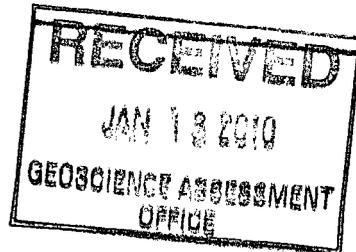


2.43876

**APPENDIX J**  
**Tri Origin Exploration IP Survey Report On the**  
**North Abitibi Project**





**Tri Origin Exploration  
Limited  
IP Survey**

**on the  
North Abitibi Project**

**Logistics Report**

Quantec Geoscience, Inc.  
101 King Street  
Porcupine, Ontario P0N 1C0  
Tel: 705-235-2166  
Fax: 705-235-2255

CA000596C  
Jeff Warne  
Mary Ohren  
Roger Sharpe  
July, 2008

## **SUMMARY**

### **INTRODUCTION**

An induced polarization (IP) geophysical survey was undertaken on the North Abitibi Project, located in located about 95 km northeast of Cochrane in Tomlinson / Hoblitzell townships, Ontario, Canada. The survey was comprised of nineteen lines of IP.

The IP technique is a geophysical technique for measuring resistivity and chargeability data from a local source signal originating at a dipole located in the survey area. Equipment manufactured by Phoenix Geophysics Ltd. was used to transmit the IP signals. Equipment manufactured by IRIS Instruments was used to receive the IP signals.

Approximately 17 kilometers of pole-dipole IP were surveyed on nineteen profiles using 25 meter dipoles. Data were collected in the time domain using a .125 Hz (2 seconds on / 2 seconds off) waveform. The IP data are presented as pseudo-sections. The primary data source is the raw instrument dump files. Formatted plots and databases are present as Geosoft™ files.

This report discusses the logistics and production of the IP surveys.

### **SURVEY OBJECTIVES**

The IP surveys on the North Abitibi Project were undertaken for mineral exploration.

The primary purpose of the survey was to map chargeable and conductive signatures with sufficient resolution to provide guidance for the purpose of locating drill targets.

### **PROJECT RESULTS**

The IP data collected were of excellent quality. The central portion of the survey, lines 8200E to 5700E, have the most anomalous resistivity and chargeability features. The western most lines have few geophysically interesting features. The eastern most lines have a deep IP anomaly beginning at station 3100N. Increasing the survey density and inverting the data would be good next steps to improve understanding of the geology of the area of interest.

## TABLE OF CONTENTS

<b>Summary .....</b>	<b>2</b>
<b>INTRODUCTION .....</b>	<b>2</b>
<b>SURVEY OBJECTIVES.....</b>	<b>2</b>
<b>PROJECT RESULTS.....</b>	<b>2</b>
<b>TABLE OF CONTENTS.....</b>	<b>3</b>
<b>1. Introduction .....</b>	<b>4</b>
<b>2. Location Access.....</b>	<b>5</b>
<b>2.1 Location.....</b>	<b>5</b>
<b>2.2 Survey Grid .....</b>	<b>5</b>
<b>2.3 Personnel .....</b>	<b>5</b>
<b>3. SURVEY Parameters and Procedures.....</b>	<b>7</b>
<b>3.1 Survey Equipment .....</b>	<b>7</b>
<b>3.2 Survey Parameters .....</b>	<b>7</b>
<b>3.3 Accuracy and repeatability .....</b>	<b>8</b>
<b>3.4 Survey Procedures .....</b>	<b>8</b>
<b>3.5 Survey Coverage .....</b>	<b>8</b>
<b>4. Data Processing And Presentation .....</b>	<b>9</b>
<b>4.1 Data Processing.....</b>	<b>9</b>
<b>4.2 Data Presentation .....</b>	<b>9</b>
<b>5. Discussion .....</b>	<b>10</b>
<b>6. Appendix A: Daily Production Summary .....</b>	<b>11</b>
<b>7. Appendix B: Theoretical Basis and Survey Procedures .....</b>	<b>13</b>
<b>8. Appendix C Instrument Specifications .....</b>	<b>15</b>

## 1. INTRODUCTION

**Project #:** CA00596C  
**Client:** TriOrigin  
**Contact:** Rob Bartram, Bob Valliant  
**Survey Types:** Induced Polarization (IP)  
**Survey Date:** 20 June-9 July, 2008  
**Project Area:** North Abitibi  
**General Location:** Tomlinson / Hoblitzell townships of Ontario, Canada  
**UTM Zone 17:** NAD 83

## 2. LOCATION ACCESS

### 2.1 LOCATION

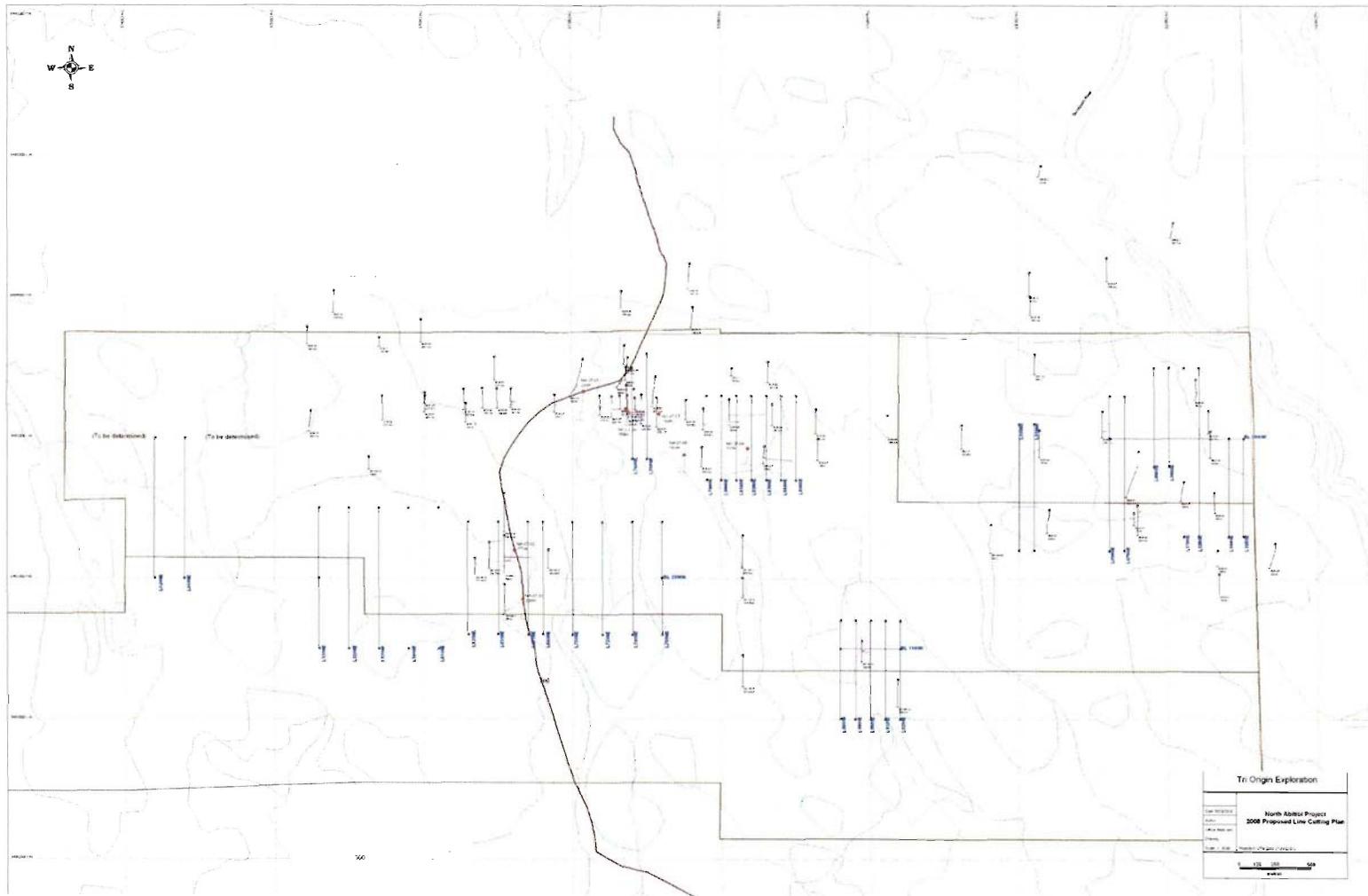
**Project Area:** North Abitibi  
**General Location:** Tomlinson / Hoblitzell townships of Ontario, Canada  
**UTM Zone 17:** NAD 83  
**Base of Operations:** On site  
**Mode of Access:** 4x4 truck and on foot

### 2.2 SURVEY GRID

**Coordinate Reference System:** Local exploration grid (Figure 1)  
**Established:** Prior to survey execution  
**Line Direction:** North-South  
**Line Separation:** Variable between 100-400 meters  
**Station Interval:** 25 m  
**Survey Dates:** 20 June-9 July, 2008

### 2.3 PERSONNEL

**Project Manager:** Jeff Warne  
**Geophysical Operator:** Jesse Maw  
**Field Assistants:** Erick Hotvedt  
Richard Chasse  
Eric Johnson  
Greg Commanda



**Figure 1: Figure 1 shows the grid established prior to survey execution. Drill hole information as well as lines not surveyed are shown. Map provided by TriOrigin.**

### 3. SURVEY PARAMETERS AND PROCEDURES

#### 3.1 SURVEY EQUIPMENT

**Receiver:** IRIS Elrec Pro (10 channel/Time Domain)  
**Transmitter:** Phoenix IPT-1  
**Receiver Electrodes:** 1 m stainless steel rods

#### 3.2 SURVEY PARAMETERS

**Array:** Pole-Dipole (see Figure 2)

**Infinite Location:**

Line	Coordinates
5700, 5900, 6100, 6300 6500, 6700, 7000, 7200	17 U 577526 5484286
100, 700, 900	17 U 577327 5485274
7400, 8000, 8200	17 U 579422 5484887
9100, 9200, 4400	17 U 581039 5483090

**Waveform:** 0.125 Hz time-domain (50% duty cycle, 2 sec. on/ 2 sec. off)

**Receiver Dipole Spacing (MN):** 25m

**Receiver decay sampling:** IRIS ELREC Pro semi-logarithmic (Table 1)

**Measured Parameters:** Chargeability in mV/V using 20 time slices (Table 1)  
 Primary Voltage in mV  
 Current in A

Mode	Delay	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
<i>Elrec Pro Semi-Logarithmic</i>	40	40	40	40	40	40	40	80	80	80	80	80	80	80	160	160	160	160	160	160	160

**Table 1: Decay Curve Sampling for IRIS Elrec Pro semi-logarithmic mode. Times in ms from shutoff (delay) or previous window end.**

### 3.3 ACCURACY AND REPEATABILITY

**Chargeability:** Repeats within 10%.

**Resistivity:** (Primary voltage and current) repeats within 10%

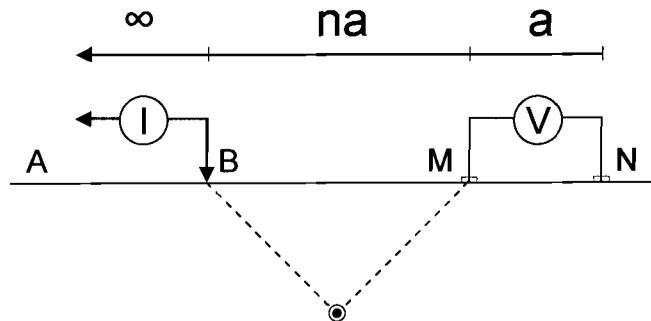
### 3.4 SURVEY PROCEDURES

Client established all survey lines with stations staked at 25 meter intervals and marked in local grid coordinates.

Figure 2 shows the electrode array configuration for a pole-dipole survey. 'A' and 'B' designate transmitter electrodes, 'I' designates the current source (transmitter and generator), 'M' and 'N' designate potential electrodes, 'V' designates the potential measurement (receiver). The 'n' coefficient is used to designate transmitter and receiver separation, and is traditionally an integer between 1 and 6. Using a multi-channel receiver several potential measurements are taken at once having a series of 'n' spacings (typically 6 or 8).

Readings were accepted or rejected according to their repeatability. Generally two readings were collected at each station, more where the data appeared to be noisy.

For this survey, pole-dipole data were collected using traditional  $n=1$  through 10 configuration and an 'a' spacing of 25 meters.



Plot point

**Figure 2. Electrode Array configuration for the pole-dipole survey.**

### 3.5 SURVEY COVERAGE

**Pole-Dipole IP Survey Coverage:** Approximately 17 kilometers on 19 lines of various length. Data were collected in the frequency domain using one base frequency at .125 Hz. The IP data are presented as pseudo-sections in Section 5.

## 4. DATA PROCESSING AND PRESENTATION

### 4.1 DATA PROCESSING

The raw IP data are presented in IRIS Elrec Pro dump files. The data were formatted in IRIS Syscal software and then brought into the Geosoft Oasis™ processing package with the IP module. Geosoft Oasis™ was used for quality control and to produce pseudo-sections of resistivity and chargeability.

### 4.2 DATA PRESENTATION

#### 4.2.1 Raw Data:

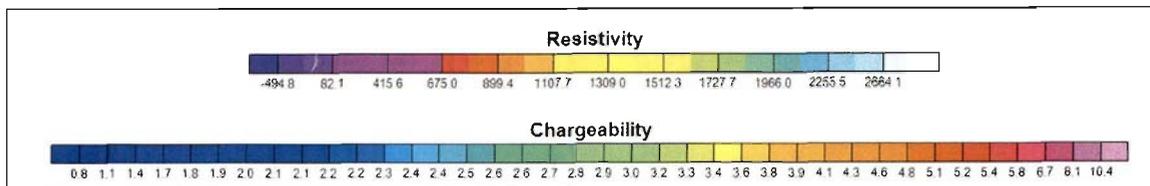
The raw data are presented as IRIS Elrec Pro dump files. The original instrument dumps are named by date. The merged and edited dumps for each survey line are named with the line number.

#### 4.2.2 Processed data.

The data were processed using the Geosoft Oasis™ processing package for quality control and to produce pseudo-sections. The databases and digital plots are included on the Digital Archive CD which accompanies this report. A consistent color bar shown in Figure 3 was used for all of the plotted sections. The Geosoft file on the CD contains the following types of files:

- a) GEOSOFT™ .GDB database format. One file called IP.GDB contains the entire survey.
- b) GEOSOFT™ format grids and maps created by the Oasis™ IP processing platform.

- |       |                        |
|-------|------------------------|
| *.GRD | Geosoft grid files     |
| *.MAP | Geosoft map files      |
| *.GDB | Geosoft database files |



**Figure 3. IP and resistivity color bars used to create the pseudo-sections**

## 5. DISCUSSION

The IP method is a remote-sensing technique. By far the most important factors controlling resistivity are the porosity and pore-salinity of rocks, not their mineral composition (except for metallic sulphides in sufficiently large volumes). Chargeability is controlled by the presence, orientation and distribution of polarizable minerals (metals, submetallic sulphides and oxides, and graphite). The signal can be affected by minerals in amounts as small as a parts per hundred. IP surveys are generally excellent, high-resolution tools in differentiating zones of structure and anomalous geochemistry.

Near the north end of Line 7400E there is a deep IP anomaly. This line also serves as a connector between two survey areas, one in the south with lines 7600E to 5500E and one in the north with lines 8500E to 7400E. Line 8200E, 8000E and 7400E share a deep IP anomaly centered station 3075N despite the separation of 800 meters.

Lines 6100E, 6300E, 6500E, 6700E have similar features with high resistivity through the line and an IP anomaly on the northern end.

Line 4400E in the western most portion of the survey shows little variation in IP or resistivity.

Lines 9100E, 9200E in a more southern and east section of survey lines are generally lacking in anomalous features in the resistivity and in the IP.

Line 700E, 900E, 1100E and 1400E in the eastern section of the survey exhibit similar features at corresponding locations. Notably there is a IP anomaly at the higher 'n' centered at 3100N.

For the entire survey, inversion would be an informative next step to help define anomalies seen in the survey. Also increasing the density of survey lines in the areas of interest could help determine the best places to drill. Inversion takes into account the topography of the lines and can change the location and relative depth of the resistivity and IP signatures.

Respectfully submitted,  
Quantec Geoscience, Inc.

Mary Ohren, B. Sc.  
Roger Sharpe, B.Sc.

**6. APPENDIX A: DAILY PRODUCTION SUMMARY**

PRODUCTION SUMMARY						
Tri Origin - North Abitibi IP/RESISTIVITY SURVEY						
Date	Description	Grid	Line	Start	End	Total (m)
20-Jun-08	Mob to jobsite. Set up camp. No survey.					
21-Jun-08	Set up camp. Deploy infinite, Tx and Rx wires. No survey.					
22-Jun-08	IP survey. Deploy Tx wire on line 6300. Did not get to grid until late in the morning because of intense thunderstorms. Transmitter malfunction at first current injection. Made repairs for 2 hours. Left the grid early because of returning thunderstorms.	Block 1	6500	2400N	1900N	500
23-Jun-08	IP survey. Deploy Tx wire on line 6100. Recover Tx wire on 6300.	Block 1	6500	1900N	1600N	300
		Block 1	6300	1600N	2400N	800
		Block 1	6100	2500N	2200N	300
						<b>1400</b>
24-Jun-08	IP survey. Deploy Tx wire on line 5900. Recovered Tx wires on line 6100 and part of line 6500. More problems with Transmitter. Switched to backup transmitter. Help from drilling contractor.	Block 1	6100	2200N	1500N	700
		Block 1	5900	1500N	2500N	1000
						<b>1700</b>
25-Jun-08	IP survey. Recover all Tx wires west of line 6500. Deploy Rx wires and Tx wires to line 6700. Help from drilling contractor.	Block 1	5700	2500N	1500N	1000
		Block 1	6700	2400N	1900N	500
						<b>1500</b>
26-Jun-08	IP survey. Deploy Tx wires on lines 7000 and 7200. Recover Tx wires on lines 6700 and 7000.	Block 1	6700	1900N	1600N	300
			7000	1600N	2400N	800
			7200	2400N	1975N	425
						<b>1525</b>
27-Jun-08	IP survey. Recover Tx wires on lines 7000 and 7200. Deploy wire on line 7400.	Block 1	7200	1975N	1600N	375
			7400	1600N	2400N	800
						<b>1175</b>
28-Jun-08	IP survey. Recover and redeploy infinite for Block 3. Deploy Tx wires on line 7400 north of 2400.	Block 3	7400	2400N	3500N	1100
29-Jun-08	IP survey. Deploy Tx wires on line 8000. Recover Tx wires on line 7400. Thunderstorms forced us to leave grid early.	Block 3	8000	3300N	2700N	600

**PRODUCTION SUMMARY**

Tri Origin - North Abitibi						
IP/RESISTIVITY SURVEY						
Date	Description	Grid	Line	Start	End	Total (m)
30-Jun-08	IP survey. Tx malfunction. Replace parts with backup Tx leaving only one Tx in repair. Deploy Tx wire on line 8200. Recover all remaining Tx and Rx wires on block 3. Recover infinite from block 3. Recon block 2.	Block 3	8200	2700N	3300N	600
1-Jul-08	IP survey. Deploy infinite on block 2. Deploy Tx and Rx wires to line 0100 approximately 1.1km from road with 450m bushcrash to access. Line 0100 has many dead fall trees. Recover Rx and Tx wires and 500m power lead.	Block 2	100	3100N	2100N	1000
2-Jul-08	IP survey. Deploy Tx wire on line 700. Thunderstorms. Left grid early.	Block 2	700	2200N	2475N	275
3-Jul-08	IP survey. Recover Tx wire on line 700 and 900. Deploy Tx wire on line 1100.	Block 2	700	2475N	3300N	825
			900	2800N	3500N	700
						1525
4-Jul-08	IP survey. Deploy Tx wire on 1400.	Block 2	1100	3500N	2300N	1200
			1400	3000N	2300	700
						1900
5-Jul-08	Recover all Tx and Rx wires from Block 2. Recover infinite. Deploy long power lead to block 4. Deploy Tx wires and Rx wires to line 9200. Deploy infinite to new location. No survey.					
6-Jul-08	IP survey. Recover all Tx and Rx wires from block 4. Recover infinite wire.	Block 4	9200	1100N	1700N	600
			9100	1700N	1100N	600
						1200
7-Jul-08	IP survey. Deploy Tx and Rx wires to Block 5. Infinite served as power lead from road to survey area well over 2 km away. CB (infinite) located on block 1 grid, 2000N, 6700E. Recover all Tx and Rx wires from the field.	Block 5	4400	2000N	3000N	1000
8-Jul-08	Break camp and demobilize to Timmins.					
						<b>Totals</b>
						17000

? 900

? 700

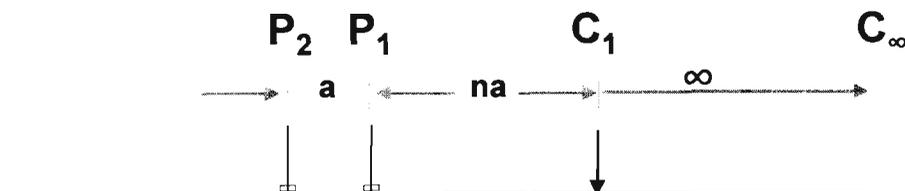
? 700

## 7. APPENDIX B: THEORETICAL BASIS AND SURVEY PROCEDURES

Resistivity is among the most variable of all geophysical parameters, with a range exceeding 106. Because most minerals are fundamentally insulators, with the exception of massive accumulations of metallic and sub-metallic ores, which are rare occurrences, the resistivity of rocks depends primarily on their porosity, permeability and the salinity of fluids contained (ionic conduction), according to Archie's Law. In contrast, the chargeability responds to the presence of polarizable minerals (metals, sub-metallic 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.

The collected data sets are reduced to apparent resistivity and total chargeability as explained in the following figures and equations. Figure B1 shows the electrode configuration and nomenclature.

### POLE-DIPOLE ARRAY



**Figure B1: Pole-Dipole Electrode Array<sup>1</sup>**

The apparent resistivity is given by:

$$\rho_a = 2\pi n(n+1)a \times \frac{V_p}{I} \Omega \cdot m$$

where:

“a” is the P<sub>1</sub>-P<sub>2</sub> (MN) dipole spacing (meters)

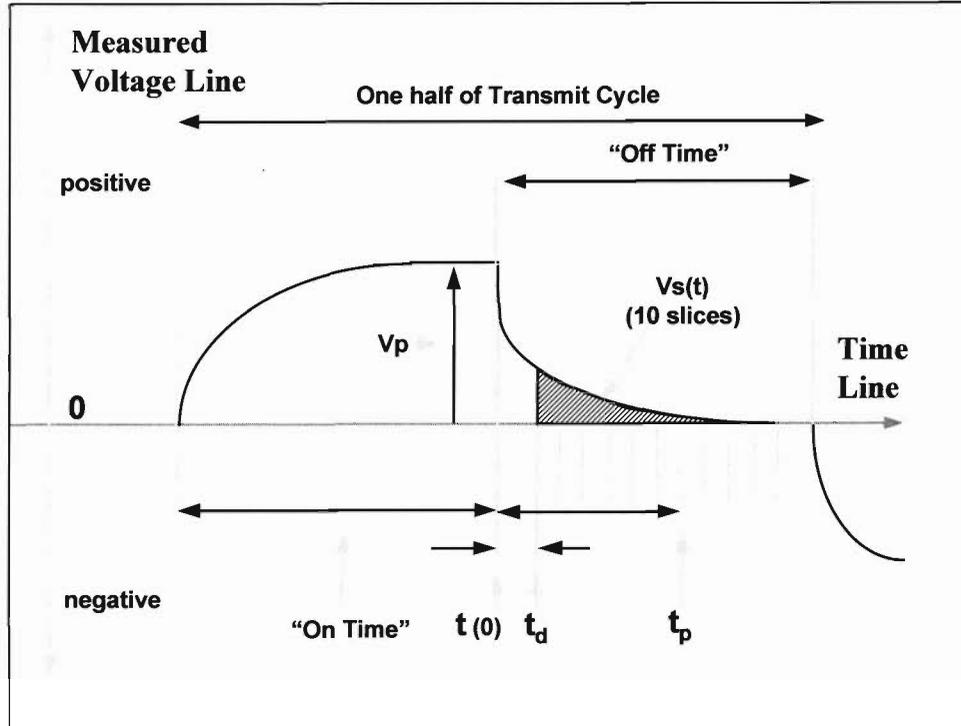
“n” is the separation parameter between C<sub>1</sub> and P<sub>1</sub>P<sub>2</sub>

“V<sub>p</sub>” is the primary voltage measured between P<sub>1</sub>P<sub>2</sub> (volts)

“I” is the output current between C<sub>1</sub>C<sub>2</sub> (amperes)

<sup>1</sup> From Telford, et al., *Applied Geophysics*, Cambridge U Press, New York, 1983..

In the time domain, Total Chargeability is measured and calculated as shown in Figure B2.



**Figure B2: Measurement of the IP Effect in the Time-Domain<sup>2</sup>**

The total chargeability<sup>3</sup> is given by:

$$M_{\text{Total}} = \frac{1}{V_p} \sum_{i=1}^{10} \int_{t_i}^{t_{i+1}} V_s(t) dt \quad \text{millivolt - seconds per volt}$$

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

The sets are then ready for plotting and profiling using the Geosoft Sushi<sup>TM</sup> and Oasis<sup>TM</sup> programs. The Apparent Resistivity and total Chargeability results of the dipole-dipole surveys are presented in pseudo section format. All resistivities are in ohm-m and chargeabilities in mV/V.

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

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

## 8. APPENDIX C INSTRUMENT SPECIFICATIONS

# ELREC PRO

## Ten channel IP receiver for mineral exploration

IRIS Instruments is pleased to announce the **ELREC PRO**, its new ten channel IP receiver, featuring 20 chargeability windows and a graphic LCD display.

The following improvements have been introduced in this new receiver with respect to the previous ELREC 10 unit :



- **HARDWARE FEATURES :**

- **the size** has been reduced by 4 cm in height : 31x 21x 21 cm
- **the power consumption** has been reduced by a ratio of three, which means that with less batteries it is possible to have a longer autonomy.
- as a result, the new system is **2 kg lighter** than the ELREC 10, with a weight of 6 kg only.
- the data (21 000 readings max.) are stored in flash memories not requiring any lithium battery for safeguard.
- the new system is compatible with the existing **SWITCH Plus boxes** for automatic switching of electrodes according to preset sequences. In such a case, the receiver is used as a single channel unit ; with **SWITCH Pro boxes** (to be developed next), the full ten channel capability of the ELREC PRO will be usable for a higher acquisition speed.

- **SOFTWARE FEATURES :**

- **each new reading** is stored as a specific unit file, making easier the grouping of readings corresponding to a given profile, specially for the last (edge) points of a line obtained with a smaller number of dipoles than the main part of the profile.
- **the data format** is compatible with the **PROSYS software**, which means that the operator can easily visualize the numerical values of the data, automatically sort them according to the standard deviation of the chargeability measurement, merge two files stored under different names, introduce the elevation of each electrode, etc...
- **the ELECTRE II software** can be used to define and upload preset sequences of measurements according to any type of electrode array.



**IRIS INSTRUMENTS**

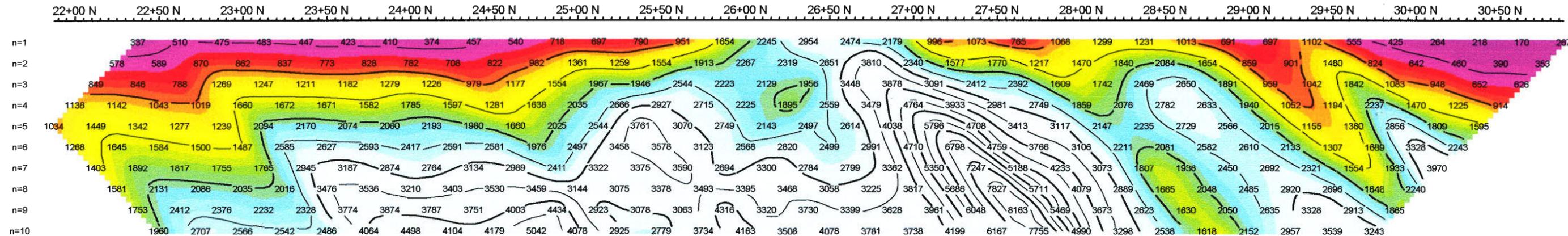
1, avenue Buffon, BP 6007, Orléans cedex 2, France  
Ph : + 33 2 38 63 81 00 mail : [insins@attglobal.net](mailto:insins@attglobal.net)  
Fax : + 33 2 38 63 81 82 web : [iris-instruments.com](http://iris-instruments.com)

### Phoenix IP Transmitter Model IPT-1

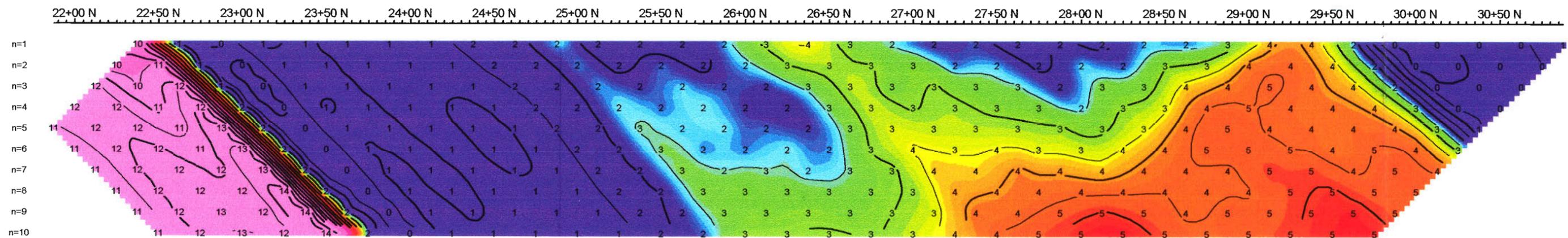
- Power Sources:** Phoenix MG-3 (2.5KVA, 60V, 3 phase, 400 Hz) motor generator
- Output Voltage:** 75 to 1200V in 5 steps.  
75 - 150 - 300 - 600 - 1200V  
Voltage is continuously variable  $\pm 20\%$  from each nominal step value.
- Output Power:** Maximum continuous output power is 2.5KW.
- Maximum Current:** 10 Amps
- Ammeter Ranges:** 30m A, 100m A, 300mA, 1A, 3A, and 10A full scale.
- Meter Display:** A meter function switch selects the display of current level, regulation status, input frequency, output voltage, line voltage
- Current regulation:** 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.
- Output waveform:** 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.
- Operating Temperature:** -40°C to +60°C
- Frequency Stability:**  $\pm 1\%$  from -40°C to +60°C is standard. A precision time base is optionally available for coherent detection and phase IP measurements.
- Transient Protection:** Current is turned off automatically if it exceeds 150% full scale or is less than 5% full scale.
- Dimensions:** 18cm x 40cm x 53cm
- Weight:**

17 kg

Resistivity  
Ohm-m



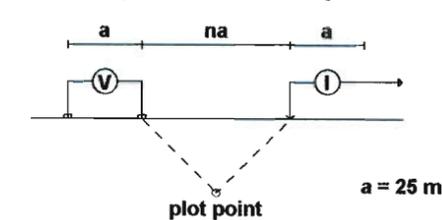
NewmontIP  
mV/V



### Pseudo Section Plot

1+00 E

Dipole-Pole Array

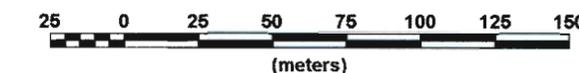


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



Scale 1:2500



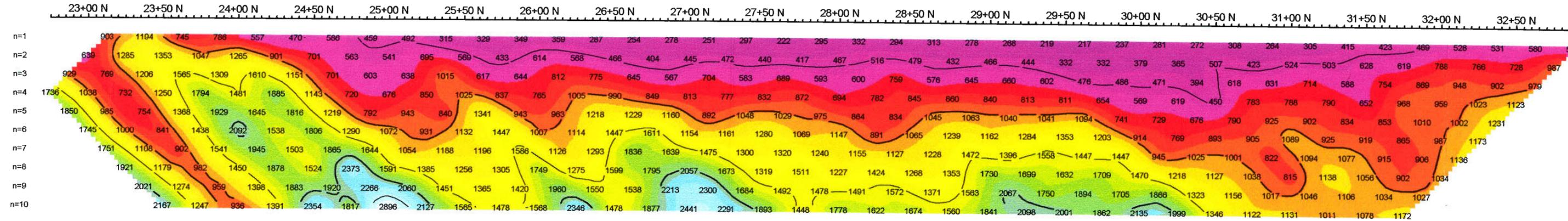
Tri Origin Exploration Ltd.

INDUCED POLARIZATION SURVEY  
 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

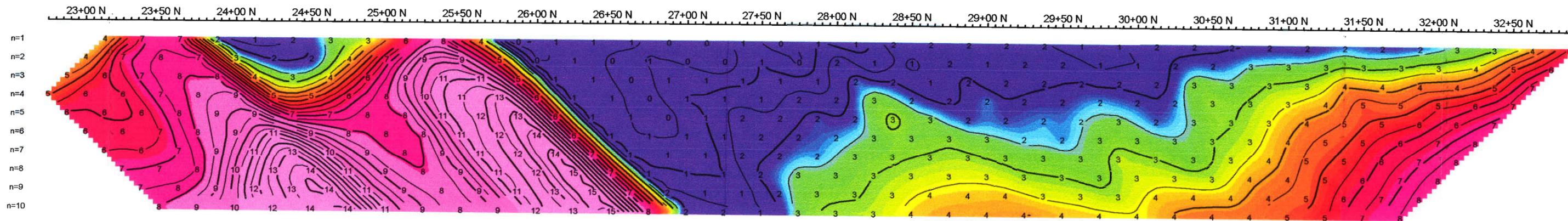
Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
 Quantec Geoscience USA, Inc.

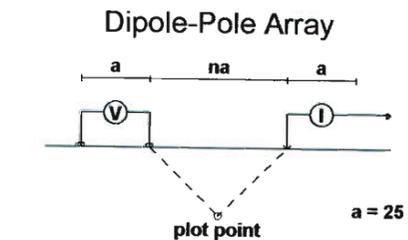
Resistivity  
Ohm-m



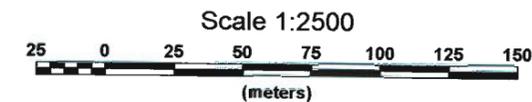
NewmontIP  
mV/V



### Pseudo Section Plot 7+00 E

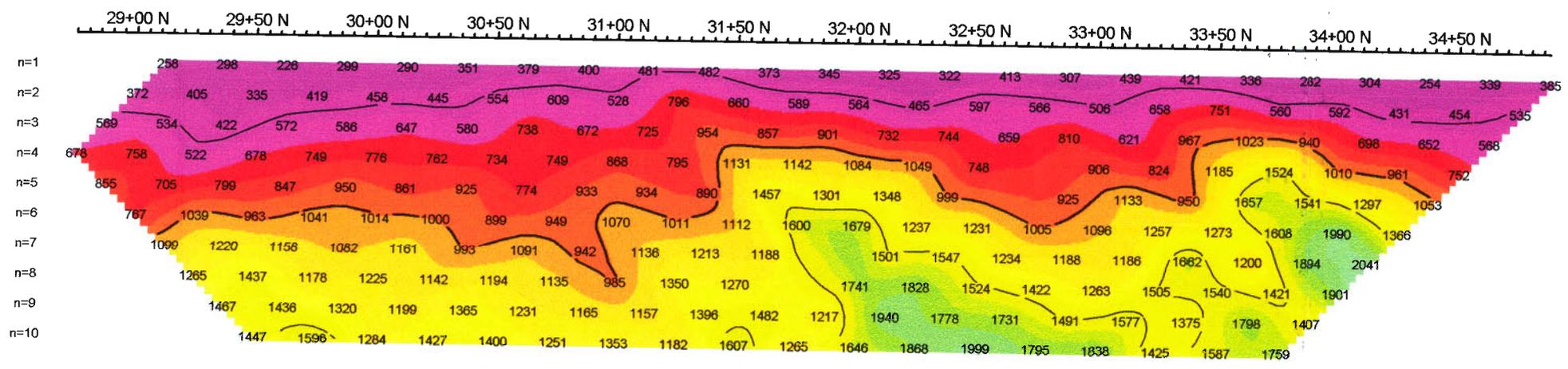


**SURVEY SPECIFICATIONS**  
 Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



*Tri Origin Exploration Ltd.*  
**INDUCED POLARIZATION SURVEY**  
*North Abitibi Project*  
**Tomlinson/Hoblitzell Twps., ON, Canada**  
 Date: July, 2008  
 Project: CA00596C  
 Surveyed and processed by  
**Quantec Geoscience USA, Inc.**

Resistivity  
Ohm-m

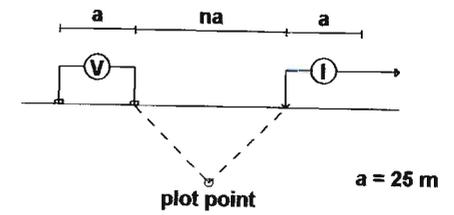


Resistivity  
Ohm-m

### Pseudo Section Plot

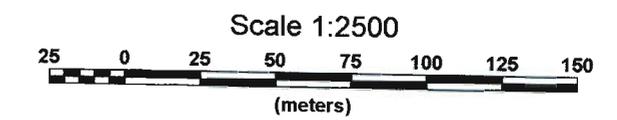
9+00 E

#### Dipole-Pole Array

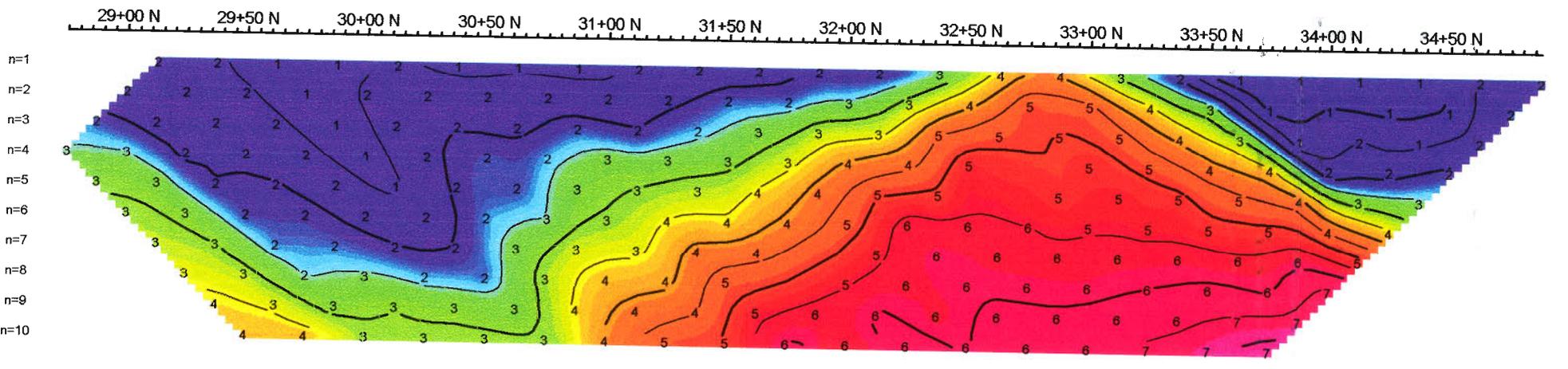


#### SURVEY SPECIFICATIONS

- Method: Time Domain IP/Resistivity
- Receiver: IRIS Elrec Pro
- Transmitter: Phoenix IPT-1
- Waveform: Time Domain
- Time Gates: 20 semi-logarithmic spaced windows
- Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)
- Repeatability: 10% total measurements
- Electrodes: 1m stainless steel rods



NewmontIP  
mV/V



NewmontIP  
mV/V

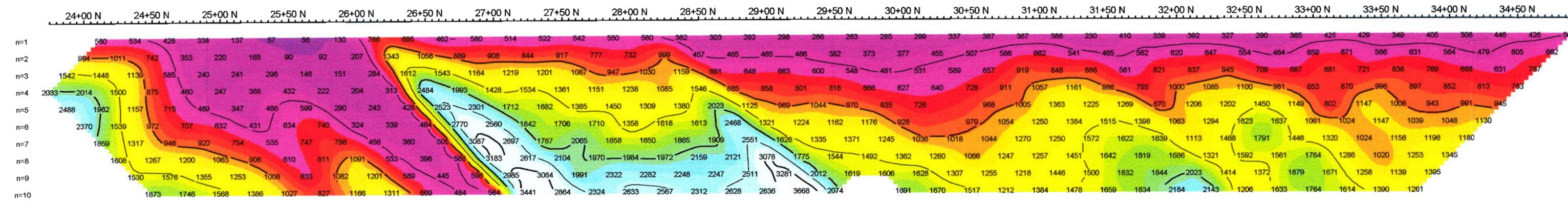
Tri Origin Exploration Ltd.

**INDUCED POLARIZATION SURVEY**  
North Abitibi Project  
Tomlinson/Hoblitzell Twps., ON, Canada

Date: July, 2008  
Project: CA00596C

Surveyed and processed by  
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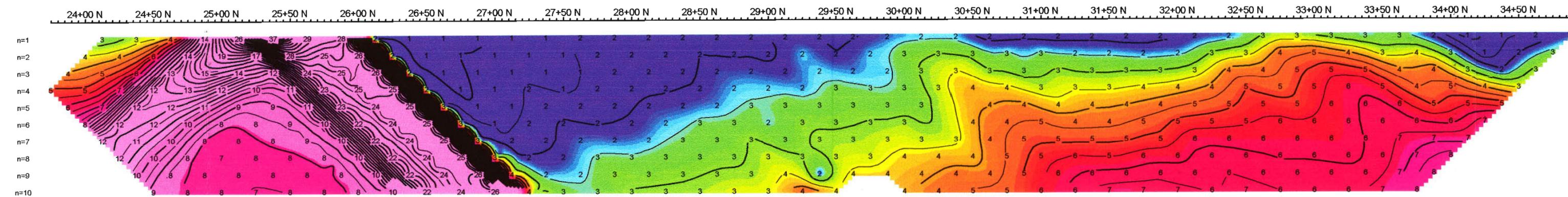
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

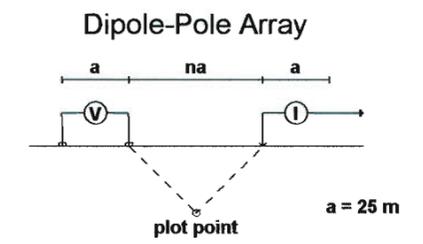
NewmontIP  
mVV



NewmontIP  
mVV

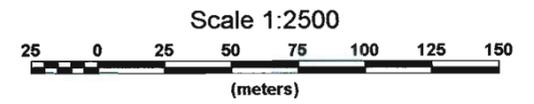
n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot 11+00 E



#### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Eirec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



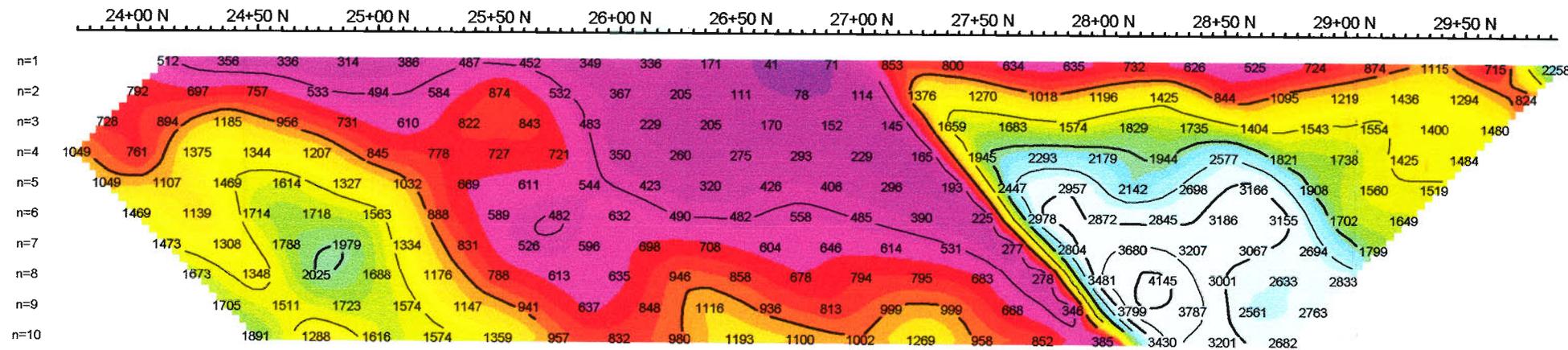
Tri Origin Exploration Ltd.

**INDUCED POLARIZATION SURVEY**  
 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

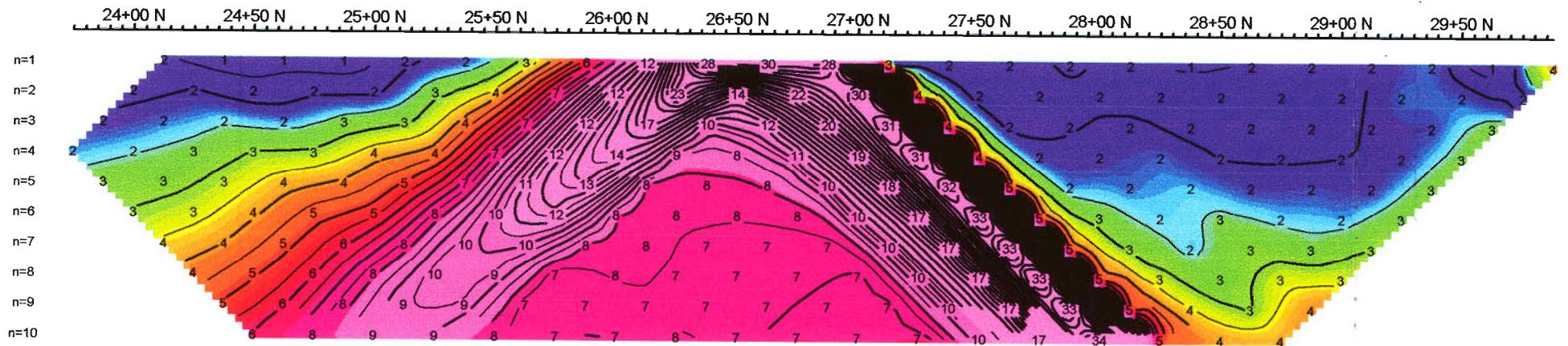
Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
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Resistivity  
Ohm-m



NewmontIP  
mV/V

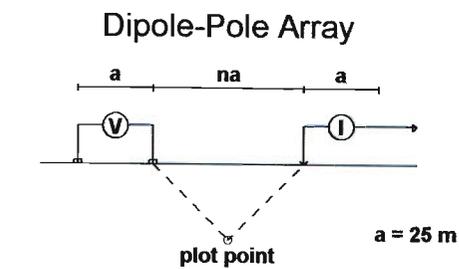


Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot

14+00 E

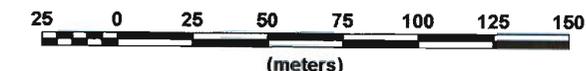


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



Scale 1:2500



NewmontIP  
mV/V

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

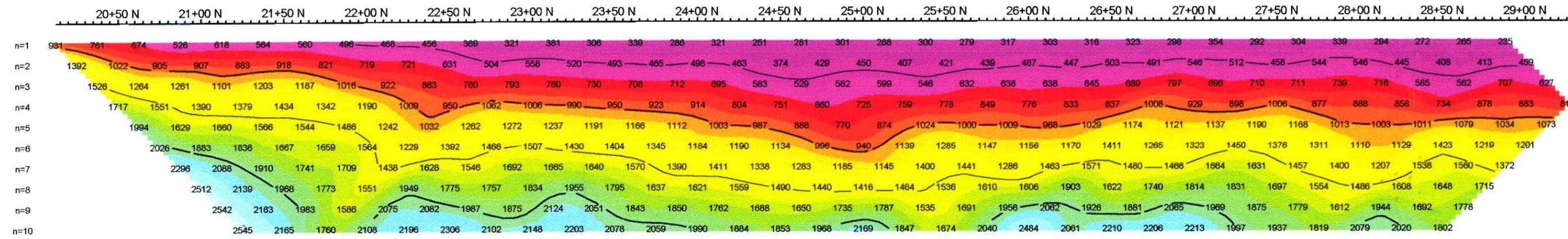
Tri Origin Exploration Ltd.

INDUCED POLARIZATION SURVEY  
 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

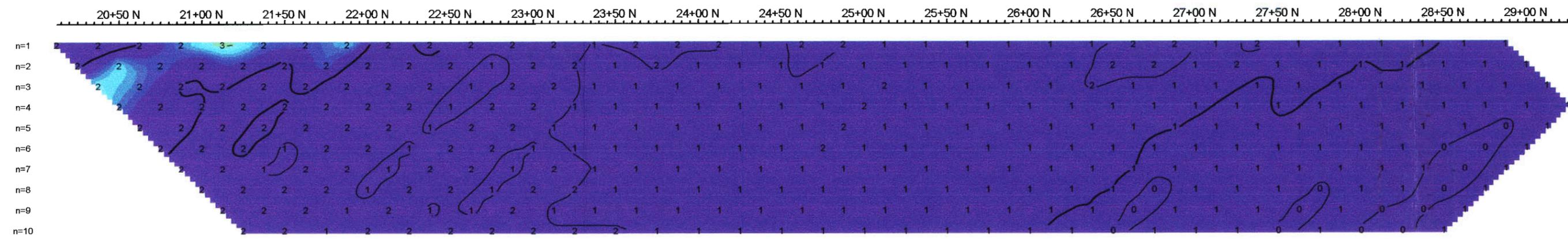
Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
 Quantec Geoscience USA, Inc.

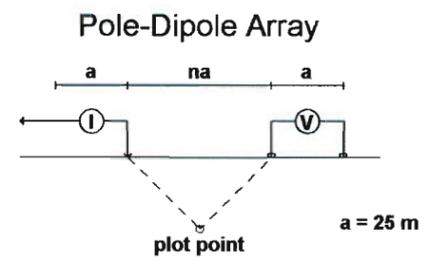
Resistivity  
Ohm-m



NewmontIP  
mVV

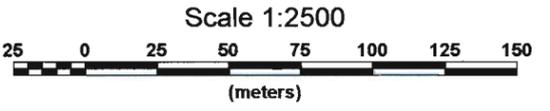


### Pseudo Section Plot 44+00 E



#### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



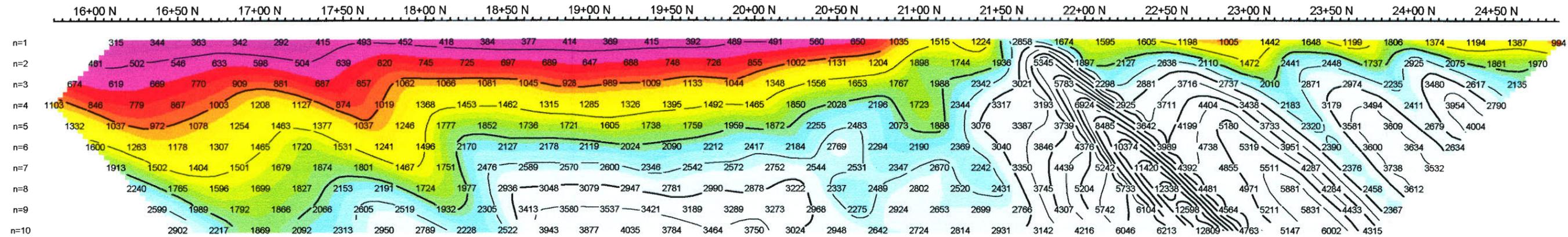
Tri Origin Exploration Ltd.

INDUCED POLARIZATION SURVEY  
 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

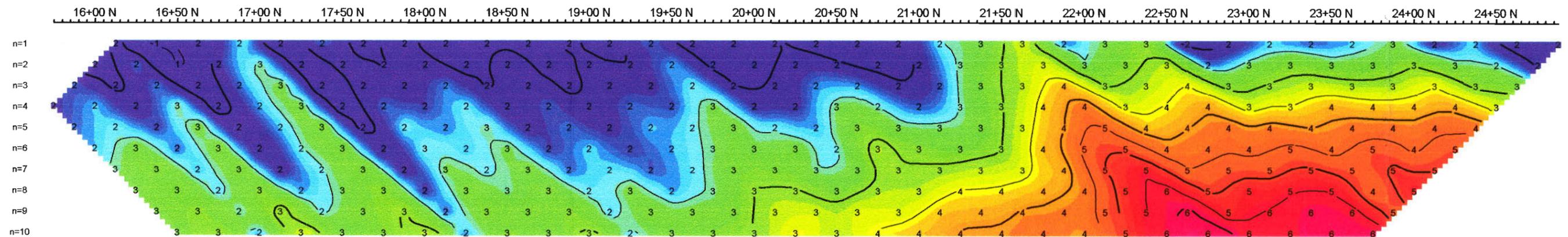
Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
 Quantec Geoscience USA, Inc.

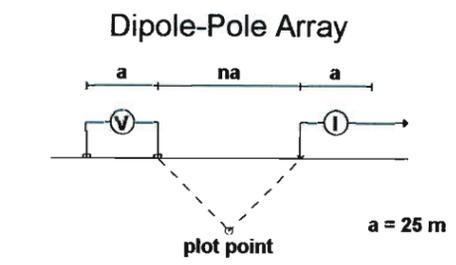
Resistivity  
Ohm-m



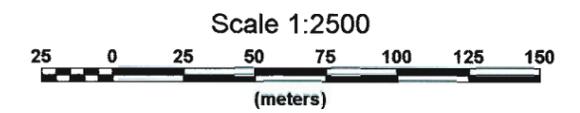
NewmontIP  
mV/V



### Pseudo Section Plot 57+00 E



**SURVEY SPECIFICATIONS**  
 Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods

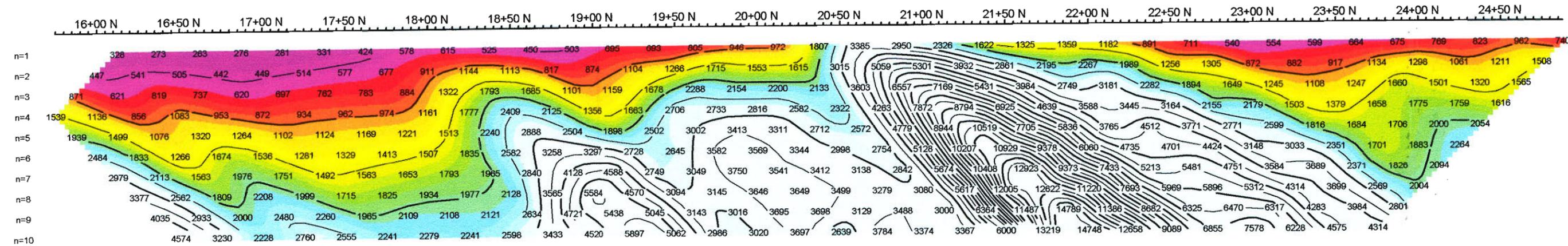


Tri Origin Exploration Ltd.  
**INDUCED POLARIZATION SURVEY**  
 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
 Quantec Geoscience USA, Inc.

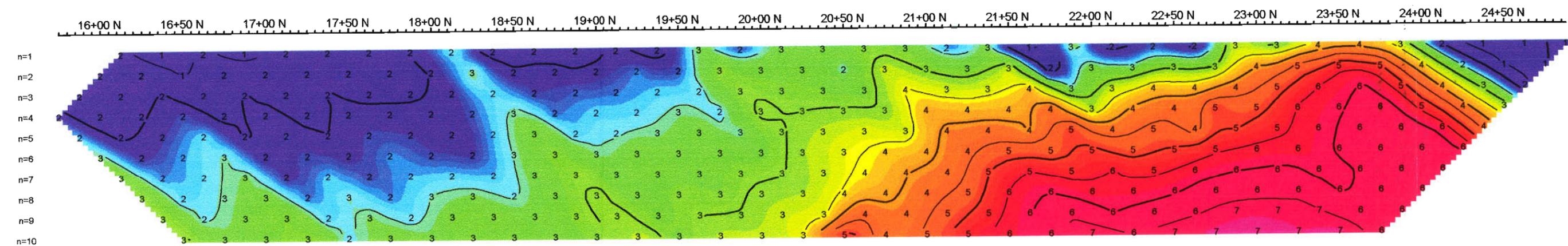
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

NewmontIP  
mV/V



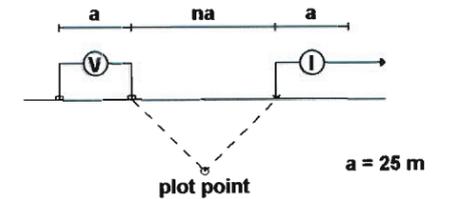
NewmontIP  
mV/V

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot

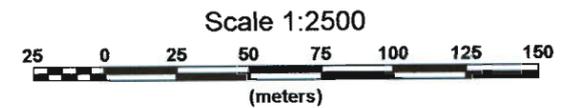
59+00 E

Dipole-Pole Array



### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
Receiver: IRIS Elrec Pro  
Transmitter: Phoenix IPT-1  
Waveform: Time Domain  
Time Gates: 20 semi-logarithmic spaced windows  
Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
Repeatability: 10% total measurements  
Electrodes: 1m stainless steel rods



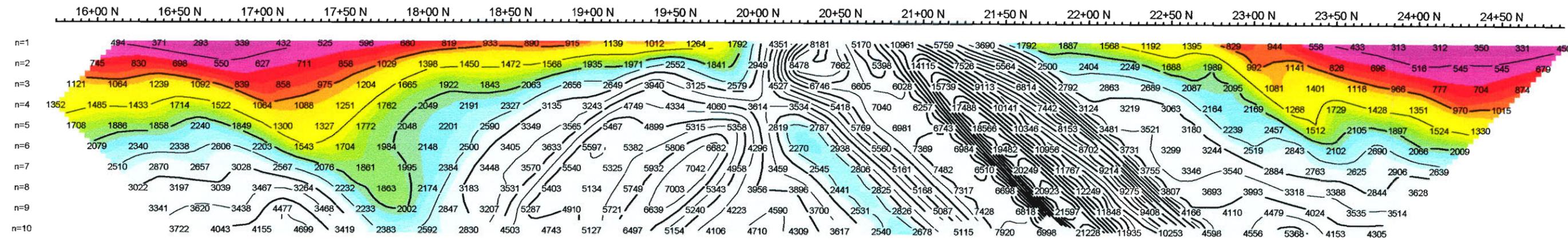
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North Abitibi Project  
Tomlinson/Hoblitzell Twps., ON, Canada

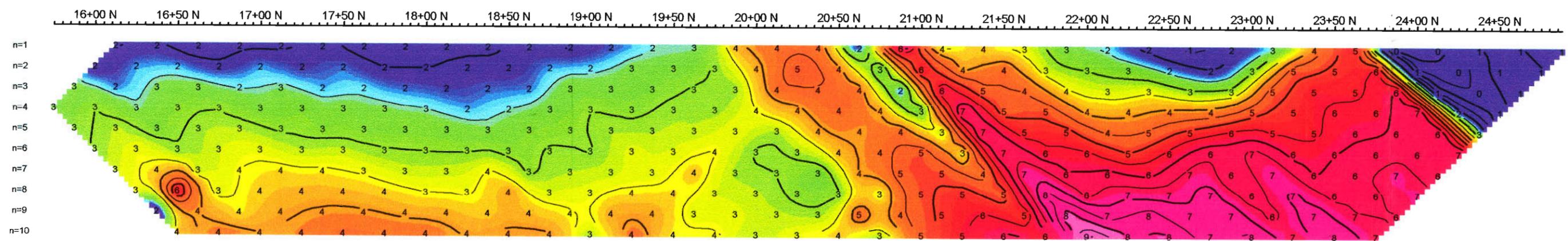
Date: July, 2008  
Project: CA00596C

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Resistivity  
Ohm-m

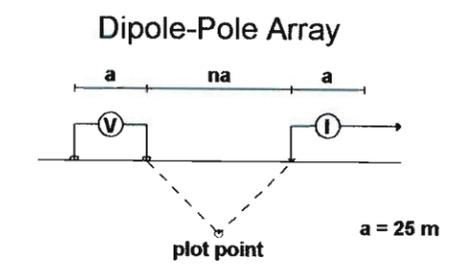


NewmontIP  
mV/V



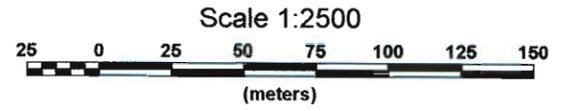
### Pseudo Section Plot

61+00 E



### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
Receiver: IRIS Elrec Pro  
Transmitter: Phoenix IPT-1  
Waveform: Time Domain  
Time Gates: 20 semi-logarithmic spaced windows  
Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
Repeatability: 10% total measurements  
Electrodes: 1m stainless steel rods



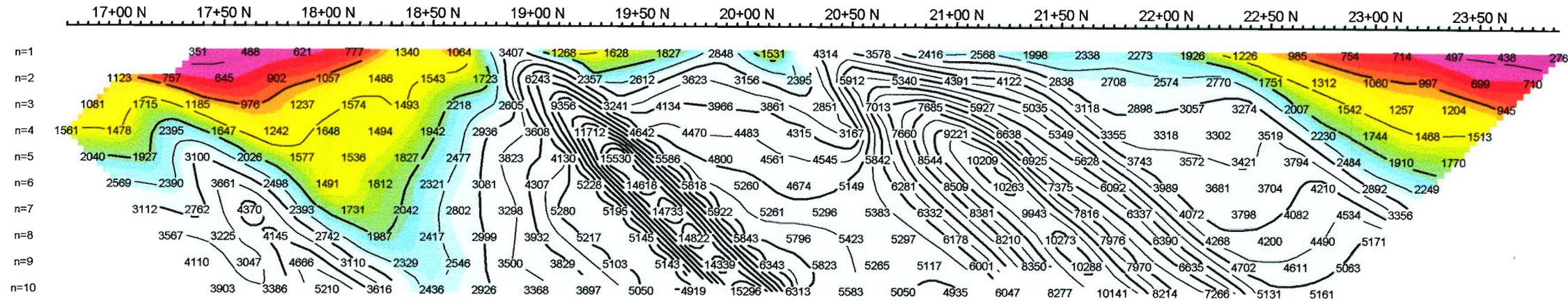
Tri Origin Exploration Ltd.

**INDUCED POLARIZATION SURVEY**  
North Abitibi Project  
Tomlinson/Hoblitzell Twps., ON, Canada

Date: July, 2008  
Project: CA00596C

Surveyed and processed by  
Quantec Geoscience USA, Inc.

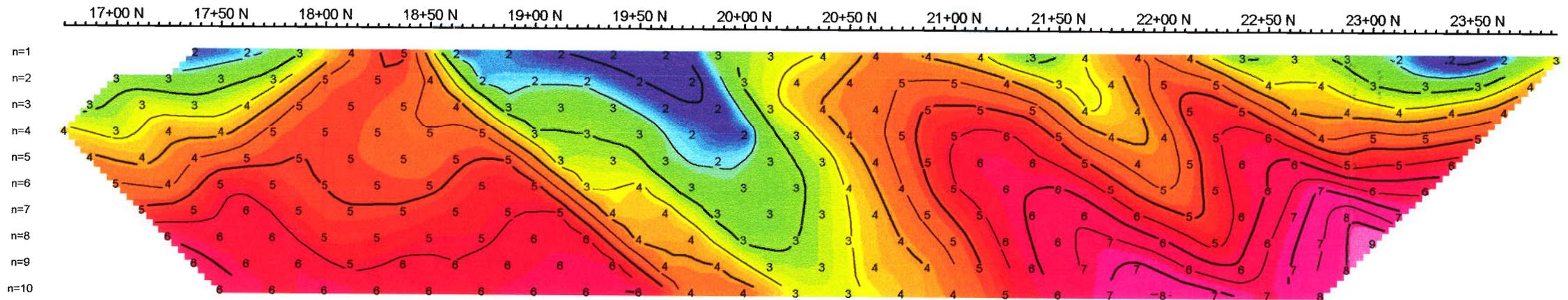
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

NewmontIP  
mVV



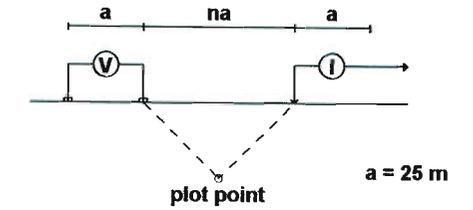
NewmontIP  
mVV

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot

63+00 E

Dipole-Pole Array

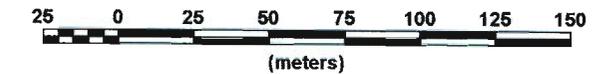


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
Receiver: IRIS Elrec Pro  
Transmitter: Phoenix IPT-1  
Waveform: Time Domain  
Time Gates: 20 semi-logarithmic spaced windows  
Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
Repeatability: 10% total measurements  
Electrodes: 1m stainless steel rods



Scale 1:2500



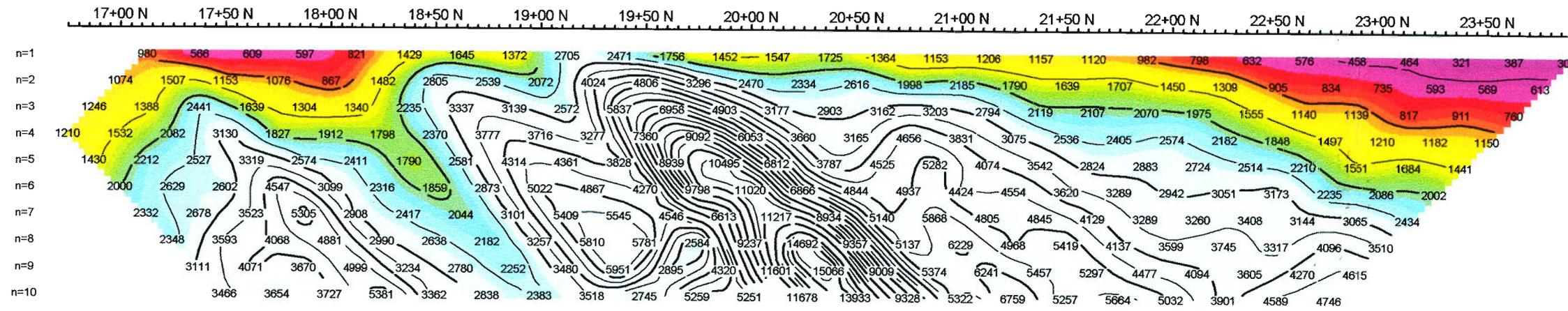
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North Abitibi Project  
Tomlinson/Hoblitzell Twps., ON, Canada

Date: July, 2008  
Project: CA00596C

Surveyed and processed by  
**Quantec Geoscience USA, Inc.**

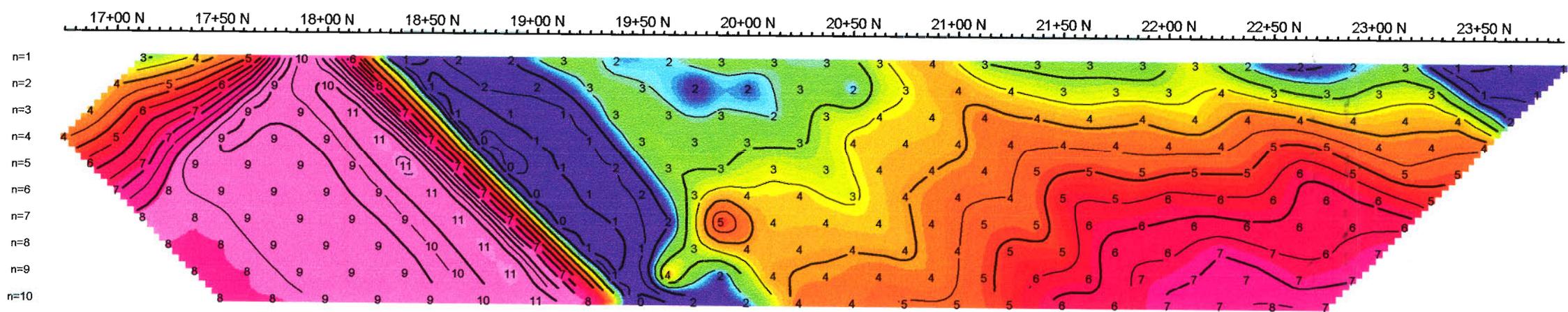
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

NewmontIP  
mVV



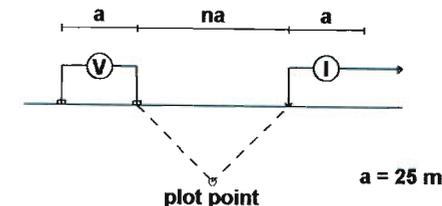
NewmontIP  
mVV

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot

65+00 E

Dipole-Pole Array

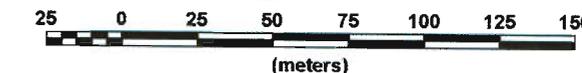


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



Scale 1:2500



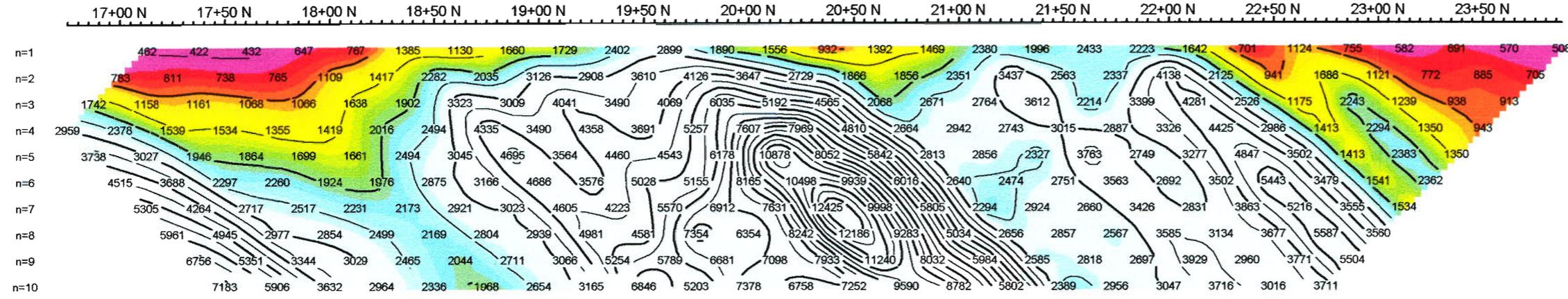
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*North Abitibi Project*  
 Tomlinson/Hoblitzell Twps., ON, Canada

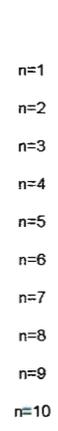
Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
**Quantec Geoscience USA, Inc.**

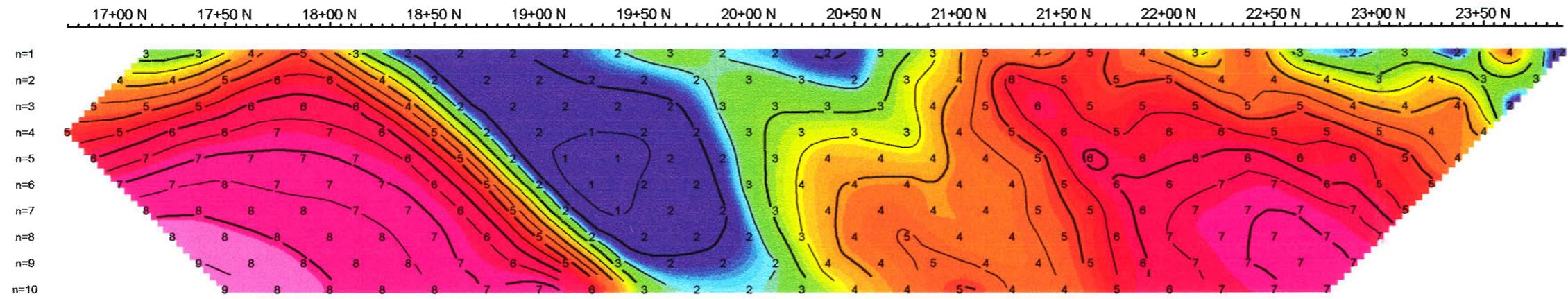
Resistivity  
Ohm-m



Resistivity  
Ohm-m



NewmontIP  
mV/V

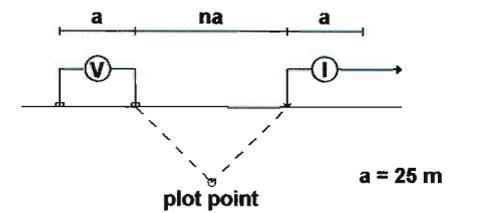


NewmontIP  
mV/V

### Pseudo Section Plot

67+00 E

Dipole-Pole Array

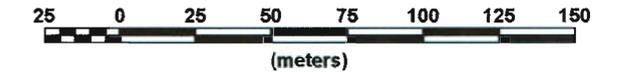


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



Scale 1:2500



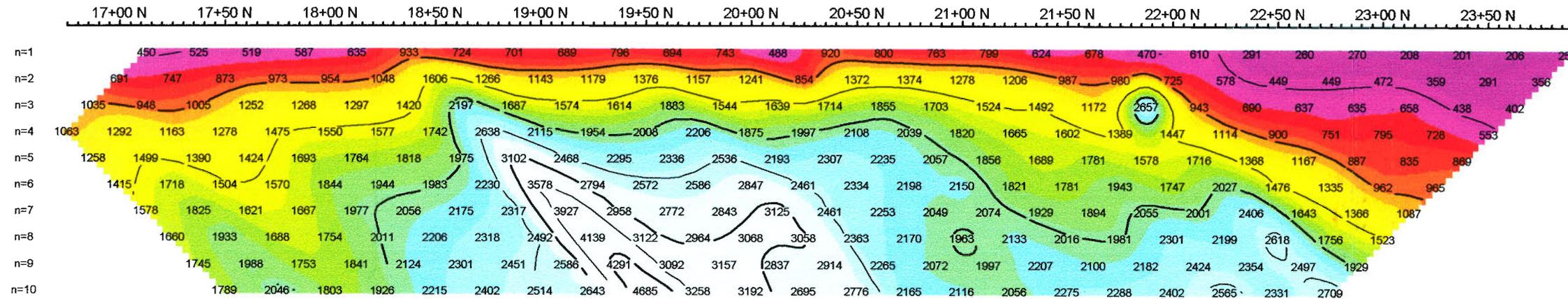
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**INDUCED POLARIZATION SURVEY**  
*North Abitibi Project*  
 Tomlinson/Hoblitzell Twps., ON, Canada

Date: July, 2008  
 Project: CA00596C

Surveyed and processed by  
 Quantec Geoscience USA, Inc.

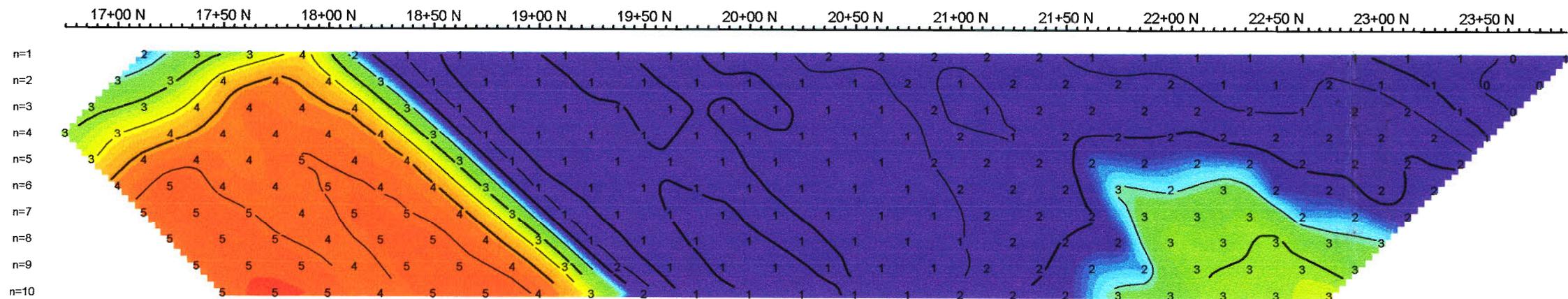
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

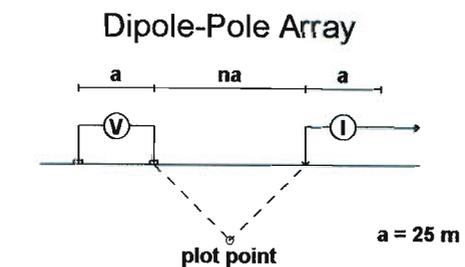
NewmontIP  
mV/V



NewmontIP  
mV/V

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

## Pseudo Section Plot 70+00 E

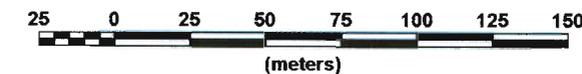


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
Receiver: IRIS Elrec Pro  
Transmitter: Phoenix IPT-1  
Waveform: Time Domain  
Time Gates: 20 semi-logarithmic spaced windows  
Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
Repeatability: 10% total measurements  
Electrodes: 1m stainless steel rods



Scale 1:2500



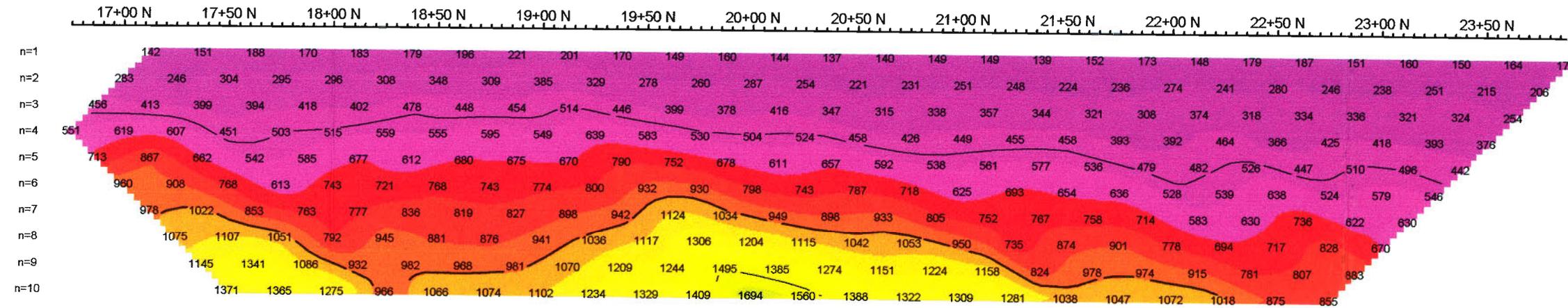
Tri Origin Exploration Ltd.

INDUCED POLARIZATION SURVEY  
North Abitibi Project  
Tomlinson/Hoblitzell Twps., ON, Canada

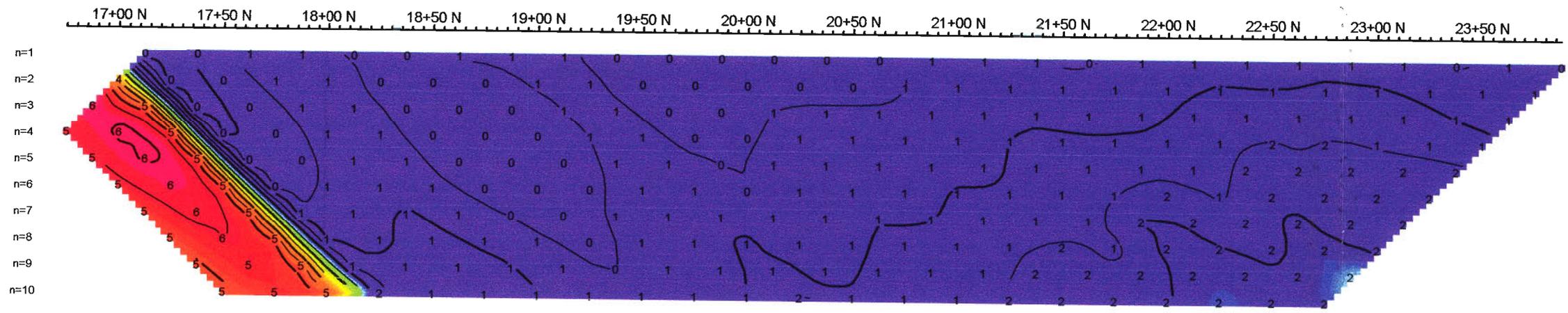
Date: July, 2008  
Project: CA00596C

Surveyed and processed by  
Quantec Geoscience USA, Inc.

Resistivity  
Ohm-m



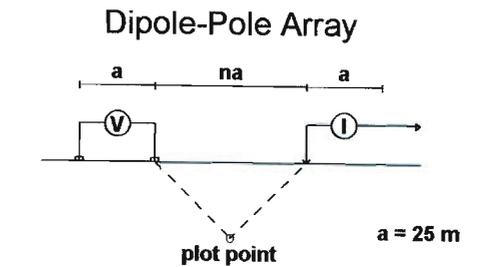
NewmontIP  
mV/V



Resistivity  
Ohm-m

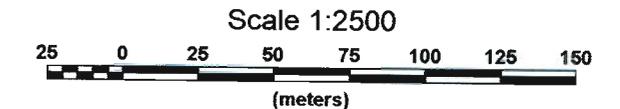
n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot 72+00 E



#### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



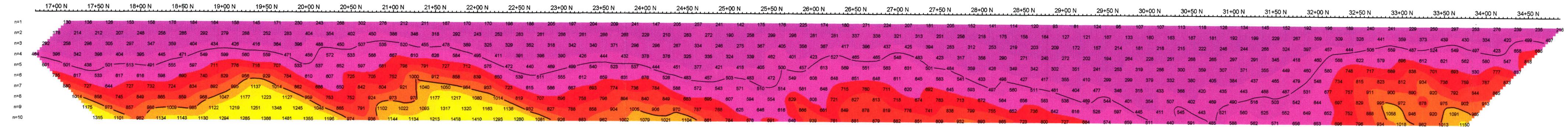
Tri Origin Exploration Ltd.

INDUCED POLARIZATION SURVEY  
 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

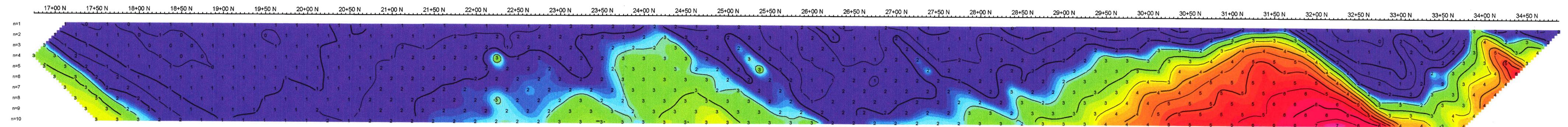
Date: July, 2008  
 Project: CA00596C

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Resistivity

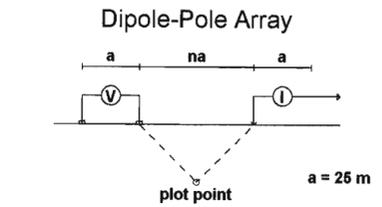


NewmontIP



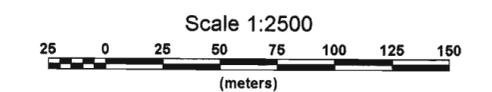
### Pseudo Section Plot

74+00 E



### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods

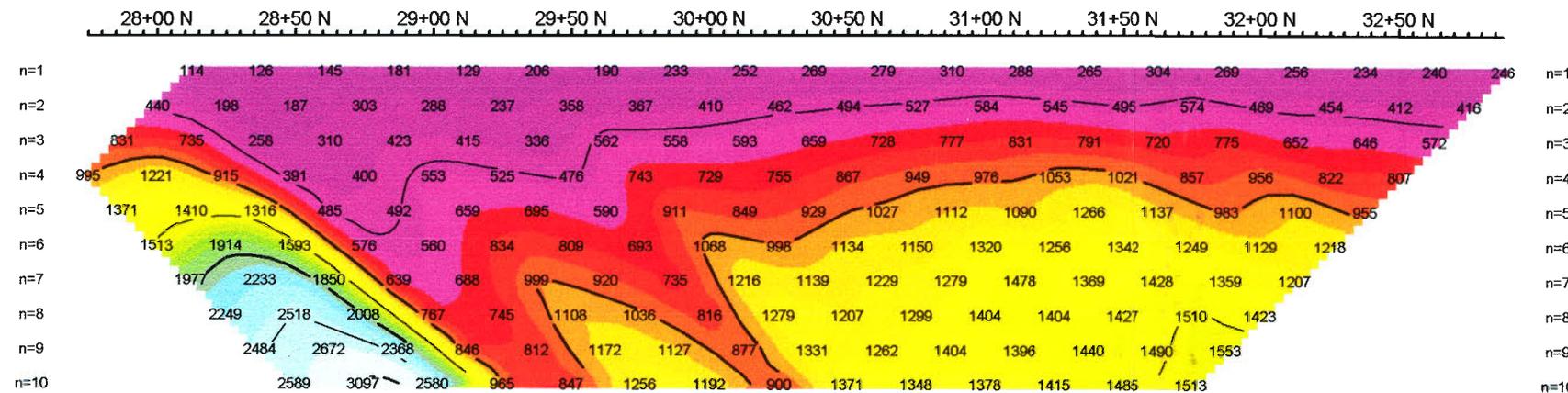


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 North Abitibi Project  
 Tomlinson/Hoblitzell Twps., ON, Canada

Date: July, 2008  
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Resistivity  
Ohm-m

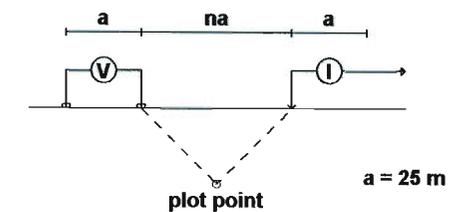


Resistivity  
Ohm-m

## Pseudo Section Plot

80+00 E

Dipole-Pole Array

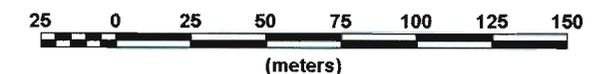


### SURVEY SPECIFICATIONS

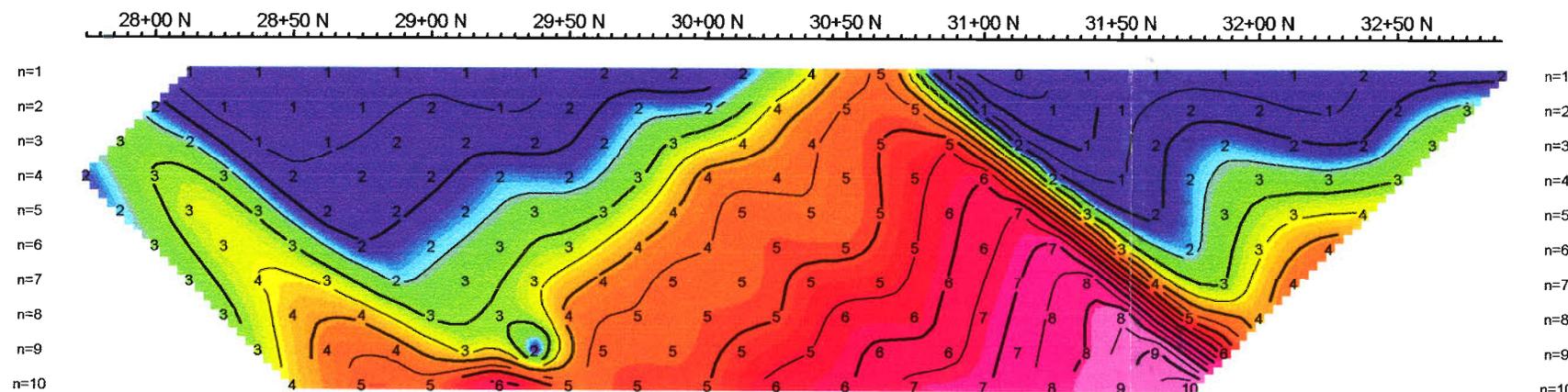
Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



Scale 1:2500



NewmontIP  
mV/V



NewmontIP  
mV/V

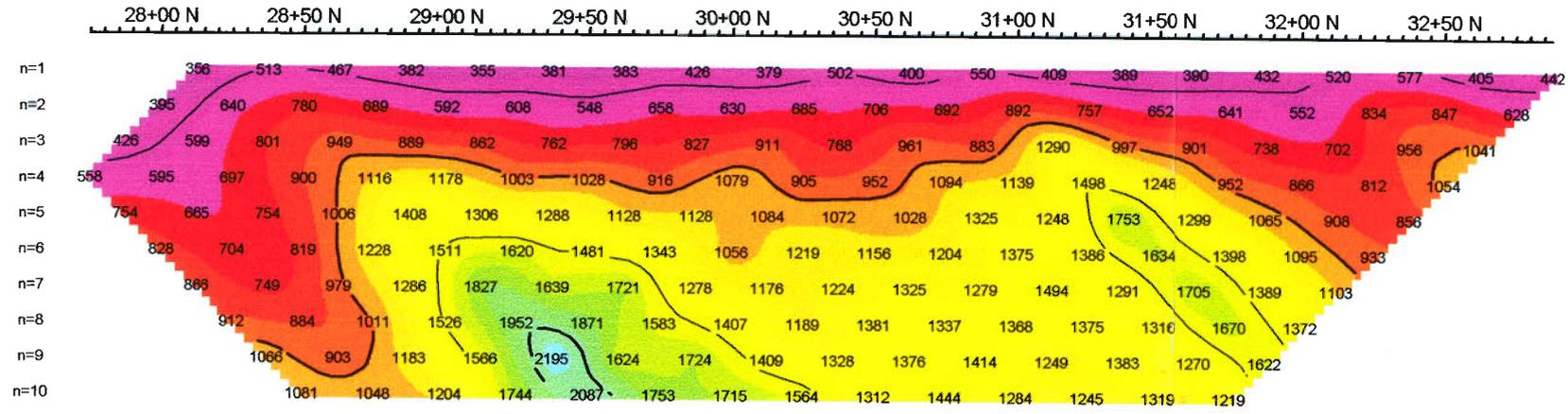
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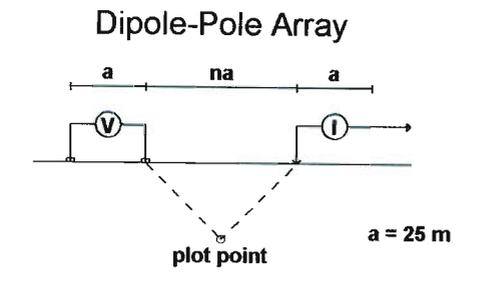
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot 82+00 E



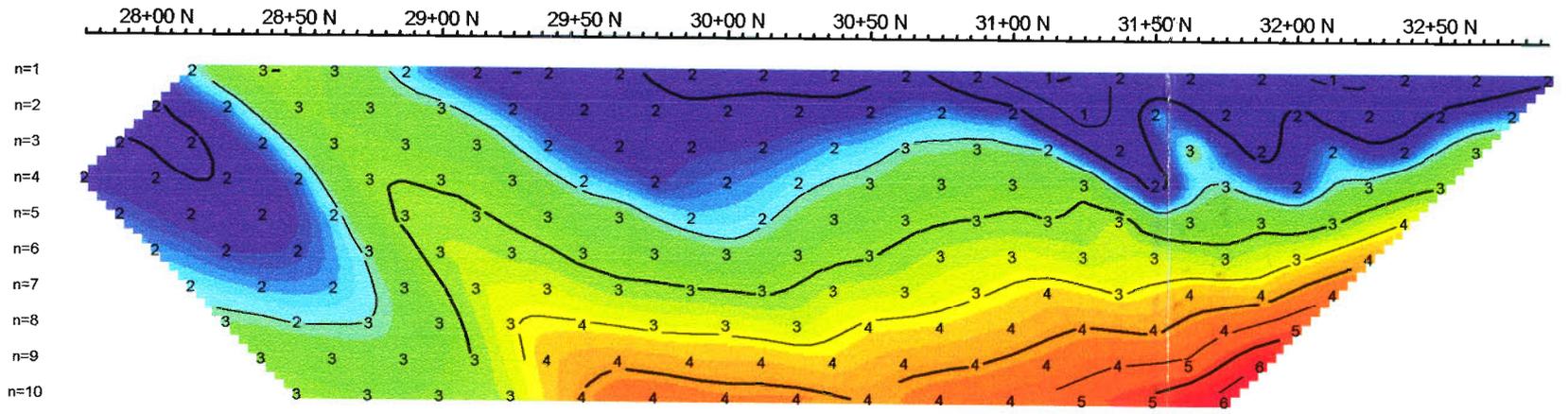
**SURVEY SPECIFICATIONS**  
 Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods

**Quantec  
Geoscience**

Scale 1:2500

25 0 25 50 75 100 125 150  
(meters)

NewmontIP  
mV/V



NewmontIP  
mV/V

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

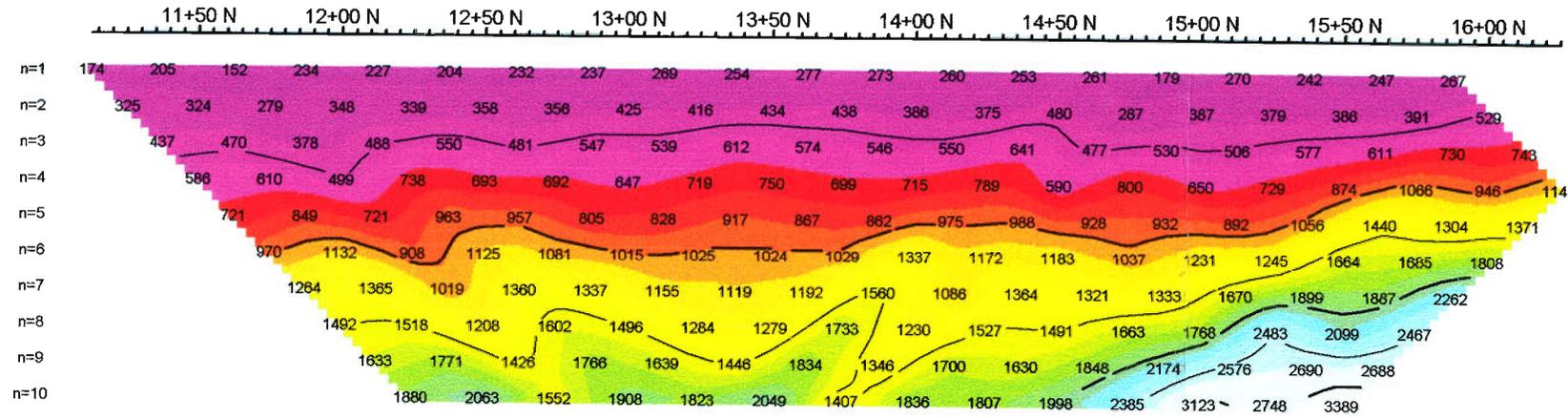
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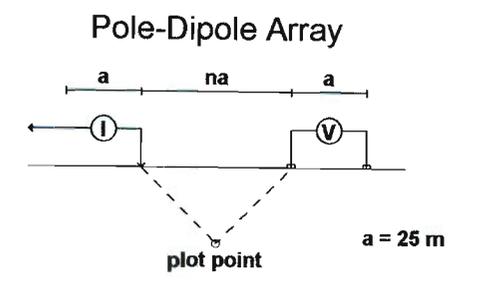
Resistivity  
Ohm-m



Resistivity  
Ohm-m

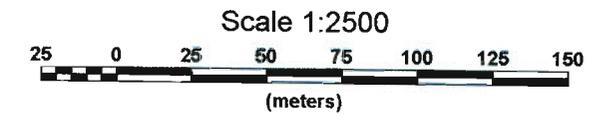
n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

### Pseudo Section Plot 91+00 E

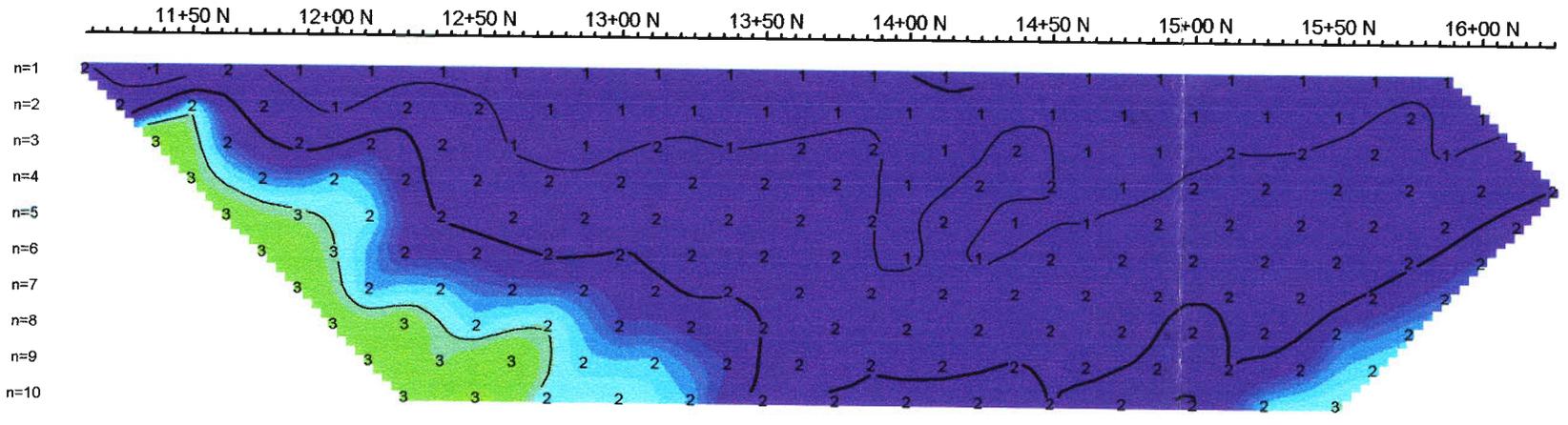


#### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



NewmontIP  
mVV



NewmontIP  
mVV

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

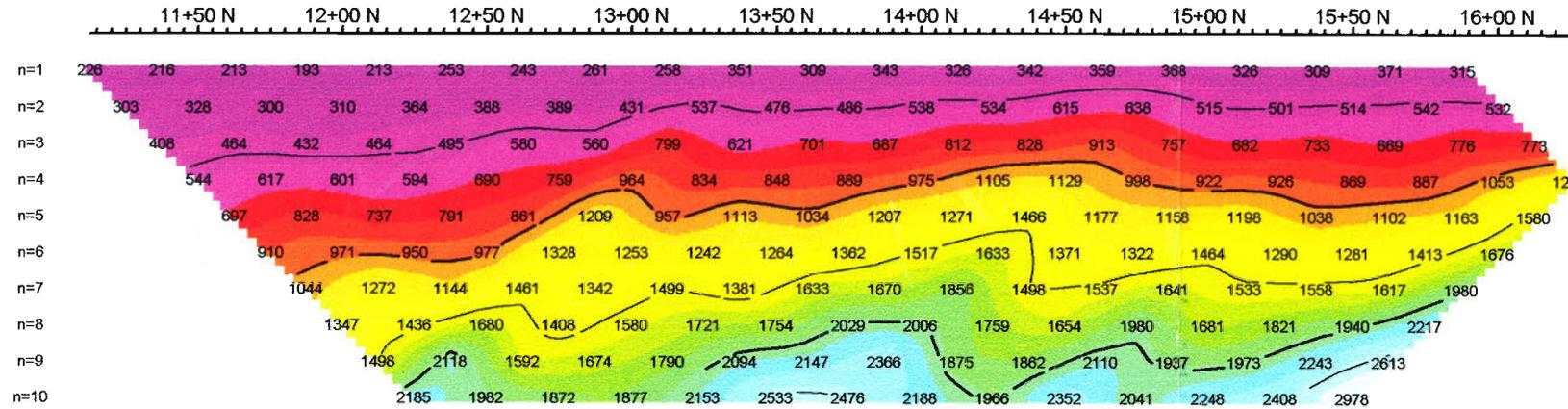
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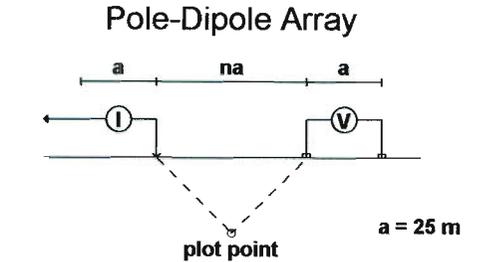
Resistivity  
Ohm-m



Resistivity  
Ohm-m

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

## Pseudo Section Plot 92+00 E

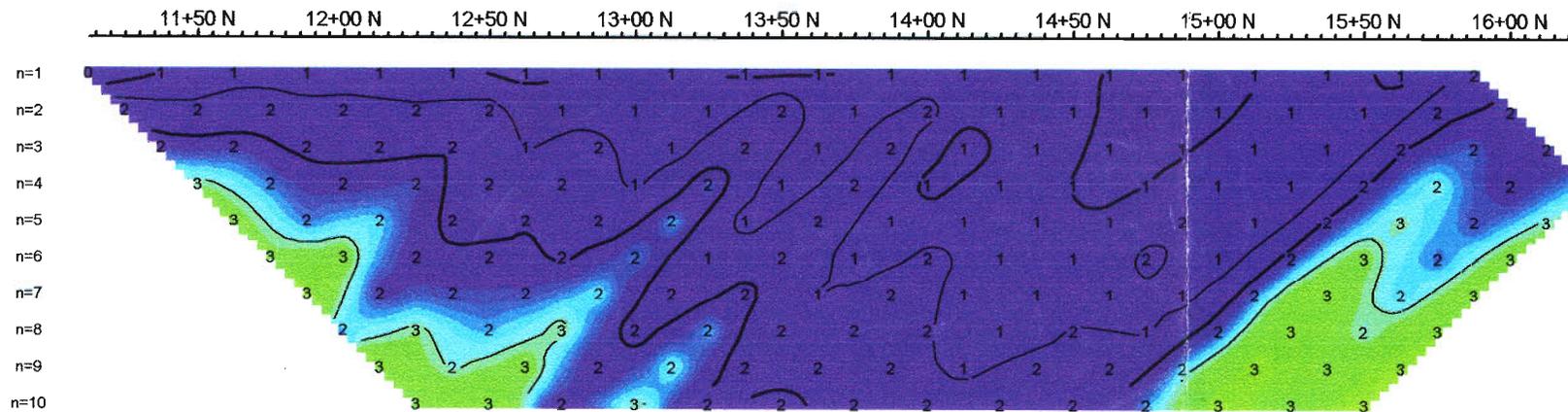


### SURVEY SPECIFICATIONS

Method: Time Domain IP/Resistivity  
 Receiver: IRIS Elrec Pro  
 Transmitter: Phoenix IPT-1  
 Waveform: Time Domain  
 Time Gates: 20 semi-logarithmic spaced windows  
 Frequency: 50% duty cycle, (2 sec. on/ 2 sec. off)  
 Repeatability: 10% total measurements  
 Electrodes: 1m stainless steel rods



NewmontIP  
mV/V



NewmontIP  
mV/V

n=1  
n=2  
n=3  
n=4  
n=5  
n=6  
n=7  
n=8  
n=9  
n=10

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