

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
1954
Part 2
Top 2

RECEIVED AND RECORDED
MAR 31 1980
GOLD CO. ASSOCIATION,
SMITH RIVER, CALIF.
M.R. No. _____

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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 cannot 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 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 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 at the top of the data profile, above the metal factor values. On a third line, below the metal factor values, are plotted the values of the percent frequency effect. 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 the 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.

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.

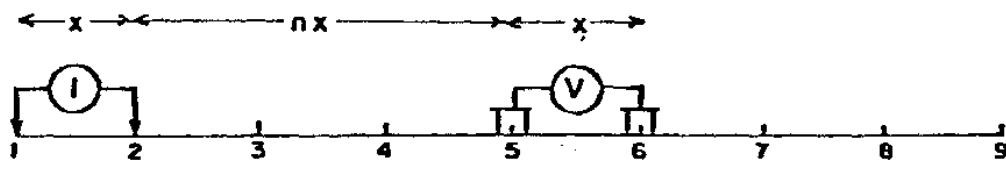
In some situations spurious noise, either man made or natural, will render it impossible to obtain a reading. The symbol "N" on the data plots indicates a station at which it is too noisy to record a reading. If a reading can be obtained, but for reasons of noise there is some doubt as to its accuracy,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

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



Stofflons on line x = Electrode spread length
 n = Electrode separation

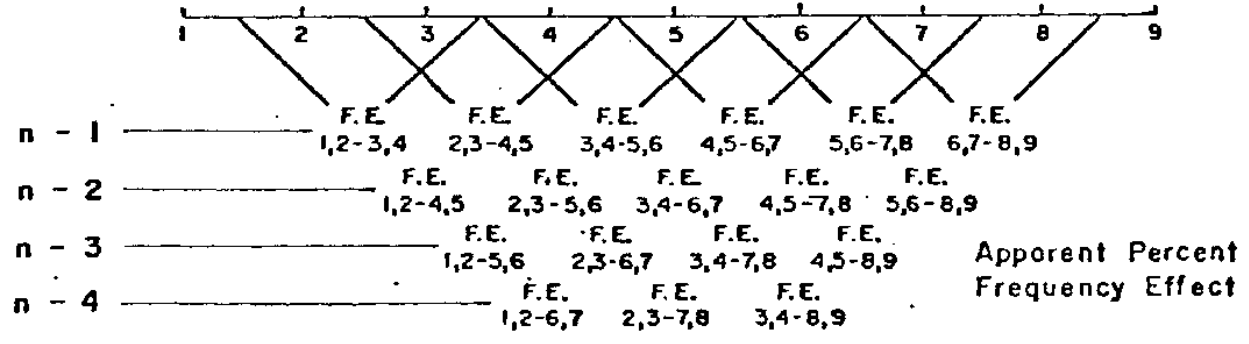
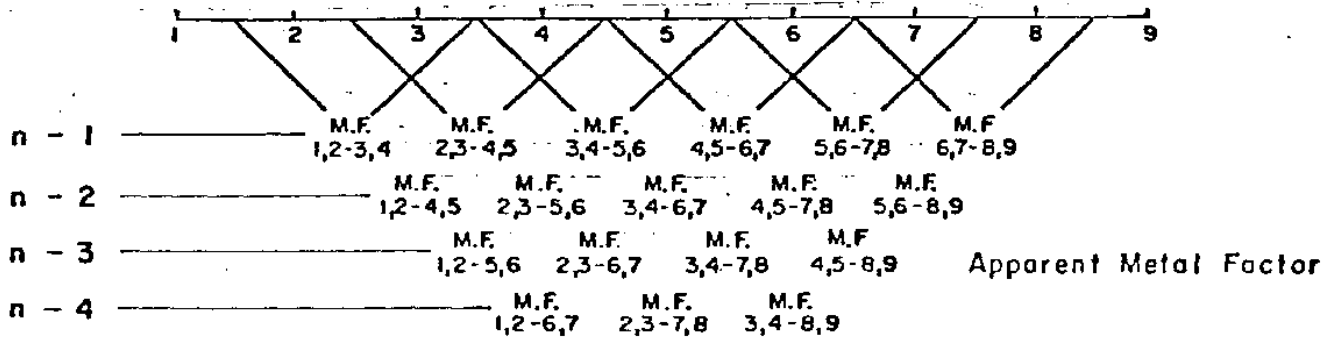
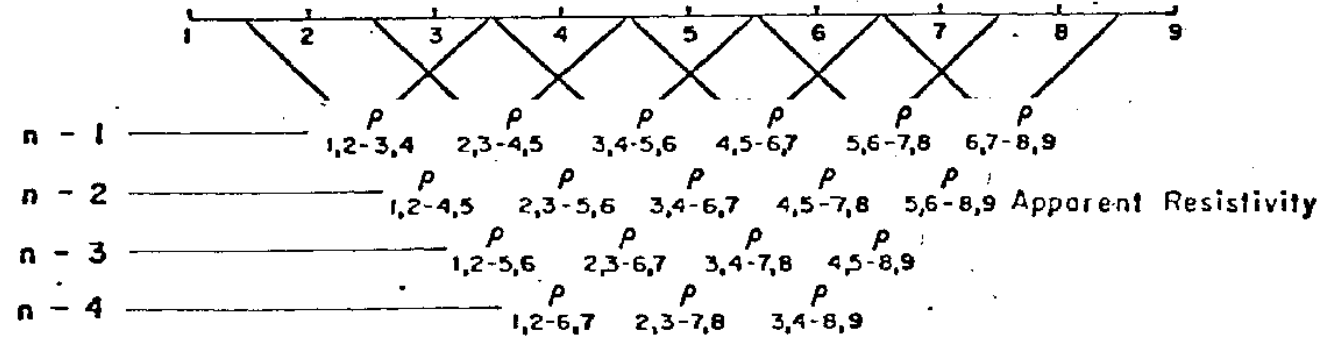


Fig. A

PHOENIX GEOPHYSICS LIMITED

REPORT ON THE
INDUCED POLARIZATION
AND RESISTIVITY SURVEY
ON THE
PARROTT LAKES PROSPECT
OMINECA MINING DIVISION, B.C.

93L - 2E

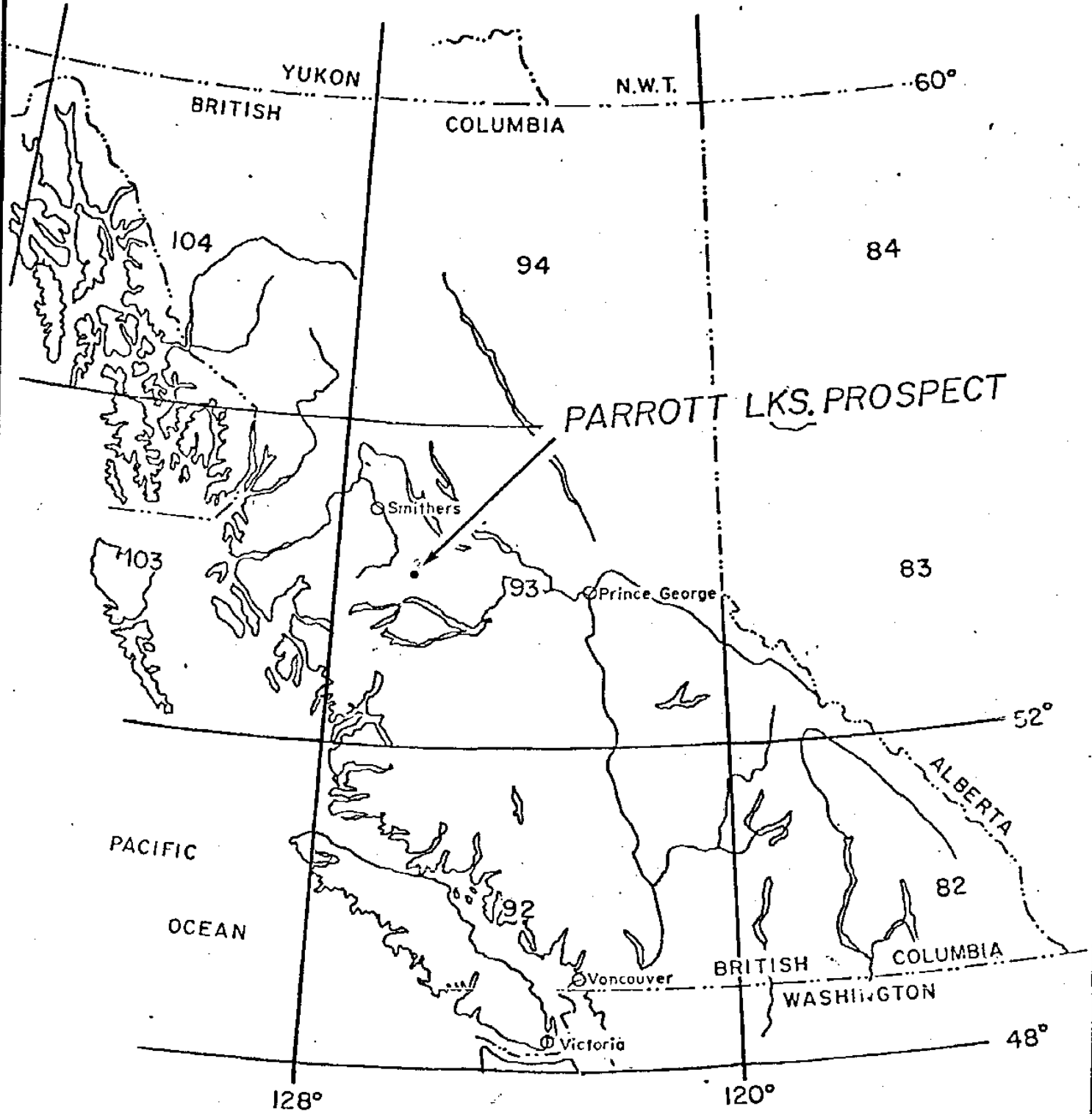
FOR

ASARCO EXPLORATION CO. OF CANADA LTD.

1. INTRODUCTION

An Induced Polarization and Resistivity survey has been carried out on the Parrott Lakes Prospect for Asarco Exploration Co. of Canada Ltd. The property is located about 23 km south of Houston in the Omineca Mining Division B.C. The center of the property is positioned at about $54^{\circ}12'$ north latitude and $126^{\circ}37.5'$ west longitude. (Figure #1).

Good road access is available via the Buck Flats road south from Houston for 21.7 km and then southwesterly on the Parrott Lakes Road to the property.

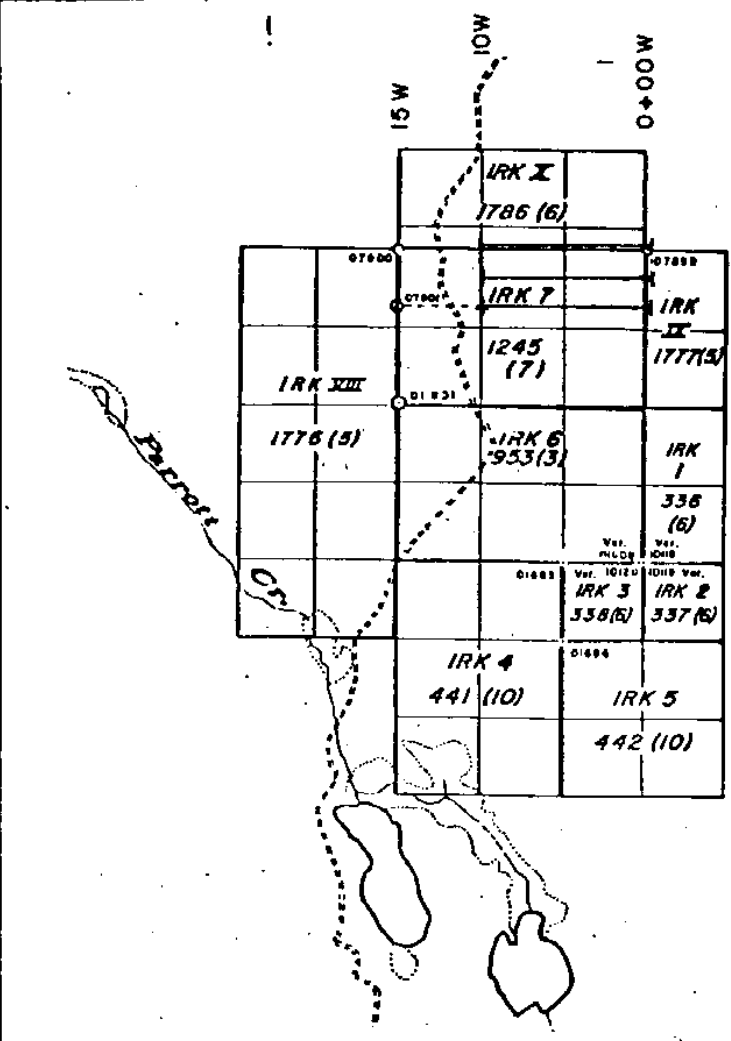


ASARCO

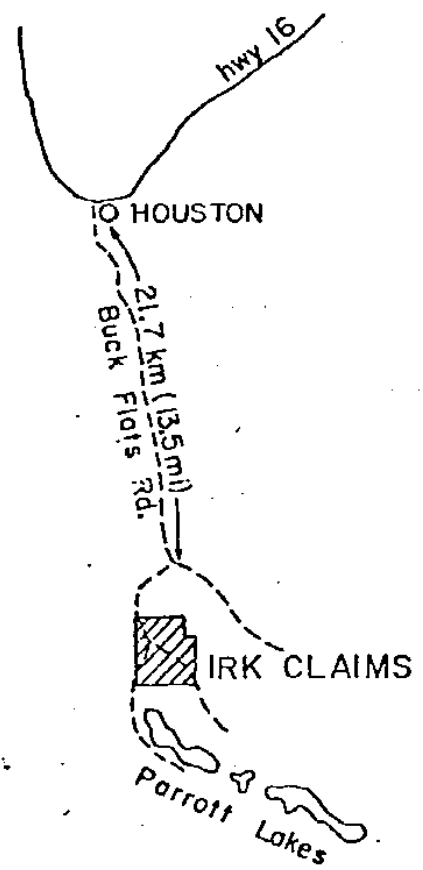
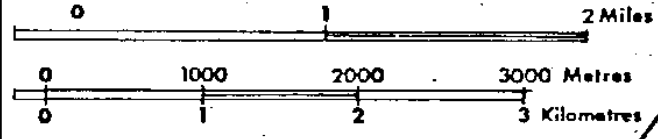
Vancouver

PARROTT LKS. PROSPECT
LOCATION MAP

Drawn by	Date	N.T.S.	Figure
D.G.M.	9 Nov. 78	93L/2E	I



20 N
18 N
16 N



ASARCO		Vancouver	
PARROTT LKS. PROSPECT OMINECA M.D. CLAIM LOCATION MAP			
Drawn by	Date	N.T.S.	
REG	15 AUG 79	93L/2E	Fig. 2

The object of the survey was to investigate the area of a silver geochemical anomaly for indications of metallic mineralization.

The survey was carried out in July, 1979 under the supervision of Crew Leader John Marsh. His certificate of qualification is appended to this report.

A Phoenix IPT-1, IPV-1 frequency domain IP system operating at 0.31 and 5.0 Hz was used for this survey.

2. DESCRIPTION OF CLAIMS

The Parrott Lakes Prospect consists of the IRK Claim 1 - 9 inclusive. These claims are located on Claim Map 93L/2E in the Omineca Mining Division. (Figure #2).

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.

<u>Line</u>	<u>Electrode Interval</u>	<u>Dwg. No.</u>
16N	50 Meters	IP 5172-1
18N	50 Meters	IP 5172-2
20N	50 Meters	IP 5172-3

Also enclosed with this report is Dwg. I.P.P. 3073, a plan map of the Parrott Lakes Grid at a scale of 1:5000. 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.

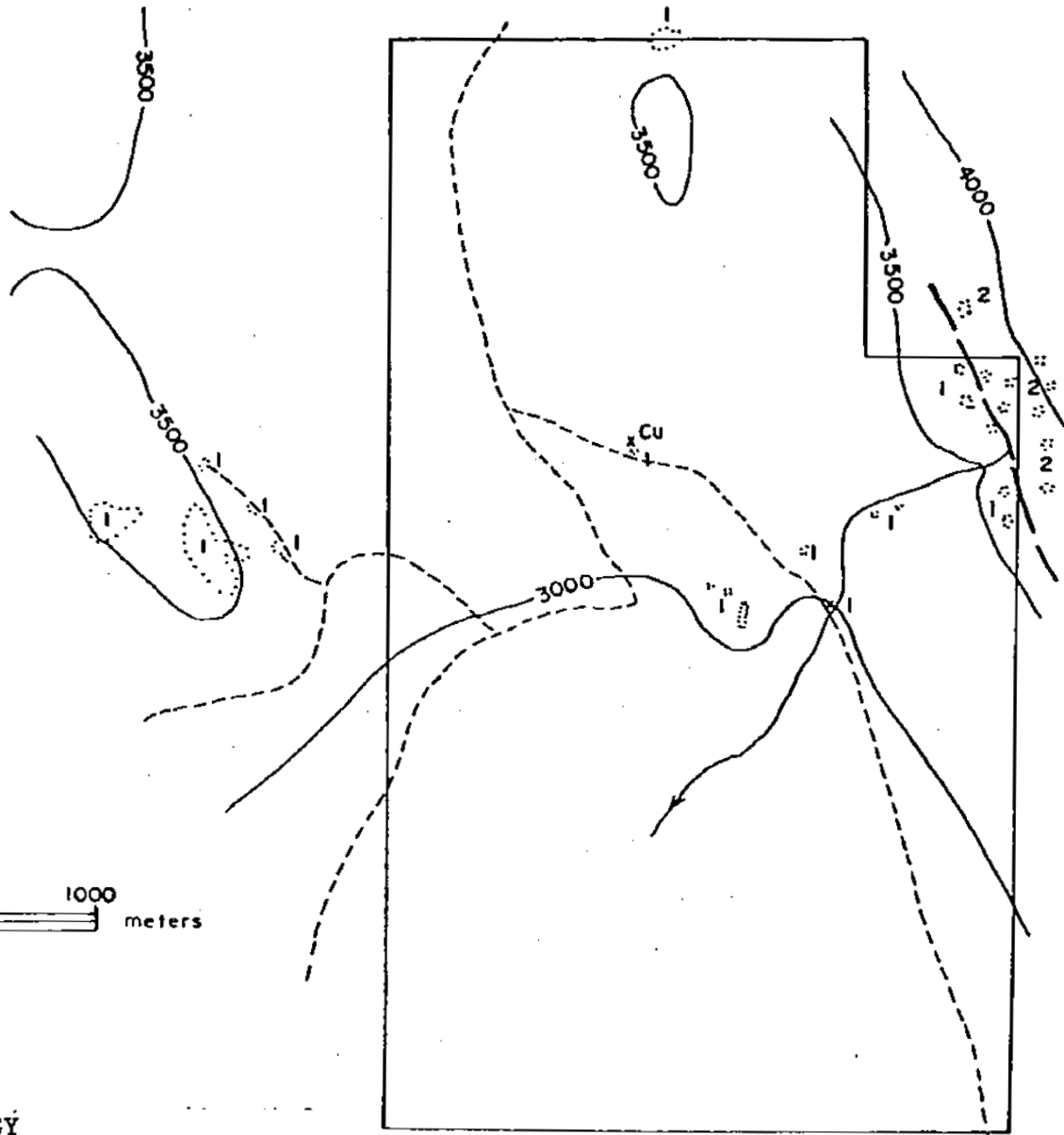
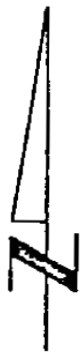
Since the Induced Polarization measurement is essentially an averaging process, as are all potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly, no anomaly can be located with more accuracy than the electrode interval length; i.e. when using 50 Meter electrode intervals the position of a narrow sulphide body can only be determined to lie between two stations 50 Meters 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 Grid and Claim information shown on Dwg. I.P.P.3073 has been taken from maps made available by the staff of Asarco Exploration Co. of Canada Ltd.

4. DESCRIPTION OF GEOLOGY

The regional and property geological settings are depicted on Figure #3. This information was supplied by the staff of Asarco.

In the vicinity of the IRK Claims, overburden is extensive and bedrock exposure quite limited. Most of the claim area is believed to be underlain by the Tip Top Hill volcanics of Cretaceous age. This unit is composed mainly of red to dark grey crystal tuff and volcanic breccia.



PROPERTY GEOLOGY

EOCENE

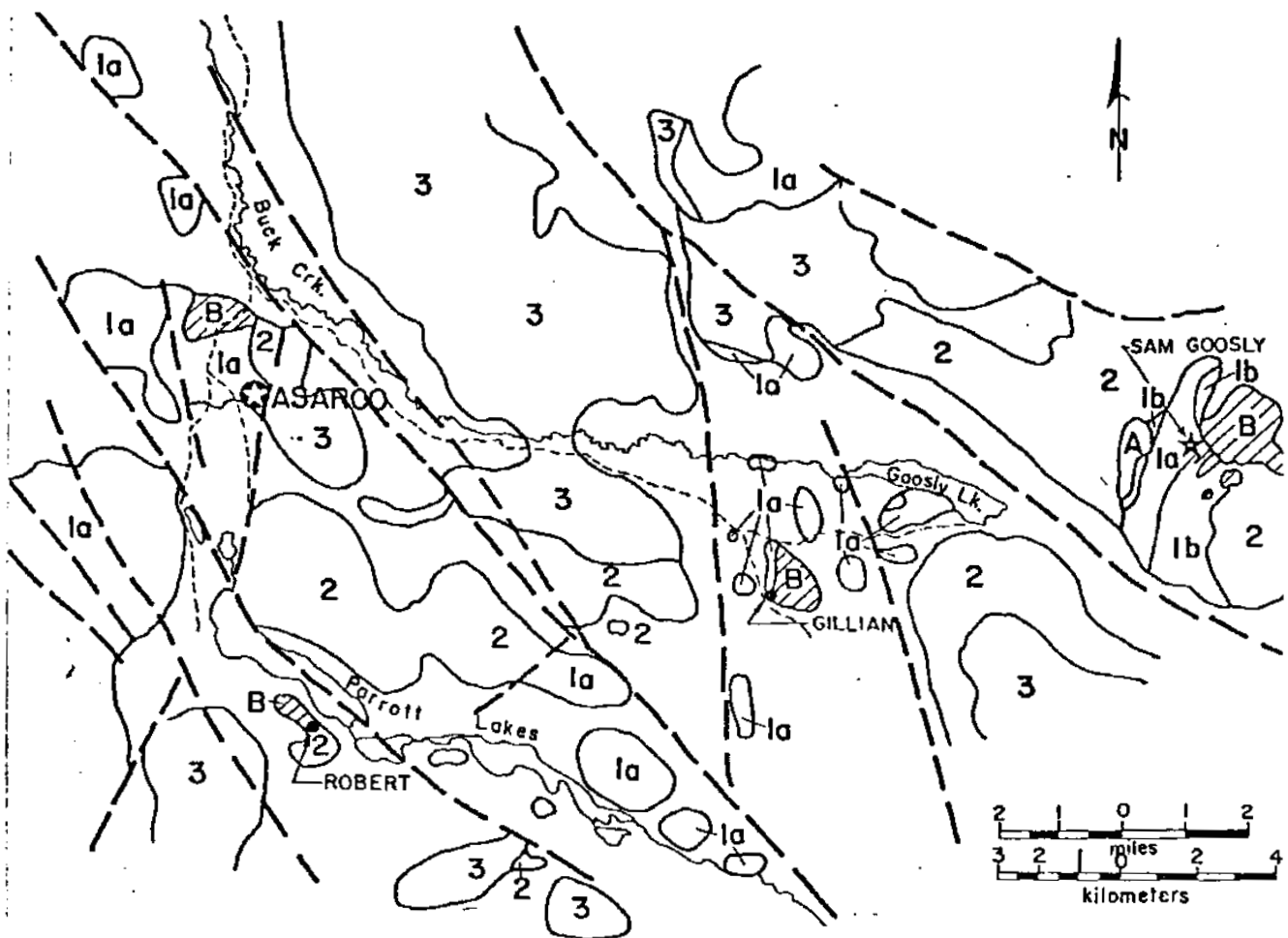
- 2 Buck Creek Volcanics - massive amygdaloidal to vesicular basalt, andesite and dacite plus related pyroclastic rocks.

CRETACEOUS

- 1 Tip Top Hill Volcanics - mainly red to dark grey crystal lithic-tuff lapilli-tuff, volcanic breccia and lahar.

- topographic contour
- outcrop
- access road
- limit of Zn anomaly
- claim boundary

ASARCO		Vancouver	
<i>PARROTT LKS PROSPECT REGIONAL & PROPERTY GEOLOGY</i>			
Drawn by	Date	N.T.S.	
D.G.M	9 Nov. 78	93L/2E	Fig. 3



REGIONAL GEOLOGIC SETTING

PARROTT LAKES PROSPECT

QUATERNARY



Alluvium, till, gravel

EOCENE



Buck Creek Volcanics - andesite and dacite flows, minor basalt



Goosly Lake Volcanics - trachytic flows

B

Goosly Lake Intrusions - syenomonzonite, gabbro

A

Nanika Intrusions - quartz monzonite

CRETACEOUS



Tip Top Hill Volcanics - a. andesite to rhyolitic flows and pyroclastic rocks. b. sandstone, shale, conglomerate.



Major Fault



Mineral Prospect

Along the northeast claim boundary, Buck Creek Volcanics of Eocene age have been mapped. This unit is composed of massive amygdoloidal to resicular basalts, andesite and dacite with some related pyroclastics.

5. DISCUSSION OF RESULTS

An Induced Polarization and Resistivity survey has been carried out over three lines on the Parrott Lakes property.

The resistivity survey results on all three lines show a resistivity high that correlates closely with a topographic high (Dwg. I.P.P. 3073). Both to the east and west, much lower resistivities were encountered. The higher resistivities probably reflect bedrock under light overburden cover. Outcroppings of Tip Top Hill volcanics occur on Line 20N within the higher resistivity section. The low resistivities could either reflect deep overburden or a rock type change. Both Line 16N and Line 20N show the higher resistivities extending easterly under the lower resistivities at depth. This could indicate either overburden or a more porous rock-type lying above the volcanic rocks.

Weak IP anomalies occur within the higher resistivity section on all lines. The anomalies are shallow relative to the 50 meter electrode interval used for the survey. These weak effects could result from sparsely disseminated metallic material, probably not exceeding 2% by volume. However in an area where semi-precious minerals such as silver, or non-metallic sulfides such as sphalerite could occur, caution must be exercised when assessing weak IP anomalies. The strongest IP effects were recorded at the following locations:

- Line 16N, 7W - 7+50W (near an outcrop)
- Line 18N, 6W - 7+50W
- Line 20N, 6+50W - 7W

Within the lower resistivity section, there are zones of weakly

anomalous IP effects. For example, on Line 18N the frequency effects at 3+25W are five times higher than at 4+25W and both occur within a similar resistivity environment. A relatively small amount of metallic material can cause IP anomalies of this magnitude in a low resistivity environment. There are several cases known where pyrite and magnetite in the overburden cause anomalies of this magnitude. Alternatively, some recent volcanics containing magnetite are low in resistivity and display weak IP effects.

6. SUMMARY AND CONCLUSIONS

A limited three line IP and resistivity survey has been carried out over the Parrott Lakes Prospect. The survey was designed to test the general vicinity of a zinc-silver geochemical anomaly.

A moderately high resistivity zone corresponds well with a topographic high. Volcanic outcrops on Line 20N occur within the higher resistivities. Much lower resistivities occur both to the east and west on all three lines. These lower resistivities could reflect either deep overburden or more porous rock types.

Very weak IP effects were recorded within both the high and low resistivity environments. Magnetometer profiles along the grid lines would help gauge the degree of contribution to the IP effect by magnetite.

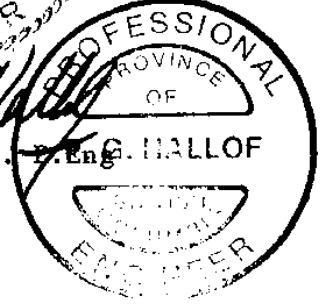
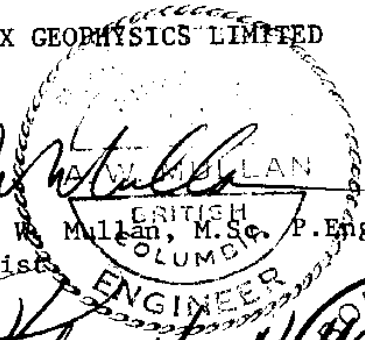
Rock outcrops at 7+50W, Line 20N may help explain the cause of the adjacent IP anomaly. Possibly overburden trenching on Line 16N and Line 18N near the crest of the hill would investigate the source of these high resistivity IP anomalies.

The weak IP anomalies within the low resistivity environment probably do not warrant further investigation unless they correlate with other favourable conditions.

PHOENIX GEOPHYSICS LIMITED

Ashton W. Mullan
Ashton W. Mullan, M.Sc. P.Eng.
Geologist

Philip G. Hallof
Philip G. Hallof, Ph.D. P.Eng.
Geophysicist



Expiry Date: February 25, 1980

Dated: November 27, 1979

ASSESSMENT DETAILS

PROPERTY: Parrott Lakes Prospect MINING DIVISION: Omineca
SPONSOR: Asarco Exploration Co. PROVINCE: British Columbia
 of Canada Ltd.
LOCATION: Houston Area
TYPE OF SURVEY: Induced Polarization
 and Resistivity
OPERATING MAN DAYS: 6.0 DATE STARTED: July 18, 1979
EQUIVALENT 8 HR. MAN DAYS: 9.0 DATE FINISHED: July 25, 1979
CONSULTING MAN DAYS: 4.0 NUMBER OF STATIONS: 66
DRAFTING MAN DAYS: 4.5 NUMBER OF READINGS: 576
TOTAL MAN DAYS: 17.5 KM. OF LINE SURVEYED: 3.2

CONSULTANTS:


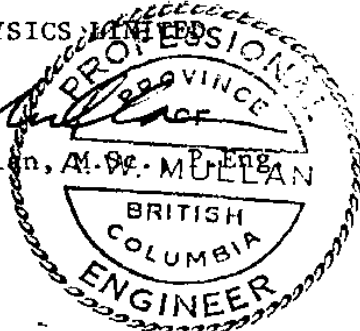
A.W. Mullan, 310 - 885 Dunsmuir Street, Vancouver, B.C.
P.G. Hallof, 15 Barnwood Court, Don Mills, Ontario.

FIELD TECHNICIANS:

J. Marsh, c/o 310 - 355 Burrard Street, Vancouver, B.C.
G. Richardson, 4161 Crown Crescent, Vancouver, B.C.

DRAUGHTSMEN:

R.C. Norris, 3000 - 106 Victoria Park Ave., Willowdale, Ontario.
R.J. Pryde, R.R.#1, Sharon, Ontario.
P.J. Anderson, 40 Landfair Crescent, Scarborough, Ontario.

PHOENIX GEOPHYSICS LIMITED

Ashton W. Mullan, M.Sc. P.Eng.
Geologist


Dated: November 27, 1979

STATEMENT OF COST

Asarco Exploration Co. of Canada Ltd. - IP Survey
Omineca Mining Division - Hazelton, B.C.

PERIOD: July 18 - July 25, 1979

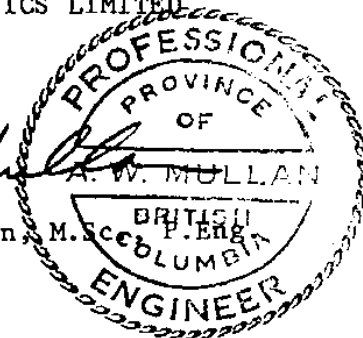
3 Operating days	@ \$490.00/day	\$1,470.00
1 Standby	@ \$190.00/day	190.00

EXPENSES:

Vehicle	\$146.60	
Meals & Accommodation	372.84	
Telephone	25.00	
Supplies	28.76	
Freight	57.00	
	<hr/>	
	\$630.00	
+ 10%	63.02	
	<hr/>	
		693.22
Extra Labour	400.00	
+ 20%	80.00	
	<hr/>	
		480.00
		<hr/>
		\$2,833.22
		<hr/>

PHOENIX GEOPHYSICS LIMITED

Ashton W. Mullan
Ashton W. Mullan, M.Sc.
Geologist



Dated: November 27, 1979

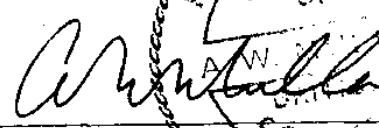
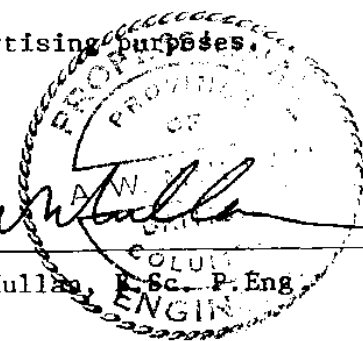
CERTIFICATE

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

1. That I am a geologist/geophysicist and a fellow of the Geological Association of Canada, Geophysics Division, with a business address at 310 - 885 Dunsmuir 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/geophysicist for over twenty-five 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 Asarco Exploration Co. of Canada Ltd., or any affiliate.
6. The statements made in this report are based on a study of published geological literature and unpublished private reports.
7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Vancouver

This 27th day of November, 1979


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


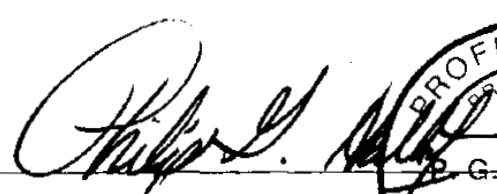
CERTIFICATE

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

1. I am a geophysicist residing at 15 Barnwood Court, Don Mills, Ontario.
2. I am a graduate of the Massachusetts Institute of Technology with a B.Sc. Degree (1952) in Geology and Geophysics, and a Ph.D. Degree (1957) in Geophysics.
3. I am a member of the Society of Exploration Geophysicists and the European Association of the Exploration Geophysicists.
4. I am a Professional Geophysicist, registered in the Province of Ontario, the Province of British Columbia and the State of Arizona.
5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Asarco Exploration Co. of Canada Ltd., or any affiliate.
6. The statements made in this report are based on a study of published geological literature and unpublished private reports.
7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Toronto

This 27th day of November, 1979


Philip G. Hallof, Ph.D.



Expiry Date: February 25, 1980

CERTIFICATE

I, JOHN MARSH, of the Municipality of North York, Ontario, DO HEREBY CERTIFY THAT:

1. I am a geophysical crew leader residing at 200 Yorkland Blvd., Willowdale, Ontario.

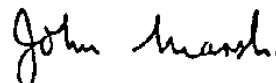
2. I am a graduate of the City of Norwich Technical College, U.K., ordinary National Certificate (Electrical Engineering)

3. I worked with McPhar Geophysics Company from 1968 to 1975 as a geophysical crew leader.

4. I am presently employed as a geophysical crew leader by Phoenix Geophysics Ltd. of 310 - 885 Dunsmuir Street, Vancouver, B.C.

Dated at Vancouver, B.C.

This 29th Day of July, 1977



John Marsh

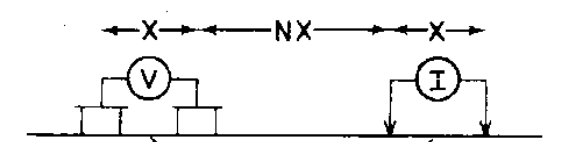
ASARCO EXPL. CO. OF CANADA LTD.

PARROTT LAKES PROSPECT

OMINECA M.D., B.C.

LINE NO.- 16N

ELECTRODE CONFIGURATION



PLOTTING POINT X=50m.

SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE **—————**
PROBABLE **|||||**
POSSIBLE **///////**

FREQUENCIES 0.3-5.0 HZ.

DATE SURVEYED JULY 1979

APPROVED

P. G. HALLOF
ENGINEER

DATE 11/27/79
Expiry Date: February 25, 1980

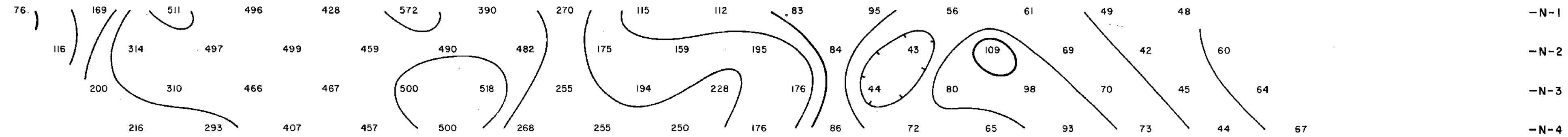
NOTE - CONTOURS AT LOGARITHMIC INTERVALS 1, -1.5, -2, -3, -5, -7.5, -10

PHOENIX GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

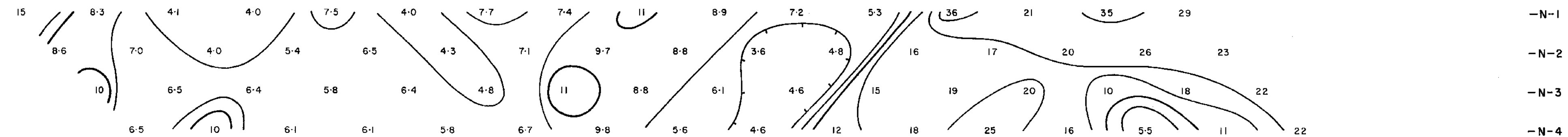
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RESISTIVITY (APP) OHM-METRES



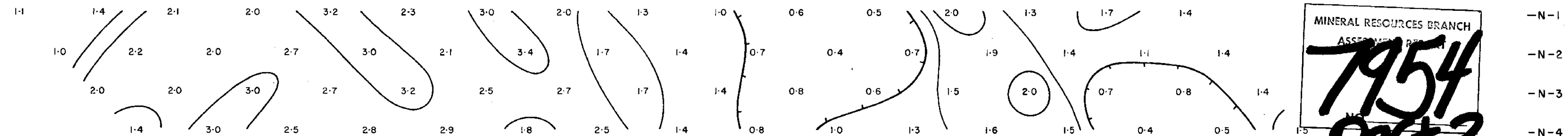
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METAL FACTOR (APP)



10W 9+50W 9W 8+50W 8W 7+50W 7W 6+50W 6W 5+50W 5W 4+50W 4W 3+50W 3W 2+50W 2W 1+50W 1W 0+50W 0 0+50E

FREQUENCY EFFECT (APP) IN %



MINERAL RESOURCES BRANCH
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7954
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10A2

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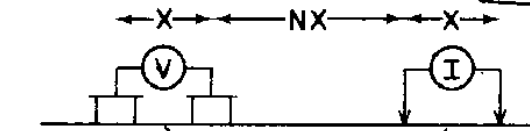
PARROTT LAKES PROSPECT

OMINECA M.D., B.C.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7954
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of 2

LINE NO. - 18N

ELECTRODE CONFIGURATION NO.



PLOTTING POINT X = 50m.

SURFACE PROJECTION OF ANOMALOUS ZONE
DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES 0.3-5.0 HZ.

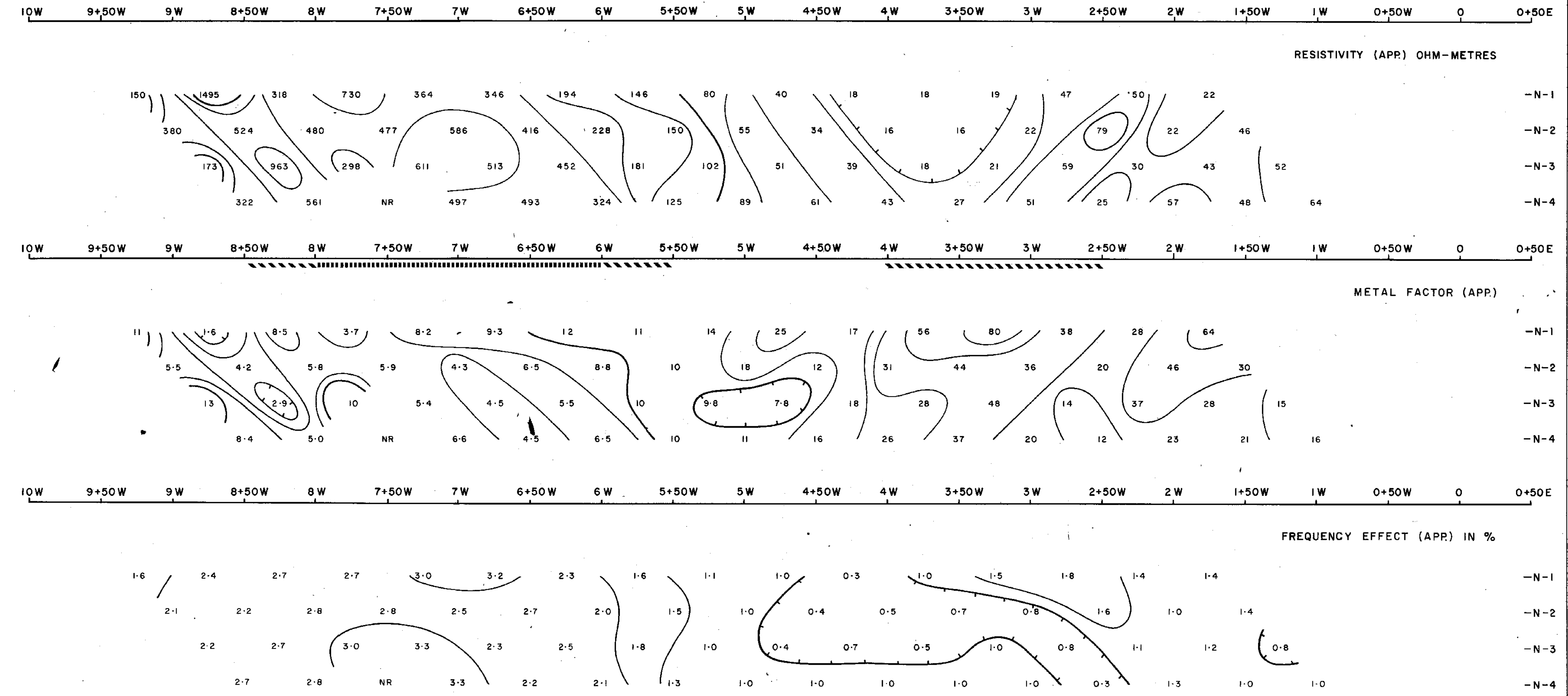
DATE SURVEYED JULY 1979

APPROVED
P. G. HALLOP
DATE
BRITISH COLUMBIA ENGINEER

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

Expiry Date: February 25, 1980

PHOENIX GEOPHYSICS LIMITED
INDUCED POLARIZATION AND RESISTIVITY SURVEY



ASARCO EXPL. CO. OF CANADA LTD.

PARROTT LAKES PROSPECT

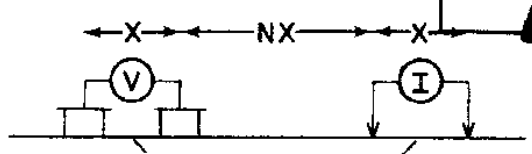
OMINECA M.D., B.C.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

7954
part 2
of 2

LINE NO.- 20N

ELECTRODE CONFIGURATION NO.



PLOTTING POINT X=50m.

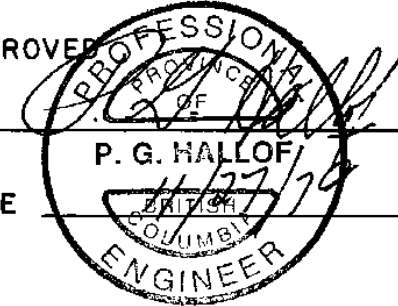
SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCIES 0.3-5.0HZ.

DATE SURVEYED JULY 1979

APPROVED



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

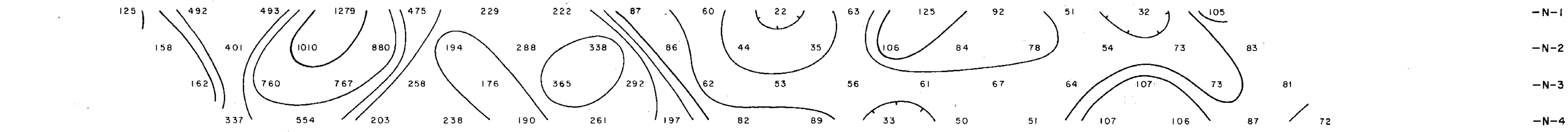
DATE

PHOENIX GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

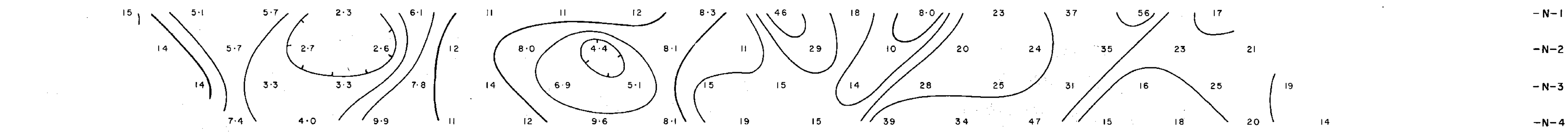
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RESISTIVITY (APP) OHM-METRES



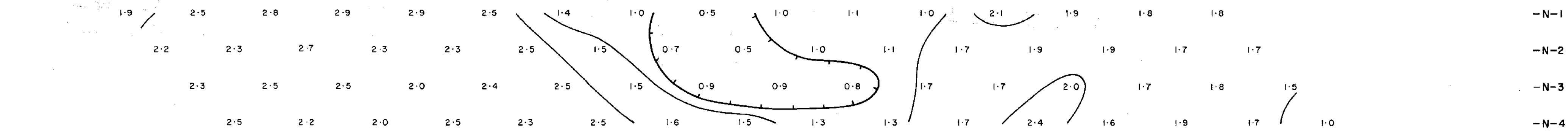
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METAL FACTOR (APP)

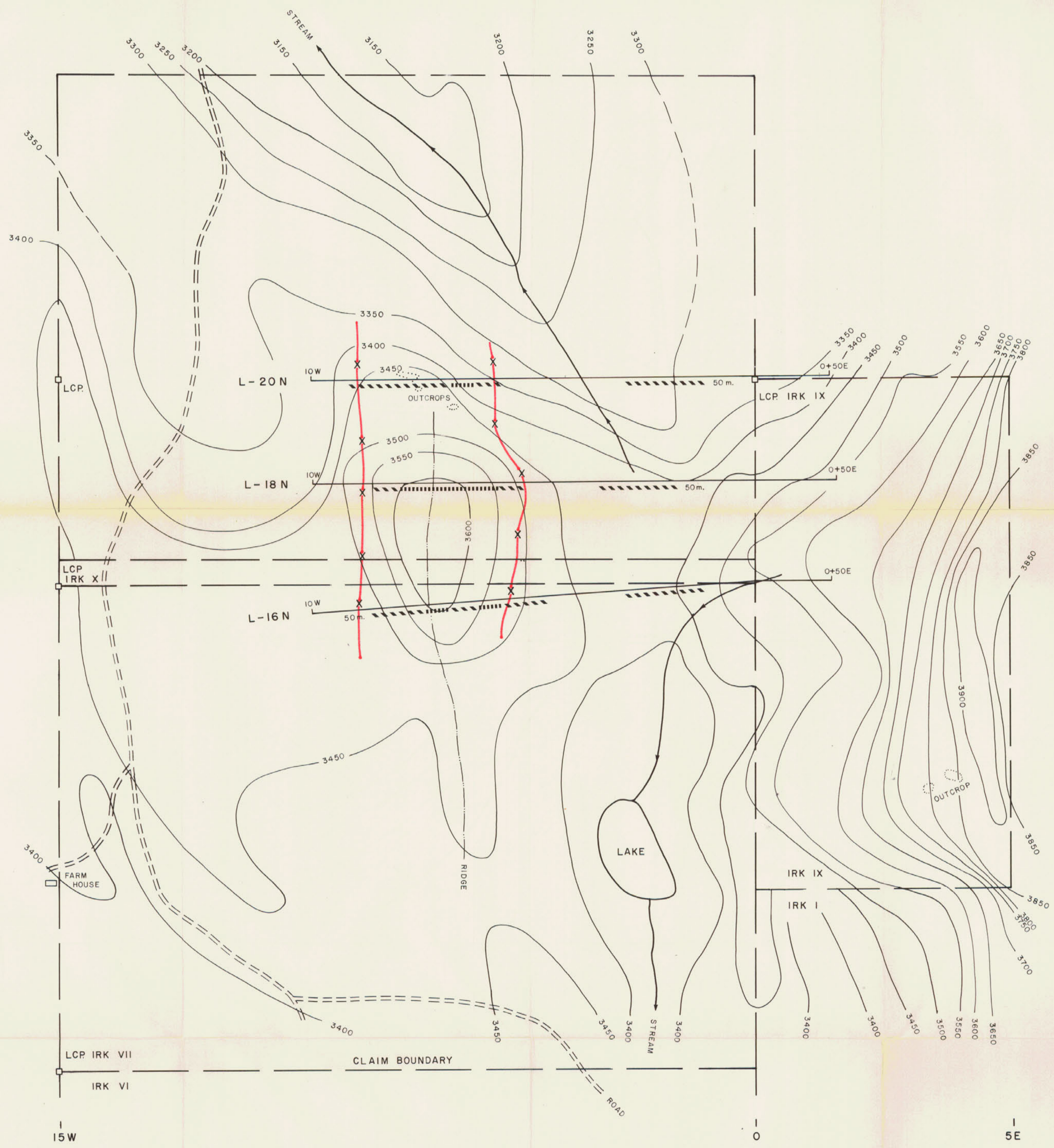
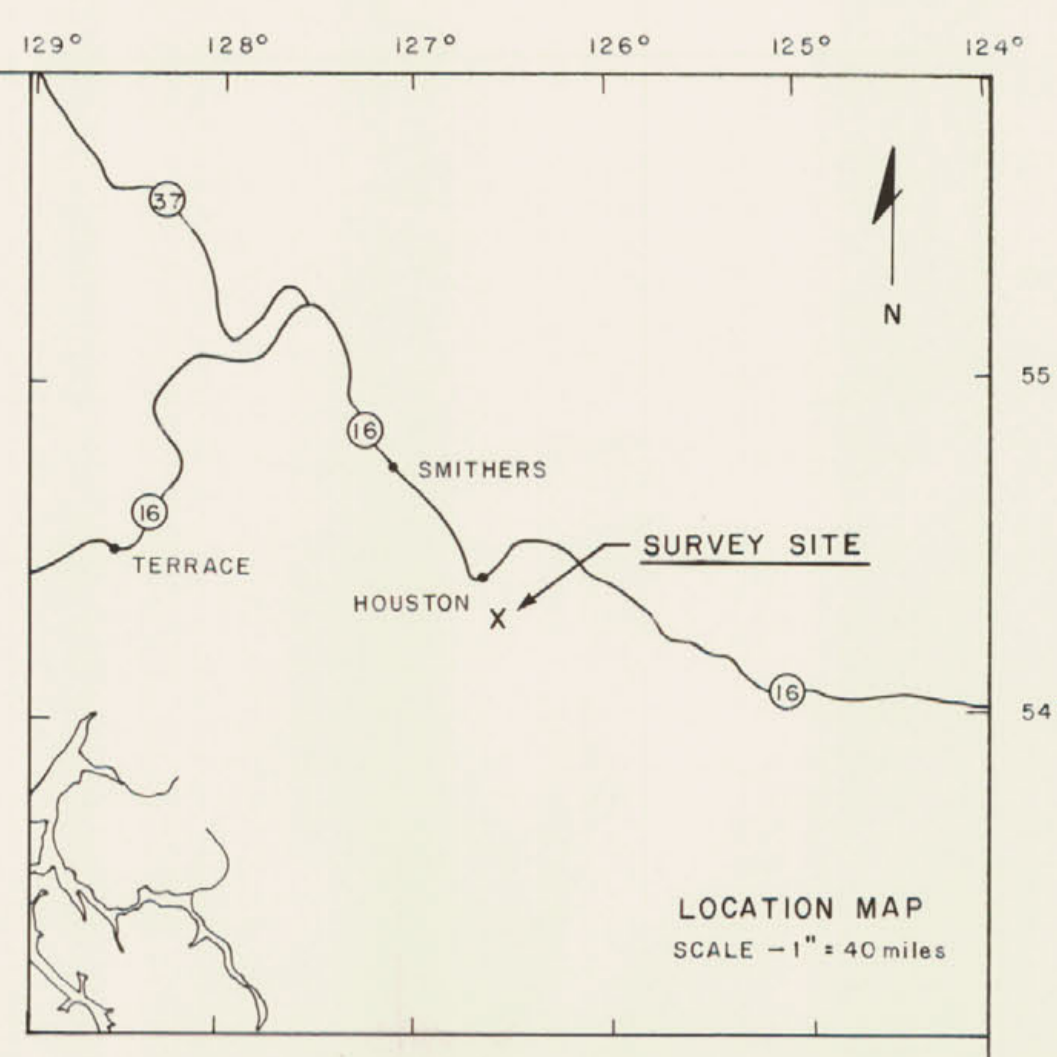


10W 9+50W 9W 8+50W 8W 7+50W 7W 6+50W 6W 5+50W 5W 4+50W 4W 3+50W 3W 2+50W 2W 1+50W 1W 0+50W 0 0+50E

FREQUENCY EFFECT (APP) IN %



PHOENIX GEOPHYSICS LIMITED
 INDUCED POLARIZATION AND RESISTIVITY SURVEY
 PLAN MAP



NOTE - LIMITS OF RESISTIVITY HIGH - X - X - X

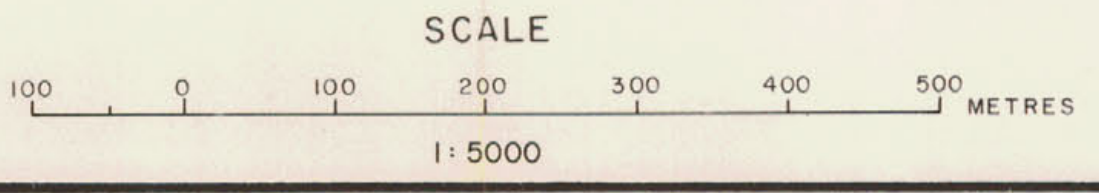
MINERAL RESOURCES BRANCH
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 top 2

N.T.S. - 93 L / 2E



SURFACE PROJECTION OF ANOMALOUS ZONE
 DEFINITE ————
 PROBABLE - - - - -
 POSSIBLE / / / / /
 NUMBER AT END OF ANOMALIES INDICATE SPREAD USED.

ASARCO EXPL. CO. OF CANADA
 PARROTT LAKES PROSPECT
 OMINECA M.D., B.C.



NOTE - TO ACCOMPANY GEOPHYSICAL REPORT FOR ASARCO EXPLORATION CO. OF CANADA LTD. ON THE PARROTT LAKES PROSPECT IN THE OMINECA M.D., B.C., BY PHILIP G. HALLOF P. ENG. GEOPHYSICIST AND, A.W. MULLAN P. ENG. GEOLOGIST.
 DATED - NOV. 27, 1979

DRAWN: R.J.P.
 DATE: NOV. 1979
 APPROVED OF:
 PHILIP G. HALLOF
 P. ENG. GEOPHYSICIST
 DATE: FEBRUARY 25, 1980