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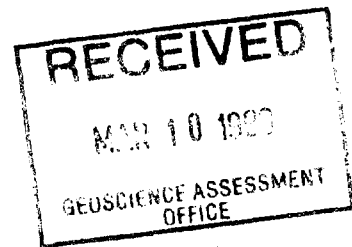
**Quantec IP Incorporated**

# Geophysical Survey Logistical Report



*Regarding the  
**GRADIENT-REALSECTION  
TDIP RESISTIVITY SURVEY**  
over the **BRISTOL PROPERTY,**  
*Bristol Twp., ON,*  
on behalf of  
**PROSPECTORS ALLIANCE CORP.,**  
*Toronto, ON**

2.19330



**QIP QIP QIP QIP QIP**

JM Legault,  
CWilliston,  
JWarne  
June, 1997  
P-188



42A05NE2018 2.19330 BRISTOL 010C

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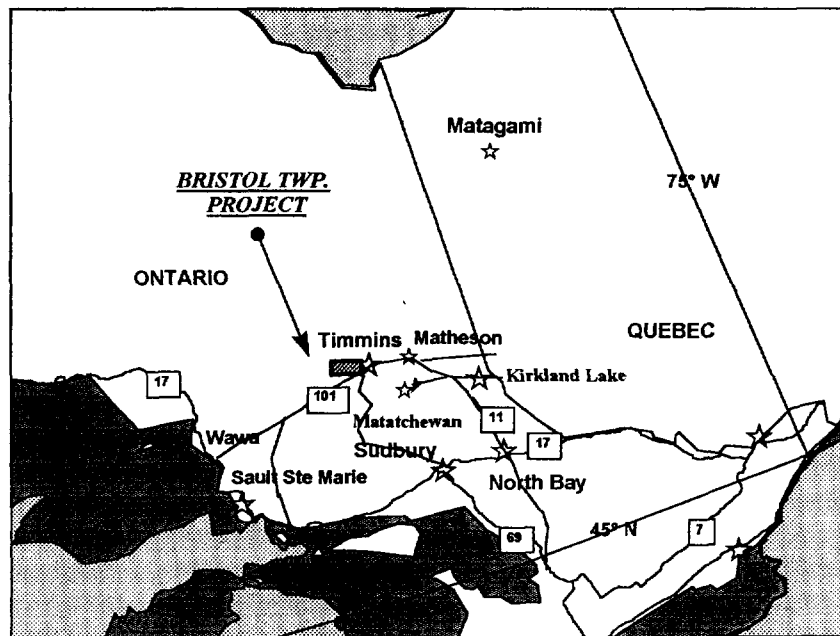
**1. INTRODUCTION**

- **QIP Project No:** P188
- **Project Name:** Bristol Twp. Property
- **General Location:** Timmins, ON
- **Survey Period:** May 22<sup>ND</sup> to 28<sup>TH</sup>, 1997
- **Survey Type:** Time Domain Induced Polarization.
- **Client:** **Prospectors Alliance Corp.**
- **Client Address:** 95 Wellington St West, Suite 1800  
Toronto, ON  
M5J 2N7
- **Client Representative:** Peter Vamos, John Harvey
- **Objectives:**
  1. **Exploration objectives:** To locate and delineate potential zones of sulphide mineralization associated with precious metals, hosted in sub-vertical shear structures, for the purposes of drill targeting and to provide information regarding the depth of overburden
  2. **Geophysical objectives:** To identify potential drill targets by measurement of their IP and Resistivity physical properties. The gradient and Realsection techniques were chosen based on their high resolution and deep penetration characteristics.
- **Report Type:** Logistical

## 2. GENERAL SURVEY DETAILS

### 2.1 LOCATION

- Country: Canada
- Province: Ontario
- Township: Bristol Township, ON
- Nearest Highway: Hwy. 101
- Nearest Settlement: Timmins, ON
- NTS Number: 42A/6



**Figure 1: General Survey Location of the Bristol Twp. Project.**

## 2.2 ACCESS

- **Base of Operations:** South Porcupine, ON
- **Distance by Land to Property:** approx. 20km northwest from Timmins
- **Access to Property:** approx. 5km west out of Timmins along Hwy. 101, northwest along logging road for 7km, then south onto secondary logging road for 4km
- **Mode of Access to Property:** 4x4 truck
- **Mode of Access to Lines:** truck

## 2.3 SURVEY GRID

- **Coordinate Reference System:** Local survey grid (non UTM)
- **Established:** Prior to survey execution by Prospectors Alliance Corporation.
- **Line Direction:** N000°E
- **Line Separation:** 100 meters
- **Station Interval:** 20 meters

### 3. SURVEY WORK UNDERTAKEN

#### 3.1 GENERALITIES

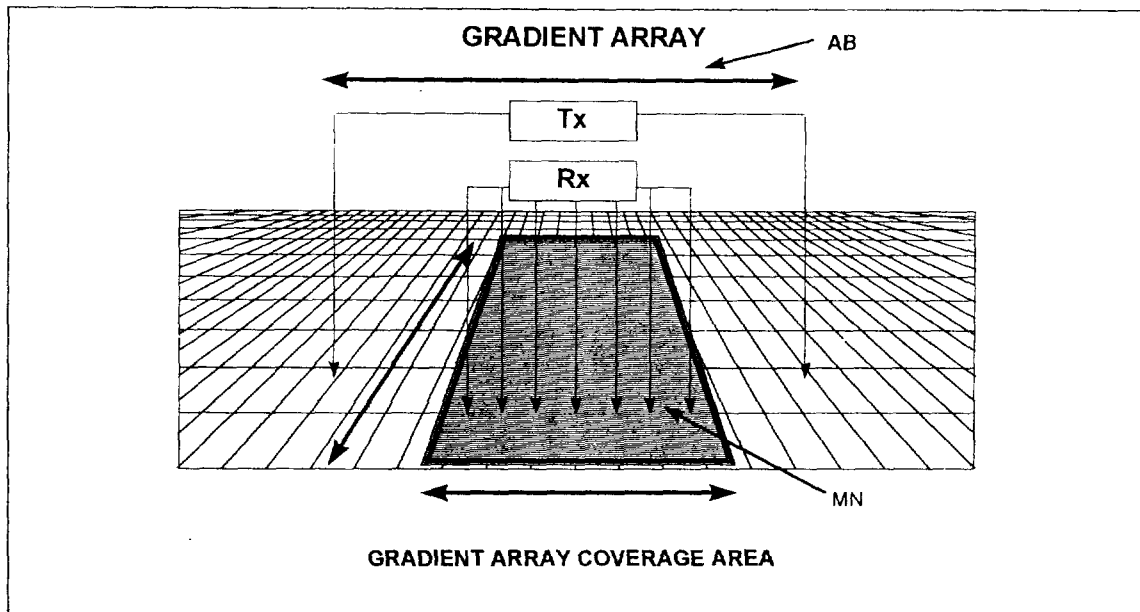
- **Survey Dates:** May 22<sup>ND</sup> to 28<sup>TH</sup>, 1997
- **Survey Period:** 7 days
- **Survey Days:** 6 days (read time)
- **Down Days:** 1
- **Total km Surveyed:** 12.3 km (incl. reconnaissance and detail)

#### 3.2 PERSONNEL

- **Supervisor:** Jeff Warne, South Porcupine, ON
- **Project Manager:** Paul Cassidy, South Porcupine ON
- **Field Assistants:** Dashamir Belliu, Porcupine, ON  
Robin Ranger, South Porcupine, ON  
Jeff Shragge, Kingston, ON  
Todd Chevrier, Timmins, ON

#### 3.3 SPECIFICATIONS

- **Array:** Multiple Gradient (see Figure 2)
- **AB (Transmitter Dipole Separation):**
  1. Reconnaissance: 3200m
  2. Detail follow-up: 2500-700m
- **MN (Receiver Dipole Separation):** 20m
- **Sampling Interval:** 20m
- **Line Interval:** 100-200m



**Figure 2: Gradient Array Layout**

**3.4 SURVEY COVERAGE**

- **Reconnaissance:** 8.52km (see Table I)
- **Detail / Follow-up:** 3.72km (see Table II)
- **Total km Surveyed:** 12.24km (incl. reconnaissance and detail)
- **Total Gradient AB Blocks:** 1
- **Approximate Arial Coverage:** 1.14 km<sup>2</sup>
- **Reconnaissance Coverage (AB = 3200m)**

LINE	SOUTHERN EXTENT	NORTHERN EXTENT	LENGTH (m)
1600E	600S	160N	720
1700E	600S	120N	720
1800E	600S	120N	720
1900E	560S	400N	960
2100E	500S	700N	1200
2300E	500S	900N	1400
2500E	100S	900N	1000
2600E	0N	900N	900
2800E	0N	900N	900
		<b>TOTAL</b>	<b>8520</b>

**Table I: Reconnaissance Survey Coverage at Bristol Twp. Property.**

- Detailed (Realsection) Coverage (AB = 700-2500m)

LINE	# AB SPACINGS	AB LENGTHS (m)	MIN. EXTENT	MAX. EXTENT	LENGTH (m)
2600E	4	700-2500	0N	840N	3720
				<b>TOTAL</b>	<b>3720</b>

**Table II: Realsection (Detail) Survey Coverage**

### 3.5 INSTRUMENTATION

- **Receiver:** BRGM/IRIS IP-6 (6 channel / Time Domain)
- **Transmitter:** Phoenix IPT-2B (15 kWatt / 100-3200V)
- **Power Supply:** Kohler Motor Generator (25HP/2cyl) + Westinghouse Alternator (30 kVA @ 400Hz)

### 3.6 PARAMETERS

- **Input Waveform:** Square wave @ 0.0625 hz, 50% duty cycle.
- **Receiver Sampling Parameters:** QIP custom windows (see Table III)
- **Measured Parameters:**
  1. Chargeability in mV/V across max. 10 time-gates, plus area under decay curve.
  2. Primary Voltage in millivolts and Input Current in milli-amperes for Resistivity in  $\Omega$ -m calculated according to Gradient Array geometry factor<sup>1</sup>.

Slice	Duration (msec)	Start (msec)	End (msec)	Mid-Point (msec)
Td	60	0	60	
T <sub>1</sub>	60	60	120	80
T <sub>2</sub>	60	120	180	150
T <sub>3</sub>	60	180	240	210
T <sub>4</sub>	60	240	300	270
T <sub>5</sub>	360	300	660	480
T <sub>6</sub>	360	660	1020	840
T <sub>7</sub>	360	1020	1380	1200
T <sub>8</sub>	720	1380	2100	1740
T <sub>9</sub>	720	2100	2820	2460
T <sub>10</sub>	720	2820	3540	3180
<b>Total T<sub>p</sub></b>	<b>3540</b>			

**Table III: Decay Curve Sampling.**

<sup>1</sup> Ref. BRGM ELREC-6 Operating Manual.



**3.7 MEASUREMENT ACCURACY AND REPEATABILITY**

- **Chargeability:** generally less than  $\pm 0.5$  mV/V but acceptable to  $\pm 1.0$  mV/V.
- **Resistivity:** less than 5% cumulative error from Primary voltage and Input current measurements.

**3.8 DATA PRESENTATION**

- **Maps:**
  - 1) **Reconnaissance/Detail Coverage:** Contoured plan maps of Total Chargeability and Apparent Resistivity, AB=32000m, scale of 1:5000 (2 maps).
  - 2) **"Realsection" Detail follow-up:** Contoured depth section map of Total Chargeability and Apparent Resistivity, at scales of 1:5000, for 1 line (1 map).
- **Digital:**
  - Raw data:** IP-6 digital dump file (see Appendix D)
  - Processed data:** ASCII Geosoft .XYZ format.

using the following format:

Column 1 =	Station (X Position), in metres
Column 2 =	Line (Y Position), in metres
Column 3 =	Apparent Resistivity, in $\Omega$ -m
Column 4 =	Total Chargeability, in mV/V
Column >5 =	TDIP Spectral Estimates, derived using IPREDC™

RESPECTFULLY SUBMITTED



Jeff Warne  
General Manager



Christine Williston  
Junior Geophysicist



Jean Legault  
Senior Geophysicist



Paul Cassidy  
Project Manager

Porcupine, ON  
June, 1997

## ADDENDUM

### SUMMARY INTERPRETATION

**For:**  
**PROSPECTORS ALLIANCE CORPORATION**  
Toronto ON

**Regarding:**  
**GRADIENT-REALSECTION IP RESISTIVITY SURVEY RESULTS**  
**Bristol Grid Project, Bristol Twp. ON**  
**May, 1997**

by:	Jean M Legault	GR Jeff Warne
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### SUMMARY INTERPRETATION AND RECOMMENDATIONS

#### OVERVIEW

At the request of Mr. Peter Vamos, of Prospectors Alliance Corp. (PALL), the following summary interpretation concerns ground geophysical survey results over the **Bristol Grid**, located in Bristol Township, near Timmins ON, during May, 1997 - specifically, Gradient-Realsection IP Resistivity (RSIP) surveys undertaken by Quantec IP Inc. (QIP), whose results are contained in the logistics report (QIP ref # P188) previously submitted in June, 1997. This report-addendum serves to outline the salient points of the survey results - as previously described in conversations between Mr. Vamos and Jeff Warne, in late May-early June, 1997. Attached is an interpretation plan map (1:5000) which serves as an overlay to the original RSIP survey plans.

The survey was designed to provide IP Resistivity coverage over an area of deep overburden, for which conventional IP results could not be obtained (ref. JVX dipole-dipole surveys for PALL, circa Winter-Spring 1997), and which hosts a favourable potential for quartz-carbonate altered, shear-hosted, McIntyre-Hollinger style mineralization (J Warne, QIP, pers. comm., 07/97). The Gradient-Realsection survey was chosen based on its deep penetration (>150-500m) and high resolution characteristics. Locally, the geology consists of NE-trending, steeply dipping felsic and mafic, which outcrop in the northern and southern portions of the survey area, respectively. The key lithologic contact occurring in the mid-grid area is entirely overburden covered by what appears to be a deep, graben-like, sinuous, ENE-WSW glacio-lacustrine paleo-channel, which cross-cuts the larger property area (P. Vamos, PALL, pers. comm., 06/97). The north edge of trough also hosts a major and auriferous shear zone with significant gold in narrow quartz-veins. Regionally, the mineralizing trends are related to the east-westerly trending Bristol Fault Zone and the NE-trending Allerton Fault, both of which are splays of the Destor-Porcupine Break - hence, discordant, EW-trending and concordant NE, subvertical high resistivity to contact-type IP axes represent favourable exploration targets.

Briefly described, the RSIP survey consists of 12.3km of survey coverage over a small (1.1 km<sup>2</sup>), asymmetric, NE-trending grid area, obtained during a 6-day period, between May 22-28, 1997. Nine (9), 100-200m spaced, NS-oriented, 720-1400m length survey lines were profiled, at 25m stations, using a reconnaissance gradient array (AB=3200m), from L16E/6S to L28E/9N, totaling 8.5 line-km. A single line (1) of detailed follow-up using the Realsection array (AB=700-2500m), also at 25m stations, along an 840m section of L26+00E, provided a depth of penetration range extending from surface to nearly 500

metres - totaling 13.7 line-km. The data were acquired in the time-domain, with results in the form of "off-time" chargeability decays and primary voltages per injected current both reduced to units of total chargeability, (millivolts per volt) and apparent resistivity (ohm-metres), respectively.

### GEOPHYSICAL ANALYSIS

The chargeability anomalies identified in the **Victoria Grid** IP\Resistivity results have been categorized according to their strength (questionable, weak, moderate), classified according to their resistivity association (high  $\rho$ , low  $\rho$ , nil/contact), and, where detailed RSIP coverage is available, assigned an optimal target depth for drill-testing. The anomalies have also been correlated from line-to-line into major and minor axes on the basis of a) their resistivity association, b) the regional geologic/geoelectric strike-trends, and c) similarities in anomaly character - as shown on the interpretation plan map. In order to better visualize the relationships between the IP and Resistivity parameters, contrasting zones of high/low resistivity have also been identified - as potentially relate to either to lithology, or more significantly, the key structurally-controlled/hosted quartz/carbonate altered shears - some of which also host coincident IP anomalies.

#### • **Gradient/Plan Interpretation**

The Gradient IP\Resistivity survey results at **Bristol** are marked by a poorly-resolved NE-trending fabric, reflecting the concordant geologic strike, upon which a cross-cutting, EW discordant linear trends are also super-imposed - relating to possible structurally-controlled, shear hosted mineralization which represents the exploration target. This identification of distinctive ENE and EW trends is also significant because it appears to be a differentiating/discriminating tool in identifying the respective concordant lithologic and discordant structural bedrock sources. The apparent resistivities in plan display a moderate range - varying between 1k-70k ohm-metres (7k  $\Omega$ -m avg.) - which reflects the mixed felsic/mafic volcanic geology, with the  $\rho_A$  lows either representing possible fault-fracturing ( $\pm$  clay/chlorite) and/or zones of deeper overburden and resistivity highs consistent with either more felsic volcanic/intrusive units, bedrock topographic highs and/or possible shear hosted qtz-carbonate alteration. The trend for higher resistivities (>10k  $\Omega$ -m) along the northern and southern boundaries of the grid generally reflects the presence of outcrop, however distinctive ENE and EW resistivity units are easily defined in the results (see interpretation plan map) - which suggests either intercalations in the felsic/mafic lithologies along the NE-trending contact zone, fault-fracture zones and possibly also the targeted qtz-altered zones. Contrasting this high resolution and deep penetration against the previous IP results clearly highlights the effectiveness of the RSIP technique particularly in areas of heavy or variable overburden present within the **Bristol Twp.** region.

The apparent chargeabilities also display a moderate range, varying between 0-15 mV/V (6 mV/V avg.) - which is consistent with both stratigraphic and economic mineralization in the Timmins-Kirkland Lake camps, relating to weak concentrations of disseminated pyritic sulphides and/or graphite in a variety of forms - including: a) weak (<2%) background disseminations in country rocks, b) concordant, stratigraphic zones of mineralization (2-5%), c) near-concordant and discordant, mineralized intrusive d dykes/porphyries and altered shear-hosted systems which are occasionally and most importantly potassic/silicic/carbonate altered - providing the key, high resistivity association (versus chloritic = low  $\rho$ /low temp = not Au-bearing ?). However, this favourable weak/moderate IP/high  $\rho$  association also often corresponds to barren overburden-basement outcrop features, as well as magnetite in mafic/ultramafic intrusives/dykes - it is therefore important to discriminate between outcropping and probable buried zones, as noted in Realsections and during ground follow-up. The chargeability axes at **Bristol** are mainly nil/contact-type and high resistivity type associations and which also host the strongest responses - both of which are consistent with stratigraphic-like disseminated sulphides and/or magnetite - as well as the targeted mineralized qtz-altered shears as noted. On the other hand, low resistivity IP axes are the least common (<25%) and weakest axes - both of which indicate that significant conductive sulphides and/or graphite mineralization are not present on the property. Overall, however, the IP axes are also, for the most part, thin (<50m) and not strike-extensive ( $\leq$ 100m) which suggests that, unless these are pencil-like/vertically-elongated features, they may not be significant in terms of size/bulk tonnage - hence, not representing the large target hoped for (J. Warne, QIP, pers. comm., 07/97).

• **Realsection/Detailed Interpretation**

The areas interest, based on the geophysics alone (chargeability, strength, strike-length) and the target model (high  $\rho$ , EW strike) have been identified on the interpretation map as **Zones A-E** and described in the following table - all of which correspond to moderately polarizeable and linear zones of resistivity high and therefore may be associated with possible qtz-carbonate, pyritic shears and/or dykes. Only two (**A-B**) have been surveyed using detailed, RSIP coverage.

NAME	LINE	STATION	RELATIVE STRENGTH	RESISTIVITY ASSOCIATION	TARGET DEPTH	PRIORIT Y	COMMENTS
A	L2100E	610N	Moderate	High	--	3	Sinuous ESE to ENE trending (NS faulted ?), multiple (2-3), discontinuous but strike-extensive, weak to moderate IP axes - all centred on a broad (>100m) prominent EW high $\rho$ lineament on north edge of coverage, whose boundary marks an abrupt increase in OB to the south, i.e. likely fault-controlled. Zone is open to west, but weakens/pinches out to east. RSIP along L26E indicates the IP high/ $\rho_A$ high is near-subcropping to partly buried, and features a generally subvertical to steep south dip, and strengthens with depth, but remains thin (<25m) and possibly pinch/swells below 300m. L26E IP axis is offset with high, i.e. likely not an OTP effect. Corresponds to known mineralized zone of outcrop / subcrop (?) - likely represents a weakly pyritic felsic unit with possible localized zones of thin, near-discordant, shear-hosted qtz-carbonate altered disseminated sulphides. Recommend DDH test at 150-300m depths along L26E - extending into buried, conductive 2 <sup>ND</sup> priority target to south at >250m depths, possibly representing clay-chlorite altered diss. sulphides. Also warrants follow-up to west, along L21E-L23E - cautioning for OB/OTP effects - as well as north across A', which is similar but poorly resolved and weak IP high/ $\rho$ high.
		550N	Moderate	High	--	3	
	L2300E	750N	Mod-Weak	Nil	--	3	
		710N	Moderate	High	--	2	
	L2600E	630N	Moderate	Nil	--	3	
		610N	Moderate	High	150-300 >400	1	
		550N	Mod-Weak	Low	>250m	2	
B	L2500E	160N	Moderate	Nil	--	3	Cross-cutting ENE to EW trending (concordant and discordant ?), multiple (3-4), mixed (nil $\rho$ + high $\rho$ ), moderate IP axes - coinciding with several ENE trending, narrow high $\rho$ lineaments which lie in area of heavy overburden cover. Zone pinches to south-west, but open to east. RSIP along L26E indicates high $\rho$ /high IP zones are thin and diffuse (i.e. possibly only weakly mineralized/altered). Flat-lying appearance at depth due to layering effect of <50m thick OB. Stronger contrasts in IP at depth suggests zones strengthen below 250-300m - deepening to south. Represents previously unknown targets, either disseminated sulphides in thin, concordant, felsic intercalations or near-discordant shear-hosted qtz-altered mineralization. Recommend DDH test at >250m depths along L26E, where zone appears to strengthen - extending into other nearby multiple horizons.
		100N	Moderate	High	--	3	
		050N	Moderate	Low	--	3	
		010S	Moderate	Nil	--	3	
	L2600E	270N	Moderate	Low	>250m	2	
		160N	Moderate	High	>300m	1	
		060N	Moderate	Nil	>350m	2	
	L2800E	320N	Mod-Weak	High	--	2	
		250N	Moderate	Nil	--	3	
		180N	Moderate	Nil	--	3	
		130N	Moderate	Nil	--	3	
C	L2100E	190S	Moderate	High	--	3	Near EW trending, short strike-length ( $\approx$ 100m), high $\rho$ association and moderate IP axis, centred on a similar size high resistivity lineament - lies in area of deeper overburden north of southern survey boundary, i.e. likely not an OB/OTP effect. No RSIP coverage (no dip/depth information available), but diffuse nature of IP/ $\rho_A$ signature suggests >50m width. Either represents near-concordant mineralized felsite or discordant, qtz-altered shear. Recommend RSIP follow-up.
	L2200E	170S	Moderate	High	--	2	
D	L1800E	460S	Moderate	Nil	--	3	EW to ENE trending, moderate strike-length (>500m), multiple (1-3) mixed nil/high $\rho$ association and moderate to strong IP axes, all closely paralleling or centred on a broad (>100m) prominent EW high $\rho$ lineament on south edge of coverage, whose boundary marks an abrupt increase in OB to the north, i.e. possibly fault-controlled. Zone is open to east, but is poorly defined to west. No RSIP coverage (no dip/depth information available). Corresponds to area of outcrop, likely represents a weakly pyritic pyroclastic unit with possible localized zones of thin, near-discordant, shear-hosted qtz-carbonate altered disseminated sulphides. Recommend RSIP follow-up - particularly for nil/high $\rho$ targets along northern edge of outcrop and for strongest targets south of L18E-L19E.
		530S	Strong	Nil	--	2	
	L1900E	510S	Mod-strong	High	--	3	
	L2100E	410S	Moderate	High	--	3	
		490S	Mod-strong	High	--	2	
	L2200E	300S	Moderate	Nil	--	3	
		400S	Mod-strong	High	--	2	
		460S	Moderate	High	--	3	
E	L1700E	030S	Moderate	High	--	2	ENE trending, short (<100m), mixed high/nil $\rho$ association, multiple (1-2) IP axes, nearly centred on a ENE high resistivity lineament, near NW edge of survey coverage. No RSIP coverage (no dip-depth info.). Possibly area of subcrop (?) or stratigraphic Py. Recommend more RSIP follow-up.
	L1800E	060N	Moderate	High	--	3	
		010N	Mod-Weak	Nil	--	3	

**Table I: Recommended Targets at Bristol Grid.**

### CONCLUSION AND RECOMMENDATIONS

The Gradient IP and Resistivity results at **Bristol** identify potential chargeability and resistivity signatures relating to the subsurface geology, including possible lithologic discrimination, concordant and discordant fault-fracture structures, geochemical alteration and also weak concentrations of disseminated mineralization potentially associated with gold-mineralized, quartz/carbonate altered fault-fractures and shear zones.

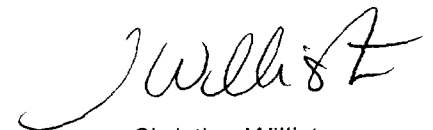
In response to the geologic objectives, at least five (5) favourable, ESE to ENE trending, high-resistivity IP zones (Zones **A** to **E**), containing multiple chargeability axes, have been identified - including three (3) which have been defined in the area of deep overburden. Of these zones, two (2) host significant geoelectric characteristics resembling the target model (high/nil  $\rho$ , moderate IP, discordant EW-ESE trends) and sufficient Realsection coverage to warrant immediate drill-testing (Zones **A**, **B**) - as well, four (4) other weaker 2<sup>ND</sup> priority targets have also been identified along L26+00E which could be tested at the same time. At least five (5) other targets hosting similar characteristics have also been identified for follow-up but require additional RSIP coverage prior to DDH testing. It should be noted, however, that the thin nature (<50m) and short strike length ( $\approx$ 150m) of all these anomalies suggests that they represent small targets - possibly not the large bulk mineable target sought after. Nevertheless, despite the varying overburden depths, which have limited previous IP survey results, this successful and straightforward result highlights the high resolution and deep penetration capabilities of the gradient Realsection technique - particularly the discrimination of both concordant ENE and discordant EW strike trends possibly relating to lithologic (barren ?) and structural (Au-bearing ?) targets, respectively.

We recommend that these results be combined with existing geoscientific information prior to follow-up. We also recommend that the current priority targets be carefully evaluated prior to and during the DDH-testing stage - particularly with regards to the target model and the apparently preferred EW-ENE orientations. When DDH-targeting, particular attention should also be given to optimal target depth as well as the probable type of mineralization/alteration indicated by the resistivity association - cautioning against possible basement topographic effects in areas of known outcrop. Additional RSIP follow-up on other buried targets identified in the survey area. As well, the Gradient-RSIP technique should be applied to other areas suspected to host either deep overburden or deeply buried targets. Finally, comparison with other geophysical results, particularly magnetics, should prove useful in distinguishing between pyritic and magnetite/pyrrhotite mineralization - the latter which also produce similar weak IP/high  $\rho$  signatures.

RESPECTFULLY SUBMITTED

G.R. Jeff Warne  
Senior Geophysicist

Jean M. Legault  
Senior Geophysicist



Christine Williston  
Geophysicist

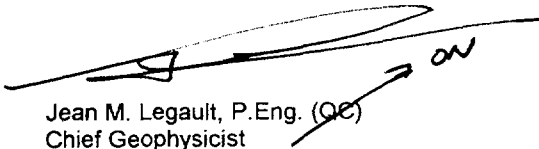
Porcupine, ON  
July, 1997

**APPENDIX A****STATEMENT OF QUALIFICATIONS**

I, Jean M. Legault, declare that:

1. I am a consulting geophysicist with residence in Timmins, Ontario and am presently employed in this capacity with the Quantec group, of Waterdown, Ontario.
2. I obtained a Bachelor's Degree, with Honours, in Applied Science (B.A.Sc.), Geological Engineering (Geophysics Option), from Queen's University at Kingston, Ontario, in Spring 1982.
3. I am a registered professional engineer (# 047032), with license to practice in the Province of Quebec, since 1985.
4. I have practiced my profession continuously since May, 1982, in North-America, South-America and North-Africa.
5. I am a member of the Society of Engineers of Quebec, the ~~Quebec~~ <sup>Assoc. Professional Engineers of Ontario Northern</sup> Prospectors Association, the Prospectors and Developers Association of Canada, and the Society of Exploration Geophysicists.
6. I have no interest, nor do I expect to receive any interest in the properties or securities of **Prospectors Alliance Corp.**
7. I oversaw the interpretation, the report preparation, the final drawings, and provided the recommendations attached and hereby attest to their accuracy herein.
8. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine, Ontario  
June, 1997



Jean M. Legault, P.Eng. (QC)  
Chief Geophysicist  
Dir. Technical Services  
Quantec Group

**APPENDIX A****STATEMENT OF QUALIFICATIONS**

I, Christine Williston, hereby declare that:

1. I am a processing geophysicist with residence in South Porcupine, Ontario and am presently employed in this capacity with Quantec Consulting Inc. of Porcupine, Ontario.
2. I am a graduate of York University, North York, ON, in 1994, with an Honours Bachelor of Science Degree in Earth and Atmospheric Science.
3. I have practiced my profession in Canada since graduation.
4. I have no interest nor do I expect to receive any interest, direct or indirect, in the properties or securities of **Prospectors Alliance Corp.**
5. The maps created in this report accurately represent the information given to me at the time of the preparation of this report.

Porcupine, Ontario  
June, 1997



Christine Williston, B.Sc.  
Processing Geophysicist  
Quantec Technical Services

**APPENDIX A****STATEMENT OF QUALIFICATIONS**

I, G.R. Jeffrey Warne, hereby declare that:

1. I am a geophysicist with residence in South Porcupine, Ontario and am presently employed in this capacity with Quantec IP Inc. of Waterdown, Ontario.
2. I studied Engineering Geophysics in the Faculty of Applied Science at Queen's University in Kingston, Ontario, completing all but two of the course requirements for a B.Sc.(Eng.) in 1981.
3. I have practiced my profession continuously since May, 1981 in Canada, the United States and Chile.
4. I have no interest, nor do I expect to receive any interest in the properties or securities of **Prospectors Alliance Corp.**
5. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine, Canada  
June, 1997

G.R. Jeffrey Warne  
Senior Geophysicist  
General Manager - QIP

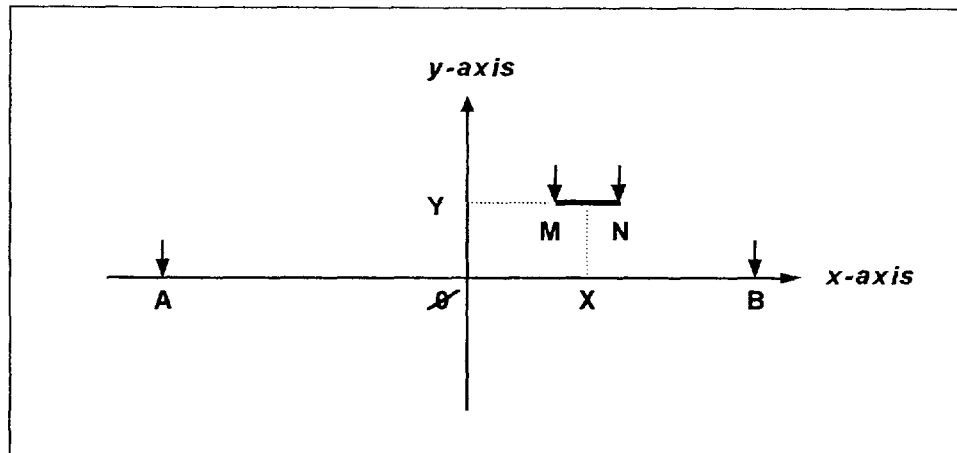


**APPENDIX B****THEORETICAL BASIS**

The "RealSection" survey design uses multiple gradient arrays - with variable depths of investigation controlled by successive changes in array size/geometry. The method of data acquisition and the "RealSection" presentation are based on the specifications developed by Dr. Perparim Alikaj, of the Polytechnic University of Tirana, Albania, over the course of 10 years of application. This technique has been further developed for application in Canada during the past four years, in association with Mr. Dennis Morrison, president of Quantec IP Inc.

The Gradient Array measurements are unique in that they best represent a bulk average of the surrounding physical properties within a relatively focused sphere of influence, roughly equal to the width of the receiver dipole, penetrating vertically downward from surface to great depths. These depth of penetration and lateral resolution characteristics are showcased when presented in plan, however through the use of multiple-spaced and focused arrays, the advantages of the gradient array are further highlighted when the IP/Resistivity data are fully developed in cross-section, using RealSections.

The resistivity is among the most variable of all geophysical parameters, with a range exceeding  $10^6$ . Because most minerals are fundamentally insulators, with the exception of massive accumulations of metallic and submetallic ores (electronic conductors) which are rare occurrences, the resistivity of rocks depends primarily on their porosity, permeability and particularly the salinity of fluids contained (ionic conduction), according to Archie's Law. In contrast, the chargeability responds to the presence of polarizable minerals (metals, submetallic sulphides and oxides, and graphite), in amounts as minute as parts per hundred. Both the quantity of individual chargeable grains present, and their distribution within subsurface current flow paths are significant in controlling the level of response. The relationship of chargeability to metallic content is straightforward, and the influence of mineral distribution can be understood in geologic terms by considering two similar, hypothetical volumes of rock in which fractures constitute the primary current flow paths. In one, sulphides occur predominantly along fracture surfaces. In the second, the same volume percent of sulphides are disseminated throughout the rock. The second example will, in general, have significantly lower intrinsic chargeability.



**Figure C1:: Gradient array configuration**

Using the diagram in Figure C1 for the gradient array electrode configuration and nomenclature:<sup>2</sup>, the gradient array apparent resistivity is calculated:

where:            the origin **O** is selected at the center of **AB**  
                       the geometric parameters are in addition to  $a = AB/2$  and  $b = MN/2$   
                       **X** is the abscissa of the mid-point of **MN** (positive or negative)  
                       **Y** is the ordinate of the mid-point of **MN** (positive or negative)

**Gradient Array Apparent Resistivity:**

$$\rho_a = K \frac{VP}{I} \text{ ohm-metres}$$

$$\text{where: } K = \frac{2\pi}{(AM^{-1} - AN^{-1} - BM^{-1} + BN^{-1})}$$

$$AM = \sqrt{(a+x-b)^2 + y^2}$$

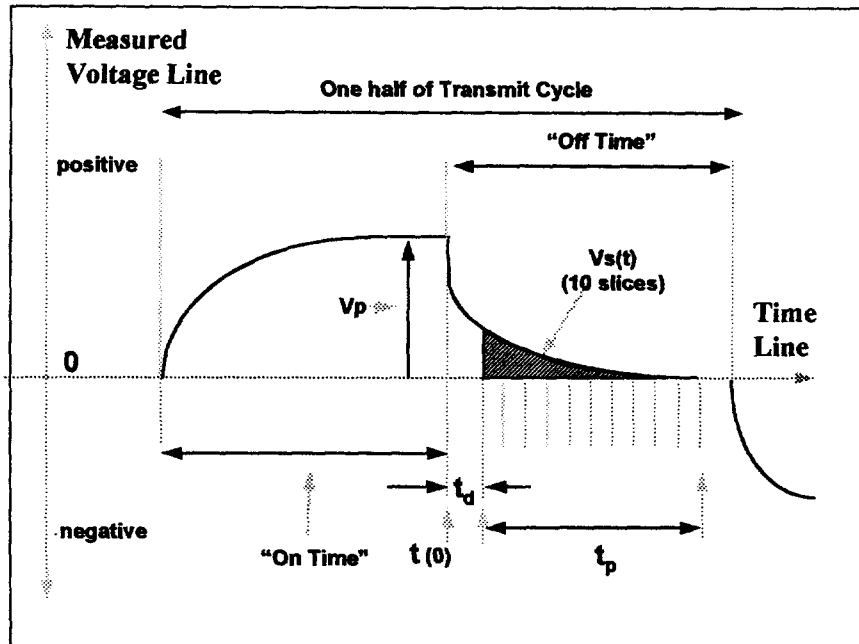
$$AN = \sqrt{(a+x+b)^2 + y^2}$$

$$BM = \sqrt{(x-b-a)^2 + y^2}$$

$$BN = \sqrt{(x+b-a)^2 + y^2}$$

Using the diagram in Figure C2 for the Total Chargeability:

<sup>2</sup> From Terraplus\BRGM, IP-6 Operating Manual, Toronto, 1987.



**Figure C2 The measurement of the time-domain IP effect.**

the total apparent chargeability is given by:

**Total Apparent Chargeability:<sup>3</sup>**

$$M_T = \frac{1}{t_p V_p} \sum_{i=1}^{10} \int_{t_i}^{t_{i+1}} V_s(t) dt \quad \text{millivolts per volt}$$

where  $t_i, t_{i+1}$  are the beginning and ending times for each of the chargeability slices,

More detailed descriptions on the theory and application of the IP/Resistivity method can be found in the following reference papers:

1. Cogan, H., 1973, Comparison of IP electrode arrays, *Geophysics*, 38, p 737 - 761.
2. Langore, L., Alikaj, P., Gjovreku, D., 1989, Achievements in copper sulphide exploration in Albania with IP and EM methods, *Geophysical Prospecting*, 37, p 925 - 941.

<sup>3</sup> From Telford, et al., *Applied Geophysics*, Cambridge U Press, New York, 1983..

## APPENDIX C

## PRODUCTION SUMMARY

P-188 PROSPECTORS ALLIANCE						
BRISTOL TWP ONT. MAY22/97 to MAY28/97						
Date	Description	AB	Line	Start	End	Total
22-May	Established AB3200M@1700N, 1500S on L2200E. Survey L23E	3200M	2300E	900N	BL0	900
	TOTAL					900M
23-May	Surveyed L2300E, L2500E, L2600E, L2800E	3200M	2300E	BL0	500S	500
		3200M	2500E	100S	900N	1000
		3200M	2600E	BL0	900N	900
		3200M	2800E	BL0	900N	900
	TOTAL					3300M
24-May	Surveyed L1600E, 1700E. Ignition not Functioning on generator had to go to office in order to make repairs	3200M	1600E	160N	600S	720
		3200M	1700E	120S	600S	480
	TOTAL					1200M
25-May	Checked Readings on L1600E, and, 1700E to verify data because of problems with generator the previous day. Surveyed L1700E, L1800E. Re-established AB 2500@1700N, 800S on L22E, surveyed L2600E	3200M	1700E	120S	120N	240
		3200M	1800E	600S	120N	720
		2500M	2600E	BL0	840N	840
	TOTAL					960M
	TOTAL DETAIL					840M
26-May	Re-established AB 2000@1400N, and 600S on L2400E Surveyed L2600E. Re-established AB 1500@ 1100N and 400S on L2600E. Had to add calcium chloride to north electrodes to stabilize current.	2000M	2600E	BL0	840N	840
		1500M	2600E	BL0	840N	840
	TOTAL DETAIL					1680M
27-May	Re-established AB 1000@ 900N, and 100S on L2600E. Re-established AB 700@900N, and 200N on L2600E. Receiver lost power unable to continue reading. Called office and had another receiver sent out. Re-established AB 700@600N and 100S on L2600E. Surveyed L2600E. Re-established AB3200M at 1700N and 1500S on L2200E.	1000M	2600E	100N	700N	600
		700M	2600E	340N	700N	360
		700M	2600E	400N	100N	300
	TOTAL DETAIL (60m overlap)					1260M
28-May	Surveyed L1900E, 2100E. pulled in wire job finished.	3200M	1900E	400N	560S	960
		3200M	2100E	700N	500S	1200
	TOTAL					2140M
	TOTAL RECONNAISSANCE					8520
	TOTAL DETAIL					3780
	GRAND TOTAL					12300

**APPENDIX D****INSTRUMENT SPECIFICATIONS:****Iris IP-6 (6 channel) Receiver**  
(from IRIS Instruments IP 6 Operating Manual)**Weather proof case**

<b>Dimensions:</b>	31 cm x 21 cm x 21 cm
<b>Weight:</b>	6 kg with dry cells 7.8 kg with rechargeable bat.
<b>Operating temperature:</b>	-20°C to 70°C (-40°C to 70°C with optional screen heater)
<b>Storage:</b>	(-40°C to 70°C)
<b>Power supply:</b>	6 x 1.5 V dry cells (100 hr. @ 20°C) or 2 x 6 V NiCad rechargeable (in series) (50hrs @ 20°C) or 1 x 12 V external
<b>Input channels:</b>	6
<b>Input impedance:</b>	10 M ohm
<b>Input over-voltage protection:</b>	up to 1000 volts
<b>Input voltage range:</b>	10 V maximum on each dipole 15 V maximum sum over ch 2 to 6
<b>SP compensation:</b>	automatic $\pm$ 10 V with linear drift correction up to 1 mV/s
<b>Noise rejection:</b>	50 to 60 Hz powerline rejection 100 dB common mode rejection (for $R_s=0$ ) automatic stacking
<b>Primary voltage resolution:</b>	1 $\mu$ V after stacking
<b>accuracy:</b>	0.3% typically; maximum 1 over whole temperature range
<b>Secondary voltage windows:</b>	up to 10 windows; 3 preset window specs. plus fully programmable sampling.
<b>Sampling rate:</b>	10 ms
<b>Synchronization accuracy:</b>	10 ms, minimum 40 $\mu$ V
<b>Chargeability resolution:</b>	0.1 mV/V
<b>accuracy:</b>	typically 0.6%. maximum 2% of reading $\pm$ 1 mV/V for $V_p > 10$ mV
<b>Battery test:</b>	manual and automatic before each measurement
<b>Grounding resistance:</b>	0.1 to 467 kohm
<b>Memory capacity:</b>	2505 records, 1 dipole/record
<b>Data transfer:</b>	serial link @ 300 to 19200 baud remote control capability through serial link @ 19200 baud

**APPENDIX D****INSTRUMENT SPECIFICATIONS:****IPT-2B Transmitter**

<b>Power Sources:</b>	Phoenix MG-19 (10KVA, 120V, 3 phase, 400Hz) motor generator (30KVA, 120V, 3 phase) motor generator Phoenix MG-1, 2 or 3 can also be used, but will generate ½ the voltage
<b>Output Voltage:</b>	To 1400V in four ranges of resp. 250-375V, 420-630V, 650-975V, 935-1400V. Voltage is continuously variable $\pm 20\%$ from each nominal step value.
<b>Output Power:</b>	Maximum continuous output power is 10KW. Absolute max output power is 15KW.
<b>Maximum Current:</b>	15 Amps
<b>Ammeter Ranges:</b>	30mA, 100mA, 1A, 3A, 10A and 30A full scale.
<b>Meter Display:</b>	A meter function switch selects the display of current level, regulation status, input frequency, output voltage, control battery voltage or line voltage
<b>Current regulation:</b>	The change in output current is less than 0.2% for a 10% change in input voltage or electrode impedance. Regulation is achieved by feedback to the alternator of the motor generator unit.
<b>Output waveform:</b>	Either DC, single frequency, two frequencies simultaneously, or time domain (50% duty cycle). Frequencies of 0.078, 0.156, 0.313, 1.25, 2.5 and 5.0 Hz are standard, whereas 0.062, 0.125, 0.25, 1.0, 2.0 and 4.0 Hz are optionally available. The simultaneous transmission mode has 0.313 and 5.0 Hz as standard, whereas 0.156 and 2.5 Hz are optional.
<b>Output waveform IPT-2B option:</b>	9 frequencies in binary progression: 1/16 - 1/32 - 1/16 - 1/8 - 1/4 - 1/2 - 1 - 2 and 4, with variable duty cycle. Selectable to one of four values: 0.25, 0.5, 0.75, and 1. <b>NOTE:</b> Duty cycle = 1 is the operation equal to the standard frequency domain cycling, i.e. Full On, except for a 50m.sec. gap at each half cycle.
<b>Operating Temperature:</b>	-40°C to +60°C
<b>Frequency Stability:</b>	$\pm 1\%$ from -40°C to +60°C is standard. A precision time base is optionally available for coherent detection and phase IP measurements.
<b>Transient Protection:</b>	Current is turned off automatically if it exceeds 150% full scale or is less than 5% full scale.
<b>Thermal Protection:</b>	Unit is fan-forced cooled. Thermostat turns transmitter off at 65°C and turns back on at 55°C internal temperature.
<b>Dimensions:</b>	46 x 46 x 32cm (18x18x13in)
<b>Weight:</b>	45 kg
<b>Shipping Weight:</b>	56 kg

## APPENDIX E

## IP 6 DUMP FILE FORMAT

\* IP 6 (V9.1)\*

\*=====\*

```

#77 Jul 1 1980 11:57
dipole 1 trigger 1 domain Time T wave
Programmable wind. Grad. RCTGL array

V= 331.605 Sp= -319 I= 1350.00 Rs= 0.50
Ro= 6679.4 Ohm.m M= 11.97 E= 0.4
M1= 40.44 M2= 33.55 M3= 29.48 M4= 26.68
M5= 20.95 M6= 15.52 M7= 12.50 M8= 9.77
M9= 7.50 M10= 6.05

cycl= 19 Time= 2000 V_D= 1260 M_D= 40
T_M1= 20 T_M2= 30 T_M3= 30 T_M4= 30
T_M5= 180 T_M6= 180 T_M7= 180 T_M8= 360
T_M9= 360 T_M10= 360

Spacing config.: Imperial grid
XP=-1300.0 Line= 400.0
D= -100.0 AB/2= 2500.0

#78 Jul 1 1980 11:57
dipole 2 trigger 1 domain Time T wave
Programmable wind. Grad. RCTGL array

V= 265.781 Sp= 388 I= 1350.00 Rs= 1.41
Ro= 4687.7 Ohm.m M= 26.75 E= 0.0
M1= 76.18 M2= 66.06 M3= 59.31 M4= 54.53
M5= 44.38 M6= 34.29 M7= 28.35 M8= 22.83
M9= 18.06 M10= 14.96

cycl= 19 Time= 2000 V_D= 1260 M_D= 40
T_M1= 20 T_M2= 30 T_M3= 30 T_M4= 30
T_M5= 180 T_M6= 180 T_M7= 180 T_M8= 360
T_M9= 360 T_M10= 360

Spacing config.: Imperial grid
XP=-1400.0 Line= 400.0
D= -100.0 AB/2= 2500.0

```

**APPENDIX F**

**OPERATOR COMMENTS**



**APPENDIX G****LIST OF MAPS**

- **Posted Contoured Plan Maps:** (Scale of 1:5000)

- |                                   |                       |
|-----------------------------------|-----------------------|
| 1. Total Chargeability (3200m AB) | DWG# P-188-PLAN-CHG-3 |
| Apparent Resistivity (3200m AB)   | DWG# P-188-PLAN-RES-3 |

- **Contoured "Realsection" Map:** (Scale of 1:5000)

- |   |              |                        |
|---|--------------|------------------------|
| 1. Total Chargeability/<br>Apparent Resistivity | :Line 26+00E | DWG# P-188-RSIP-26+00E |
|---|--------------|------------------------|

TOTAL PLANS MAPS = 2  
TOTAL REALSECTIONS =  $\frac{1}{3}$   
TOTAL MAPS

**APPENDIX H**

**PLAN MAPS AND SECTION**



42A05NE2018 2.19330 BRISTOL 900

sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this work and correspond with the mining land holder. Questions about this collection and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.  
 - Please type or print in ink.

**1. Recorded holder(s) (Attach a list if necessary)**

Name <i>RALPH ALLERTON</i>	Client Number <i>101930</i>
Address <i>543 Pine St. No. 1</i>	Telephone Number <i>705-264-8224</i>
<i>TIMMINS ONTARIO</i>	Fax Number <i>705-264-7818</i>
Name	Client Number
Address	Telephone Number
	Fax Number

**2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.**

**Geotechnical: prospecting, surveys, assays and work under section 18 (regs)**       **Physical: drilling stripping, trenching and associated assays**       **Rehabilitation**

Work Type: *REAL SECTION T.D.I.P SURVY* ✓

Office Use: Commodity *1*

Total \$ Value of Work Claimed: *17,146*

Dates Work Performed: From *22 05 97* To *22 05 97*

Global Positioning System Data (if available): Township/Area *BRISTOL*

Mining Division: *Porcupine*

Resident Geologist District: *Timmins*

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;  
 - provide proper notice to surface rights holders before starting work;  
 - complete and attach a Statement of Costs, form 0212;  
 - provide a map showing contiguous mining lands that are linked for assigning work;  
 - include two copies of your technical report.

**3. Person or companies who prepared the technical report (Attach a list if necessary)**

Name <i>QUANTEC I.P. INC</i>	Telephone Number <i>705-235-2166</i>
Address <i>P.O. Box 580, 101 Kings St. Porcupine</i>	Fax Number <i>705-235-2255</i>
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

**4. Certification by Recorded Holder or Agent**

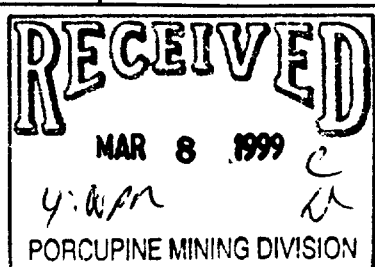
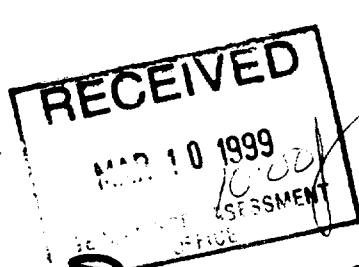
*Lionel Bonhomme, Agent*, do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: *[Signature]* Date: *March 5/99*

Agent's Address: *166 ALLENDALE EAST, TIMMINS P4N 8A9* Telephone Number: *705-267-3511* Fax Number: *705-267-3121*

*2*

*Deemed on June 8/99*



Number, or if on other eligible, show in this location number and on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank Value of work to be distributed at a future date
TS 7827	18 ha	\$28,826	N/A	\$24,000	\$2,826
eg 1234887	12	0	\$24,000	0	0
eg 1234888	2	\$ 8,882	\$ 4,000	0	\$4,882
1 451545	1	1696.		<del>7126.</del>	1696
2 363447	1	824		<del>4071</del>	824
3 363446	1	2326.		<del>2326</del>	2326
4 921758	1	2101.	400	<del>2101</del>	<del>2101</del>
5 1190579	4	9450.			9450
6 413423	1	242.		<del>242</del>	242.
7 413424	1	242		<del>242</del>	242
8 413425	1	485.		<del>485</del>	485.
9 434248			400		
10 634741			400		
11 634742			400		
12 634743			400		
13 634744			400		
14 634745			400		
15 634746			400		
Column Totals	FORWARD -	17446.	400.		17046.

I, Lionel Bourbonnais, Agent, do hereby certify that the above work credits are eligible under subsection 7 (j) of the Assessment Work Regulation 6/98 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: [Signature] Date: MARCH 5, 1999

6. Instructions for cutting back credits that are not approved.
- Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:
- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
  - 2. Credits are to be cut back starting with the claims listed last, working backwards, or
  - 3. Credits are to be cut back equally over all claims listed in this declaration; or
  - 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

**For Office Use Only**

Received Stamp

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

MAY 04 '99 12:59 2673121 PAGE. 02

Received Stamp

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

2.19380

RECEIVED  
 MAR 10 1999  
 MINING ASSESSMENT  
 OFFICE

RECEIVED  
 MAR 8 1999  
 YOUNG  
 PORCUPINE MINING DIVISION

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
Survey Charge	6 DAYS.	1950/DAY	11700.00
CONSULTANT (Site)	1 DAY. J. WARNE.	600./DAY.	600.00
Summary Interp. C. Williams	1 DAY.	350/DAY.	350.00
Geophysical Review Report.	1 DAY J. LOGAN.	750./DAY.	750.00
Geologist Planning Supervisor	4 DAYS.	300./DAY	1200.00
<b>Associated Costs (e.g. supplies, mobilization and demobilization).</b>			
<b>Transportation Costs</b>			
Truck Charge	7 DAYS	75./DAY	525.00
<b>Food and Lodging Costs</b>			
Execution Expense.			1180.00
		657.	1741.00
<b>Total Value of Assessment Work</b>			<b>17446.00</b>

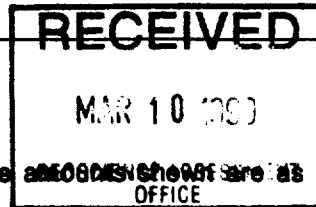
**Calculations of Filing Discounts:**

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK  $\times$  0.50 = Total \$ value of worked claimed.

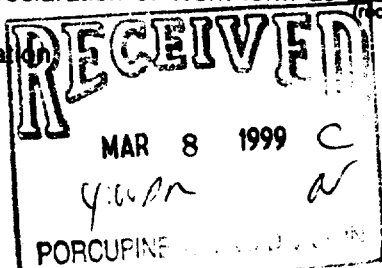
**Note:**

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.



**Certification verifying costs:**

I, Lionel Bubeaux Agent (please print full name), do hereby certify, that the above information is as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Agent I am authorized to make this certification (Recorded holder, agent, or state company position with signing authority)



Signature: [Handwritten Signature] Date: March 5/99

Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9846  
Fax: (877) 670-1555

July 20, 1999

RALPH E. ALLERSTON  
543 PINE STREET, NORTH  
TIMMINS, ONTARIO  
P4N-6L9

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number:** 2.19330

**Status**

**Subject: Transaction Number(s):** W9960.00104 Approval After Notice

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at [bruce.gates@ndm.gov.on.ca](mailto:bruce.gates@ndm.gov.on.ca) or by telephone at (705) 670-5856.

Yours sincerely,



ORIGINAL SIGNED BY  
Blair Kite  
Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

---

**Submission Number:** 2.19330

**Date Correspondence Sent:** July 20, 1999

**Assessor:** Bruce Gates

---

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9960.00104	451545	BRISTOL	Approval After Notice	July 20, 1999

**Section:**

14 Geophysical IP

The revisions outlined in the Notice dated June 8, 1999, have been corrected. Accordingly, assessment work credit has been approved as outlined on the Declaration of Assessment Work Form accompanying this submission.

**Correspondence to:**

Resident Geologist  
South Porcupine, ON

**Recorded Holder(s) and/or Agent(s):**

Lionel Bonhomme  
TIMMINS, ONTARIO, CANADA

Assessment Files Library  
Sudbury, ON

RALPH E. ALLERSTON  
TIMMINS, ONTARIO

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**MAP SYMBOLOLOGY**

Aerial Cableway	Pipeline
Boundary	Railroad
Intentional	Single Track
District Township	Unstable Track
Urban Reserve	Abandoned
Approach	Turbine
Int. Structure	Road
Appurtenant	Municipal County Territory
Post Boundary	Access Road at junction or intersection
Bridge	Foot, Bank Area (Storage Area)
Rough, Wetland	Rapid
Building	Double line river with multiple rapids
Chimney	Reservoir
Cliff, Pit, Pile	River, Stream, Canal
Contours	Approximate boundary (faded)
Interpretation	Transmission Line
Access Road	Spot Elevation (from altimeter)
Depression	Tower
Control Point	Fence
Vertical	Wharf, Dock, Pier
Culvert	Wooded Area
Falls	Tunnel
Wall	Utility Poles
Feature Outline (Construction features, etc.)	Mine Head Frame
Flooded Land	Outcrop
Lock	
Marsh or Swamp	
Moat	

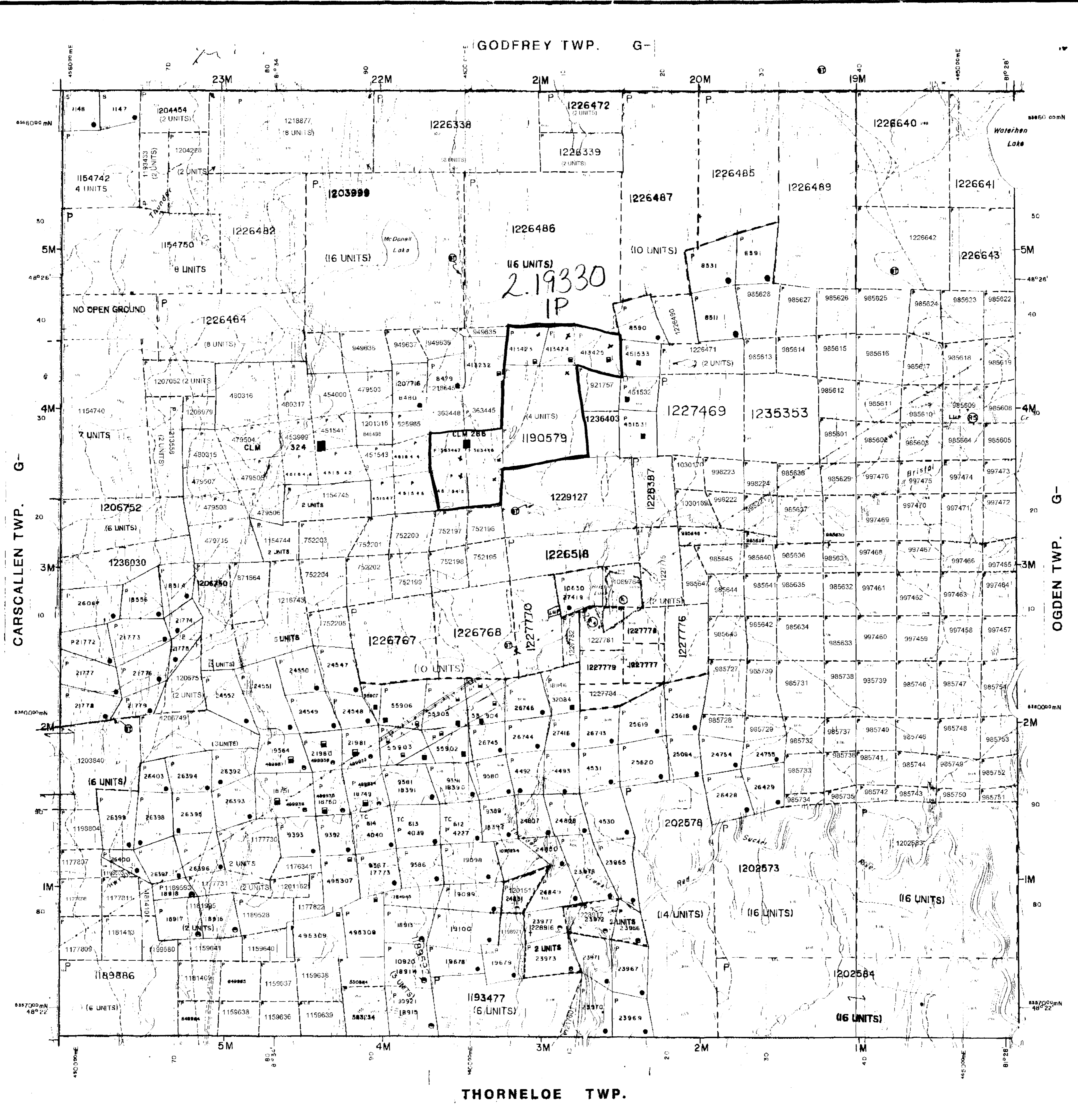
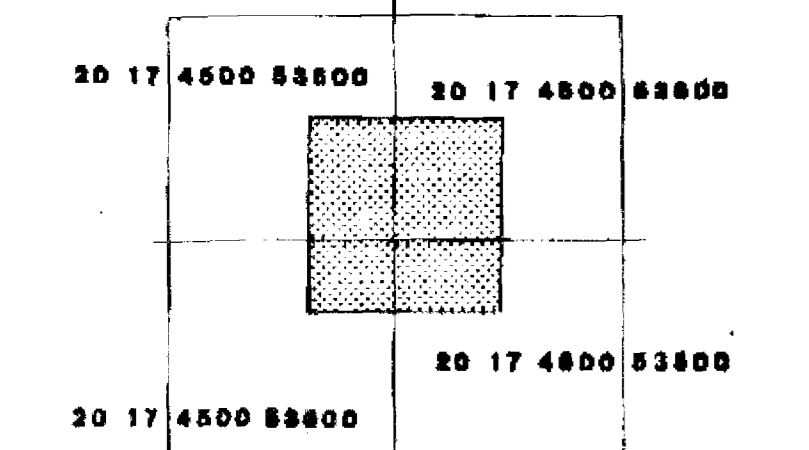
**AREAS WITHDRAWN FROM DISPOSITION**

Description	Crown No.	Date	Disposition	File
M.R.O. - MINING RIGHTS ONLY				
S.R.O. - SURFACE RIGHTS ONLY				
M.S.B. - MINING AND SURFACE RIGHTS				
	S.R.O.	164584		

MINING AND SURFACE RIGHTS WITHDRAWN FROM DISPOSITION...  
 MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING...  
 MINING AND SURFACE RIGHTS WITHDRAWN FROM DISPOSITION...  
 THIS TWP. SUBJECT TO FOREST ACTIVITY IN...  
 MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING...  
 MINING AND SURFACE RIGHTS WITHDRAWN FROM DISPOSITION...  
 MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING...  
 MINING AND SURFACE RIGHTS WITHDRAWN FROM DISPOSITION...

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

**KEY PLAN**  
For O.B.M. Map



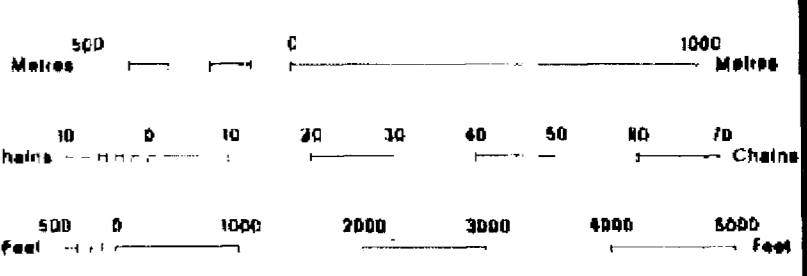
**LEGEND**

HIGHWAY AND ROUTE No.	OFF-ROAD ROADS
TRAILS	SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC.	LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES	LOT LINES
PARCEL BOUNDARY	MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY	UTILITY LINES
NON-PERENNIAL STREAM	FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN	RESERVATIONS
ORIGINAL SHORELINE	MARSH OR MUSKEG
MINES	TRAVERSE MONUMENT

**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
SURFACE RIGHTS ONLY	
MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
SURFACE RIGHTS ONLY	
MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL LAND USE PERMIT	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1930, CHAP. 380, SEC. 43, SUBSEC. 1.

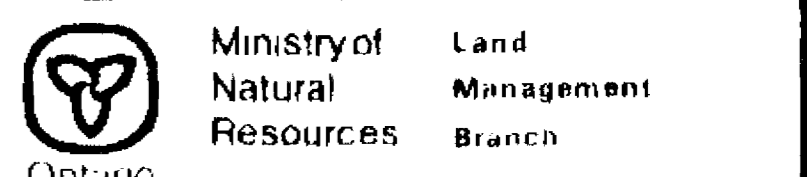


SCALE 1:20 000  
ZONE 17

- 1 APPLICATION PENDING UNDER THE PUBLIC LANDS ACT. NOTICE RECEIVED 22-DEC-81. THROUGHOUT TRAILS.
- 2 APPLICATION FOR CROWN LAND UNDER THE PUBLIC LANDS ACT. NOTICE RECEIVED 24-MAY-84. FOR EXCAVATION TOP SOIL, HOLDING STORAGE ETC.
- 3 SUBJECT TO LAND USE PERMIT INTG 40097 MARCH 26, 88.
- 4 THIS TWP. SUBJECT TO FOREST ACTIVITY IN 1989/88. AREAS DESIGNATED EXACTLY AS SUBMITTED BY MNR TIMMINS.

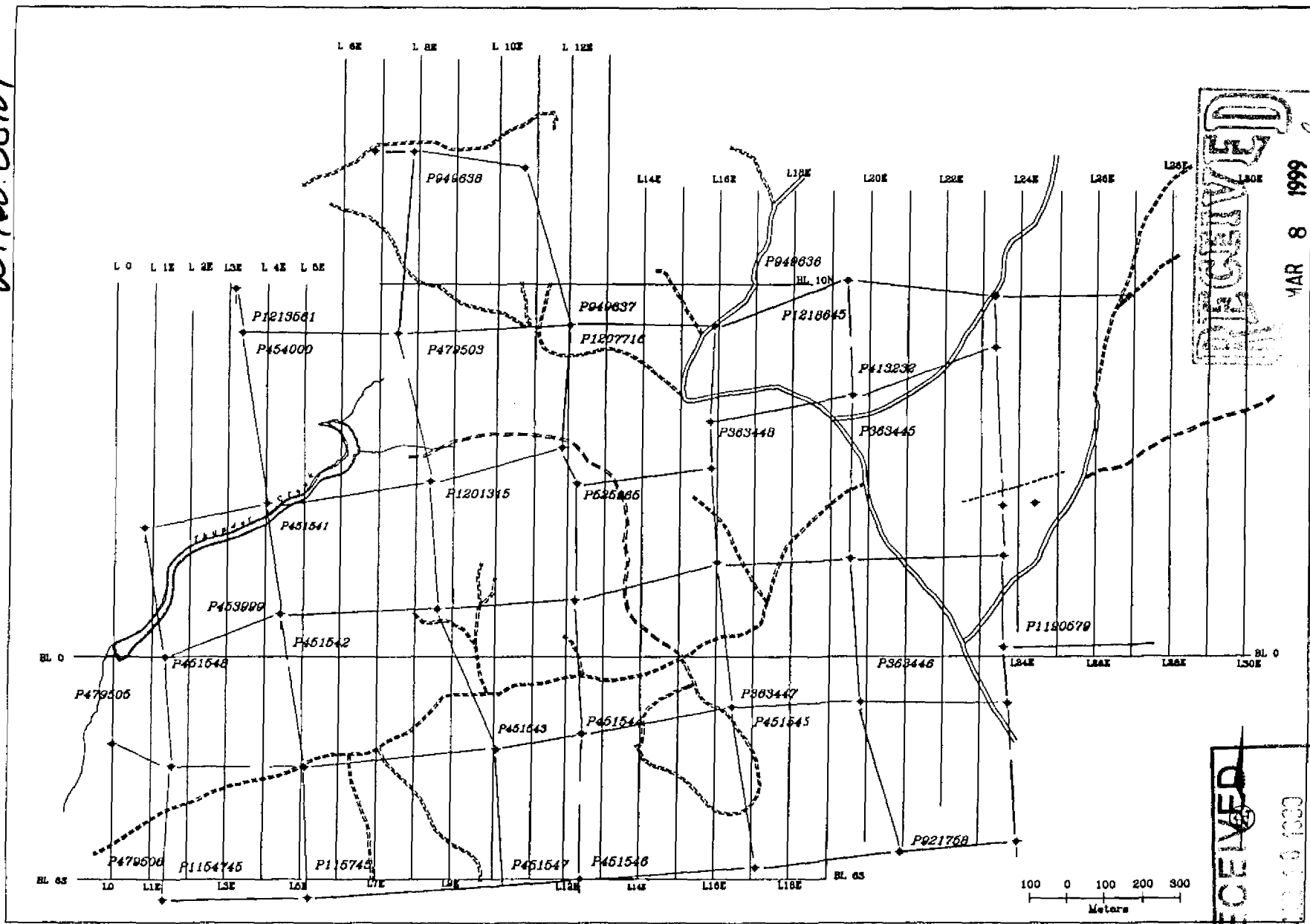
**TOWNSHIP**  
**BRISTOL**

M.N.R. ADMINISTRATIVE DISTRICT  
**TIMMINS**  
MINING DIVISION  
**PORCUPINE**  
LAND TITLES / REGISTRY DIVISION  
**COCHRANE**





W9960.00104



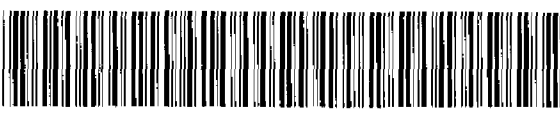
RECEIVED

MAR 8 1999

FORCUNE MINING DIVISION

RECEIVED  
MAR 10 1999  
GEOSCIENCE ASSESSMENT  
OFFICE

GRID / CLAIM MAP  
 PROSPECTORS ALLIANCE CORPORATION  
 ALLERSTON OPTION  
 Bristol Twp., Ontario  
 NTS 42 A/5,6  
 GROUND GEOPHYSICAL SURVEY



42A05NE2018 2.19330 BRISTOL

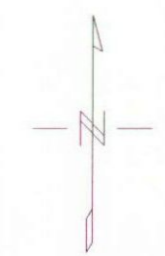
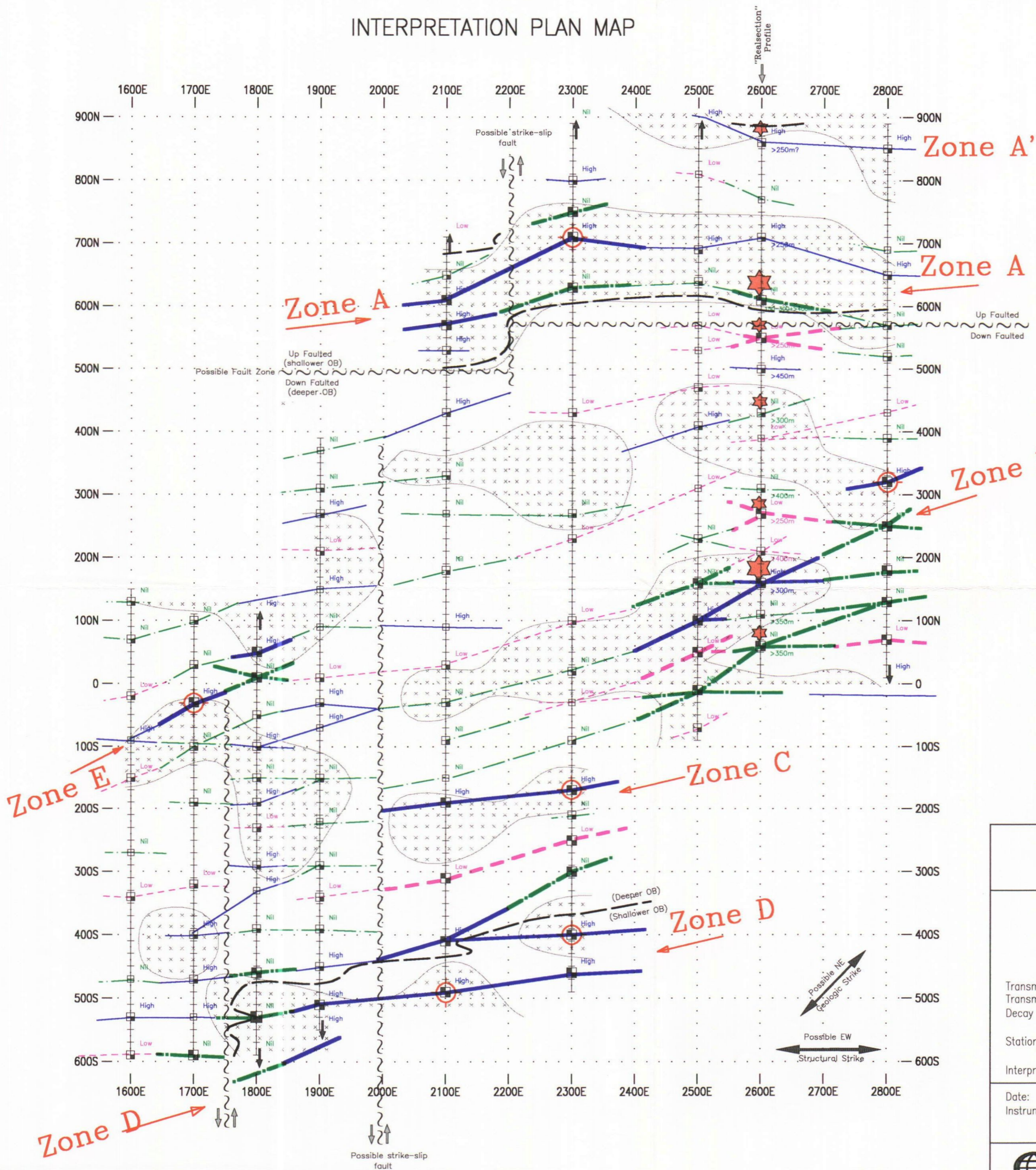
210

Surveyed by JVX Ltd.

Figure 2



# INTERPRETATION PLAN MAP



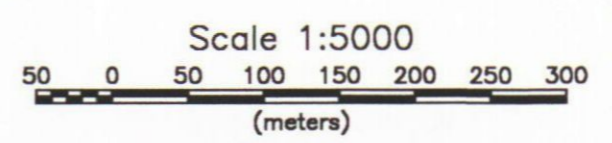
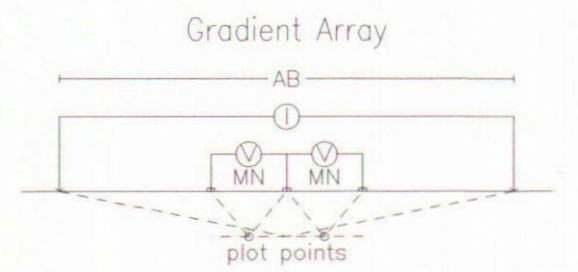
## LEGEND

### CHARGEABILITY AXES

- High Resistivity Association, major, minor
- Nil Resistivity Association, major, minor
- - - Low Resistivity Association, major, minor

### CHARGEABILITY ANOMALIES

- Very Strong
- Strong
- Moderate
- Weak
- Questionable
- High → Resistivity Association
- 200m → Estimated Target Depth
- x High Resistivity Unit
- ~ ~ ~ Interpreted Fault
- — — Geoelectric Contact
- ★ Recommended DDH Targets  
1st priority, 2nd priority
- Recommended Follow-up Targets
- Zone A** Refer to text



PROSPECTORS ALLIANCE CORP.  
BRISTOL GRID  
Bristol Twp, ON

TIME DOMAIN IP SURVEY  
Gradient Array  
INTERPRETATION PLAN MAP  
AB = 700 to 3200 meters

Transmitter Frequency 0.0625 Hz (50% duty cycle)  
Transmitter Current 1.4 - 6 Amps  
Decay Curve: QIP IP-6 Custom Semilogarithmic Windows  
10 Gates (60ms to 3540ms)  
Station Interval: 20 meters  
Interpretation by: JM Legault + CM Williston

Date: May, 1997  
Instrumentation: Rx = IRIS IP-6 (6 channels)  
Tx = PHOENIX IPT-2B(15 kW) + MG-30(30 kVA)

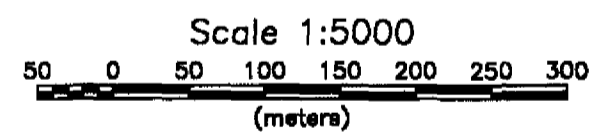
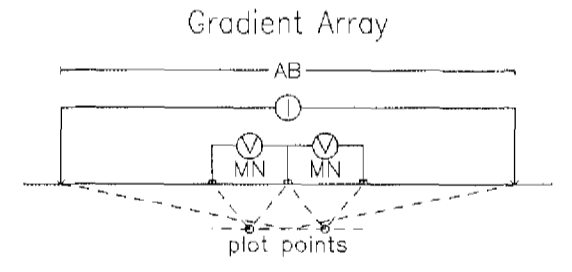
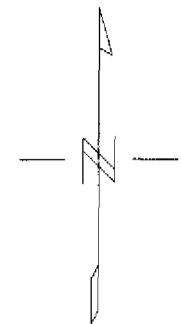
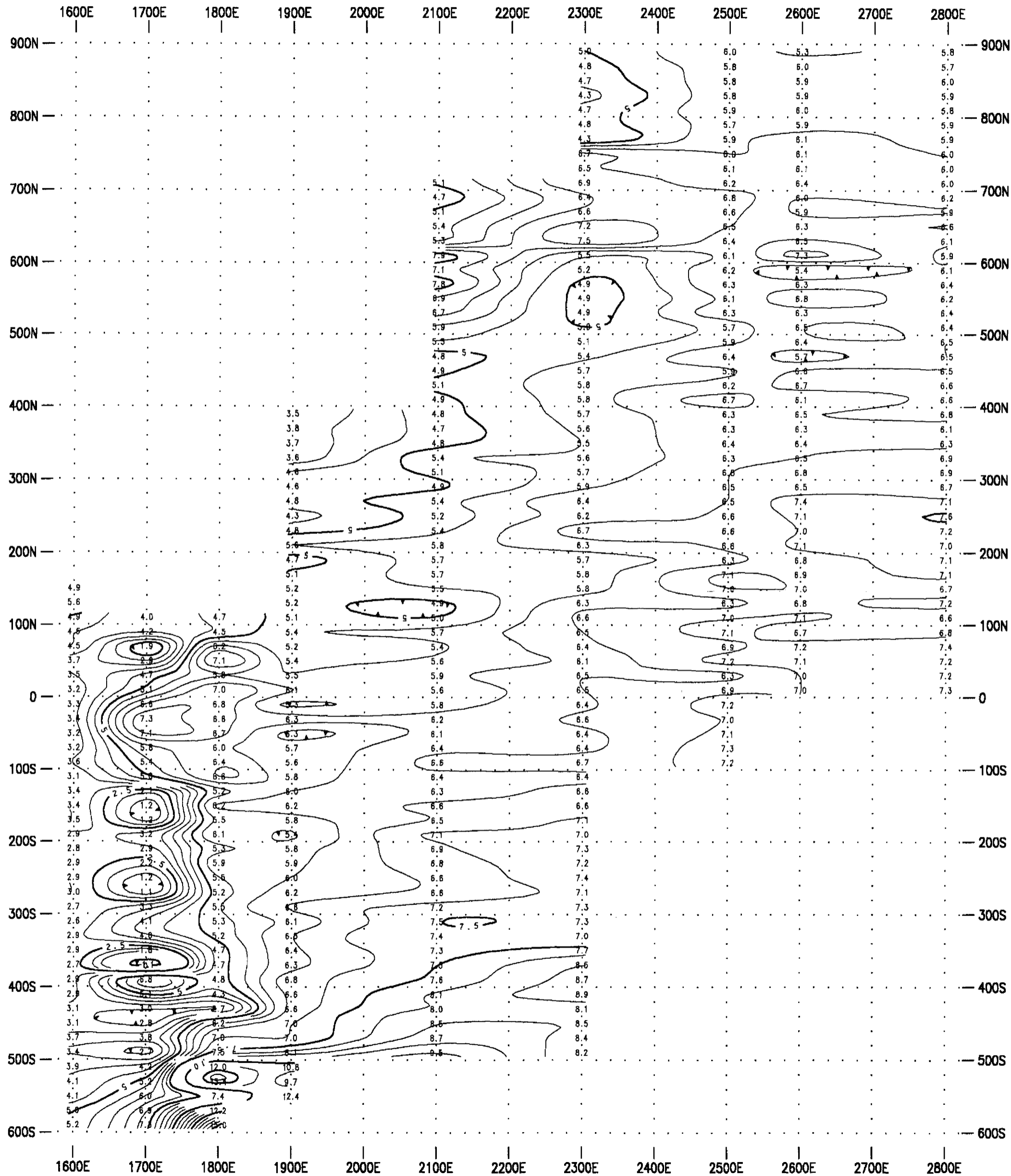


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**QUANTEC IP INC.**  
DWG. #: P-188-PLAN-INT-1





# TOTAL CHARGEABILITY (mV/V)



**PROSPECTORS ALLIANCE CORP.**  
BRISTOL GRID  
Bristol Twp., ON

TIME DOMAIN IP SURVEY  
Gradient Array  
**TOTAL CHARGEABILITY**  
AB= 3200 METERS

Transmitter Frequency 0.0625 Hz (50% duty cycle)  
Transmitter Current 5.6 - 6 Amps  
Decay Curve: QIP IP-6 Custom Semilogarithmic Windows  
10 Gates (60ms to 3540ms)  
Station Interval: 20m  
Chargeability Contour Interval: 0.5, 2.5 mV/V  
Colour Scale: Equal Area Zoning

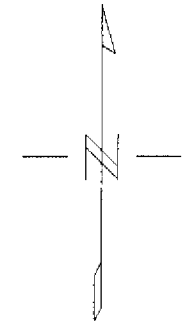
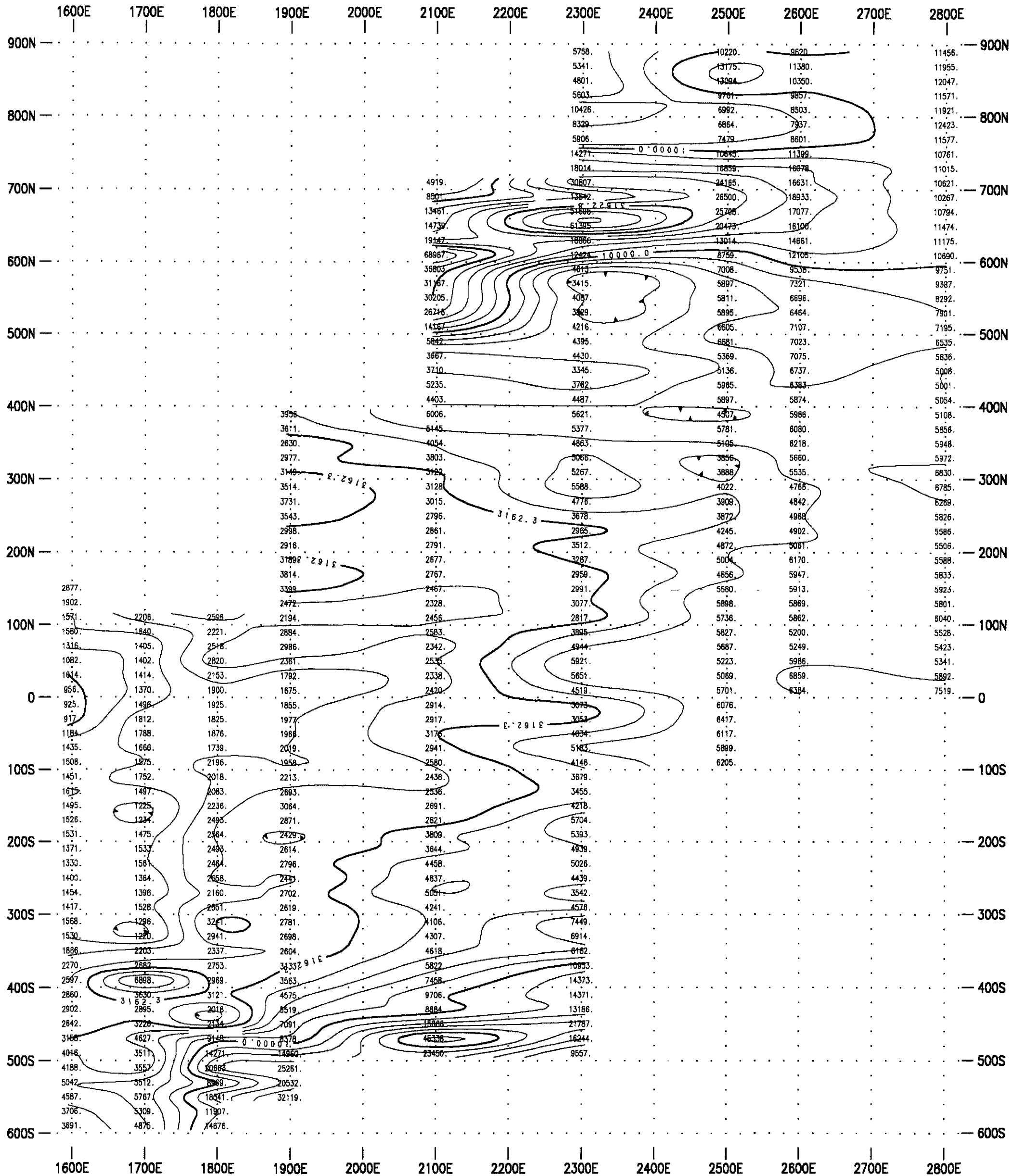
Date: MAY 1997  
Instrumentation: Rx = iRIS IP-6 (6 channels)  
Tx = PHOENIX IPT-2B(15 kW) + MG-30(30 kVA)



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DWG. #: P-188-PLAN-CHG-3

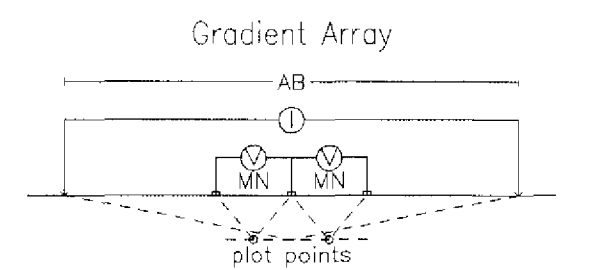


# APPARENT RESISTIVITY (ohm-metres)



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MAR 10 1999  
GEOSCIENCE ASSESSMENT  
OFFICE

2019



Scale 1:5000  
50 0 50 100 150 200 250 300  
(meters)

**PROSPECTORS ALLIANCE CORP.**  
BRISTOL GRID  
Bristol Twp., ON

**TIME DOMAIN IP SURVEY**  
Gradient Array  
**APPARENT RESISTIVITY**  
AB= 3200 METERS

Transmitter Frequency 0.0625 Hz (50% duty cycle)  
Transmitter Current 5.6 - 6 Amps  
Decay Curve: QIP IP-6 Custom Semilogarithmic Windows  
10 Gates (60ms to 3540ms)  
Station Interval: 20m  
Resistivity Contour Interval: 10 levels/log decade  
Colour Scale: Equal Area Zoning

Date: MAY 1997  
Instrumentation: Rx = IRIS IP-6 (6 channels)  
Tx = PHOENIX IPT-2B(15 kW) + MG-30(30 kVA)

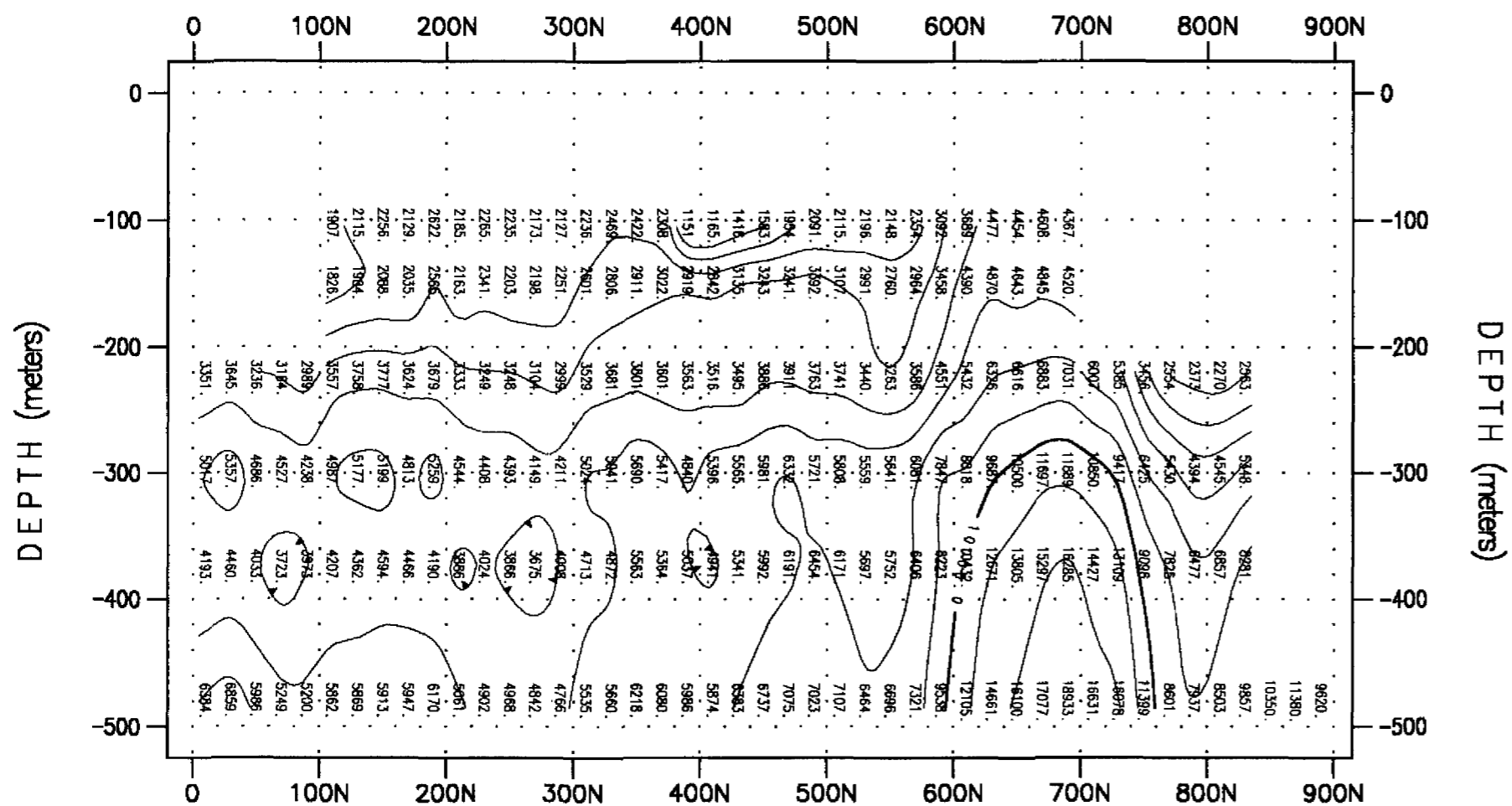


Surveyed & Processed by:  
**QUANTEC IP INC.**  
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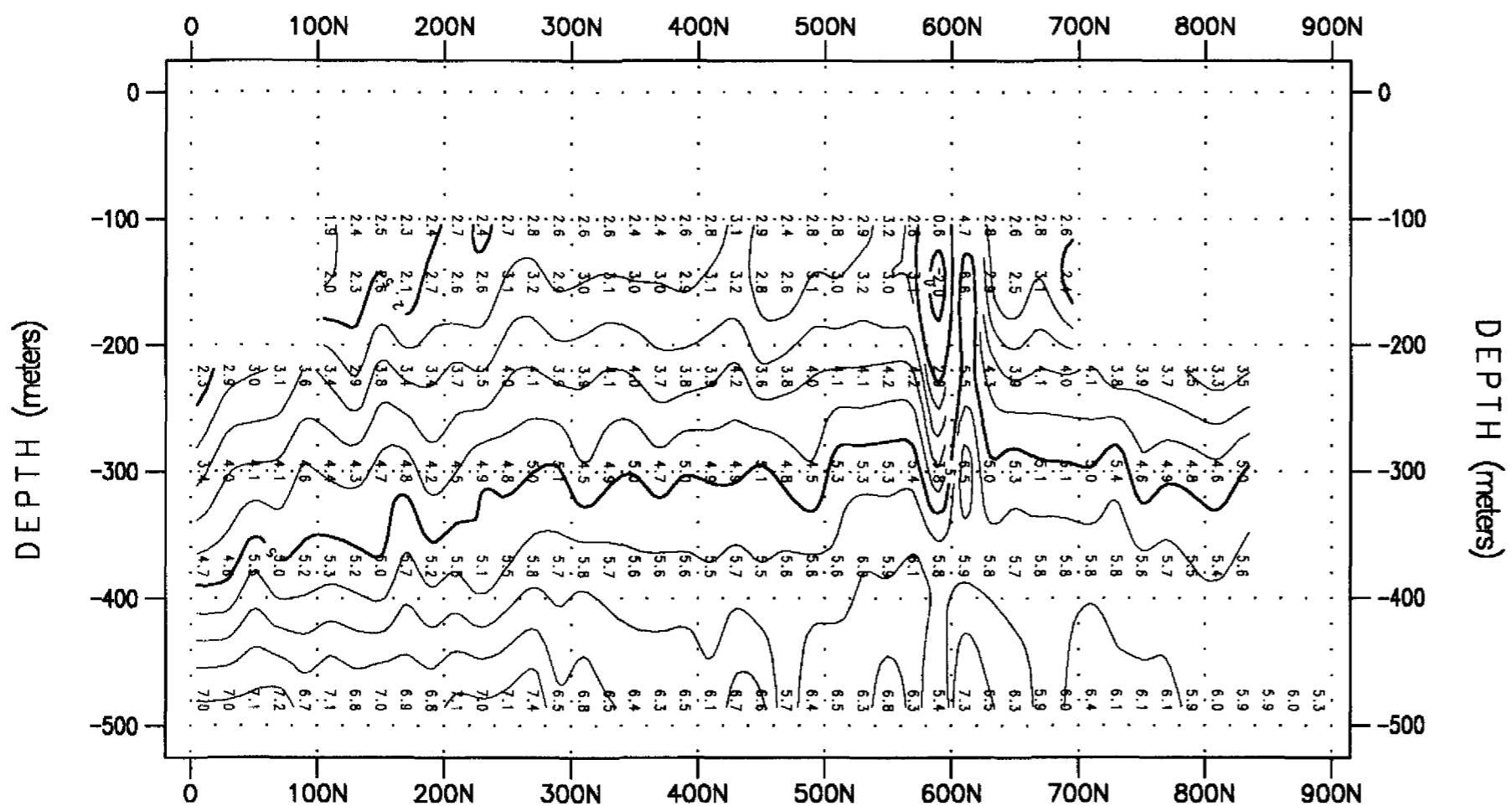


42A05NE2018 2.19330 BRISTOL 240

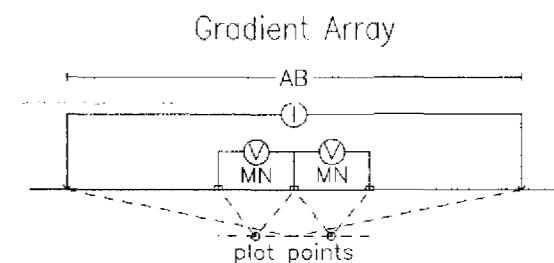
# APPARENT RESISTIVITY (ohm-metres)



# TOTAL CHARGEABILITY (mV/V)



LINE 26+00E



Scale 1:5000  
50 0 50 100 150 200 250 300  
(meters)

PROSPECTORS ALLIANCE CORP.  
BRISTOL GRID  
Bristol Twp., ON

TIME DOMAIN IP SURVEY  
REALSECTION L26+00E  
AB=700 to 3200 meters

Transmitter Frequency: 0.0625 Hz (50% duty cycle)  
Transmitter Current: 5.3 - 6.0 Amps  
Decay Curve: QIP IP-6 Custom Semi-logarithmic Windows  
10 Gates (15ms + 3540ms)

Station Interval:  
Resistivity Contour Interval: 10 levels/log decade  
Chargeability Contour Interval: 0.5, 2.5 mV/V  
Colour Scale: Equal Area Zoning

Date: MAY 1997  
Instrumentation: Rx = IRIS IP-6 (6 channels)  
Tx = PHOENIX IPT-2B(15 kW) + MG-30(30 kVA)



Surveyed & Processed by:  
**QUANTEC IP INC.**  
DWG. #: P-188-RSIP-26+00E

P-19330

