83-906 #11376

PHOENIX GEOPHYSICS LIMITED

REPORT ON THE

INDUCED POLARIZATION AND RESISTIVITY SURVEY
ON THE

SNOWFLAKE CLAIMS
NICOLA MINING DIVISION
BRITISH COLUMBIA

FOR

LARAMIDE RESOURCES LIMITED

LATITUDE: 49°58'N LONGITUDE: 120°35'W

N.T.S. 92H/15E

Claims: Snowflake; Snowflake 2-7, 9, 10; Tule 10 Mineral Claim

Owner: Mr. Fred Gingell, Mr. R.W. Yorke-Hardy

Operator: Laramide Resources Limited

BY

PAUL A. CARTWRIGHT, B.Sc.
GEOPHYSICIST

DATED: 14 July 1983

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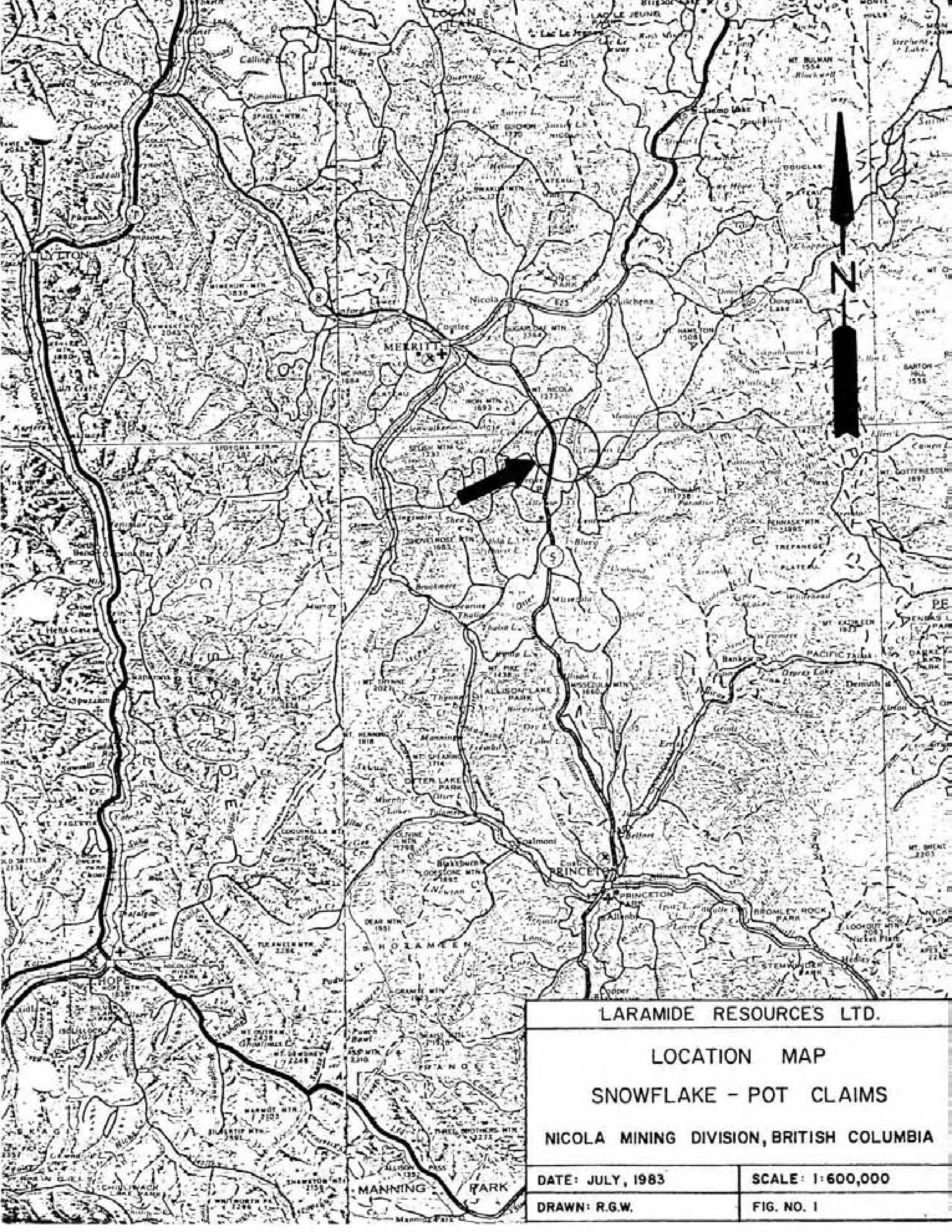
1. Introduction

An Induced Polarization and Resistivity Survey has been completed on the Snowflake Claims, Nicola Mining Division, British Columbia, on behalf of Laramide Resources Ltd.

The property is located approximately 5 km northeast of the community of Aspen Grove, B.C. Access is via 4 km of gravel road which turns east off Highway 5, about 4 km north of Aspen Grove, B.C.

The following geological description of the project area has been provided by the staff of Laramide Resources Ltd.

> "THE ASPEN GROVE AREA IS WITHIN A TERRAIN COMMONLY REFERRED TO AS THE NICOLA BELT, A EUGEOSYNCLINAL UPPER TRIASSIC ISLAND-ARC ROCK ASSEMBLAGE. MASSIVE ANDESITIC FLOWS AND COARSE PYROCLASTIC ROCKS PREDOMINATE IN THE CENTRAL PART OF THE AREA AND A SEQUENCE OF LAYERED AND MASSIVE VOLCANOGENIC ROCKS PREDOMINATE ALONG THE EASTERN MARGIN. THE SOUTHWESTERN SECTION OF THE AREA IS UNDERLAIN BY INTERCALATED VOLCANICLASTIC ROCKS, FLOWS, AND CALCAREOUS SEDIMENTARY ROCKS THAT ARE PARTLY COVERED BY COARSE VOLCANIC BRECCIA.
>
> A SEQUENCE OF MASSIVE RED TO PURPLE AND GREEN AUGITE PORPHYRY FLOWS, COARSE VOLCANIC BRECCIA AND DIORITIZED VOLCANICS IS PRESENT IN THE CENTRAL PART OF THE REGION. THIS SEQUENCE MAY INDICATE THE EXISTENCE OF A CENTRAL ZONE OF PARTLY SUBAERIAL VOLCANIC CENTRES.
>
> INTRUSIVE ROCKS WITHIN THE AREA ARE MAINLY DIORITIC AND APPEAR TO BE IN PART COMAGMATIC WITH THE NICOLA VOLCANIC ROCKS BECAUSE OF SIMILAR COMPOSTION AND GRADATIONAL RELATIONSHIPS. SEVERAL SMALL AREAS OF MONZONITE AND/OR SYENITE ARE FOUND WITHIN THE BELT.
>
> THE STRUCTURE OF THE ASPEN AREA IS DOMINATED BY TWO REGIONAL, NORTHERLY-TRENDING FAULTS ABOUT 4 KILOMETRES APART. THEY ARE LINKED BY MANY SPLAYS AND A TERRAIN SHATTERED BY BRITTLE FRACTURE. IN CONTRAST, FOLDING IS OBSCURE AND MAY BE SLIGHT EXCEPT FOR DRAG NEAR FAULTS.
>
> THE SNOWFLAKE PROPERTY IS UNDERLAIN BY A SEQUENCE OF FLOWS, VOLCANIC FRAGMENTALS AND RELATED VOLCANICLASTIC SEDIMENTS INTRUDED BY A MASS OF DIORITE-MONZONITE ON THE WEST-CENTRAL PORTION OF THE PROPERTY, AND BY PLUGS OF DIORITE, DIORITE PORPHYRY, AND DIORITE-MONZONITE ON THE EASTERN SIDE OF THE PROPERTY."



LARAMIDE RESOURCES LTD.

LOCATION MAP

SNOWFLAKE - POT CLAIMS

NICOLA MINING DIVISION, BRITISH COLUMBIA

DATE: JULY, 1983	SCALE: 1:600,000
DRAWN: R.G.W.	FIG. NO. 1

Previous work included ground magnetics, geological mapping, induced polarization, soil and rock geochemistry, VLF electromagnetics, and a considerable amount of drilling and trenching by at least seven different operators.

Objective of the present IP and Resistivity Survey was to confirm the location of IP anomalies outlined by previous surveys, particularly in relation to past drilling results.

A Phoenix Model IPV-1 IP and Resistivity receiver unit was used in conjunction with a Phoenix Model IPT-1 IP and Resistivity transmitter powered by a 2 kw motor-generator. IP effect is recorded directly as Percent Frequency Effect (P.F.E.) at operating frequencies of 4.0 Hz and 0.25 Hz. Apparent resistivity values are normalized in units of ohm-meters, while Metal Factor values are calculated according to the formula: M.F. = (P.F.E. x 1000) : Apparent Resistivity.

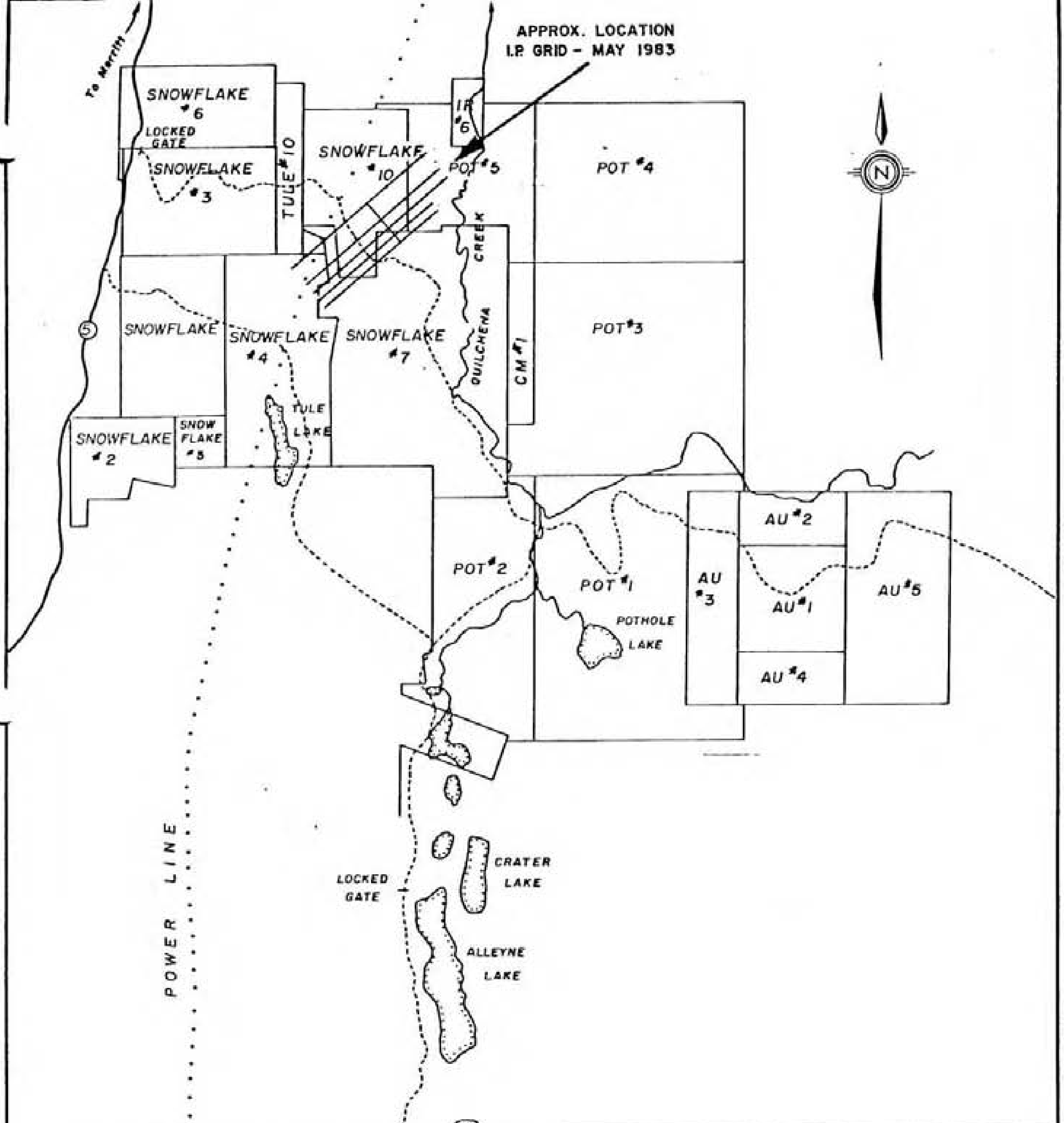
Dipole-dipole array was utilized to make the measurements, with a basic interelectrode distance of 100 meters and 50 meters. Four dipole separations were recorded in every case.

Field work was carried out during May 1983, under the supervision of Peter Gardner, geophysical crew leader. His certificate of qualification is included with this report.

2. Description of Claims

The Snowflake Group consists of the following claims as outlined below:

Claim Name	Units	Record No.	Date Recorded	Expiry Date	Owner
Snowflake	6	8	13 May 1975	13 May 1985	F. Gingell
Snowflake 2	4	93	14 April 1976	14 April 1986	R.W. Yorke-Hardy
Snowflake 3	6	167	20 Aug. 1976	20 Aug. 1984	R.W. Yorke-Hardy
Snowflake 4	8	211	11 Feb. 1977	11 Feb. 1985	F. Gingell
Snowflake 5	2	212	11 Feb. 1977	11 Feb. 1985	F. Gingell
Snowflake 6	6	321	16 Sept. 1977	16 Sept. 1984	F. Gingell
Snowflake 7	20	470	15 June 1978	15 June 1983	F. Gingell
Snowflake 9	20	472	15 June 1978	15 June 1982	F. Gingell
Snowflake 10	12	514	25 Oct. 1978	25 Oct. 1983	F. Gingell
Tule 10	4	322	16 Sept. 1977	16 Sept. 1984	F. Gingell



LARAMIDE RESOURCES LTD.

CLAIM MAP

SNOWFLAKE - POT CLAIMS

NICOLA MINING DIVISION, BRITISH COLUMBIA.

Technical Work By: Kerr, Dawson and Assoc. Ltd.	Scale: 1:50,000
Drawn By: W.G.	Date: March, 1983.
Approved By: J.M. Dawson, P.Eng.	Fig. No. 2

Operator is Laramide Resources Limited.

3. Presentation of Data

The Induced Polarization and Resistivity results are shown on the following data plots in the manner described in Part B of this report.

Line	Electrode Interval	Dwg. No.
8+00 NW	50 Meters	I.P.-5830-1
6+00 NW	100 Meters	I.P.-5830-2
6+00 NW	50 Meters	I.P.-5830-3
5+00 NW	100 Meters	I.P.-5830-4
5+00 NW	50 Meters	I.P.-5830-5
4+00 NW	100 Meters	I.P.-5830-6
4+00 NW	50 Meters	I.P.-5830-7
3+00 NW	100 Meters	I.P.-5830-8
3+00 NW	50 Meters	I.P.-5830-9

Also enclosed with this report is Dwg. I.P.P.-B-3029, a plan map of the Snowflake Grid at a scale of 1:5,000. 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 usng 50 meter electrode interval the position of a narrow sulphide body can only be determined to lie between two stations 50 meter apart. In order to definitely locate, and fully evaluate, a narrow, shallow source it is necessry to use shorter electrode intervals. In order to locate sources at some depth, larger eletrode 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 claim and grid information shown on Dwg. I.P.P.-B-3029 has been taken from maps made available by the staff of Laramide Resources Limited.

4. Discussion of Results

The results from the present IP and Resistivity survey on the Snowflake grid indicate that rock resistivities are generally quite low over the entire grid area. This is consistant with the presence of widespread faulting and shearing, as noted by Morrison in a report dated June 30, 1981.

Five, or possibly six, zones of anomalous Induced Polarization effects are also interpreted in the data, and are shown on Plan Map I.P.P.-B-3029. Each zone is discussed separately below.

ZONE A

This anomalous IP trend is evident striking across the southwestern ends of Line 5+00 NW, Line 4+00 NW, and Line 3+00 NW, at which point it is open to the south. In contrast to some of the other zones, the source of this feature appears to be very narrow; i.e., less than 50 meters in total width. It is best seen in the 50 meter dipole data collected on Line 4+00 NW between Station 8+00 SW and Station 8+50 SW. Depth to the target in this instance is indicated to be less than 50 meters.

ZONE B

Zone B is outlined in the data from all five grid lines, as a roughly north-northwesterly trending feature, positioned approximately 500 meters west of the baseline. The anomaly signatures in every case show a wide (greater than 100 meters) region of anomalous IP effects, the center of which lies along the northeastern margin of a higher resistivity rock type. There does not appear to b a discernable patern of lower than background resistivity values correlating with the anomalous P.F.E. reading. This suggests the source of Zone B is disseminated mineralization only. Depth to the polarizable material is every where less than 50 meters sub-surface, while the highest magnitude IP areadings are noted in the data from Line 6+00 NW between Station 5+00 SW, and Station 5+50 SW.

ZONE C

Generally, weakly anomalous IP effects mark IP Zone C, which extends southeastward from the vicinity of Line 6+00 NW Station 1+50 SW to beyond Line 3+00 NW. As was the case of Zone B, the anomalous IP readings lie along the flank of a zone of higher apparent resistivity values, although in this instance the high resistivity measurements are situated to the northeast of the IP trend. Again there does not appear to be a zone of incrased conductivity associated with the interesting IP values, thus suggesting that weakly disseminated mineralization is the source of IP Zone C.

ZONE D1, D2

It is not certain if Zone D1 and Zone D2 represent the same source, as there is considerable displacement of the anomalies involved between Line 8+00 NW and Line 6+00 NW. In addition, the character of the individual anomalies changes considerably between the two lines, with a much more conductive source being indicated to underlie Line 8+00 NW (Zone D1).

The source of Zone D2 on the other hand, does not appear to be nearly as conductive, and is outlined primarily as a zone of increased polarizability forming the southwestern edge of a resistive rock unit, which itself gives use to very weakly anomalous P.F.E. values. Evidently, a very weakly mineralized rock unit is present, with Zone D2 outlining a region of slightly more concentrated mineralization along the southwestern margin.

ZONE E

Zone E may mark the opposite contact, that is, the northeastern margin of the weakly mineralized unit mentioned above. This relationship is uncertain as the source of the IP zone is undefined further to the northeast as well as to the southeast.

5. Summary and Recommendations

The present Induced Polarization and Resistivity survey on the Snowflake Claims has outlined five, or possibly six separate anomalous zones. Sources of all of the zones except one, Zone D1, appear to be primarily disseminated metallic mineralization. In the case of Zone D1, which is interpreted in the data from the northeastern end of Line 8+00 NW only, lower apparent resistivity values suggest the presence of more conductive mineralization.

Further work on the property should first be in the form of an evaluation of all the previously existing data, especially the drilling results; in order to judge the significance of the anomalous IP zones detected by this year's IP and Resistivity survey.

PHOENIX GEOPHYSICS LTD.

Paul A. Cartwright

PAUL A. CARTWRIGHT, B.Sc.,
Geophysicist.

Dated: 14 July 1983

ASSESSMENT DETAILS

PROPERTY: Snowflake Claims

MINING DIVISION: Nicola

SPONSOR: Laramide Resources Ltd.

PROVINCE: British Columbia

LOCATION: 5 km North of Aspen Grove, B.C.

TYPE OF SURVEY: Induced Polarization and Resistivity

OPERATING MAN DAYS: 8

DATE STARTED: 24 May 1983

EQUIVALENT 8 HR. MAN DAYS: 12

DATE FINISHED: 31 May 1983

CONSULTING MAN DAYS: 4

NUMBER OF STATIONS: 204

DRAFTING MAN DAYS: 5

NUMBER OF READINGS: 1962

TOTAL MAN DAYS: 21

KILOMETERS OF LINE SURVEYED: 12.8

CONSULTANTS:

Paul A. Cartwright, 4238 W. 11th Avenue, Vancouver, B.C.

FIELD TECHNICIANS:

P. Gardner, 393 Connaught Avenue, Willowdale, Ontario.
G. Richardson, 4161 Crown Crescent, Vancouver, B.C.

DRAUGHTSMEN:

R. Wakaluk, 78865 Vivian Drive, Vancouver, B.C.

PHOENIX GEOPHYSICS LTD.
Paul A. Cartwright
Paul A. Cartwright, B.Sc.,
Geophysicist.

DATED: 14 July 1983

STATEMENT OF COST

INDUCED POLARIZATION AND RESISTIVITY SURVEY
SNOWFLAKE CLAIMS, NICOLA MINING DIVISION, B.C.

CREW: P. Gardner, G. Richardson

PERIOD: 24 May 1983 to 31 May 1983

8 Operating Days @ $650.00 per day		$ 5,200.00
Mobilization/Demobilization		1,000.00
Fuel and Oil	$ 8.07	
Meals	29.51	
	$ 37.58	
+ 15%	5.64	43.22
		$ 6,243.22

PHOENIX GEOPHYSICS LIMITED

Paul A. Cartwright

Paul A. Cartwright, B.Sc.
Geophysicist.

DATED: 14 July 1983

83-#906

COST STATEMENT

INDUCED POLARIZATION SURVEY - SNOWFLAKE CLAIMS

Labour:			
J.M. Dawson, P. Eng. 4 days @ $400/day		$1,600.00	
M. Dawson 14 days @ $200/day		2,800.00	
K. Davies 14 days @ $160/day		2,240.00	
			$6,640.00
Expenses and Disbursements:			
Direct cost from Phoenix Geophysics		6,243.22	
Truck Rental			
18 days @ $40/day	$720.00		
1480 miles @ .40/m	592.00	1,312.00	
Room and Board		1,688.40	
Base Map Preparation		423.32	
Pickets		143.75	
Flagging and Misc. field gear		107.40	
Xerox and blueprints		42.75	
Telephone		59.65	
			10,020.49
TOTAL COSTS			$16,660.49

PERSONNEL

James M. Dawson, P. Eng.	Geologist	May 17, 23, 24, 29 (4 days)
Mike Dawson	Senior Technician	May 17-22 inc. May 24-31 inc. (14 days)
K. Davies	Prospector	May 17-22 inc. May 24-31 inc. (14 days)

CERTIFICATE

I, PAUL A. CARTWRIGHT, of the City of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a geophysicst residing at 4238 W. 11th Avenue, Vancouver, B.C.

2. I am a graduate of the University of British Colunbia, with a B.Sc. Degree.

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

4. I have been practising my profession for 13 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 Laramide Resources 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 VANCOUVER, B.C. this 14th day of July 1983.

Paul A Cartwright

Paul A. Cartwright, B.Sc.

CERTIFICATE

I, PETER GARDNER, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysical crew leader residing at 393 Connaught Avenue, Willowdale, Ontario.

2. I am a graduate of Radio College of Canada in Electronics Technology.

3. I have been practising my vocation about six years.

4. I am presently employed as a geophysical crew leader by Phoenix Geophysics Ltd. of 200 Yorkland Blvd., Willowdale, Ontario.

DATED at Vancouver, British Columbia this 14th day of July 1983.

Peter Gardner.

PART B

PHOENIX GEOPHYSICS LIMITED

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. can be useful values 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 (Δ V) 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 (Δ V) the change is 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

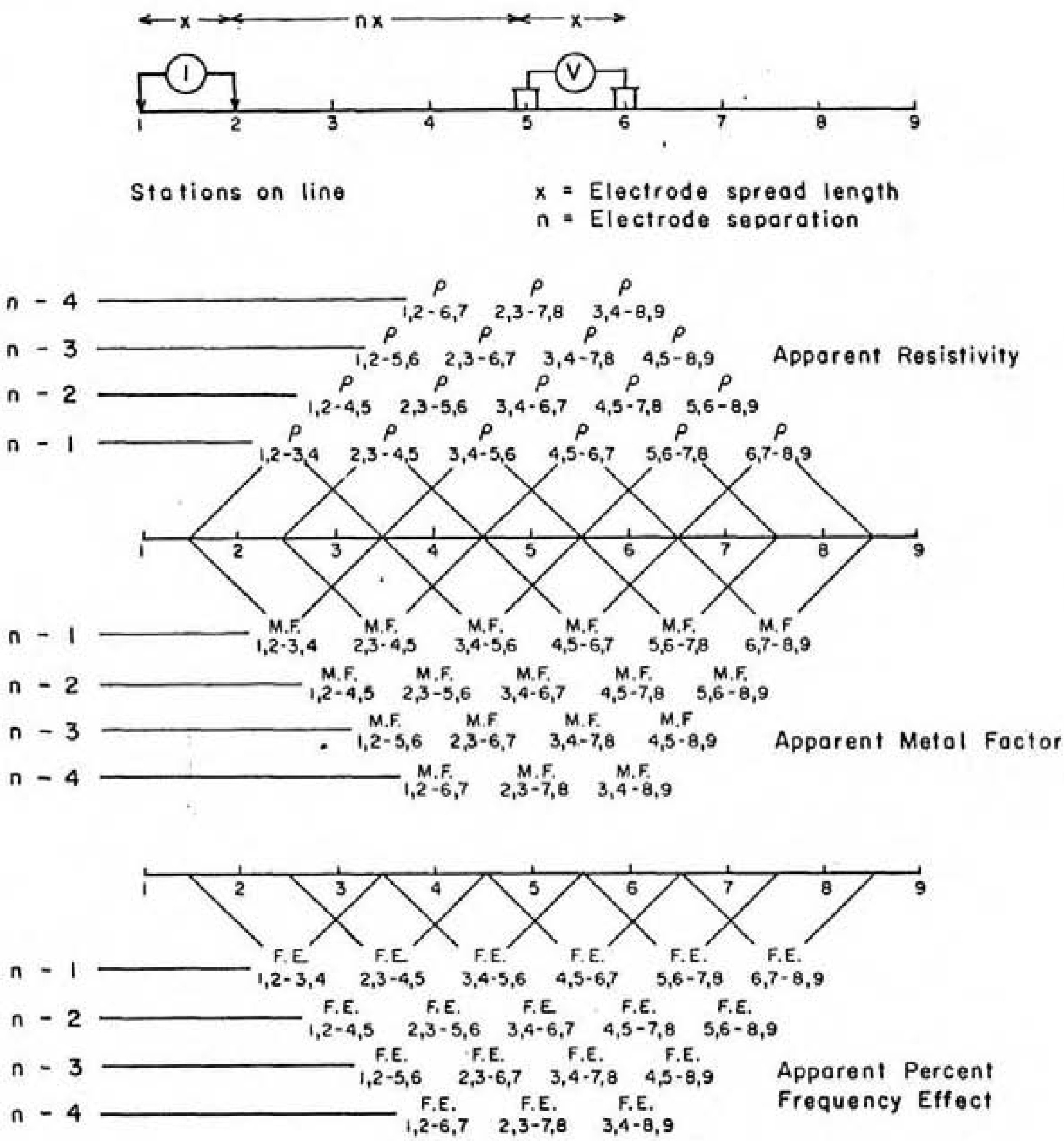
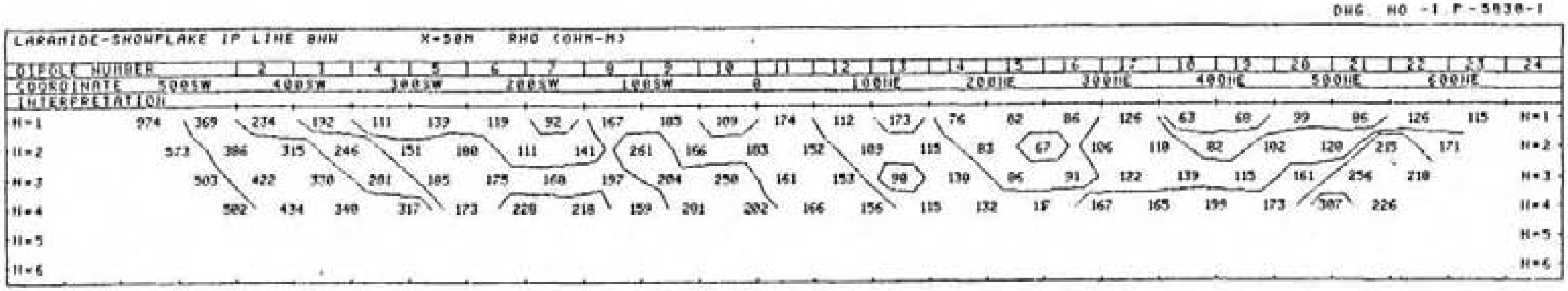
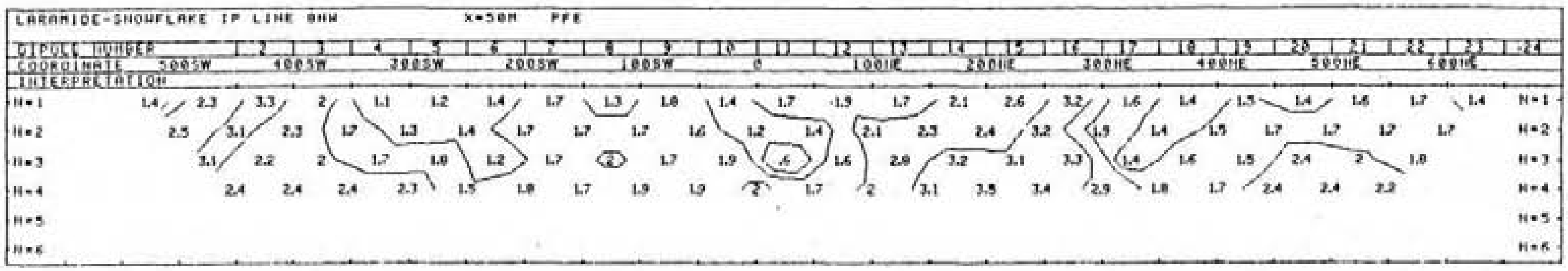
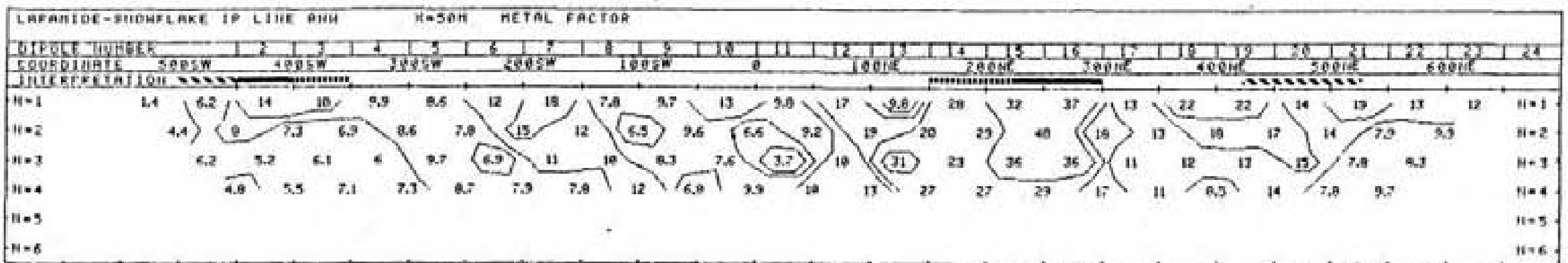


Fig. A

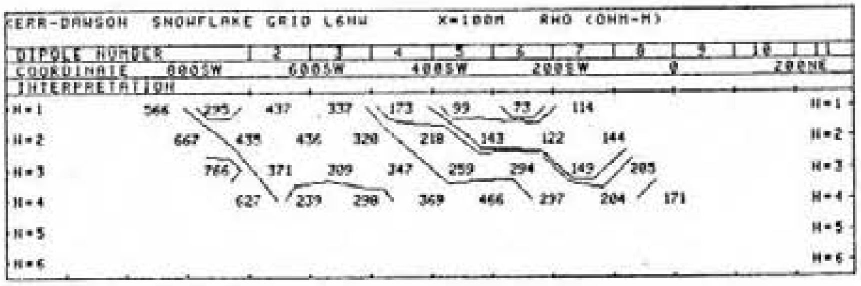
DWG. NO -I P-5830-I

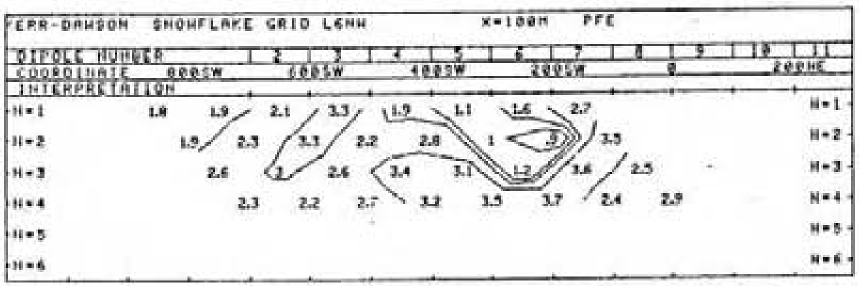


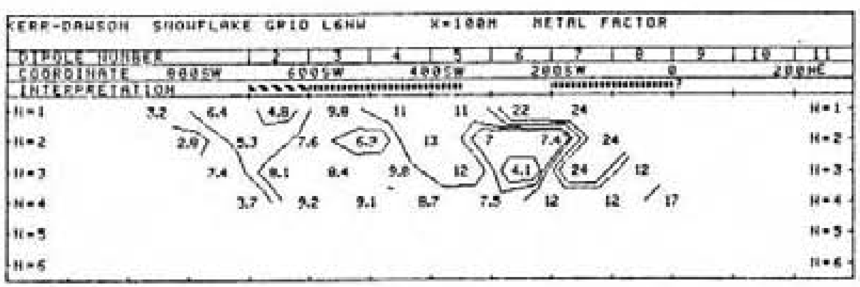




PAC / July 13/83







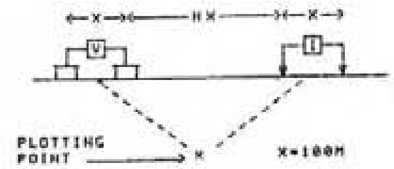
DWG NO -I P-5830-2

LARAMIDE RESOURCES LTD.

SNOWFLAKE CLAIMS

NICOLA M.D., B.C.

LINE NO. -6+00NW



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
4.0, 0.25

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

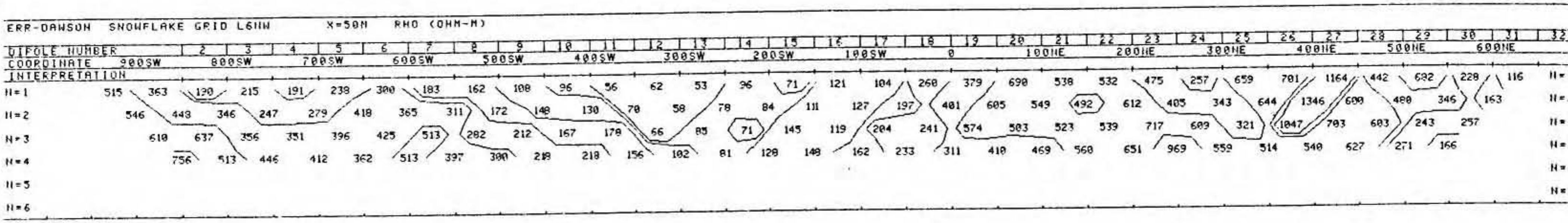
DATE SURVEYED: MAY 1983
APPROVED

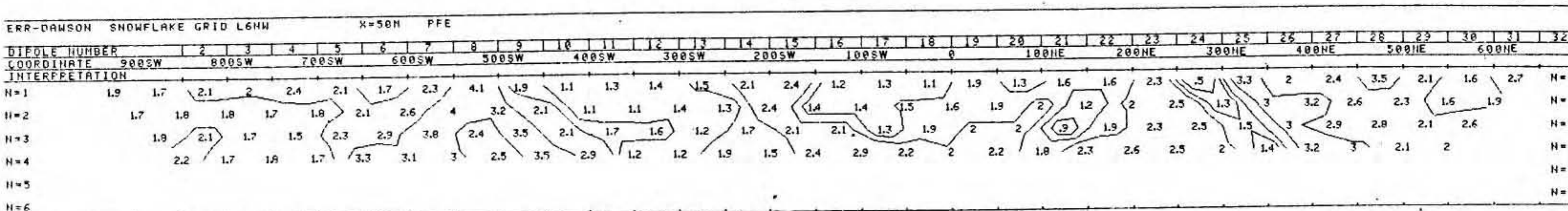
DATE July 13/83

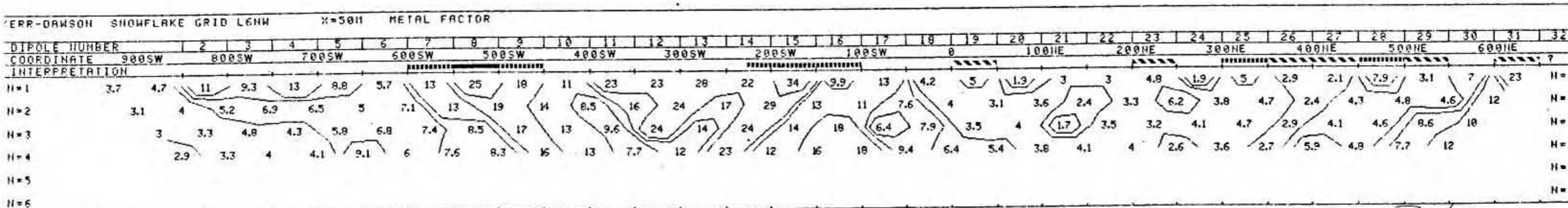
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

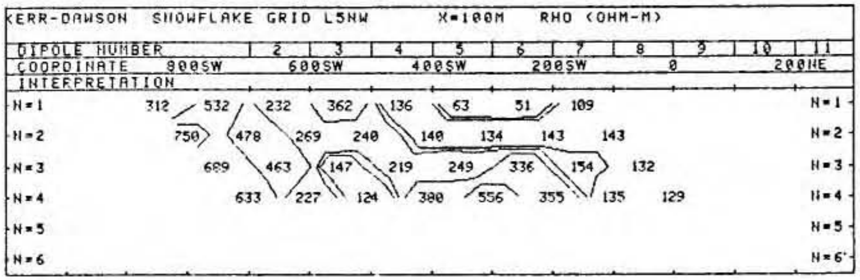
DWG NO -I P-5830-3

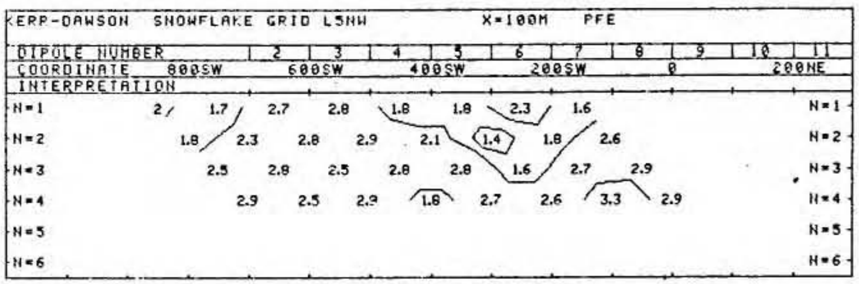


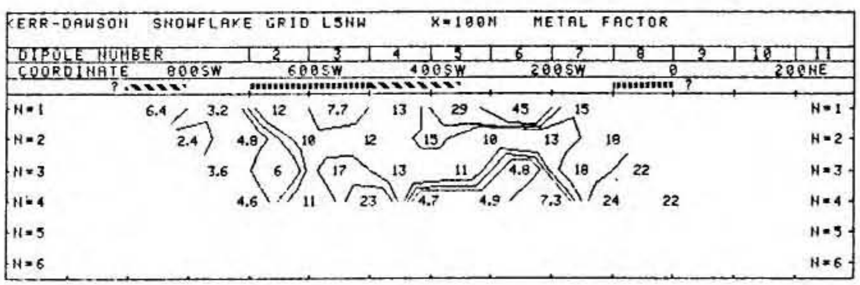




PAC / JULY 13/83





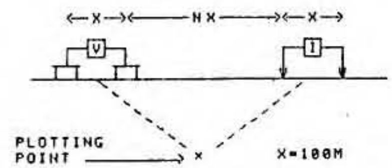


LARAMIDE RESOURCES LTD.

SNOWFLAKE CLAIMS

NICOLA M.D./B.C

LINE NO.-5+00NW



SURFACE PROJECTION OF ANOMALOUS ZONE,

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
4.0;0.25

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

DATE SURVEYED:MAY 1983
APPROVED

PAC

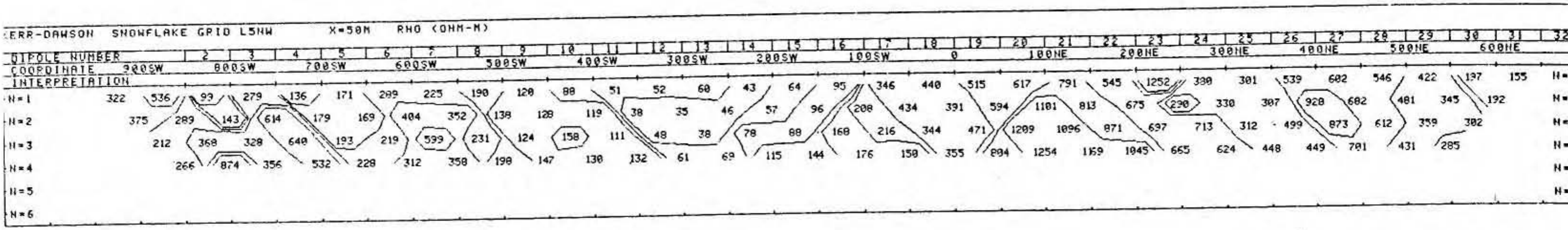
DATE JULY 13/83

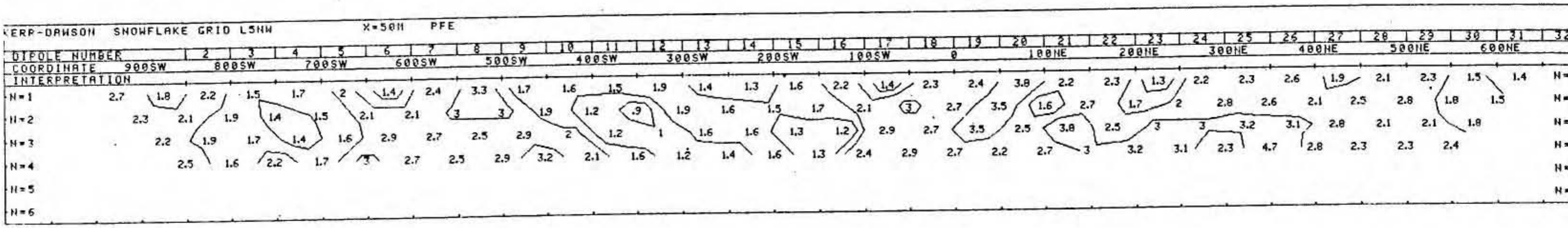
PHOENIX GEOPHYSICS LTD.

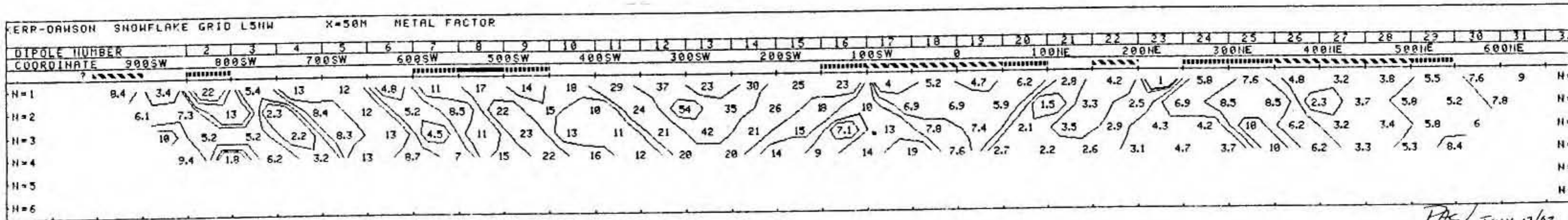
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

DWG NO -I P-5830-5

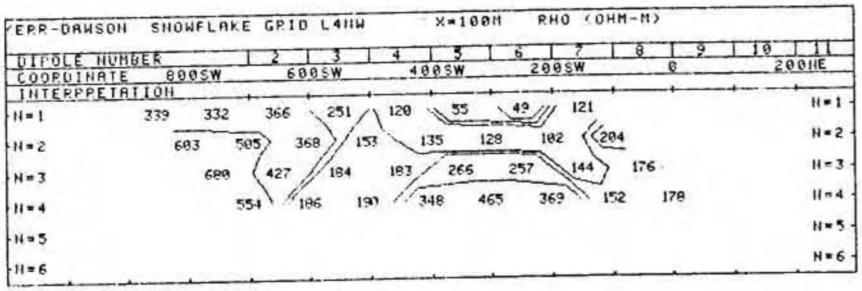


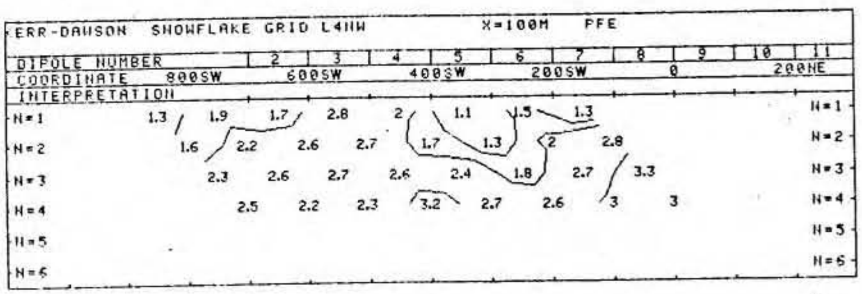


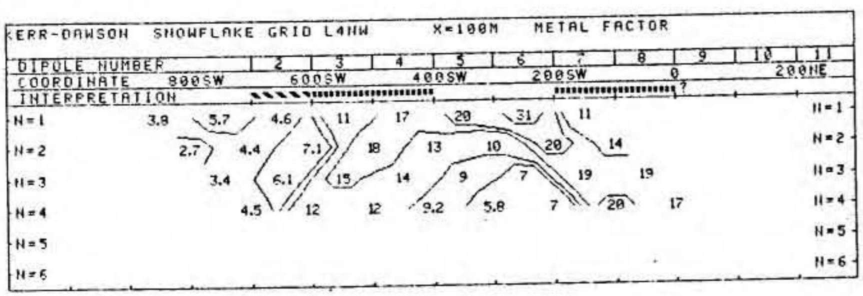


PAC / July 13/87

DWG. NO -I P.-5830-6





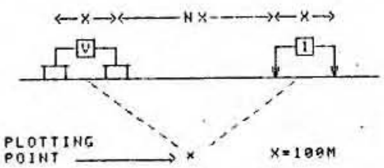


LARAMIDE RESOURCES LTD.

SNOWFLAKE CLAIMS

NICOLA M.D., B.C.

LINE NO.-4+00NW



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ) 4.0:0.25

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

DATE SURVEYED: MAY 1983

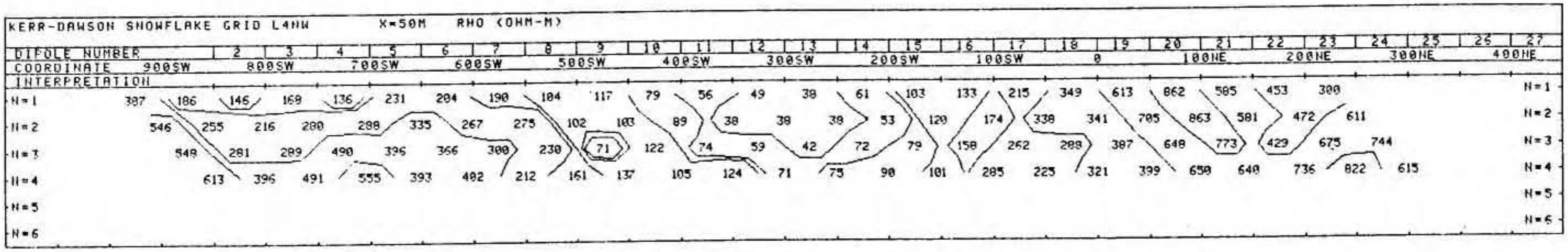
APPROVED PAC

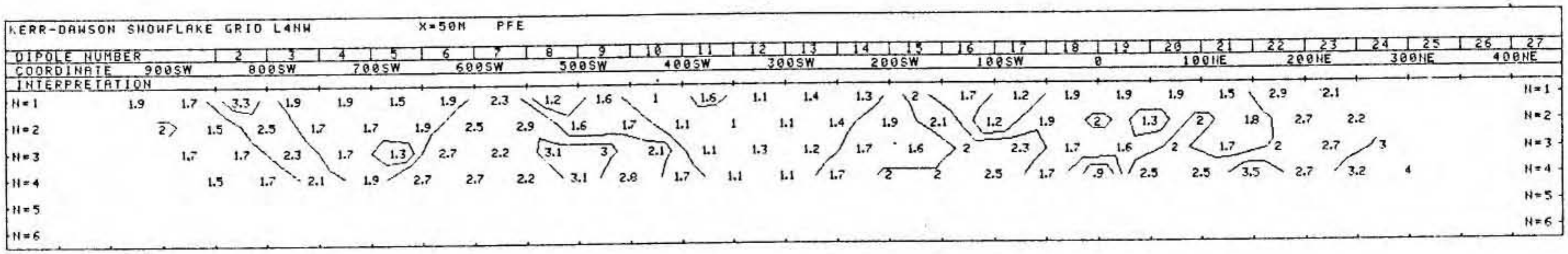
DATE July 13/83

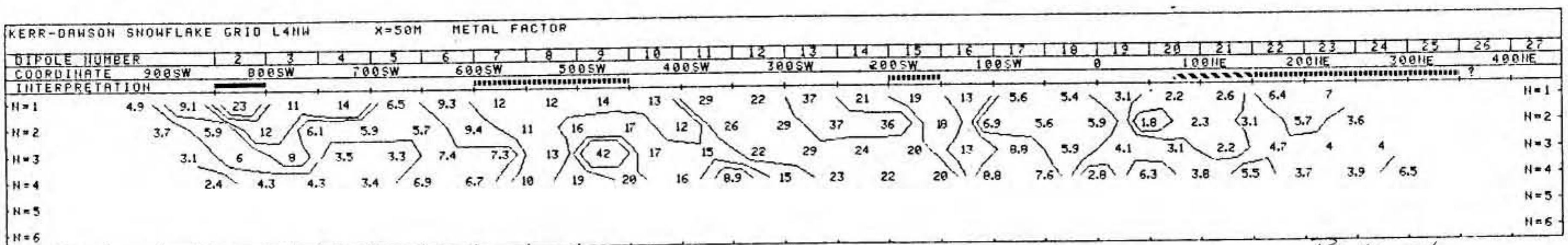
PHOENIX GEOPHYSICS LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

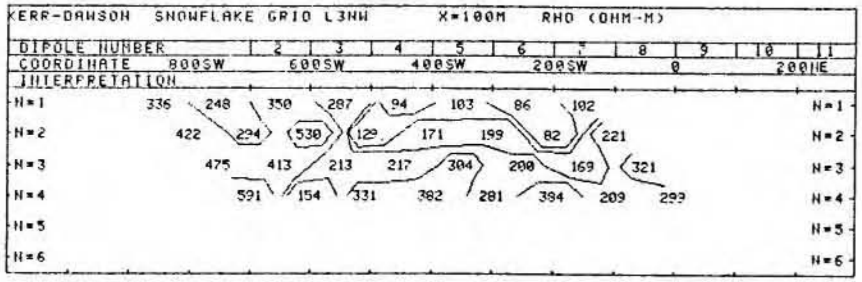
DWG NO -I P-5830-7

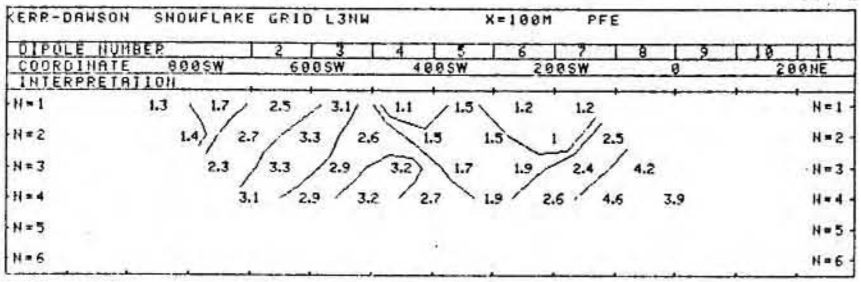


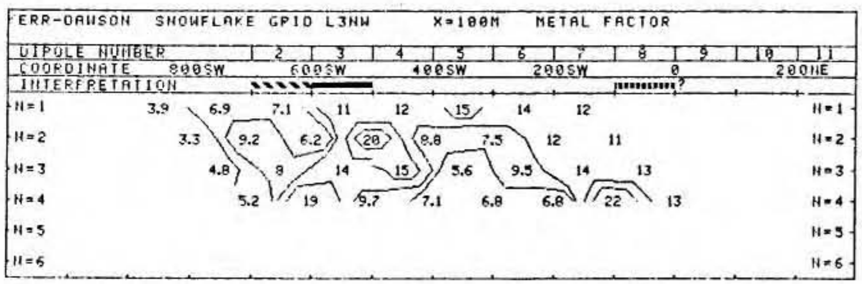




FAC / JULY 13/81







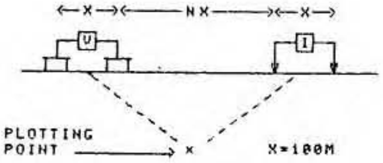
DWG NO -I.P-5030-8

LARAMIDE RESOURCES LTD.

SNOWFLAKE CLAIMS

NICOLA M.D., B.C.

LINE NO.-3+00NW



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

FREQUENCY (HERTZ)
4.0;0.25

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

DATE SURVEYED: MAY 1983

APPROVED PAC

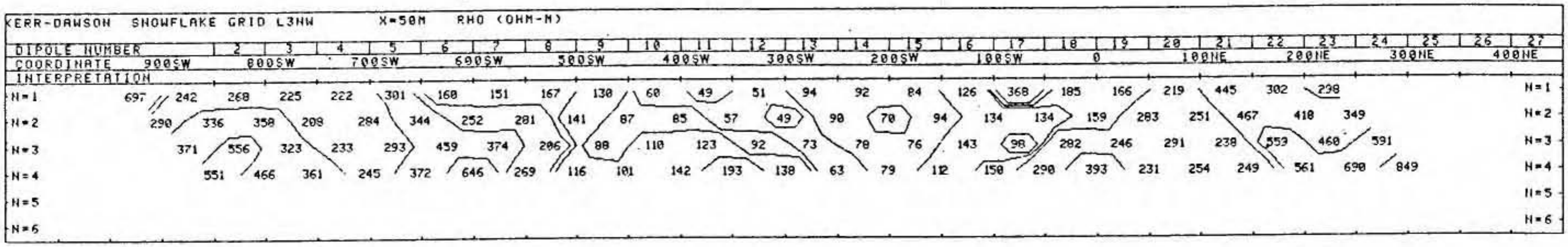
DATE July 13/93

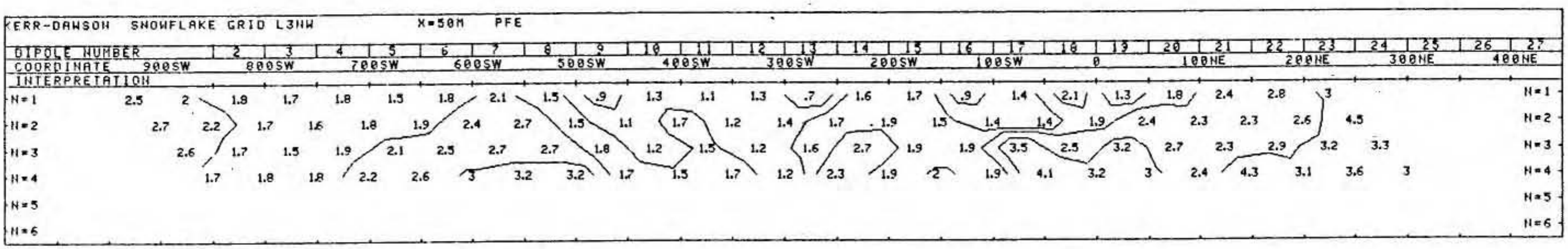
PHOENIX GEOPHYSICS LTD.

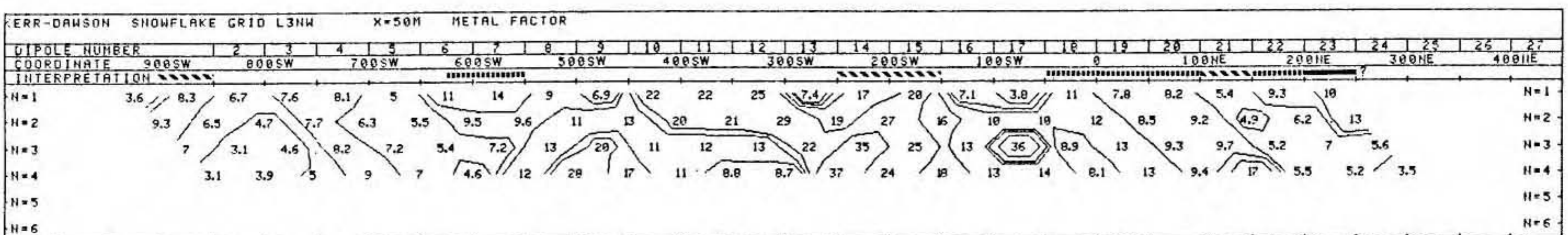
INDUCED POLARIZATION

AND RESISTIVITY SURVEY

DWG NO -I P-5830-9





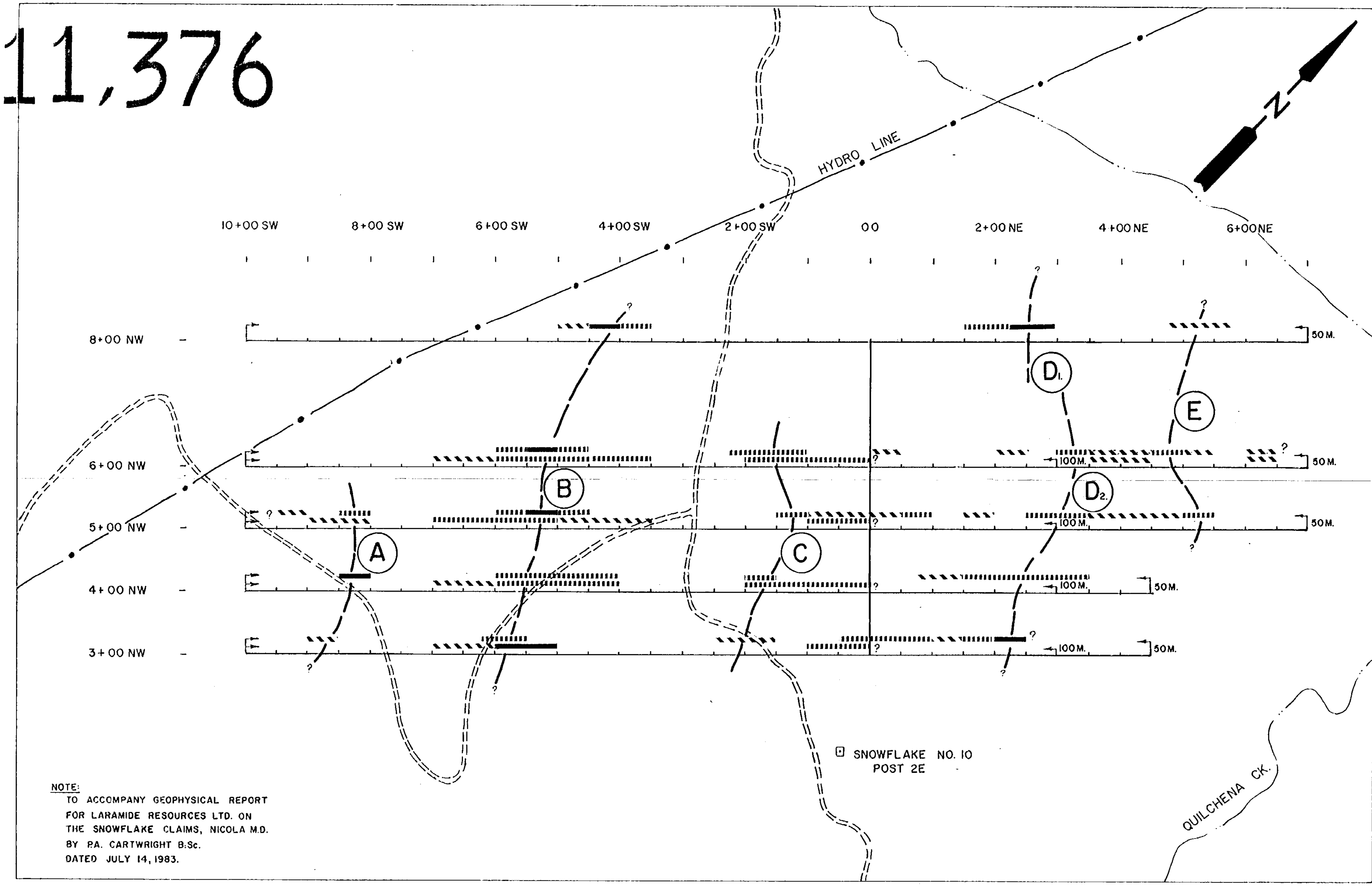


PAC/July 13/81

PHOENIX GEOPHYSICS LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



SURFACE PROJECTION
OF ANOMALOUS ZONE

DEFINITE
PROBABLE
POSSIBLE

NUMBER AT END OF ANOMALIES
INDICATE SPREAD USED.

LARAMIDE RESOURCES LIMITED

SNOWFLAKE CLAIMS

NICOLA MINING DIVISION, B.C.

SCALE
1:5000
0 50 100 200 M.

AXIS OF ANOMALOUS I.P. ZONE -

ROAD -

DRAWN: R.G.W.

DATE: JULY 11, 1983

APPROVED: PAC

DATE: July 13/83

DWG. NO.-I.P.P.-B-3029