Report of Induced Polarization, VLF-EM and Total Field Magnetic Surveys

On the

Tully Grid

Tully Township, Ontario

Mining Claim Nos. 4243872 4243873

Porcupine Mining Division

For

SGX Resources Inc.

January 20, 2011
Timmins, Ontario

Matthew Johnston

1226 Gatineau Blvd.
Timmins, Ont. P4R 1E3

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1.0 Introduction

The Tully grid is located on the Tully Central property of SGX Resources Inc., located in north central Tully Township, Porcupine Mining Division. The Tully grid in Tully Township covers portions of or all of mining claims numbered 4243872 and, 4243873. This mining property is currently under option to SGX Resources Inc. Between December 2010 and January of 2011, a geophysical survey program consisting of induced polarization and resistivity surveys, VLF-EM, and total field magnetic surveys was conducted over a portion of this claim. Ray Meikle and Associates of North Bay, Ontario, carried out the IP geophysical surveys, while Yvon Veronneau of Timmins completed the magnetic, VLF-EM surveys; and line cutting. The surveys were completed between December 15, 2010; and January 11, 2011. 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 Tully property is located approximately 35 kilometers northeast of the city of Timmins in north central Tully Township. Access to the grid area is via highway 655 north for approximately 28 kilometers. From this point a number of bush roads and trails can be accessed by four wheel drive vehicles, ATV, or snowmobiles for 7 kilometers in an easterly direction to the southern area of the cut grid (see figures 1 and 2).

3.0 Summary of 2010/11 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 0° spaced every 100 meters and chained and marked every 25 meters. The grid lines were surveyed every 100 meters along a baseline 1.2 km. in length and ranged in length between 350 and 850 meters.

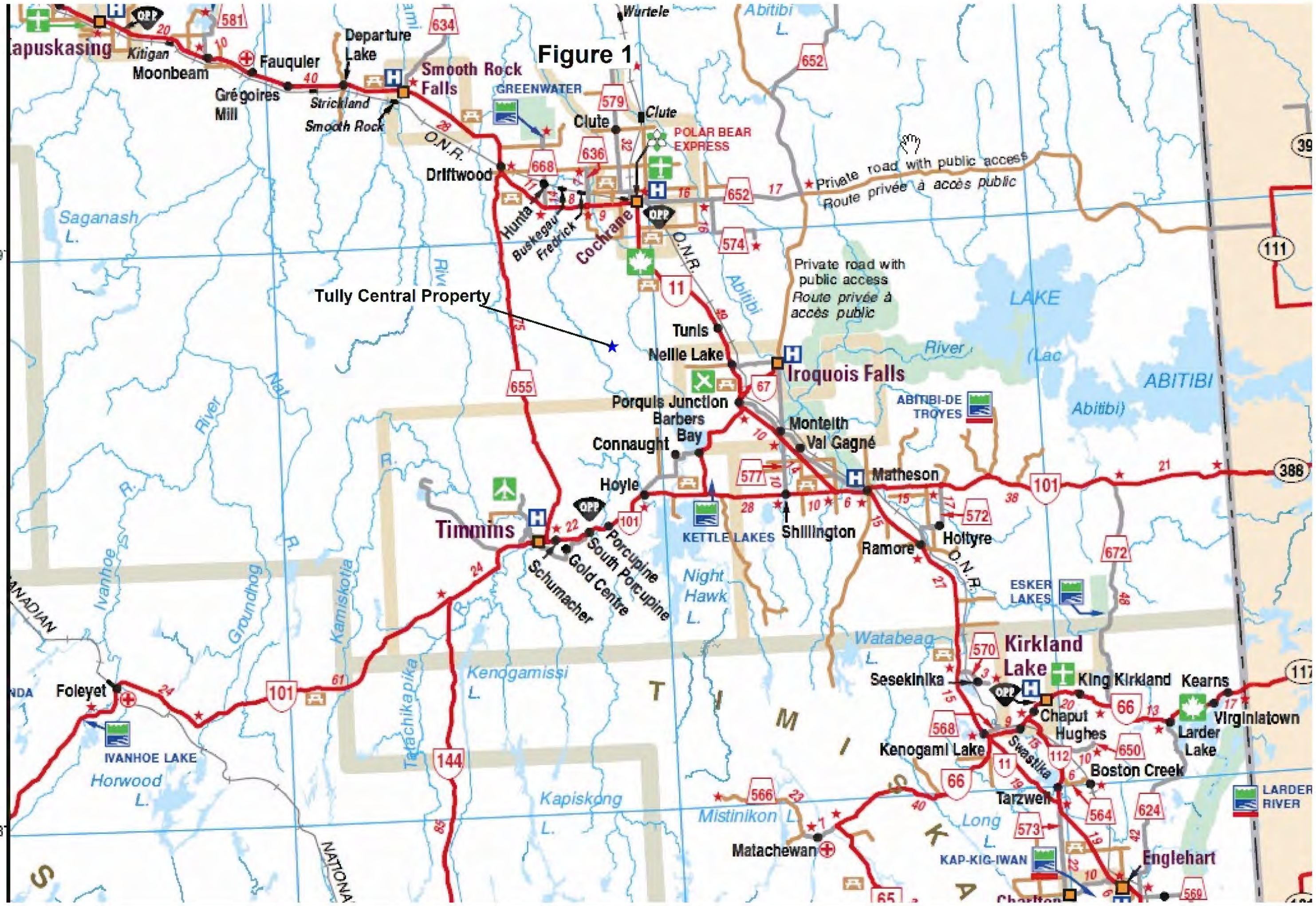
Tully Central Property
Kapuskasing
Kitigan
Moonbeam
Fauquier
Departure Lake
Grégoires Mill
Strickland
Smooth Rock
Smooth Rock Falls
GREENWATER
Clute
Wurtele
POLAR BEAR EXPRESS
Driftwood
Hunta
Buskegau
Fredrick
Cochrane
O.N.R.
Private road with public access
Route privée à accès public
Saganash L.
Abitibi L.
Tunis
Nellie Lake
Iroquois Falls
LAKE ABITIBI
(Lac Abitibi)
River
ABITIBI-DE TROYES
Porquis Junction
Barbers Bay
Connaught
Monteith
Val Gagné
Matheson
Hoyle
Timmins
Schumacher
Gold Centre
South Porcupine
Porcupine
KETTLE LAKES
Shillington
Ramore
Holtyre
Night Hawk L.
ESKER LAKES
Watabeag L.
Kirkland Lake
Sesekinika
King Kirkland
Kearns
Chaput Hughes
Virginiatown
Larder Lake
Kenogami Lake
Swastika
Boston Creek
Tarzwell
LARDER RIVER
Long L.
KAP-KIG-IWAN
Englehart
Charlton
Matachewan
Mistinikon L.
Kapiskong L.
Kenogamissi L.
Foleyet
IVANHOE LAKE
Horwood L.
Ivanhoe R.
Groundhog
Kamiskotia
Tatachikapika
Nat R.
River
T I M I S K A

Figure 1

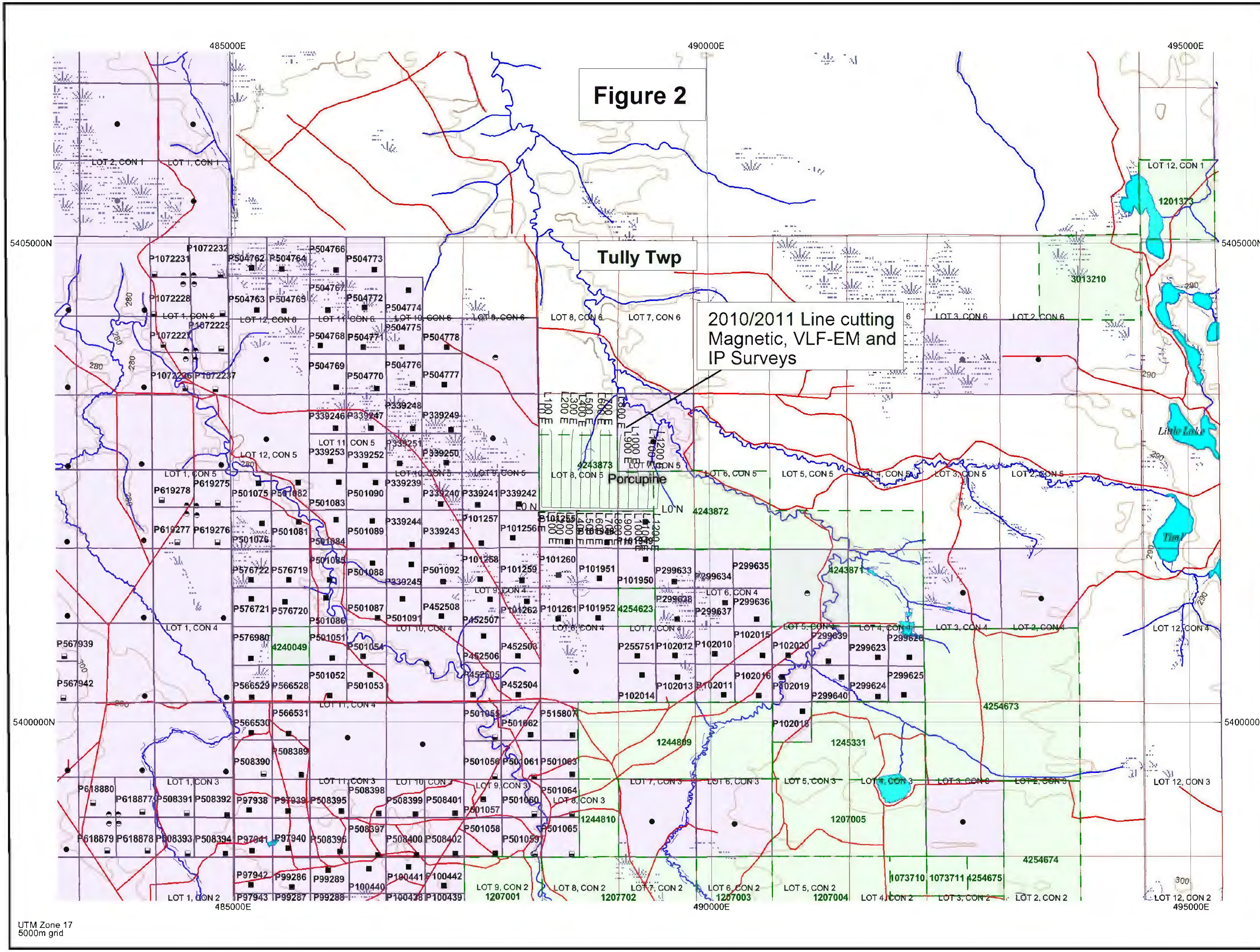

Figure 2
Tully Twp
2010/2011 Line cutting
Magnetic, VLF-EM and
IP Surveys
Porcupine
485000E
490000E
495000E
5405000N
5400000N
LOT 2, CON 1
LOT 1, CON 1
LOT 12, CON 1
LOT 1, CON 6
LOT 12, CON 6
LOT 11, CON 6
LOT 10, CON 6
LOT 9, CON 6
LOT 8, CON 6
LOT 7, CON 6
LOT 3, CON 6
LOT 2, CON 6
LOT 1, CON 5
LOT 12, CON 5
LOT 11, CON 5
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4243873
4243872
4243871
4254623
4240049
4254673
1244809
1245331
1244810
1207005
4254674
1073710
1073711
4254675
1207001
1207702
1207003
1207004
Little Lake
UTM Zone 17
5000m grid

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, n=5, and n=6 times the dipole spacing was measured in order to map the response at depth. A total of approximately **9.6 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 and VLF-EM, using a GEM GSM-19 magnetometer/VLF system, totaled **10.2** 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 26 to 746 ohm-m with a mean background resistivity of approximately 179 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. Four significant anomaly trends were identified and labeled on the plan map as T1 through T4. In addition, several isolated, moderate and strong IP anomalies were also mapped which are not readily grouped into trends. Anomaly trends T1 is a well defined, strong IP anomaly trend that should be followed up. This anomaly is coincident with a large anomalous resistivity low striking northwest through the grid area. These anomalies may reflect underlying lithology containing sulphide or graphitic mineralization which could be considered prospective to gold or base metals. Anomalies T2, T3 and T4 are weak to moderate strength IP anomaly trends which may represent weakly mineralized lithology. These anomalies may represent weakly 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 Tully grid indicates a very quiet magnetic background with magnetic values ranging between 56938 and 57444 nT. The background magnetic field strength is 56993 nT. The overall magnetic pattern is characterized by a low magnetic domain to the northeast and a more active magnetic domain to the southwest. This likely reflects a contact between sediments to the northeast and volcanics to the southwest. This interpreted magnetic contact has been identified and labeled as M1 and is easily seen on the magnetic 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.

In addition to magnetic anomaly M1; a fault zone has been interpreted within the Tully grid. This anomaly may represent major lithological contacts or structural anomalies which may be significant in this area. This anomaly location is indicated and shown on the contour map.

The VLF-EM survey over the Tully grid was not successful in mapping any significant bedrock conductive zones.

5.0 Conclusions and Recommendations

The induced polarization, VLF-EM, and magnetic surveys completed over the Tully grid were successful in mapping several zones of anomalous I.P. effects, VLF-EM conductors and magnetic anomalies, as well as mapping the bedrock resistivity. All of 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 IP anomalies **T1, T2, T3, and T4** 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 which 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 Tully 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 Tully 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,

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 January 20, 2011

Appendix A

Survey Theory - Total Field Magnetics

Magnetic Survey

<u>Theory:</u>

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 illuminate, pyrrhotite, and some less common minerals. Magnetic anomalies in the earth's filed 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).

<u>Method:</u>

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

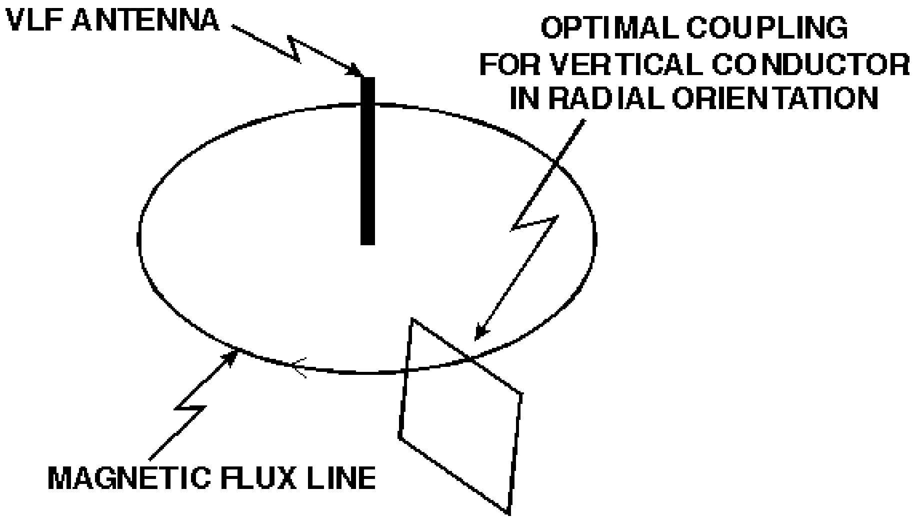
Time domain IP surveys involve measurement of the magnitude of the polarisation voltage (Vp) that results from the injection of pulsed current into the ground.

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 Vp. 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.

The VLF Method

- The very low frequency (VLF) method is a reconnaissance electromagnetic technique used mainly in mineral exploration
- The method makes use of powerful VLF transmitters (3-30 kHz) that are used for military communications
- The U.S. Navy operates 11 transmitters that serve as standard VLF sources for geophysical work

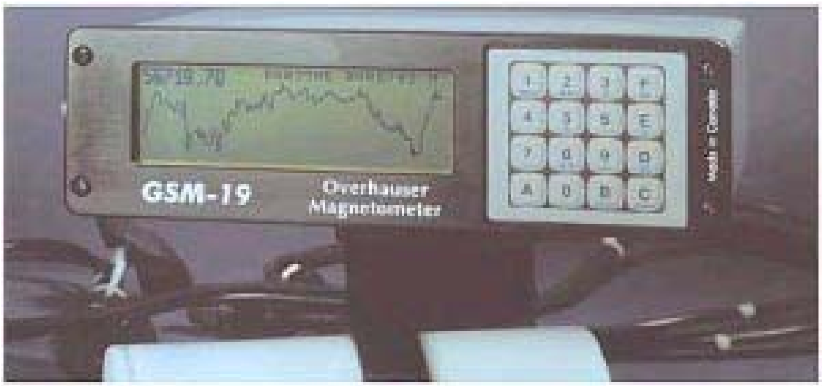


- The VLF method is essentially a tilt-angle technique. In the absence of any conductive body, the secondary field is zero, and the resultant (primary) magnetic field is thus horizontal. If a conductor is present, the associated secondary field will cause the resultant to be tilted.

- Flux linkage analysis can be used to show that vertically above the conductor, the tile angle passes through zero (see Reynolds, 1997, p. 656).

- VLF signal strength diminishes rapidly with depth (i.e., the skin depth is small). Consequently, VLF methods are primarily used to detect near-surface features, and not for depth-sounding.
  Data acquisition:
- The most common field technique (VLF-EM) uses a hand-held antenna. In older systems, an audio signal is nulled to determine the tilt angle. In newer systems, data acquisition is entirely digital (push one button, the electronics do the rest). The measured parameters are tilt angle (in degrees) and quadrature component (in %).

- Another field technique, known as VLF-R, uses an electrical dipole. Measured parameters are apparent resistivity (Ohm-m) and quadrature component (%).



GSM-19 v7.0

Overhauser Magnetometer / Gradiometer / VLF

Introduction

The GSM-19 v7.0 Overhauser instrument is the total field magnetometer / gradiometer of choice in today's earth science environment - representing a unique blend of physics, data quality, operational efficiency, system design and options that clearly differentiate it from other quantum magnetometers.

With data quality exceeding standard proton precession and comparable to costlier optically pumped cesium units, the GSM-19 is a standard (or emerging standard) in many fields, including:

- **Mineral exploration (ground and airborne base station)**
- **Environmental and engineering**
- **Pipeline mapping**
- **Unexploded Ordenance Detencion**
- **Archeology**
- **Magnetic observatory measurements**
- **Volcanology and earthquake prediction**

Taking Advantage of the Overhauser Effect

Overhauser effect magnetometers are essentially proton precession devices except that they produce an order-of magnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field.

The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal-- that is ideal for very high-sensitivity total field measurement.

In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and reduces noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

The unique Overhauser unit blends physics, data quality, operational efficiency, system design and options into an instrumentation package that ... exceeds proton precession and matches costlier optically pumped cesium capabilities.

And the latest v7.0 technology up-grades provide even more value, including:

- **Data export in standard XYZ** (i.e. line-oriented) format for easy use in standard commercial software programs
- **Programmable export format** for full control over output
- **GPS elevation values** provide input for geophysical modeling
- **<1.5m standard GPS** for high-resolution surveying
- **<1.0 OmniStar GPS**
- <**0.7m for Newly introduced CDGPS**
- **Multi-sensor capability** for advanced surveys to resolve target geometry
- **Picket marketing / annotation** for capturing related surveying information on the go.

And all of these technologies come complete with the most attractive prices and warranty in the business!

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Tel: 905-764-5505
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Email: sales@terraplus.ca
Website: www.terraplus.ca

Maximizing Your Data Quality with the GSM-19

Data quality is a function of five key parameters that have been taken into consideration carefully in the design of the GSM-19. These include sensitivity, resolution, absolute accuracy, sampling rates and gradient tolerance.

Sensitivity is a measure of the signal-to noise ratio of the measuring device and reflects both the underlying physics and electronic design. The physics of the Overhauser effect improves sensitivity by an order of magnitude over conventional proton precession devices. Electronic enhancements, such as high-precision precession frequency counters enhance sensitivity by 25% over previous versions.

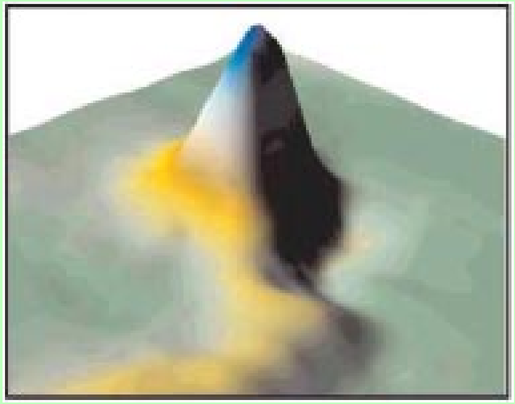
The result is high quality data with sensitivities of 0.022 nT / vHz. This sensitivity is also the same order-of magnitude as costier optically pumped cesium systems.

Resolution is a measure of the smallest number that can be displayed on the instrument (or transmitted via the download process). The GSM-19 has unmatched resolution (0.01mT)

This level of resolution translates into well-defined, characteristic anomalies; improved visual display; and enhanced numerical data for processing and modeling.

Absolute accuracy reflects the closeness to the "real value" of the magnetic field -- represented by repeatability of readings either at stations or between different sensors. With an absolute accuracy of +/- 0.1 nT, the GSM-19 delivers repeatable station-to-station results that are reflected in high quality total field results.

Similarly, the system is ideal for gradient installations (readings between different sensors do not differ by more than +/- 0.1 nT) -- maintaining the same high standard of repeatability.



Data from Kalahari Desert kimberlites. Courtesy of MPH Consulting (project managers), IGS c. c. (geophysical contractor) and Aegis Instruments (Pty) Ltd., Botswana.

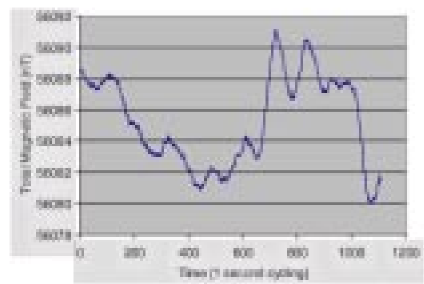
The GSM-19 gradiometer data are consistently low in noise and representative of the geologic environment under investigation.

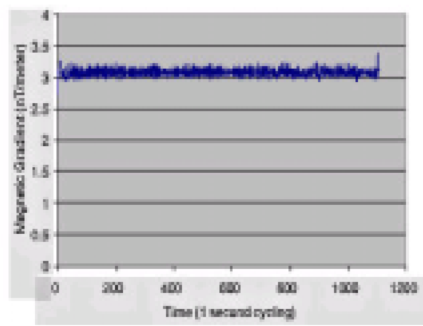
Sampling rates are defined as the fastest speed at which the system can acquire data. This is a particularly important parameter because high sampling rates ensure accurate spatial resolution of anomalies and increase survey efficiency.

The GSM-19 Overhauser system is configured for two "measurement modes" or maximum sampling rates -- "Standard" (3 seconds / reading), and "Walking" (0.2 seconds / reading) These sampling rates make the GSM-19 a truly versatile system for all ground applications (including vehicle-borne applications).

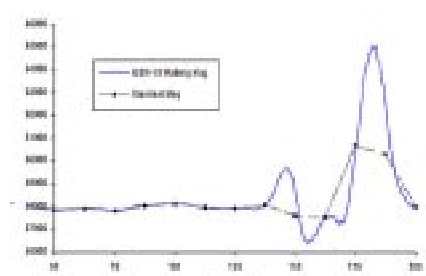
Gradient tolerance represents the ability to obtain reliable measurements in the presence of extreme magnetic field variations. GSM-19 gradient tolerance is maintained through internal signal counting algorithms, sensor design and Overhauser physics. For example, the Overhauser effect produces high amplitude, long-duration signals that facilitate measurement in high gradients.

The system's tolerance (10,000 nT / meter) makes it ideal for many challenging environments -- such as highly magnetic rocks in mineral exploration applications, or near cultural objects in environmental, UXO or archeological applications.





Total Field and Stationary Vertical Gradient showing the gradient largely unaffected by diurnal variation. Absolute accuracy is also shown to be very high (0.2 nT/meter).



Much like an airborne acquisition system, the GSM-19 "Walking" magnetometer option delivers very highly-sampled, high sensitivity results that enable very accurate target location and / or earth science decision-making.

Increasing Your Operational Efficiency

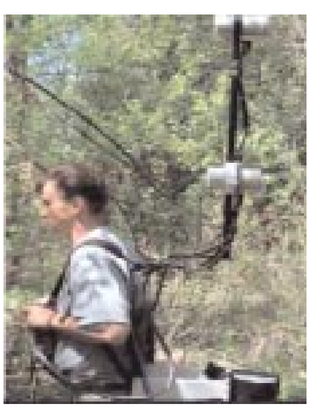
Many organizations have standardized their magnetic geophysical acquisition on the GSM-19 based on high performance and operator preference. This preference reflects performance enhancements such as memory capacity; portability characteristics; GPS and navigation; and dumping and processing.

Memory capacity controls the efficient daily acquisition of data, acquisition of positioning results from GPS, and the ability to acquire high resolution results (particularly in GSM-19's "Walking" mode).

V7.0 upgrades have established the GSM-19 as the commercial standard for memory with over 1,465,623 readings (based on a basic configuration of 32 Mbytes of memory and a survey with time, coordinate, and field values).

Portability characteristics (ruggedness, light weight and power consumption) are essential for operator productivity in both normal and extreme field conditions.

GSM-19 Overhauser magnetometer is established globally as a robust scientific instrument capable of withstanding temperature, humidity and terrain extremes. It also has the reputation as the lightest and lowest power system available -- reflecting Overhauser effect and RF polarization advantages.



In comparison with proton precession and optically pumped cesium systems, the GSM-19 system is the choice of operators as an easy-to-use and robust system.

GPS and navigation options are increasingly critical considerations for earth science professionals.

GPS technologies are revolutionizing data acquisition -- enhancing productivity, increasing spatial resolution, and providing a new level of data quality for informed decision-making.

The GSM-19 is now available with real-time GPS and DGPS options in different survey resolutions. For more details, see the GPS and DGPS section.

The GSM-19 can also be used in a GPS Navigation option with real-time coordinate transformation to UTM, local X-Y coordinate rotations, automatic end of line flag, guidance to the next line, and survey "lane" guidance with cross-track display and audio indicator.

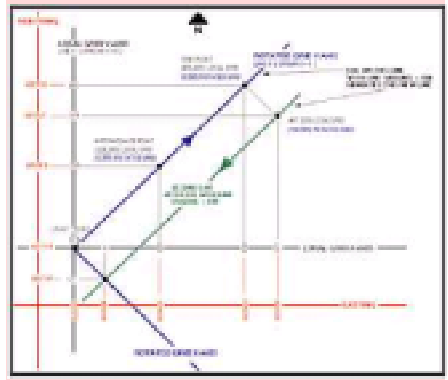
Other enhancements include way point pre-programming of up to 1000 points. Professionals can now define a complete survey before leaving for the field on their PC and download points to the magnetometer via RS-232 connection.

The operator then simply performs the survey using the way points as their survey guide. This capability decreases survey errors, improves efficiency, and ensures more rapid survey completion.

Dumping and processing effectiveness is also a critical consideration today. Historically, up to 60% of an operator's "free" time can be spent on low-return tasks, such as data dumping.

Data dumping times are now significantly reduced through GEM's implementation of high-speed, digital data links (up to 115 kBaud).

This functionality is faciliated through a new RISC processor as well as the new GSM-19 data acquisition / display software. This software serves as a bi-directional RS-232 terminal. It also has integrated processing functionality to streamline key processing steps, including diurnal data reduction. This software is provided free to all GSM-19 customers and regular updates are available.

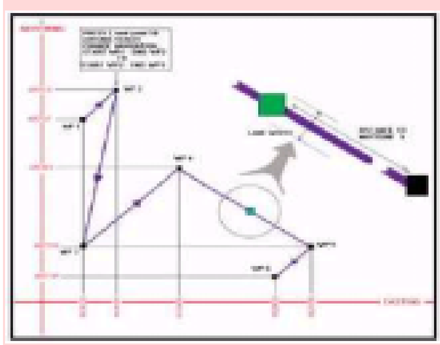


Navigation and Lane Guidance

The figure above shows the Automatic Grid (UTM, Local Grid, and Rotated Grid). With the Rotated Grid, you can apply an arbitrary origin of your own definition. Then, the coordinates are always in reference to axes parallel to the grid. In short, your grid determines the map, and not the NS direction.

The Local Grid is a scaled down, local version of the UTM system, and is based on your own defined origin. It allows you to use smaller numbers or ones that are most relevant to your survey.

The figure below shows how programmable-waypoints can be used to plan surveys on a point-by-point basis. Initially, you define waypoints and enter them via PC or the keyboard. In the field, the unit guides you to each point.



While walking between waypoints, lane guidance keeps you within a lane of predefined width using arrows (< - or - >) to indicate left or right. Within the lane, the display uses horizontal bars (- -) to show your relative position in the lane. The display also shows the distance (in meters) to the next waypoint.

Adding Value through Options

When evaluating the GSM-19 as a solution for your geophysical application, we recommend considering the complete range of options described below. These options can be added at time of original purchase or later to expand capabilities as your needs change or grow.

Our approach with options is to provide you with an expandable set of building blocks:

* **Gradiometer**
* **Walking- Fast Magnetometer / Gradiometer**
* **VLF (3 channel)**
* **GPS (built-in and external)**

GSM-19G Gradiometer Option

The GSM-19 gradiometer is a versatile, entry level system that can be upgraded to a full-featured "Walking" unit (model GSM-19WG) in future.

The GSM-19G configuration comprises two sensors and a "Standard" console that reads data to a maximum of 1 reading every three seconds.

An important GSM-19 design feature is that its gradiometer sensors measure the two magnetic fields concurrently to avoid any temporal variations that could distort gradiometer readings. Other features, such as single-button data recording, are included for operator ease-of-use.

GSM-19W / WG "Walking" Magnetometer / Gradiometer Option

The GSM-19 was the first magnetometer to incorporate the innovative "Walking" option which enables the acquisition of nearly continuous data on survey lines. Since its introduction, the GSM-19W / GSM-19WG have become one of the most popular magnetic instruments in the world.

Similar to an airborne survey in principle, the system records data at discrete time intervals (up to 5 readings per second) as the instrument is carried along the line.

At each survey picket (fiducial), the operator touches a designated key. The system automatically assigns a picket coordinate to the reading and linearly interpolates the coordinates of all intervening readings (following survey completion during post-processing).

A main benefit is that the high sample density improves definition of geologic structures and other targets (UXO, archeological relics, drums, etc.).

It also increases survey efficiency because the operator can record data almost continuously. Another productivity feature is the instantaneous recording of data at pickets. This is a basic difference between the “Walking” version and the GSM-19 / GSM-19G (the “Standard” mode version which requires 3 seconds to obtain a reading each time the measurement key is pressed).

GSM-19 "Hands-Free" Backpack Option

The "Walking" Magnetometer and Gradiometer can be configured with an optional backpack-supported sensor. The backpack is uniquely constructed - permitting measurement of total field or gradient with both hands free.

This option provides greater versatility and flexibility, which is particularly valuable for high-productivity surveys or in rough terrain.

GSM-19GV "VLF" Option

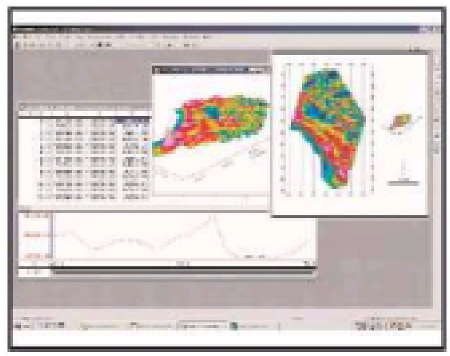
With its omnidirectional VLF option, up to 3 stations of VLF data can be acquired without orienting. Moreover, the operator is able to record both magnetic and VLF data with a single stroke on the keypad.

3rd Party Software - A One-Stop Solution for Your Potential Field Needs

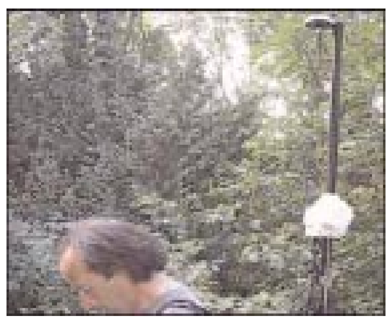
As part of its complete solution approach, Terraplus offers a selection of proven software packages. These packages let you take data from the field and quality control stage right through to final map preparation and modeling.

Choose from the following packages:

* **Contouring and 3D Surface Mapping**
* **Geophysical Data Processing & Analysis**
* **Semi-Automated Magnetic Modeling**
* **Visualization and Modeling / Inversion**



Geophysical Data Processing and Analysis from Geosoft Inc.



GSM-19 with internal GPS board. Small receiver attaches above sensor

Version 7 -- New Milestones in Magnetometer Technology

The recent release of v7.0 of the GSM-19 system provides many examples of the ways in which we continue to advance magnetics technologies for our customers.

Enhanced data quality:

* 25% improvement in sensitivity (new frequency counting algorithm)
* new intelligent spike-free algo rithms (in comparison with other manufacturers, the GSM-19 does not apply smoothing or filtering to achieve high data quality)

Improved operational efficiency:

* Enhanced positioning (GPS engine with optional integrated / external GPS and real-time navigationl)
* 16 times increase in memory to 32 Mbytes
* 1000 times improvement in processing and display speed (RISC microprocessor with 32-bit data bus) 2 times faster digital data link (115 kBaud through RS-232)

Innovative technologies:

* Battery conservation and survey flexibility (base station scheduling option with 3 modes - daily, flexible and immediate start)
* Survey pre-planning (up to 1000 programmable waypoints that can be entered directly or downloaded from PC for greater efficiency)
* Efficient GPS synchronization of field and base units to Universal Time (UTC)
* Cost saving with firmware up grades that deliver new capabilities via Internet

More About the Overhauser System

In a **standard Proton magnetometer,** current is passed through a coil wound around a sensor containing a hydrogenrich fluid. The auxiliary field created by the coil (>100 Gauss) polarizes the protons in the liquid to a higher thermal equilibrium.

When the current, and hence the field, is terminated, polarized protons precess in the Earth's field and decay exponentially until they return to steady state. This process generates precession signals that can be measured as described below.

Overhauser magnetometers use a more efficient method that combines electronproton coupling and an electron-rich liquid (containing unbound electrons in a solvent containing a free radical). An RF magnetic field -- that corresponds to a specific energy level transition -- stimulates the unbound electrons.

Instead of releasing this energy as emitted radiation, the unbound electrons transfer it to the protons in the solvent. The resulting polarization is much larger, leading to stronger precession signals.

Both Overhauser and proton precession, measure the scalar value of the magnetic field based on the proportionality of precession frequency and magnetic flux density (which is linear and known to a high degree of accuracy). Measurement quality is also calculated using signal amplitude and its decay characteristics. Values are averaged over the sampling period and recorded.

With minor modifications (i.e. addition of a small auxiliary magnetic flux density while polarizing), it can also be adapted for high sensitivity readings in low magnetic fields. (ex. for equatorial work)

GPS - Positioning You for Effective Decision Making

The use of Global Positioning Satellite (GPS) technology is increasing in earth science disciplines due to the ability to make better decisions in locating and following up on anomalies, and in improving survey cost effectiveness and time management.

Examples of applications include: Surveying in remote locations with no grid system (for example, in the high Arctic for diamond exploration)

* **High resolution exploration mapping**
* **High productivity ferrous ordnance (UXO) detection**
* **Ground portable magnetic and gradient surveying for environmental and engineering applications**
* **Base station monitoring for observing diurnal magnetic activity and disturbances with integrated GPS time**

The GSM-19 addresses customer requests for GPS and high-resolution Differential GPS (DGPS) through both the industry's only built-in GPS (as well as external GPS).

Built-in GPS offers many advantages such as minimizing weight and removing bulky components that can be damaged through normal surveying. The following table summarizes GPS options.

GPS Options:

Description	Range	Services
GPS Option A		Time Reception only
GPS Option B	<1.5m	DGPS*
GPS Option C	<1.0m	Ag 114 DGPS*, OmniStar
GPS Option D	<0.7m <1.2m <1.0M	CDGPS, DGPS *, OmniStar.
Output		
Time, Lat / Long, UTM, Elevation and number of Satellites		
*DGPS with SBAS (WASS/EGNOS/MSAS)		

Key System Components

Key components that differentiate the GSM-19 from other systems on the market include the sensor and data acquisition console. Specifications for components are provided on the right side of this page.

Sensor Technology

Overhauser sensors represent a proprietary innovation that combines advances in electronics design and quantum magnetometer chemistry.

Electronically, the detection assembly includes dual pick-up coils connected in series opposition to suppress far-source electrical interference, such as atmospheric noise. Chemically, the sensor head houses a proprietary hydrogen-rich liquid solvent with free electrons (free radicals) added to increase the signal intensity under RF polarization.

From a physical perspective, the sensor is a small size, light-weight assembly that houses the Overhauser detection system and fluid. A rugged plastic housing protects the internal components during operation and transport.

All sensor components are designed from carefully screened non-magnetic materials to assist in maximization of signal-to-noise. Heading errors are also minimized by ensuring that there are no magnetic inclusions or other defects that could result in variable readings for different orientations of the sensor.

Optional omni-directional sensors are available for operating in regions where the magnetic field is near-horizontal (i.e. equatorial regions). These sensors maximize signal strength regardless of field direction.

Data Acquisition Console Technology

Console technology comprises an external keypad / display interface with internal firmware for frequency counting, system control and data storage / retrieval. For operator convenience, the display provides both monochrome text as well as real-time profile data with an easy to use interactive menu for performing all survey functions.

The firmware provides the convenience of upgrades over the Internet via its software. The benefit is that instrumentation can be enhanced with the latest technology without returning the system to us -- resulting in both timely implementation of updates and reduced shipping / servicing costs.

Performance

Sensitivity:	0.022 nT / vHz@1Hz
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Dynamic Range:	15,000 to 120,000 nT
Gradient Tolerance:	> 10,000 nT/m
Sampling Rate:	60+, 3, 2, 1, 0.5, 0.2 sec
Operating Temp:	-40C to +55C

Operating Modes

Manual:
Coordinates, time, date and reading stored automatically at minimum 3 second interval.

Base Station:
Time, date and reading stored at 3 to 60 second intervals.

Remote Control:
Optional remote control using RS-232 interface.

Input / Output:
RS-232 or analog (optional) output using 6-pin weatherproof connector

Storage - 32Mbytes (# of Readings)

Mobile:	1,465,623
Base Station:	5,373,951
Gradiometer:	1,240,142
Walking Magnetometer:	2,686,975

Dimensions

Console:	223 x 69 x 240 mm
Sensor:	175 x 75mm diameter cylinder

Weights

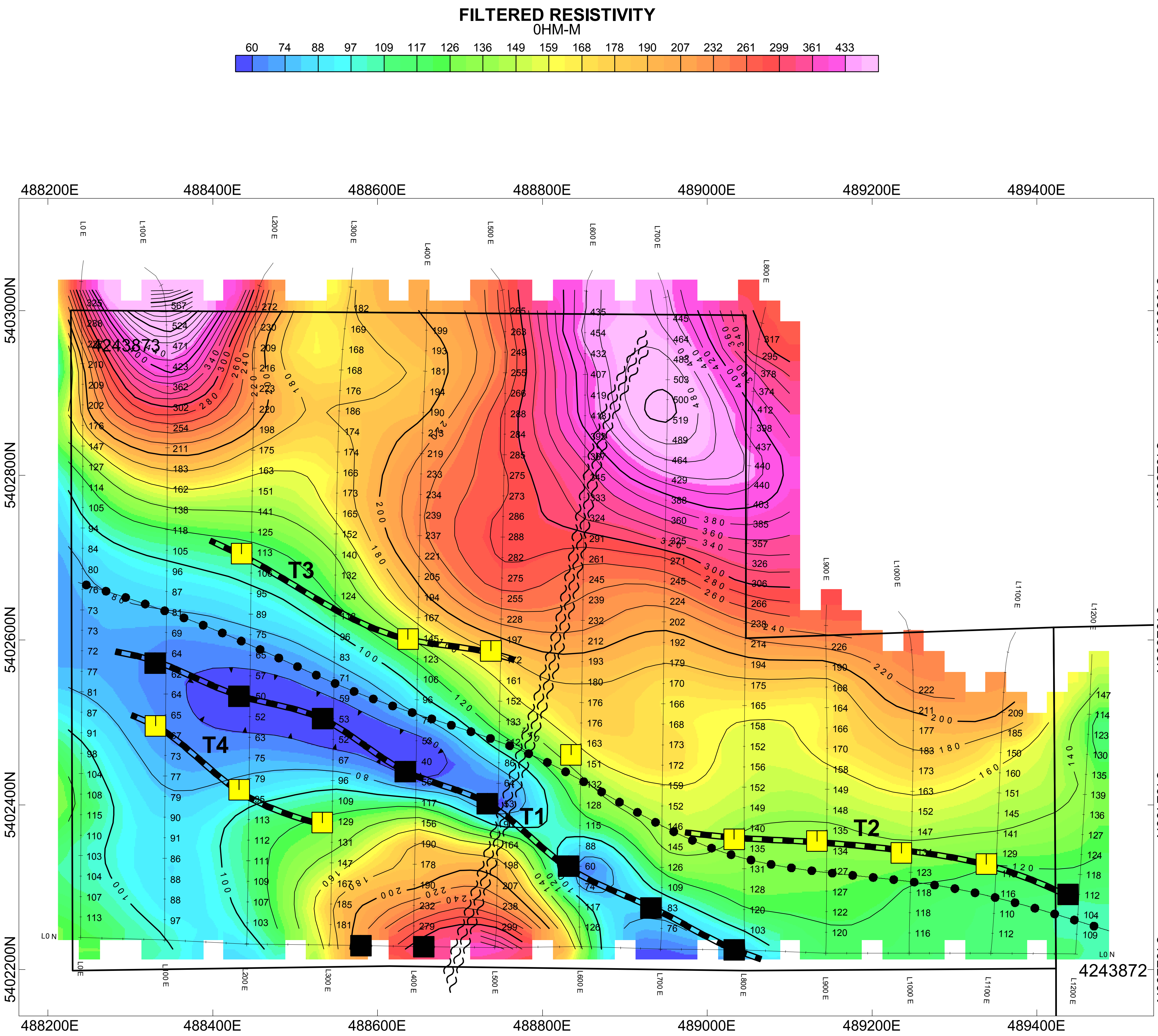
Console:	2.1 kg
Sensor and Staff Assembly:	1.0 kg

Standard Components

GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232/USB cable, staff, instruction manual and shipping case.

Optional VLF

Frequency Range:	Up to 3 stations between 15 to 30.0 kHz
Parameters:	Vertical in-phase and out-of phase components as % of total field. 2 components of the horizontal field amplitude and total field strenght in pT
Resolution:	0.1% of total field



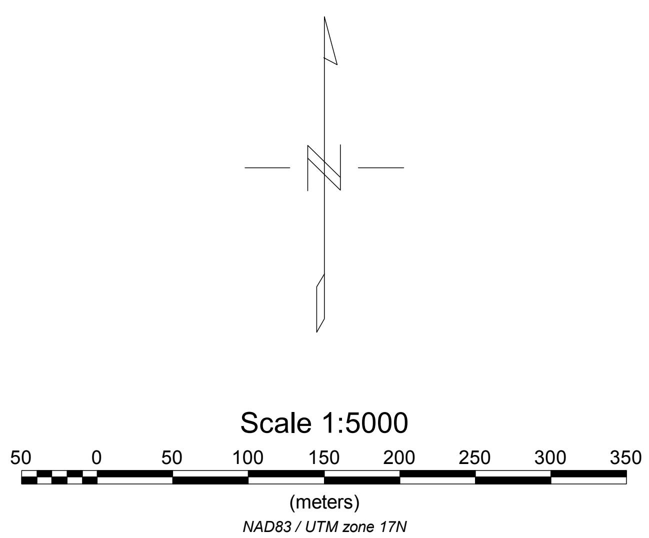
Legend

Well Defined Strong IP Chargeability Anomaly/Trend

Weak to Moderate Strength IP Chargeability Anomaly/Trend

Interpreted Magnetic/Lithologic Contact Zone

Interpreted Magnetic Lineament/Fault



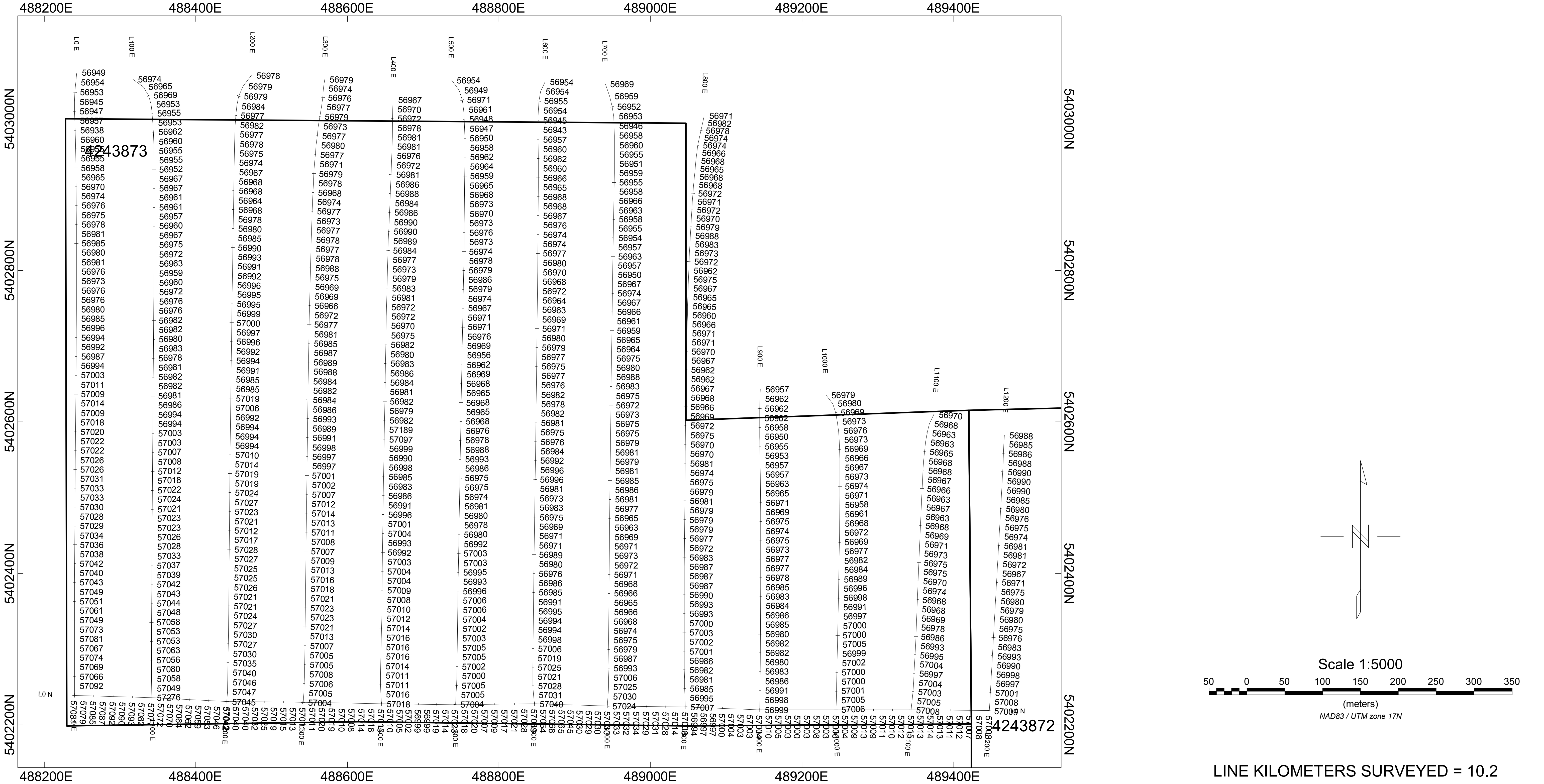
LINE KILOMETERS SURVEYED = 9.6

SGX RESOURCES INC.

TULLY PROJECT
FILTERED RESISTIVITY WITH IP ANOMALIES
DECEMBER 15, 2010 - JANUARY 11, 2011

TULLY TOWNSHIP - PORCUPINE MINING DIVISION
CLAIMS: POSTED ON MAPS
CONTOUR INTERVAL = 20, 100 OHM-M
INSTRUMENT: IRIS ELREC PRO TD IP/RESISTIVITY RECEIVER

SURVEYED BY: YVON VERONNEAU



LINE KILOMETERS SURVEYED = 10.2

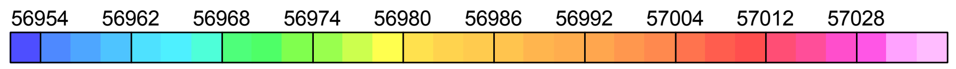
SGX RESOURCES INC.

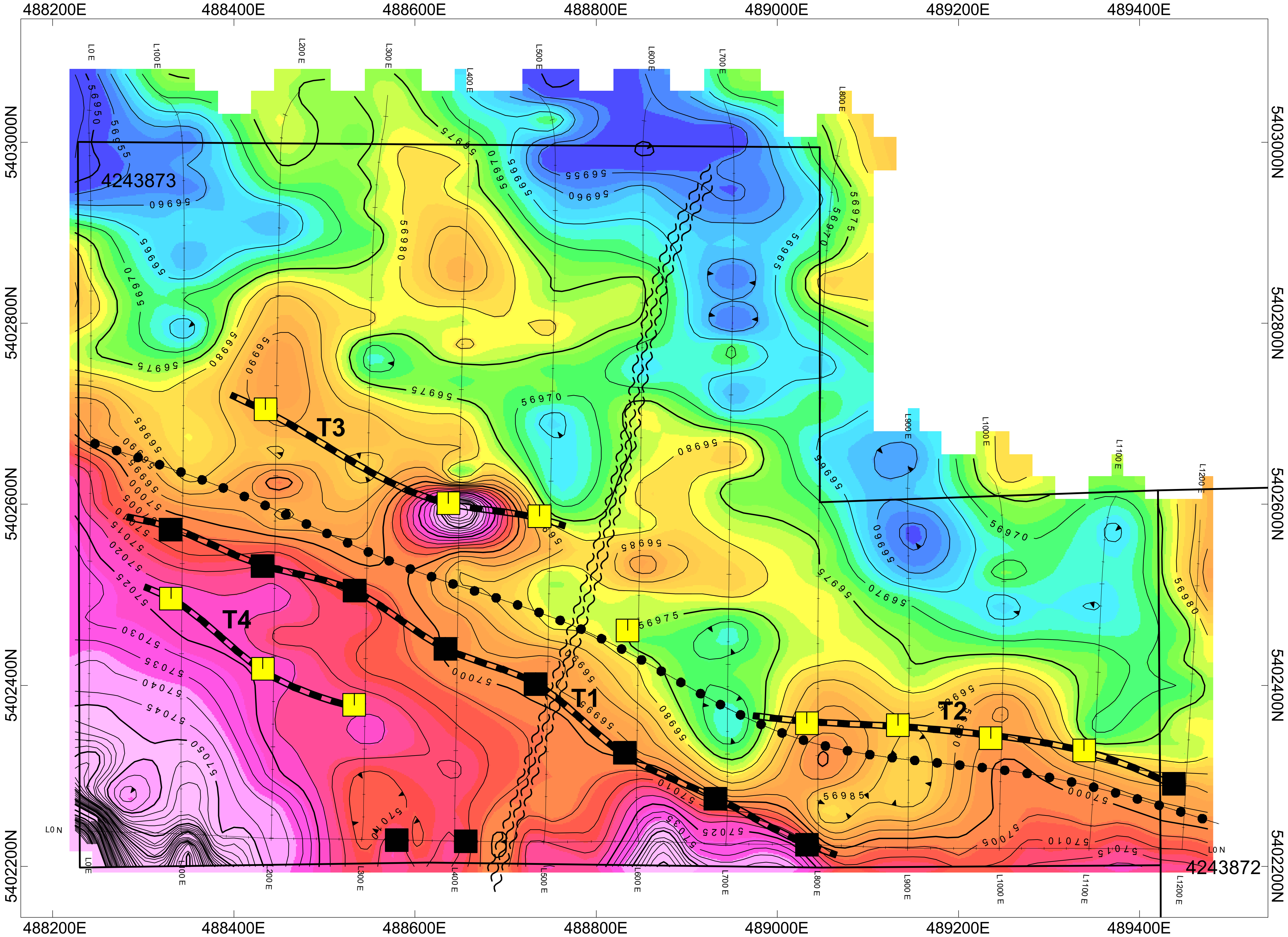
TULLY PROJECT
TOTAL FIELD MAGNETIC SURVEY - POSTED DATA
JANAURY 8 - 9, 2011

TULLY TOWNSHIP - PORCUPINE MINING DIVISION
CLAIMS: POSTED ON MAPS
Magnetic Reference Field: 57000 nT.
INSTRUMENT: GEM SYSTEMS GSM-19 MAGNETOMETER/VLF

SURVEYED BY: YVON VERONNEAU

Total Field Magnetics
nT





Legend

- Well Defined Strong IP Chargeability Anomaly/Trend
- Weak to Moderate Strength IP Chargeability Anomaly/Trend
- Interpreted Magnetic/Lithologic Contact Zone
- Interpreted Magnetic Lineament/Fault

Scale 1:5000

50 0 50 100 150 200 250 300 350

(meters)

NAD83 / UTM zone 17N

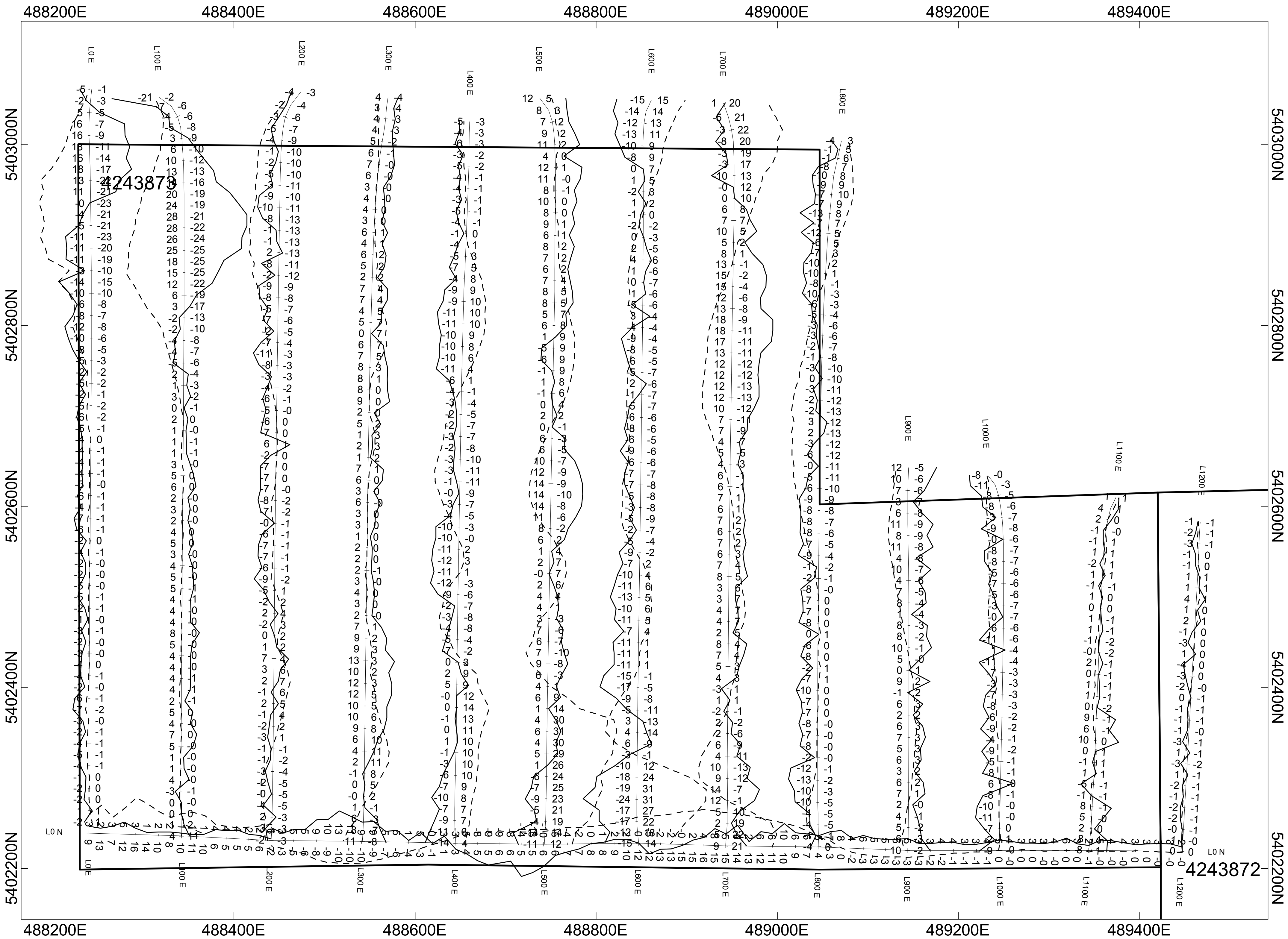
LINE KILOMETERS SURVEYED = 10.2

SGX RESOURCES INC.

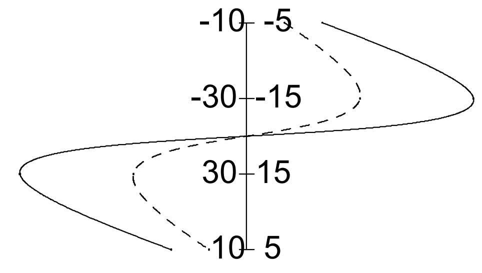
TULLY PROJECT
TOTAL FIELD MAGNETIC SURVEY - CONTOURS
JANAURY 8 - 9, 2011

TULLY TOWNSHIP - PORCUPINE MINING DIVISION
CLAIMS: POSTED ON MAPS
CONTOUR INTERVAL = 5, 25 nT.
INSTRUMENT: GEM SYSTEMS GSM-19 MAGNETOMETER/VLF

SURVEYED BY: YVON VERONNEAU



VLF PROFILES
1 cm. = 20 %
- PROFILE +
---- IP POSTING Q - - -



Lamour, N.D., 25.2 kHz.
INSTRUMENT : GEM SYSTEM GSM-19 MAGNETOMETER/VLF
Read Facing NORTH

Scale 1:5000
50 0 50 100 150 200 250 300 350
(meters)
NAD83 / UTM zone 17N

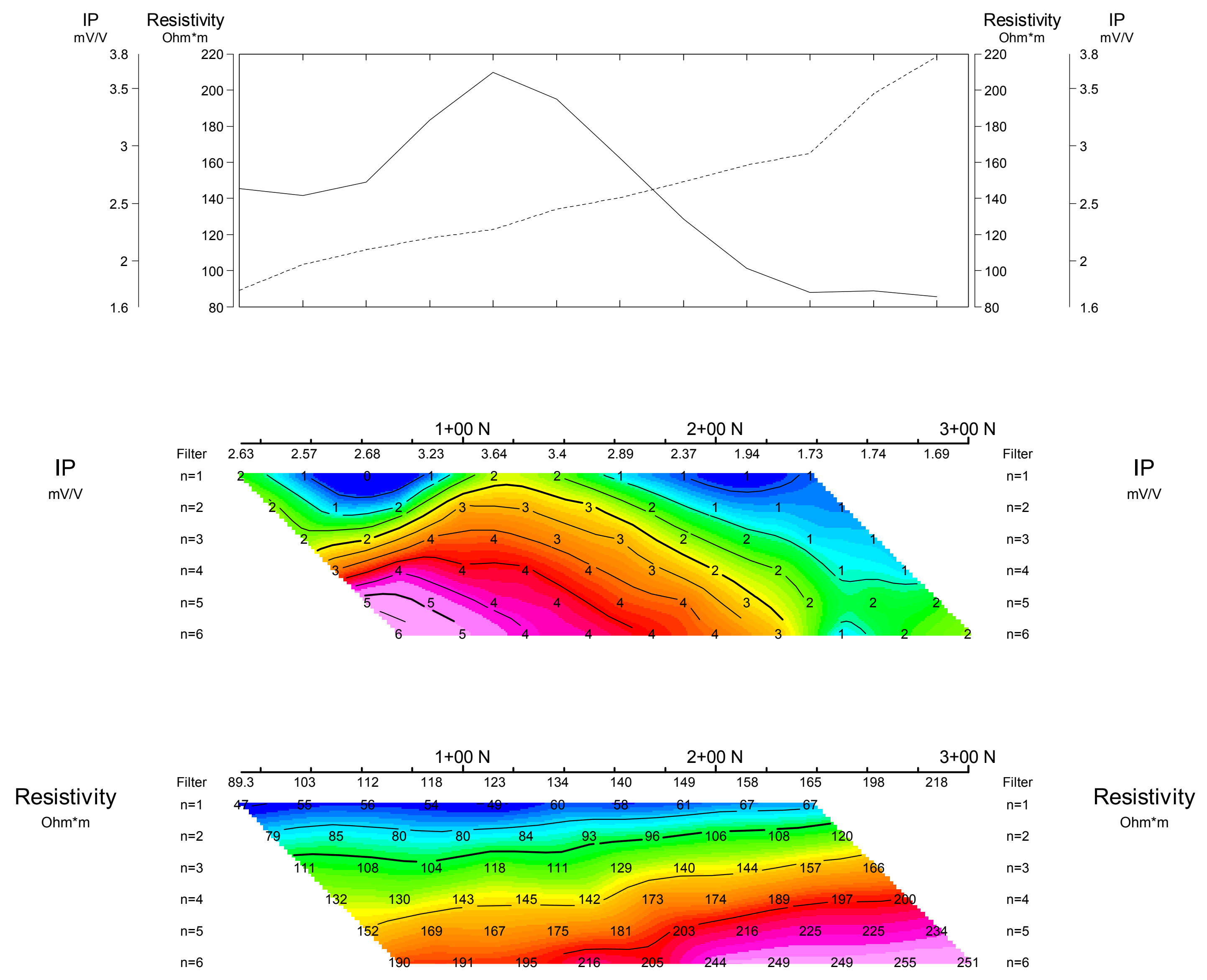
LINE KILOMETERS SURVEYED = 10.2

SGX RESOURCES INC.

TULLY PROJECT
VLF-EM 25.2 kHz. PROFILES
JANAURY 8 - 9, 2011

TULLY TOWNSHIP - PORCUPINE MINING DIVISION
CLAIMS: POSTED ON MAPS
READ FACING NORTH
INSTRUMENT: GEM SYSTEMS GSM-19 MAGNETOMETER/VLF SYSTEM

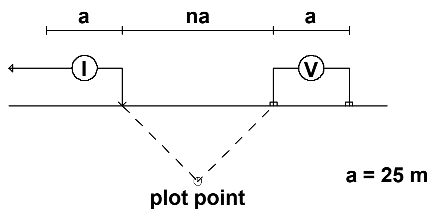
SURVEYED BY: YVON VERONNEAU



Pseudo Section Plot

11+00 E

Pole-Dipole Array



Pyramid-top Filter

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Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

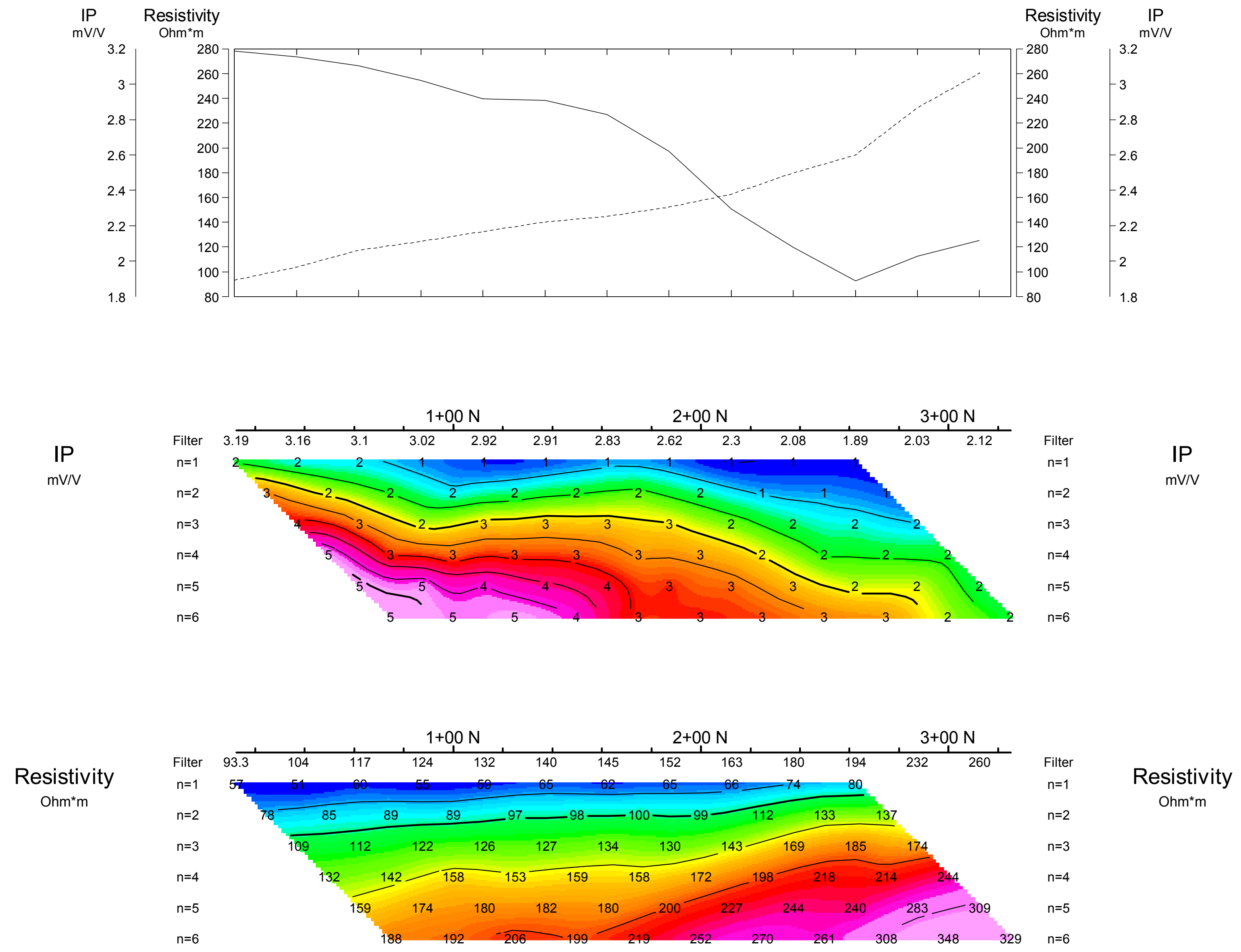
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

10+00 E

Pole-Dipole Array

Pyramid-top Filter

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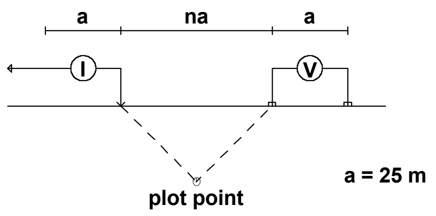
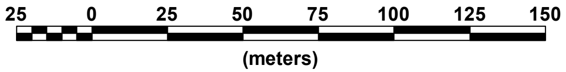


Scale 1:2500



SGX RESOURCES INC.

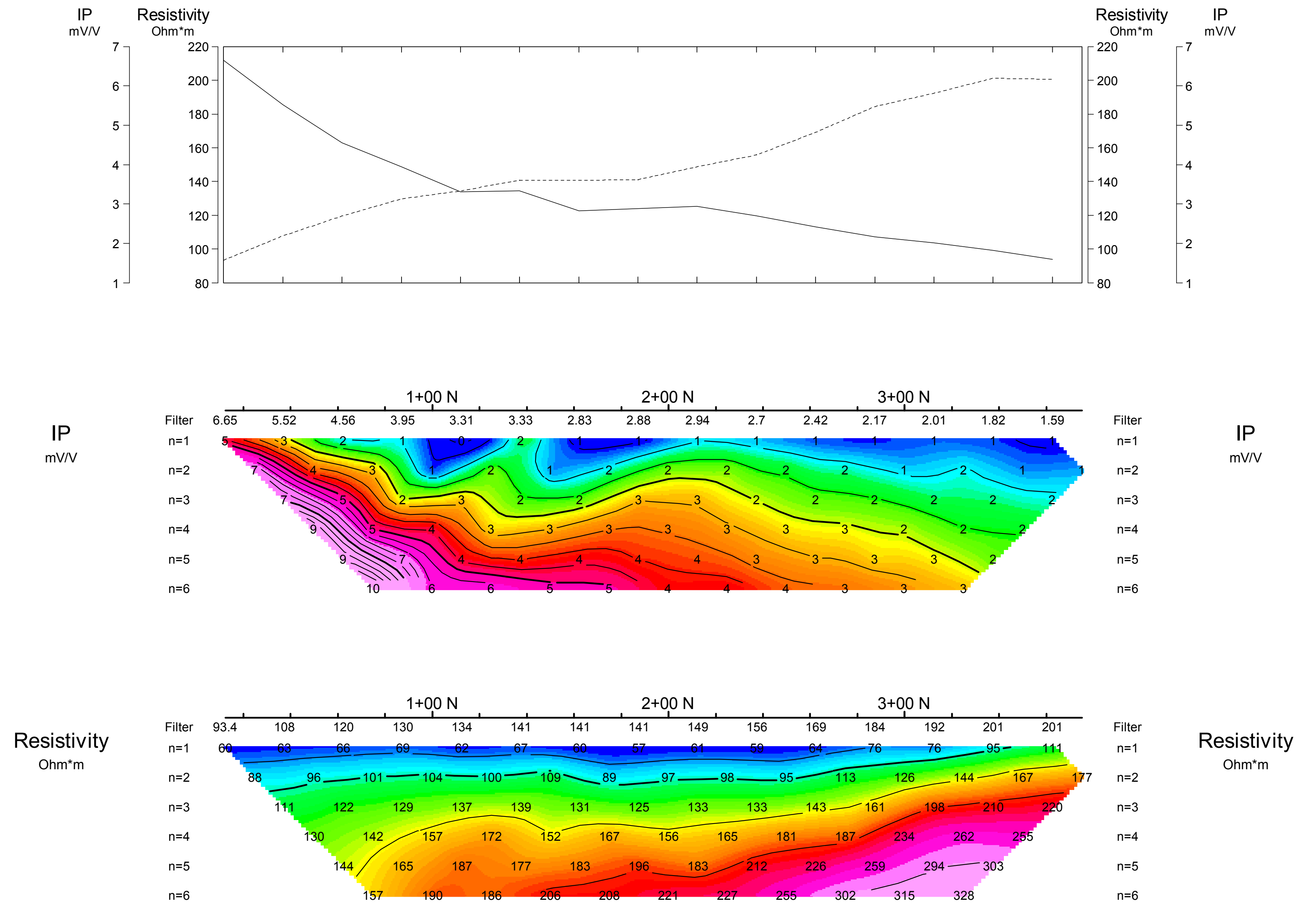
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

9+00 E

Pole-Dipole Array

Pyramid-top Filter
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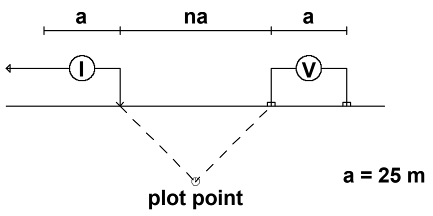

Scale 1:2500

25 0 25 50 75 100 125 150
(meters)

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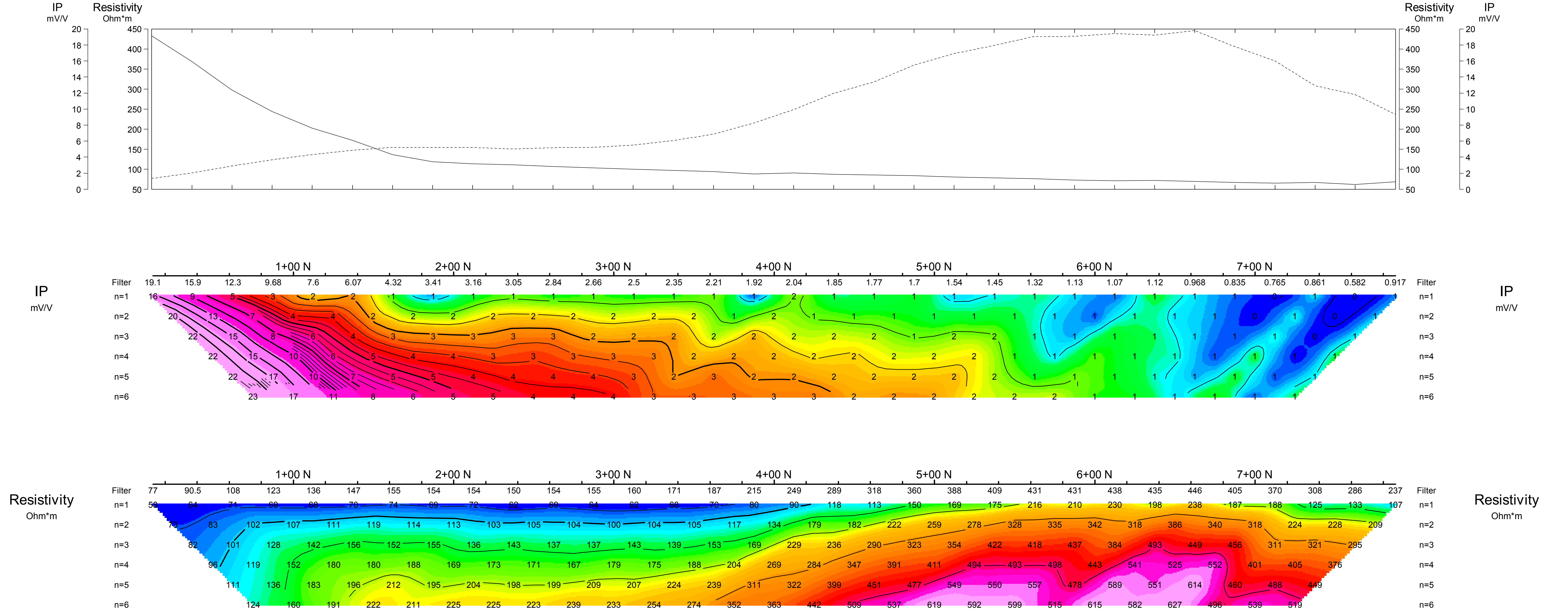
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

8+00 E

Pole-Dipole Array

Pyramid-top Filter

a = 25 m

Scale 1:2500

(meters)

SGX RESOURCES INC.

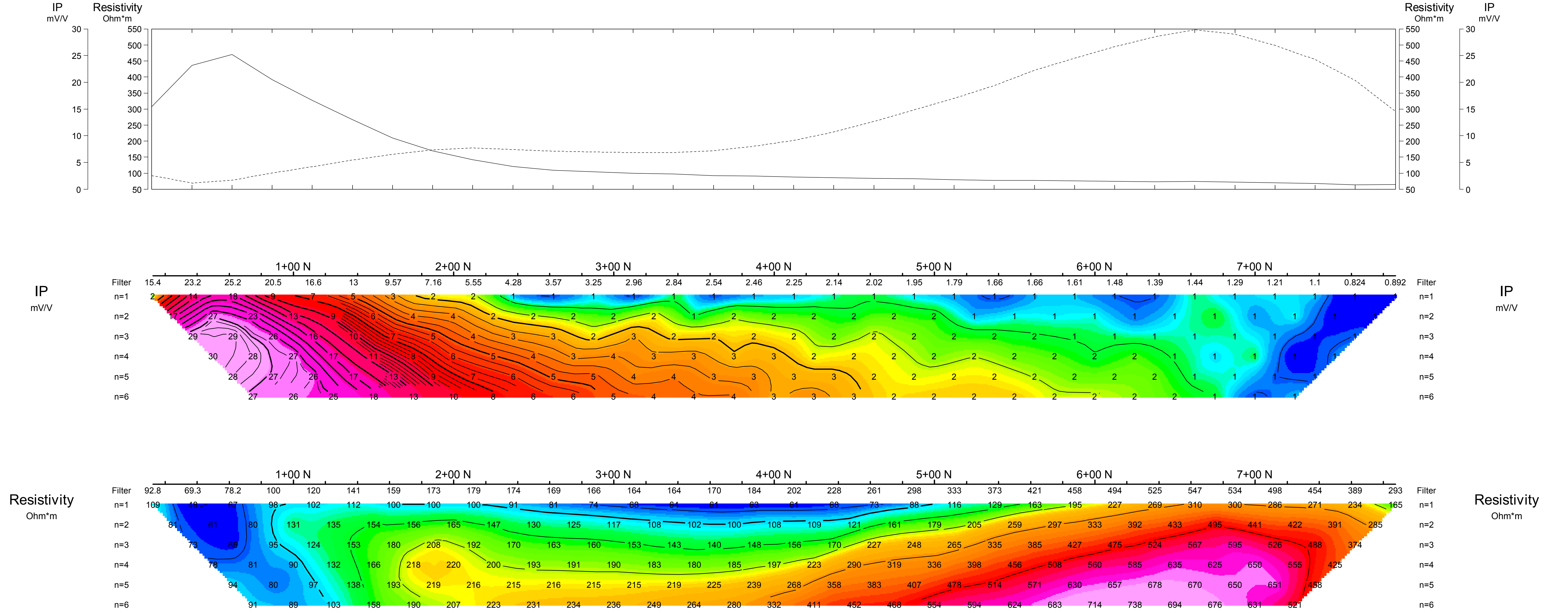
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

7+00 E

Pole-Dipole Array

Pyramid-top Filter
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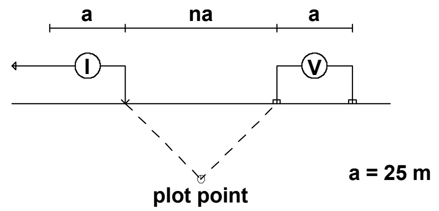

Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

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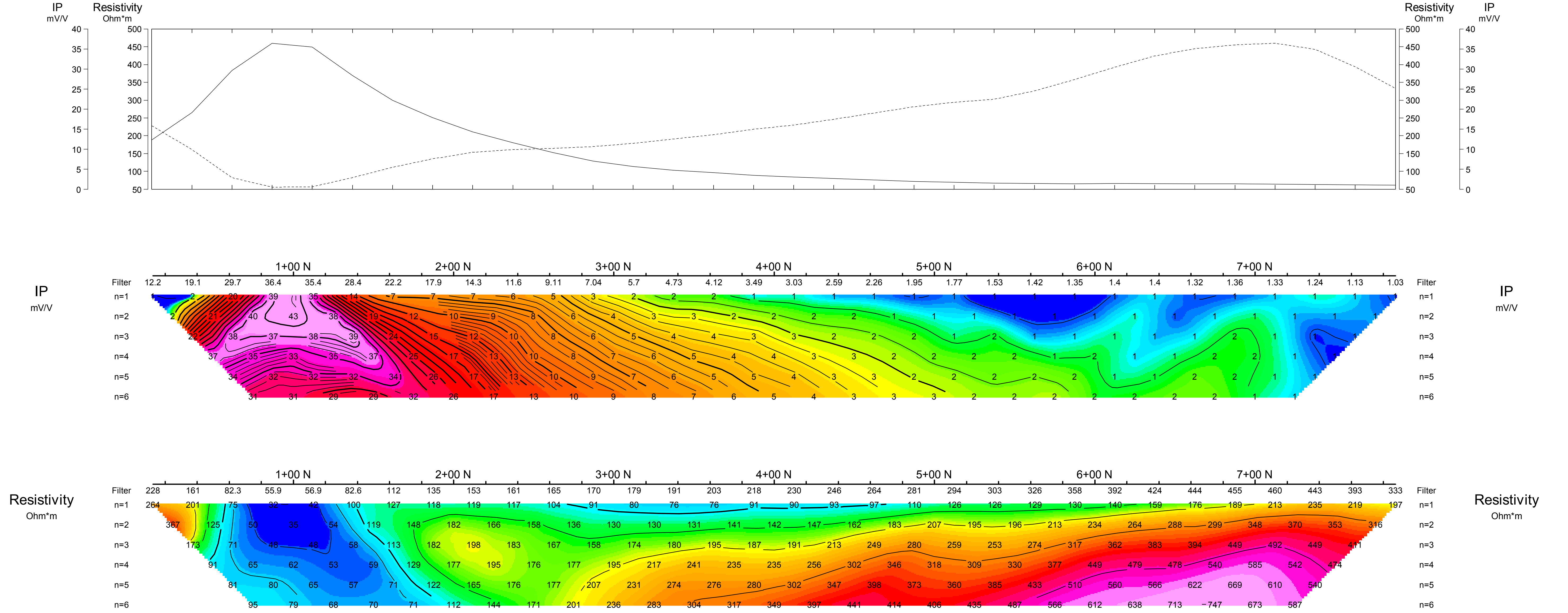
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

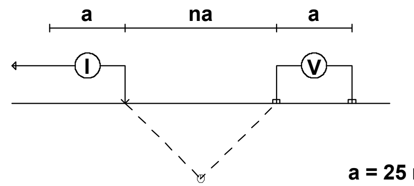
SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

6+00 E

Pole-Dipole Array



Pyramid-top Filter

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a = 25 m

Scale 1:2500

SGX RESOURCES INC.

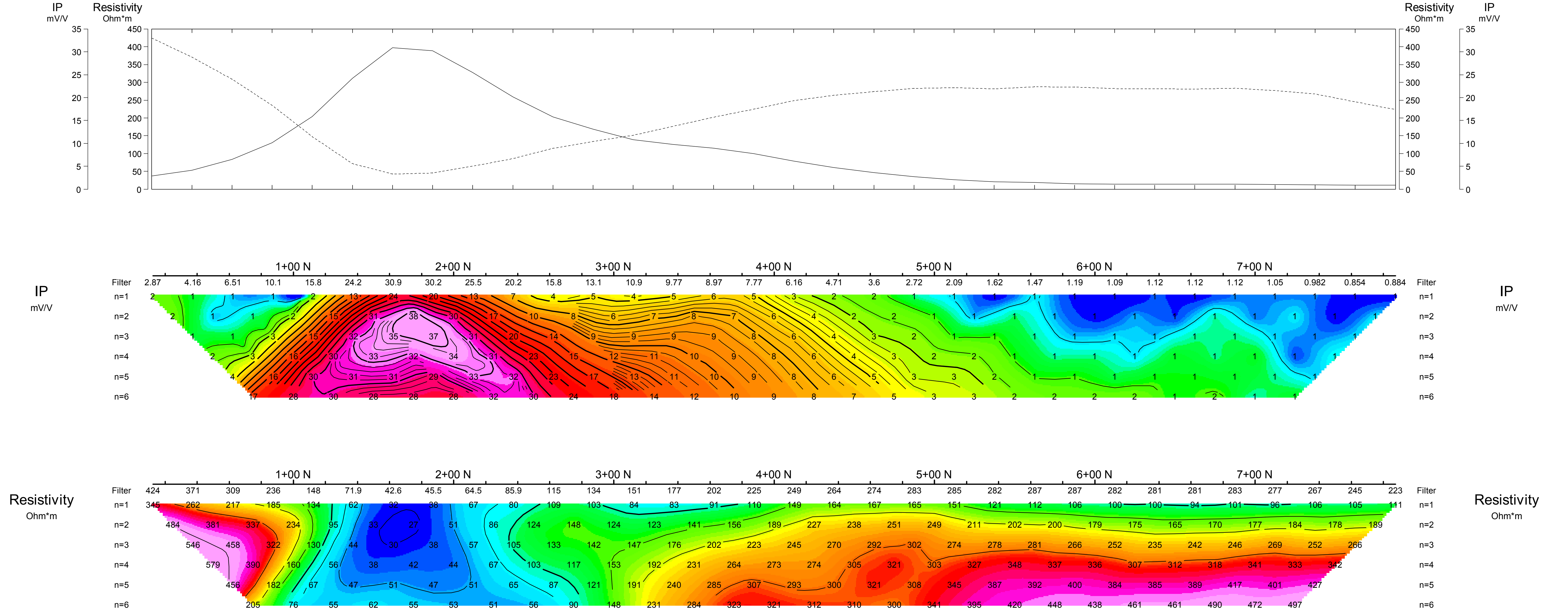
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

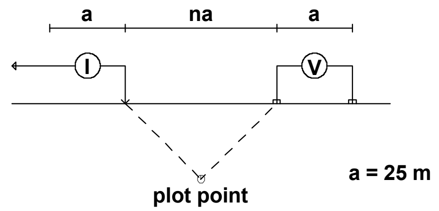
SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

5+00 E

Pole-Dipole Array



Pyramid-top Filter
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Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

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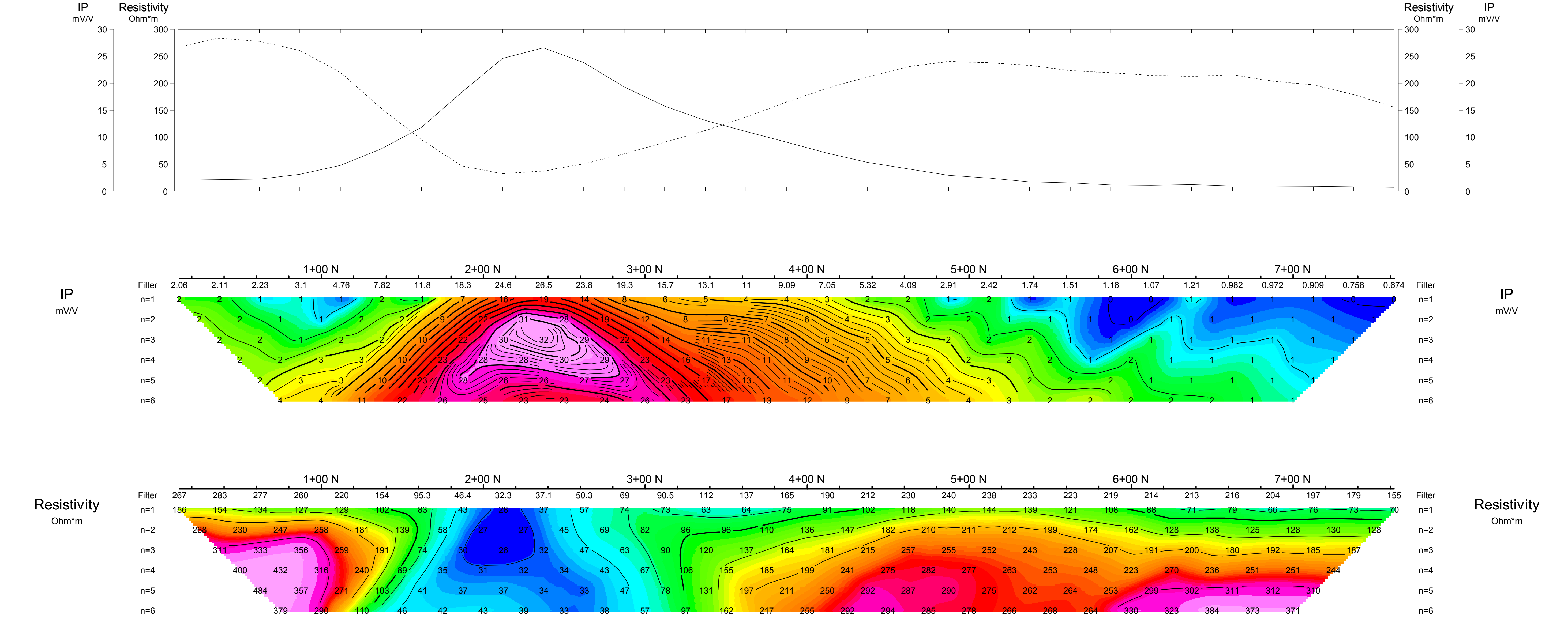
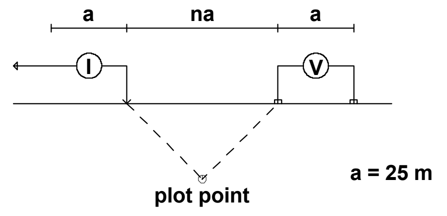


Pseudo Section Plot

4+00 E

Pole-Dipole Array

Pyramid-top Filter



Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

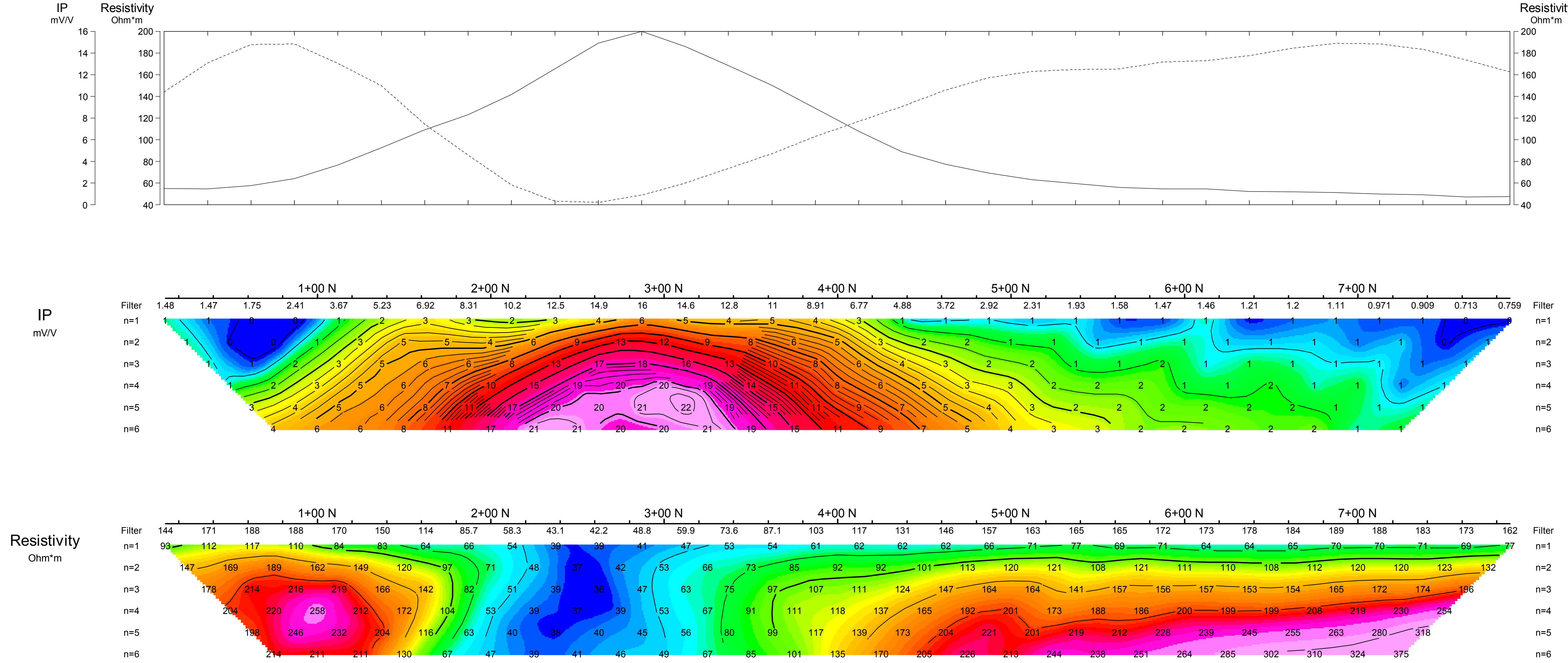
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

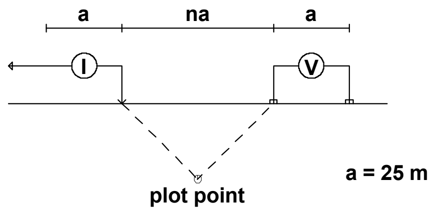
SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

3+00 E

Pole-Dipole Array



Pyramid-top Filter
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Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

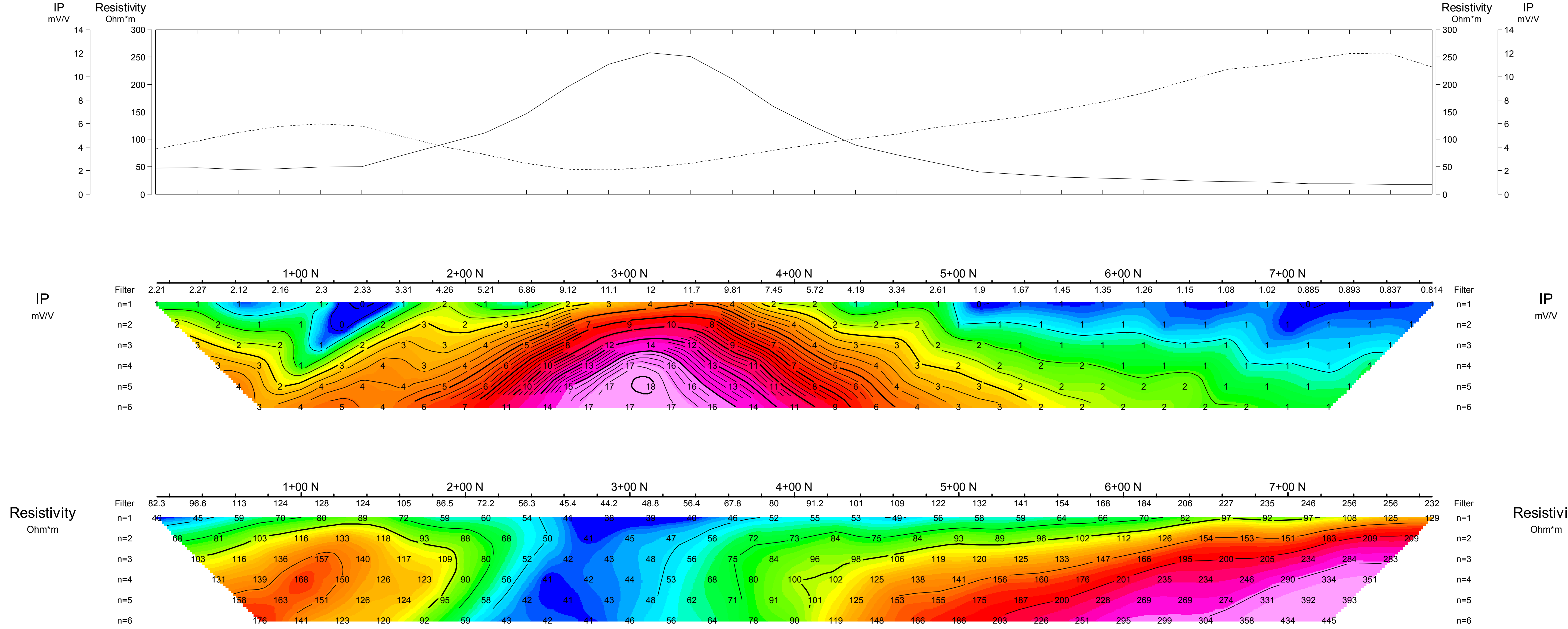
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

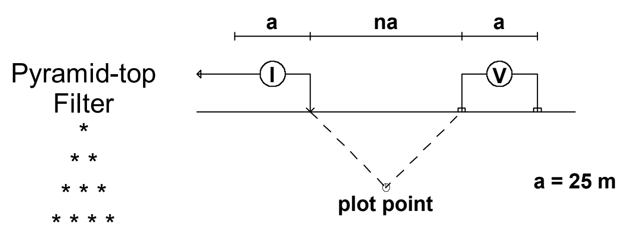
SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

2+00 E

Pole-Dipole Array



Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

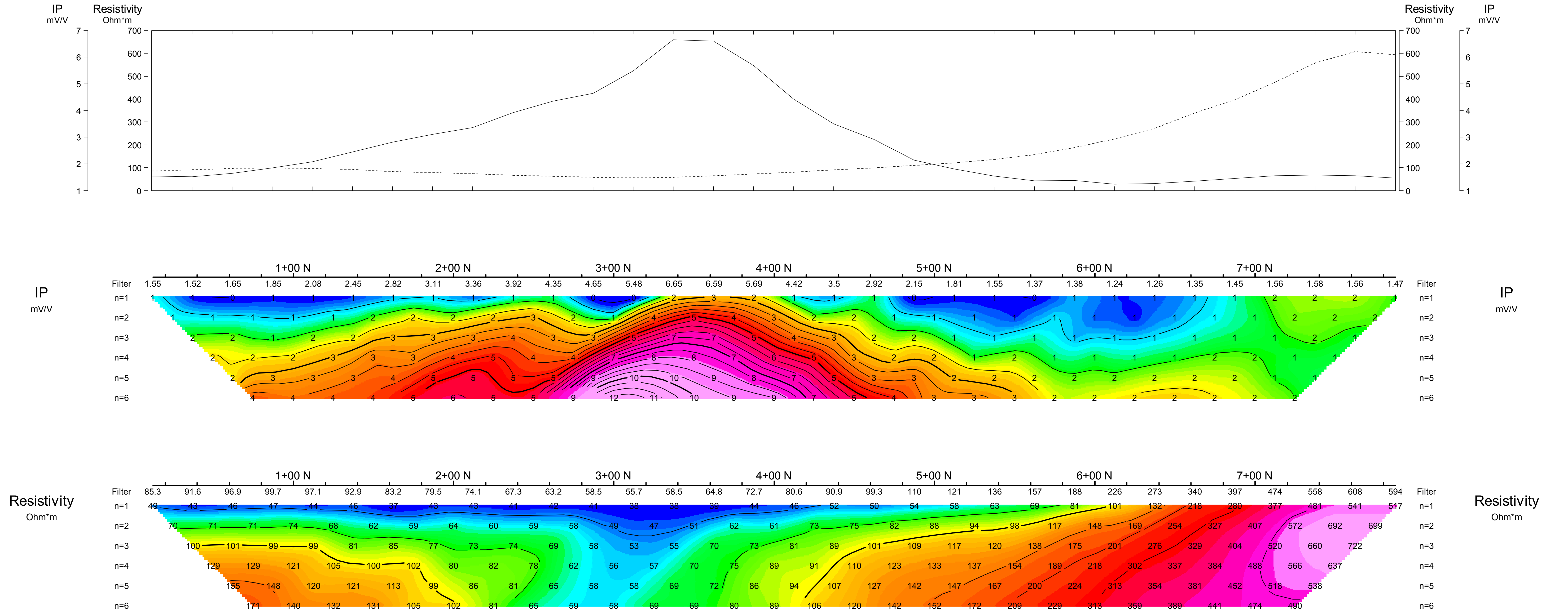
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

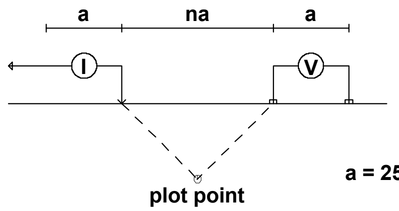
SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

1+00 E

Pole-Dipole Array



Pyramid-top Filter
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a = 25 m

Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

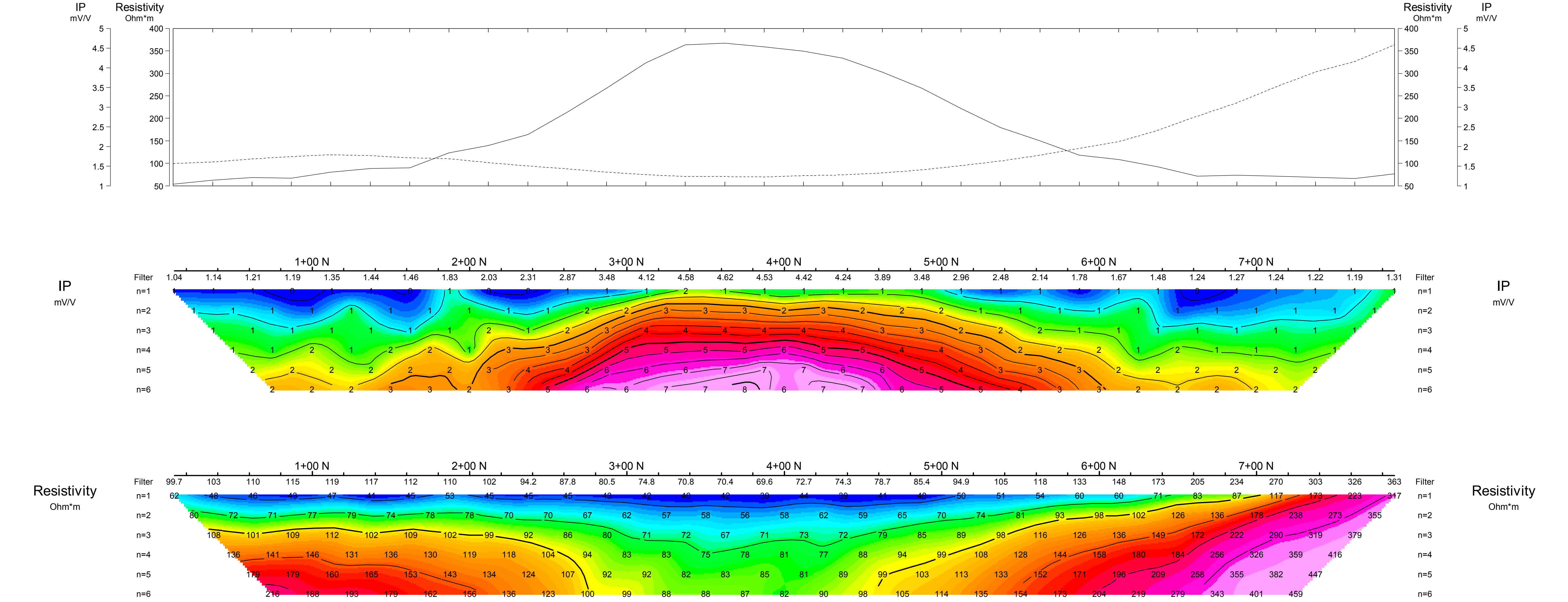
INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

SURVEYED BY: R J MEIKLE AND ASSOCIATES



Pseudo Section Plot

0+00 E

Pole-Dipole Array

Pyramid-top Filter
*
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a na a

plot point

a = 25 m

Scale 1:2500

25 0 25 50 75 100 125 150

(meters)

SGX RESOURCES INC.

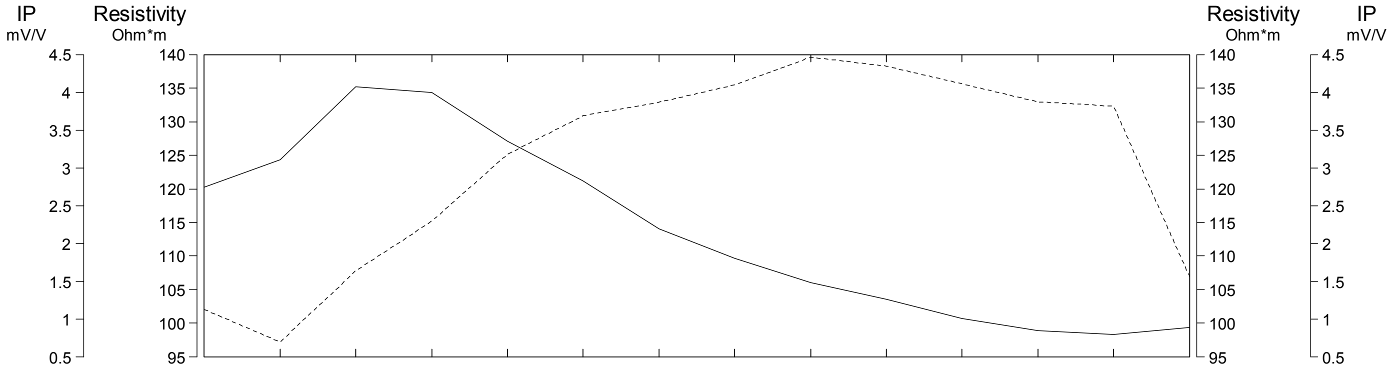
INDUCED POLARIZATION SURVEY

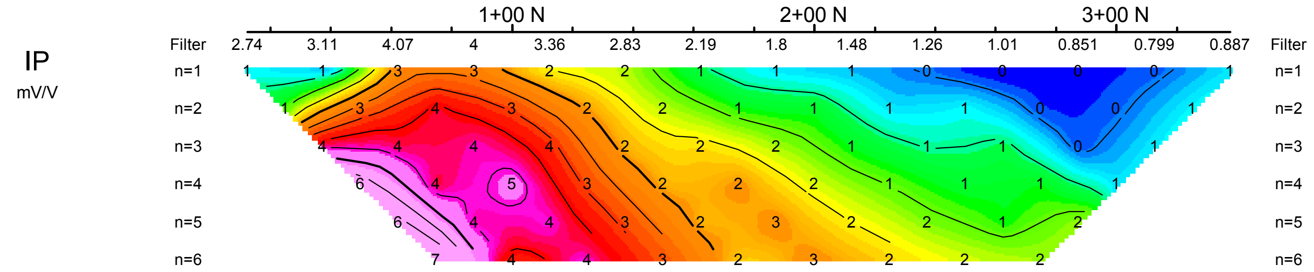
TULLY PROJECT

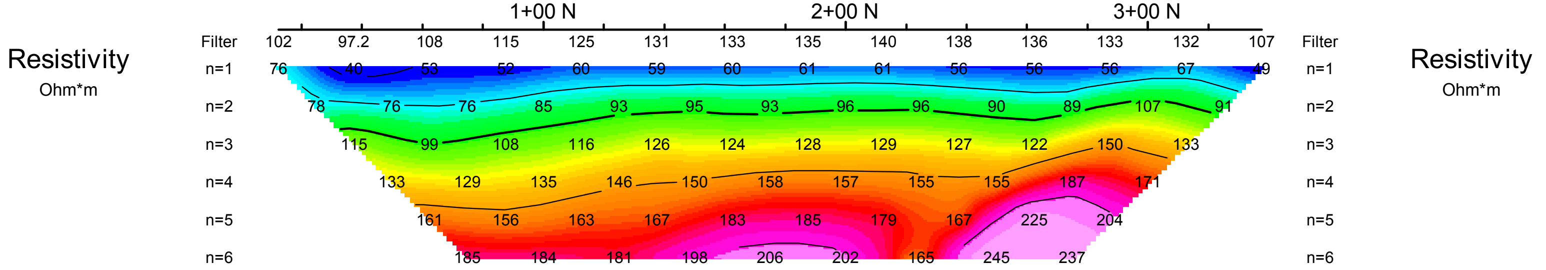
DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

SURVEYED BY: R J MEIKLE AND ASSOCIATES





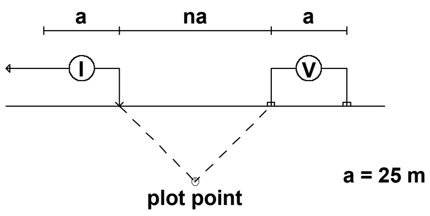


Pseudo Section Plot

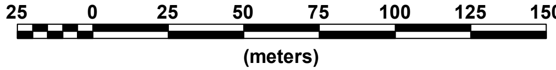
12+00 E

Pole-Dipole Array

Pyramid-top Filter
*
* *
* * *
* * * *



Scale 1:2500



SGX RESOURCES INC.

INDUCED POLARIZATION SURVEY

TULLY PROJECT

DEC. 15, 2010 - JAN. 11, 2011

Tully Township
Porcupine Mining Division

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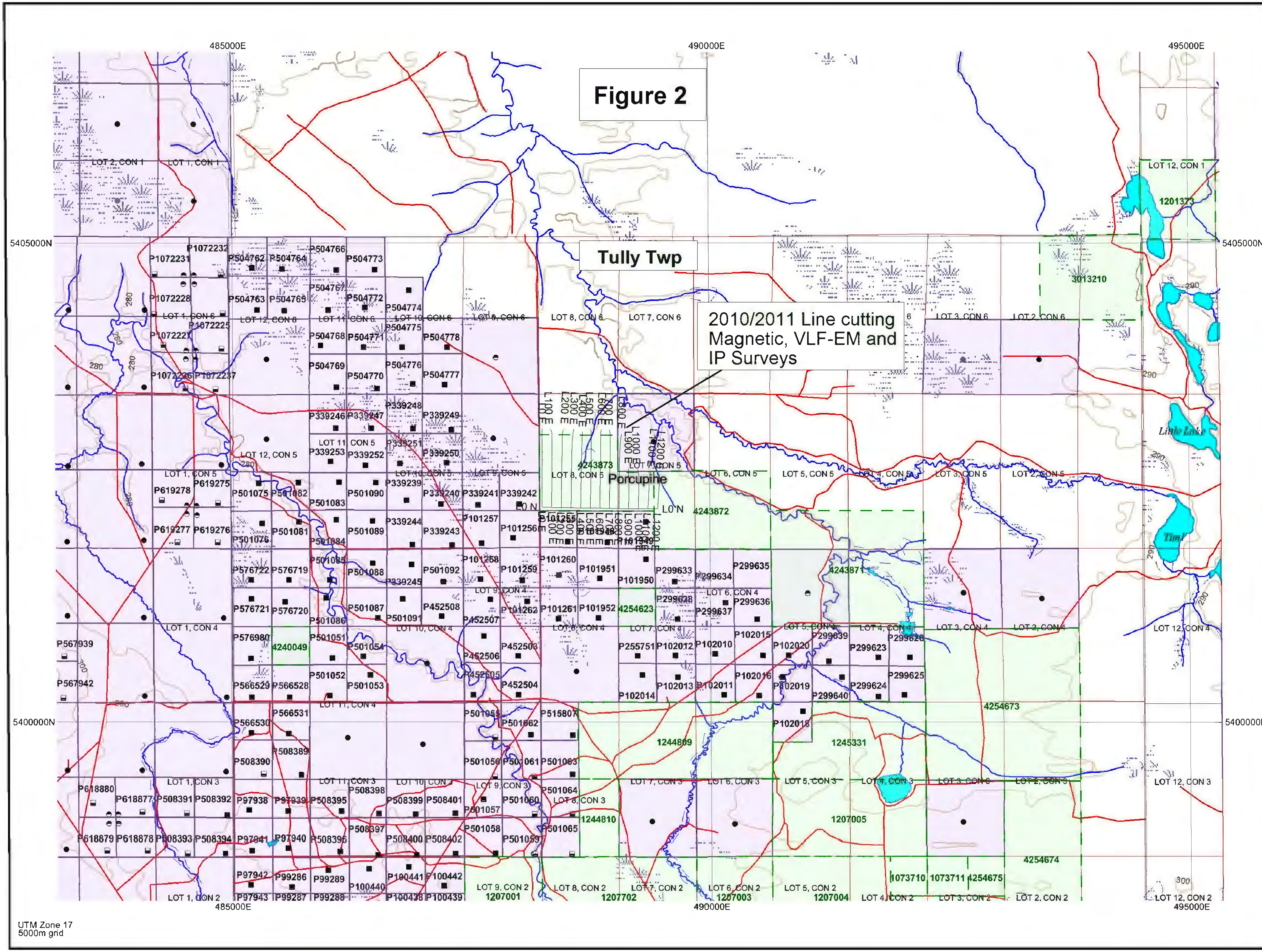
Figure 2
Tully Twp
2010/2011 Line cutting
Magnetic, VLF-EM and
IP Surveys
Porcupine
485000E
490000E
495000E
5405000N
5400000N
LOT 8, CON 6
LOT 7, CON 6
LOT 8, CON 5
LOT 7, CON 5
LOT 6, CON 5
LOT 5, CON 5
LOT 4, CON 5
LOT 3, CON 5
LOT 2, CON 5
LOT 12, CON 1
LOT 2, CON 1
LOT 1, CON 1
Little Lake
4243873
4243872
4243871
4254623
4254673
4254674
1244809
1245331
1244810
1207005
1207001
1207702
1207003
1207004
1201373
3013210
4240049
UTM Zone 17
5000m grid