86-731-15416

PACIFIC GEOPHYSICAL LIMITED

REPORT

ON THE

RESISTIVITY AND INDUCED POLARIZATION SURVEY

ON THE

WISCONSIN PROPERTY
NELSON MINING DIVISION
BRITISH COLUMBIA

FOR

HYPERION INDUSTRIES LIMITED

LATITUDE: 49° 24½'N
LONGITUDE: 116° ~~75~~ 57.8' W

N.T.S. 82F/6.7W

OWNER: ESPERANZA EXPLORATIONS LIMITED
OPERATOR: HYPERION INDUSTRIES LIMITED

BY

PAUL A. CARTWRIGHT, P.Geoph.

DATED: 30 SEPTEMBER 1986

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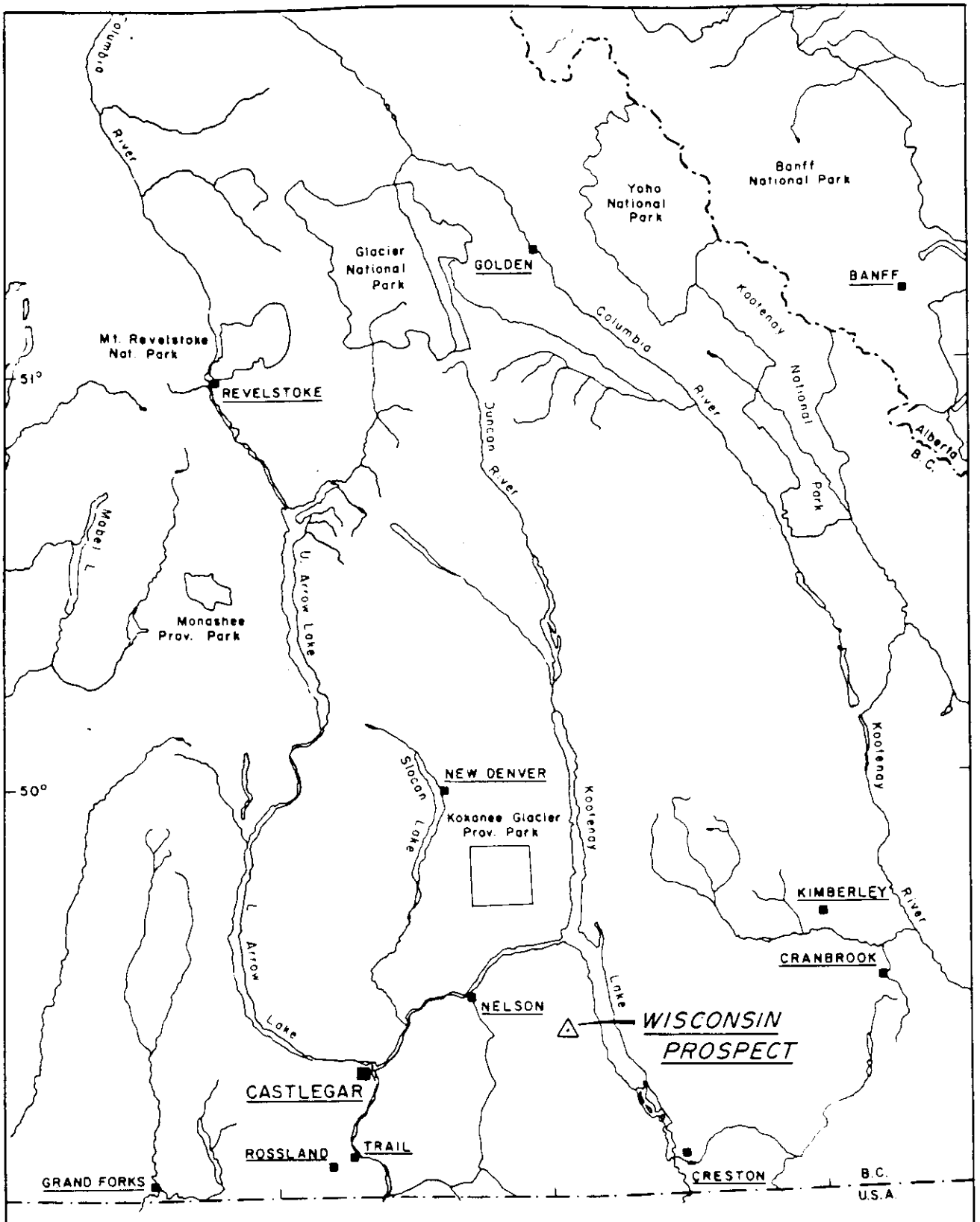


GEOLOGICAL ASSOCIATION OF CANADA · J. WISEMAN · FELLOW ·

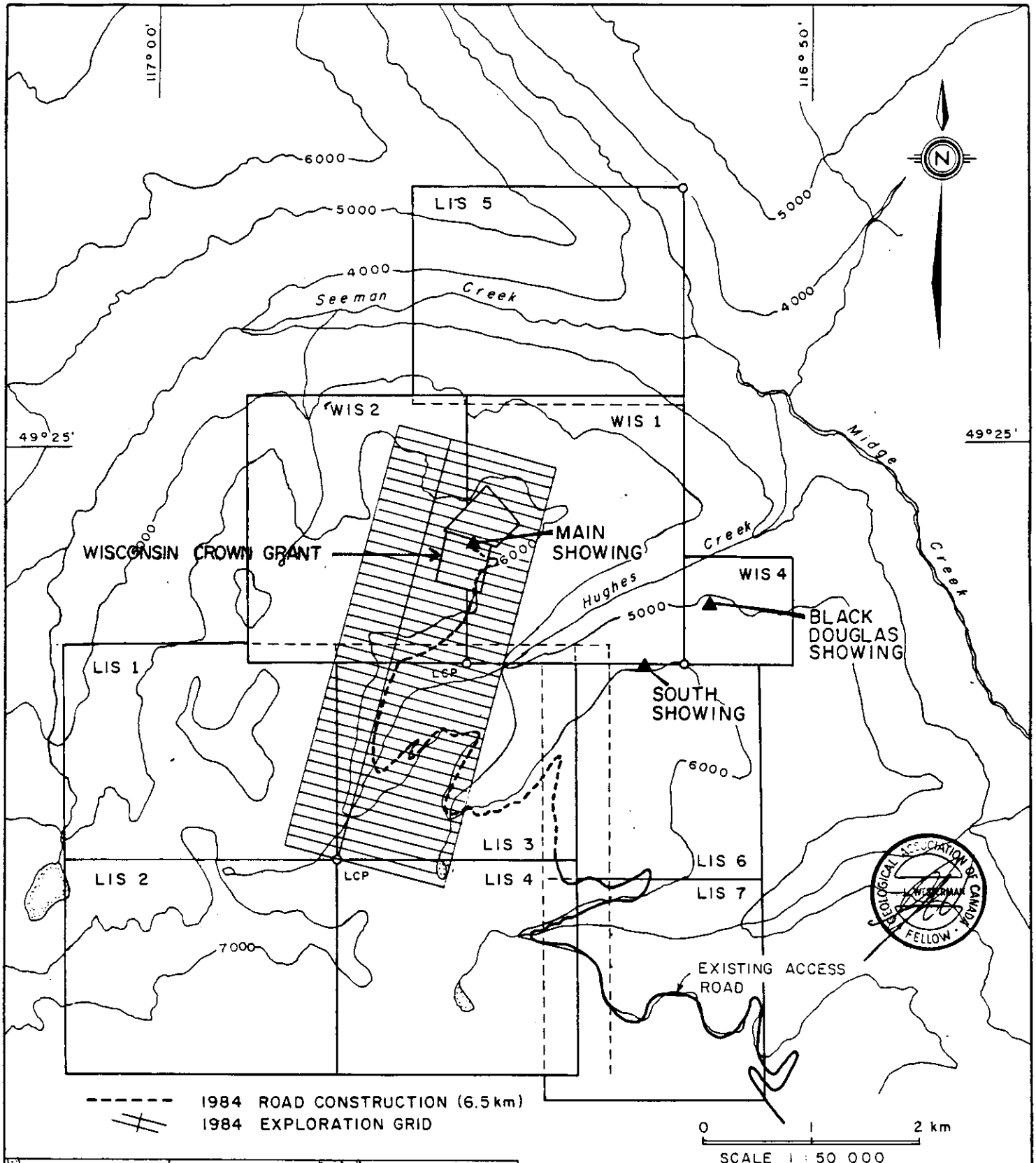
HYPERION INDUSTRIES LTD.

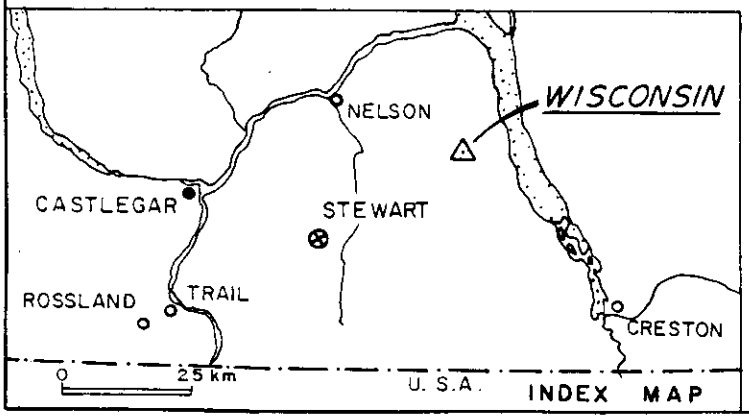
WISCONSIN PROJECT - B.C.

NELSON MINING DIVISION

LOCATION MAP

SCALE As Shown	DRAWN BY:	FIG. 1
DATE NOVEMBER 1984	DRAFTED BY: J.S.	
N.T.S. 82 F, M	REV. JUNE 5, 1986	C.J.W. Ph.D.





HYPERION INDUSTRIES LTD.

WISCONSIN PROJECT - B.C.

NELSON MINING DIVISION

CLAIM MAP

SCALE 1:50,000		DRAWN BY: J. PEARSON	FIG. 2
DATE AUGUST 1984		DRAFTED BY: L.G. + J.S.	
N.T.S. 82 F/6,7	REV. JUNE 5, 1986	C.J.W. Ph.D.	

PART A REPORT

1) Introduction

An Induced Polarization and Resistivity Survey has been completed on the Wisconsin Property, Nelson Mining Division, at the request of Robert Holland, President, Hyperion Industries Limited.

The property is located approximately 25 kilometers southeast of the City of Nelson, B.C. Access is via paved road from Nelson (30 km along Highway 6) and a system of gravel roads (36 km) along Porcupine, Cultus and Liab Creeks leading to the property.

Previous work on the property dates back to 1884 and includes tunnelling, trenching and diamond drilling. More recently, operators of the property have carried out detailed mapping and sampling, a soil geochemical survey, electromagnetic surveys and diamond drilling.

The objective of the present IP and Resistivity survey was to further define the strike extent of the known mineralized horizons, as well as to outline any previously undiscovered anomalous zones.

A Phoenix Model IPV-1 Induced Polarization and Resistivity receiver unit was used, together with Phoenix Model IPT-1 IP and Resistivity transmitter powered by a 1 kw motor-generator. IP effects are recorded as Percent Frequency Effects (P.F.E.) at operating frequencies of 4.0 Hz and 0.25 Hz, while apparent resistivity values are normalized in units of ohm-meters. Initially, one line was tested using the gradient array using a potential electrode separation of 10 meters. All subsequent work employed the dipole-dipole array, with a 10 meter electrode separation. Four dipole separations were recorded in every case.

Field work took place during the period August 22, 1986 to September 12, 1986, initially under the supervision of Paul A. Cartwright, P.Geoph., and then under the direction of Michael J. Cormier, B.Sc. Certificates of qualification are included in this report.

2) Description of Claims

The Wisconsin property consists of the following Crown grants and mineral claims, which are also illustrated in Figure 2.

Claim	Units	Record No.	Expiry Date
Wisconsin	1	L2928	-
Lucky Strike	1	L2929	-
Wis 1	20	1558	19 March 1994
Wis 2	20	1559	19 March 1993
Wis 4	4	1939	7 October 1993
Lis 1	20	3537	24 October 1992
Lis 2	20	3538	24 October 1992
Lis 3	20	3539	24 October 1994
Lis 4	20	3540	24 October 1993
Lis 5	20	3541	24 October 1992
Lis 6	16	3595	3 August 1993
Lis 7	16	3596	3 August 1993

Esperanza Explorations Ltd. is the owner of the Wis-1,2,4 and Lis-1,2,3,4,5,6,7 claims and also owns the Crown granted Wisconsin and Lucky Strike claims, subject to an underlying option agreement. Hyperion Industries may earn up to 100 % interest in the property as the result of an option agreement with Esperanza Explorations Ltd.

3) Description of Geology

The following geological description has been provided by the staff of Hyperion Industries Ltd.

"The Wisconsin property is located near the southern end of the Kootenay Arc, a complexly deformed, north trending belt of metasedimentary and metavolcanic

rocks of Proterozoic and Early Paleozoic age. The arc is extensively intruded by granitic plutons and stocks of Jurassic and Cretaceous age. In the general vicinity of the property, regional stratigrphy becomes progressively younger from east to west.

Regional geologic maps indicate that a major north-northeast trending fault bisects the property. To the east of this fault, the property is underlain by Windermere Supergroup rocks of the Upper Proterozoic-Lower Paleozoic age. The base of the Windermere consists of a conglomerate overlain by mafic volcanic tuffs and greenstone. Upper Windermere rocks include the Monk Formation (phyllites and grey limestone horizon) overlain by quartzites, grits and a conglomerate. To the west of the major fault, Hamill Group rocks of Lower Cambrian age consist of quartzites and mica schists with the marble and conglomerate horizons."

"The massive to semi-massive sulphide mineralization occurs in sheared Proterozoic metasediments and Cretaceous quartz-diorite intrusives."

4) **Presentation of Data**

The dipole-dipole array 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.
36+00N	10 Meters	IP-5872-1
35+50N	10 Meters	IP-5872-2
35+00N	10 Meters	IP-5872-3
34+50N	10 Meters	IP-5872-4
34+00N	10 Meters	IP-5872-5
33+50N	10 Meters	IP-5872-6
33+00N	10 Meters	IP-5872-7
32+50N	10 Meters	IP-5872-8

32+00N	10 Meters	IP-5872-9
31+50N	10 Meters	IP-5872-10
30+50N	10 Meters	IP-5872-11
30+00N	10 Meters	IP-5872-12
29+50N	10 Meters	IP-5872-13
29+00N	10 Meters	IP-5872-14
28+50N	10 Meters	IP-5872-15
28+00N	10 Meters	IP-5872-16
27+50N	10 Meters	IP-5872-17
27+00N	10 Meters	IP-5872-18
26+50N	10 Meters	I. -5872-19

The gradient array IP and Resistivity data are displayed on the followng data plots:

Line	**Measurement Interval**	**Dwg. No.**
32+50N	10 Meters	IP-5872-20

Also enclosed with this report are Dwg. Nos. I.P.P.-B-4149A to 4149D, 1:1,000 Scale Plan maps of the contoured n=1 and n=2 Apparent Resistivity and PFE results. Dwg. No. I.P.P.-B-4149E is a 1:1000 Scale Plan Map illustrating the positions of the conductive zones interpreted from the data.

It is important to note that the above plan maps have been drawn using distances measured along the slope, i.e., the station positions on the grid lines have not been corrected to the horizontal in areas of steep slopes. Consequently, two separate grid numbering schemes are used on the plan maps, with the Pacific Geophysical grid numbers being shown in parenthesis, while the applicable 1984 BP grid numbers are not enclosed by parenthesis. The pseudosection plots use the Pacific Geophysical grid numbers.

Since the Induced Polarization measurement is essentially an averaging

process, as are all the 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 a 10 meter electrode interval, the position of a narrow sulpide body can only be determined to lie between two stations 10 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.

5) Discussion of Results

The present IP and Resistivity Survey on the Wisconsin Property initially used gradient array with transmitter electrodes situated 700 meters apart at Station 200E (BP grid) and Station 900E (BP Grid) on Line 3250N. A 10 meter potential circuit was then used to measure IP effects and apparent resistivity values along that part of the line enclosed by the transmitter electodes. Several very narrow zones of massive sulphide mineralization are mapped as being close to the line in this region, and it was hoped that gradient array would provide a relatively rapid means of detecting these less than 10 meter wide veins by virtue of their increased conductivity and polarizability compared to the host rocks.

Unfortunately, the gradient array measurements do not appear to clearly resolve the known massive sulphide veins. Instead, it would seem that either several larger and deeper conductive and polarizable sources are being detected, or a number of closely spaced, narrow, and relatively shallow conductors are being averaged together.

Dipole-dipole array was then utilized to re-evaluate Line 3250N in the area of the known massive sulphides. A basic interelectrode distance of 10 meters was selected in order to detect tabular sources of less than 10 meters width, as well as to maintain a high degree of horizontal resolution between closely spaced zones. Four dipole separations were recorded yielding a maximum penetration depth of 20 to 25 meters subsurface.

This dipole-dipole IP and Resistivity data first recorded on Line 3250N indicated well defined low resistivity (high conductivity) zones correlating with the positions of the known sulphide veins. Consequently, the rest of the geophysical survey was carried out using the same array. A number of conductive zones are now evident with the axis of the conductors being marked at their shallowest points on Dwg. No. I.P.P.-B-4149E. It should be noted that the apparent resistivity data has been used as the primary anomaly indicator rather than the IP effect (P.F.E.). The massive sulphides have apparently been randomly oxidized with the result that, while low resistivity values always correlate with the positions of the known veins, the IP effects recorded over the sulphides often show distinctly lower than background values, rather than the higher than background values normally recorded over unweathered mineralization. Extensive oxidization of the vein sulphides would normally be expected to greatly reduce the magnitude of the IP effects observed, while the observed resistivities would not be affected to nearly the same degree. This appears to be the case for many of the anomalous zones outlined on the Wisconsin property by the present IP and Resistivity survey.

Each of the conductive zones interpreted in the IP and Resistivity data are illustrated on Dwg. No. I.P.P.-B-4149E, and are discussed below. The sources of all of the zones marked extend to within 15 meters of the surface.

Zone A

The northern part of this trend is coincident with the No. 1 Adit mineralized zone outlined by previous trenching, drilling and underground work. It is encouraging that this conductive zone appers to extend well to the south to the vicinity of Line 2700N. This southern extension does not appear to have been tested by trenching; however, the down dip extension of the southern half of Zone A may have been tested at relatively great depth by diamond drill holes positioned west of the zone of interest on Line 2800N nd Line 2900N.

Zone A1

This feature may represent a northerly trending extension of Zone A, slightly offset to the west. Most anomalous results are evident in the data collected on Line 3400N, in the vicinity of Station 490E (Pacific Grid) and Station 495E (Pacific Grid).

Zone B

A narrow zone of lower than background resistivity readings outline mineralization previously mapped by trenching as well as Adit No. 4. The source of Zone B is open towards the north and towards the southeast at which point the conductor has split into two separate, subparallel limbs, with the more westerly trend coinciding with massive sulphides.

Zone C

This zone of anomalous conductivity is coincident with sulphide mineralization seen near the portal of Adit No. 5, which is located close to Line 3200N. The geophysical results indicate that this mineralization extends at least as far north as Line 3400N, with a very well defined anomalous response being evident in the data recorded on Line 3350N, in the vicinity of Station 580E (Pacific Grid).

Zone C1

It is thought that this zone represents the southern extension of Zone C, striking along the extreme eastern edge of the grid, in the area of Line 3050N and Line 3000N. The trend is presently undefined beyond these points.

Zone C2

This is interpreted to be a short zone lying 20 to 30 meters west of and parallel to Zone C, in the vicinity of Line 3300N. Zone C2 is only seen in the n=2 data, which suggests a depth of at least 10 meters to the top of the source.

Zone D, Zone D1, Zone D2

These three features form a discontinuous line which extends across virtually the entire grid. The northern end of Zone D1 correlates moderately well with massive sulphides exposed in a trench at the far northern end of the No. 1 Adit mineralized zone.

In the case of Zone D, the most anomalous response is seen in the data collected on Line 3350N, near Station 520E (Pacific Grid). Zone D1 is composed of very anomalous results on Line 3150N, Station 520E (Pacific Grid), while considerably less anomalous resistivity values mark the presence of Zone D2 on Line 2700N, near Station 525E (Pacific Grid).

Zone E

The source of Zone E is indicated to be in the order to 100 meters in length. Most anomalous response is evident in the data acquired on line 2750N, in the vicinity of Station 470E (Pacific Grid).

Zone F

The conductive zone is interpreted to be immediately to the east of, and parallel to Zone E. Strike length of the source is at least 150 meters as the zone is seen extending from the vicinity of Line 2800N to beyond Line 2650N. Again the most conductive part of the zone is indicated to underlie Line 2750N, Station 490E (Pacific Grid).

Zone G

Zone G is best seen in the data recorded on Line 3050N, centered at Station 490E (Pacific Grid). It appears as a short strike length trend lying just to the west of and parallel to Zone D1.

Zone H

A very conductive response recorded on Line 3150N, Station 460E (Pacific Grid) outlines the northern end of Zone H, while much less anomalous results mark the southward extension of the zone to the area of Line 2900N and line 2850N, where the source of the geophysical response again appears to be very conductive but is buried at a somewhat greater depth. It should be noted that the depth to the top of the most conductive material is at least 10 meters beneath Line 2850N, Station 425E (Pacific Grid).

Zone I

This zone lies approximately 35 meters west of and parallel to Zone B. The source of Zone I appears to be well defined by the data acquired on Line 3550N, Station 560E (Pacific Grid). At present Zone I is open to both the north of Line 3600N and the south of Line 3450N.

Zone J

Somewhat lower than background apparent resistivity values accompanied by lower than normal IP effects outline Zone J near the western ends of Line 2700N and Line 2650N. Most encouraging results are seen in the data recorded on Line 2650N, Station 380E (Pacific Grid). The zone is undefined to the south of this point.

Zone K

Zone K is interpreted to lie between the southern extension of Zone A and Zone H. It is not as well defined as these other features, and the source appears to be buried at least 10 meters below the surface.

Zone L

Data recorded on Line 3300N, Station 445E (Pacific Grid) shows the most anomalous signature evident along the length of Zone L, the southern half of which is indicated to be striking parallel to and 20 meters west of the northern end of the No. 1 Adit mineralization marked by geophysical Zone A.

Zone M

This feature is interpreted to be present in the extreme northeastern corner of the survey grid; however, additional coverage would be required to better ascertain the significance of the source of the geophysical response.

Zone N, Zone O

Both of these trends are interpreted in data acquired on the western extensions of Line 3200N and Line 3250N. As such, additional surveying would be needed to more fully assess the importance of the anomalies involved.

6) Summary and Recommendations

An Induced Polarization and Resistivity survey has been completed on part of the Wisconsin Property on behalf of Hyperion Industries Ltd.

Well defined zones of increased conductivity are recorded by the apparent resistivity data over the known massive to semi-massive sulphide veins. IP effects noted coincident with the previously mapped veins are generally lower than background, which could be indicative of extensive oxidation of the vein sulphides.

A number of additional conductive zones are outlined by the resistivity and IP data. Some of these trends exhibit very similar signatures to those recorded over the known vein sulphides, and should be further evaluated by trenching and/or drilling on a high priority basis.

Recommendations and remarks concerning individual conductive zones are listed below. The positions of the zones are illustrated on plan map Dwg. No. I.P.P.-B-4149E.

ZONE	REMARKS	RECOMMENDATIONS
A	Northen half of zone coincident with No. 1 Adit mineralization	- ascertain if previous diamond drilling on Line 2800N and Line 2900N tested down dip extension of Zone A. - Line 2800N should be trenched cross the interval 395E-405E (Pacific Grid) on high priority basis.
A1	May be northern extension of Zone A	- trenching is recommended on Line 3400N between 485E and 500E (Pacific Grid) on high priority basis.
B	Coincident with No 4 Adit mineralization	- extend resistivity and IP coverage to north and south on high priority bsis.
C	Appears to outline northward continuation of No. 5 Adit mineralization	- trenching is recommended on Line 3350N between 570E and 590E (Pacific Grid) on a high priority basis.
C1	May be southern extension of Zone C	- visual inspection of road cut near Line 3050N, Station 540E (Pacific Grid) recommended in order to determine cause of geophysical conductor.
C2	Relatively deep source, single line anomaly (L3300N)	- drill hole located so as to pass approximately 15 meters beneath Line 3300N, 550E (Pacific Grid) is recommended on medium priority basis.
D	Possible northern extension of Zone D1	- trenching is recommended on Line 3350N between 510E and 530E (Pacific Grid) on high priority basis.
D1	Coincident at extreme northern end with No. 1 Adit mineralization	- visual inspection of 3 separate road cuts in area of zone between Line 3050N and Line 3150N to determine source of geophysical anomalies.
D2	Possible southern extentions of Zone D1	- additional resistivity and IP surveying to better define zone on low priority basis.
E	Short strike length	- trenching is recommended on Line 2750N between 465E and 475E (Pacific Grid) on a high priority basis.
F	Zone open to south	- trenching is recommended on Line 2750N between 485E and 495E (Pacific Grid) on a high priority basis.

ZONE	REMARKS	RECOMMENDATIONS
G	Short strike length	- trenching is recommended on Line 3050N between 485E and 495E (Pacific Grid) on medium priority basis.
H	Zone may pass close to No. 2 Adit	- visual inspection of road cut near Line 3150N, Station 460E (Pacific Grid) recommended to determine cause of northern geophysical response. - drill hole spotted to pass approximately 15 meters below Line 2850N, Station 425E (Pacific Grid) is recommended on medium priority basis.
I	Zone is open to north and south	- trenching is recommended on Line 3550N between 560E and 570E (Pacific Grid) on a high priority basis.
J	Zone is open to south	- additional resistivity and IP surveying is recommended to better outline extent of zone on a medium priority basis.
K	Relatively deep, poorly defined source	- no further work recommended at this time.
L	Zone located in close proximity to northern end of No. 1 Adit mineralized zone	- trenching is recommended on Line 3300N between 440E and 450E (Pacific Grid) on a high priority basis.
M	Zone open to north, east, south	- additional resistivity and IP surveying is recommended on a medium priority basis.
N,O	Zones undefined to north and south, respectively	- additional resistivity and IP surveying is recommended on medium priority basis.

In the event it becomes advantageous to more precisely map the extent of individual veins of massive sulphide mineralization exposed in a trench or drill hole, the use of the "Applied Potential" or "Mise a la Masse" technique should be considered. This method is capable of very accurate and cost effective mapping of narrow metallic sulphide veins, as long as the mineralization is electrically continuous.

PACIFIC GEOPHYSICAL LTD.

Paul A. Cartwright, P.Geoph.

Dated: 30 September 1986

7) **Assessment Details**

Property: Wisconsin **Mining Division:** Nelson

Sponsor: Hyperion Industries Ltd. **Province:** British Columbia

Location: 25 km southeast of Nelson, B.C.

Type of Survey: Induced Polarization and Resistivity

Operating Days: 18.5 **Date Started:** 22 Augut 1986

Equivalent 8 hr. Man Days: 81 **Date Finished:** 12 September 1986

Consulting Man Days: 10 **Number of Stations:** 588

Drafting Man Days: 8 **Number of Readings:** 3256

Total Man Days: 99 **Km of Line Surveyed:** 5.68

Consultants:

P.A. Cartwright, 4238 West 11th Avenue, Vancouver, B.C.

Field Technicians:

M. Cormier, 2242 Stephens Street, Vancouver, B.C.
M.Makulowich, 669 Valdes Drive, Kamloops, B.C.
R.Wartnow, 4976 2nd Avenue, Tsawwassen, B.C.

Draughtsman:

P.A. Cartwright, 4238 West 11th Avenue, Vancouver, B.C.
M. Cormier, 2242 Stephens Street, Vancouver, B.C.

PACIFIC GEOPHYSICAL LIMITED

Dated: 30 September 1986

Paul A. Cartwright

Paul A. Cartwright, P.Geoph.

8) **Statement of Costs**

HYPERION INDUSTRIES LTD.

Induced Polarization and Resistivity Survey - Wisconsin Property, Nelson, M.D., British Columbia.

Period:	22 August 1986 - 26 August 1986
Crew:	M. Cormier, M. Makulowich, P. Cartwright
Period:	27 August 1986 - 8 September 1986
Crew:	M. Cormier, M. Makulowich, R. Wartnow
Period:	9 September 1986 - 11 September 1986
Crew:	M. Cormier, M. Makulowich, P. Cartwright

17 Operating Days @ $ 1,000.00	$ 17,000.00
2 Bad weather Days @ $650.00	1,300.00
1 Organizational Day @ $650.00	650.00
Mobilization - Demobilization	1,500.00
	$ 20,450.00

PACIFIC GEOPHYSICAL LTD.

Dated: 30 September 1986

Paul A. Cartwright

Paul A. Cartwright, P.Geoph.

CERTIFICATE

I, Paul A. Cartwright, of the City of Vancouver, Province of British Columbia, do hereby certify:

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

2. I am a graduate of the University of British Columbia, with a B.Sc. Degree (1970)

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

4. I have been practising my profession for 16 years.

5. I am a Professional Geophysicist licensed in the Province of Alberta.

6. I have no direct or indirect interest, nor do I expect to receive any interest, directly or indirectly, in the property or securities of Hyperion Industries Ltd., Esperanza Explorations Ltd., or any affiliates.

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

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

DATED AT VANCOUVER, BRITISH COLUMBIA this 30th day of September 1986.

Paul A. Cartwright

Paul A. Cartwright, P.Geoph.

CERTIFICATE

I, Michael J. Cormier, of the City of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a geophysicist residing at 2242 Stepehns Street, Vancouver, British Columbia.

2. I am a graduate of McGill University, Montreal, Quebec with a B.Sc. Degree (1981).

3. I have been practising my profession for 5 years.

DATED at Vancouver, B.C. this 30th day of September 1985.

Michael J. Cormier

Michael J. Cormier, B.Sc.

11) Statement of Costs - Project Supervision
by Hyperion Industries Ltd.

The following costs were incurred on behalf of Hyperion Industries Ltd. for preparation and supervision of the I.P. survey conducted on their Wisconsin property near Nelson, B.C. Costs include expenses for four trips to the property. Work was carried out during the period of August 1 to September 30, 1986.

Field Equipment and Supplies	$89.90
Food and Lodging (includes some food for I.P. crew)	585.60
Office Costs (copying, phone, etc)	62.77
Radio Rental 2 months @ $50/mo	100.00
Transportation (gas, parking, etc)	272.08
Wages	
R. Holland, geologist-supervisor 10 days @ $200/day August 2,8,10-14,21-23,25 September 16,30	2000.00
J. Bavalis, field supervisor 6 days @ $150/day August 22-23,29-30 September 7-9	900.00
Supervision Costs	4010.35
Contract Geophysical Costs (page 16)	20450.00
Total Project Costs	$24460.35

Administrative and several other costs not directly related to work done have been excluded from the above figures. As a result, the total cost of $24460.35 is $599.87 less than that filed in our Statements of Exploration and Development ($25060.22). This difference will not affect the amount of assessment work filed and can be deducted from the P.A.C. credits.

Robert Holland, B.Sc., F.G.A.C.
president, Hyperion Industries Ltd.

PART B

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.

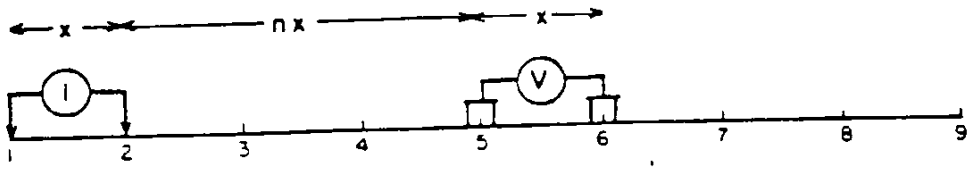
In some situations spurious noise, either man-made or natural, will render it impossible to obtain a reading. The symbol "N" on the data plots indicates a station at which it is too noisy to record a reading. If a reading can be obtained, but for reasons of noise there is some doubt as to its accuracy,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

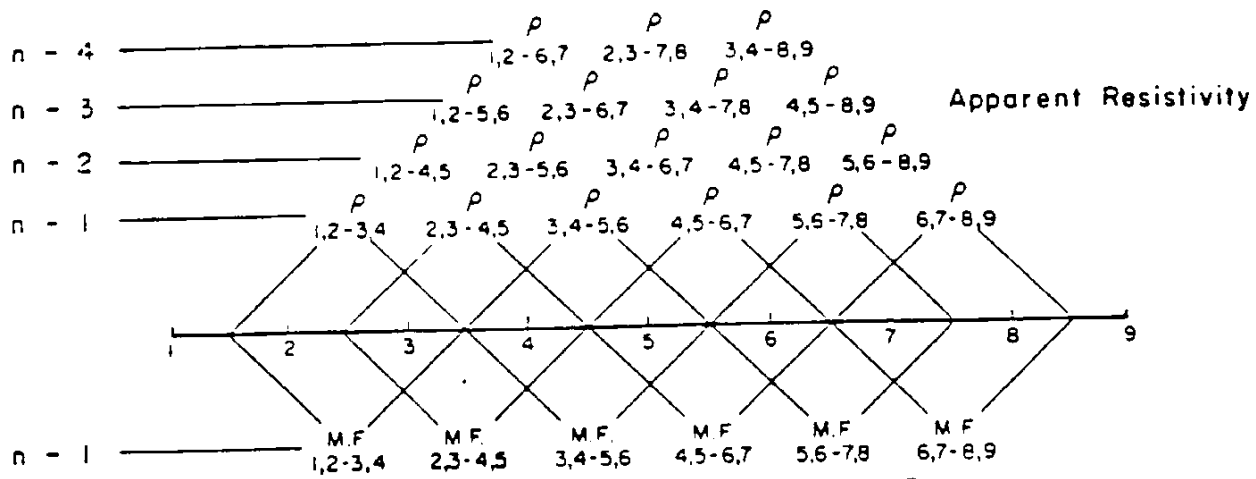
The symbol "NR" indicates that for some reason the operator did not attempt to record a reading, although normal survey procedures would suggest that one was required. This may be due to inaccessible topography or other similar reasons. Any symbol other than those discussed above is unique to a particular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

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

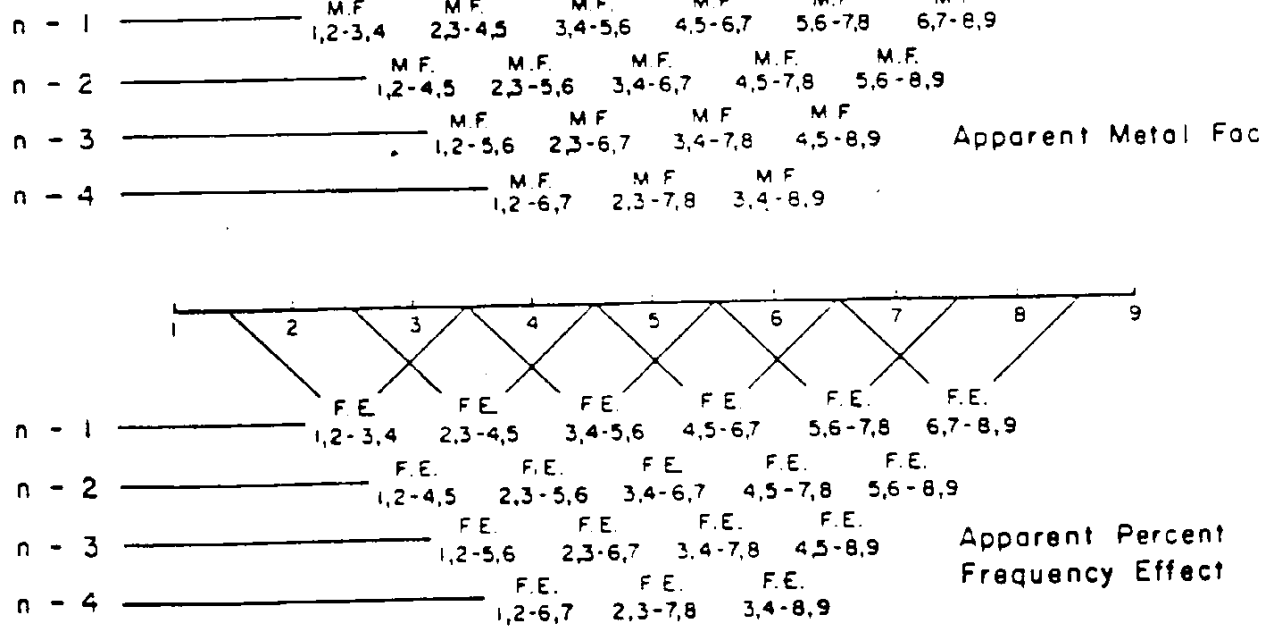


Stations on line

x = Electrode spread length
n = Electrode separation



Apparent Resistivity



Apparent Metal Factor

Apparent Percent Frequency Effect

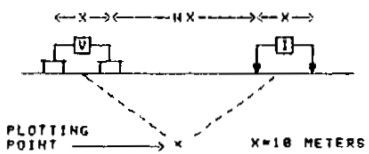
Fig. A

HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D. ;B.C.

LINE NO -3600N



FREQUENCY (HERTZ)
0.25:4.0

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

DWG. NO.-I.P.-5872-1

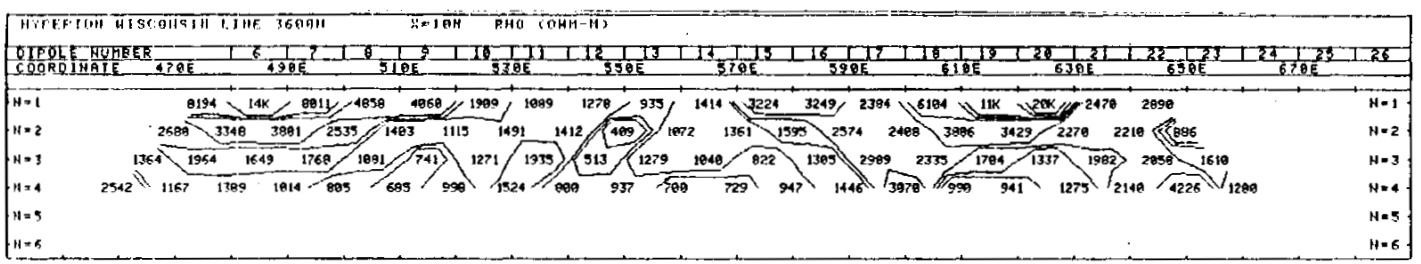
DATE SURVEYED SEPT 3/86

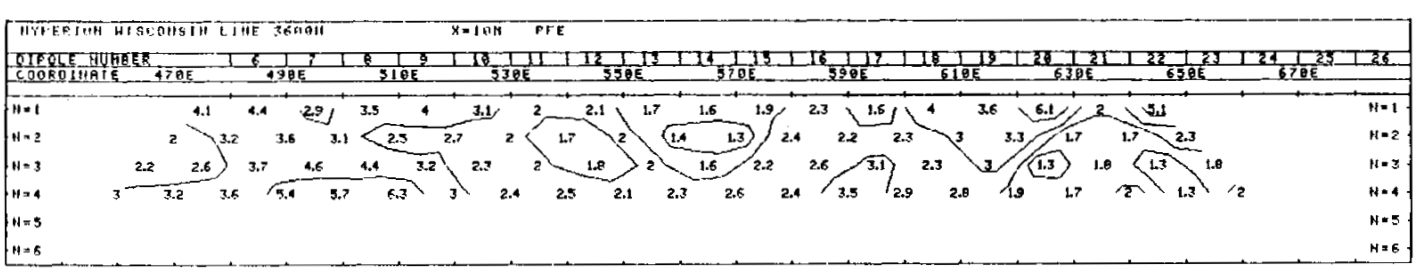
APPROVED PAC

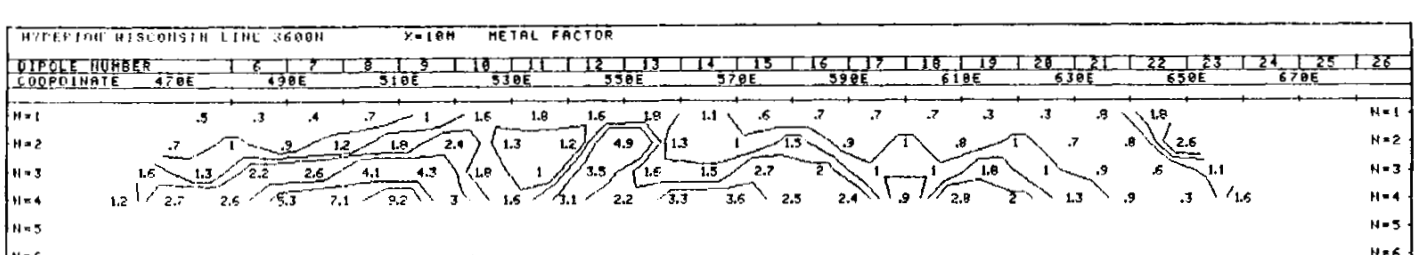
DATE SEPT. 27/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





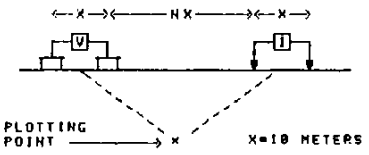


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON N.B. (B.C.)

LINE NO.-3550N



FREQUENCY (HERTZ)
0.25:4.0

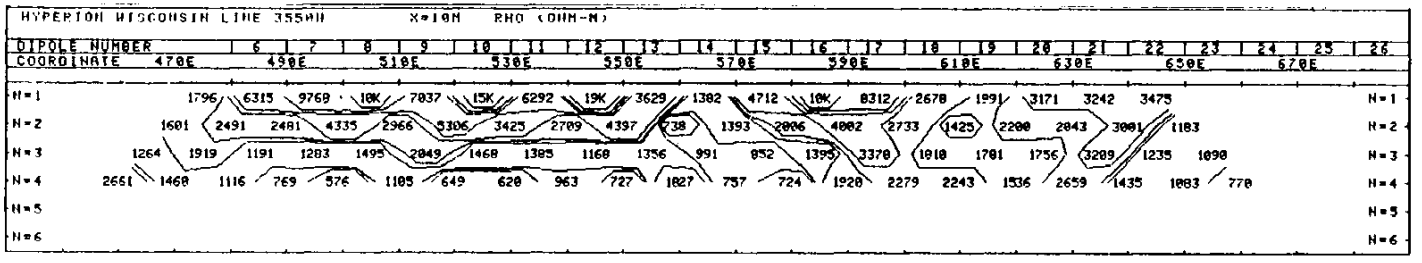
NOTE- CONTOURS AT LOGARITHMIC INTERVALS. 1,-1.5 -2,-3,-5,-7.5,-10

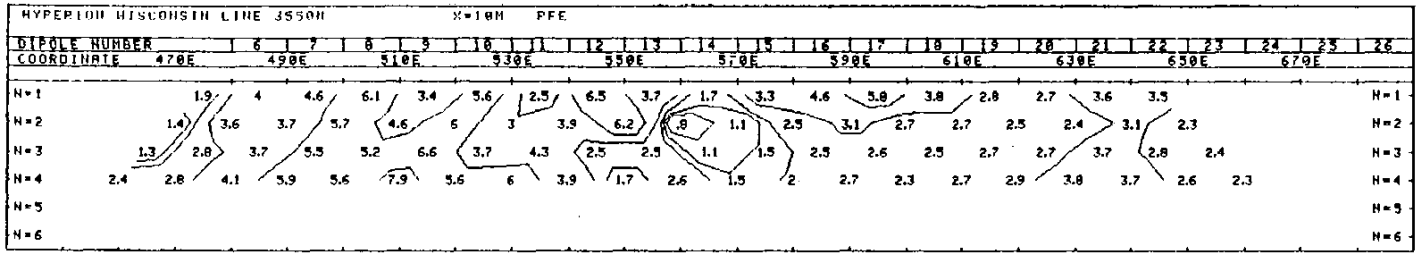
DWG. NO.-I.P.-5872-2

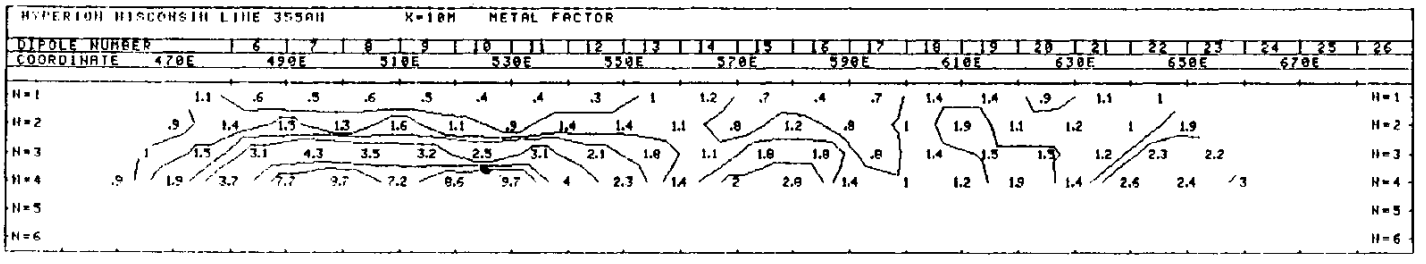
DATE SURVEYED: AUG 31/86
APPROVED PAC
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





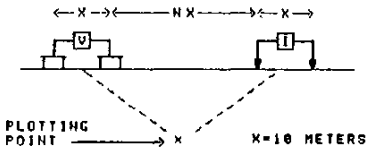


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M. D. B.C.

LINE NO -3500N



FREQUENCY (HERTZ)
0.25,4.0

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

DWG. NO.-I.P.-5872-3

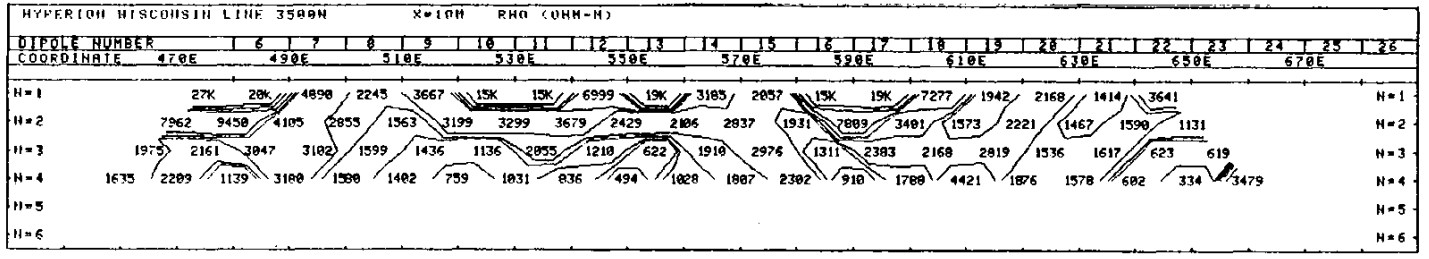
DATE SURVEYED: AUG 29/86

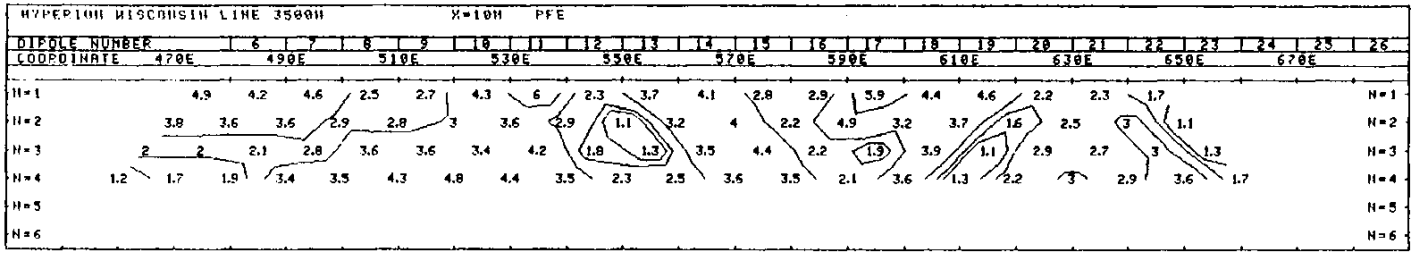
APPROVED PAC

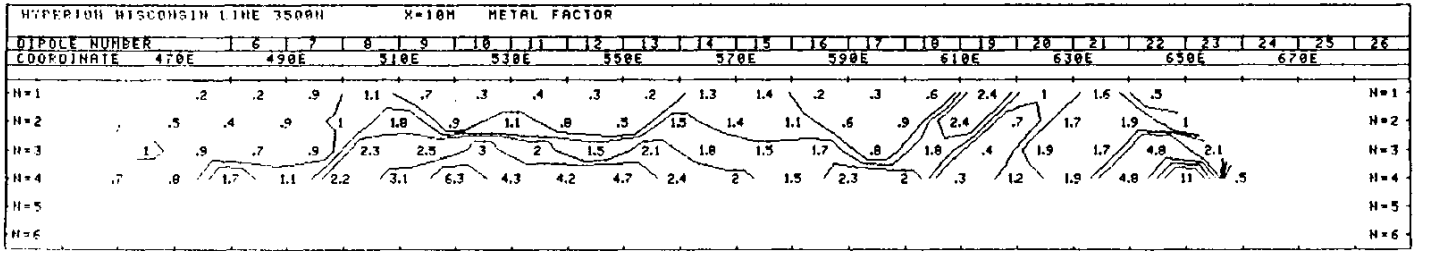
DATE SEPT 27/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





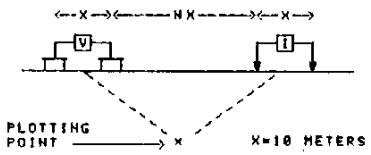


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M D /B.C.

LINE NO -3450N



FREQUENCY (HERTZ)
0.25:4.0

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

DWG. NO.-I.P.-5872-4

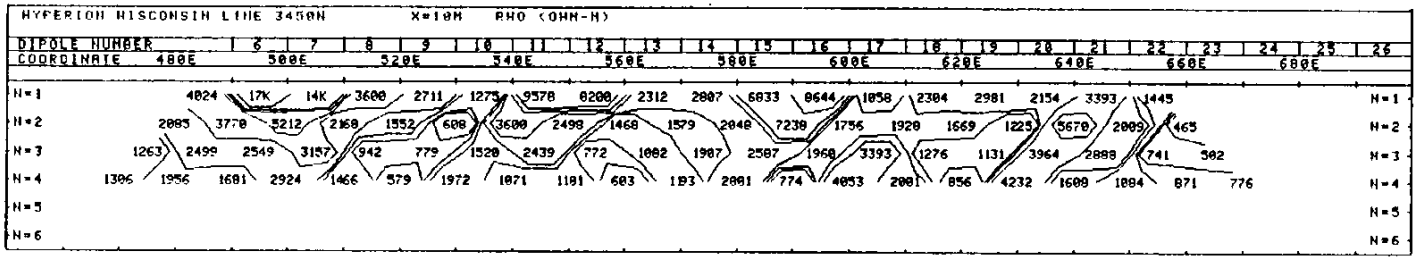
DATE SURVEYED AUG 29/86

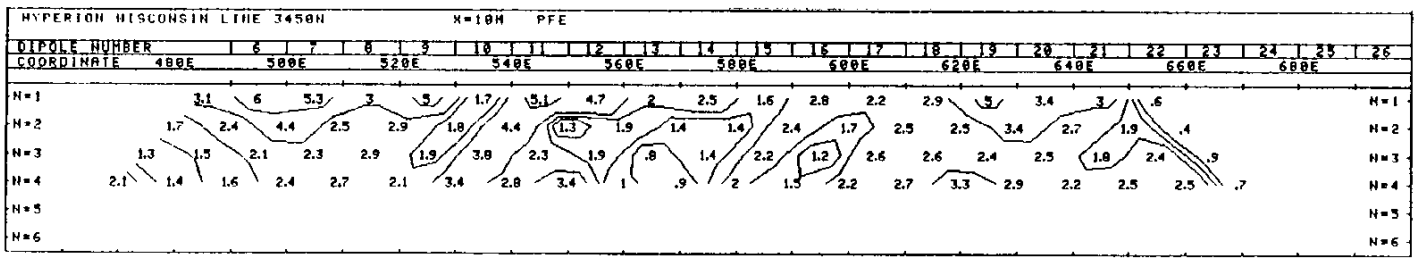
APPROVED Pac.

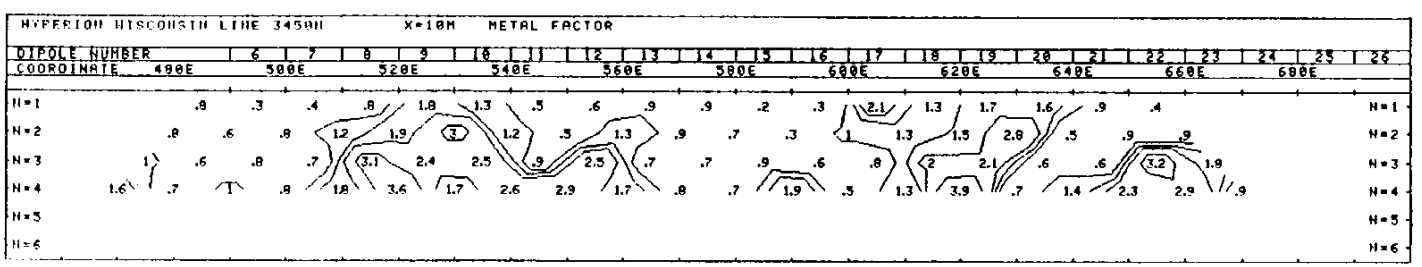
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





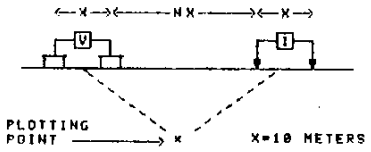


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D., B.C.

LINE NO.-3400N



FREQUENCY (HERTZ)
0.25/4.0

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

DWG. NO.-I.P.-5872-5

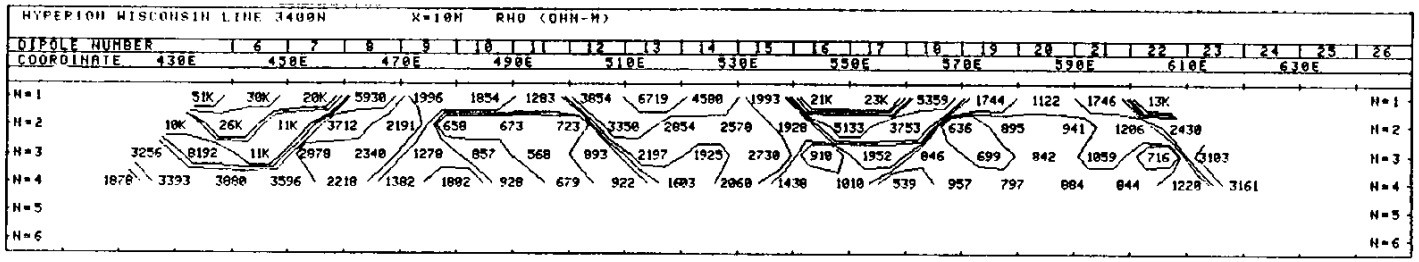
DATE SURVEYED: AUG 28/86

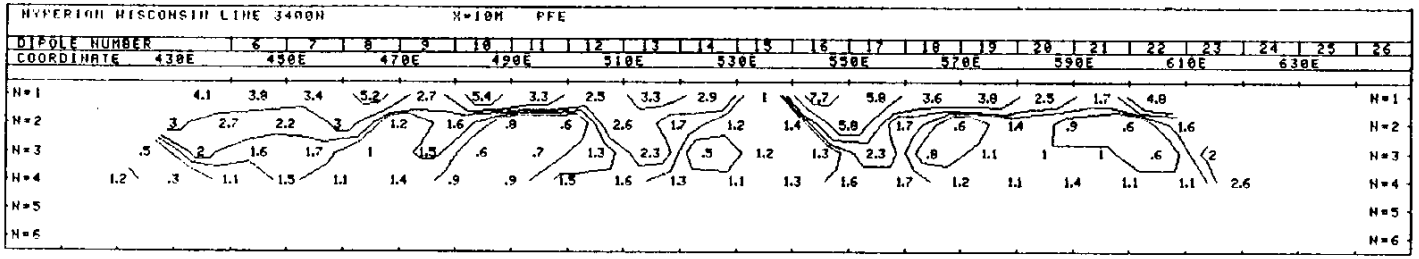
APPROVED PAC

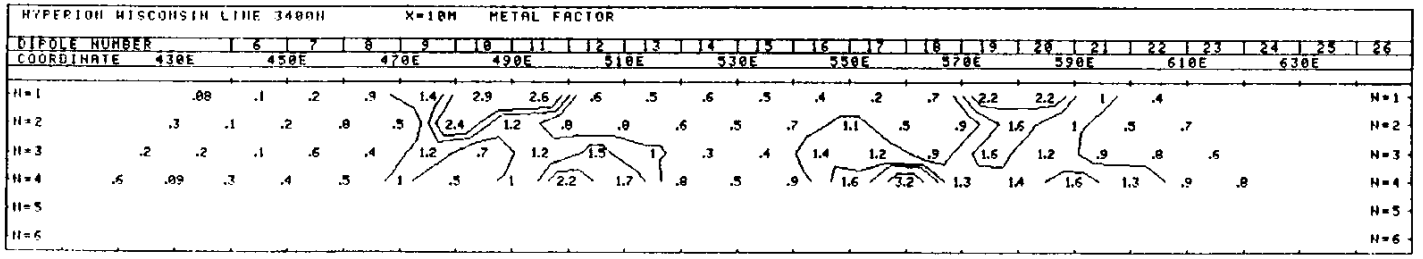
DATE Sept 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





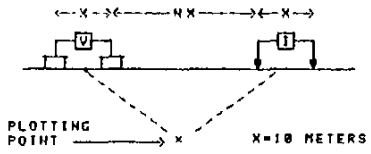


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D.#8 C

LINE NO -3350N



FREQUENCY (HERTZ)
0.25/4.0

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

DWG. NO.-I.P.-5872-6

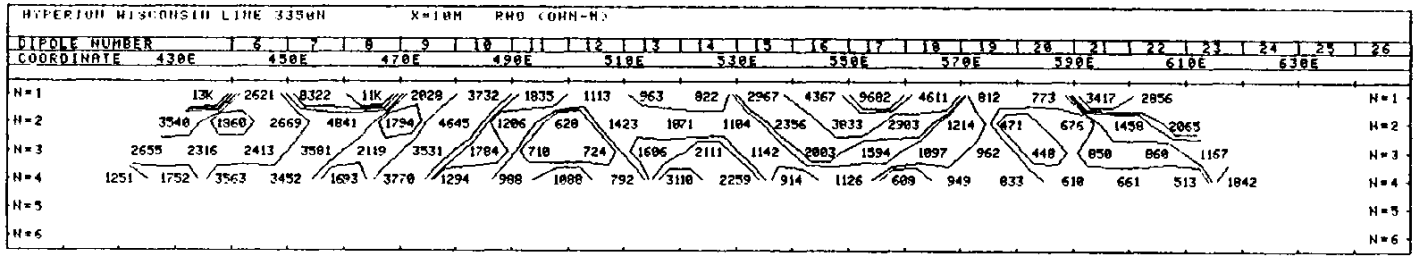
DATE SURVEYED: AUG 27/86

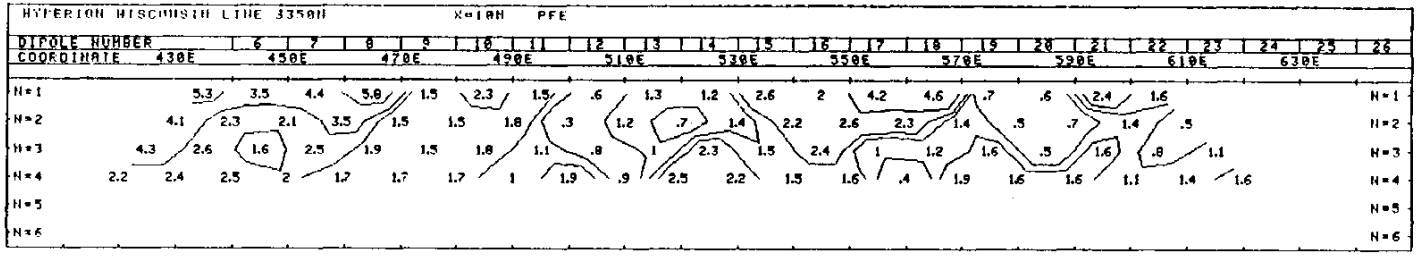
APPROVED

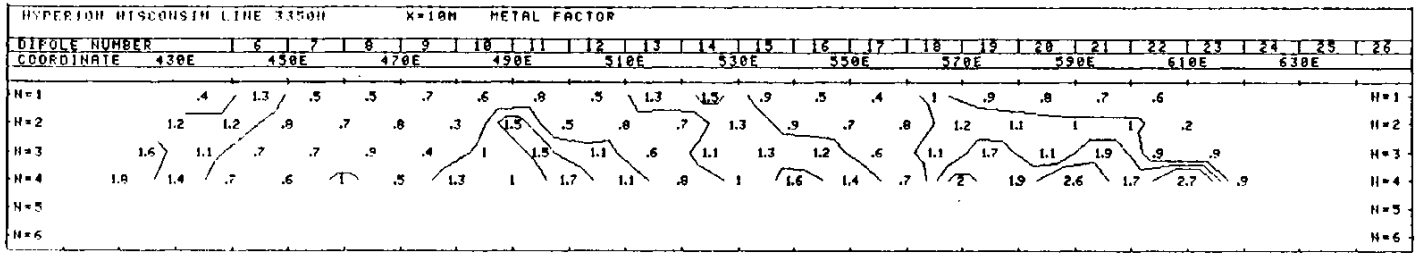
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





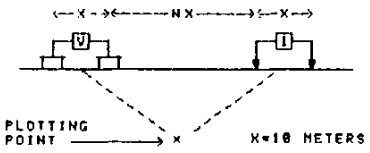


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D./B.C.

LINE NO -3300N



FREQUENCY (HERTZ)
0.25/4.0

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

DWG. NO.-I.P.-5872-7

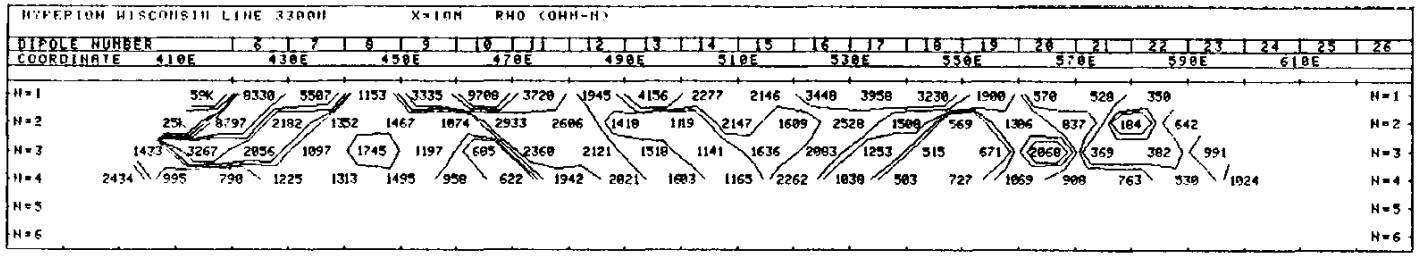
DATE SURVEYED: AUG 25/86

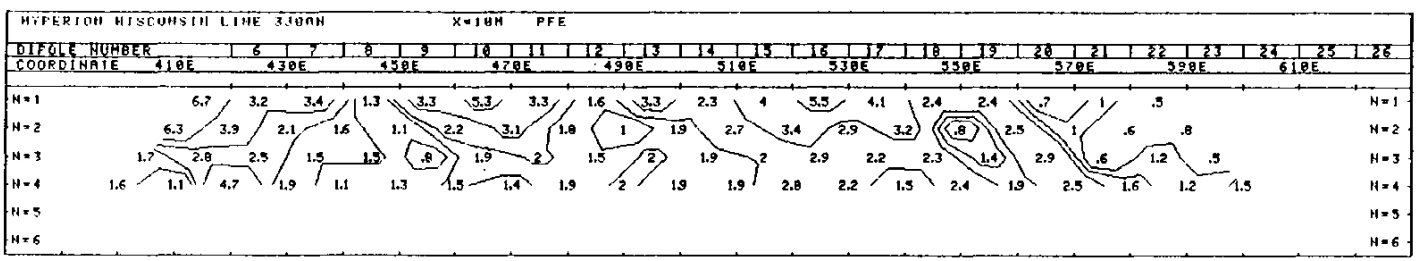
APPROVED Pac

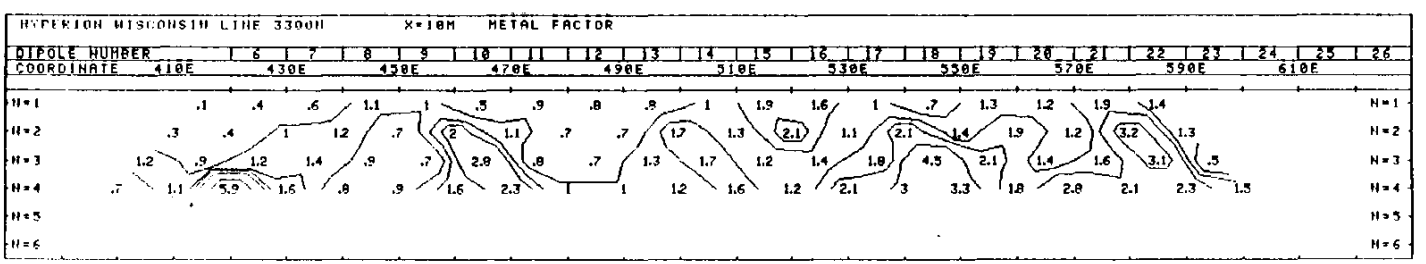
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





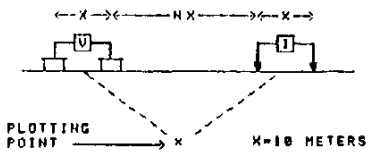


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D./B.C.

LINE NO.-3250N



FREQUENCY (HERTZ)
0.25/1.0

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

DWG. NO.-I P.-5872-8

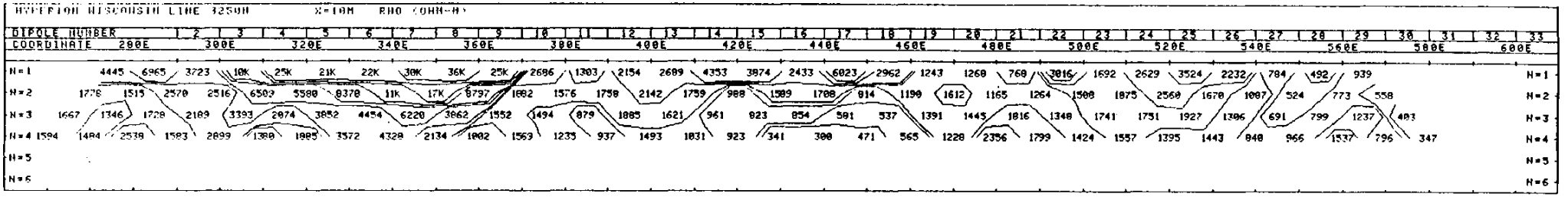
DATE SURVEYED: AUG 25/86

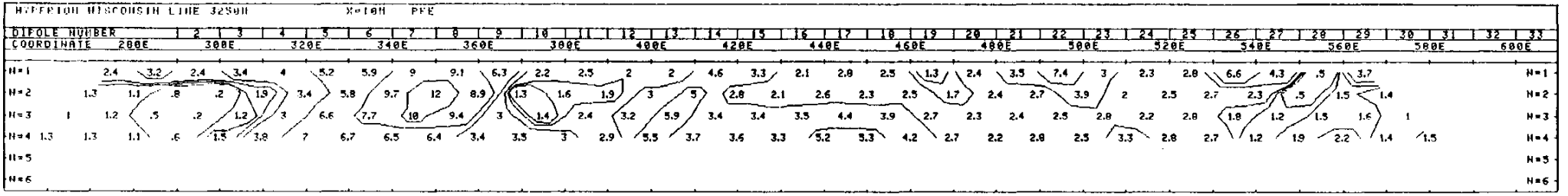
APPROVED PAC

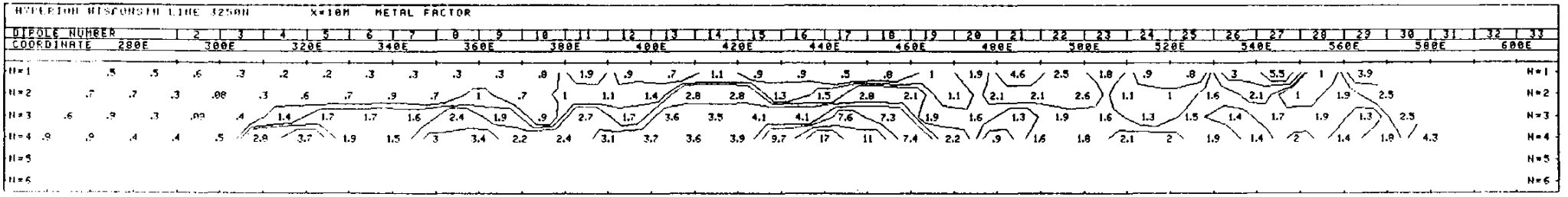
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





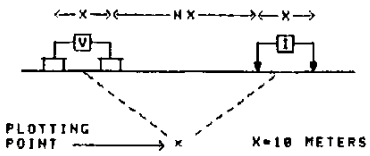


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D./B.C.

LINE NO.-3200N



FREQUENCY (HERTZ)
0.25/4.0

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

DWG. NO.-I.P.-5872-9

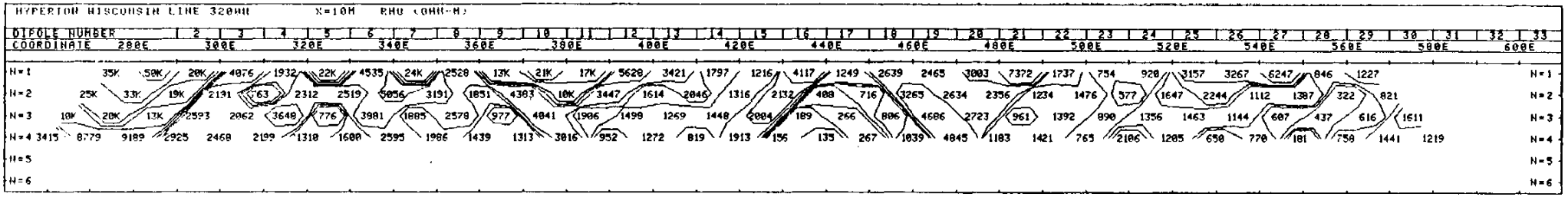
DATE SURVEYED AUG 26/86

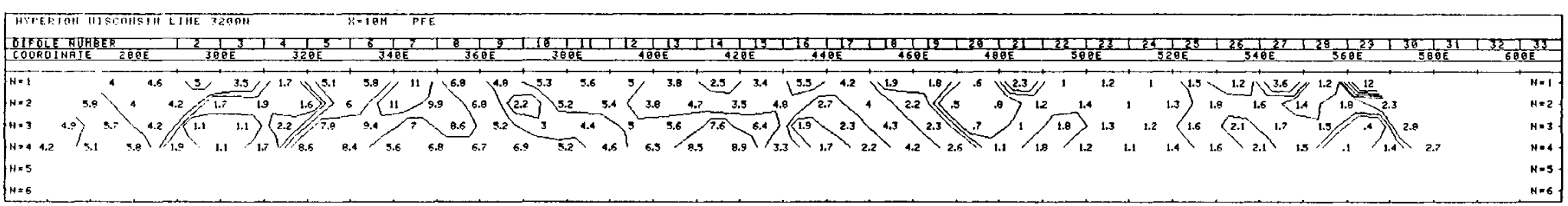
APPROVED PAC

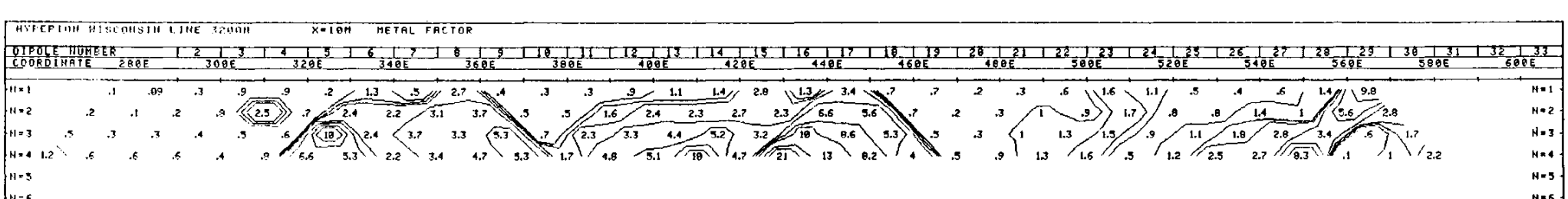
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





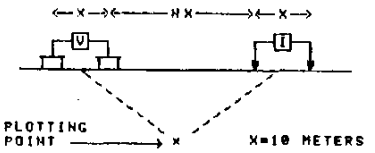


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D. ,B.C.

LINE NO -3150N



FREQUENCY (HERTZ)
0.25:4.0

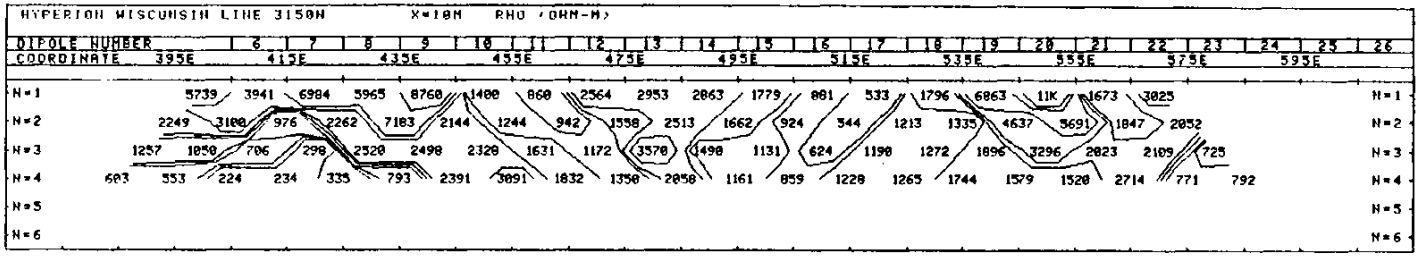
NOTE- CONTOURS
AT LOGARITHMIC
INTERVALS. 1,-1.5
-2,-3,-5,-7.5,-10

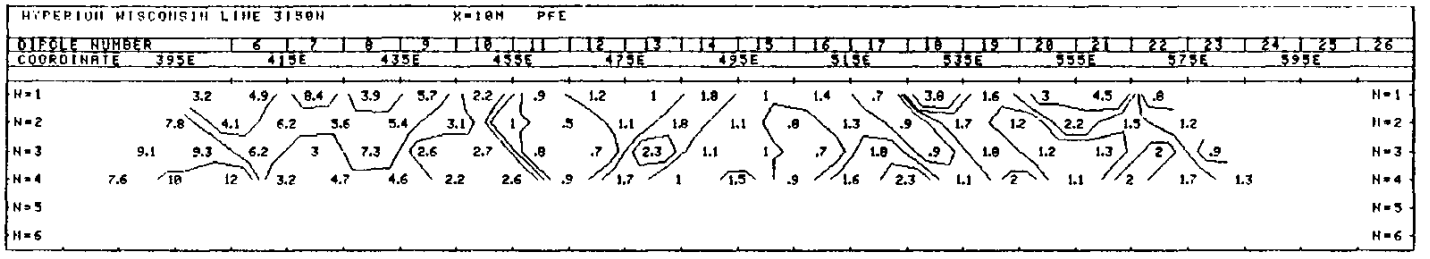
DWG. NO.-I.P.-5072-10

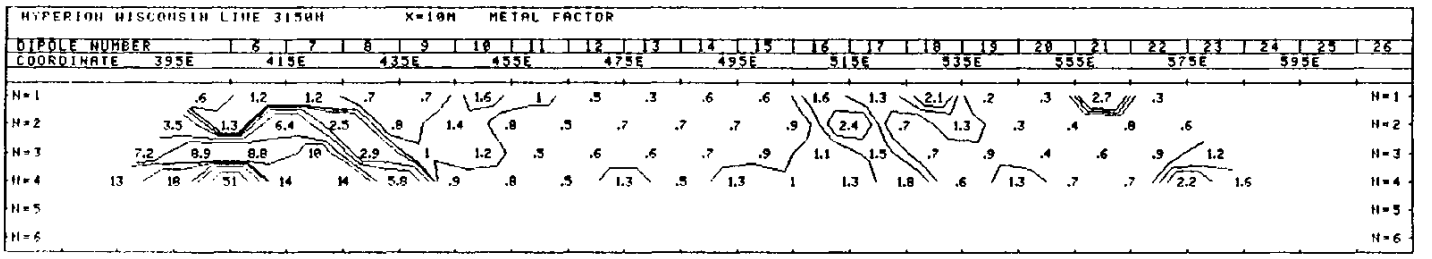
DATE SURVEYED-SEPT 11/86
APPROVED PAC
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





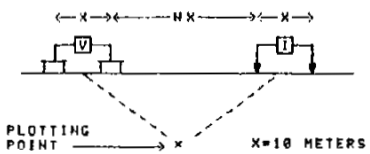


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M D /B C

LINE NO -3050N



FREQUENCY (HERTZ)
0.25;4.0

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

DWG. NO.-I.P.-5072-11

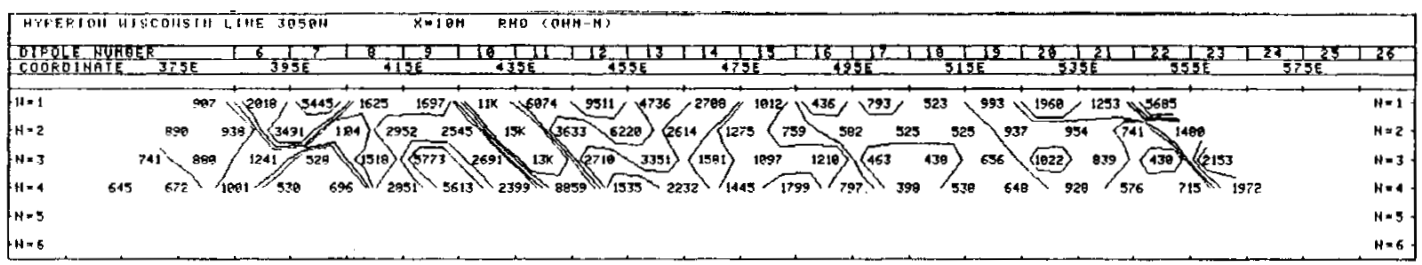
DATE SURVEYED: SEPT 5/86

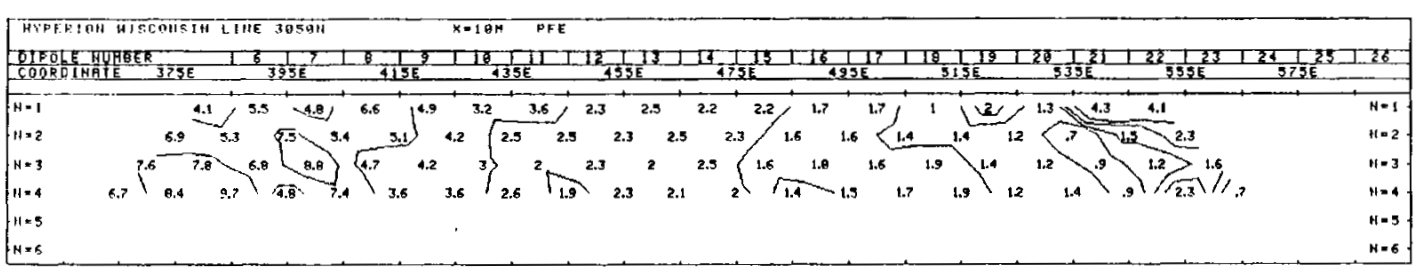
APPROVED PAC

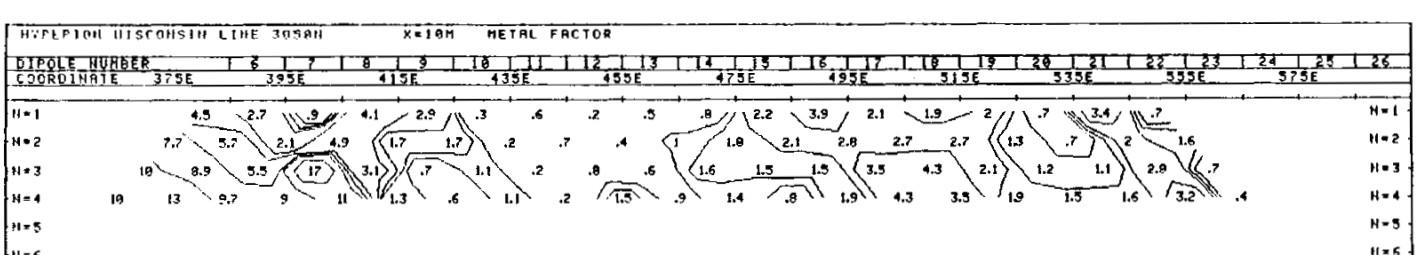
DATE Sept 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





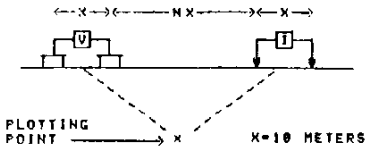


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D. B.C.

LINE NO -3000N



FREQUENCY (HERTZ)
0.25 1 4.0

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

DWG. NO.-I.P.-5872-12

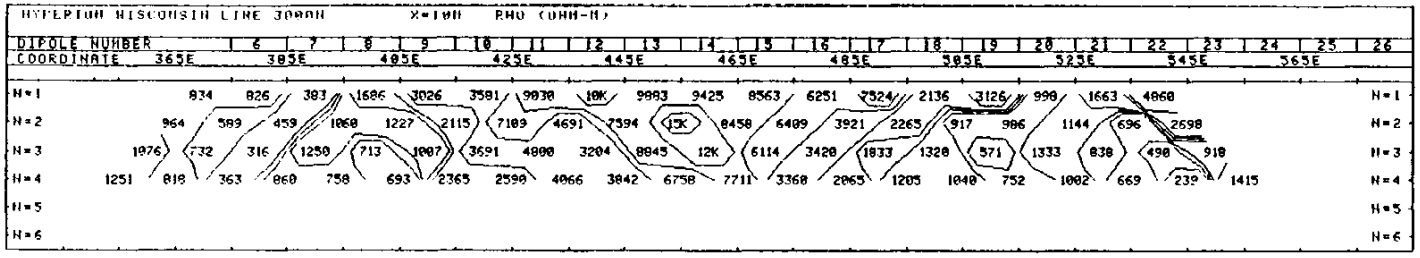
DATE SURVEYED-SEPT 5/86

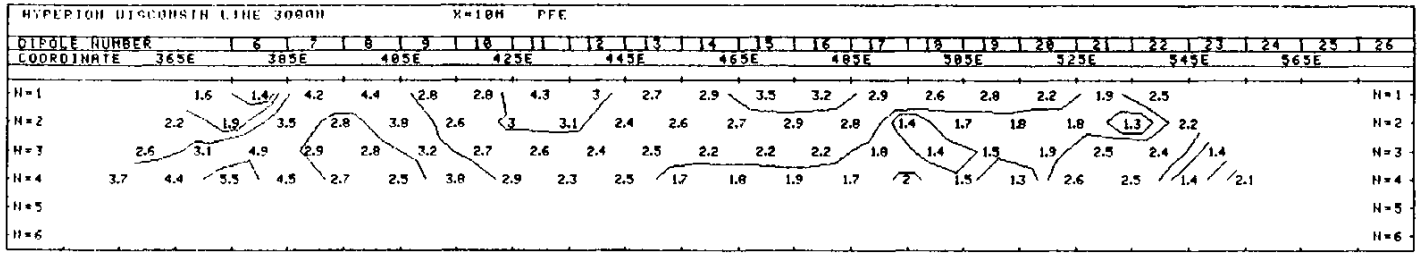
APPROVED PAC

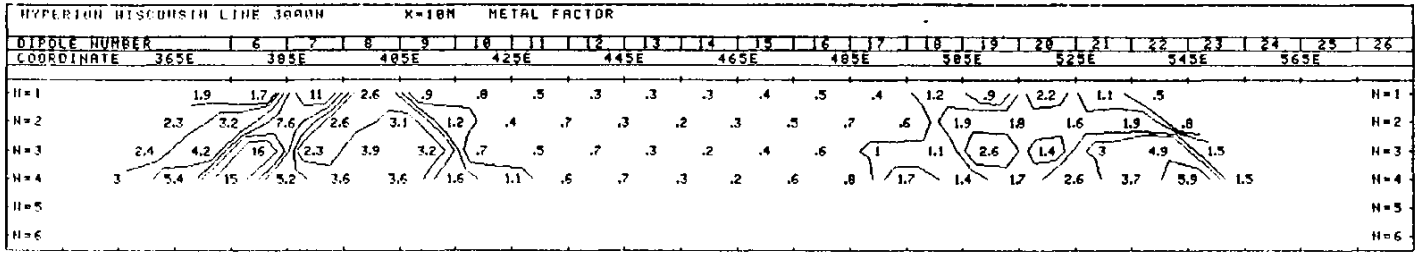
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





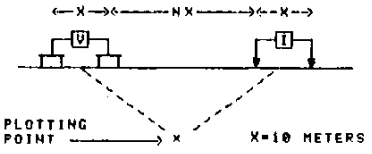


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D./B.C.

LINE NO.-2950N



FREQUENCY (HERTZ)
0.25:4.0

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

DWG. NO.-I.P.-5872-13

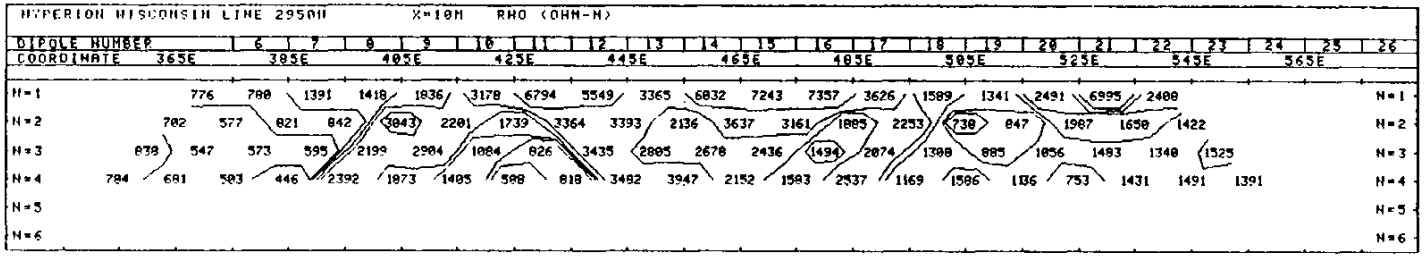
DATE SURVEYED: SEPT 6/86

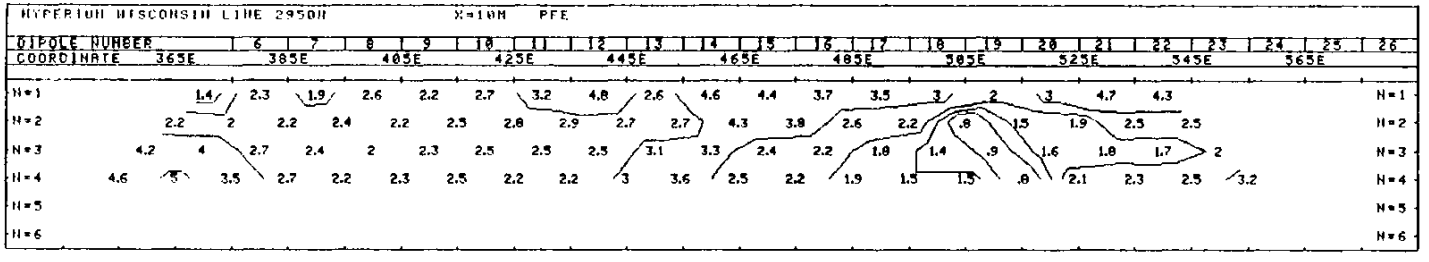
APPROVED PAC

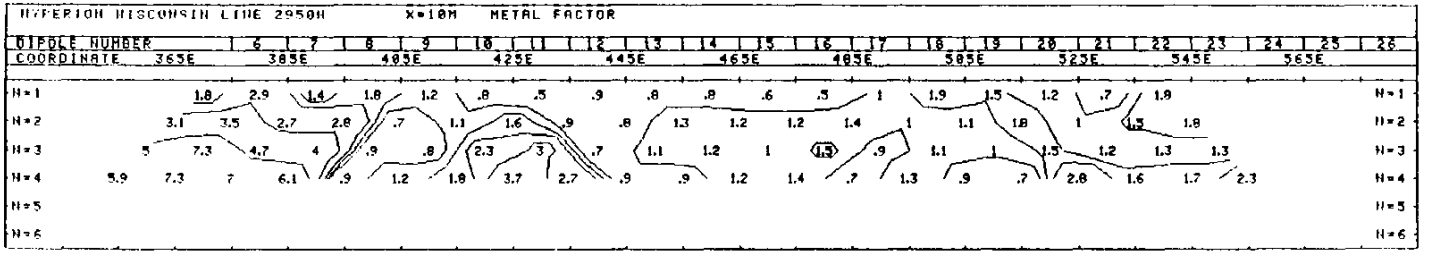
DATE Sept 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





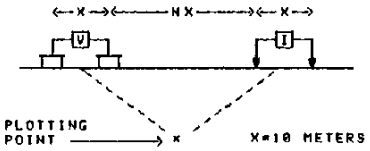


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D./B.C.

LINE NO -2900N



FREQUENCY (HERTZ) 0.25/4.0

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

DWG. NO.-I.P.-5872-14

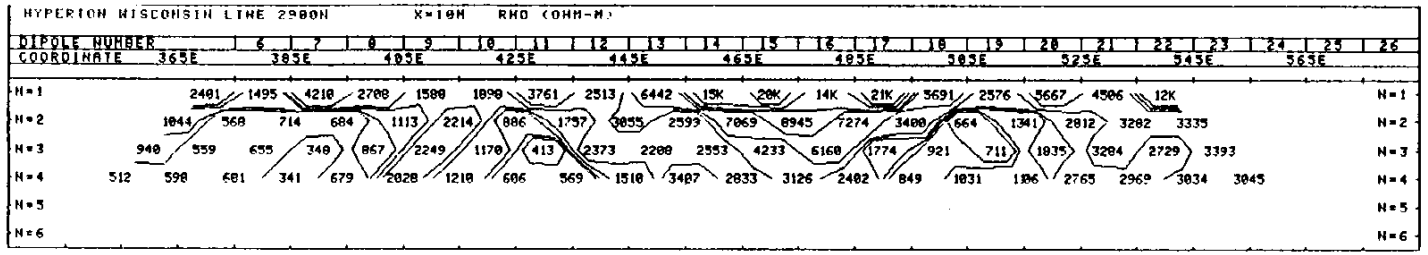
DATE SURVEYED SEPT 7/86

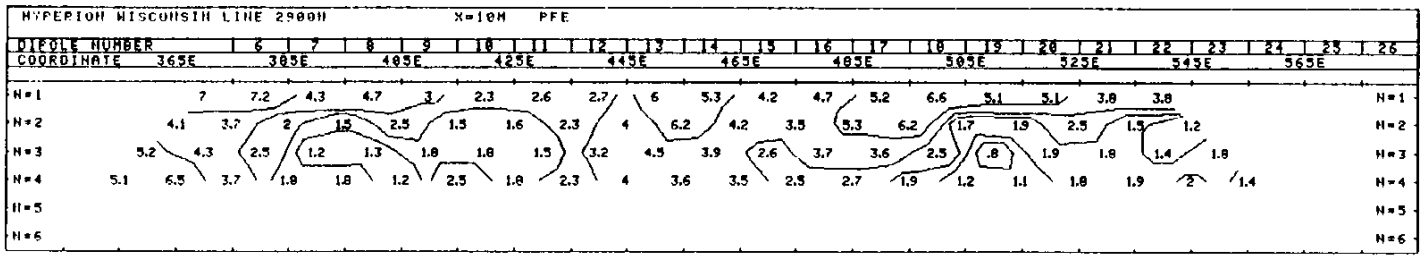
APPROVED DMC

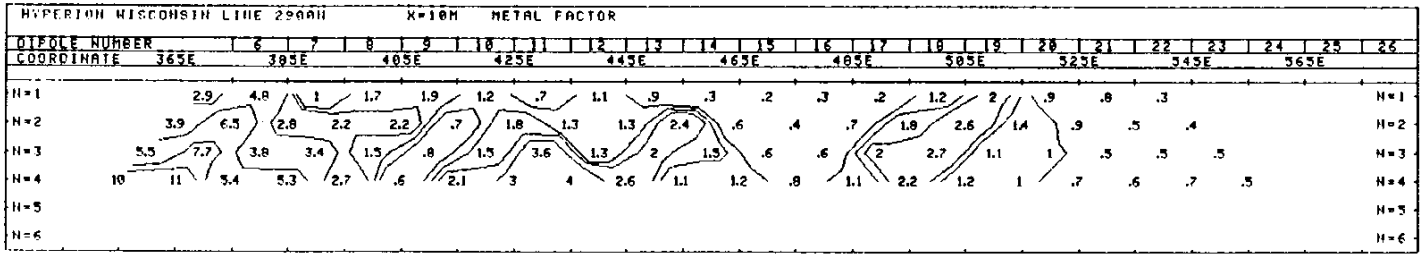
DATE Sept 27/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





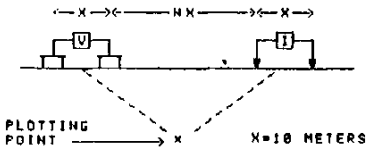


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D.,B.C.

LINE NO. -2850N



FREQUENCY (HERTZ)
0.25;4.0

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

DWG. NO.-I.P.-5872-15

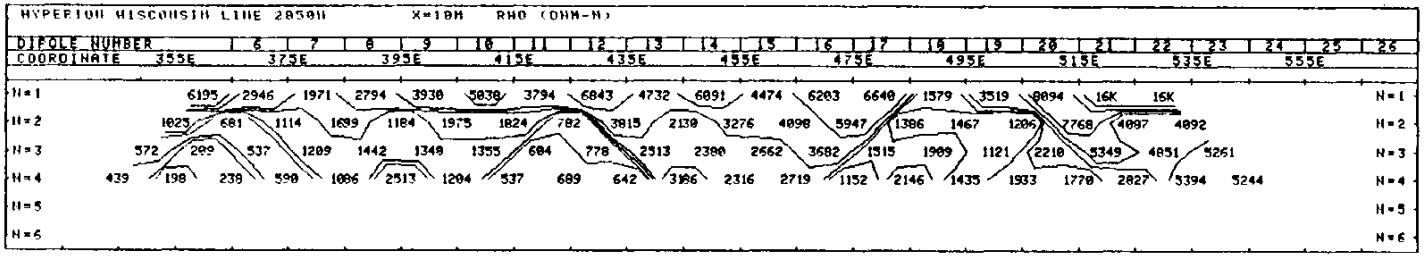
DATE SURVEYED:SEPT 8/86

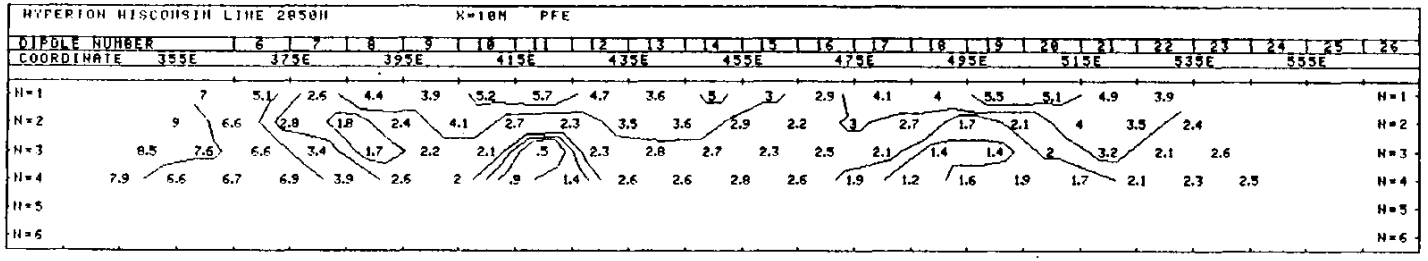
APPROVED Pac

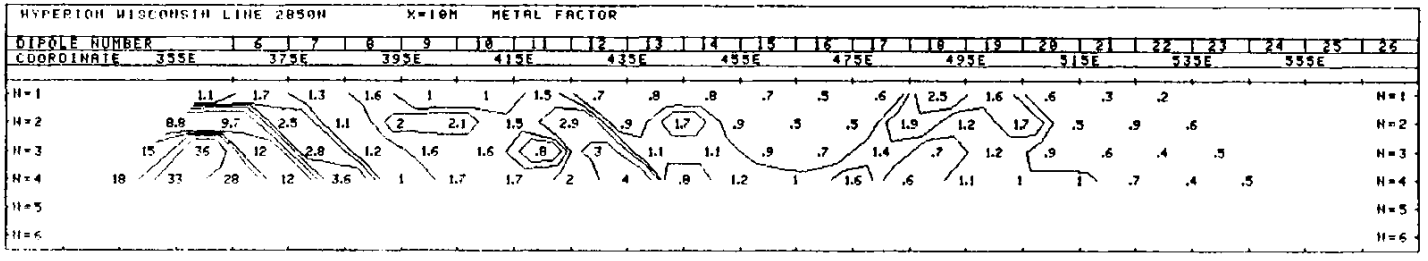
DATE Sept 27/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





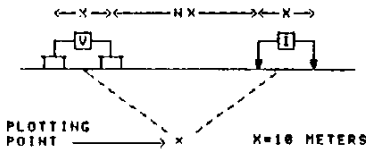


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D. (B.C.)

LINE NO -2800N



FREQUENCY (HERTZ)
0.25:4.0

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

DWG. NO.-I.P.-5872-16

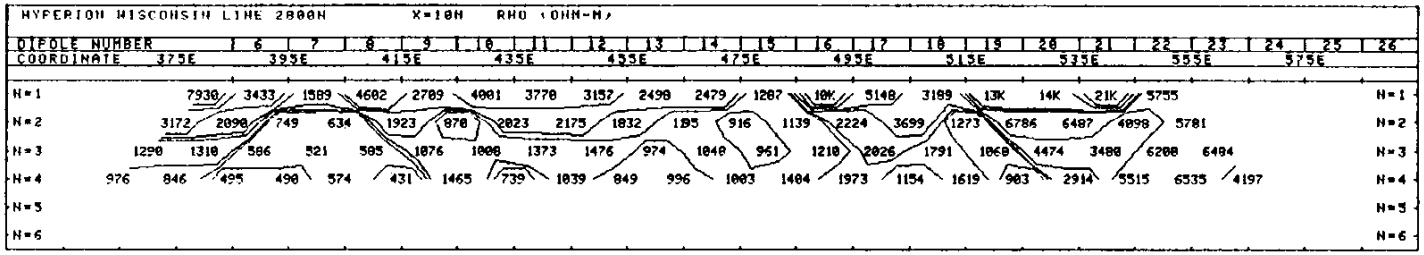
DATE SURVEYED: SEPT 9/86

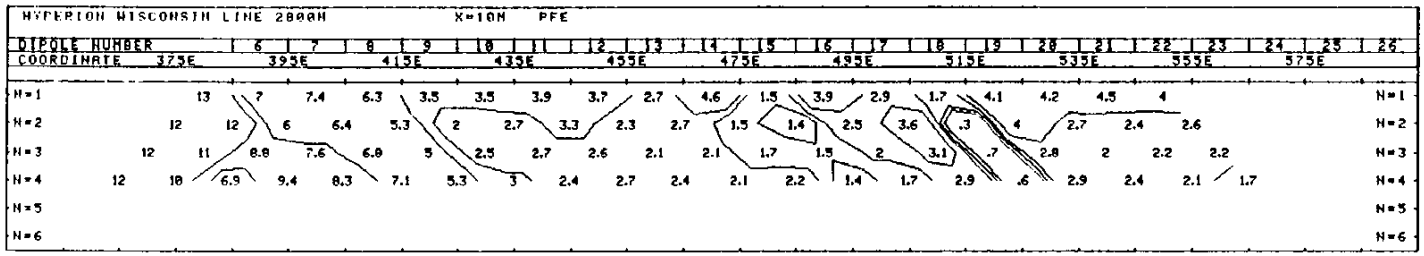
APPROVED PAC

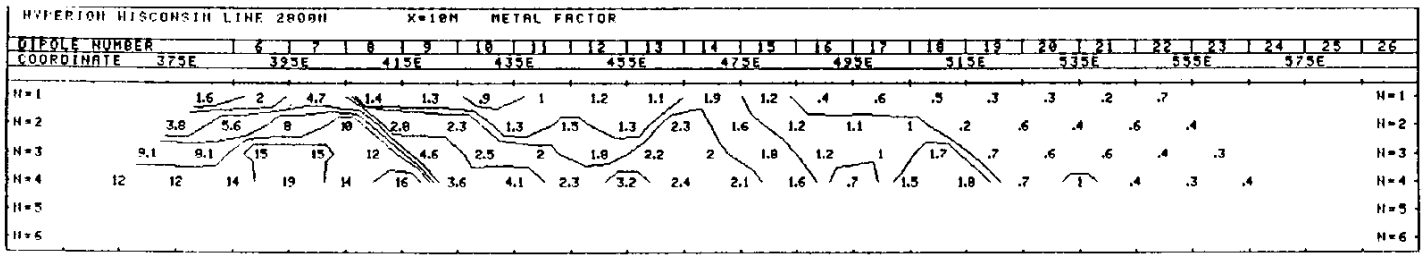
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





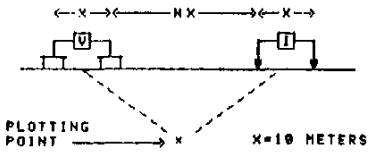


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D., B.C.

LINE NO. -2750N



FREQUENCY (HERTZ)
0.25/4.0

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

DWG. NO. -I.P.-5872-17

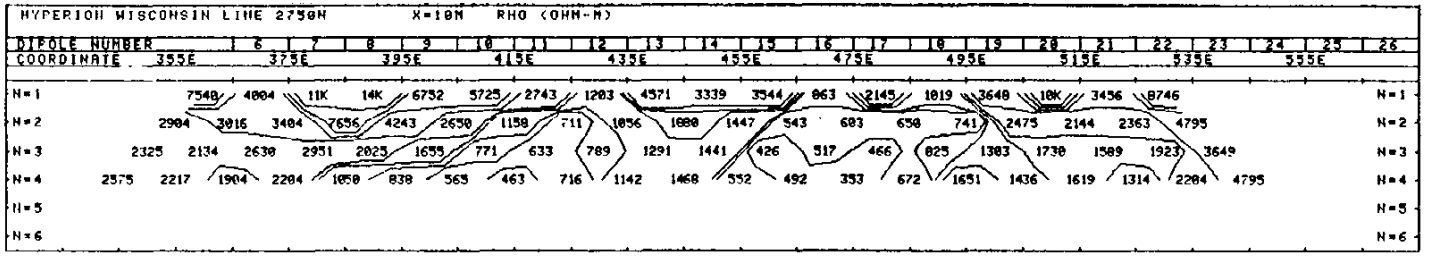
DATE SURVEYED: SEPT 9/86

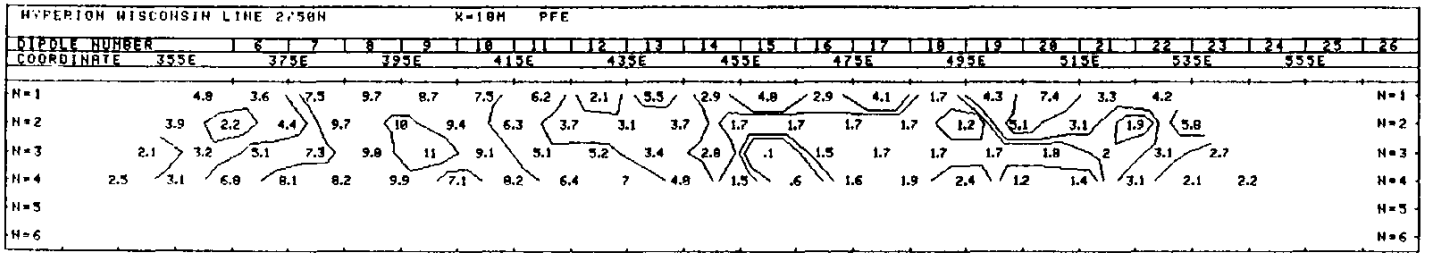
APPROVED PAC

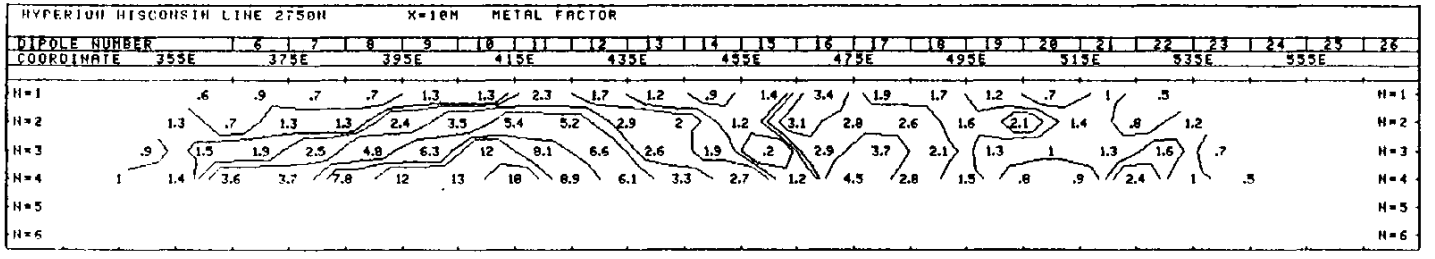
DATE Sept 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





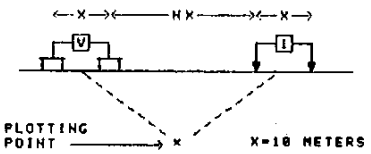


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D., B.C.

LINE NO -2700N



FREQUENCY (HERTZ)
0.25:4.0

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

DWG. NO.-I.P.-5872-18

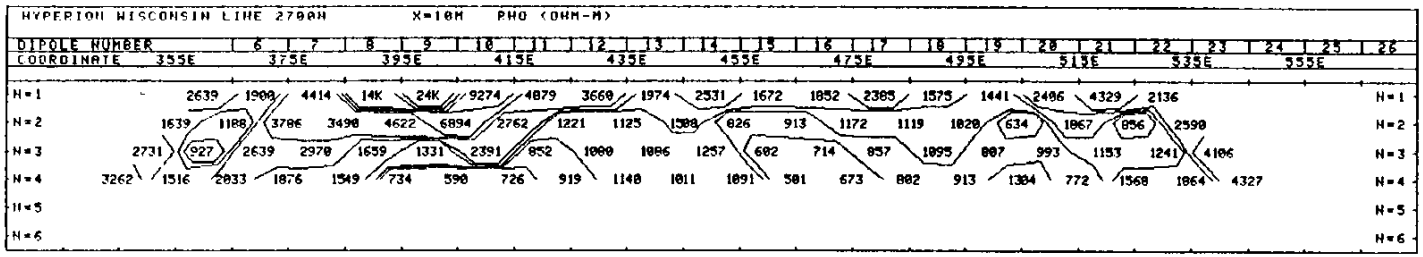
DATE SURVEYED-SEPT 10/86

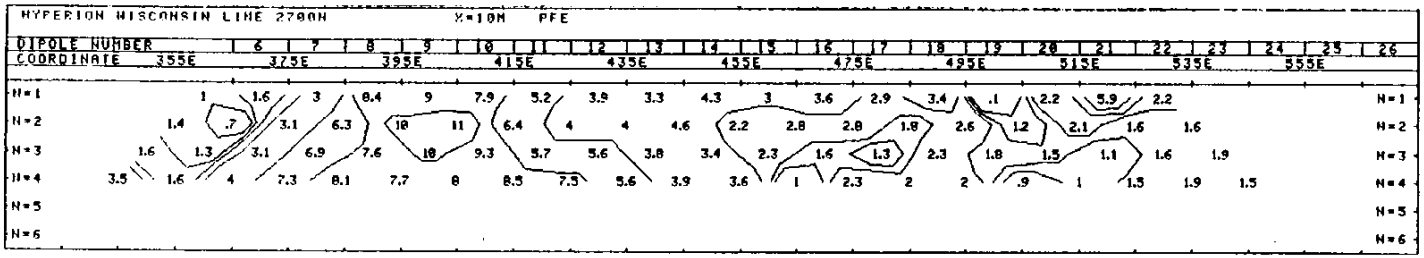
APPROVED DAC

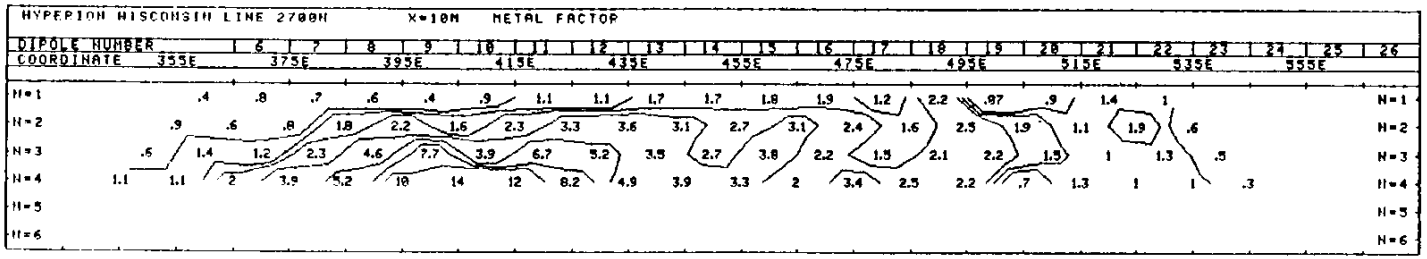
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





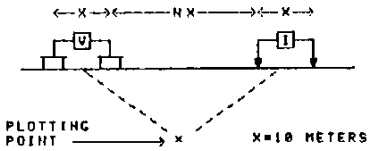


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D. /B.C.

LINE NO -2650N



FREQUENCY (HERTZ)
0.25:4.0

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

DWG. NO.-I.P.-5872-19

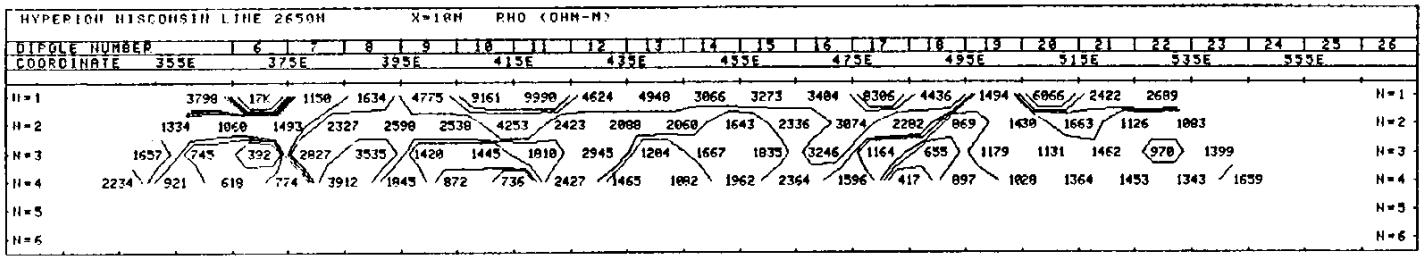
DATE SURVEYED: SEPT 11/86

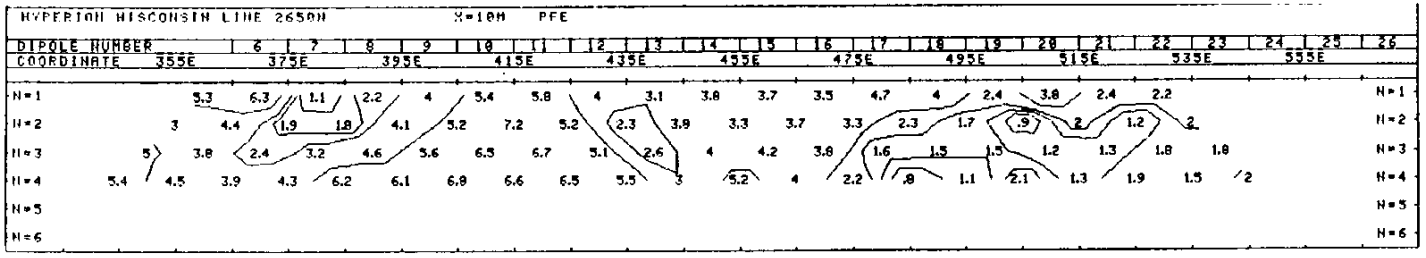
APPROVED Pac

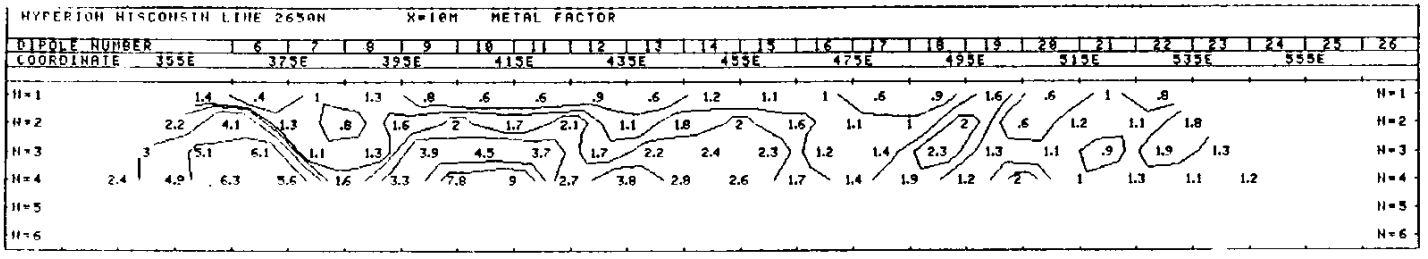
DATE Sept. 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY





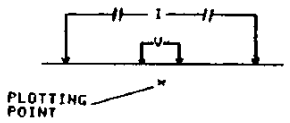


HYPERION INDUSTRIES LTD.

WISCONSIN PROPERTY

NELSON M.D. /B.C.

LINE NO -3250N



RECEIVING DIPOLE (V) = 10 METERS

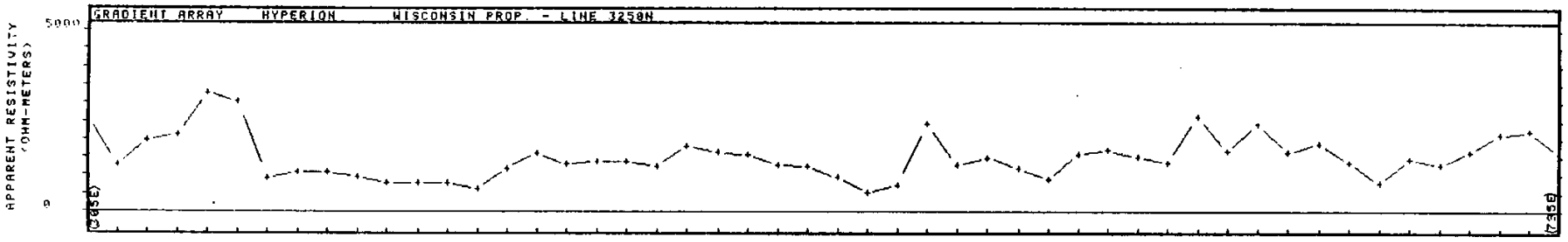
FREQUENCY (HERTZ)
0.25/4.0

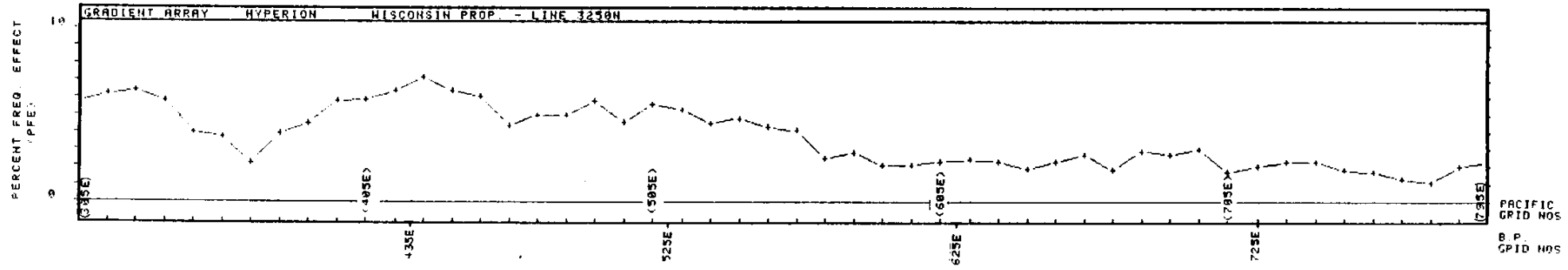
DWG. NO.-I.P.-5872-20

DATE SURVEYED: AUG 23/86
APPROVED
DATE SEPT 29/86

PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

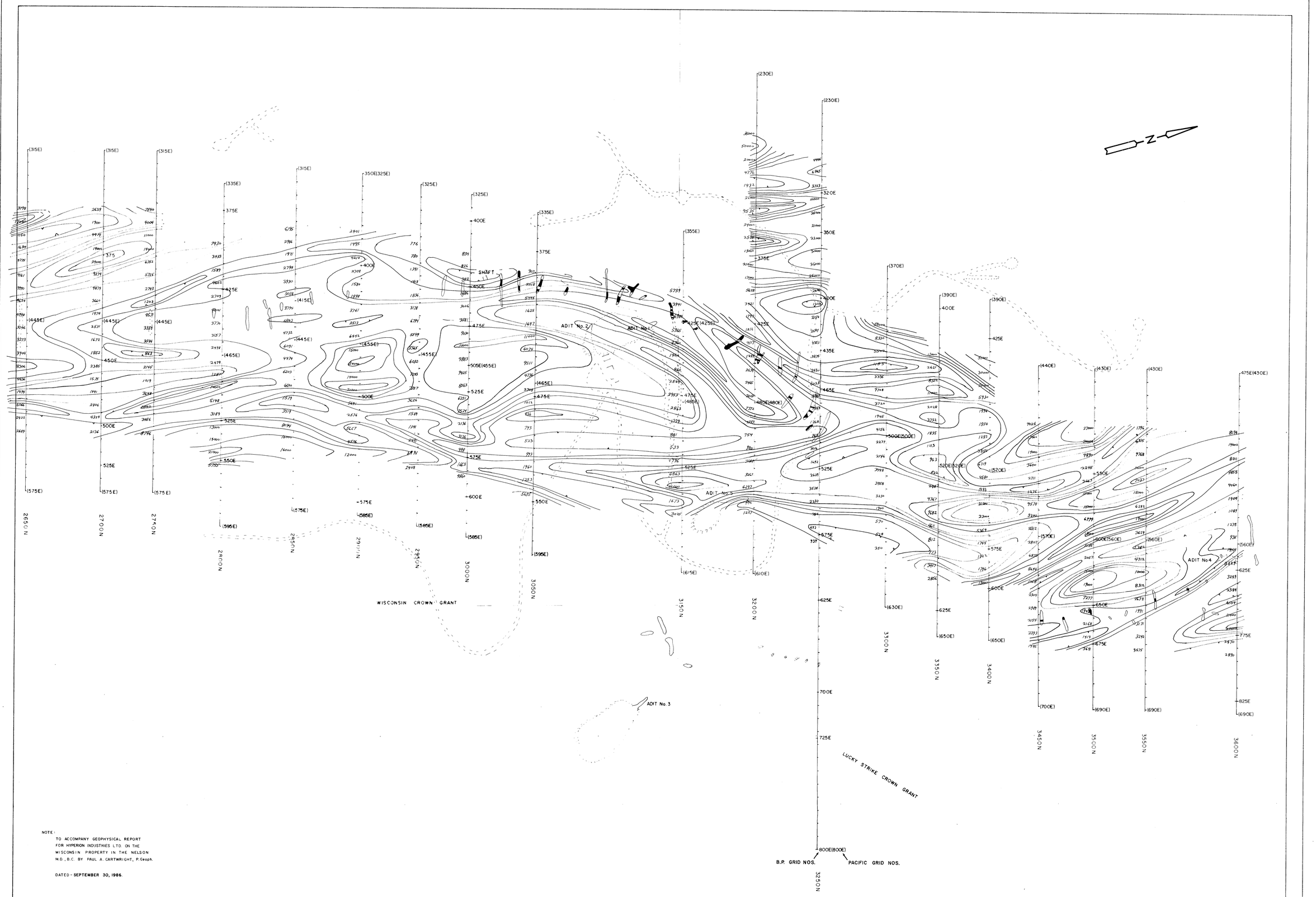




PACIFIC GEOPHYSICAL LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



NOTE:

TO ACCOMPANY GEOPHYSICAL REPORT FOR HYPERION INDUSTRIES LTD. ON THE WISCONSIN PROPERTY IN THE NELSON M.D., B.C. BY PAUL A. CARTWRIGHT, P.Geoph.

DATED - SEPTEMBER 30, 1986.

TRENCH OUTLINE

MASSIVE SULPHIDES

ROAD

HYPERION INDUSTRIES LIMITED

WISCONSIN PROPERTY

NELSON M.D., BRITISH COLUMBIA

SCALE

0 20m 40m 60m

1:1000

APPARENT RESISTIVITY (OHM-METERS)

N=1

CONTOUR INTERVAL 100,150,200,300,500,750,1000, ETC.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,416

DRAWN: P.A.C.

DATE: SEPT. 18, 1986

APPROVED: PAC

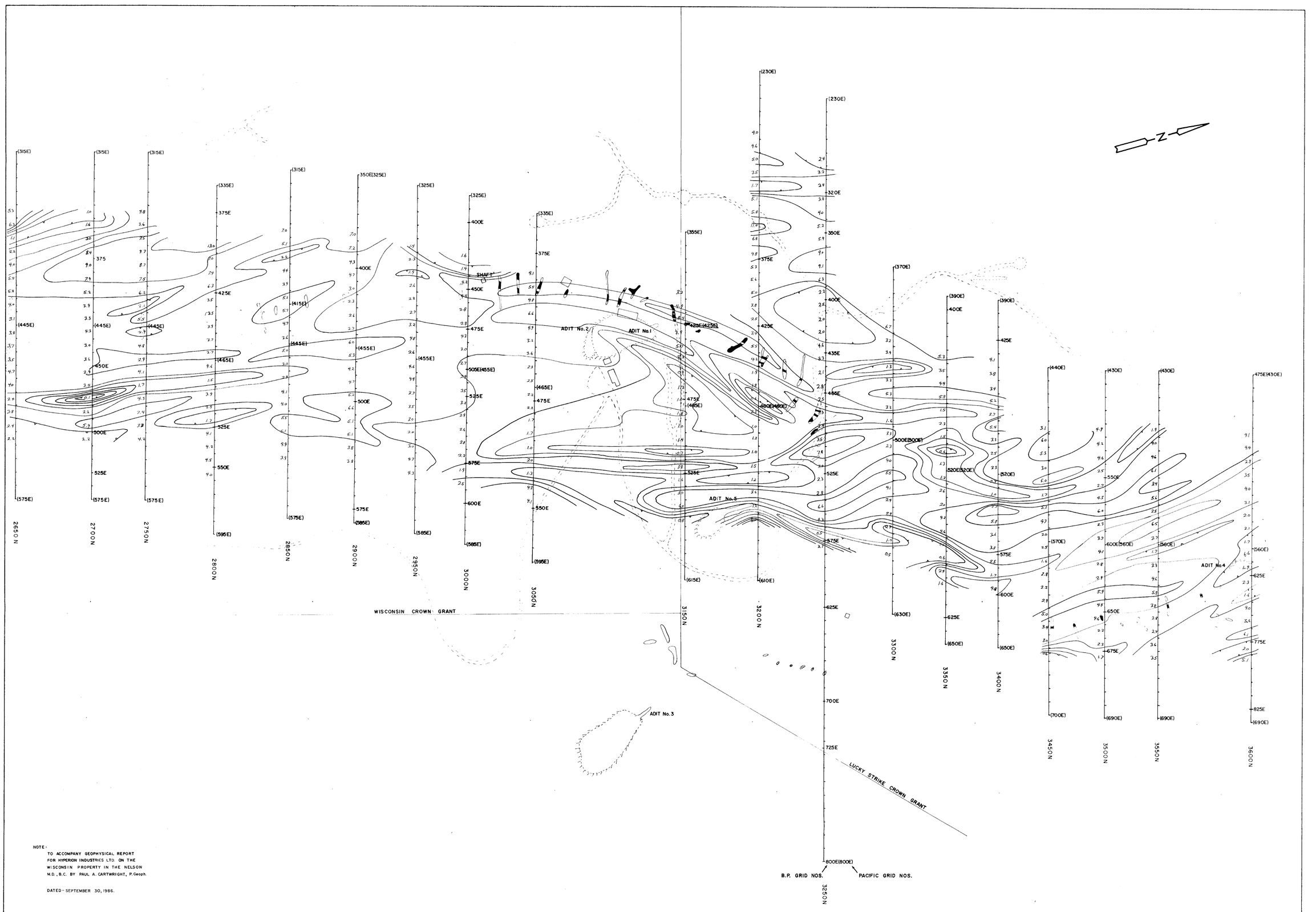
DATE: SEPT 27/86

DWG. NO.- I.P.P.- B-4149A

PACIFIC GEOPHYSICAL LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



NOTE:

TO ACCOMPANY GEOPHYSICAL REPORT FOR HYPERION INDUSTRIES LTD. ON THE WISCONSIN PROPERTY IN THE NELSON M.D., B.C. BY PAUL A. CARTWRIGHT, P.Geoph.

DATED - SEPTEMBER 30, 1986.

TRENCH OUTLINE

MASSIVE SULPHIDES

ROAD

HYPERION INDUSTRIES LIMITED

WISCONSIN PROPERTY

NELSON M.D., BRITISH COLUMBIA

SCALE

0 20m 40m 60m

1:1000

PERCENT FREQUENCY EFFECT (P.F.E.)

N=1

CONTOUR INTERVAL 0.1, 0.15, 0.2, 0.3, 0.3, 0.5, 0.75, 1.0, ETC.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,416

DRAWN: P.A.C.

DATE: SEPT. 18, 1986

APPROVED: PAC

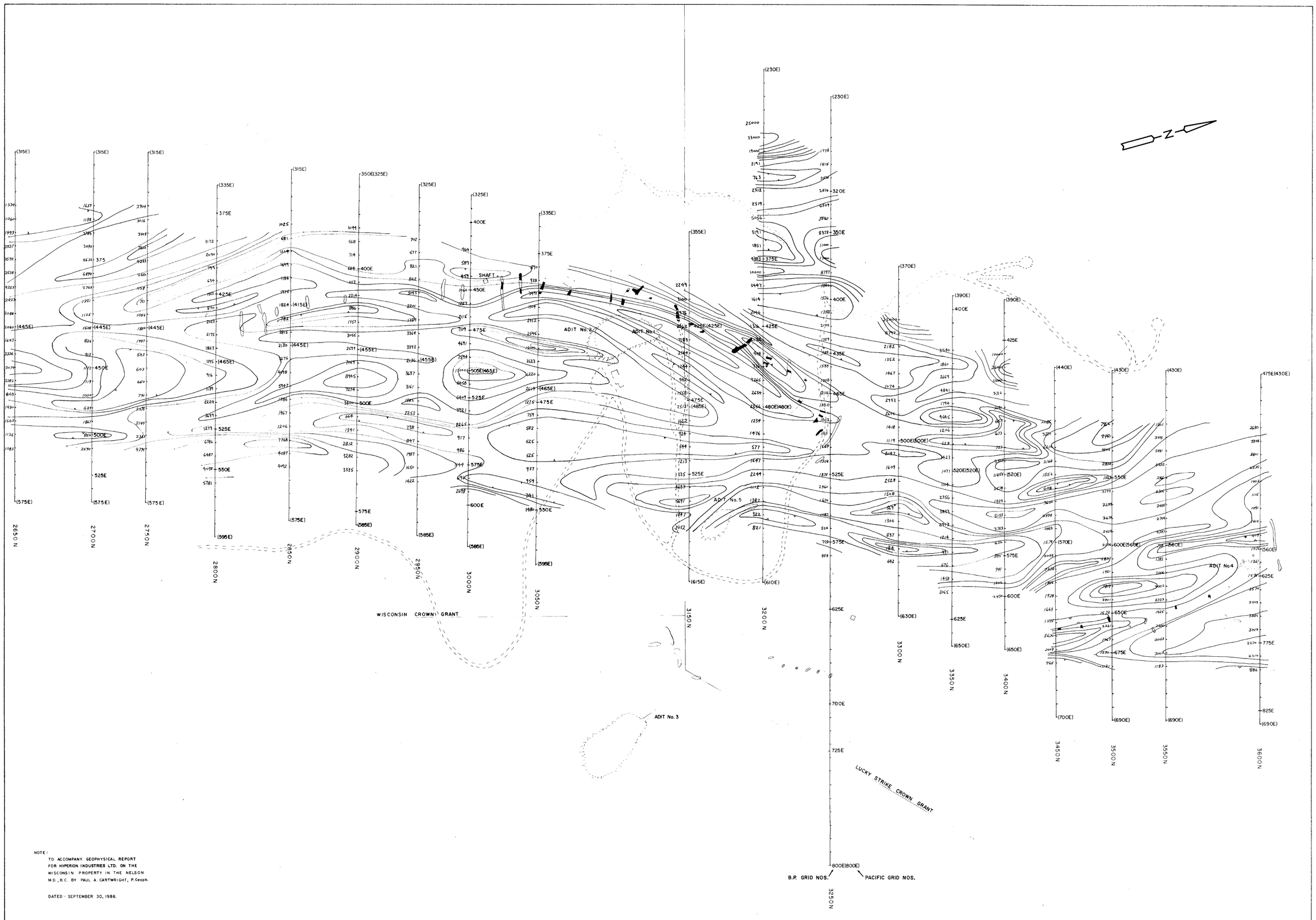
DATE: SEPT 29/86

DWG. NO.- I.P.P.- B-4149B

PACIFIC GEOPHYSICAL LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



NOTE:

TO ACCOMPANY GEOPHYSICAL REPORT FOR HYPERION INDUSTRIES LTD. ON THE WISCONSIN PROPERTY IN THE NELSON M.D., B.C. BY PAUL A. CARTWRIGHT, P.Geoph.

DATED - SEPTEMBER 30, 1986.

TRENCH OUTLINE

MASSIVE SULPHIDES

ROAD

HYPERION INDUSTRIES LIMITED

WISCONSIN PROPERTY

NELSON M.D., BRITISH COLUMBIA

SCALE

0 20m 40m 60m

1:1000

APPARENT RESISTIVITY (OHM-METERS)

N=2

CONTOUR INTERVAL 100,150,200,300,500,750,1000, ETC.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,416

DRAWN: P.A.C.

DATE: SEPT. 18, 1986

APPROVED: PAC

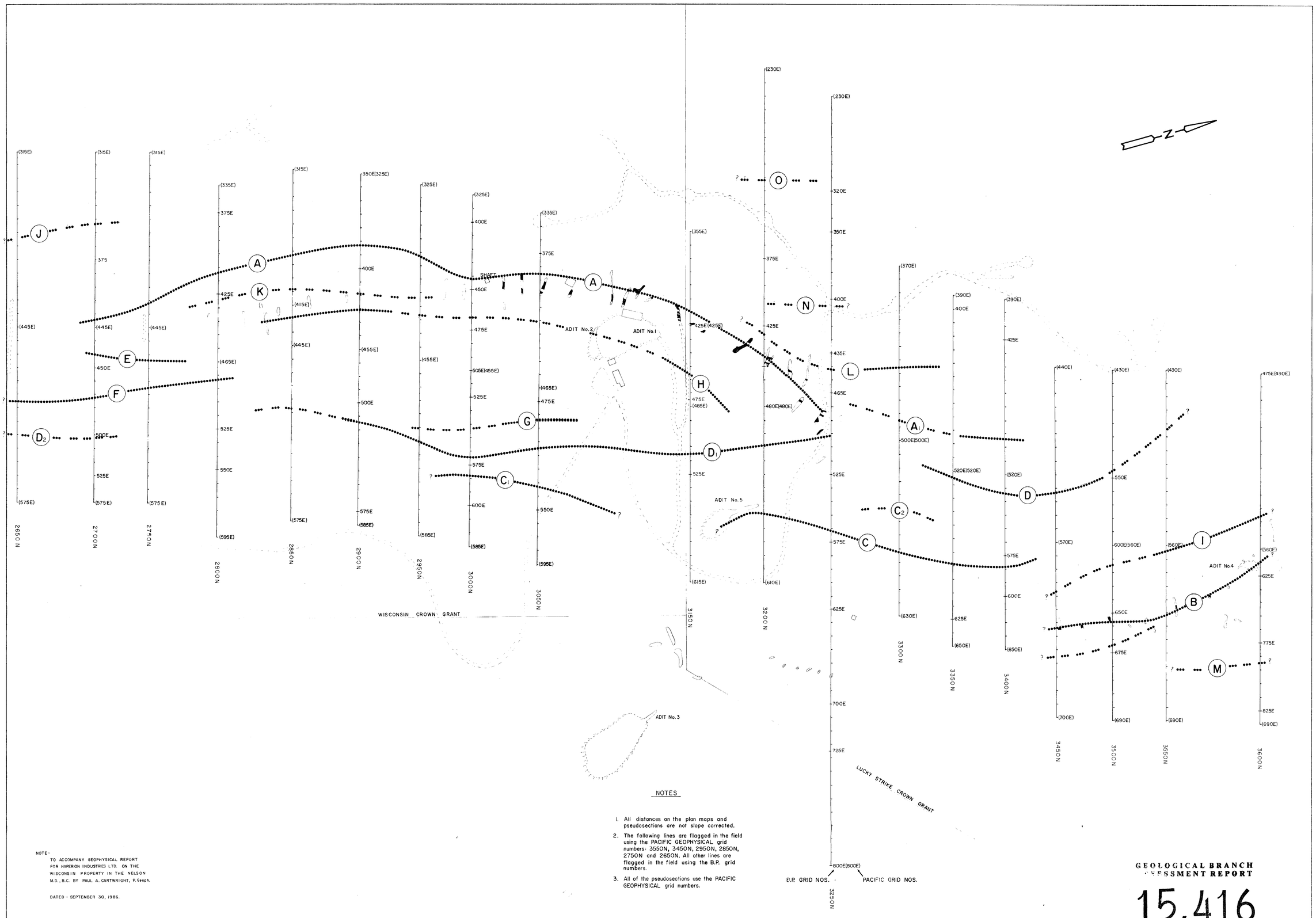
DATE: Sept 29/86

DWG. NO.- I.P.P.- B-4149C

PACIFIC GEOPHYSICAL LIMITED

INDUCED POLARIZATION AND RESISTIVITY SURVEY

PLAN MAP



NOTES

1. All distances on the plan maps and pseudosections are not slope corrected.
2. The following lines are flagged in the field using the PACIFIC GEOPHYSICAL grid numbers: 3550N, 3450N, 2950N, 2850N, 2750N and 2650N. All other lines are flagged in the field using the B.P. grid numbers.
3. All of the pseudosections use the PACIFIC GEOPHYSICAL grid numbers.

NOTE:
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GEOLOGICAL BRANCH
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15,416

HYPERION INDUSTRIES LIMITED

WISCONSIN PROPERTY

NELSON M.D., BRITISH COLUMBIA

SCALE
0 20m 40m 60m
1:1000

TRENCH OUTLINE
MASSIVE SULPHIDES
ROAD

AXIS OF CONDUCTIVE ZONE (DEFINITE)
AXIS OF CONDUCTIVE ZONE (PROBABLE)

DRAWN: P.A.C.
DATE: SEPT. 18, 1986
APPROVED: PAC
DATE: SEPT. 29/86

DWG. NO.- I.P.P - B - 4149E