

Report of Induced Polarization Surveys

On the

Slade Property

Deloro Township, Ontario

Mining Claim No. 4227179

Porcupine Mining Division

For

SGX Resources Inc.

October 28, 2011  
Timmins, Ontario

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Filtered Resistivities with IP Anomalies Plan Map	1:5000

## **1.0 Introduction**

The Slade property is located on the Timmins property of SGX Resources Inc., located in eastern Deloro Township, Porcupine Mining Division. The grid in Deloro Township covers portions of or all of mining claim number 4227179. This mining claim is currently subject to an option agreement between SGX Resources Inc. and Pete Robert and Wade Kornik. During June 2010, a geophysical survey program consisting of induced polarization and resistivity surveys was conducted over a portion of this claim. Ray Meikle and Associates of North Bay, Ontario, carried out the IP survey. The surveys were completed between June 27 and June 28, 2010. The geophysical surveys were performed in order to evaluate and map the presence of disseminated to massive sulphides with respect to their location, width, and concentrations.

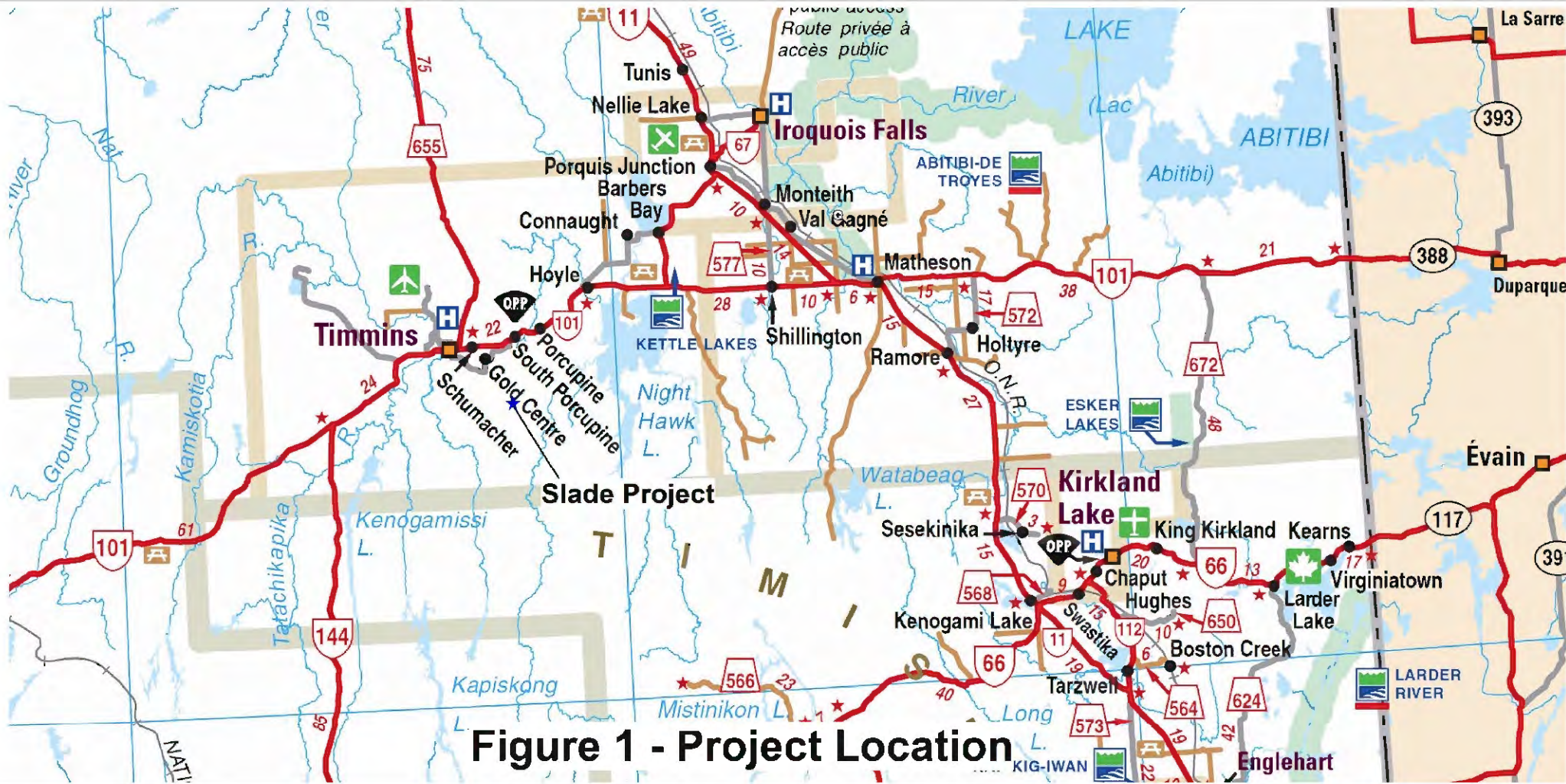
## **2.0 Location And Access**

The Slade property is located approximately 9 kilometers southwest of the city of Timmins, Ontario, in the eastern portion of Deloro Township. Access to the property is by driving south along the Langmuir road from South Porcupine for approximately 5 kilometers and then west and south along Stringers logging road for approximately 2.5 kilometers. Access to the grid is from this road by walking, ATV or snowmobile (see figures 1 and 2).

## **3.0 Summary of 2010 Geophysical Program**

The geophysical program consisted of induced polarization and resistivity surveying (I.P.). These surveys were carried out on five lines of recently cut and chained lines, oriented at 0° and chained and marked every 25 meters. The grid lines varied in length between 250 and 500 meters.

The I.P. survey was performed using a dipole-dipole separations of  $n=1$ ,  $n=2$ ,  $n=3$ ,  $n=4$ , and  $n=5$ , times the dipole spacing was measured in order to map the response at depth. A total of approximately 1.75 km. of I.P. data was measured and recorded. The I.P. equipment used for the survey consisted of a Phoenix IPT-1 3000 watt transmitter



**Figure 1 - Project Location**



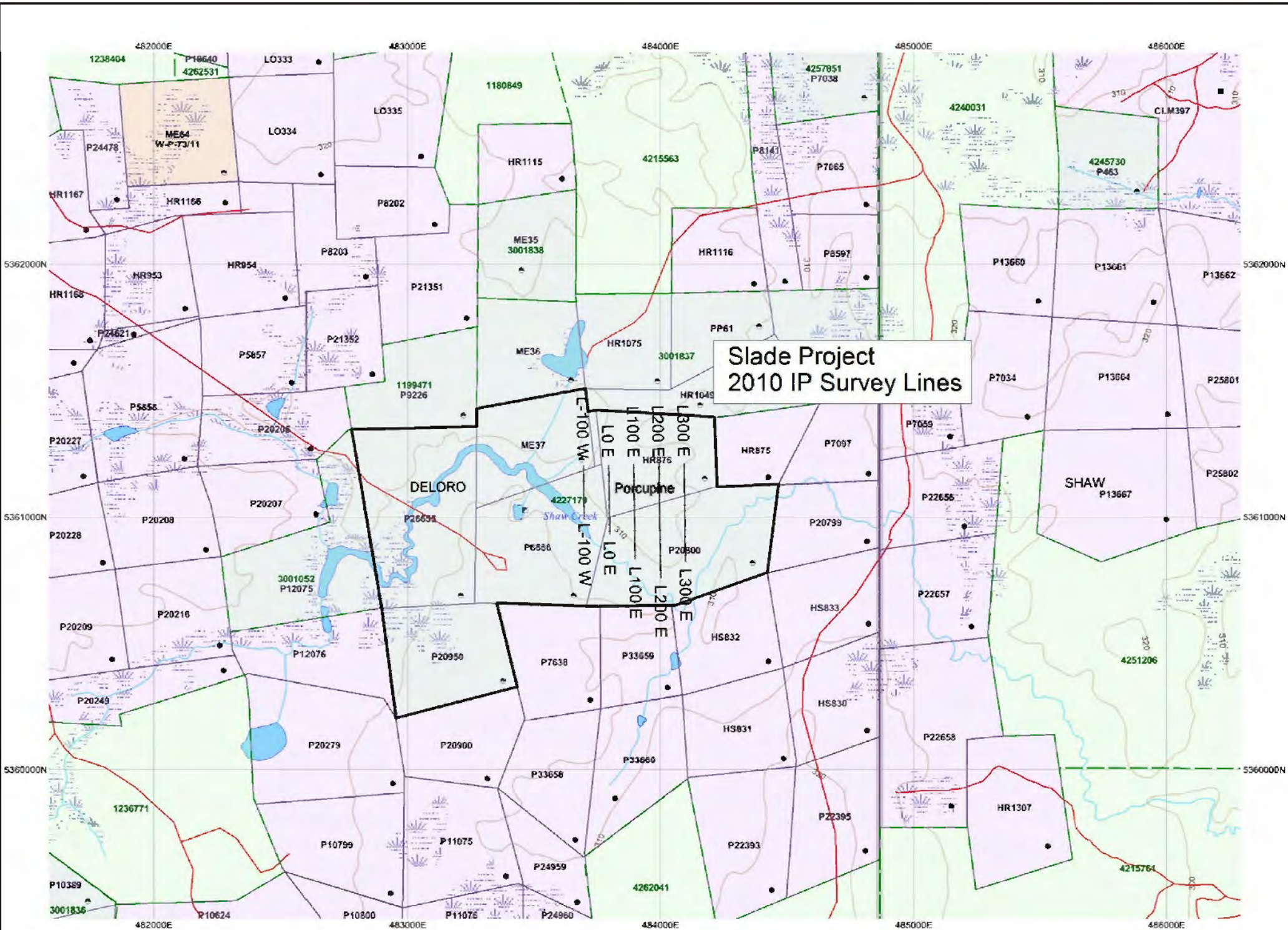


Figure 2

UTM Zone 17  
1000m grid

operating in the time domain powered by a 2 kilowatt motor generator. The chargeability (measured in mV/V) between the transmitted current and the received voltage is recorded by an Iris Elrec IP Pro receiver which records the chargeability and the apparent resistivity for each set of dipoles. The chargeability measured in this survey is a measure of the polarization of the underlying lithology.

A description of the survey method and equipment used can be found in Appendix A.

#### **4.0 Discussion of Results**

The results of the I.P. survey is presented as a contoured and posted pseudo-section of the apparent resistivity and recorded chargeability's at a scale of 1:2500. All maps accompany this report in the pocket at the back of this report.

The resistivity data as displayed by the measured and contoured resistivity shows a wide variation of measured resistivities in the range of 90 to 928 ohm-m with a mean background resistivity of approximately 349 ohm-m. The higher resistivity areas of the grid may likely be mapping areas of bedrock ridges and sub-cropping bedrock areas. It is also possible the high resistivity zones may be outlining more resistive felsic lithology or silica altered horizons as well.

The I.P. anomalies have been interpreted and are displayed on the plan map of filtered resistivities accompanying this report. The IP pseudo sections have been interpreted and five chargeability anomalies have been identified. They are located at Line 300E/87.5N, L300E/275N, Line 200E at 25N and 150N and on Line 100E at 350N. The most well defined anomalies are at L300E/275N and Line 200E/25N. The depths of the identified I.P. anomalies are interpreted to be moderate; within the range of 10 to 25 meters below surface.

## 5.0 Conclusions and Recommendations

The induced polarization survey completed over the Slade Property was successful in mapping several zones of anomalous I.P. effects, as well as mapping the bedrock resistivity. The interpreted I.P. anomalies are moderate to strong in strength and generally well defined and will likely require further investigation in order to determine their causes. The most promising I.P. anomalies, which are thought to arise from bedrock sources, have been interpreted and identified. In particular the IP anomalies located at L300E/275N and Line 200E/25N should be considered as exploration follow-up targets.

It is always difficult to quantitatively rate all of the I.P. anomalies in terms of their economic potential when searching for exploitable mineral deposits, but it is possible that some of the I.P. anomalies mapped by this survey are caused by disseminated to semi-massive metallic mineralization. This type of mineralization is often associated with valuable deposits of massive sulphides, gold and platinum group minerals.

All of the responses should be investigated further in order to determine the priority of follow-up needed. The anomalies should be further screened utilizing any other different types of geophysical surveys that may have been undertaken on the Slade grid. This would aid greatly in further refining the interpretation of the I.P. survey. Any existing geological, diamond drilling or geochemical information that may exist in the mining recorder assessment files should be investigated and compiled prior to further exploration of the Slade property in order to accurately assess the area of the current geophysical surveys and to determine the most effective follow-up exploration method for this property.

Respectively Submitted,

A handwritten signature in dark ink, appearing to read "Matthew Johnston". The signature is written in a cursive, flowing style.

Matthew Johnston

## Statement of Qualifications

This is to certify that: MATTHEW JOHNSTON

I am a resident of Timmins; province of Ontario since June 1, 1995.

I am self-employed as a Consulting Geophysicist, based in Timmins, Ontario.

I have received a B.Sc. in geophysics from the University of Saskatchewan; Saskatoon, Saskatchewan in 1986.

I have been employed as a professional geophysicist in mining exploration, environmental and other consulting geophysical techniques since 1986.

Signed in Timmins, Ontario, this October 28, 2011

A handwritten signature in dark ink, appearing to read "Matthew Johnston". The signature is written in a cursive style with some loops and flourishes.



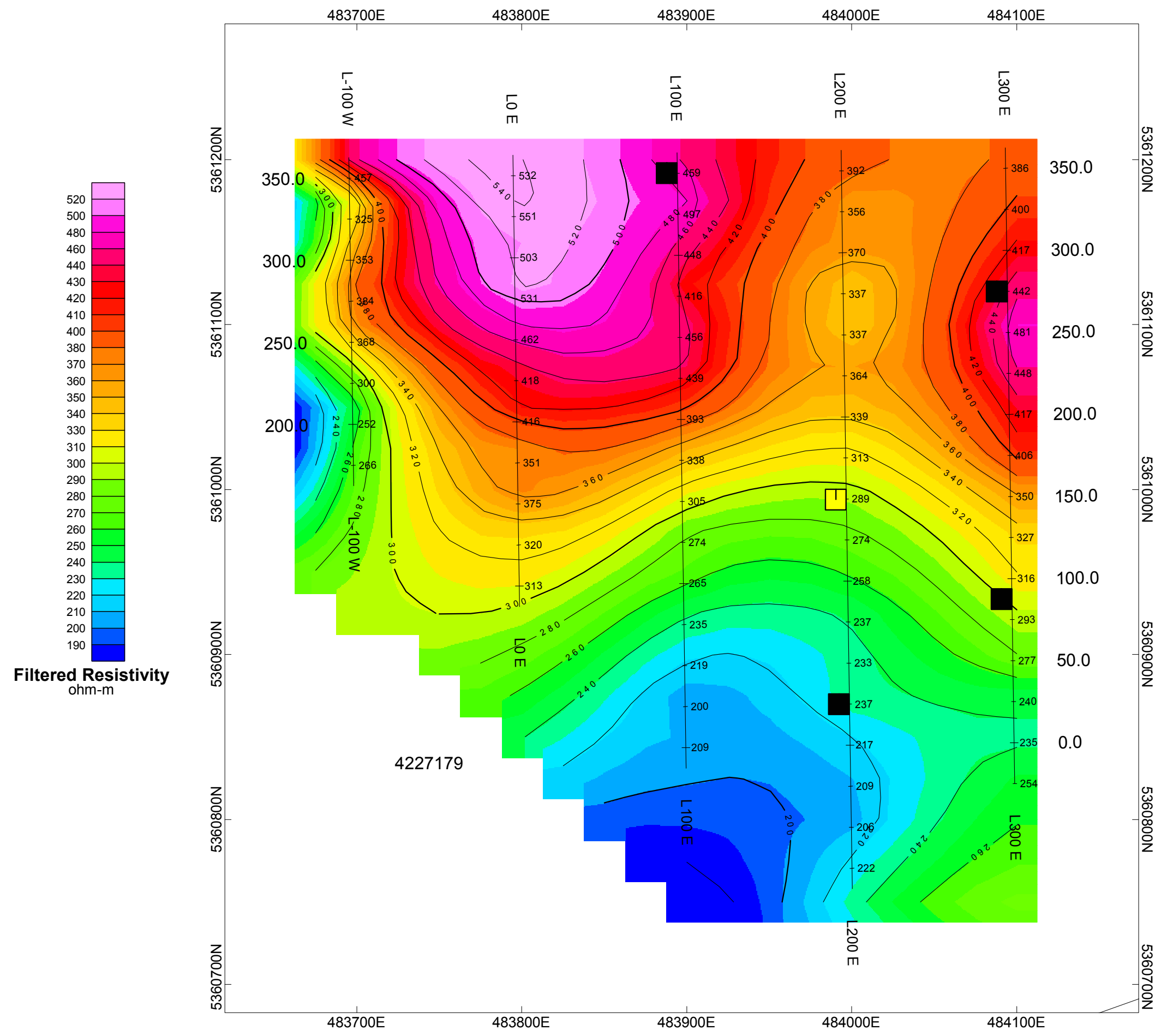
## **Appendix A**

## Induced Polarization Surveys

Time domain IP surveys involve measurement of the magnitude of the polarisation voltage ( $V_p$ ) that results from the injection of pulsed current into the ground.

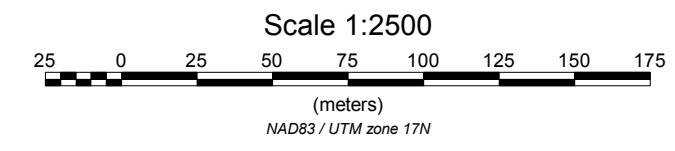
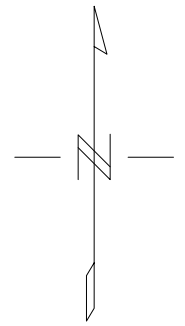
Two main mechanisms are known to be responsible for the IP effect although the exact causes are still poorly understood. The main mechanism in rocks containing metallic conductors is electrode polarisation (overvoltage effect). This results from the build up of charge on either side of conductive grains within the rock matrix as they block the flow of current. On removal of this current the ions responsible for the charge slowly diffuse back into the electrolyte (groundwater) and the potential difference across each grain slowly decays to zero. The second mechanism, membrane polarisation, results from a constriction of the flow of ions around narrow pore channels. It may also result from the excessive build up of positive ions around clay particles. This cloud of positive ions similarly blocks the passage of negative ions through pore spaces within the rock. On removal of the applied voltage the concentration of ions slowly returns to its original state resulting in the observed IP response. In TD-IP the current is usually applied in the form of a square waveform, with the polarisation voltage being measured over a series of short time intervals after each current cut-off, following a short delay of approximately 0.5s. These readings are integrated to give the area under the decay curve, which is used to define  $V_p$ . The integral voltage is divided by the observed steady voltage (the voltage due to the applied current plus the polarisation voltage) to give the apparent chargeability ( $Ma$ ) measured in milliseconds or  $mV/V$ . For a given charging period and integration time the measured apparent chargeability provides qualitative information on the subsurface geology.

The polarisation voltage is measured using a pair of non-polarising electrodes similar to those used in spontaneous potential measurements and other IP techniques.



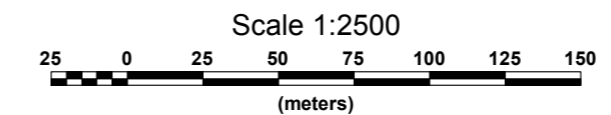
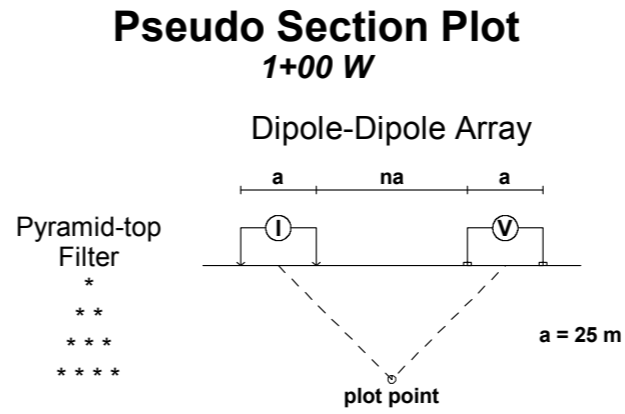
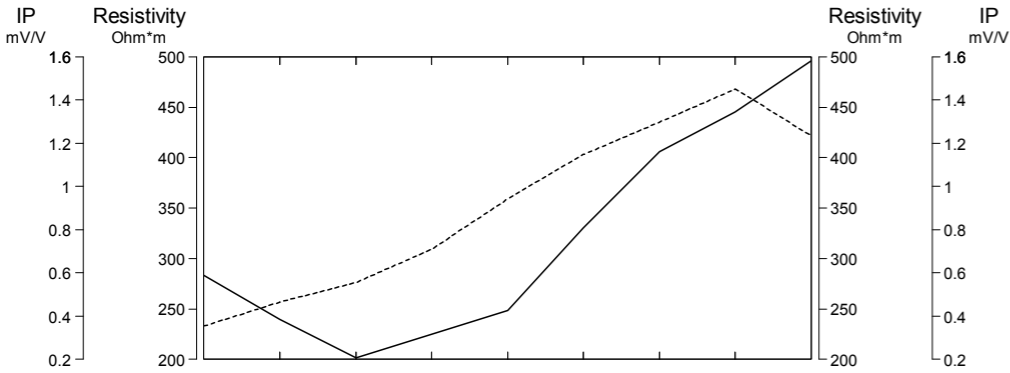
### Legend

- Well Defined Strong IP Chargeability Anomaly/Trend
- Weak to Moderate Strength IP Chargeability Anomaly/Trend



Line Kilometers Surveyed: 1.75

<b>SGX RESOURCES INC.</b>
<b>SLADE PROPERTY FILTERED RESISTIVITY WITH IP ANOMALIES JUNE - 2010</b>
DELORO TOWNSHIP - PORCUPINE MINING DIVISION CLAIM NO: 4227179 CONTOUR INTERVAL = 20, 100 OHM-M INSTRUMENT: IRIS ELREC IP PRO TD IP RECEIVER
<b>SURVEYED BY: R J MEIKLE AND ASSOCIATES</b>



**SGX RESOURCES INC.**

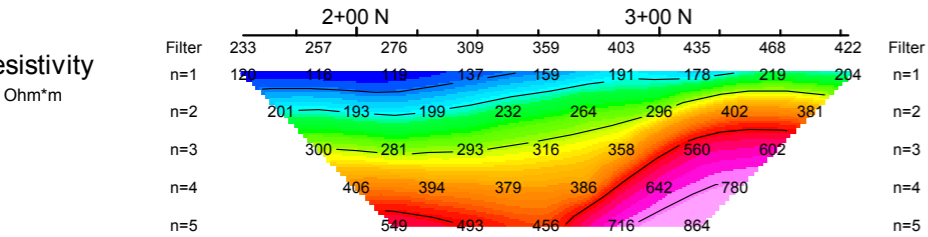
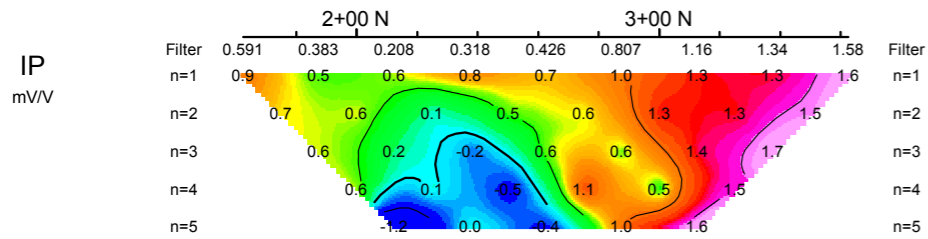
**INDUCED POLARIZATION SURVEY**

**SLADE PROPERTY**

**June - 2010**

Deloro Township  
Porcupine Mining Division

**Surveyed By: R J Meikle and Associates**



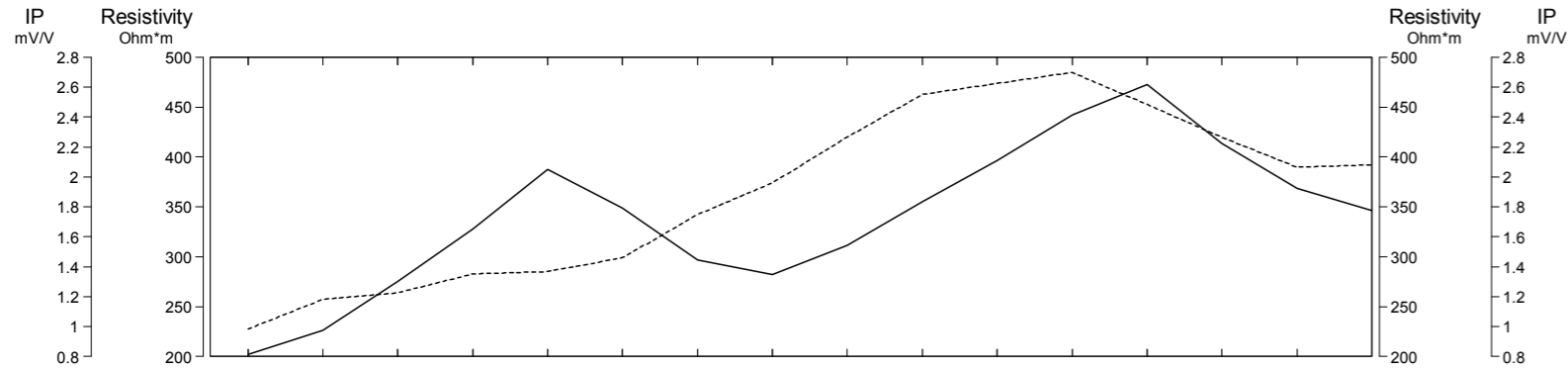
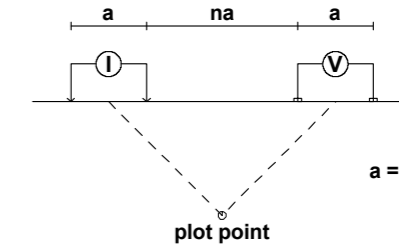
# Pseudo Section Plot

3+00 E

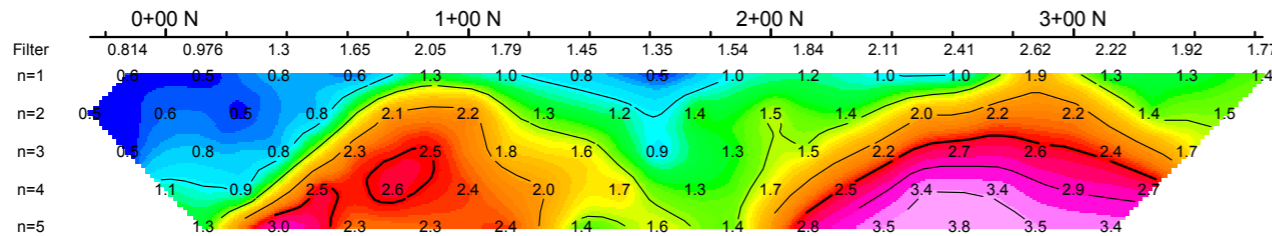
Dipole-Dipole Array

Pyramid-top  
Filter

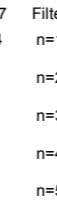
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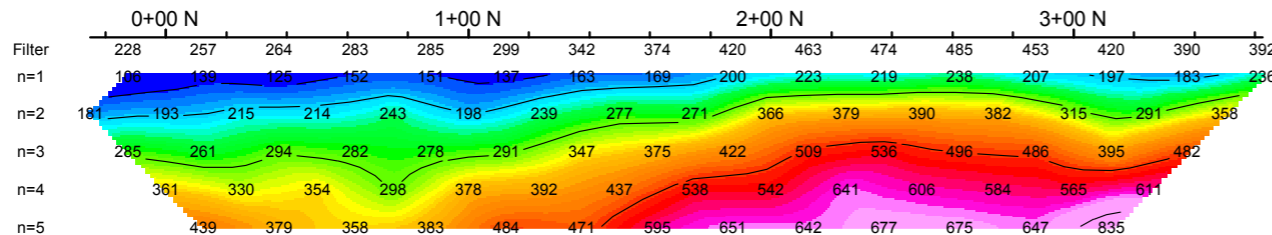
IP  
mV/V



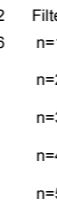
IP  
mV/V



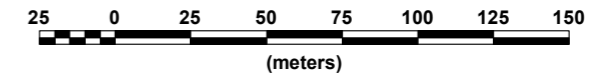
Resistivity  
Ohm\*m



Resistivity  
Ohm\*m



Scale 1:2500



**SGX RESOURCES INC.**

**INDUCED POLARIZATION SURVEY**

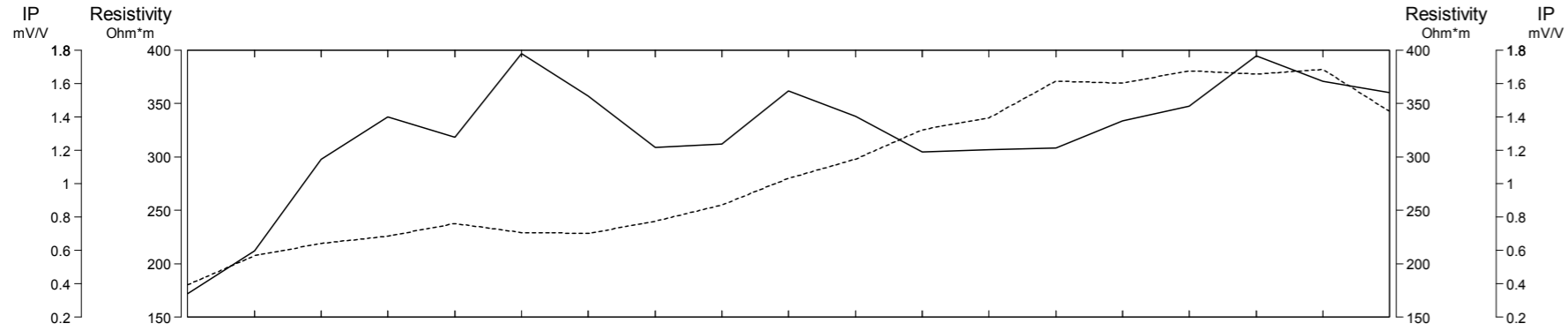
**SLADE PROPERTY**

**June - 2010**

Deloro Township  
Porcupine Mining Division

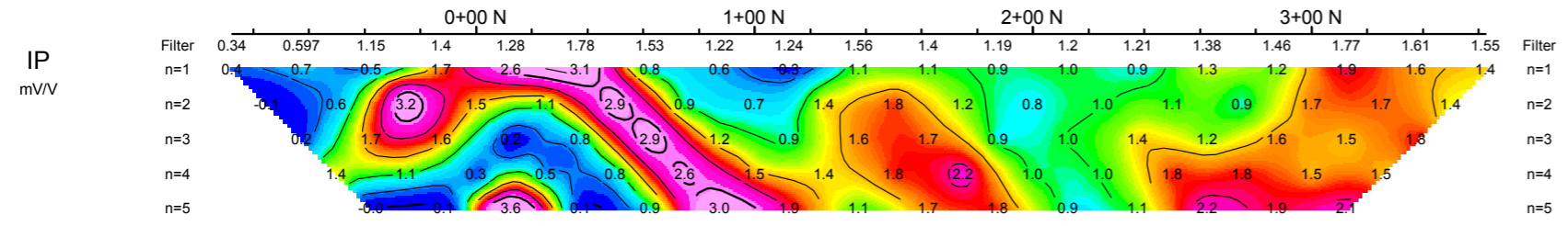
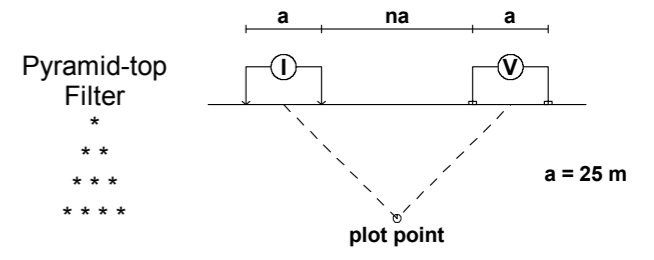
**Surveyed By: R J Meikle and Associates**



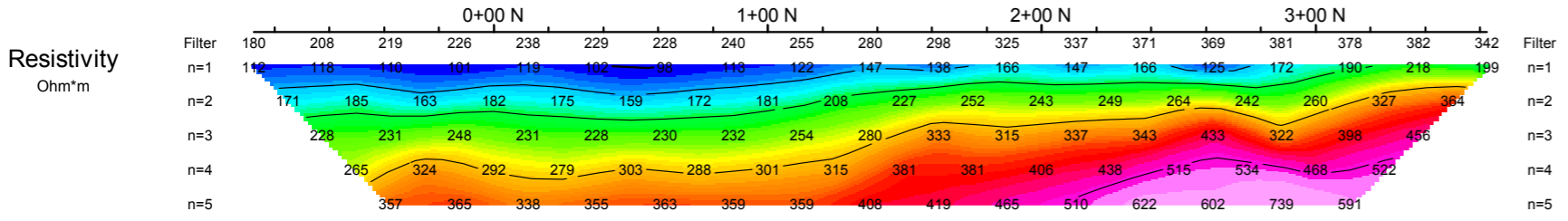


# Pseudo Section Plot 2+00 E

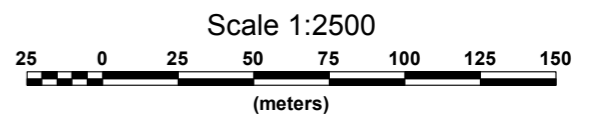
Dipole-Dipole Array



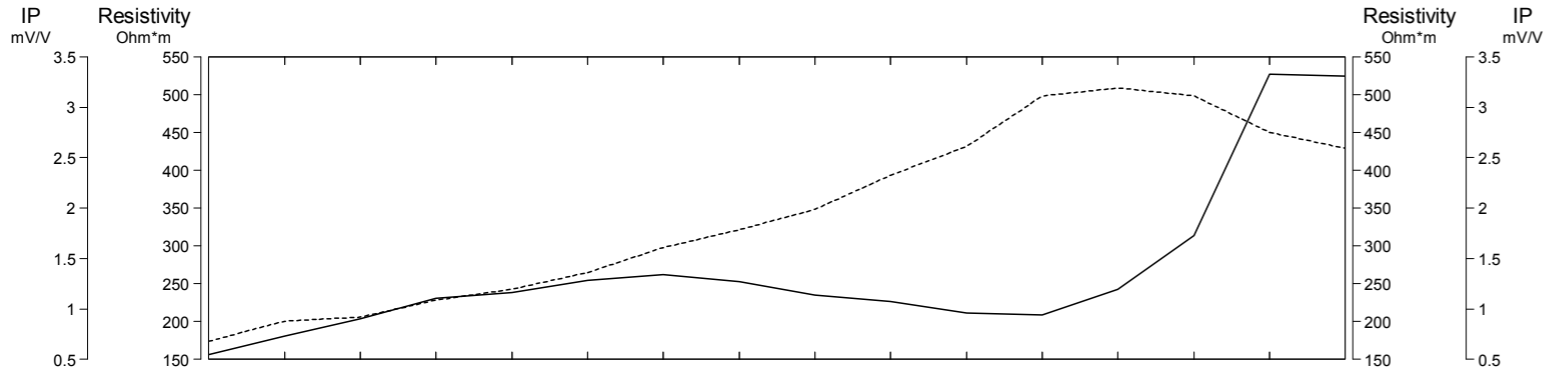
IP  
mV/V



Resistivity  
Ohm\*m

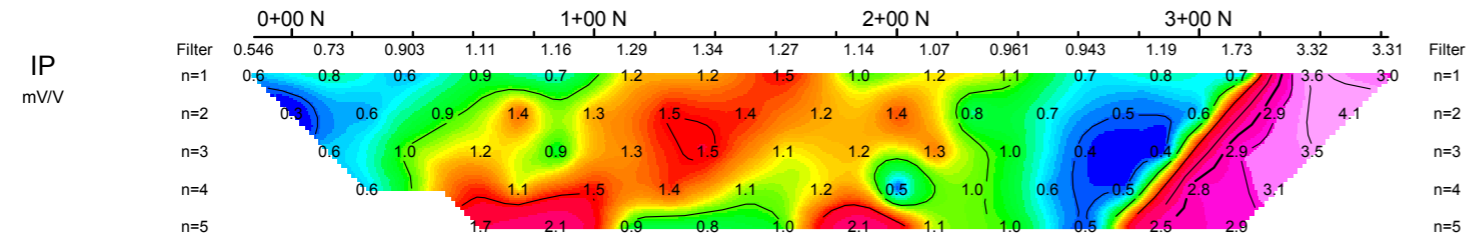
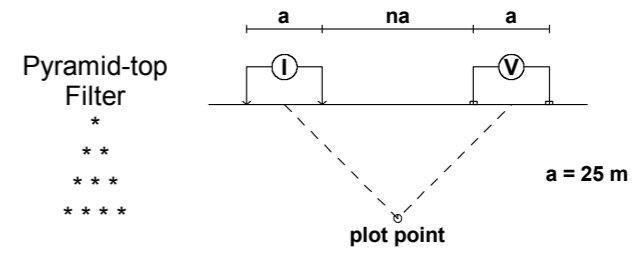


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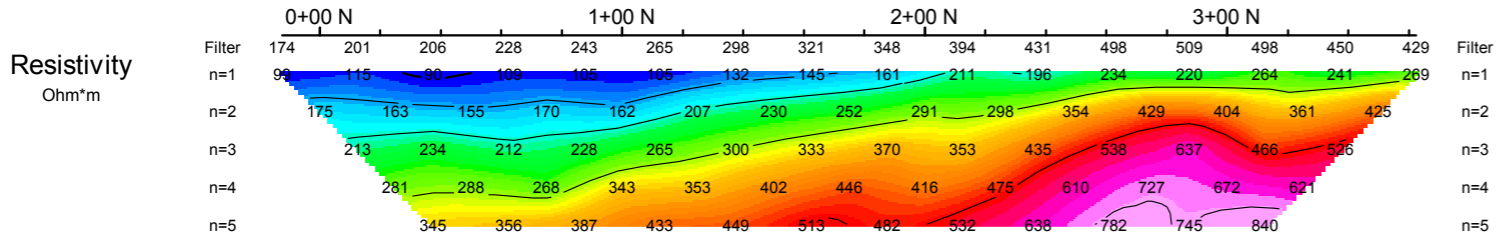
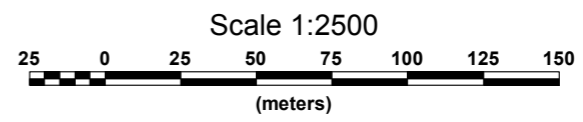


# Pseudo Section Plot 1+00 E

Dipole-Dipole Array



IP  
mV/V



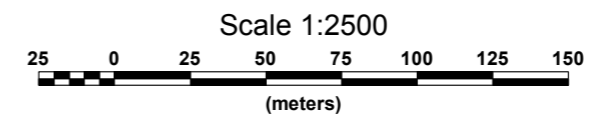
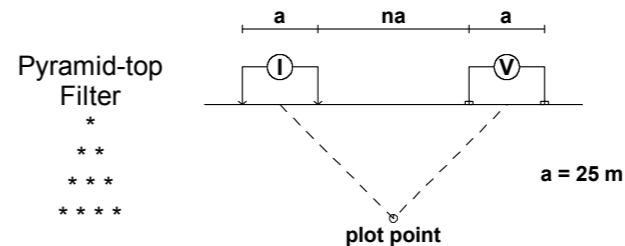
Resistivity  
Ohm\*m

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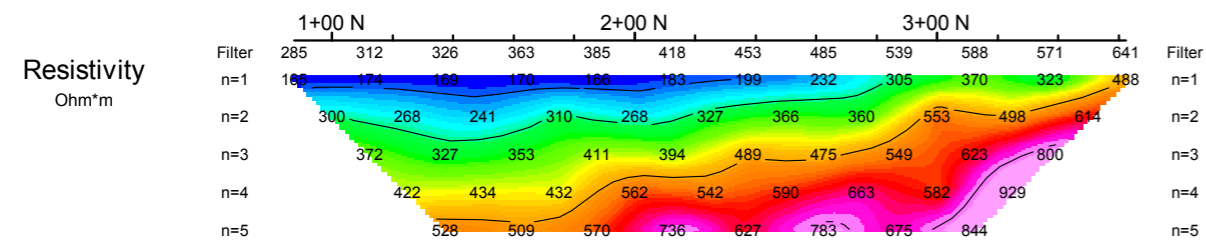
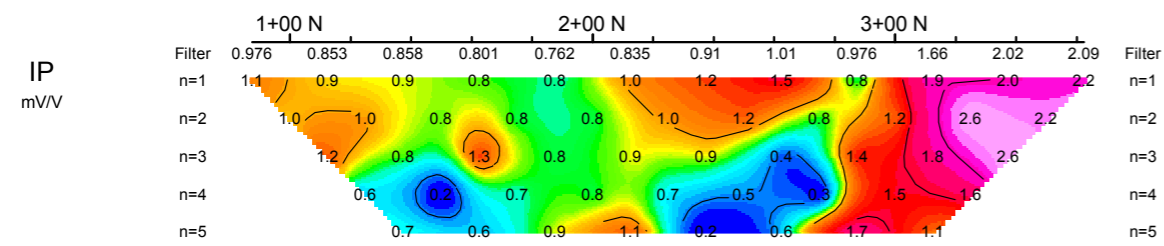
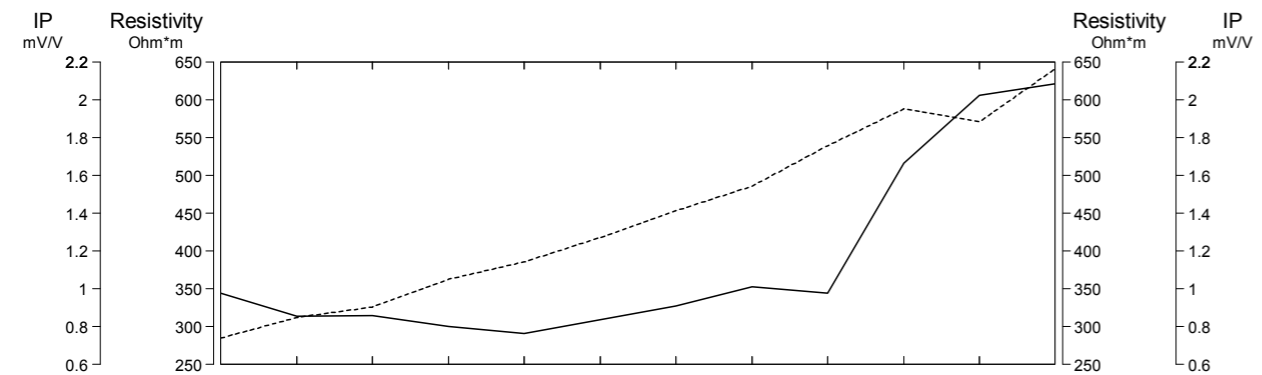
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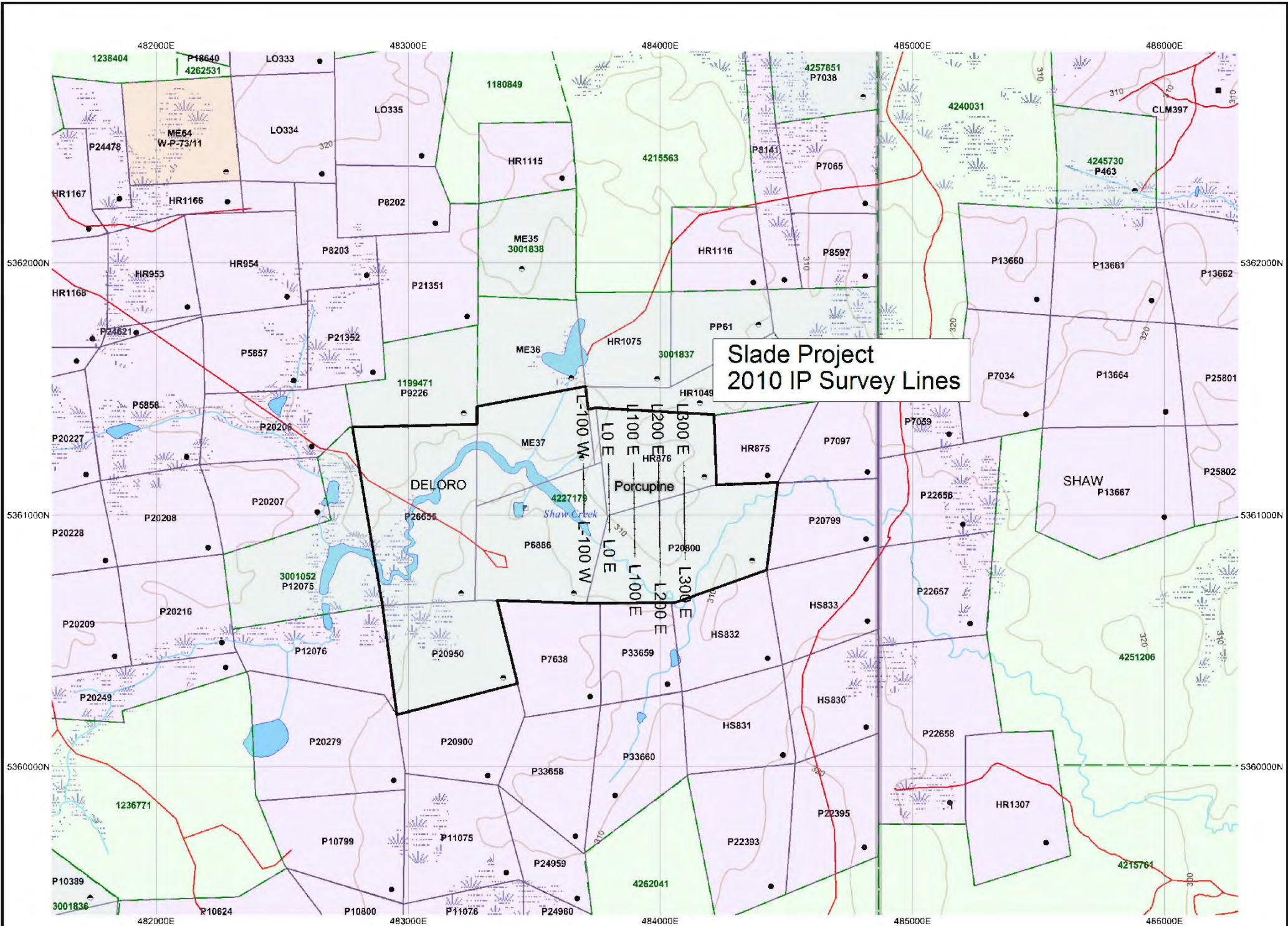
0+00 E

Dipole-Dipole Array



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**INDUCED POLARIZATION SURVEY**  
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Slade Project  
2010 IP Survey Lines

Figure 2

UTM Zone 17  
1000m grid