

Report of Induced Polarization
and Total Field Magnetic Surveys

On the
Sewell Project
Sewell Township, Ontario

Mining Claim Nos. 3005388,4209636,4209637,
4202901 and 4259548

Porcupine Mining Division

For
Benton Resources Corp.

February 14, 2012
Timmis, Ontario

Matthew Johnston
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Timmis, Ont. P4R 1E3

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I.P./Resistivity Pseudo-Sections Lines 4900N - 6800N Sewell Grid	1:2500
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1.0 Introduction

The Sewell property of Benton Resources Corp. is located in western Sewell Township, Porcupine Mining Division. The grid in Sewell Township covers portions of, or all of mining claims numbered 3005388,4209636,4209637,4202901 and 4259548. This mining property is currently under option to Benton Resources Corp. Between August and September, 2011 a geophysical survey program consisting of induced polarization and resistivity surveys, and total field magnetic surveys was conducted over a portion of this claim group. Ray Meikle and Associates of North Bay, Ontario, carried out the IP geophysical surveys, while Hussey Geophysics Inc. of Timmins completed the line cutting and magnetic surveys. 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 Sewell claims are located in southwest Sewell and southeast Reeves Townships, Porcupine Mining Division, Ontario. This area is located approximately 60 kilometers west of the city of Timmins, Ontario. The northern section of the property is accessed and transected by Highway 101, west from Timmins. Access to the southern part of the property is gained by turning south from Highway 101 onto Kenogaming Rd for two kilometers then turning right onto a narrow bush road that crosses the southern claims. All roads are easily accessible by two wheel drive vehicles. From this point a number of bush roads and trails can be accessed by four wheel drive vehicles, ATV, or snowmobiles to the area of the cut grid (see figures 1 and 2).

3.0 Summary of 2011 Geophysical Program

The geophysical program consisted of induced polarization and resistivity surveying (I.P.) and total field magnetic surveys. These surveys were carried out on a grid of recently cut lines oriented at 51° spaced every 100 meters and chained and

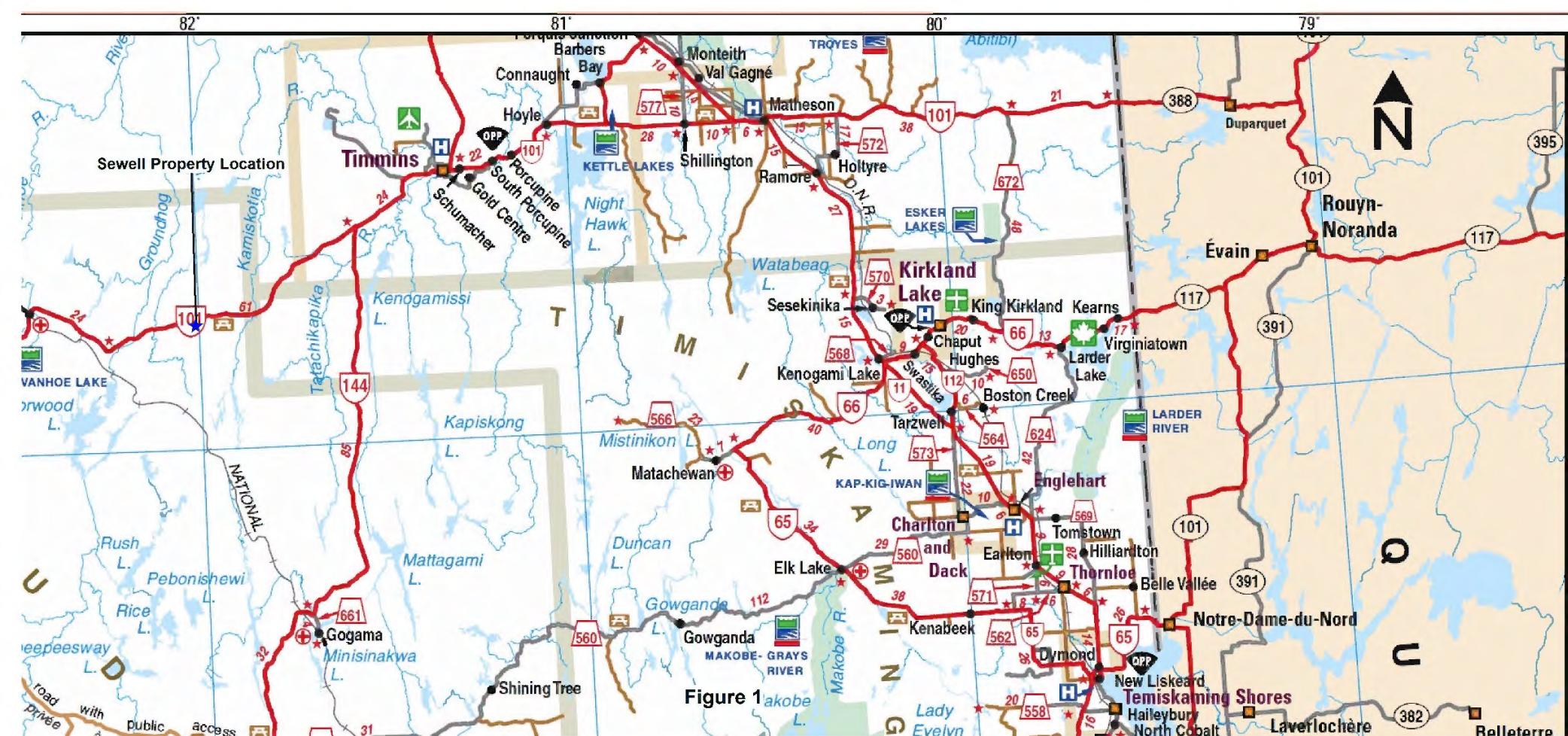


Figure 1

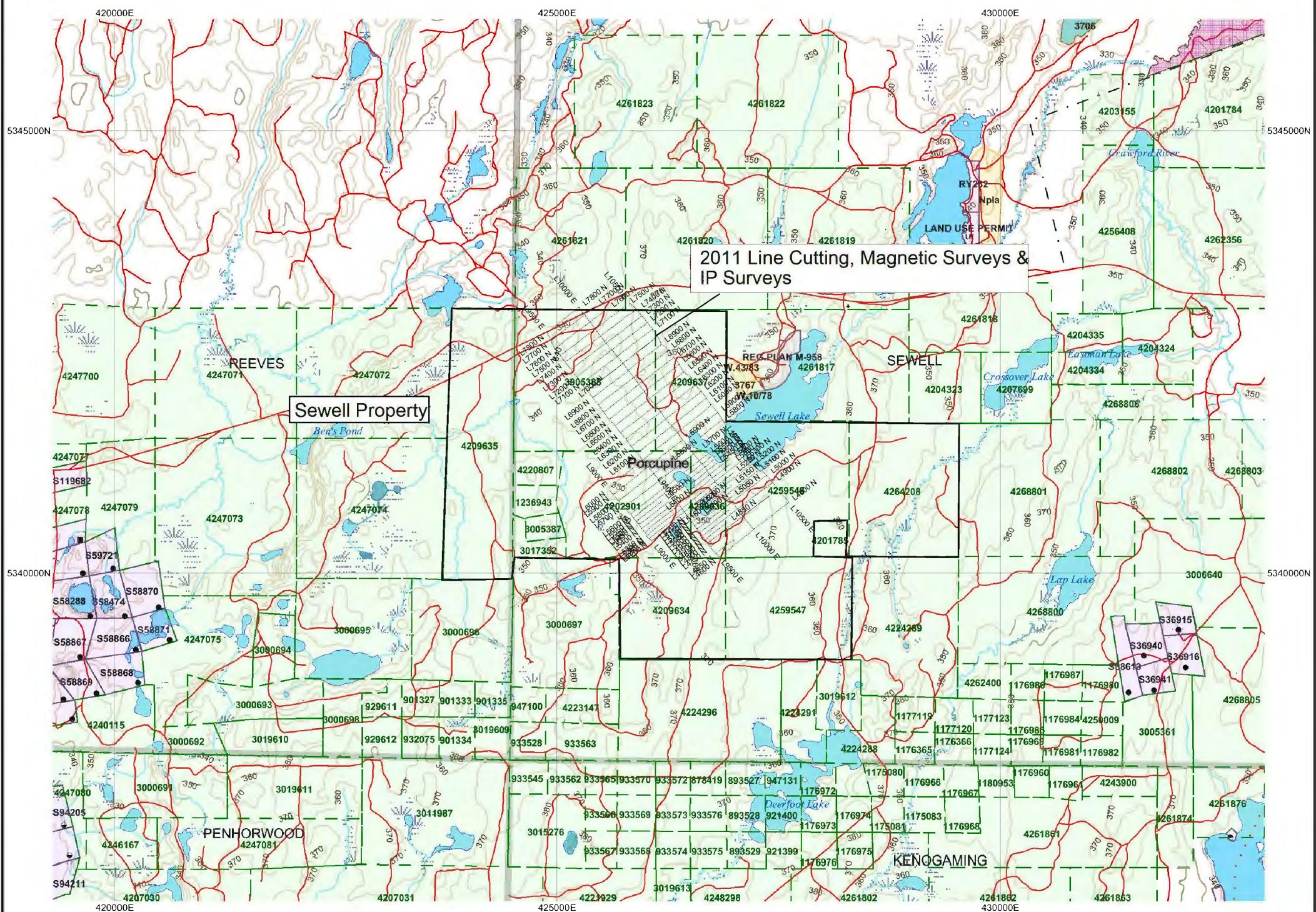


Figure 2

marked every 25 meters along the lines. The grid lines were surveyed every 100 meters along a baseline 3.2 km. in length and ranged in length between 500 and 1500 meters.

The I.P. survey was performed using a pole-dipole electrode configuration. The dipole ‘a’ spacing was 25 meters and increasing 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 **17 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 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.

The total field magnetic survey using a GEM GSM-19 magnetometer system, totaled **48** kilometers with readings collected every 12.5 meters along all lines.

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 are presented as contoured and posted pseudo-sections of the apparent resistivity and recorded chargeability’s at a scale of 1:2500. In addition, plan maps at a scale of 1:5,000 showing the contours of the filtered apparent resistivity with the interpretation and location of the I.P. anomalies is also presented. All maps accompany this report in the pocket at the back of this report.

The magnetic data has been presented on plan maps at a scale of 1:5000, showing the contours and postings, as well as the interpretations (see maps in pocket).

The resistivity data as displayed by the contoured resistivity plan map shows a moderate variation of measured resistivities in the range of 126 to 30622 ohm-m with a mean background resistivity of approximately 3303 ohm-m. The higher resistivity

areas of the grid may likely be mapping areas of bedrock ridges and sub-cropping bedrock areas. These areas are quite evident on the plan map. 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 the filtered resistivity as well. Emphasis was placed on identifying I.P. anomalies, which were thought to originate within the bedrock as opposed to cultural sources; and those I.P. anomalies that, may be associated with bedrock relief. Forty-four IP chargeability anomalies were identified throughout the grid area. Eight anomaly trends were identified and labeled on the plan map as S1 through S8. In addition, several isolated, moderate and strong IP anomalies were also mapped which are not readily grouped into trends. Many of the mapped IP anomalies are well defined, strong IP anomalies. If possible the anomalies and trends should be followed up by prospecting and geological mapping in order to determine their sources. These anomalies may reflect underlying lithology containing sulphide or graphitic mineralization which could be considered prospective to gold or base metals. Anomaly trends **S1, S2, S3 and S4** are moderate to strong well defined IP anomaly trends which may represent mineralized lithology. These anomaly trends should be considered as strong follow-up exploration targets. These anomalies may represent mineralized horizons containing sulphides or graphitic mineralization. The depths of all of the identified I.P. anomalies are interpreted to be shallow; within the range of 5 to 25 meters below surface.

The magnetic survey on the Sewell grid indicates a very active magnetic background with magnetic values ranging between 56084 and 62312 nT. The background magnetic field strength is 56916 nT. The overall magnetic pattern is disrupted by many moderate to strong linear anomalous magnetic highs striking at approximately 350 to 360 degrees azimuth. Many of these anomalies are discontinuous and deformed suggesting structural deformation. These magnetic anomalies have been identified and labeled as M1 through M8 and are located in throughout the grid area and are easily seen

on the magnetic contour map. These magnetic anomalies may represent mafic diabase dikes, common to this geologic setting or possibly mafic or ultramafic lithology.

In addition to magnetic anomalies M1 to M8, several fault zones have been interpreted within the grid area. These anomalies may represent major lithological contacts or structural anomalies which may be significant in this area. These anomaly locations are indicated and shown on the contour map.

The isomagnetic contour pattern suggests an underlying lithology striking in an generally south-easterly direction through the grid area. All of the anomalies are easily identified and are labeled on the plan maps.

5.0 Conclusions and Recommendations

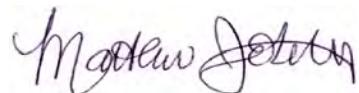
The induced polarization, and magnetic surveys completed over the Sewell grid were successful in mapping several zones of anomalous I.P. effects, and magnetic anomalies, as well as mapping the bedrock resistivity. Many of the interpreted I.P. anomalies are well defined and strong IP responses and will 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 IP anomalies **S1, S2, S3 and S4**, should be considered as priority 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 Bristol 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 Sewell 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 black ink, appearing to read "Matthew Johnston".

Matthew Johnston

Statement of Qualifications

This is to certify that: MATTHEW JOHNSTON

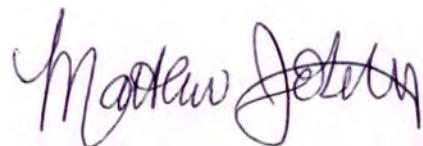
I am a resident of Timmins; province of Ontario since June 1, 1995.

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 February 14, 2012

A handwritten signature in purple ink that reads "Matthew Johnston". The signature is fluid and cursive, with "Matthew" on top and "Johnston" below it, though the two names are connected by a single stroke.

Appendix A

Survey Theory - Total Field Magnetics

Magnetic Survey

Theory:

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally occurring magnetic field caused by changes in the magnetization of the rocks in the earth. These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals. Magnetic anomalies in the earth's field are caused by changes in two types of magnetization: (1) Induced, caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals. (2) Remanent magnetism is independent of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc.) in the rocks. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same direction as the present earth's field, due to changes in the orientation of the rock or the field. The **unit** of measurement (variations in intensity) is commonly known as the Gamma which is equivalent to the nanotesla (nT).

Method:

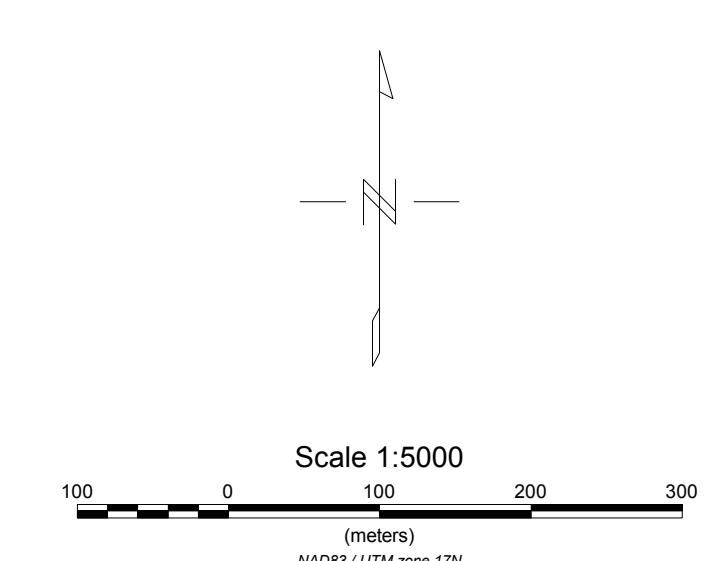
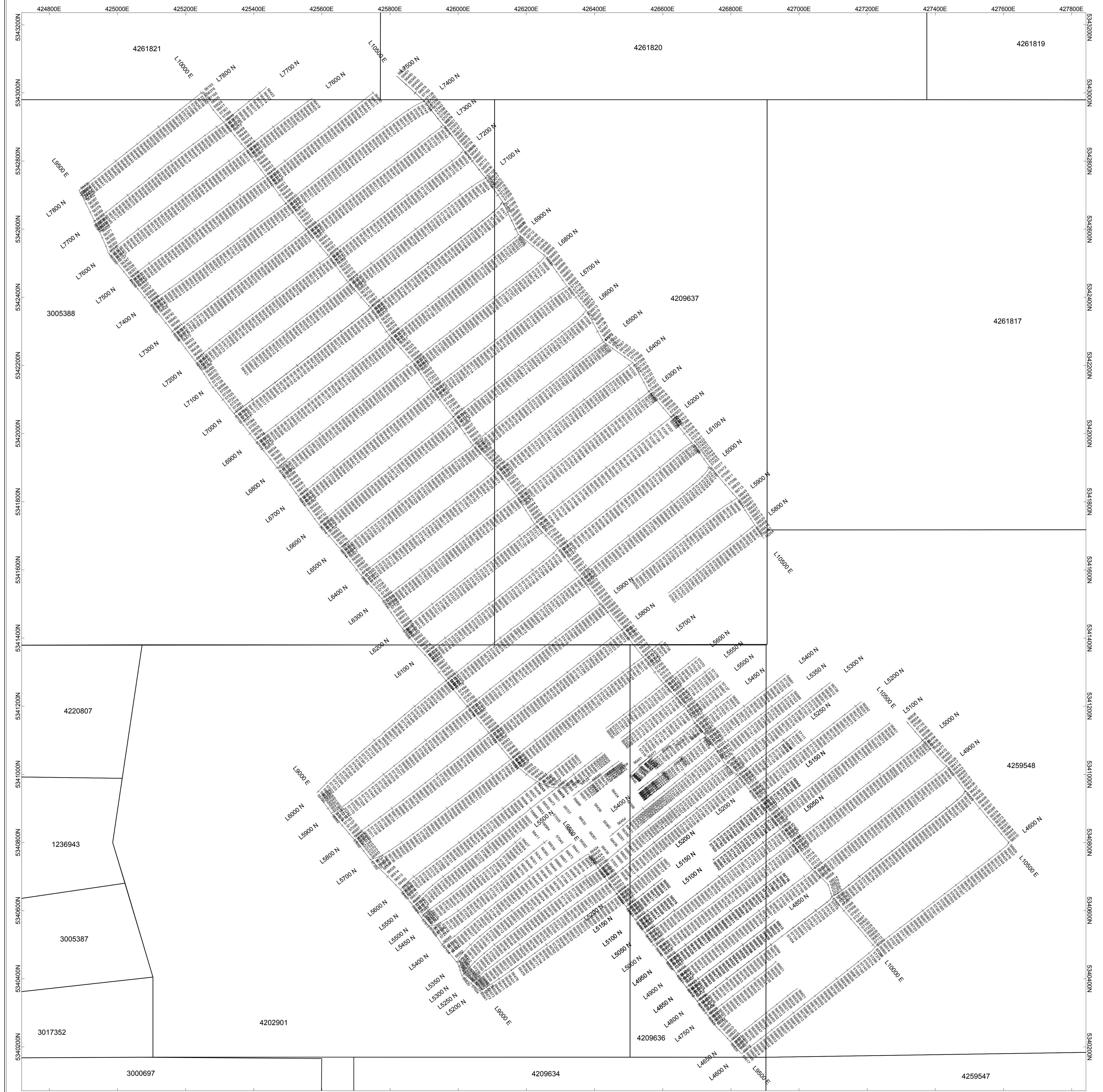
The magnetometer, a GEM Systems **GSM-19** with an Overhauser sensor measures the **Total Magnetic Field** (TFM) perpendicular to the earth's field (horizontal position in the polar region). The unit has no moving parts, produces an absolute and relatively high resolution measurement of the field and displays the measurement on a digital lighted display and is recorded (to memory). Initially, the tuning of the instrument should agree with the nominal value of the magnetic field for each particular area. The Overhauser procession magnetometer collected the data with a **0.2 nanoTesla accuracy**. The operator read each and every line at a 12.5 **m** intervals with the sensor attached to the top of four (56cm), aluminum tubing sections. The readings were corrected for changes in the earth's magnetic field (diurnal drift) with a similar GSM-19 magnetometer, acting as a stationary base station which automatically read and stored the readings at every 15 seconds. The data from both units was then downloaded to PC and base corrected values were computed.

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 (M_a) 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.



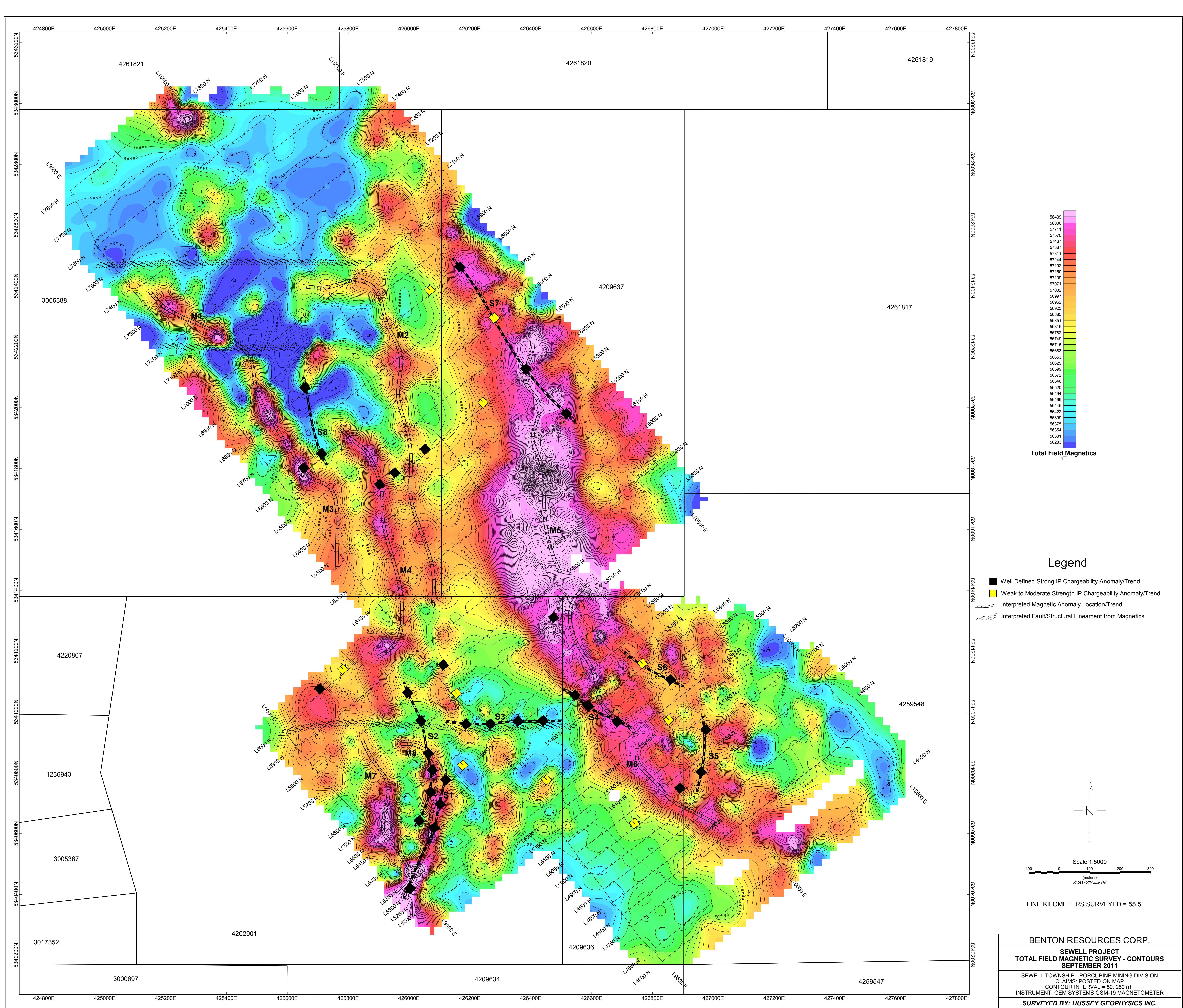
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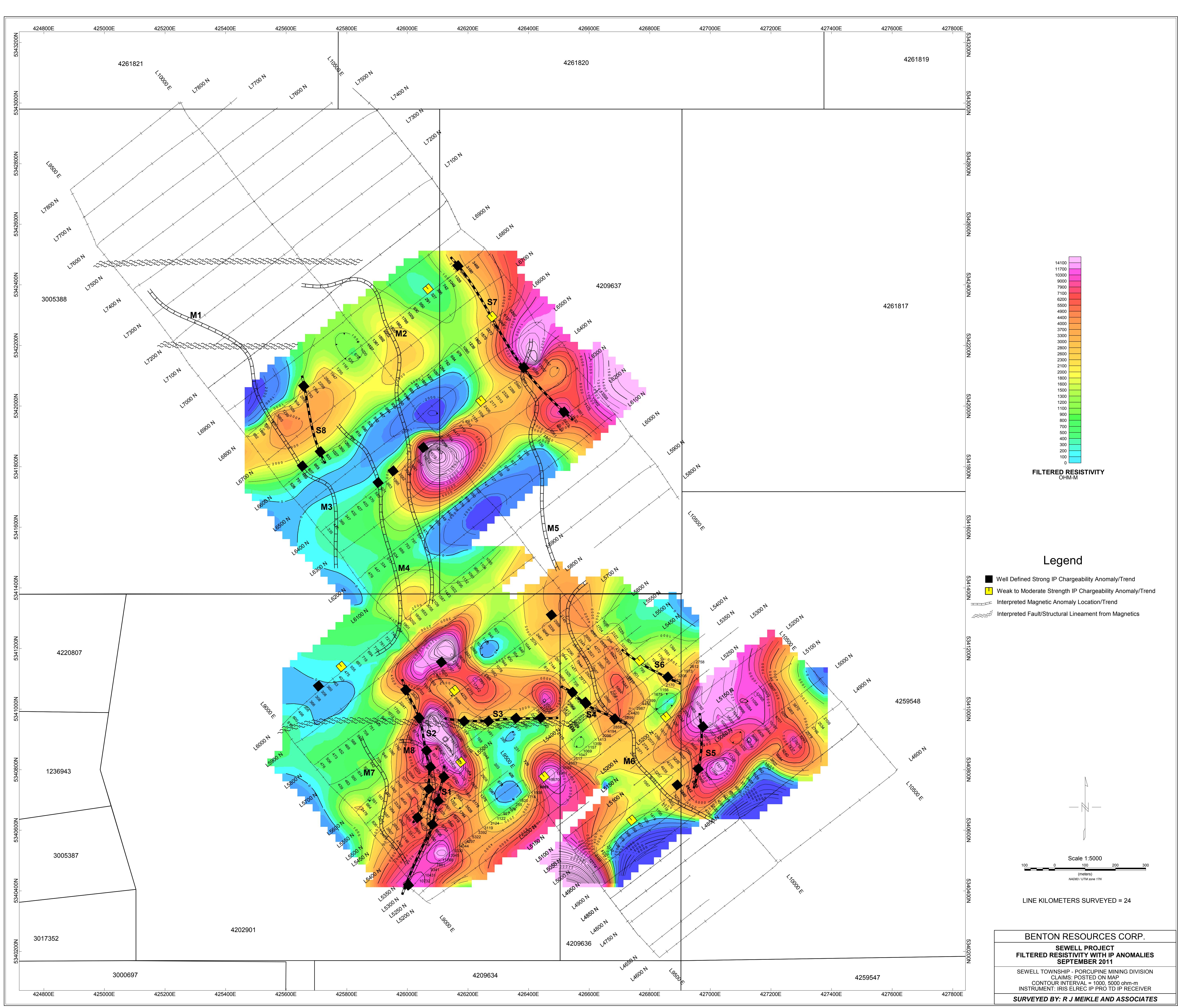
BENTON RESOURCES CORP.

SEWELL PROJECT

TOTAL FIELD MAGNETIC SURVEY - POSTED DATE

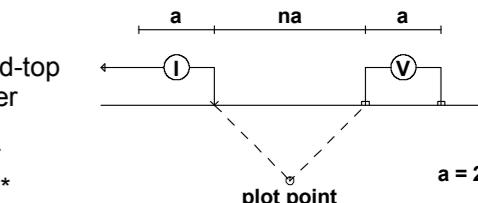
SEPTEMBER 2011





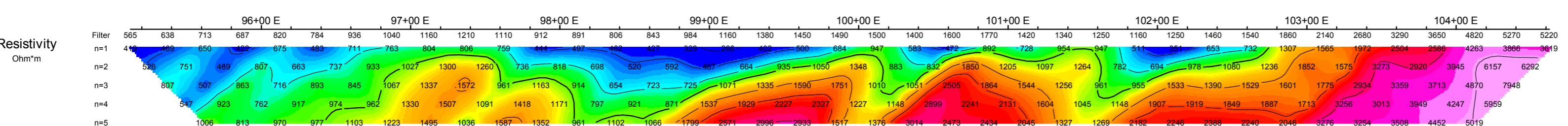
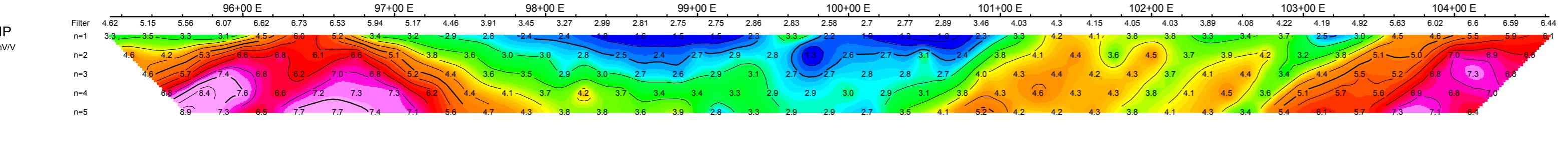
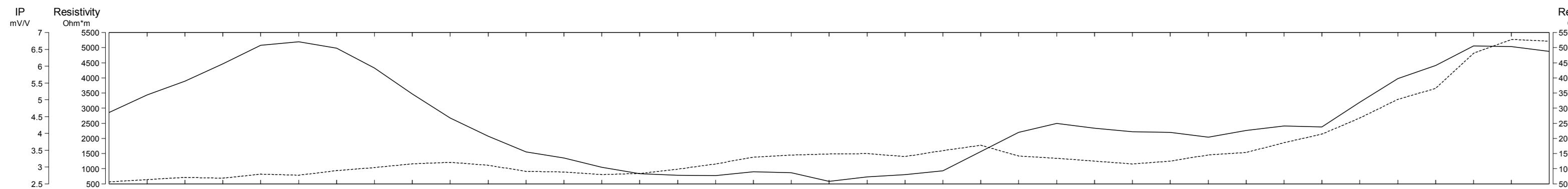
Pseudo Section Plot
66+00 N

Pole-Dipole Array



Pyramid-top Filter

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Scale 1:2500
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(meters)

Benton Resources Corp.
INDUCED POLARIZATION SURVEY
Sewell Project
September 2011

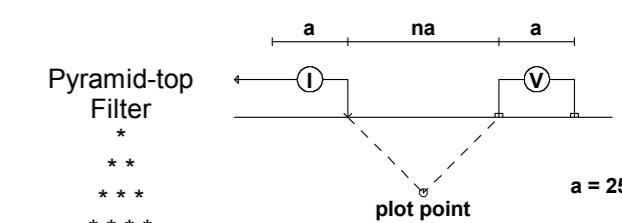
Sewell Township
Porcupine Mining Division

Surveyed By: R J Meikle and Associates

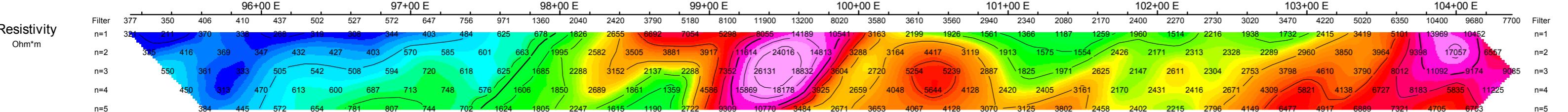
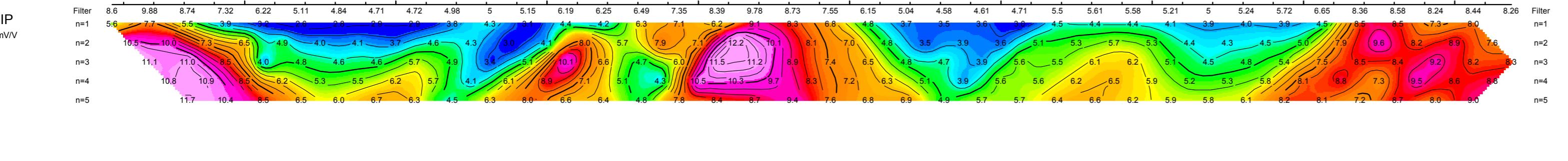
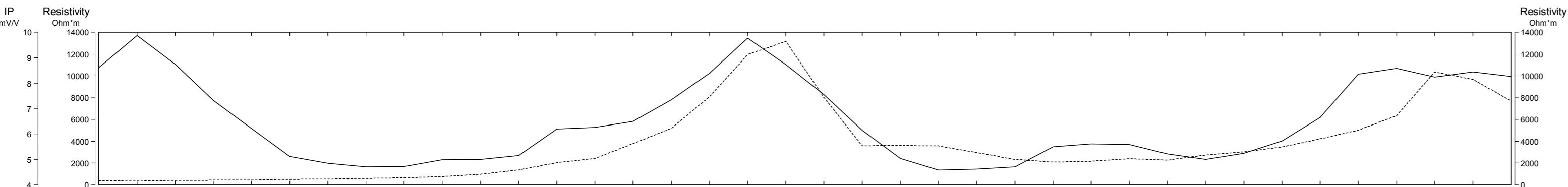
Pseudo Section Plot

64+00 N

Pole-Dipole Array



$a = 25 \text{ m}$



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INDUCED POLARIZATION SURVEY

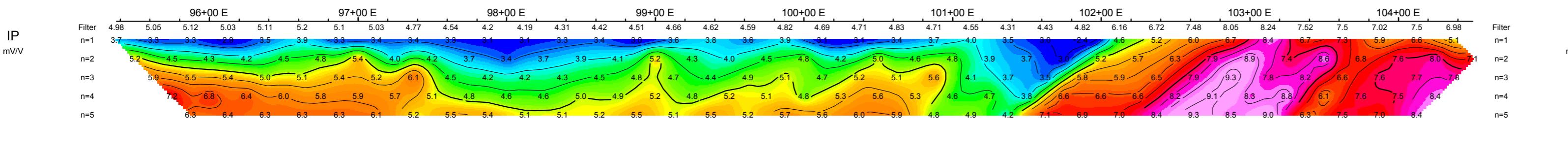
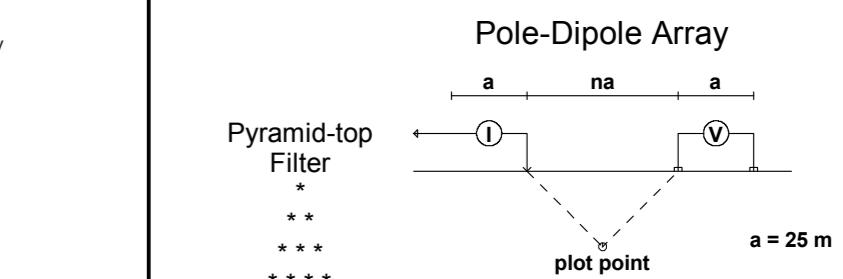
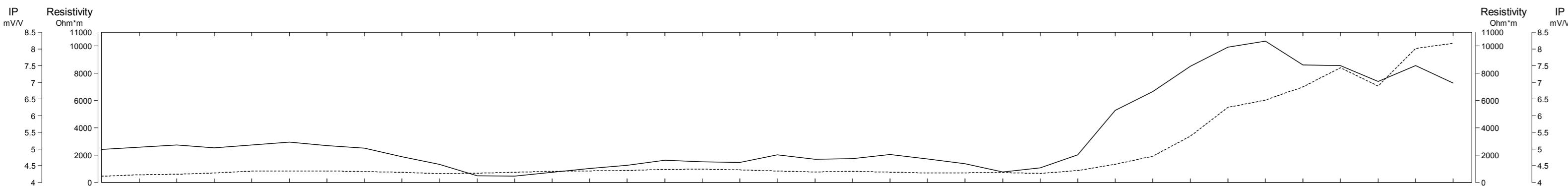
Sewell Project

September 2011

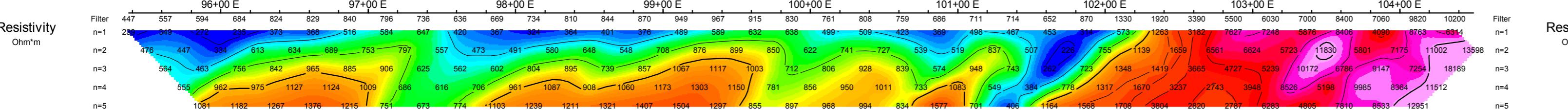
Sewell Township
Porcupine Mining Division

Surveyed By: R J Meikle and Associates

Pseudo Section Plot
62+00 N



Scale 1:2500
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(meters)



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Sewell Project
Spetember 2011

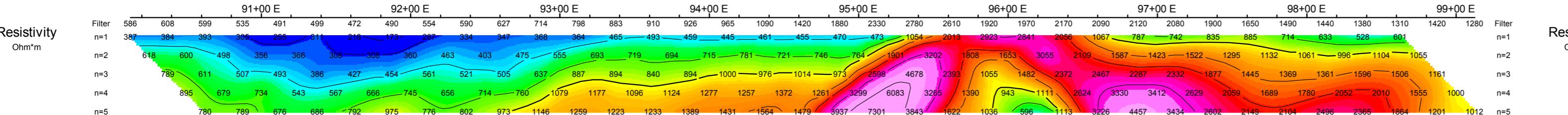
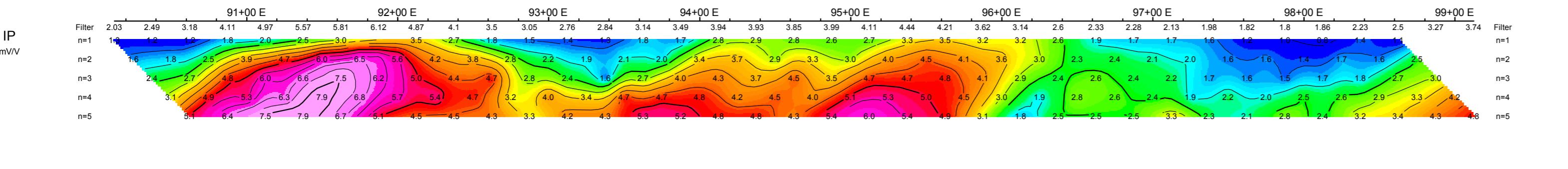
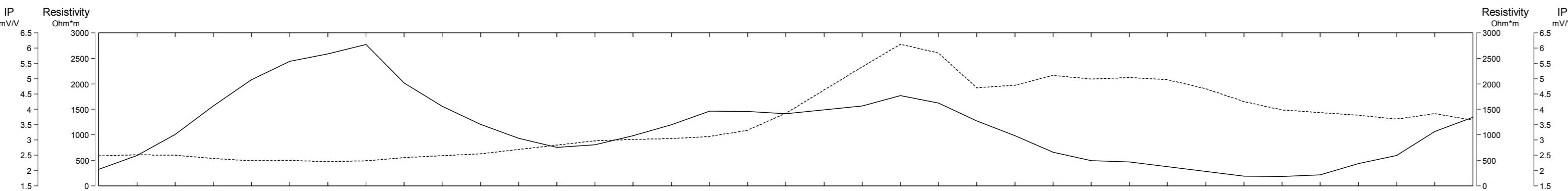
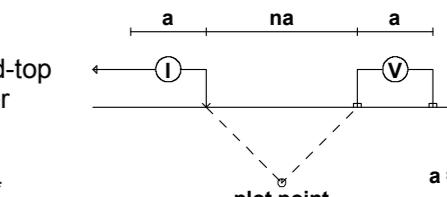
Sewell Township
Porcupine Mining Division

Surveyed By: R J Meikle and Associates

Pseudo Section Plot

60+00 N

Pole-Dipole Array



Scale 1:2500
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(meters)

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INDUCED POLARIZATION SURVEY

Sewell Project

September 2011

Sewell Township
Porcupine Mining Division

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Pseudo Section Plot 58+00 N

Dipole-Dipole Array

Pyramid-top Filter
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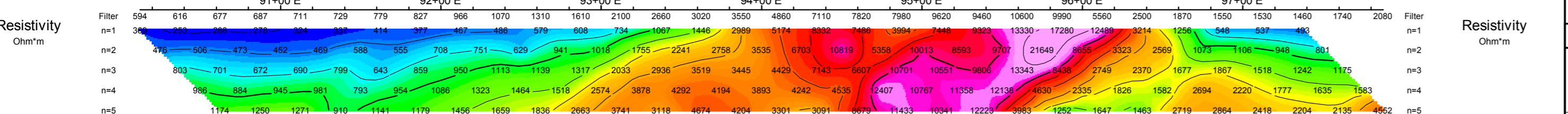
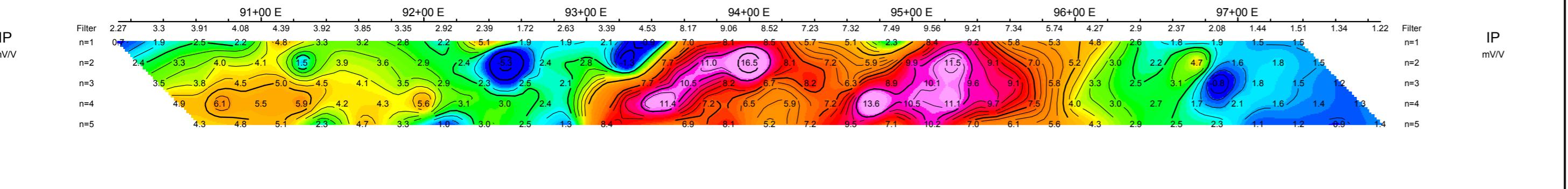
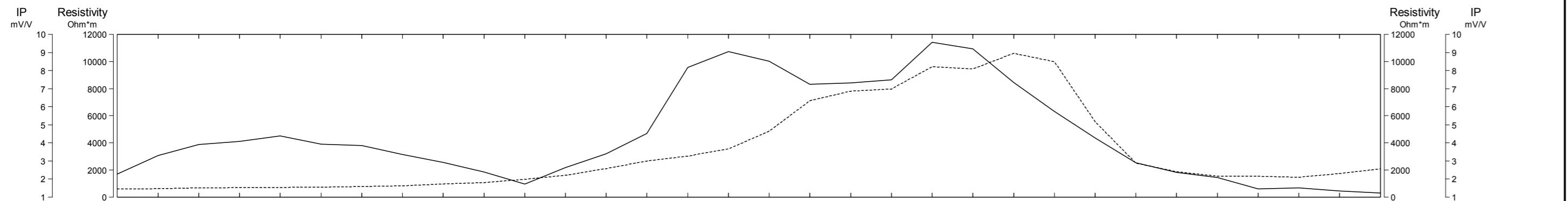
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Scale 1:2500
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 (meters)

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 INDUCED POLARIZATION SURVEY
 Sewell Project
 September 2011

Sewell Township
 Porcupine Mining Division

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Resistivity
Ohm*m

n=1 369 253 288 278 324 337 414 377 467 486 579 608 734 1067 1446 2989 5174 8332 7486 3994 7820 9620 9460 10600 2500 17280 3214 1256 548 537 493
 n=2 476 506 473 452 469 588 555 708 751 629 941 1015 1755 2241 2758 3535 6703 10819 5358 10013 8593 9707 21649 8655 3323 2569 1073 1106 948 801
 n=3 803 701 672 690 799 643 859 950 1113 1139 1317 2033 2936 3519 3445 4429 7143 6607 10701 10551 9806 13343 8438 2749 2370 1677 1867 1518 1242 1175
 n=4 986 884 945 981 793 954 1086 1323 1464 1518 2574 3878 4194 3893 4242 4535 12407 10767 11358 12138 4630 2335 1826 1582 2694 2220 1777 1635 1583
 n=5 1174 1250 1271 910 1141 1179 1456 1836 2663 3741 3118 4674 3301 3091 11433 10341 12223 3983 1252 1647 1483 2719 2864 2418 2204 2135 4552

Filter
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n=2
n=3
n=4
n=5

Pseudo Section Plot

57+00 N

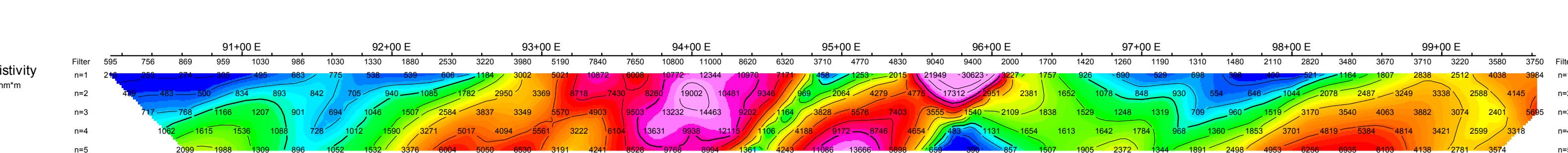
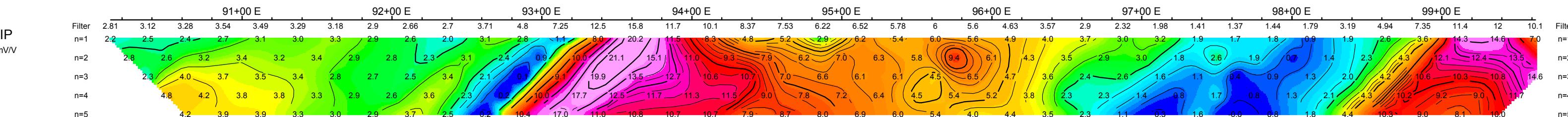
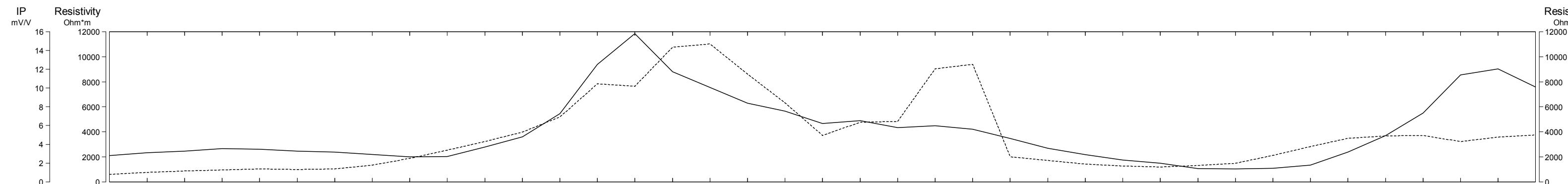
Dipole-Dipole Array



Pyramid-top Filter
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$a = 25 \text{ m}$

plot point



Scale 1:2500

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(meters)

Benton Resources Corp.

INDUCED POLARIZATION SURVEY

Sewell Project

Spetember 2011

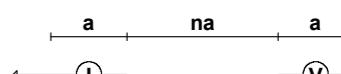
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Pseudo Section Plot

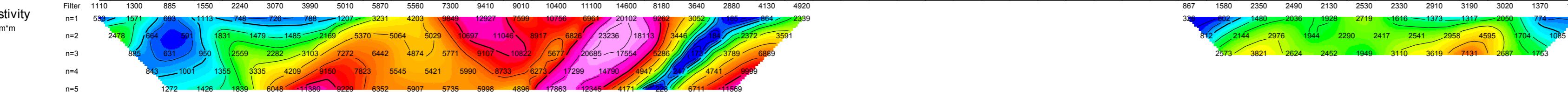
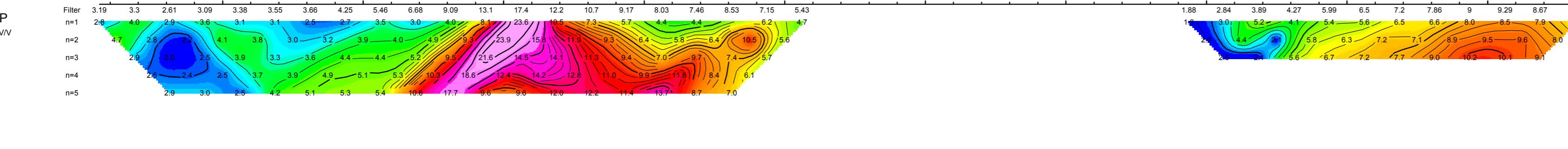
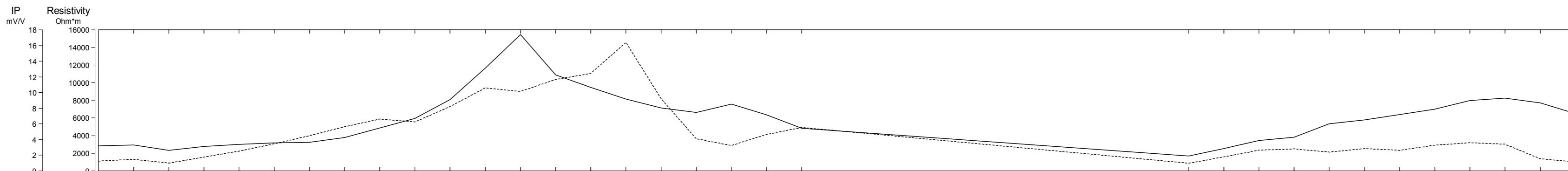
56+00 N

Pole-Dipole Array



$a = 25 \text{ m}$

Pyramid-top
Filter
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(meters)

Pseudo Section Plot

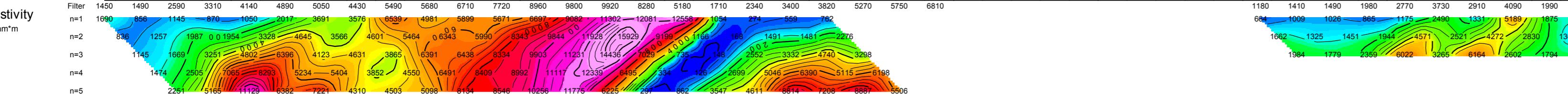
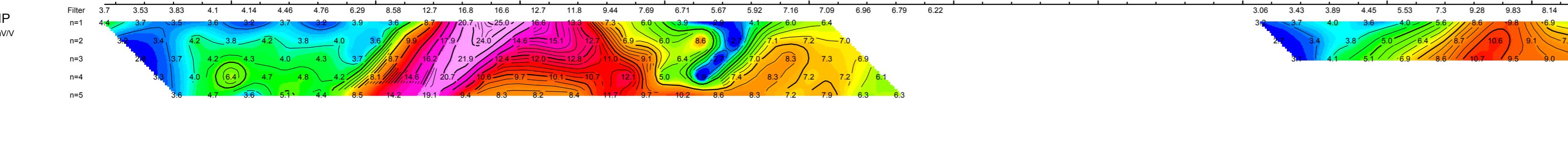
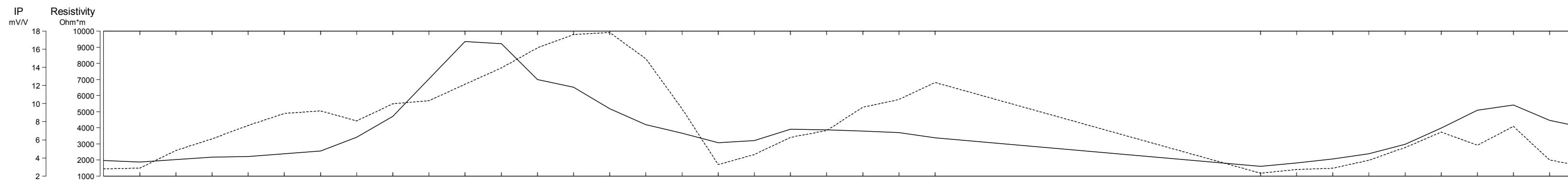
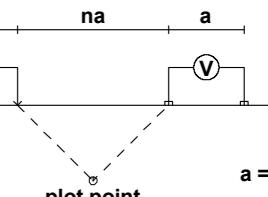
55+50 N

Pole-Dipole Array

Pyramid-top
Filter

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Scale 1:2500
25 0 25 50 75 100 125 150
(meters)

Benton Resources Corp.

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Sewell Project

September 2011

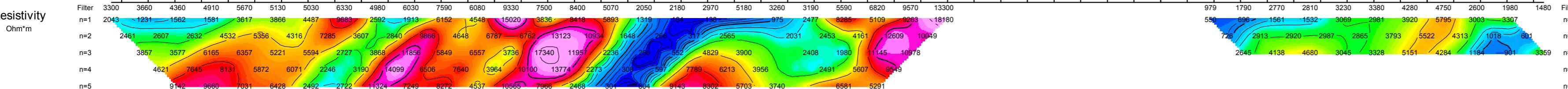
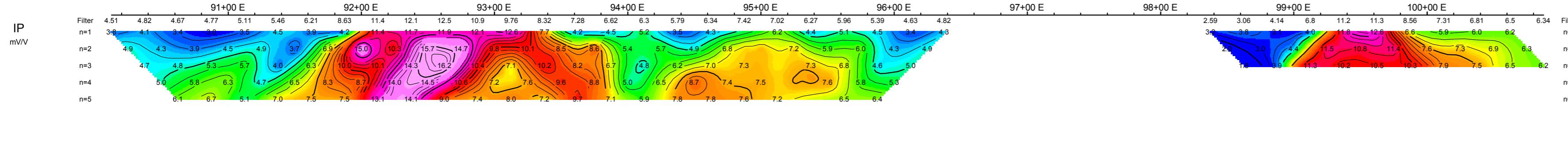
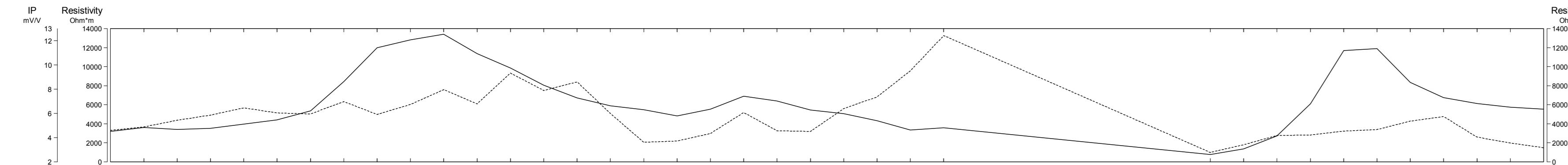
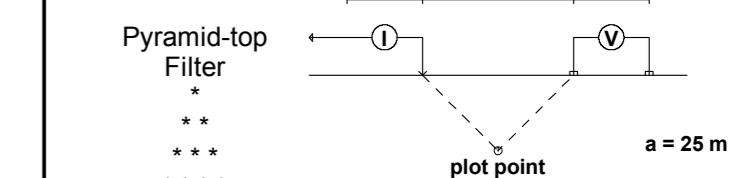
Sewell Township
Porcupine Mining Division

Surveyed By: R J Meikle and Associates

Pseudo Section Plot

55+00 N

Pole-Dipole Array



Scale 1:2500
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 (meters)

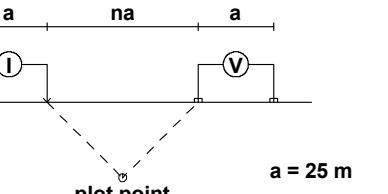
Benton Resources Corp.
 INDUCED POLARIZATION SURVEY
 Sewell Project
 September 2011

Sewell Township
 Porcupine Mining Division

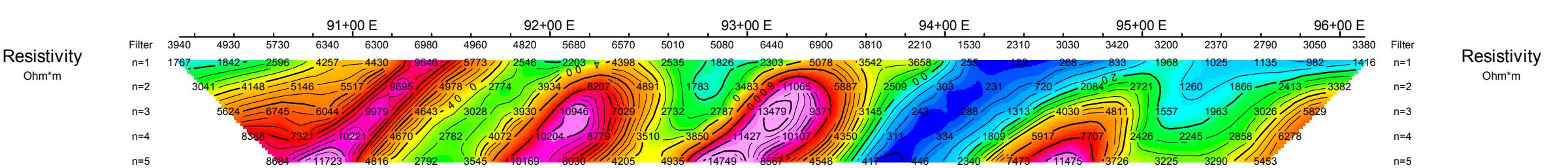
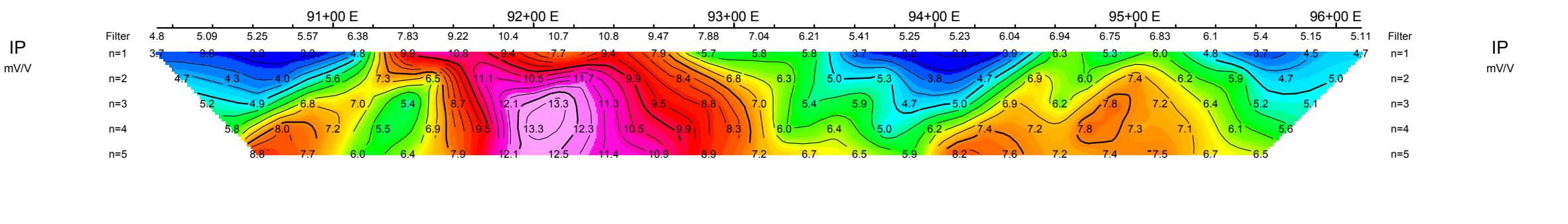
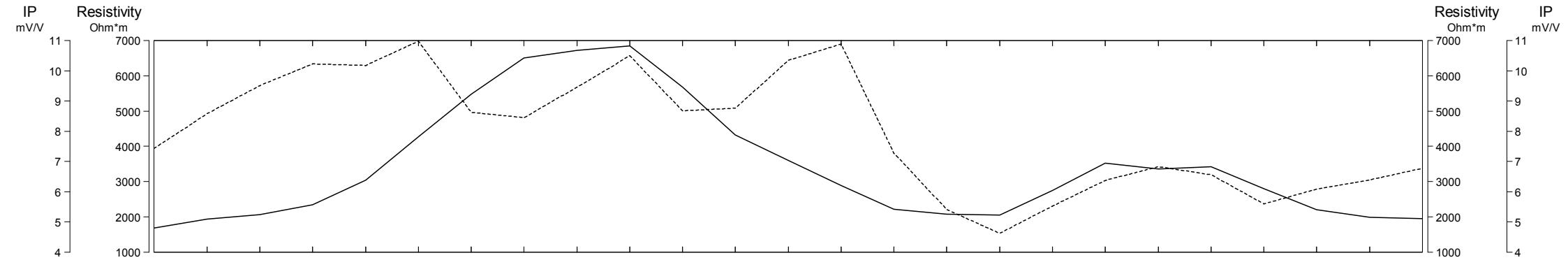
Surveyed By: R J Meikle and Associates

Pseudo Section Plot 54+50 N

Pole-Dipole Array



Pyramid-top
Filter
*
**



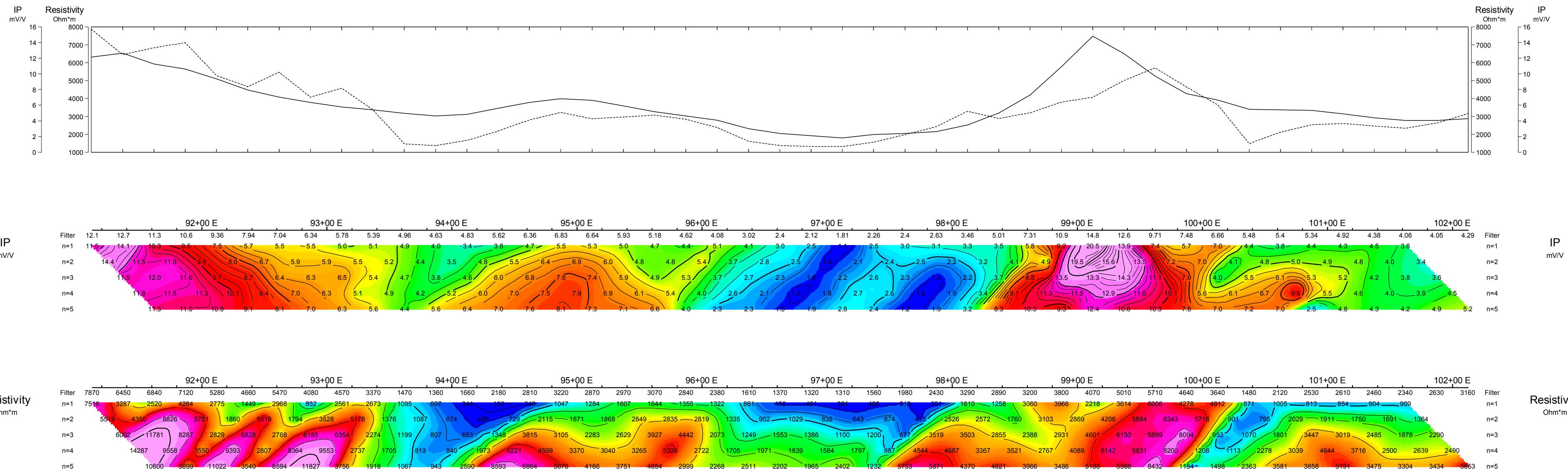
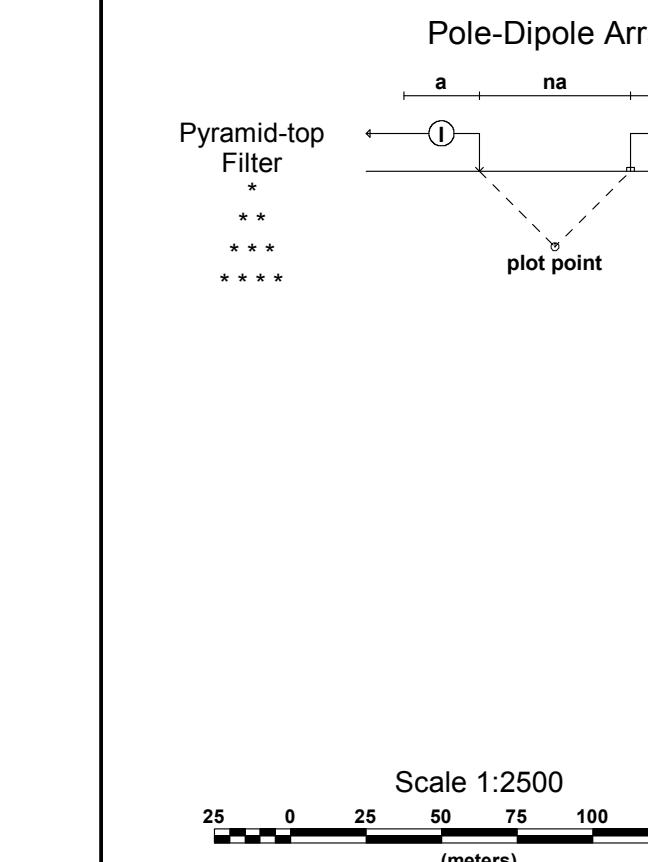
Scale 1:2500
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(meters)

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Sewell Project
September 2011

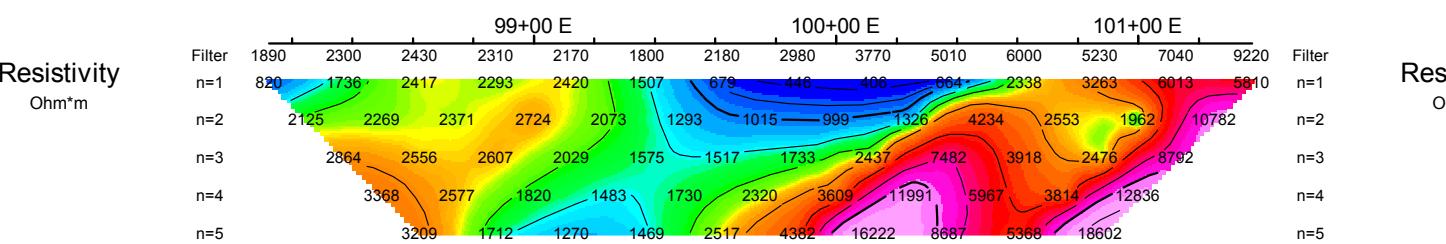
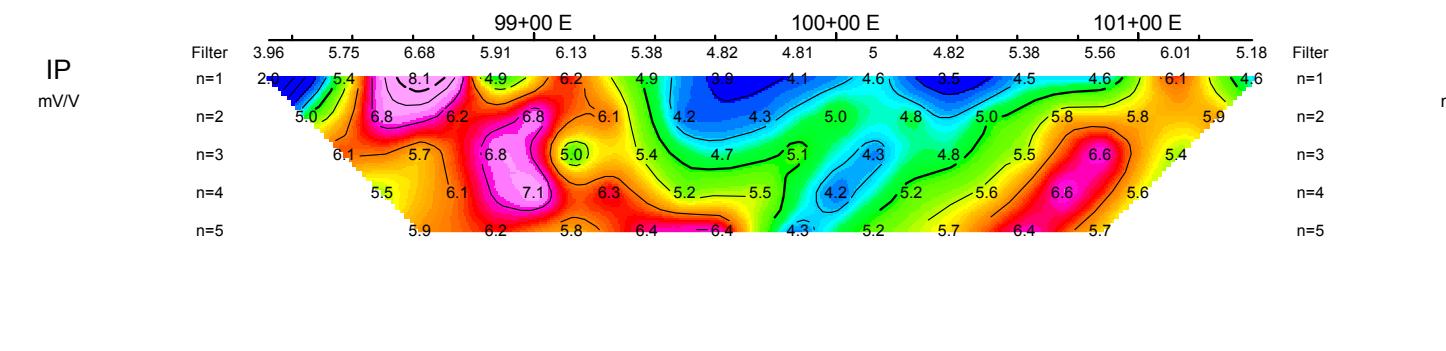
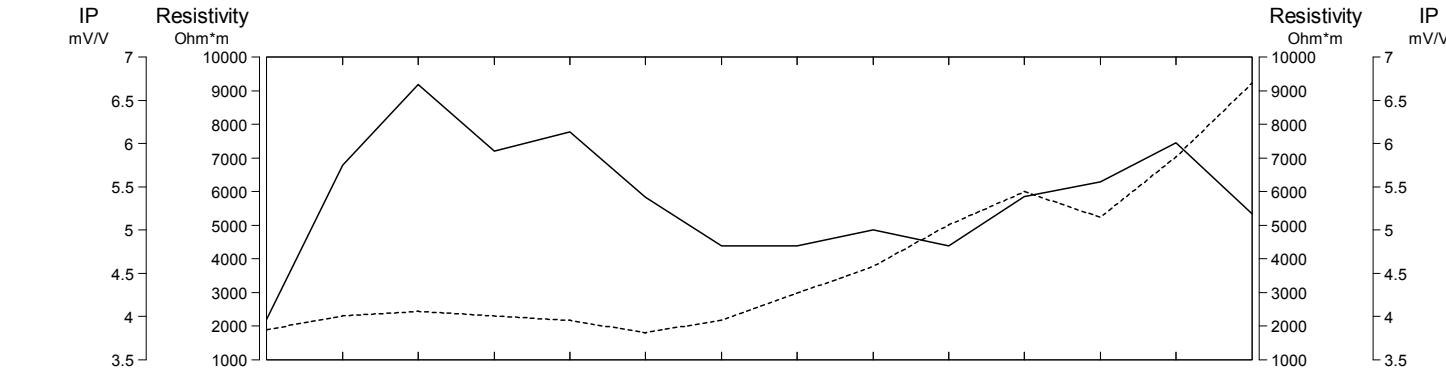
Sewell Township
Porcupine Mining Division

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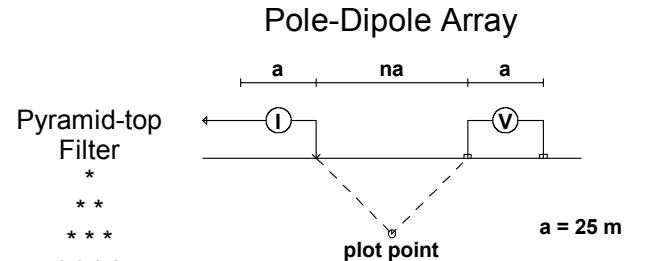
**Pseudo Section Plot
54+00 N**



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September 2011
Sewell Township
Porcupine Mining Division
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Pseudo Section Plot 52+00 N



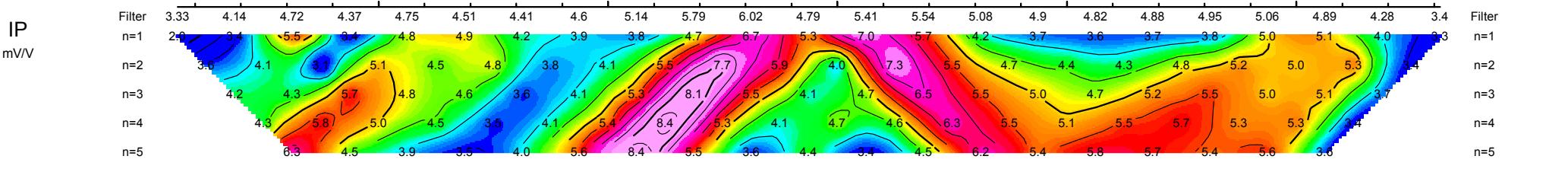
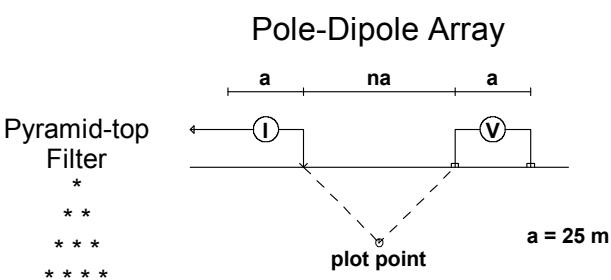
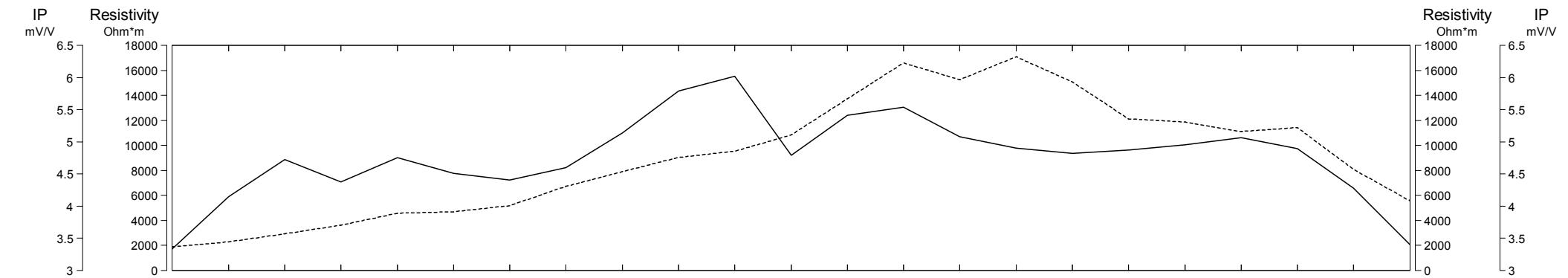
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(meters)

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Sewell Project
September 2011

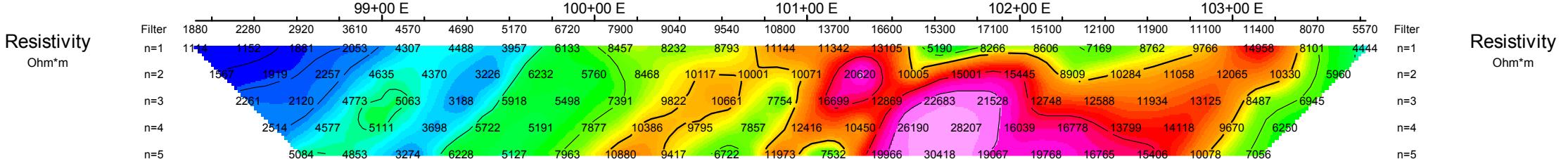
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Pseudo Section Plot 51+00 N



Scale 1:2500
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(meters)



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September 2011

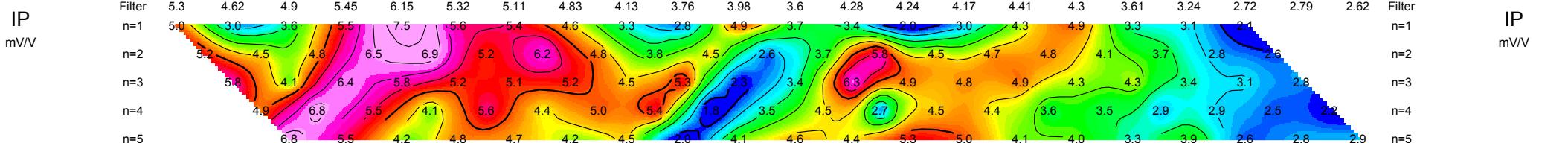
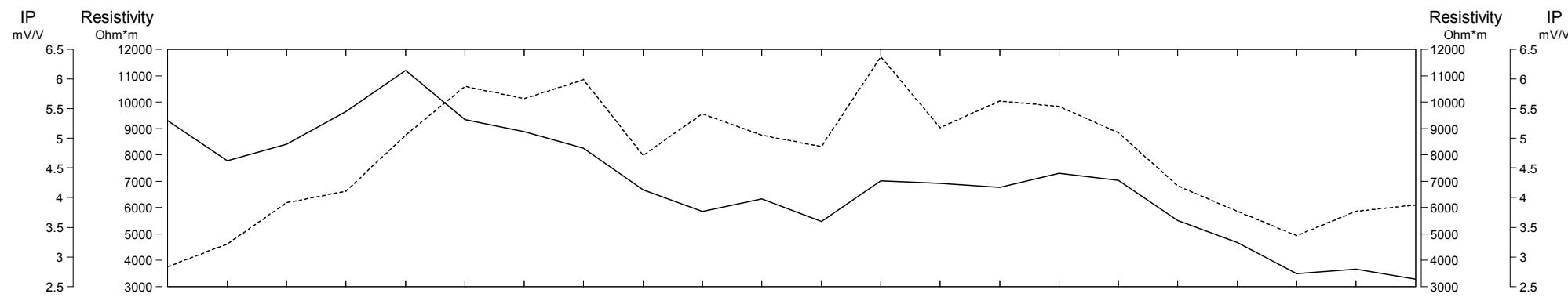
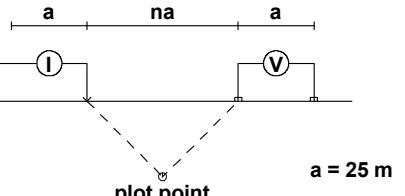
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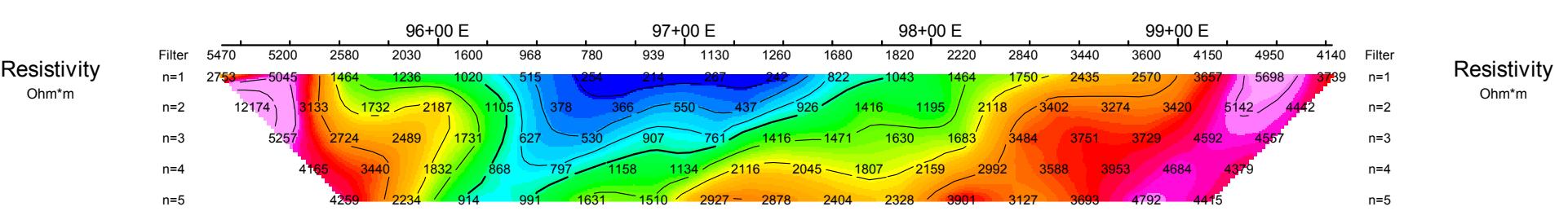
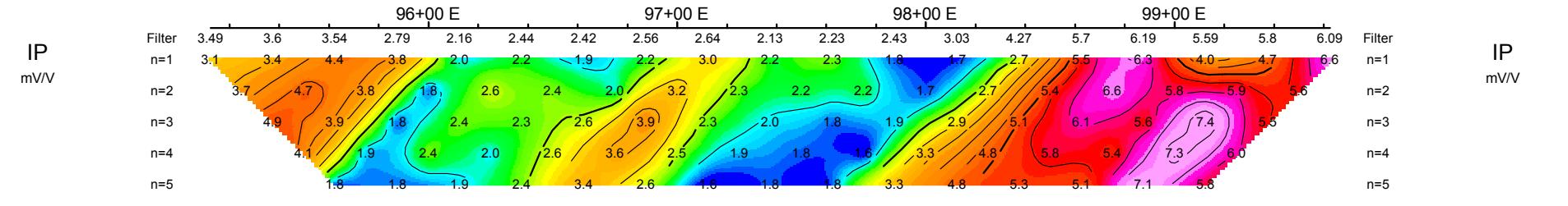
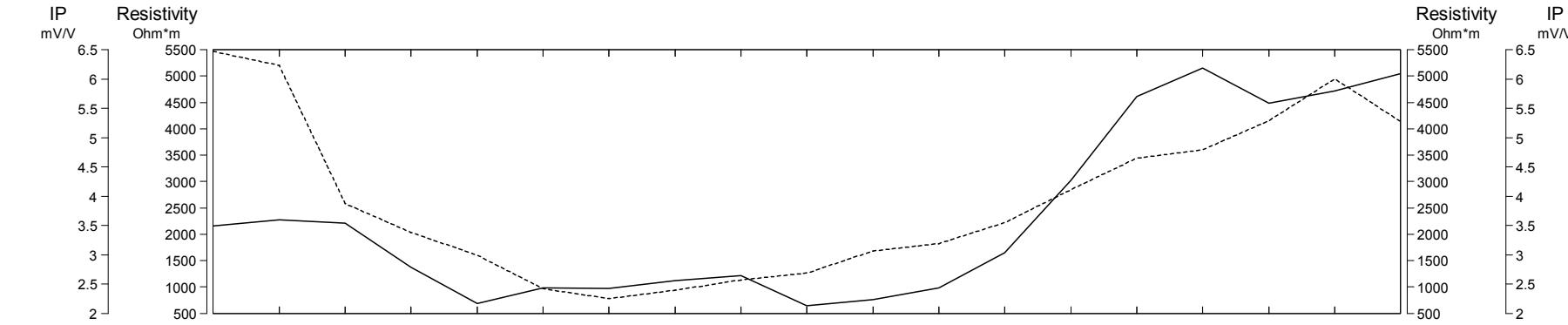
Surveyed By: R J Meikle and Associates

Pseudo Section Plot 50+00 N

Pole-Dipole Array

Pyramid-top
Filter
*
**

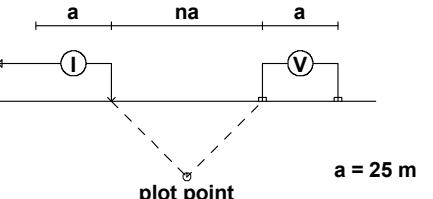




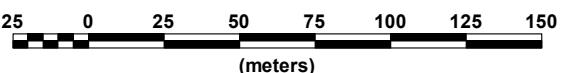
Pseudo Section Plot 50+00 N

Pole-Dipole Array

Pyramid-top
Filter
*
**



Scale 1:2500



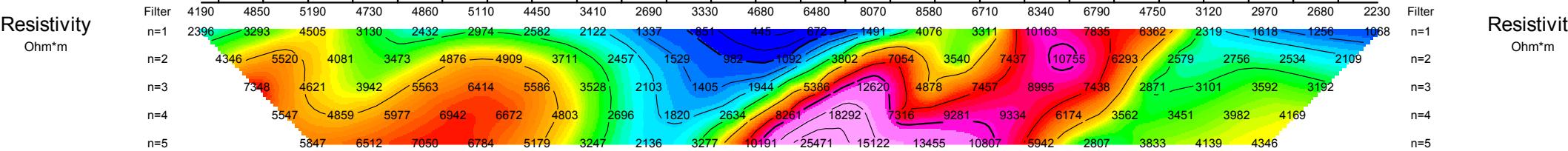
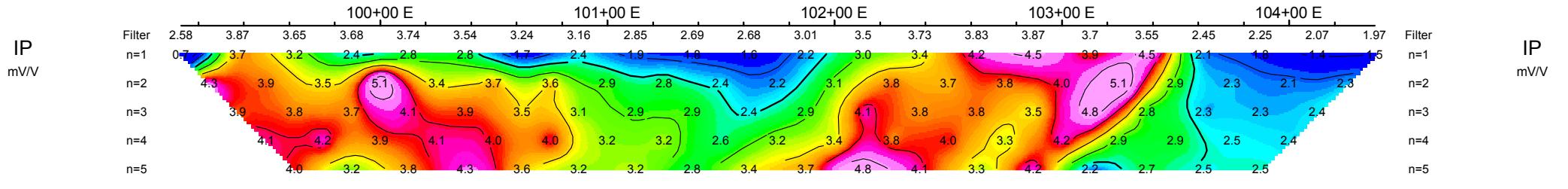
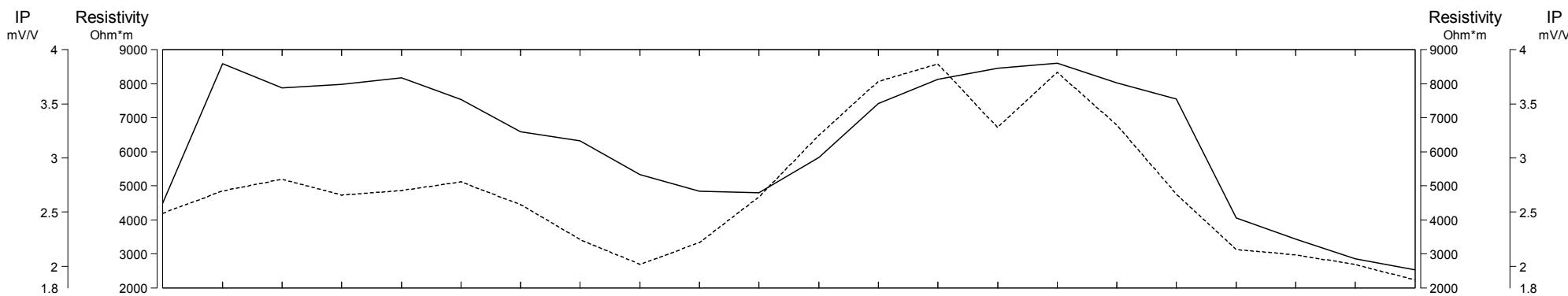
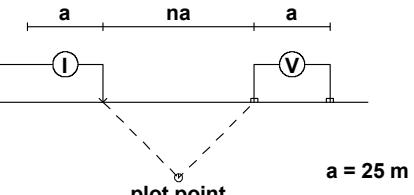
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Sewell Project
Spetember 2011

Sewell Township
Porcupine Mining Division

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Pseudo Section Plot 49+00 N

Pole-Dipole Array



Scale 1:2500
25 0 25 50 75 100 125 150 (meters)

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Sewell Project

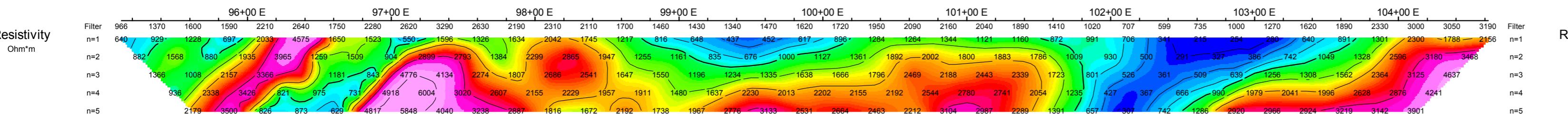
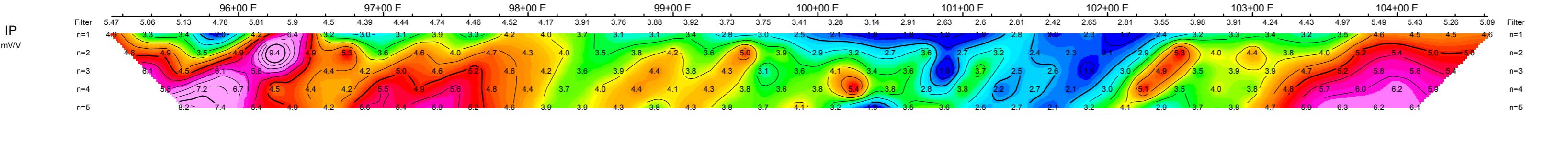
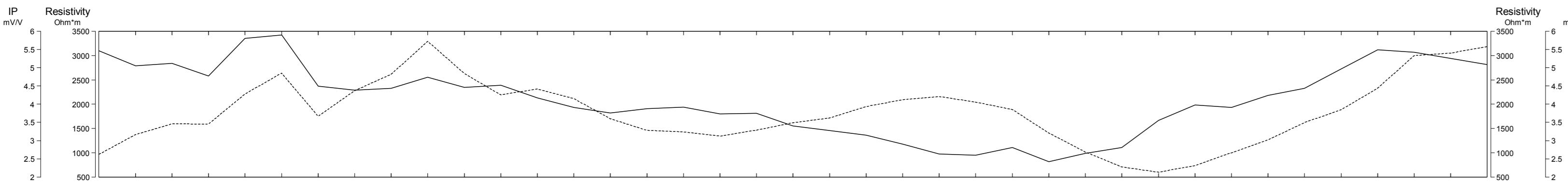
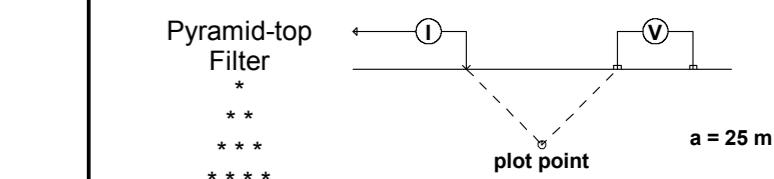
September 2011

Sewell Township
Porcupine Mining Division

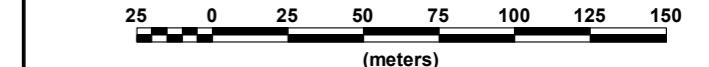
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Pseudo Section Plot
68+00 N

Pole-Dipole Array



Scale 1:2500



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Sewell Project

Spetember 2011

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Porcupine Mining Division

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