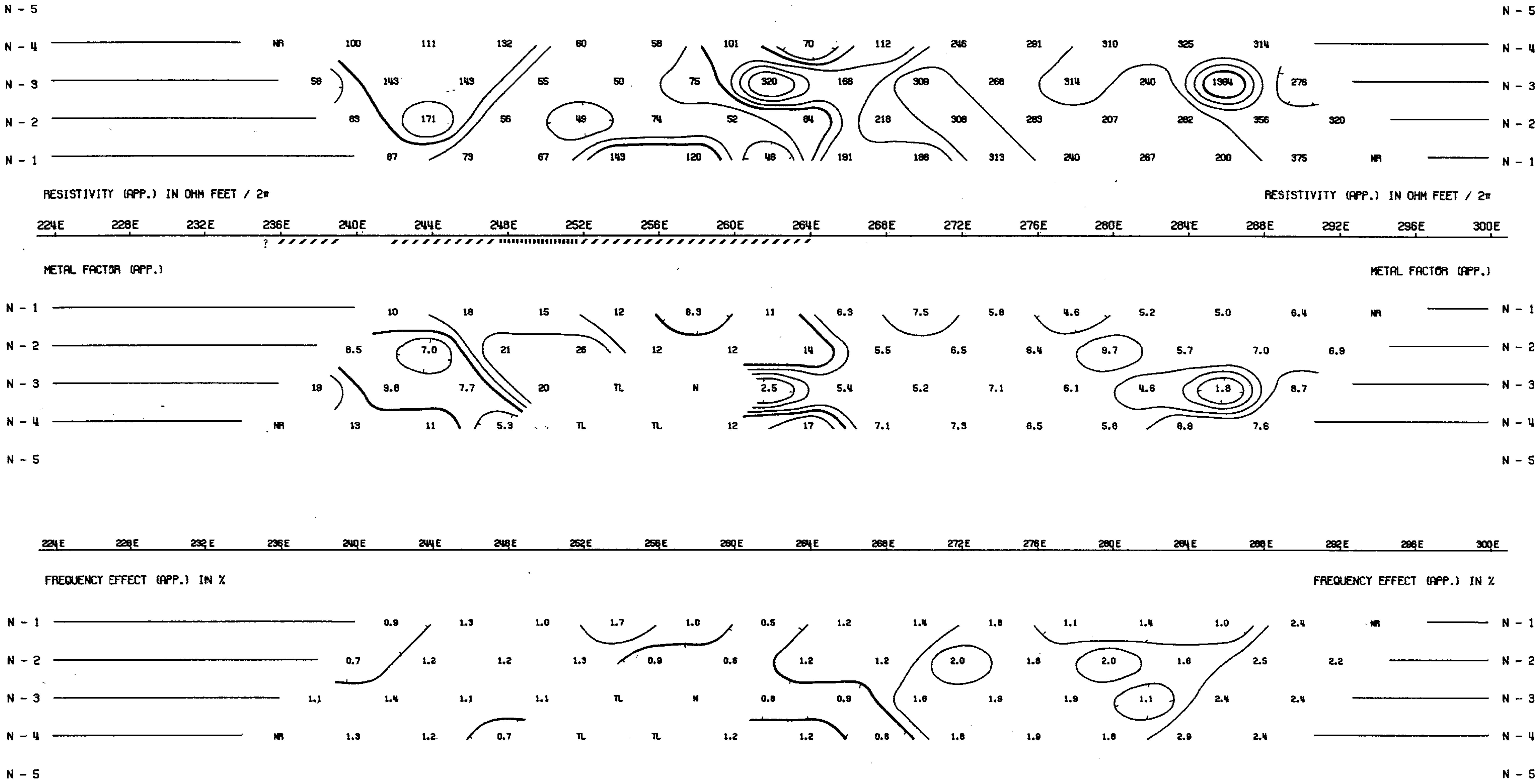
Expiry Date: February 25, 1973

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



DWG. NO.- I.P.-5940-4

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 230N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: APR 1972

APPROVED

DATE:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
PHILIP G. HALLOF

Expiry Date: February 25, 1973

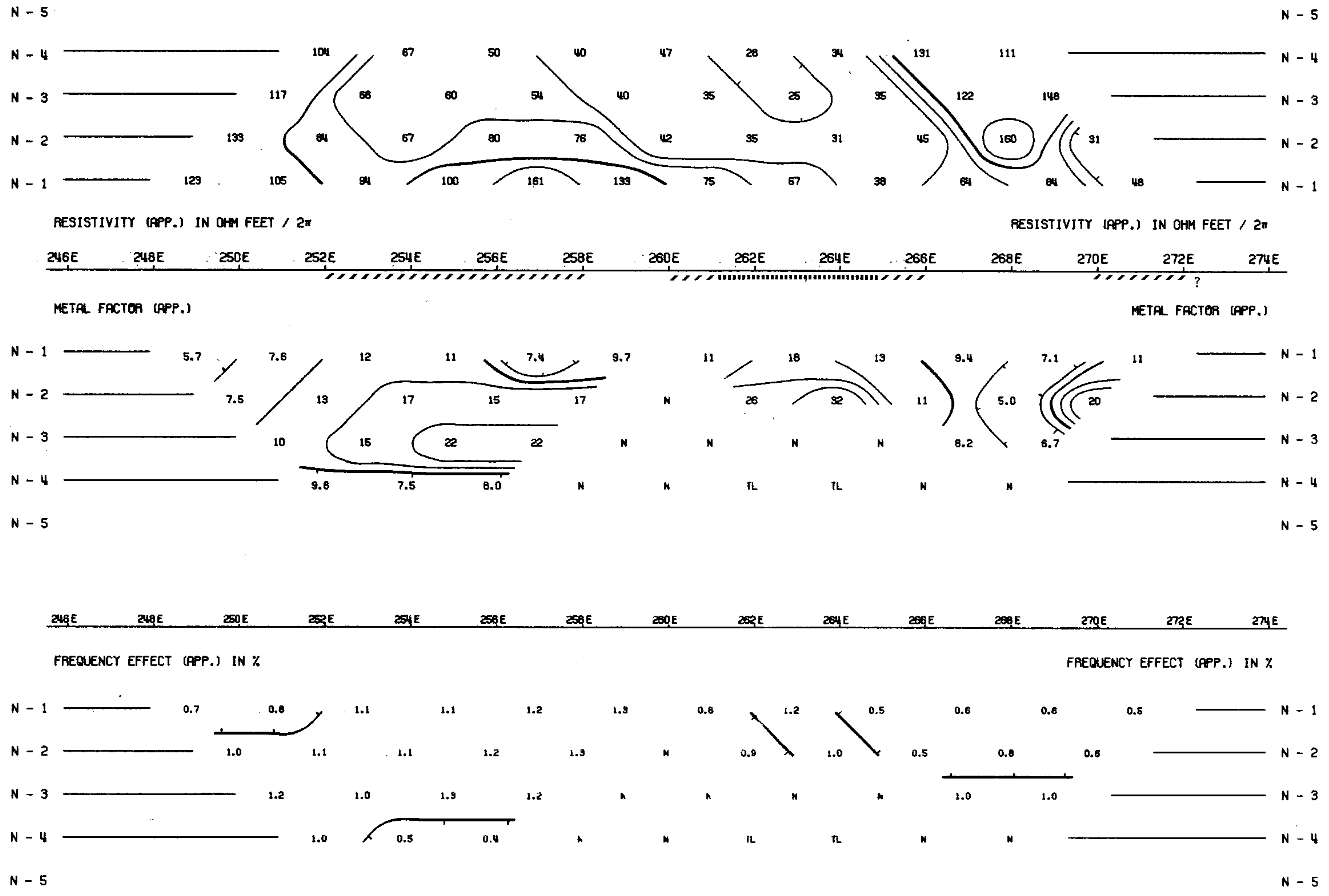
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #8



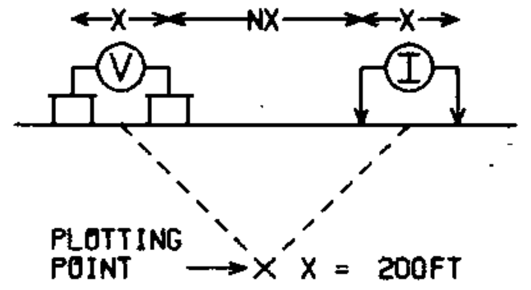
DWG. NO.- I.P.-5940-3

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 238N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

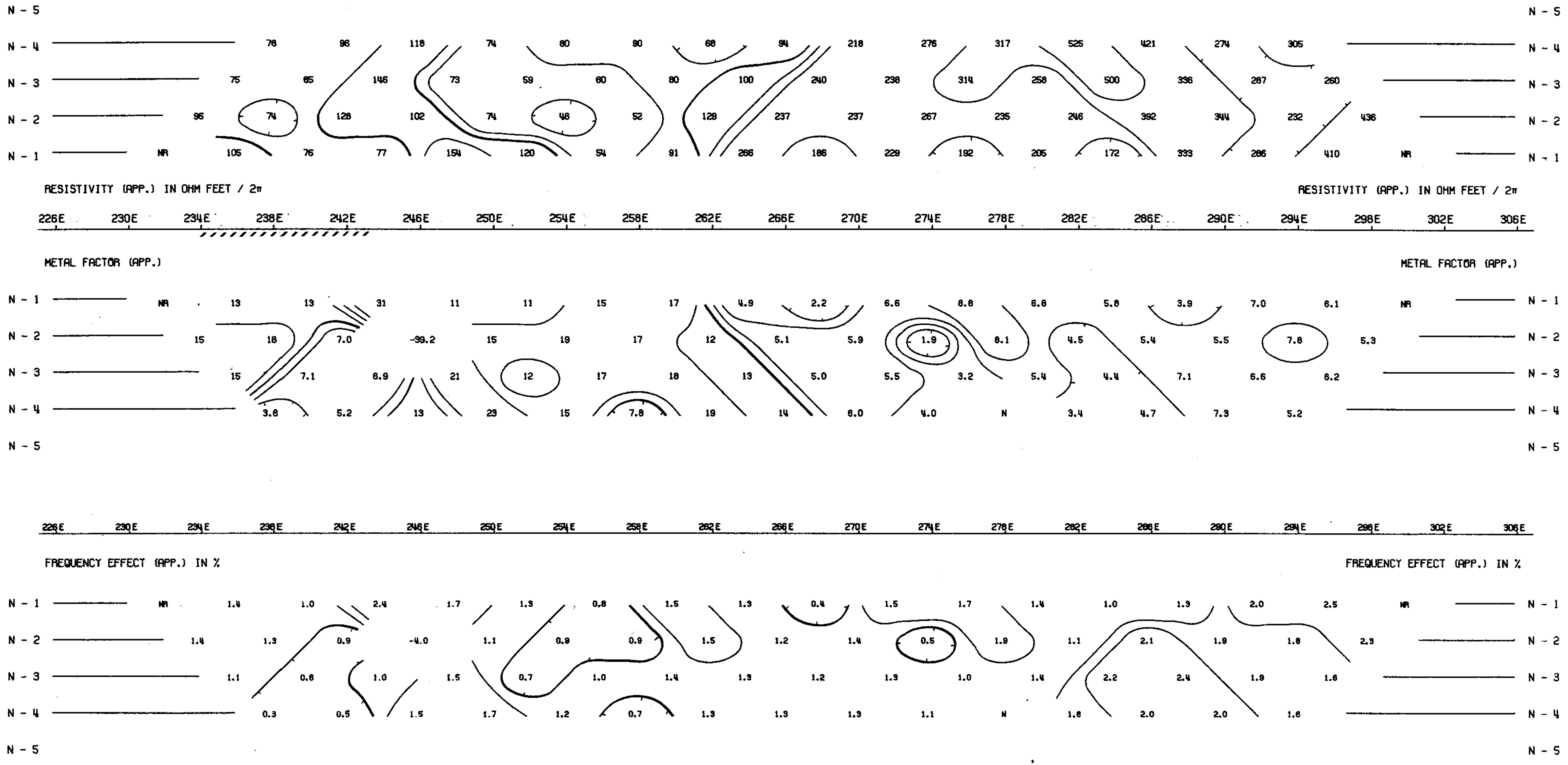
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
PHILIP G. HALLOF
Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5940-5

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 222N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: SEPT. 1972

APPROVED

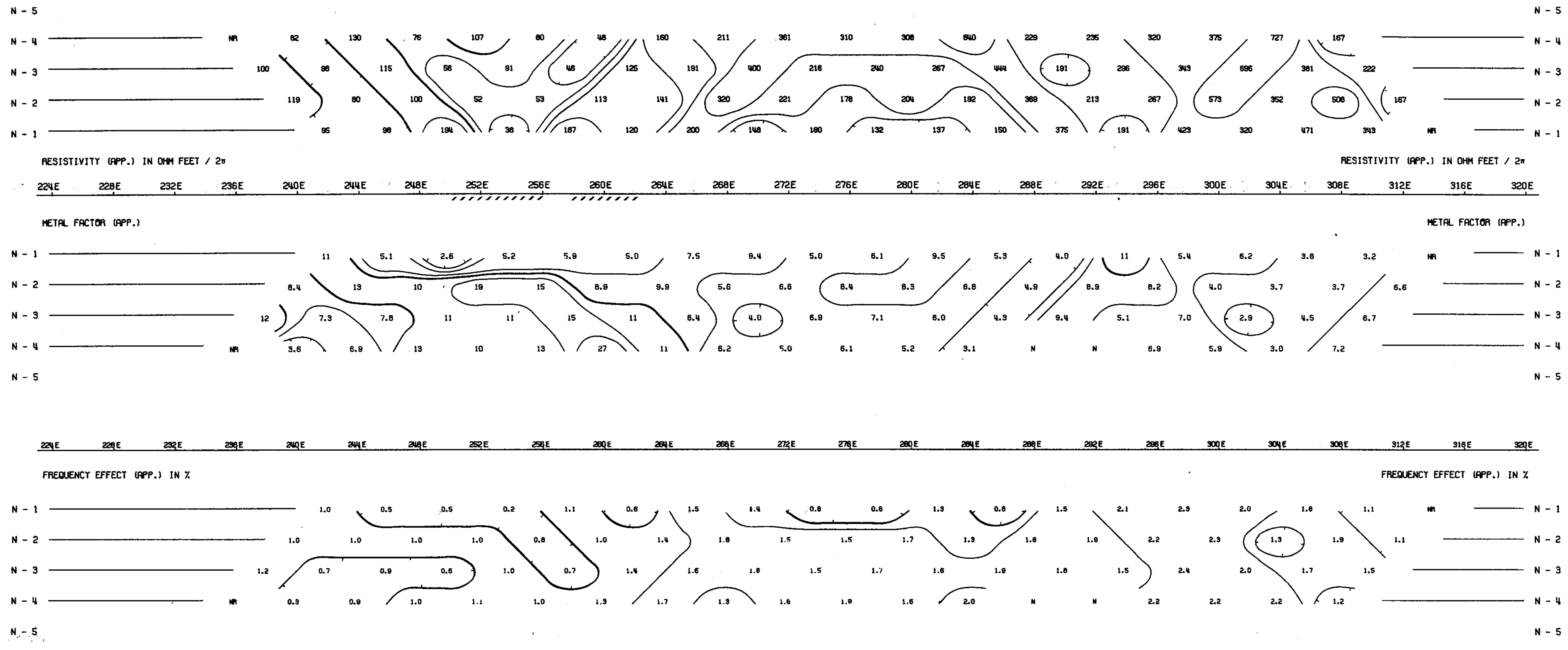
DATE: 5/3/72

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. NO.- I.P.-5940-6

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 214N

ELECTRODE CONFIGURATION

PLOTTING POINT

X = 400FT

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

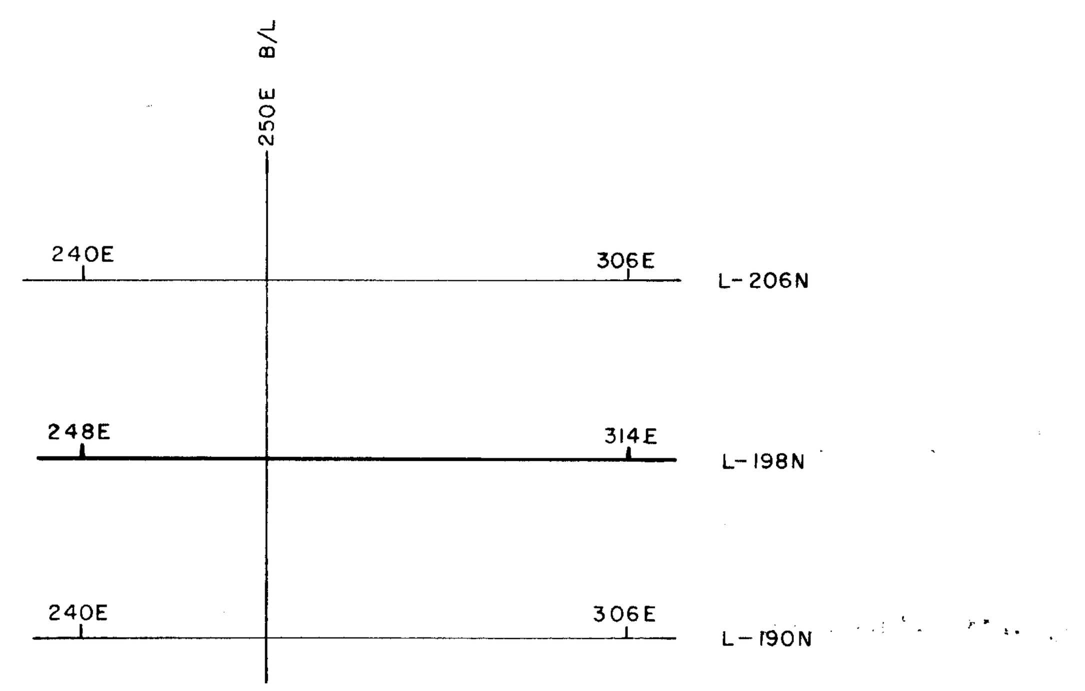
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



CHAINAGE ERROR ON LINE 198N
(NOT TO SCALE)

ON PLAN MAP, DATA IS PLOTTED AS STAKES INDICATE.

DWG. NO.- I.P.-5940-8

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 198N

ELECTRODE CONFIGURATION
←X→←NX→←X→
PLOTTING POINT → X   X = 400FT

SURFACE PROJECTION
OF ANOMALOUS ZONES
DEFINITE ▬▬▬
PROBABLE ||||||||||
POSSIBLE / / / / /

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED: [signature]

DATE: 6/21/72

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF
Expiry Date: February 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

DWG. NO.- I.P.-5940-7

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 206N

ELECTRODE CONFIGURATION

PLOTTING POINT → X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: 1972

APPROVED:

DATE:

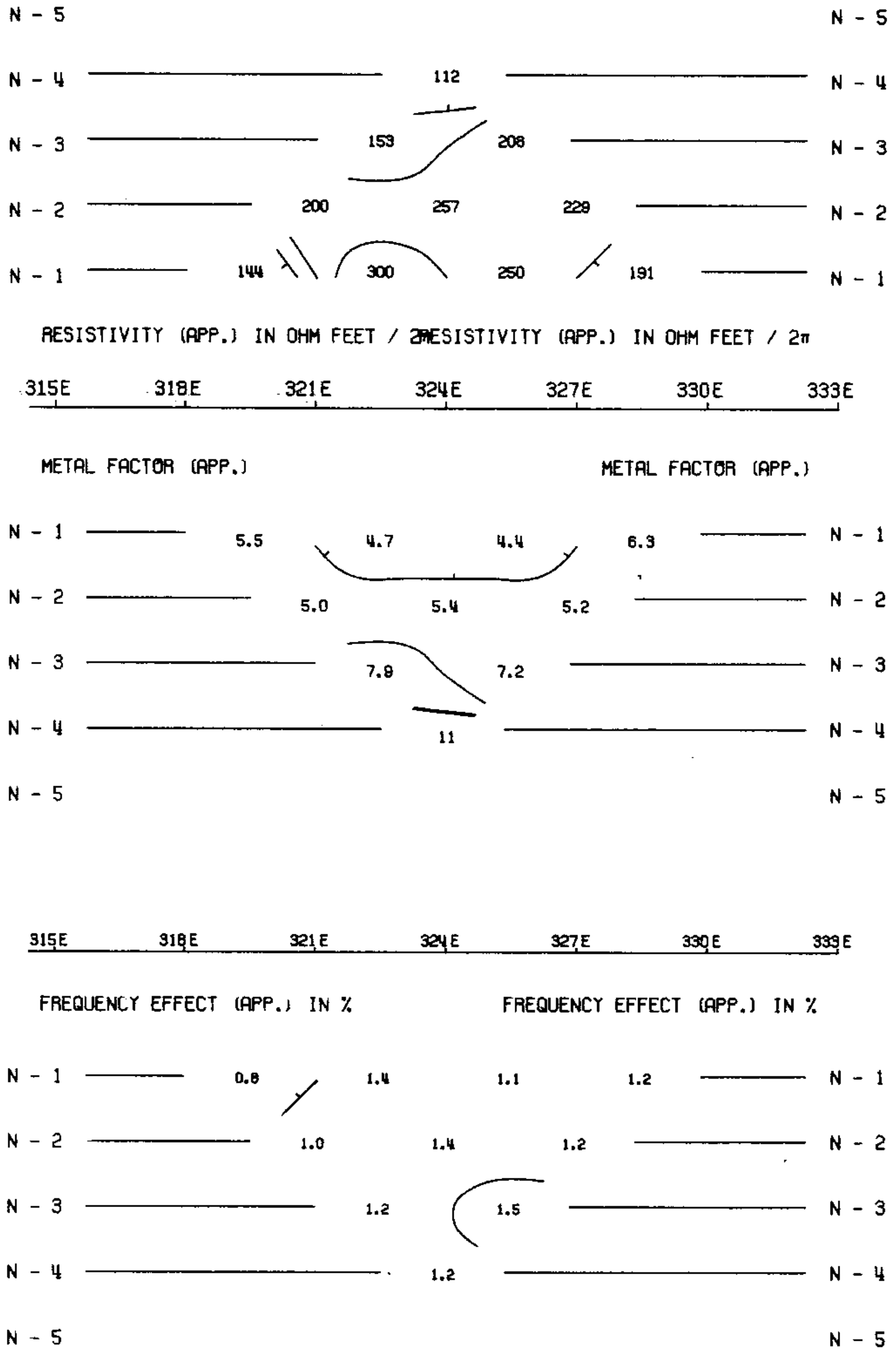
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #14

DWG. NO.- I.P.-5940-9

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 198N

ELECTRODE CONFIGURATION

X — NX — X

PLOTTING POINT → X X = 300FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

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

DATE SURVEYED: MAY 1972

APPROVED: PHILIP G. HALLOF

DATE: 6/26/72

PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

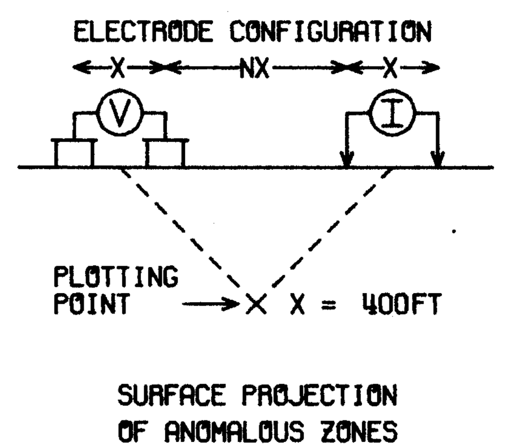
NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION

DWG. NO.- I.P.-5940-10

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 190N



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED

DATE 6/27/72

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

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION

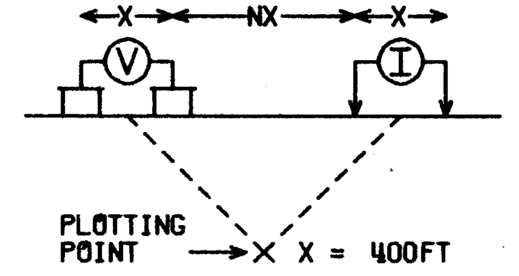
DWG. NO.- I.P.-5940-12

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 174N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

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

APPROVED:

DATE: 6/12/72

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION

DWG. NO.- I.P.-5940-11

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 182N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED

DATE

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

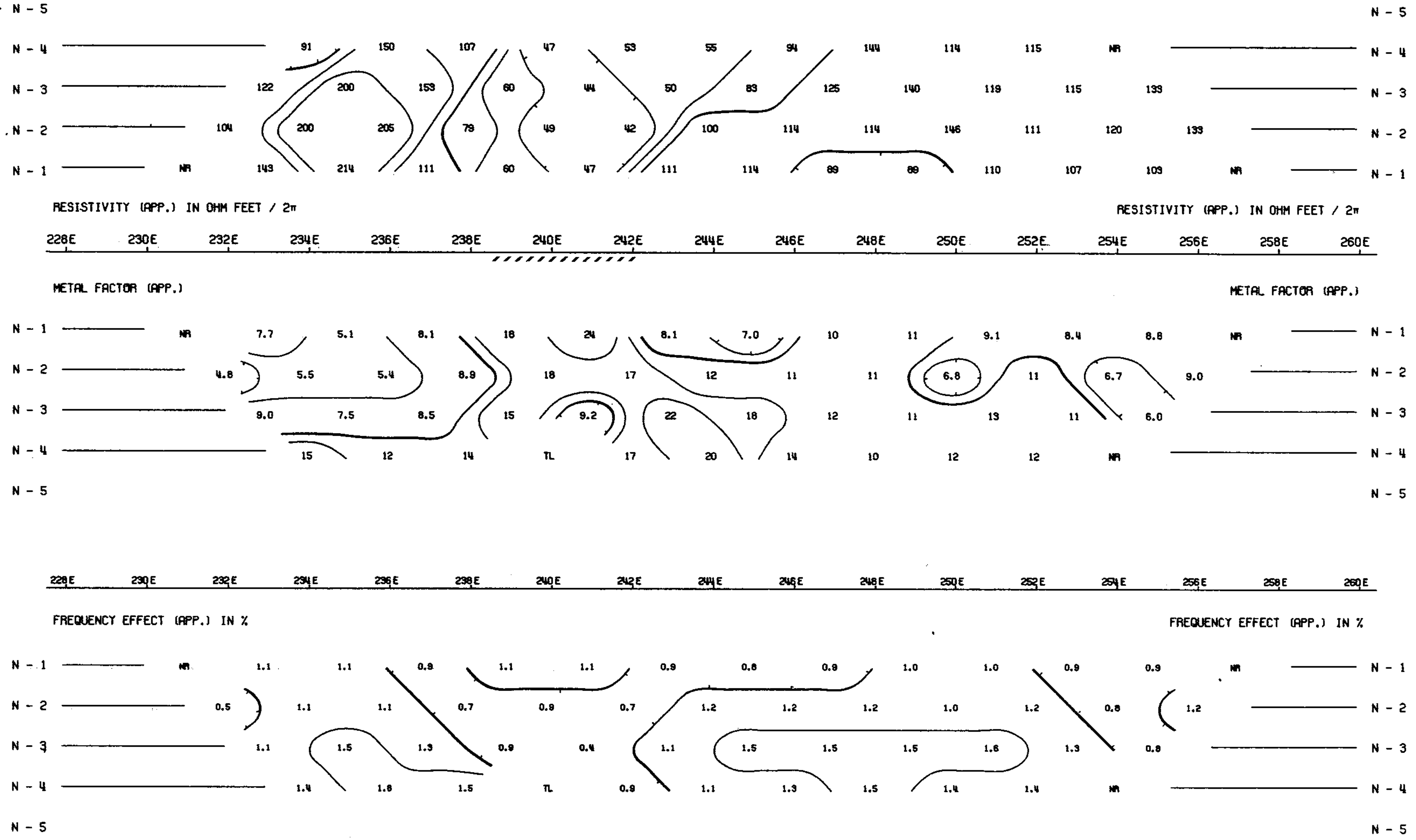
PROFESSIONAL ENGINEER · PROVINCE OF BRITISH COLUMBIA · PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5940-13

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 168N

ELECTRODE CONFIGURATION

PLOTTING POINT → X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

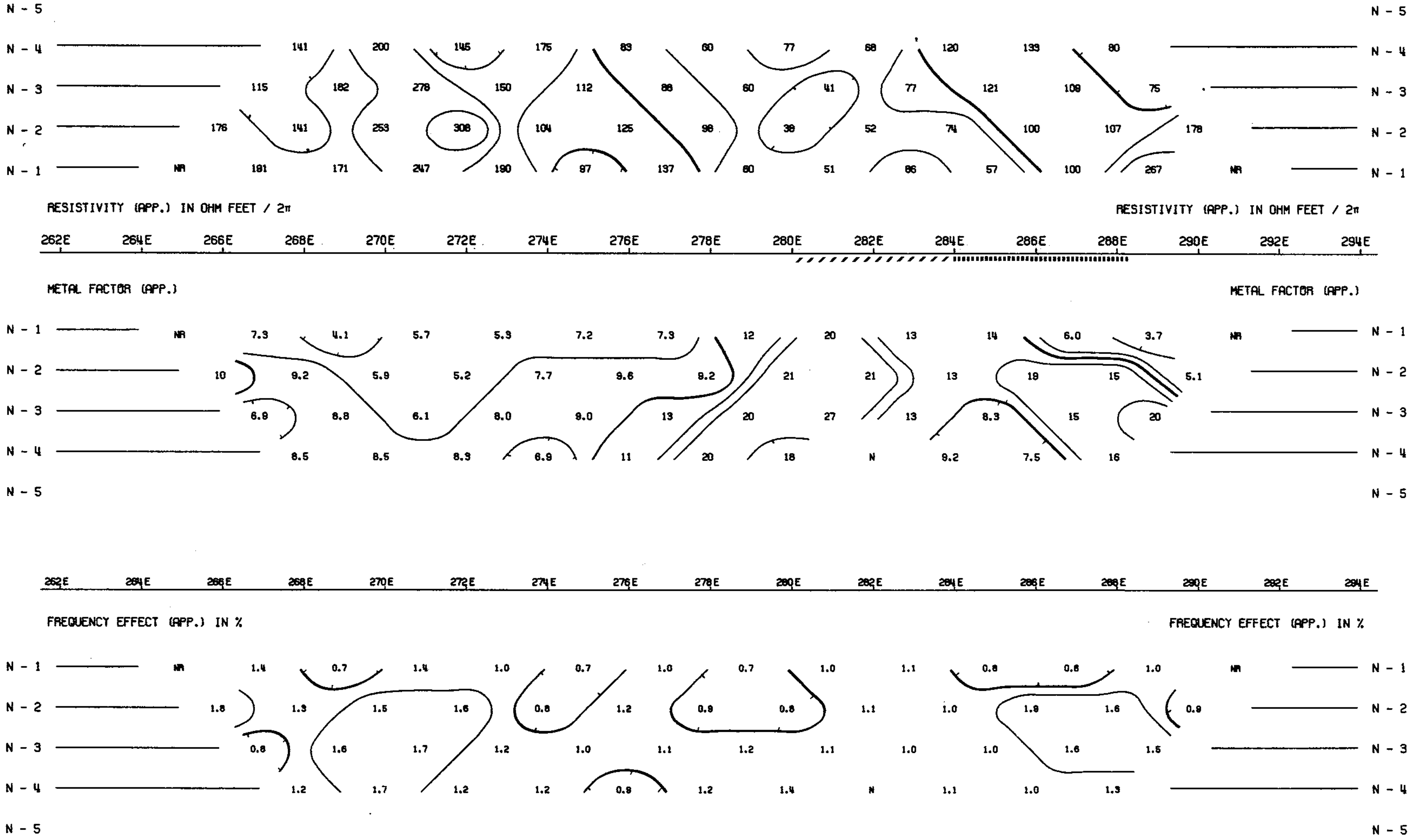
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

PROFESSIONAL ENGINEER PHILIP G. HALLOF BRITISH COLUMBIA
Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



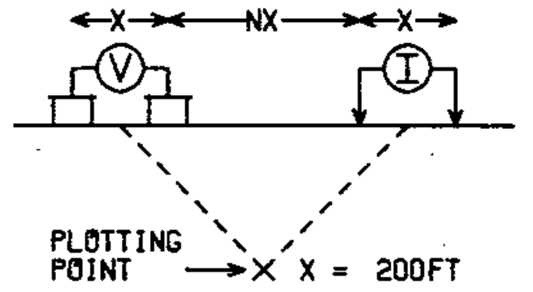
DWG. NO.- I.P.-5940-14

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 160N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

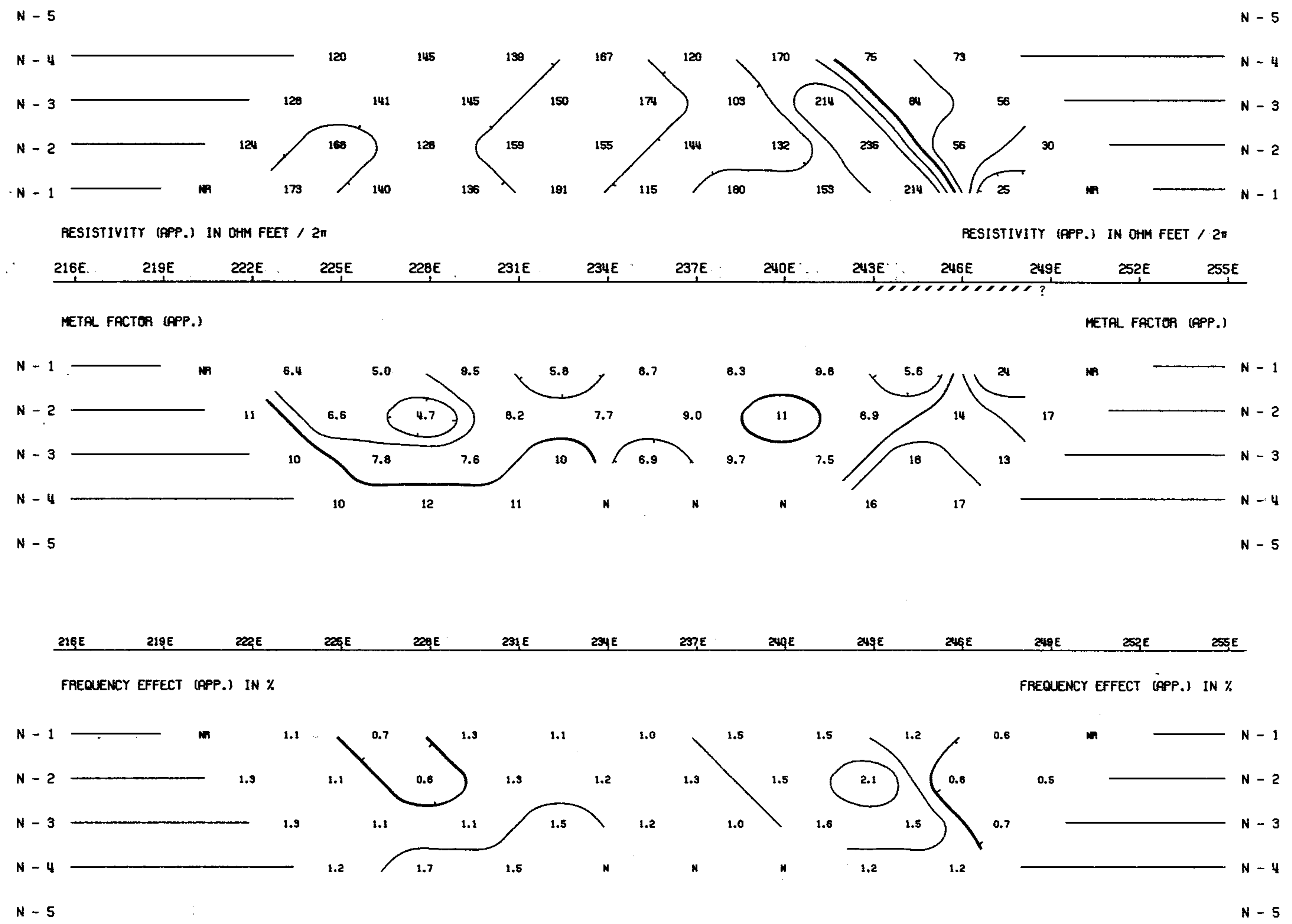
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – PHILIP G. HALLOF
Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5940-15

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 136N (EAST)

ELECTRODE CONFIGURATION

PLOTTING POINT X = 300FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

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

PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

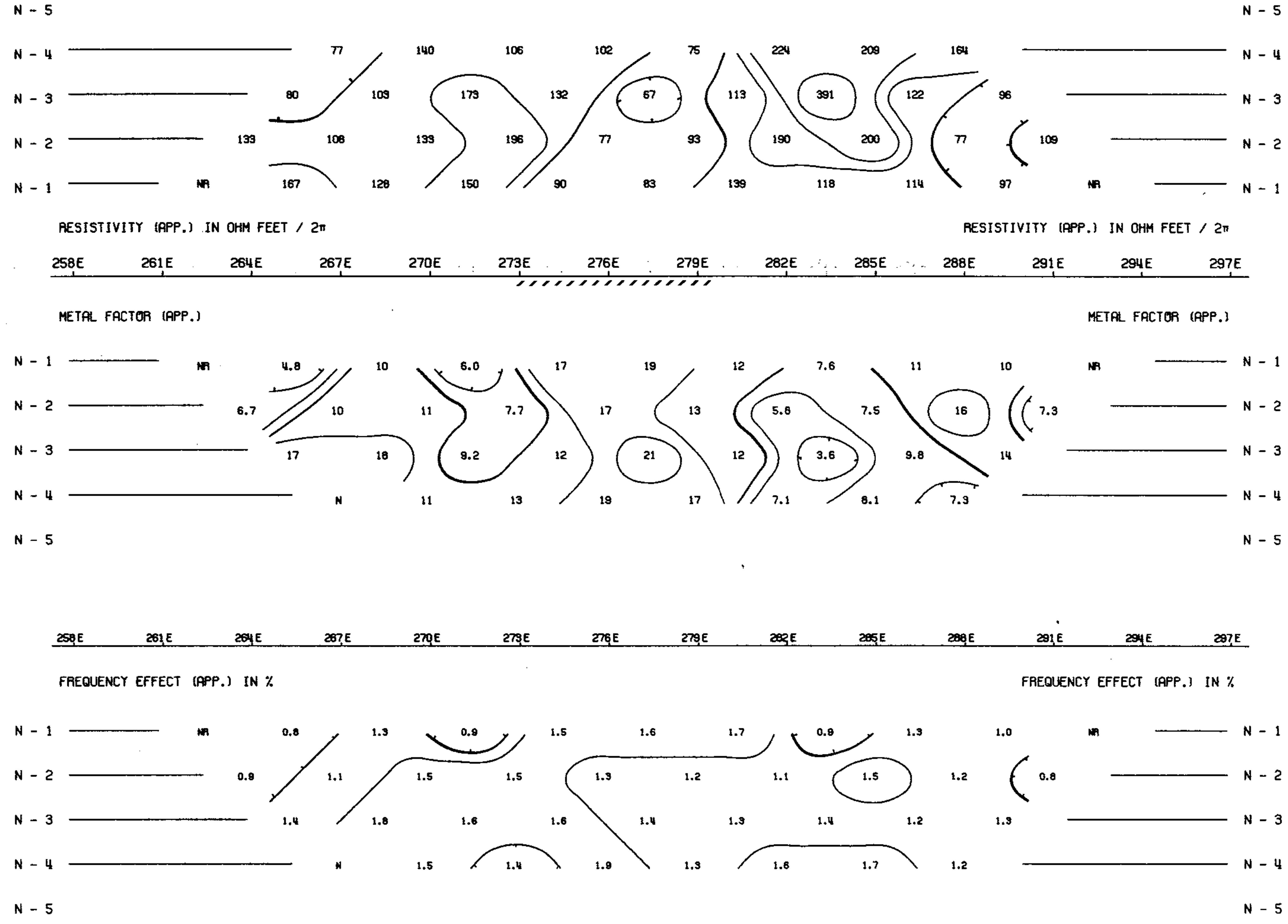
Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #21



DWG. NO.- I.P.-5940-16

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.

LINE NO.- 136N (WEST)

ELECTRODE CONFIGURATION

PLOTTING POINT → X X = 300FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

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

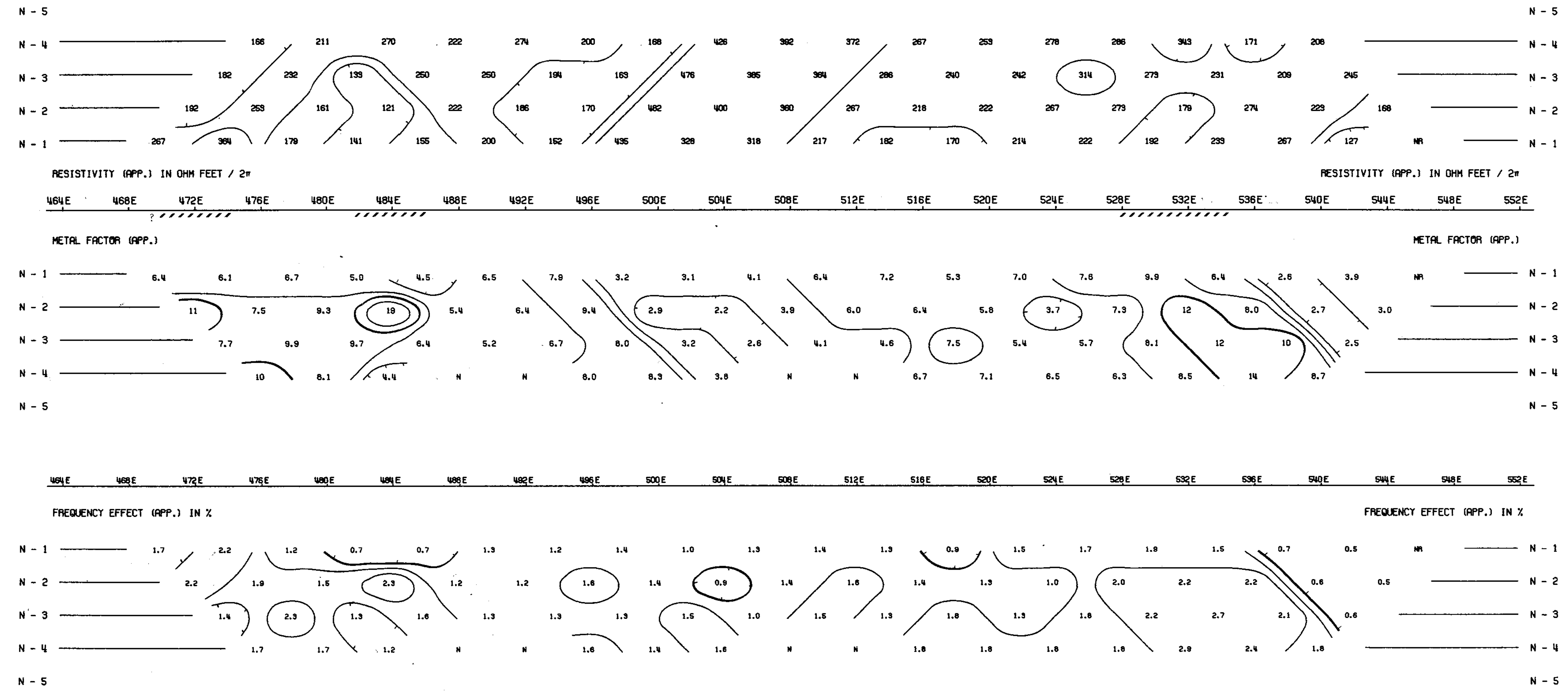
PROFESSIONAL ENGINEER — PHILIP G. HALLOF — BRITISH COLUMBIA

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-1

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 580N

ELECTRODE CONFIGURATION

PLOTTING POINT → X X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: 1972

APPROVED

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

DATE

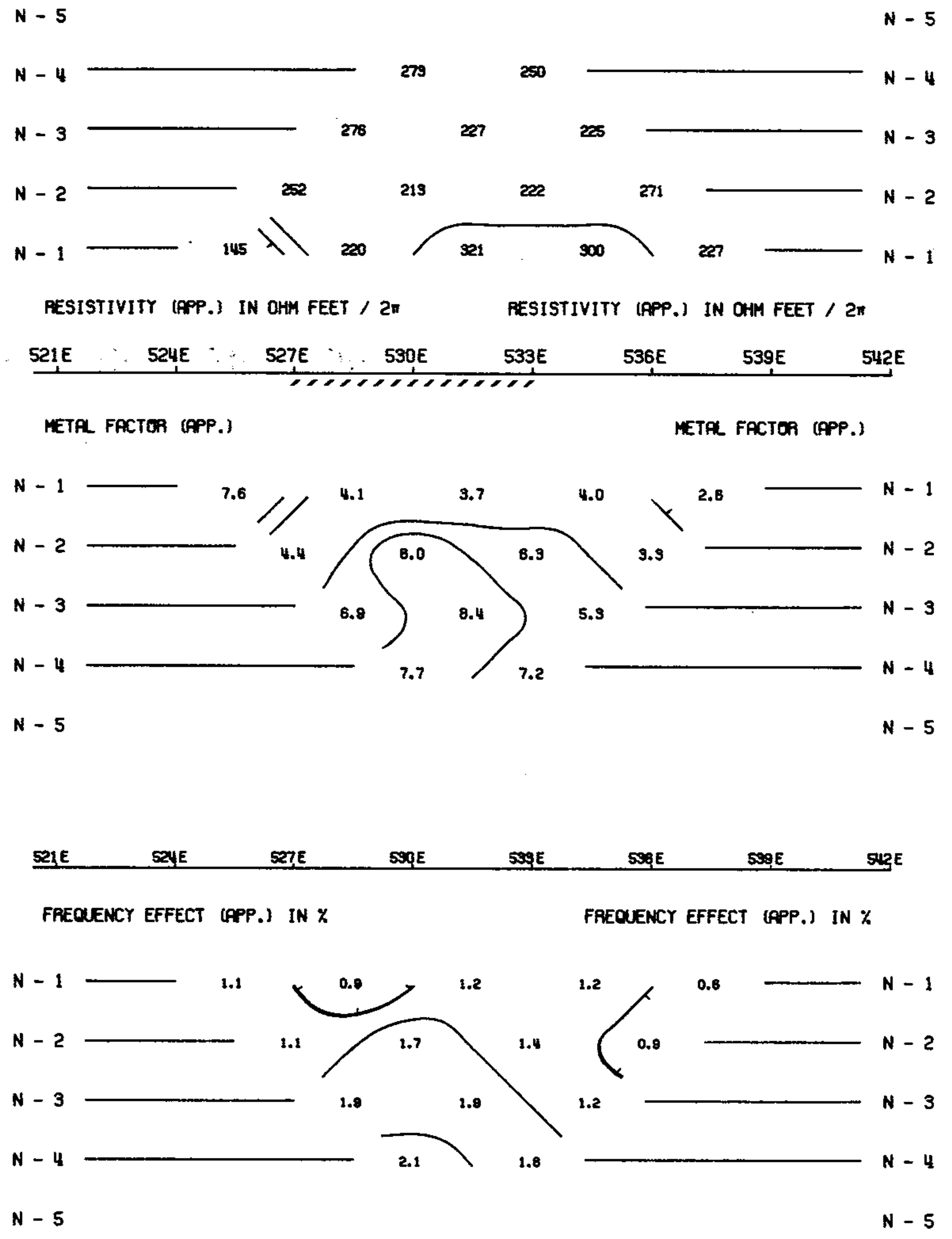
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



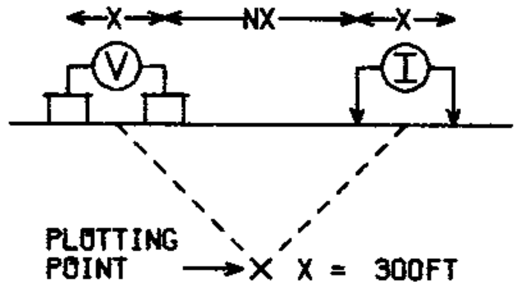
DWG. NO.- I.P.-5941-2

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 580N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: [illegible] 1972

APPROVED:

DATE:

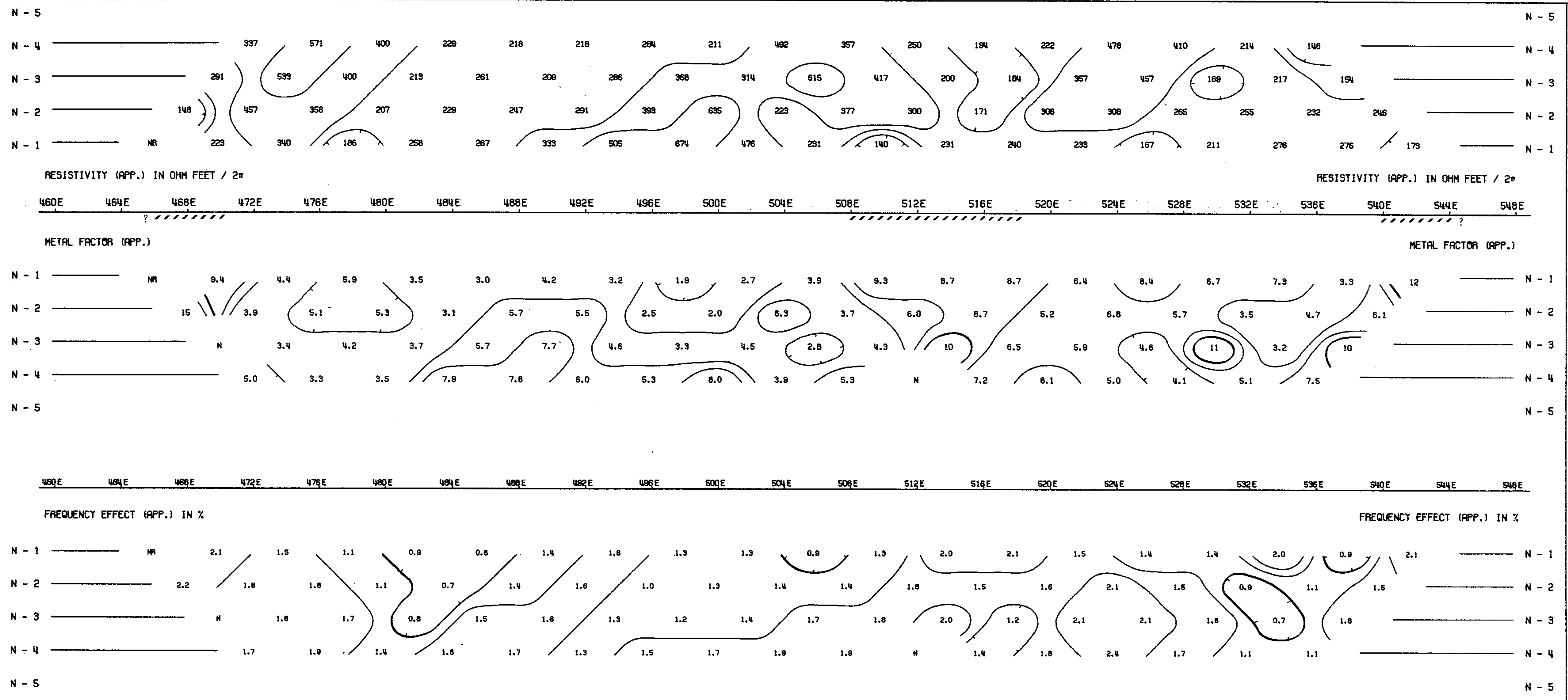
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



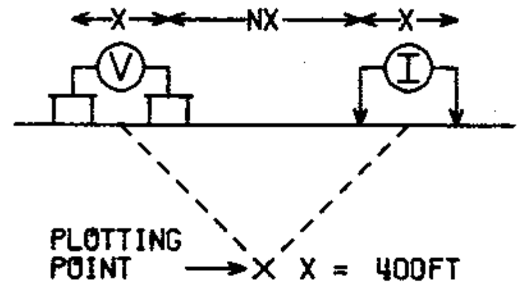
DWG. NO.- I.P.-5941-3

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500 E B/L)

LINE NO.- 572N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED

DATE

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

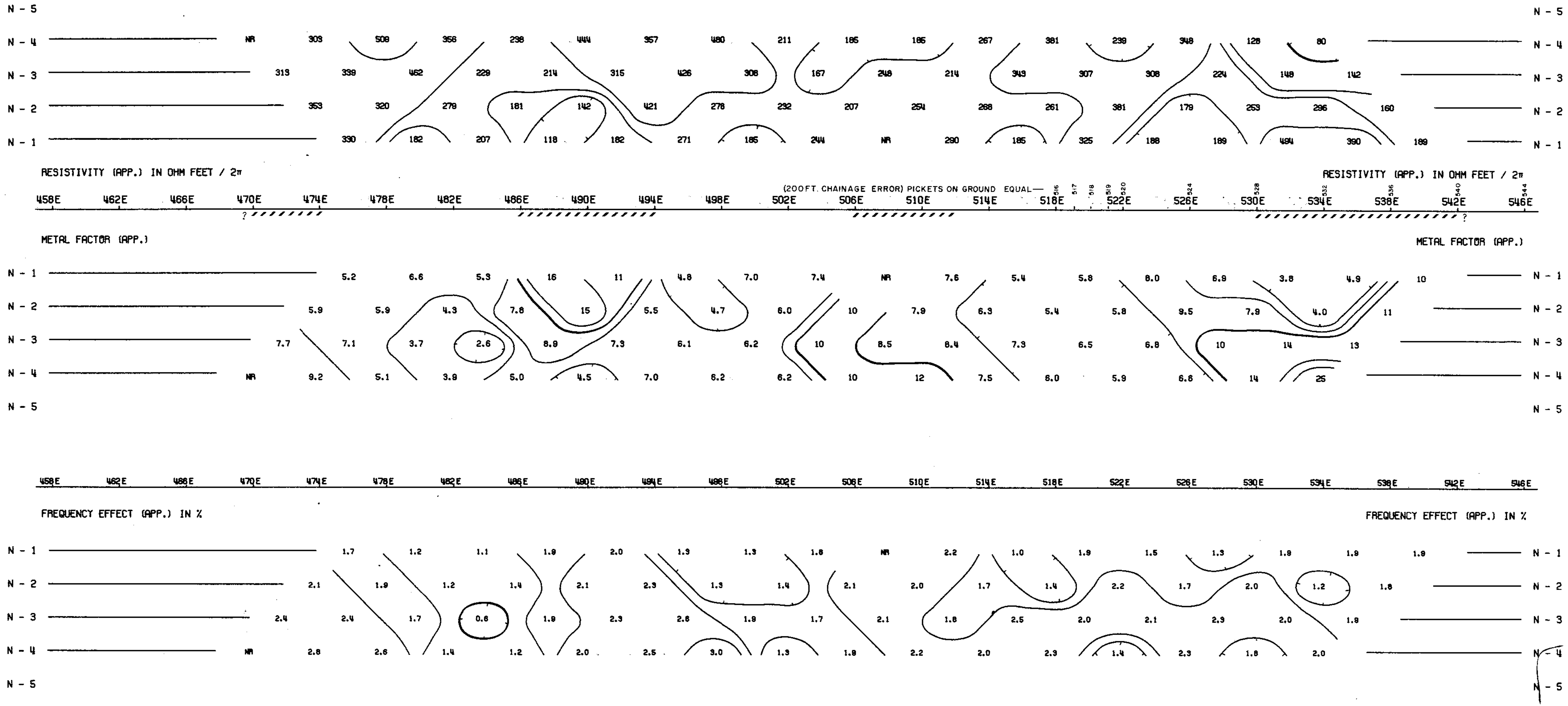
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY MCPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-4

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500 E B/L)

LINE NO.- 564N

ELECTRODE CONFIGURATION
X — NX — X
PLOTTING POINT
X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED

DATE

PROVINCE OF BRITISH COLUMBIA PROFESSIONAL ENGINEER

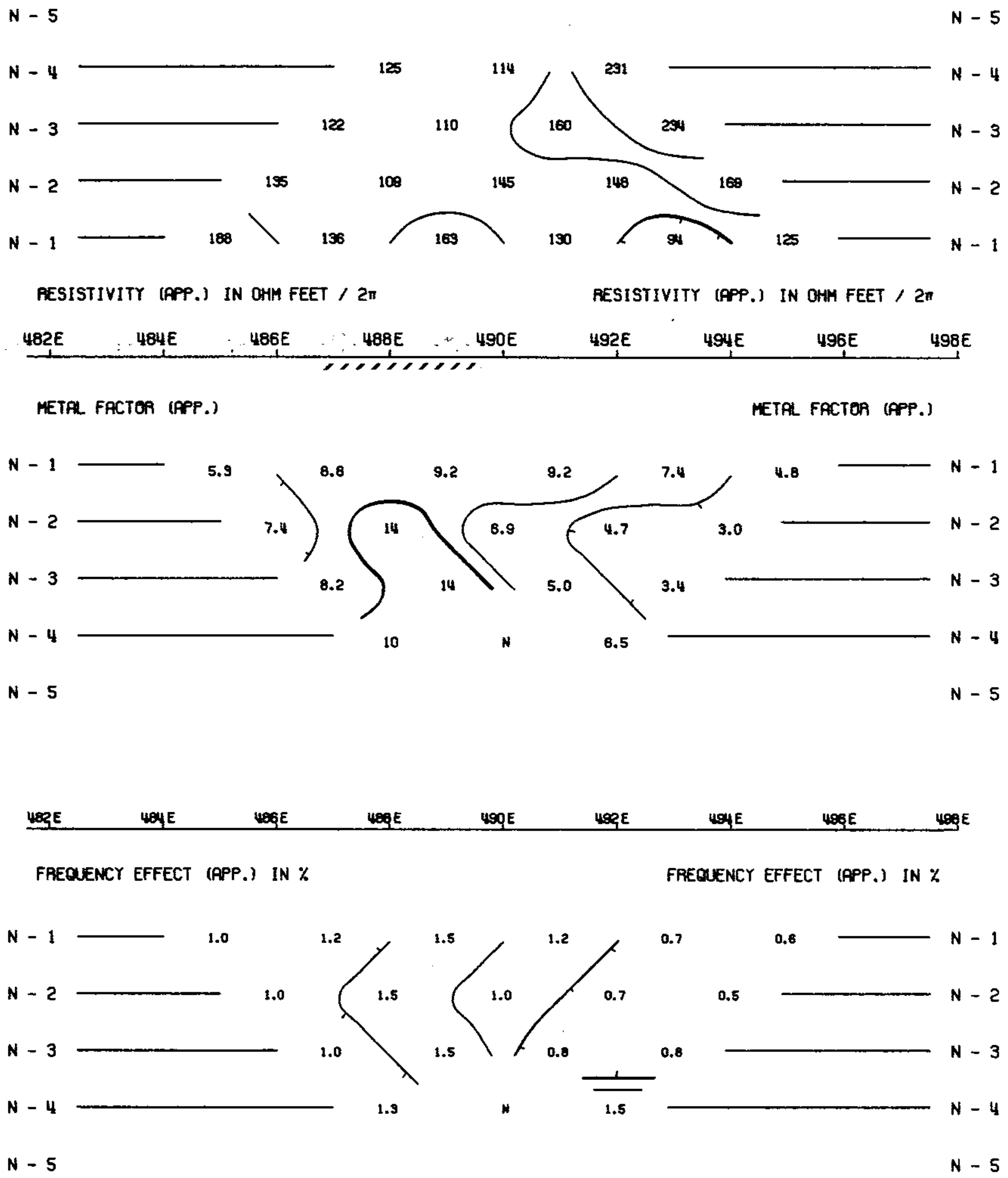
Expiry Date: February 25, 1973

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



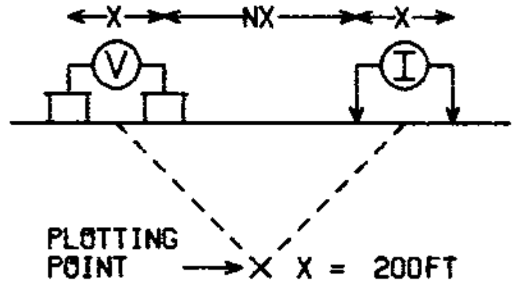
DWG. NO.- I.P.-5941-5

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500 E B/L)

LINE NO.- 564N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

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

DATE:

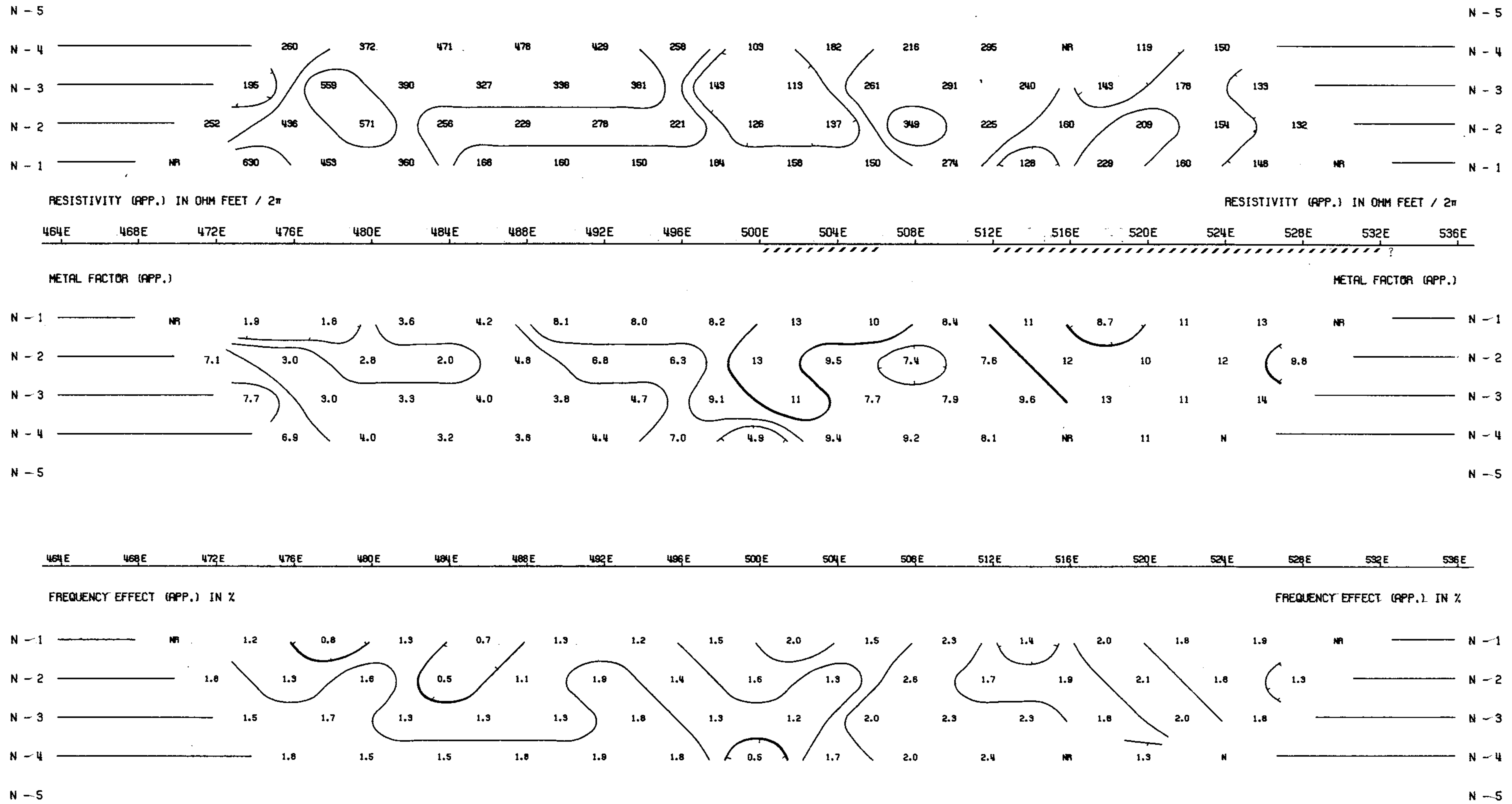
PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-6

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY

KAMLOOPS AND NICOLA M.D., B.C.

(500 E B/L)

LINE NO.- 556N

ELECTRODE CONFIGURATION

PLOTTING POINT → X = 400FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

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

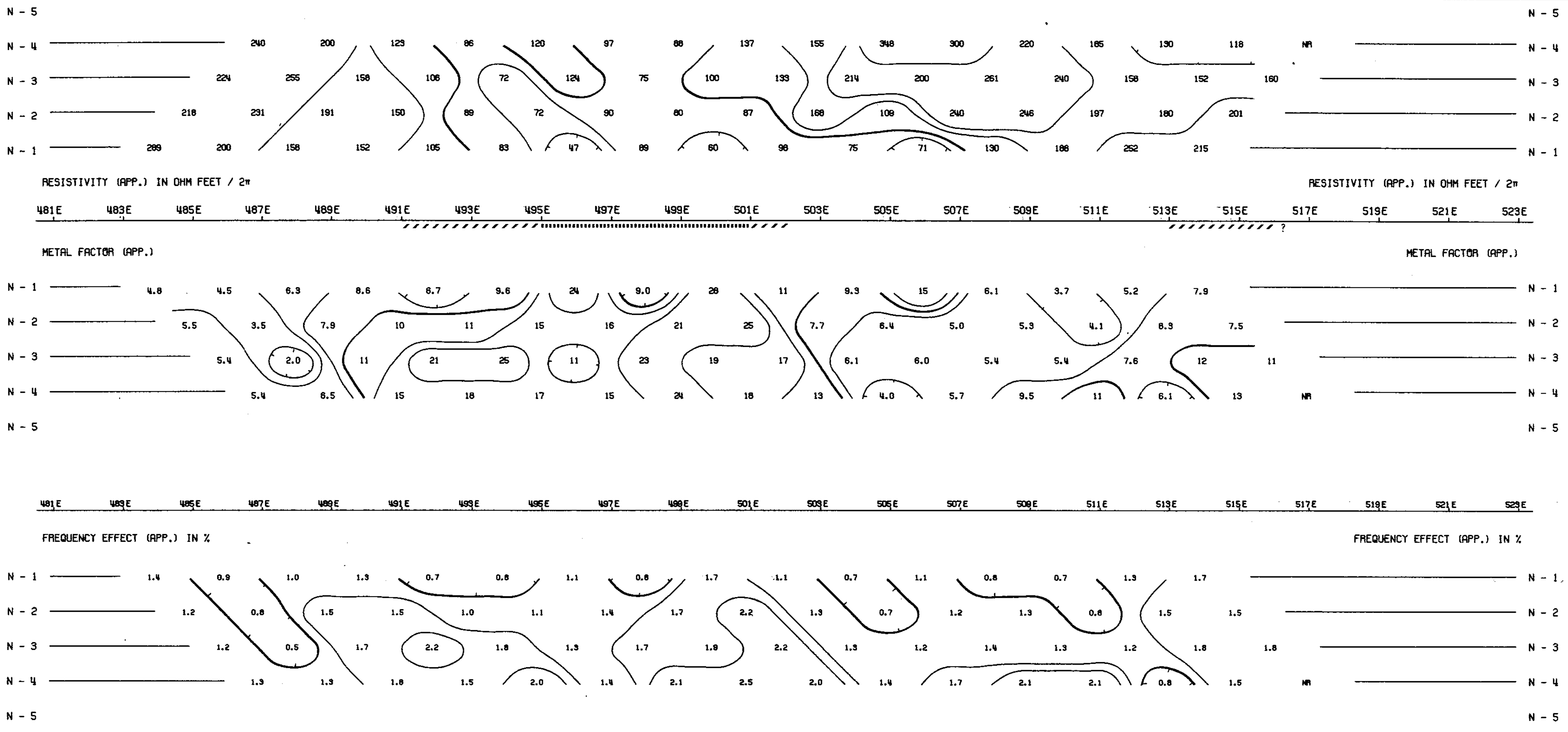
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-8

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 540N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

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

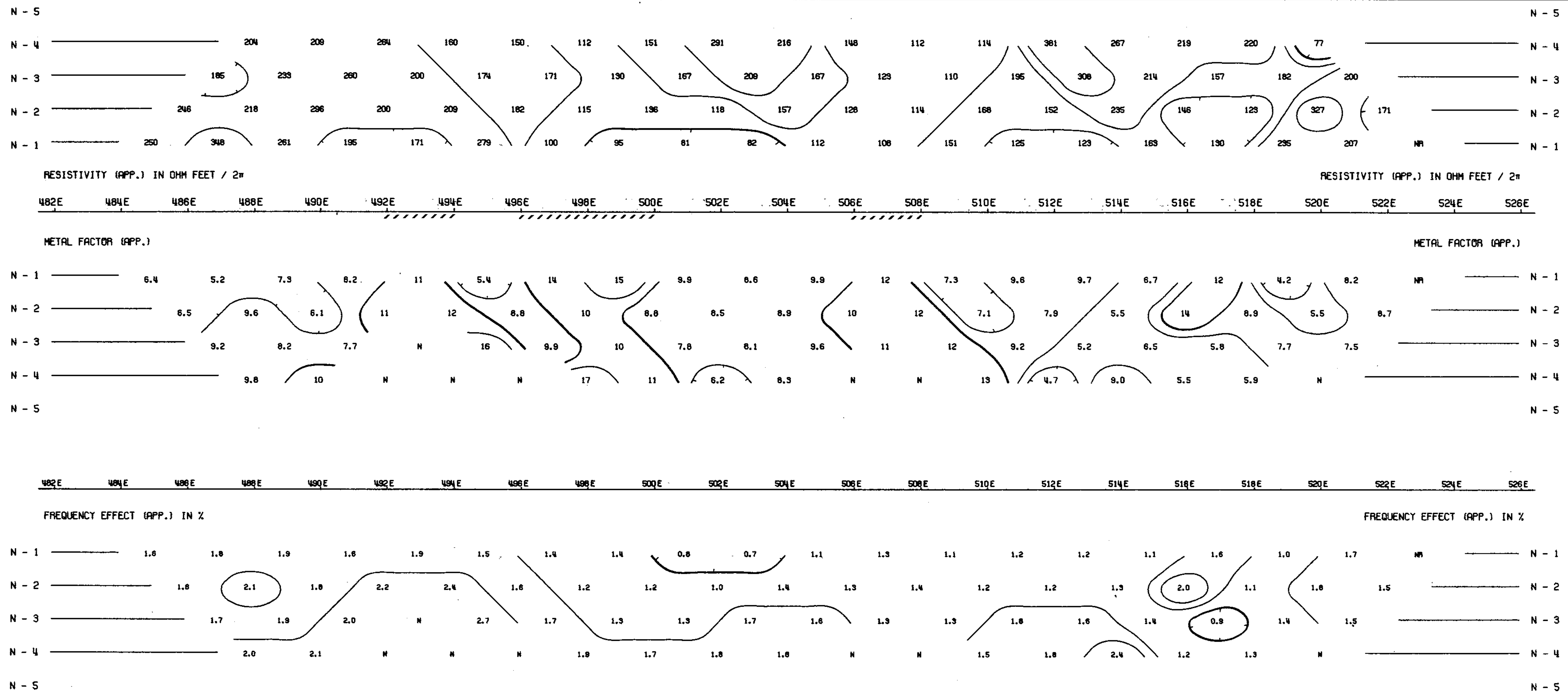
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PHILIP G. HALLOF

Expiry Date: February 25 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-7

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500 E B/L)

LINE NO.- 548N

ELECTRODE CONFIGURATION

PLOTTING POINT → X X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE ⁄⁄⁄⁄⁄

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

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

DATE: [illegible]/72

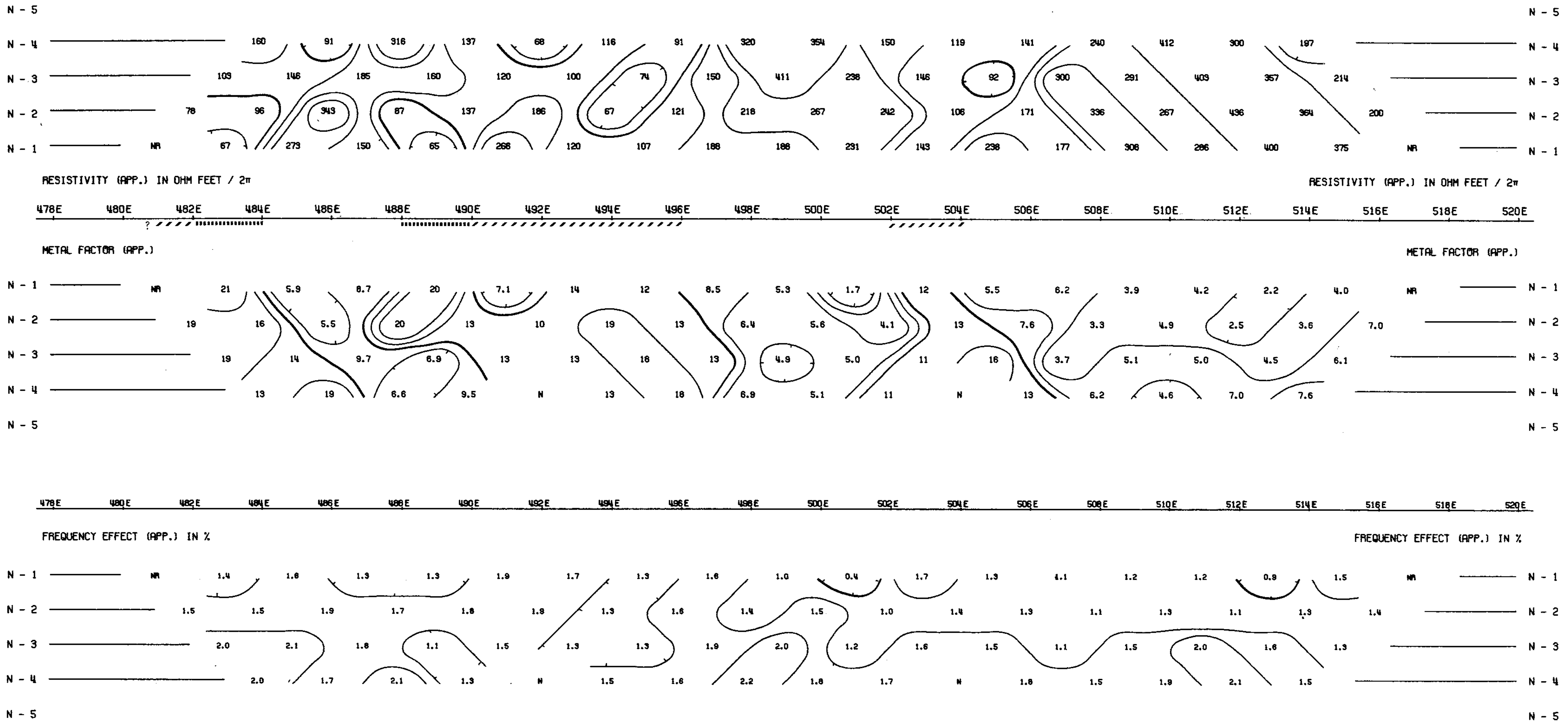
PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION

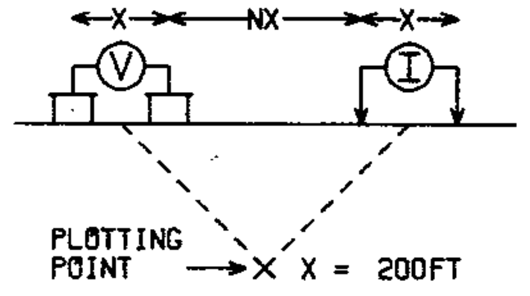


DWG. NO.- I.P.-5941-9

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 532N



SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
PHILIP G. HALLOF

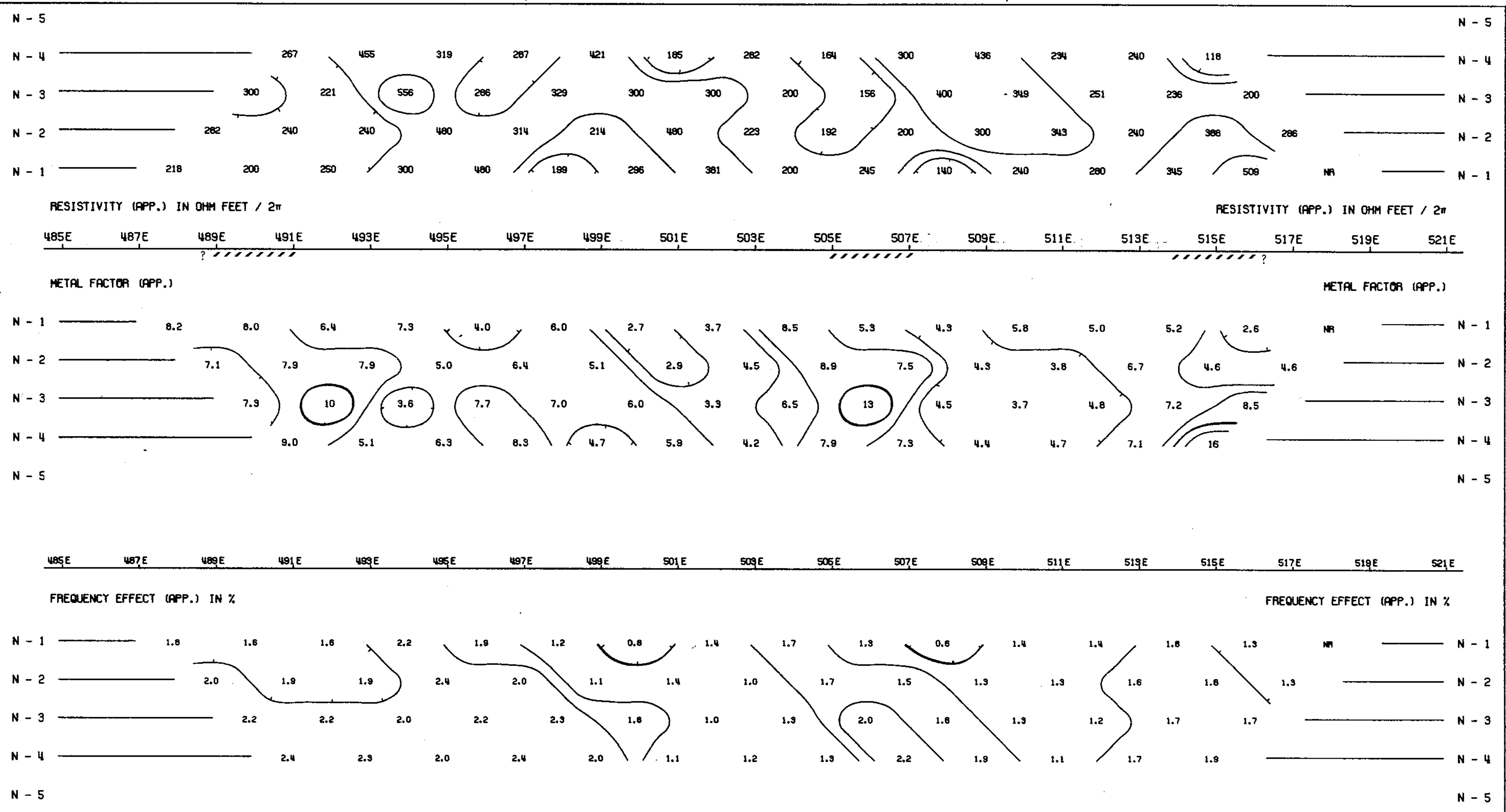
Expiry Date: February 25, 1973

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



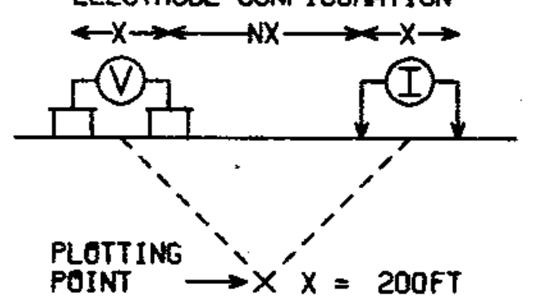
DWG. NO.- I.P.-5941-10

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 524N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

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

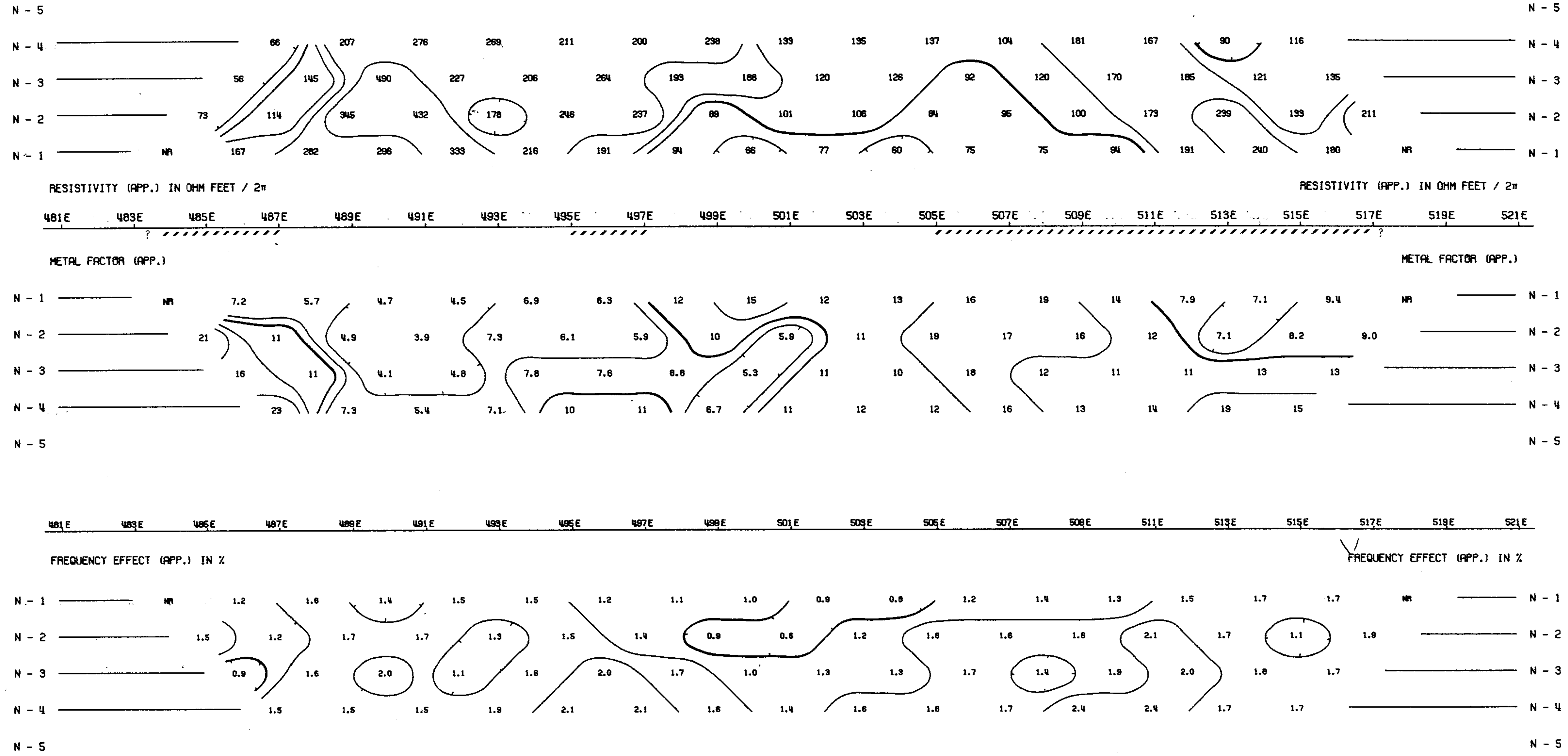
PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA

Expiry Date: February 28, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-11

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 516N

ELECTRODE CONFIGURATION

PLOTTING POINT — X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE: [illegible] MAY 1972

APPROVED: [illegible]

DATE: [illegible] 72

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

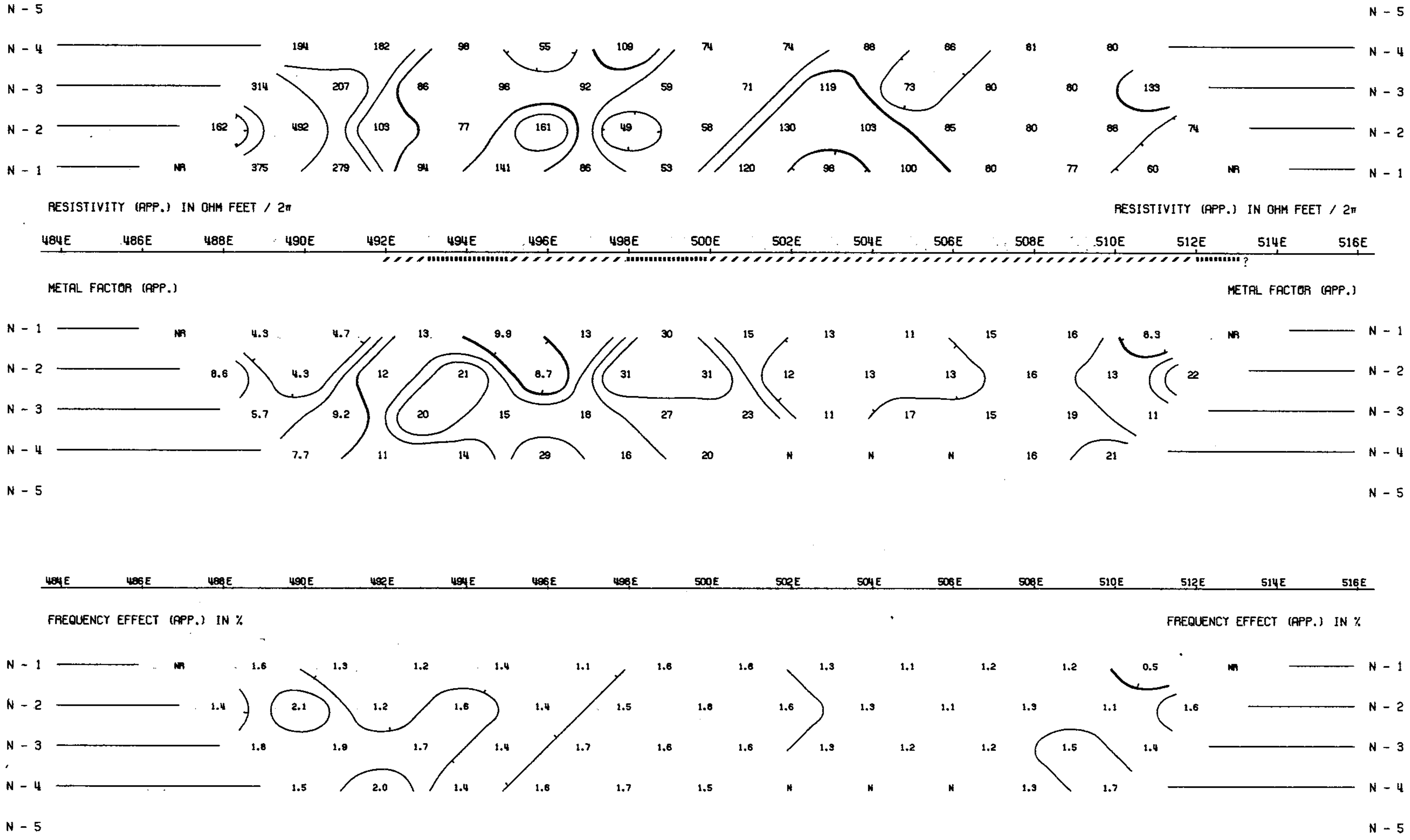
PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



DWG. NO.- I.P.-5941-12

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 508N

ELECTRODE CONFIGURATION

PLOTTING POINT X = 200FT

SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972
APPROVED BY
DATE: 1972

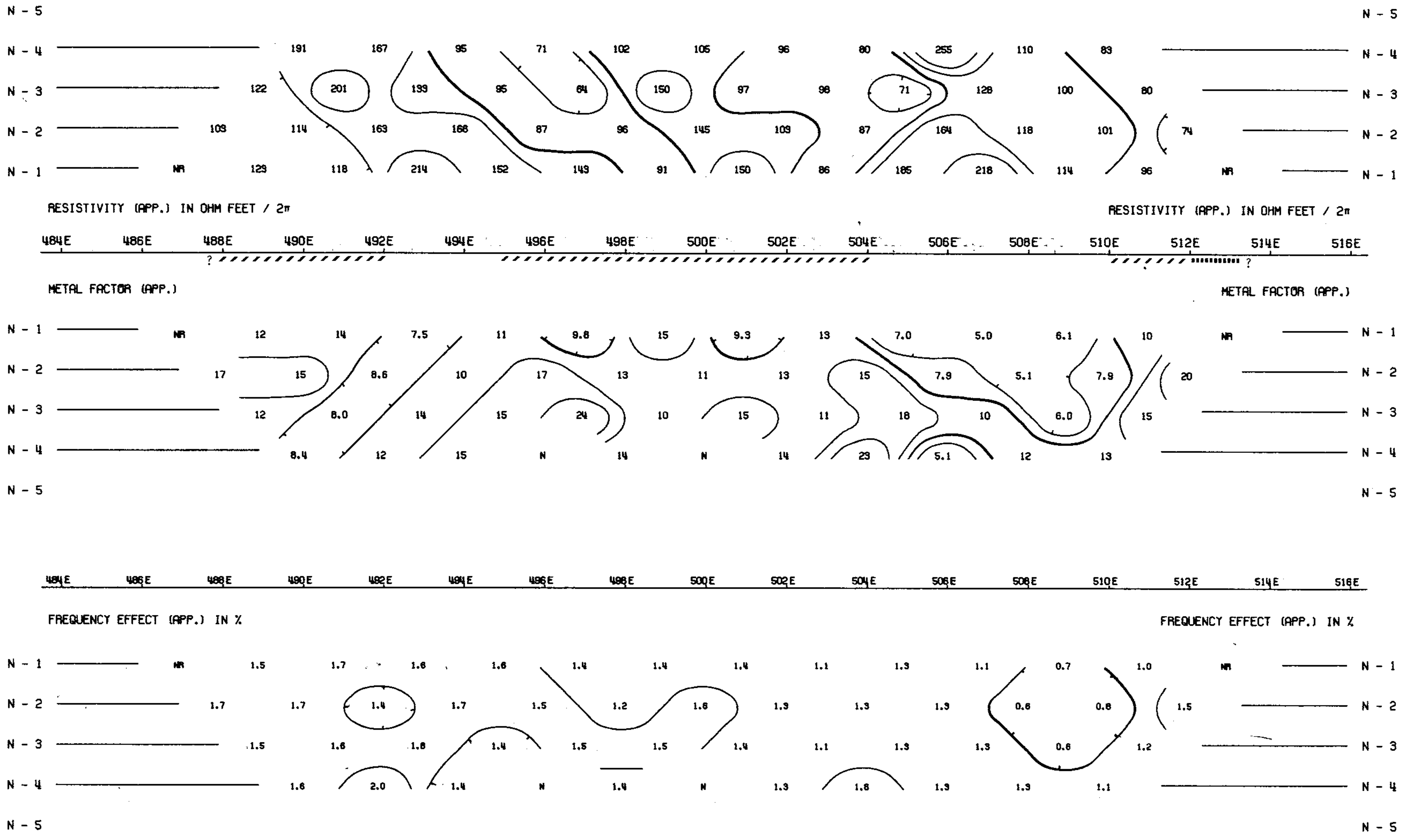
NOTE: CONTOURS AT LOGARITHMIC INTERVALS 1.-1.5-2.-3.-5.-7.5-10

PROVINCE OF BRITISH COLUMBIA PROFESSIONAL ENGINEER PHILIP G. HALLOF
Expiry Date: February 25, 1973

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

NOTE: THIS PLOT WAS PRODUCED BY McPHAR COMPUTER DIVISION



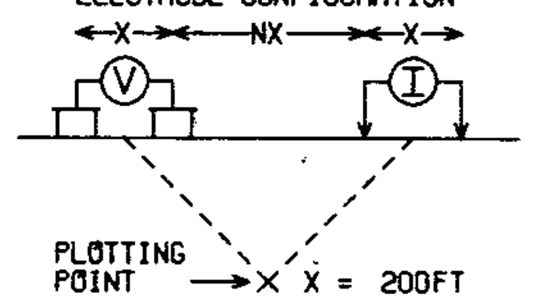
DWG. NO.- I.P.-5941-13

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY
KAMLOOPS AND NICOLA M.D., B.C.
(500E B/L)

LINE NO.- 500N

ELECTRODE CONFIGURATION



SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES: 0.31-5.0 HZ

DATE SURVEYED: MAY 1972

APPROVED:

DATE:

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — PHILIP G. HALLOF

Expiry Date: February 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

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA

KAMLOOPS AND NICOLA M.D., B.C.

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

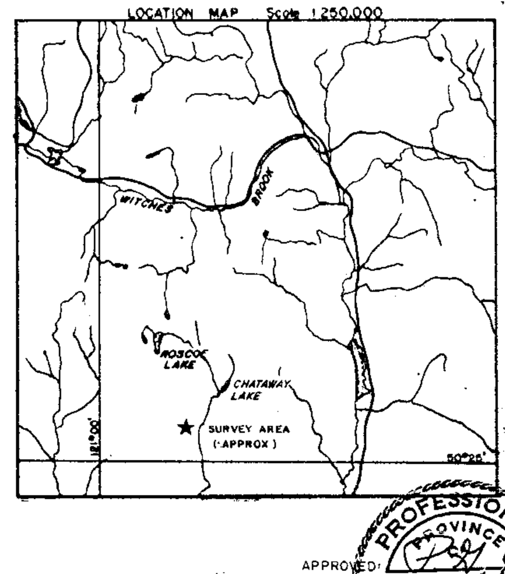
Numbers at the end of the anomalies indicate electrode interval

<u>NOTE</u> TO ACCOMPANY GEOPHYSICAL REPORT FOR INTERNATIONAL MOGUL MINES LTD., CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA, KAMLOOPS AND NICOLA M.D., B.C. BY P.G. HALLOF (P. ENG.) AND M.A. GOUDIE, (GEOLOGIST).

DATED: JUNE 21, 1972

SCALE

ONE INCH EQUALS FOUR HUNDRED FEET

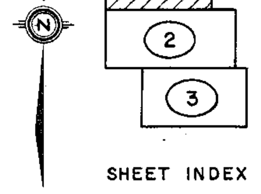


APPROVED:

DATE:

PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, PHILIP G. HALLOF

Expiry Date: February 28, 1973



SHEET INDEX

Coordinate and elevation datums based on photogrammetric tie to Lornex datums. Lornex coordinates are arbitrary and referred to true north at longitude 121° 03' 00" W. Elevations are on geodetic datum.
CHATAWAY GRID PRECEDED BY LETTER "C"

Preliminary Reconnaissance Type Mapping
Compiled by
McELHANNEY SURVEYING & ENGINEERING LTD
Vancouver, B.C. Canada

Scale and elevation datum based on limited ground control resulting in good relative, but uncertain absolute map accuracy.

Compiled from aerial photography at an approximate scale of 1 inch equals 2400 feet flown in 1968.

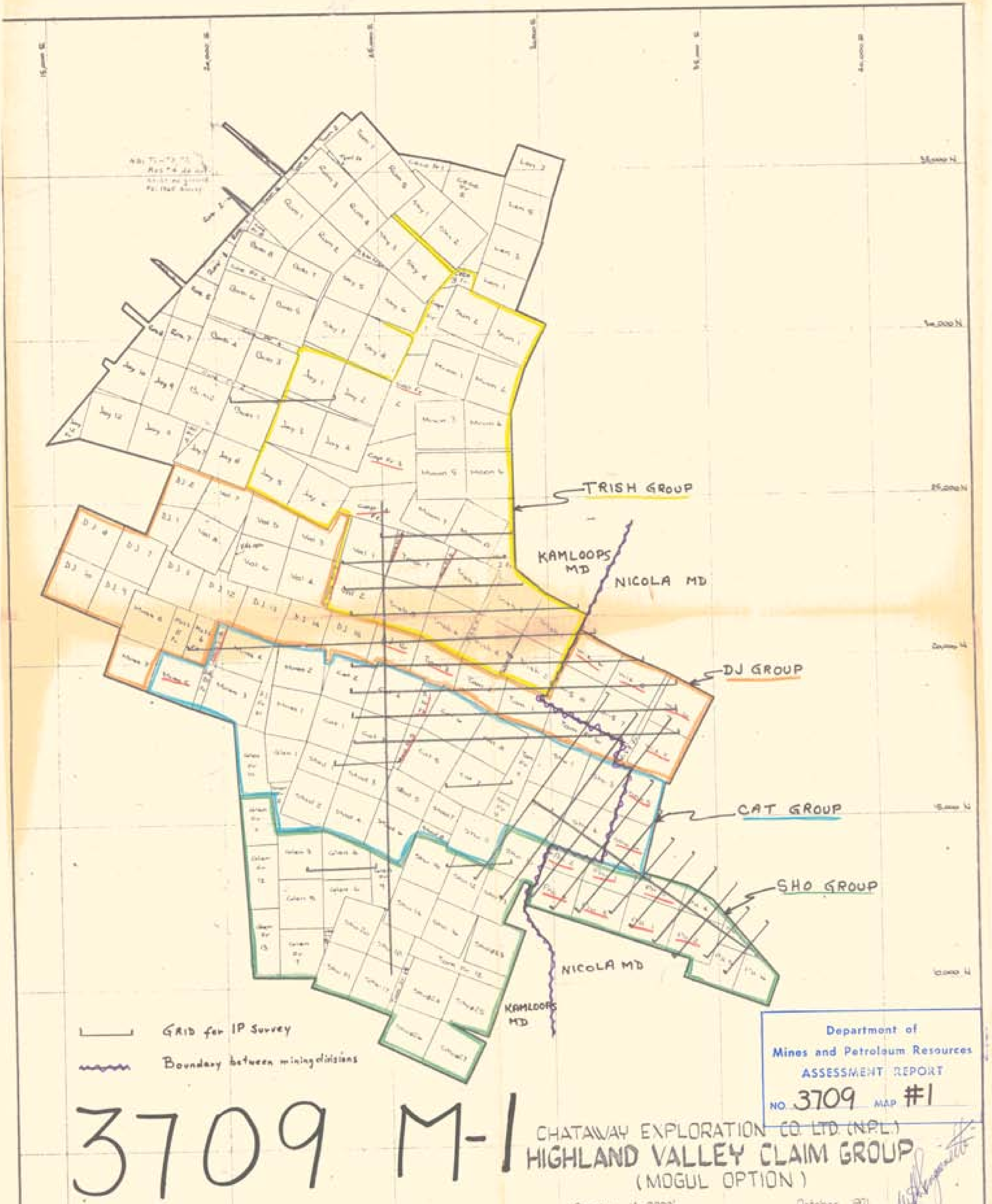
Nº	REVISION	DATE	APP'D

INTERNATIONAL MOGUL MINES LIMITED

CHATAWAY EXPLORATION PROJECT
HIGHLAND VALLEY — BRITISH COLUMBIA

SCALE 1" to 400'	DATE:	IPP. 4846 - 1
DRAWN BY	APPROVED	

M.S.E.L. Ref. No. 5809-0



TRISH GROUP
KAMLOOPS MD
NICOLA MD
DJ GROUP
CAT GROUP
SHO GROUP
NICOLA MD
KAMLOOPS MD
GRID for IP Survey
Boundary between mining divisions
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #1
3709 M-1
CHATAWAY EXPLORATION CO. LTD. (N.P.L.)
HIGHLAND VALLEY CLAIM GROUP
(MOGUL OPTION)
Scale: 1"=2000'
October 1971

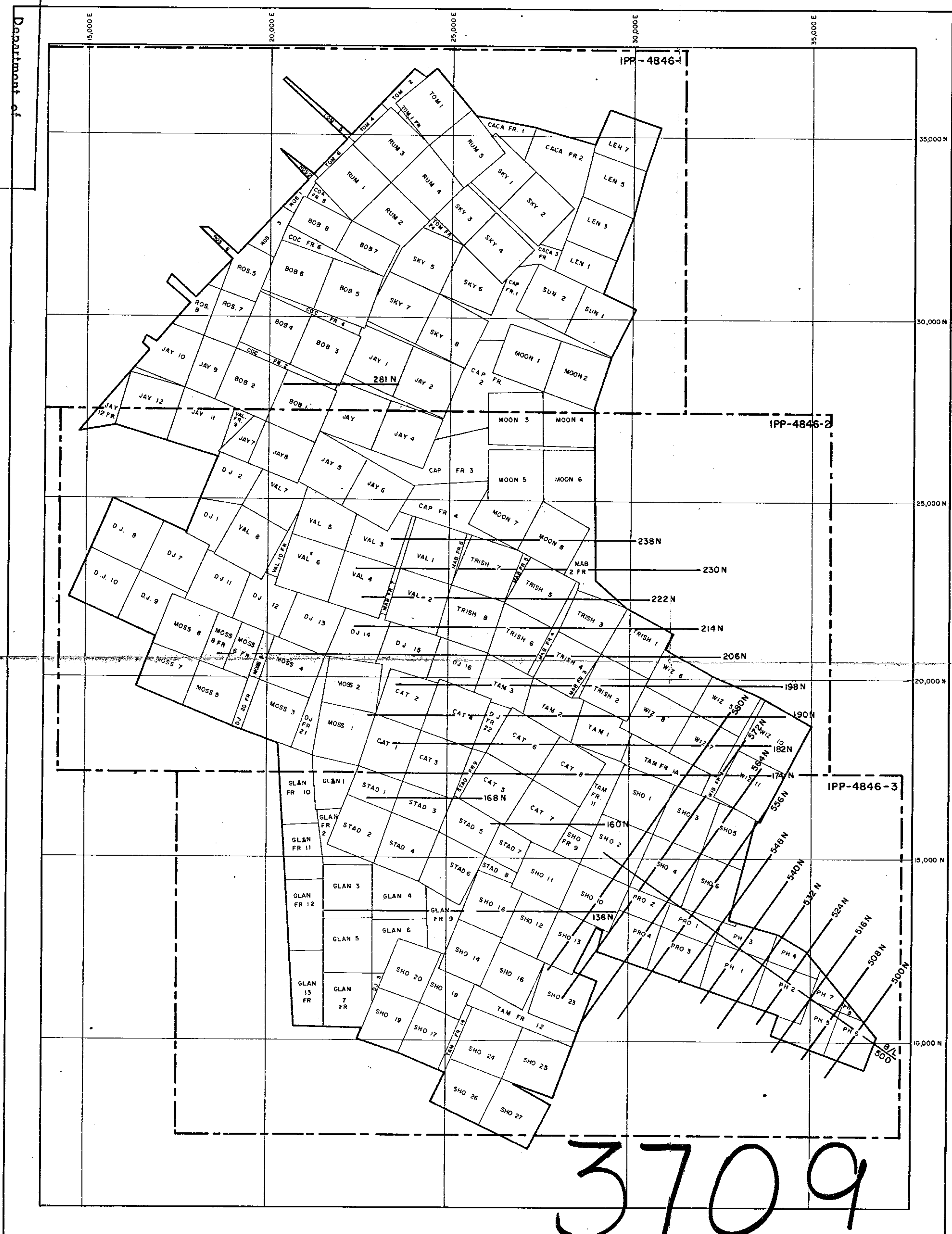
DWG. MISC-2884

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3709 MAP #2

McPHAR GEOPHYSICS

CLAIM LOCATION

PLAN MAP



3709

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA

KAMLOOPS AND NICOLA M.D., B.C.

SCALE

ONE INCH EQUALS TWO THOUSAND FEET

M-2

DRAWN: F.L.H.

APPROVED

DATE

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
PHILIP G. HALLOF

Expiry Date: February 25, 197

DWG. MISC-2884

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA

KAMLOOPS AND NICOLA M.D., B.C.

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE

Numbers at the end of the anomalies indicate electrode interval

NOTE TO ACCOMPANY GEOPHYSICAL REPORT FOR INTERNATIONAL MOGUL MINES LTD., CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA, KAMLOOPS AND NICOLA M.D., B.C. BY P.G. HALLOF (P.ENG.) AND M.A. GOUDIE, (GEOLOGIST).

DATED: JUNE 21, 1972

SCALE
ONE INCH EQUALS FOUR HUNDRED FEET

LOCATION MAP Scale 1:250,000

SHEET INDEX

Coordinate and elevation datums based on photogrammetric tie to Lornex datums. Lornex coordinates are arbitrary and referred to true north at longitude 121° 03' 00" W. Elevations are on geodetic datum

CHATAWAY GRID
PRECEDED BY LETTER "C".

Preliminary Reconnaissance Type Mapping
Compiled by
McELHANNEY SURVEYING & ENGINEERING LTD
Vancouver, B.C. Canada

Scale and elevation datum based on limited ground control resulting in good relative, but uncertain absolute map accuracy.

Compiled from aerial photography at an approximate scale of 1 inch equals 2400 feet flown in 1968.

Nº	REVISION	DATE	APP'D

INTERNATIONAL MOGUL MINES LIMITED

CHATAWAY EXPLORATION PROJECT
HIGHLAND VALLEY — BRITISH COLUMBIA

SCALE: 1" to 400'	DATE:	IPP. 4846-2
DRAWN BY:	APPROVED:	

M.S.E.L. Ref. No. 5809

McPHAR GEOPHYSICS

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP

INTERNATIONAL MOGUL MINES LTD.,

CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA

KAMLOOPS AND NICOLA M.D., B.C.

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE

PROBABLE

POSSIBLE

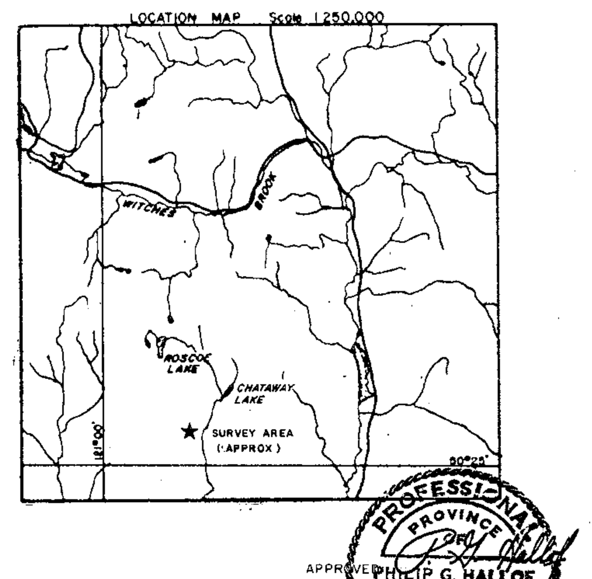
Numbers at the end of the anomalies indicate electrode interval

NOTE TO ACCOMPANY GEOPHYSICAL REPORT FOR INTERNATIONAL MOGUL MINES LTD., CHATAWAY EXPLORATION PROJECT, HIGHLAND VALLEY AREA, KAMLOOPS AND NICOLA M.D., B.C. BY P.G. HALLOF (P.ENG.) AND M.A. GOUDIE, (GEOLOGIST).

DATED: JUNE 21, 1972

SCALE

ONE INCH EQUALS FOUR HUNDRED FEET

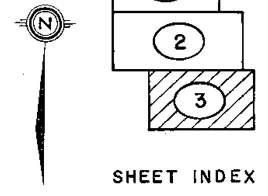


APPROVED

DATE:

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA PHILIP G. HALLOF

Expiry Date: February 25, 1973



SHEET INDEX

Coordinate and elevation datums based on photogrammetric tie to Lornex datums. Lornex coordinates are arbitrary and referred to true north at longitude 121° 03' 00" W. Elevations are on geodetic datum

Chataway grid preceded by letter "C"

Preliminary Reconnaissance Type Mapping
Compiled by
McELHANNEY SURVEYING & ENGINEERING LTD
Vancouver, B.C. Canada

Scale and elevation datum based on limited ground control resulting in good relative, but uncertain absolute map accuracy.

Compiled from aerial photography at an approximate scale of 1 inch equals 2400 feet flown in 1968.

Nº	REVISION	DATE	APP'D

INTERNATIONAL MOGUL MINES LIMITED

CHATAWAY EXPLORATION PROJECT
HIGHLAND VALLEY — BRITISH COLUMBIA

SCALE 1" to 400'	DATE	
DRAWN BY	APPROVED	IPP. 4846-3