GEOPHYSICAL REPORT
For
**GOLDEN CHALICE RESOURCES INC.**
ON THE
**IP, MAGNETIC AND VLF-EM SURVEYS**
**PENHORWWOD PROPERTY**
PENHORWOOD TOWNSHIP
PORCUPINE MINING DIVISION
NORTHEASTERN, ONTARIO



Prepared by: J.C.Grant, CET, FGAC
February, 2008

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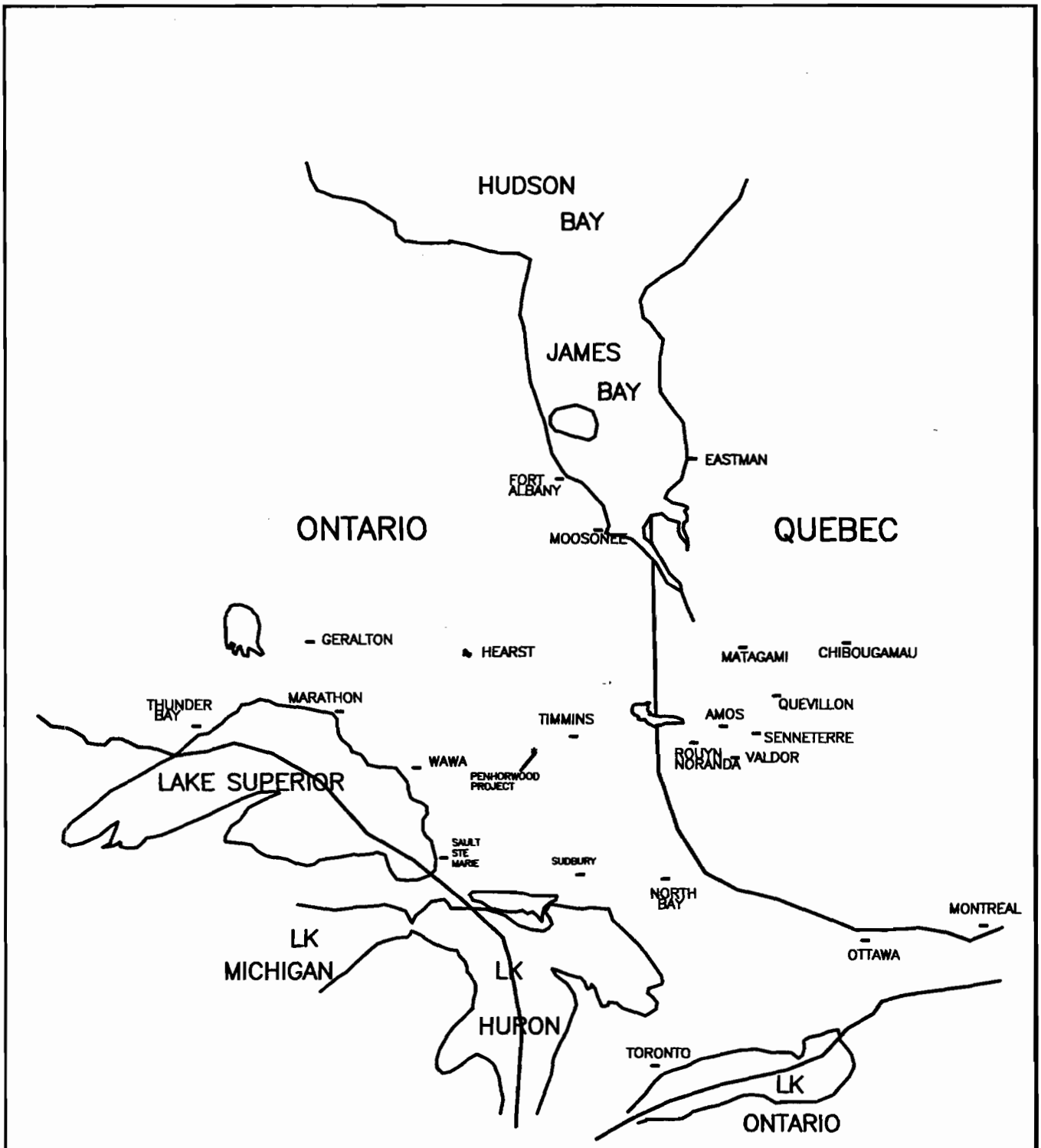


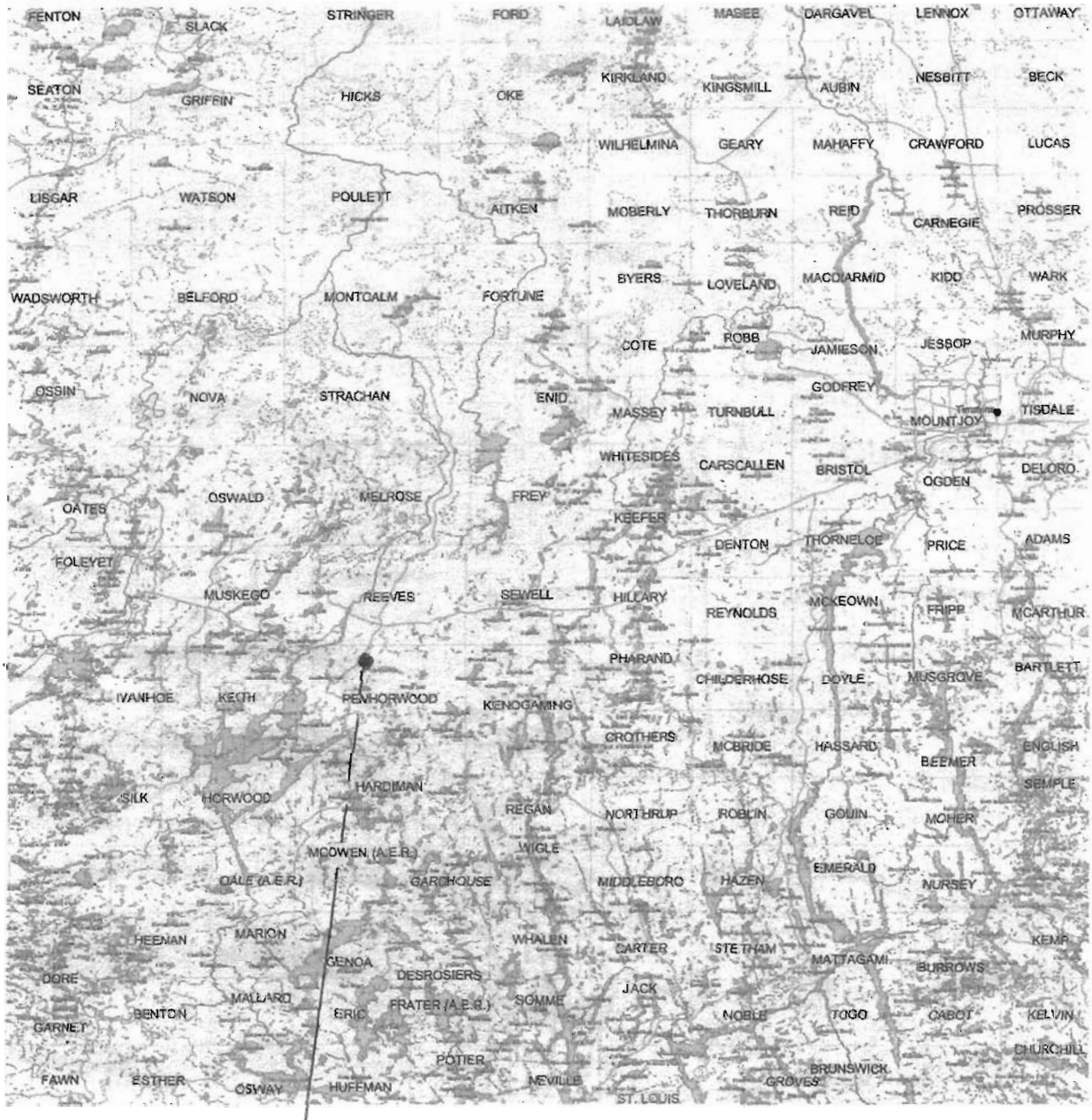

EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151, 267-2424

| | |
|---|---|
| CLIENT: | GOLDEN CHALICE RESOURCES INC.. |
| PROPERTY: | PENHORWOOD PROPERTY |
| TITLE: | PENHORWOOD TOWNSHIP |

# LOCATION MAP

Fig. 1

| | | |
|---|---|---|
| Date: FEB./08 | Scale:1"=125miles | NTS: |
| Drawn:J.C.Grant | Interp: J.C.Grant | Job No.: E-577 |

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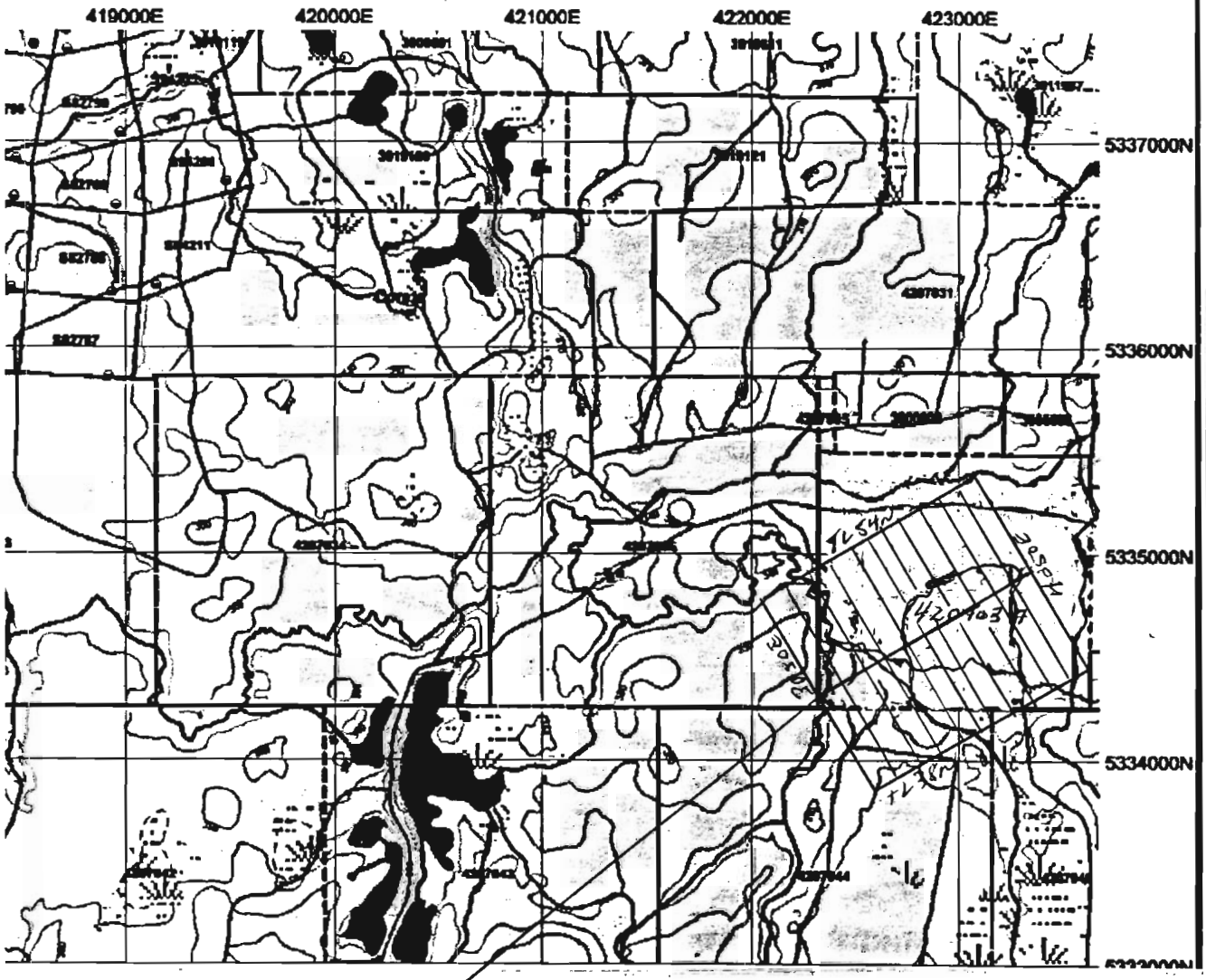
# PROPERTY LOCATION MAP

Fig. 2

| | | |
|---|---|---|
| Date: FEB./08 | Scale:1:600,000 | NTS: |
| Drawn:J.C.Grant | Interp: J.C.Grant | Job No.: E-577 |

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# CLAIM MAP/GRID MAP

Fig. 3

| | | |
|---|---|---|
| Date: FEB./08 | Scale:1:40,000 | NTS: |
| Drawn:J.C.Grant | Interp: J.C.Grant | Job No.: E-577 |

## INTRODUCTION:

The services of Exsics Exploration Limited were retained by Mr. C. Hartley, on behalf of the Company, Golden Chalice Resources Inc., to complete a detailed ground geophysical program on the Penhorwood Property, which is located in the east central portion of Penhorwood Township of the Porcupine Mining Division of Northeastern Ontario.

The purpose of this ground program was to locate and outline favorable horizons that would lend themselves to the possibility of larger and more economical gold deposits. .

The ground program commenced on the first week of December 2007 with the commencement of the line cutting. This initial program was followed up about 5 weeks later with a detailed total field magnetic survey that was completed in conjunction with a VLF-EM survey. Both of these initial programs were then to be followed up with an IP survey.

In all, a total of 20.6 kilometers of grid lines were cut across the property and all of the lines were covered by the magnetic and VLF-EM surveys. The IP survey was completed on the cross lines only.

## PROPERTY LOCATION AND ACCESS:

The Penhorwood property is situated in the east central section of the Township, which is part of the Porcupine Mining Division. More specifically, the property is situated approximately 2 kilometers to the west of Hanrahan Lake and the Nat River cuts across the southwest corner of the grid area. Refer to Figures 1 and 2. The entire property is located approximately 60 kilometers southwest of the City of Timmins.

Access to the grid during the survey period was ideal. Highway 101 travels west from Timmins and crosses the north end of a good logging road locally called the Kenogaming lumber road. This gravel road travels south and southwest through Penhorwood and crosses into the north and northwest section of the grid. A series of good ingress gravel roads and ATV trails cross the grid in a number of locations that provided good access to a large portion of the property.

## CLAIM BLOCK:

The claim numbers that represent the portion of the property that was covered by this current ground program are as follows.

4207037, 4207036, 4207045, 4207044

Refer to Figure 3 of this report that was copied from MNDM Plan Map of Penhorwood Township for the positioning of the claims within the Township.

**PERSONNEL:**

The field crew directly responsible for the collection of all of the raw field data was as follows.

| | |
|---|---|
| E. Jaakkola | Timmins, Ontario, magnetic-VLF-EM operator |
| R. Bradshaw | Timmins, Ontario, IP operator |
| M. Wing | Timmins, Ontario |
| R. Wing | Timmins, Ontario |
| D. Porier | Timmins, Ontario |
| S. Fortin | Timmins, Ontario |

The entire program was completed under the direct supervision of J.C.Grant and all of the plotting, compilation, interpretation and reports were completed by in-house staff.

**GROUND PROGRAM:**

The ground program was completed in two stages. The first stage was to cut a detailed metric grid across the claim block.

The grid consisted of a series of east-west lines that were spaced 100 meters apart. These lines were turned off of a Tie line that was first cut across the grid at an azimuth of 060 degrees from a point that had been established by the client. This tie line was cut and chained with 25 meter station intervals from line 4050ME to and including 3050ME. All of the cross lines were also chained with 25 meter station intervals from 3800MN to and including 5400MN.

Once the line cutting was completed, Exsics then commenced a total field magnetic and VLF-EM survey which was then to be followed up with an Induced Polarization, (IP), survey. The magnetic and EM survey was completed over the entire cut grid including all tie lines. The survey was completed using the Scintrex Envi Mag system for both the base station unit and the field unit. Specifications for the system can be found as Appendix A of this report. The following parameters were kept constant throughout the survey period.

**MAGNETIC SURVEY:**

| | |
|---|---|
| Line spacing | 100 meter and 25 meter |
| Station spacing | 25 meters |
| Reading interval | 12.5 meter |
| Diurnal monitoring | Base station recorder |
| Base record interval | 30 seconds |
| Reference field | 56500nT |
| Datum subtracted | 56000nT |

Once the magnetic survey was completed the data was corrected, leveled and then plotted onto a base map at a scale of 1:2500. The magnetic data was then contoured at 50 gamma intervals wherever possible. A color copy of the contoured base map is included in the back pocket of this report.

**VLF-EM SURVEY:**

A VLF-EM survey was also done at the same time as the magnetic survey. This was completed using the Envi Mag system and the following parameters were kept constant throughout the survey period.

| | |
|---|---|
| Line spacing | 100 meter and 25 meter |
| Station spacing | 25 meters |
| Reading interval | 12.5 meter |
| Transmitting station | Cutler, Maine, 24.0 Khz |
| Parameters measured | In phase, out of phase component, field strength and dip angle of the primary field |
| Parameters plotted | In phase component |
| Profile scale | 1 cm = +/- 20% |

Once the VLF-EM survey was completed the In phase data was then plotted directly onto a base map at a scale of 1:2500 and then profiled at 1cm to +/- 20%. All conductor axis were then placed directly onto the map. A copy of the profiled results is included in the back pocket of this report.

**IP SURVEY**

The IP survey was completed using the Elrec 10 receiver and the GDD 3.6 kilowatt transmitter. Specifications for these units can be found as Appendix B of this report. The following parameters were kept constant throughout the survey.

| | |
|---|---|
| Line spacing | 100 meters |
| Station spacing | 25 meters |
| Reading intervals | 25 meters |
| IP method | Time domain |
| IP array | Pole-Dipole |
| Delay time | 240Ms |
| Timing | 80Ms through 20 windows |
| Number of electrodes | 6 stainless steel |
| Electrode spacing | 25 meters |
| Parameters measured | Chargeability and Apparent Resistivity |

Once the IP survey was completed the data was then plotted as individual line pseudo-sections, one section for each line read, at a scale of 1:2500. These sections show the contoured results for the collected chargeabilities and resistvities. Interpretations for any and all conductive zones were then put on each section along with corresponding resistivity high correlations. The data was then correlated to the results of the magnetic survey.

## SURVEY RESULTS:

## MAGNETIC AND VLF-EM SURVEY RESULTS:

The most predominant feature outlined by the magnetic and VLF-EM surveys relate to an iron rich formation striking across the grid parallel to the 4600MN tie line. This iron formation lies at the contact between the felsic and mafic intermediate volcanics

Another good magnetic unit lies between lines 3350ME and 3850ME and appears to relate to a possible intrusive. This magnetic feature is also host to at least 2 of the VLF conductive zones as well.

There also appears to be two dike like units generally striking perpendicular to the iron formation. The first zone lies along line 3950ME with the second zone following lines 3450ME at the 4600MN tie line to line 3350ME at the southern end.

There are several other VLF-EM zones scattered across the grid that generally relate to structural trends that relate to the dikes and or contact zones.

## IP SURVEY RESULTS:

The IP survey was successful in locating and outlining 7 conductive horizons across the grid area. **Zones A1 and A2** correlate directly to the suspected iron formation and both are represented by strong chargeabilities with good correlating resistivity lows.

**IP Zone B** correlates to the southern edge of the intrusive zone that lies beneath lines 3510ME and 3850ME on their northern extensions. The IP zone can be traced from line 3750ME to and including 3050ME and appears to continue off of the grid to the west. The zone is represented by a moderate to strong chargeability anomaly with very little resistivity correlation but does lie along the southern edge of the magnetic unit. The zone also has a VLF conductor associated with it's eastern extension.

**IP ZONE C** is a strong to moderate chargeability anomaly that can be traced from line 3650ME to 4050ME and appears to continue off of the grid in both directions. The zone has a correlating resistivity high as well as a direct correlation with a VLF-EM zone. This zone appears to relate to a cross unit that appears to cut across the eastern extension of the magnetic unit.

**IP ZONE D** lies at the extreme southern edge of the suspected iron formation and it can be traced from line 3150ME to 3050ME and continues west off of the grid. The zone is a relatively shallow zone represented by a strong chargeability anomaly with a corresponding resistivity low. The zone has a direct magnetic high correlation and a direct VLF correlation.

**IP ZONES E AND F** are somewhat broken up zones that can be traced from line 4050ME to 3050ME and appears to continue off of the grid in both directions. The zones seems to have been altered, faulted and or folded by the dike like units that cross cut the grid. The zones appear to represent the same structural source as it comes into the grid from the west but it is then offset and or folded and faulted by the dike like units as the zone progress to the east side of the grid. The zones are represented by strong chargeability highs with direct resistivity highs and are also associated with several VLF-EM conductive zones.

## CONCLUSIONS AND RECOMMENDATIONS:

The magnetic survey was successful in outlining the suspected iron formation that was known to strike across the grid area. The survey was also successful in locating a second intrusive zone that is host to both IP zones B and C as well as several of the VLF conductive zones. This unit and it's correlating IP zones should be followed up with a detailed geological and or geochemical program as well as future drilling considerations.

Also, IP zones E and F should be followed up further with the same methods as they both represent good strong zones that appear to be relatively shallow and for the most part they both have moderate to good magnetic correlation.

The iron formation and its conductive zones should also be examined in detail by either geology, soil sampling and or trenching.

All diamond drilling should be based on the follow up survey conclusions.

Respectfully submitted:

J. C. Grant, CET, FGAC
February, 2008

## CERTIFICATION

I, John Charles Grant, of 108 Kay Crescent, in the City of Timmins, Province of Ontario, hereby certify that:

1). I am a graduate of Cambrian College of Applied Arts and Technology, 1975, Sudbury Ontario Campus, with a 3 year Honors Diploma in Geological and Geophysical Technology.

2). I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited, (5 years, 1975 to 1980), and currently as Exploration Manager and Chief Geophysicist for Exsics Exploration Limited, since May, 1980.

3). I am a member in good standing of the Certified Engineering Technologist Association, (CET), since 1984.

4). I am in good standing as a Fellow of the Geological Association of Canada, (FGAC), since 1986.

5). I have been actively engaged in my profession since the 15th day of May, 1975, in all aspects of ground exploration programs including the planning and execution of field programs, project supervision, data compilation, interpretations and reports.

6). I have no specific or special interest nor do I expect to receive any such interest in the herein described property. I have been retained by the property holders and or their Agents as a Geological and Geophysical Consultant and Contract Manager.

John Charles Grant, CET., FGAC.

GEOLOGICAL ASSOCIATION OF CANADA
JOHN GRANT
FELLOW

# APPENDIX A

# SCINTREX

# ENVI-MAG Environmental Magnetometer/Gradiometer

## Locating Buried Drums and Tanks?

The ENVI-MAG is the solution to this environmental problem. ENVI-MAG is an inexpensive, lightweight, portable "WALKMAG" which enables you to survey large areas quickly and accurately.

ENVI-MAG is a portable, proton precession magnetometer and/or gradiometer, for geotechnical, archaeological and environmental applications where high production, fast count rate and high sensitivity are required. It may also be used for other applications, such as mineral exploration, and may be configured as a total-field magnetometer, a vertical gradiometer or as a base station.

**The ENVI-MAG**

- easily detects buried drums to depths of 10 feet or more
- more sensitive to the steel of a buried drum than EM or radar
- much less expensive than EM or radar
- survey productivity much higher than with EM or radar

Main features include:

- select sampling rates as fast as 2 times per second
- "WALKMAG" mode for rapid acquisition of data
- large internal, expandable memory
- easy to read, large LCD screen displays data both numerically and graphically
- ENVIMAP software for processing and mapping data

ENVI-MAG comprises several basic modules; a lightweight console with a large screen alphanumeric display and high capacity memory, a staff mounted sensor and sensor cable, rechargeable battery and battery charger, RS-232 cable and ENVIMAP processing and mapping software.

For gradiometry applications an upgrade kit is available, comprising an additional processor module for installation in the console, and a second sensor with a staff extender.

*ENVI-MAG Proton Magnetometer in operation*

For base station applications a Base Station Accessory Kit is available so that the sensor and staff may be converted to a base station sensor.

## Features and Benefits

**"WALKMAG" Magnetometer/Gradiometer**

The "WALKMAG" mode of operation (sometimes known as "Walking Mag") is user-selectable from the keyboard. In this mode, data is acquired and recorded at the rate of 2 readings per second as the operator walks at a steady pace along a line. At desired intervals, the operator "triggers" an event marker by a single key stroke, assigning coordinates to the recorded data.

**True Simultaneous Gradiometer**

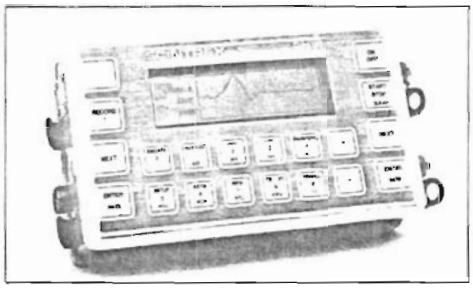
An optional upgrade kit is available to configure ENVI-MAG as a gradiometer to make true, simultaneous gradiometer measurements. Gradiometry is useful for geotechnical and archaeological surveys where small near surface magnetic targets are the object of the survey.

**Selectable Sampling Rates**

0.5 second, 1 second and 2 second reading rates user selectable from the keyboard.

**Large-Key Keypad**

The large-key keypad allows easy access for gloved-hands in cold-weather operations. Each key has a multi-purpose function.



*Front panel of ENVI-MAG showing a graphic profile of data and large-key keypad*

**Large Capacity Memory**

ENVI-MAG with standard memory stores up to 28,000 readings of total field measurements, 21,000 readings of gradiometry data or 151,000 readings as a base station. An expanded memory option is available which increases this standard capacity by a factor of 5.

**Easy Review of Data**

For quality of data and for a rapid analysis of the magnetic characteristics of the survey line, several modes of review are possible. These include the measurements at the last four stations, the ability to scroll through any or all previous readings in memory, and a graphic display of the previous data as profiles, line by line. This feature is very useful for environmental and archaeological surveys.

**Highly Productive**

The "WALKMAG" mode of operation acquires data rapidly at close station intervals, ensuring high-definition results. This increases survey productivity by a factor of 5 when compared to a conventional magnetometer survey.

**"Datacheck" Quality Control of Data**

"Datacheck" provides a feature wherein at the end of each survey line, data may be reviewed as a profile on ENVI-MAG's screen. Datacheck confirms that the instrument is functioning correctly and

allows the user to note the magnetic relief (anomaly) on the line.

### Large Screen Display

"Super-Twist" 64 x 240 dot (8 lines x 40 characters), LCD graphic screen provides good visibility in all light conditions. A display heater is optionally available for low-temperature operations below 0°C.

*Close-up of the ENVI-MAG screen showing data presented after each reading*

### Interactive Menus

The set-up of ENVI-MAG is menu-driven, and minimizes the operator's learning time, and on-going tasks.


*Close-up of display of ENVI-MAG showing interactive set-up menu*

### Rechargeable Battery and Battery Charger

An "off-the-shelf" lead-acid battery and charger are provided as standard. The low-cost "Camcorder" type battery is available from electronic parts distributors everywhere.

### HELP-Line Available

Purchasers of ENVI-MAG are provided with a HELP-Line telephone number to call in the event assistance is needed with an application or instrumentation problem.

### ENVIMAP Processing and Mapping Software

Supplied with ENVI-MAG, and custom designed for this purpose, is easy-to-use, very user-friendly, menu driven data processing and mapping software called ENVIMAP. This unique software appears to the user to be a single program, but is in fact a sequence of separate programs, each performing a specific task. Under the menu system, there are separate programs to do the following:

a) read the ENVI-MAG data and reformat it into a standard compatible with the ENVIMAP software
b) grid the data into a standard grid format
c) create a vector file of posted values with line and baseline identification that allows the user to add some title information and build a suitable surround
d) contour the gridded data
e) autoscale the combined results of the posting/surround step and the contouring step to fit on a standard 8.5 ins. wide dot-matrix printer
f) rasterize and output the results of step e) to the printer

ENVIMAP is designed to be as simple as possible. The user is required to answer a few basic questions asked by ENVIMAP, and then simply toggles "GO" to let ENVIMAP provide default parameters for the making of the contour map. The user can modify certain characteristics of the output plot. ENVIMAP'S menu system is both keyboard and mouse operable. HELP screens are integrated with the menu system so that HELP is displayed whenever the user requests it.

### Options Available

- True simultaneous gradiometer upgrade
- Base station upgrade
- Display heater for low temperature operations
- External battery pouch

## Specifications

### Total Field Operating Range

20,000 to 100,000 nT (gammas)

### Total Field Absolute Accuracy

+/- 1nT

### Sensitivity

0.1 nT at 2 second sampling rate

### Tuning

Fully solid state. Manual or automatic, keyboard selectable

### Cycling (Reading) Rates

0.5, 1 or 2 seconds, up to 9999 seconds for base station applications, keyboard selectable

### Gradiometer Option

Includes a second sensor, 20 inch (½m) staff extender and processor module

### "WALKMAG" Mode

0.5 second for walking surveys, variable rates for hilly terrain

### Digital Display

LCD "Super Twist", 240 x 64 dots graphics, 8 line x 40 characters alphanumerics

### Display Heater

Thermostatically controlled, for cold weather operations

### Keyboard Input

17 keys, dual function, membrane type

### Notebook Function

12 characters, 5 user-defined MACRO's for quick entry

### Standard Memory

Total Field Measurements: 28,000 readings
Gradiometer Measurements: 21,000 readings
Base Station Measurements: 151,000 readings

### Expanded Memory

Total Field Measurements: 140,000 readings
Gradiometer Measurements: 109,000 readings
Base Station Measurements: 750,000 readings

### Real-Time Clock

Records full date, hours, minutes and seconds with 1 second resolution, +/- 1 second stability over 12 hours

### Digital Data Output

RS-232C interface, 600 to 57,600 Baud, 7 or 8 data bits, 1 start, 1 stop bit, no parity format. Selectable carriage return delay (0-999 ms) to accommodate slow peripherals. Handshaking is done by X-on/X-off

### Analog Output

0 - 999 mV full scale output voltage with keyboard selectable range of 1, 10, 100, 1,000 or 10,000 nT full scale

### Power Supply

Rechargeable "Camcorder" type, 2.3 Ah, Lead-acid battery.

12 Volts at 0.65 Amp for magnetometer, 1.2 Amp for gradiometer,

External 12 Volt input for base station operations

Optional external battery pouch for cold weather operations

### Battery Charger

110 Volt - 230 Volt, 50/60 Hz

### Operating Temperature Range

Standard 0° to 60°C
Optional -40°C to 60°C

### Dimensions

Console - 10 x 6 x 2.25 inches (250 mm x 152 mm x 55 mm)

T.F. sensor - 2.75 inches dia. x 7 inches (70 mm x 175 mm)

Grad. sensor and staff extender - 2.75 inches dia. x 26.5 inches (70 mm x 675 mm)

T.F. staff - 1 inch dia. x 76 inches (25 mm x 2 m)

### Weight

Console - 5.4 lbs (2.45 kg) with rechargeable battery

T. F. sensor - 2.2 lbs (1.15 kg)

Grad. sensor - 2.5 lbs (1.15 kg)

Staff - 1.75 lbs (0.8 kg)

SCINTREX

**Head Office**
222 Snidercroft Road
Concord, Ontario, Canada L4K 1B5
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Unit 202
Buffalo, NY 14207
Telephone: (716) 298-1219
Fax: (716) 298-1317

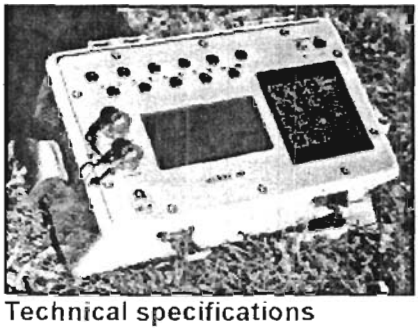
# APPENDIX B

Fugro Instruments
Company Profile
Products
Instrument Sales
Software Sales
Instrument Rentals
Related Services
Technical Papers
Related Links
Contact Us

## Elrec 10 Specifications @ Fugro Instruments

• Back to Instrument Sales • Go Back

Iris Instruments offer a comprehensive range of geophysical instruments, environmental monitoring equipment and geotechnical instruments. Information about IRIS Induced Polarization and Proton Magnetic Resonance systems may be viewed by following the links. For a complete listing of Iris Instruments products, click on the rotating Ohm symbol to visit the IRIS web site.



❑ ELREC 10, Ten dipole IP receiver

*The With graphics display for data quality monitoring*

TEN SIMULTANEOUS DIPOLES
TWENTY PROGRAMMABLE CHARGEABILITY WINDOWS
HIGH ACCURACY AND SENSITIVITY

ELREC 10 is a ten dipole Time Domain Induced Polarization receiver designed for high productivity surveys in Mineral Exploration. ELREC 10 is a highly sensitive receiver and features a large graphic display for user friendly operation and a Cole-Cole parameter computation for in-the-field time constant analysis.

### Technical specifications

- Ten input dipoles
- Signal waveform: Time Domain (ON+, OFF, ON

-, OFF) with pulse duration of 0.5 , 1 , 2 , 4 or 8 seconds
- Up to twenty arithmetic, logarithmic or fully programmable IP chargeability windows
- Computation of apparent resistivity, average chargeability and standard deviation
- Input impedance: >50 Mohms
- *Input overvoltage protection up to 1000* Volts
- Automatic SP bucking ±15V with linear drift connection
- Internal calibration generator for a true calibration on request of the operator
- Automatic synchronization and re-synchronization process on primary voltage signals whenever needed
- Automatic stacking number in relation with a given standard deviation value
- Proprietary intelligent stacking process rejecting strong non-linear SP drifts
- *Common mode rejection: more than 100 dB* (for Rs = 0)
- Ground resistance measurement from 0.1 to 100 kohms
- Battery test: graphic plot of battery status
- Primary voltage: range: 10 µV to 15V, resolution: 1µV, accuracy: typ. 0.3%
- Chargeability: range: 10µV to 15V, accuracy: typ. 0.6%
- Self Potential: range: ±15V, resolution: 0.1 mV
- Time constant (tau) range: Cole-Cole inversion continuous from 10 milliseconds to 100 seconds ; Customized range on request

- Dimensions: 31x21x25 cm
- Display: 16 lines by 40 characters, 128 x

**Ten dipoles:**
The ten dipoles of ELREC 10 offer an increased productivity in the field for dipole-dipole, gradient or extended poly-pole arrays. It is also possible to measure five differential (non adjacent) dipoles, for special electrode configurations.

**Twenty programmable windows:**
Beside classical arithmetic and logarithmic modes, ELREC 10 also offers twenty fully programmable windows for a higher flexibility in the definition of the IP decay curve.

**User Friendly Interface:**
user friendly interface has been set up in ELREC 10 with a minimal number of key strokes for each operation.

***Intelligent Stacking Process:***
When the electric noise has strong non-linear effects, the standard arithmetic stacking process requires a long acquisition time to measure the IP effect ; a proprietary intelligent stacking

- Weight: 8 kg including internal battery
- Operating temperature: -30°C to +70°C
- Power supply: 12V internal rechargeable battery with more than 20 hours service at +20°C ; a 12V external battery can be also used.

SP bursts and minimize the acquisition time for a given reading accuracy

**Monitoring Display:**
A large graphic LCD (128x240 dots) permits the operator to display simultaneously the IP decay curves of the ten dipoles during the acquisition, for a global visualization of the readings and for better quality control. Before the acquisition, the ELREC 10 can be used as a one channel DC graphic display, for monitoring the noise level and checking the primary voltage waveform, through a continuous display process.

**Cole-Cole Parameters:**
An inversion procedure has been implemented to compute Cole-Cole time constant at the end of the acquisition. This allows a possible grain size discrimination analysis.

**Internal Memory:**
The memory can store up to 3200 dipole readings, each reading including the full set of parameters characterizing the measurements. An explicit data storage procedure has been developed including the display of warning messages for data not yet stored. File names are available for a better memory management of sets of readings.

**Field proof Instrument:**
ELREC 10 operates in a wide temperature range and features a fiber-glass case for resistance to field shocks and vibrations.

# *Tx II Transmitter*

## *3600 W*

### *User's Guide*


**INSTRUMENTATION INC.**

3700, boul. de la Chaudière, suite 200, Québec (Qc) Canada G1X 4B7

Tel.: (418) 877-4249 Fax: (418) 877-4054

E-Mail: gdd@gddinstrumentation.com

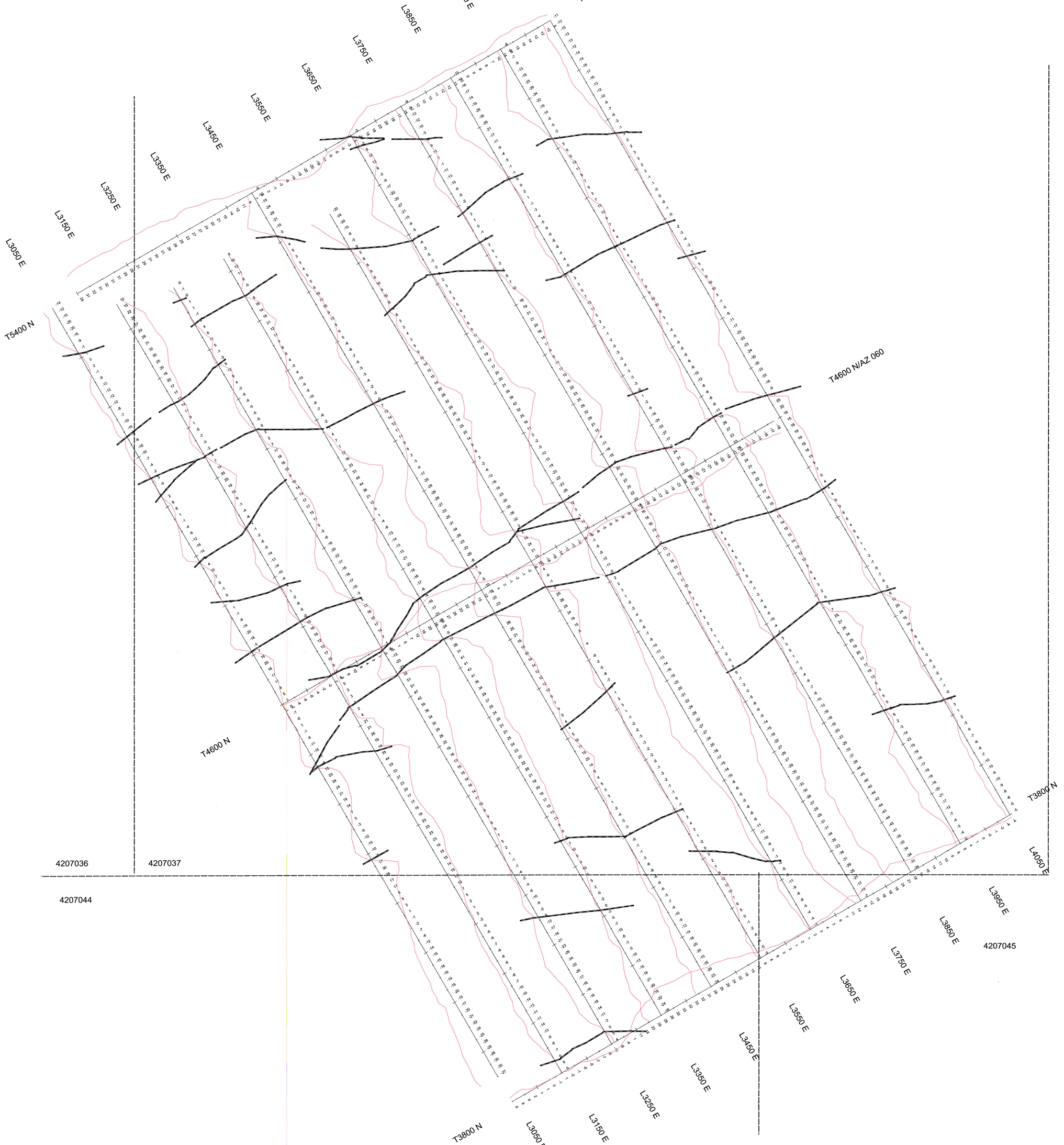
# 6. SPECIFICATIONS

**Size :** 51 x 41.5 x 21.5 cm- built in transportation box from Pelican

**Weight :** approximately 32 kg

**Operating temperature :** -40 °C to 65 °C

| | |
|---|---|
| **Cycle :** | time domain : 2 s ON, 2 s OFF |
| Optional: | 1, 2, 4 or 8 s |
| | 0.5, 1, 2 or 4 s |
| | DC |
| **Output current :** | 0.030 A to 10 A (normal operation) |
| | 0.000 A to 10 A (cancel open loop) |
| **Output voltage :** | 150 V to 2400 V |
| **Display :** | LCD, reads to 0,001 A |
| **Power source :** | 240 V / 60 Hz (220 V / 50 Hz) |




Scale 1:2500

50 0 50 100 150

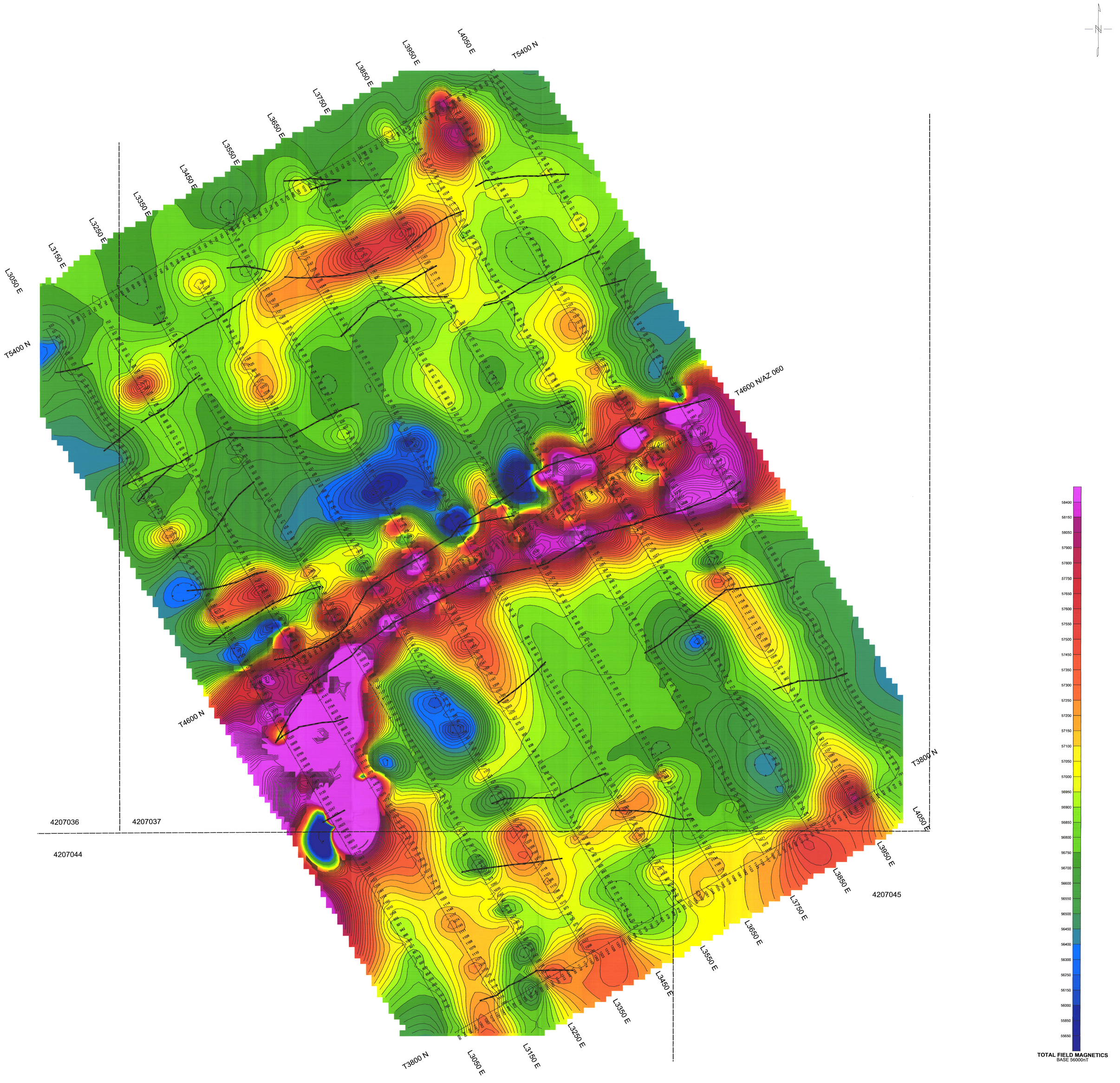
(meters)

GOLDEN CHALICE RESOURCES INC.

**PENHORWWOD PROJECT-PENHORWOOD TOWNSHIP**
**VLF-EM SURVEY-CUTLER, MAINE-24.0KHZ**

Scintrex ENVI MAG System
Profiled: 1cm=+/- 20%

***Jan. 2008 EXSICS EXPLORATION LIMITED E-***

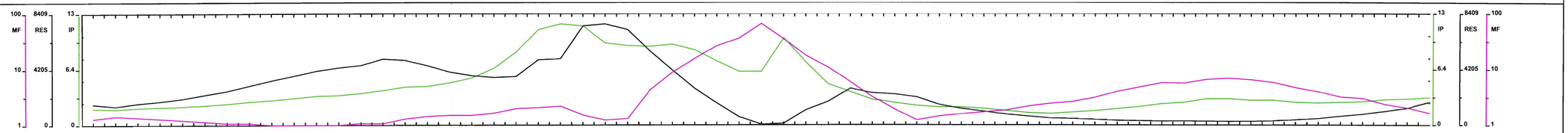


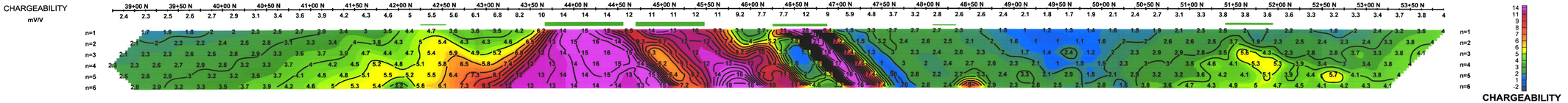

GOLDEN CHALICE RESOURCES INC.

**PENHORWWOD PROJECT-PENHORWOOD TOWNSHIP**
**TOTAL FIELD MAGNETIC SURVEY**

Scintrex ENVI MAG System
Contoured: 50 nT

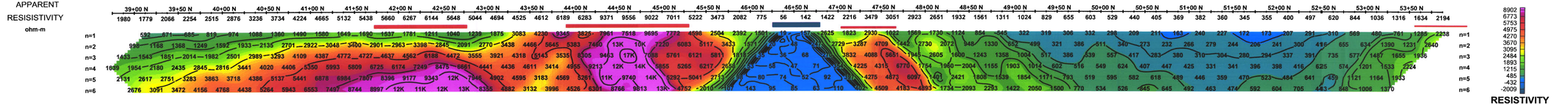
*Jan. 2008 EXSICS EXPLORATION LIMITED E-*



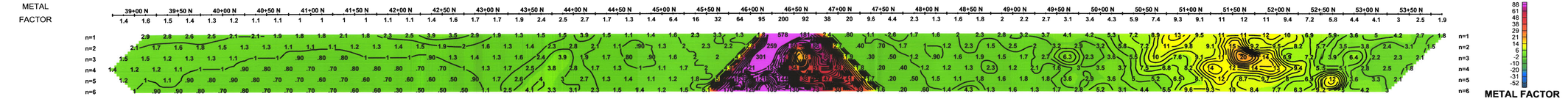






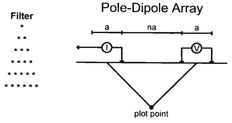








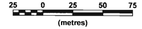





DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

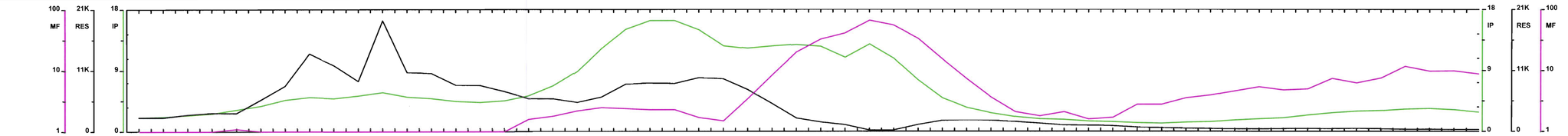


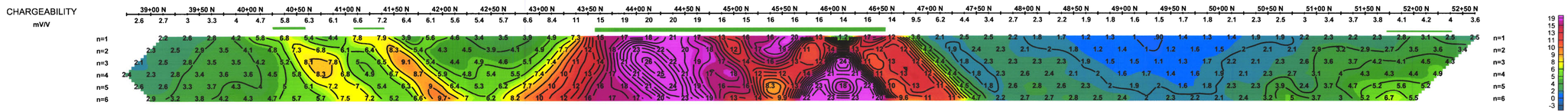

GOLDEN CHALICE RESOURCES INC.

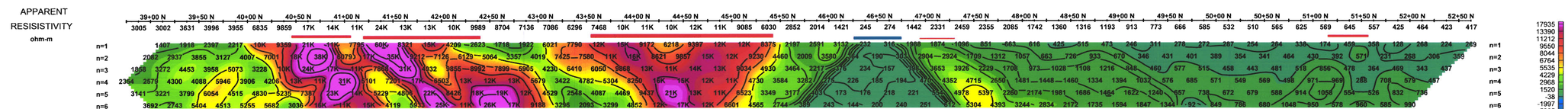
# INDUCED POLARIZATION

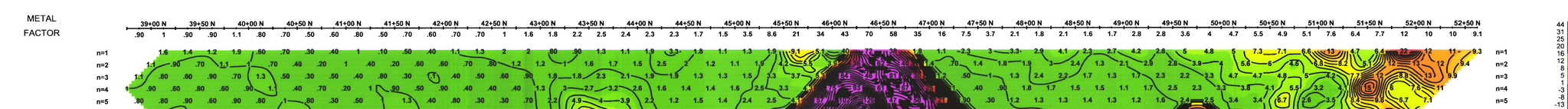
## LINE L40+50E

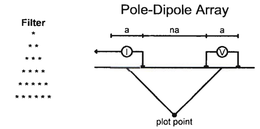
Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

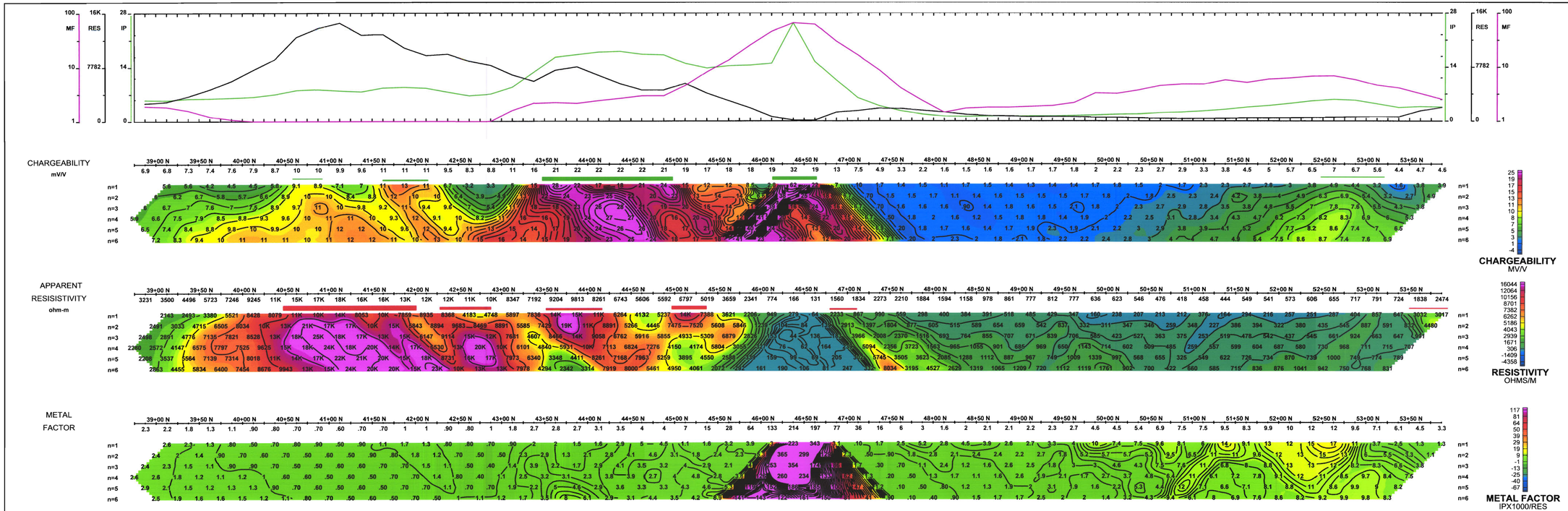
25 0 25 50 75
(metres)

GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

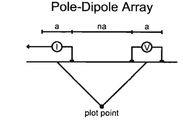
## LINE L39+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Filter

Pole-Dipole Array




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

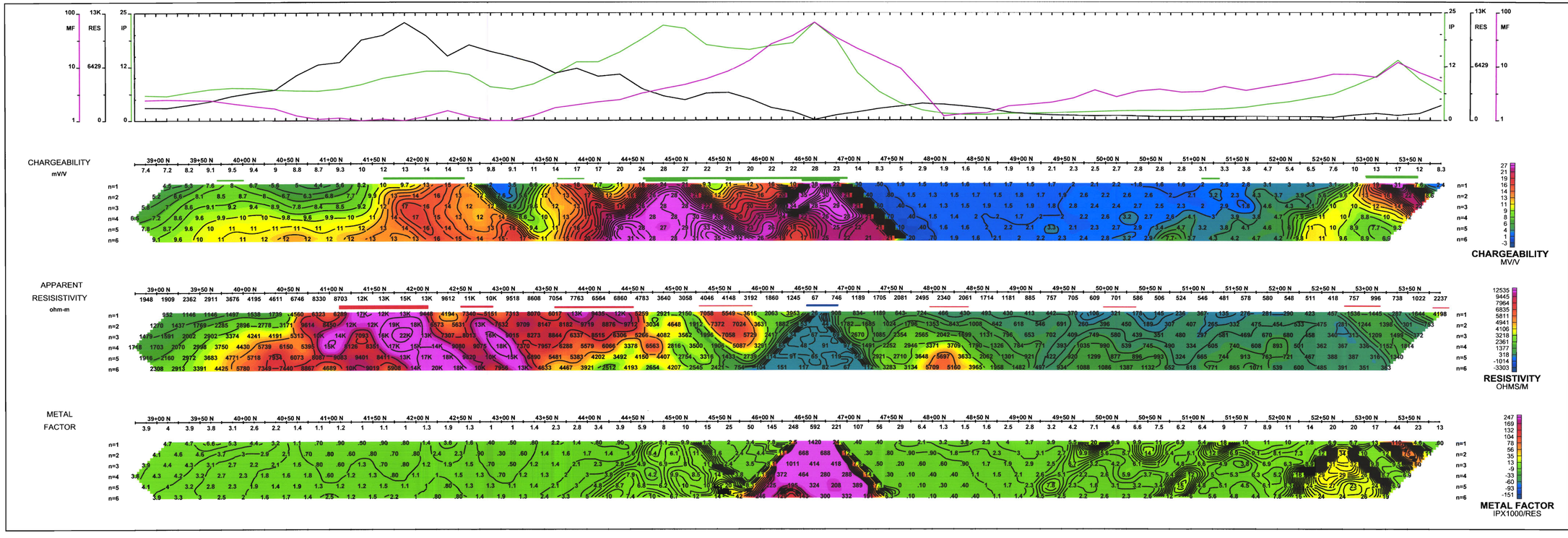
25 0 25 50 75
(metres)

GOLDEN CHALICE RESORCES INC.

# INDUCED POLARIZATION

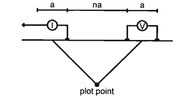
## LINE L38+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Filter

Pole-Dipole Array




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

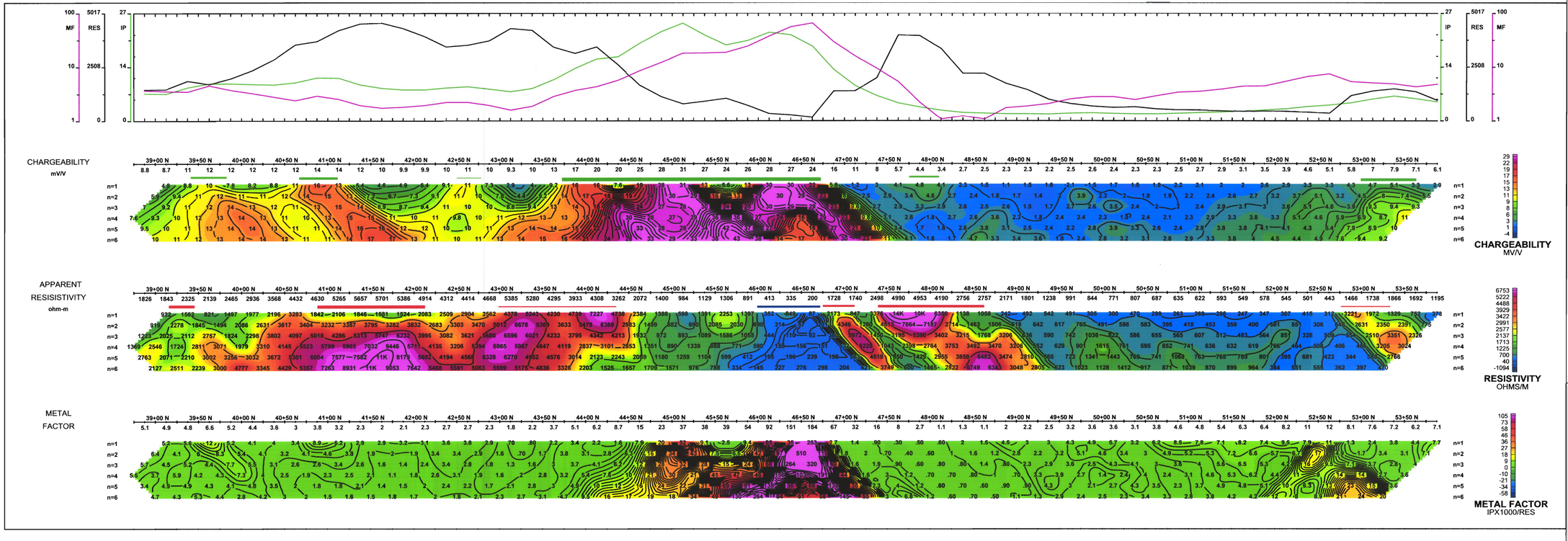
25 0 25 50 75
(metres)

GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

## LINE L37+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Pole-Dipole Array

Filter

a na a

plot point

DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

25 0 25 50 75

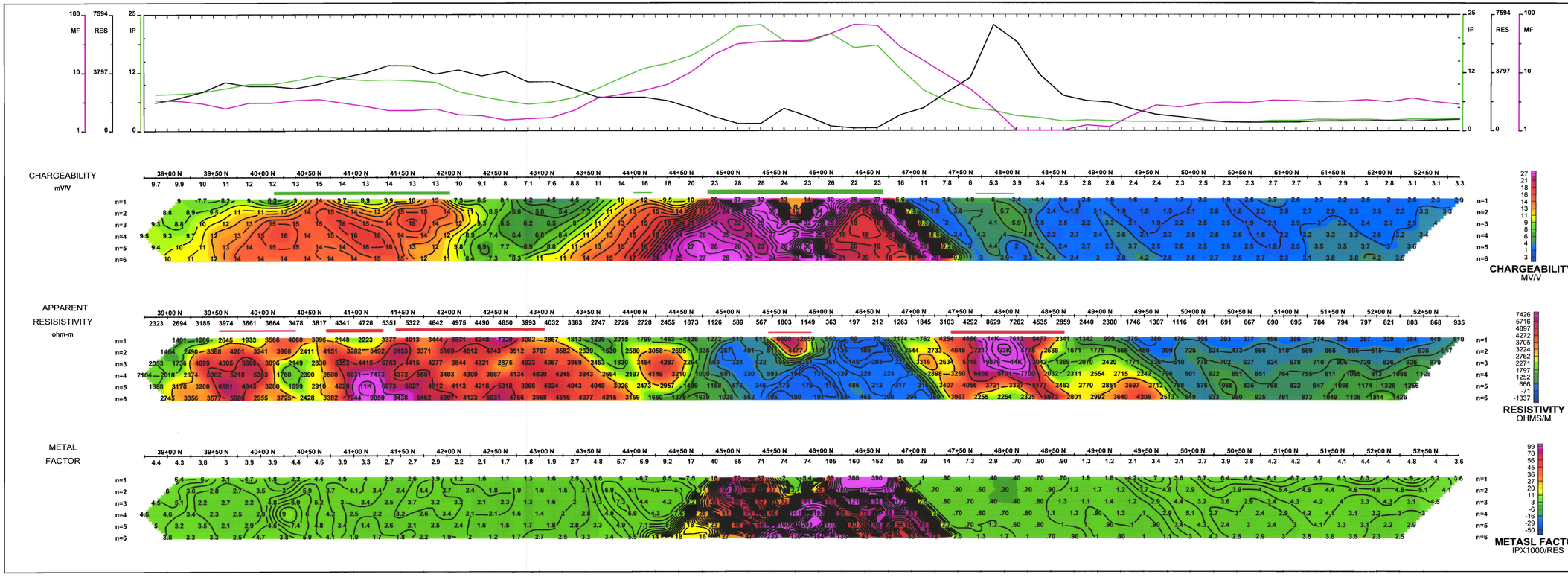
(metres)

GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

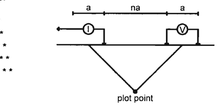
## LINE L36+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Pole-Dipole Array

Filter




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

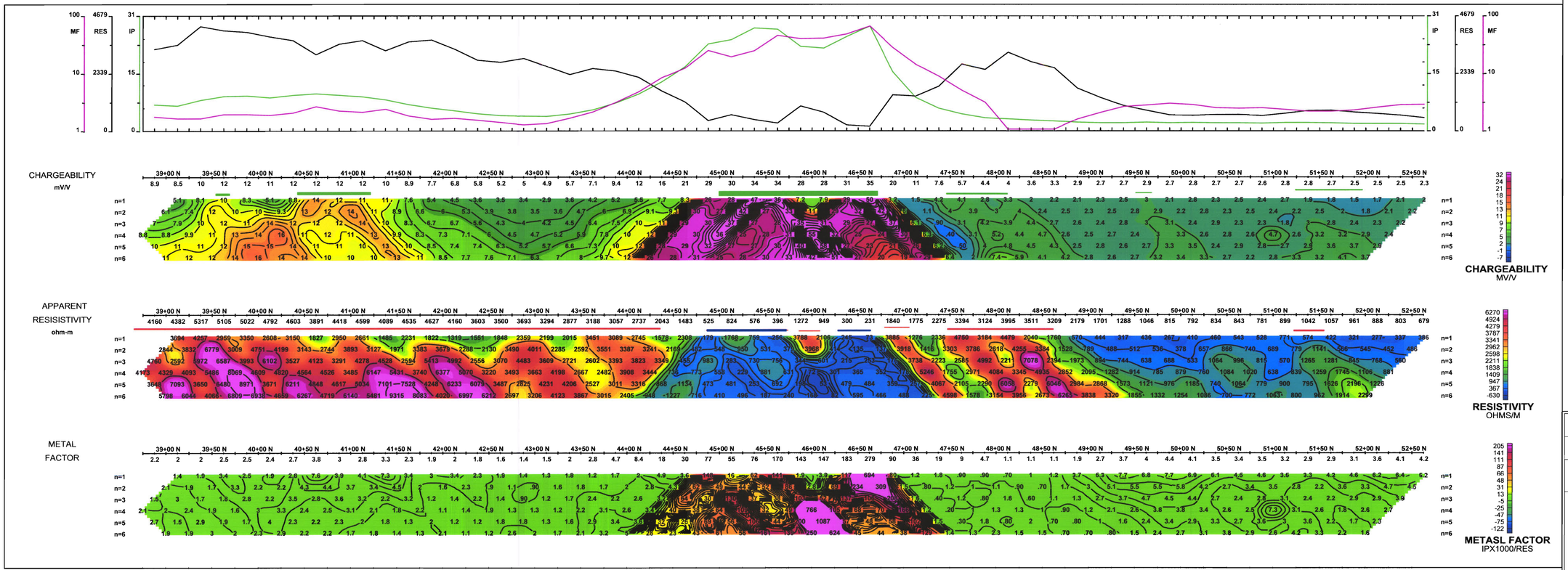
25 0 25 50 75
(metres)

GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

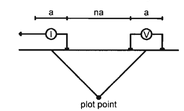
## LINE L35+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Filter

Pole-Dipole Array

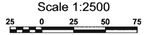



DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

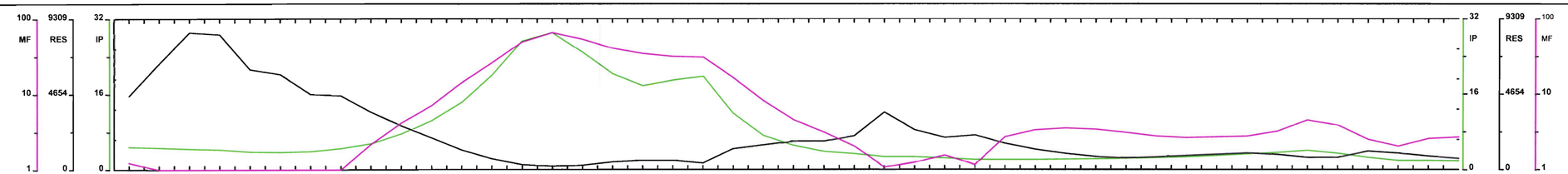



GOLDEN CHALICE RESOURCES INC.

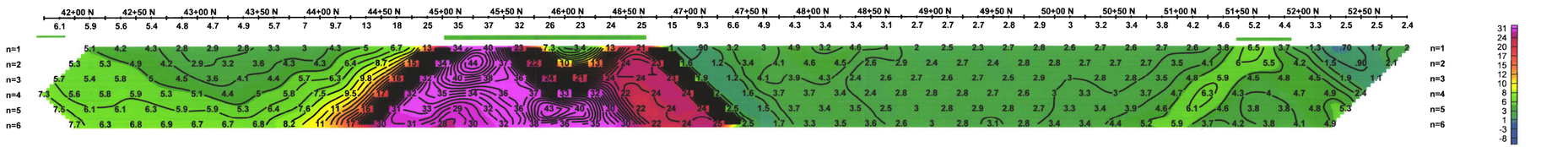
# INDUCED POLARIZATION

## LINE L34+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.

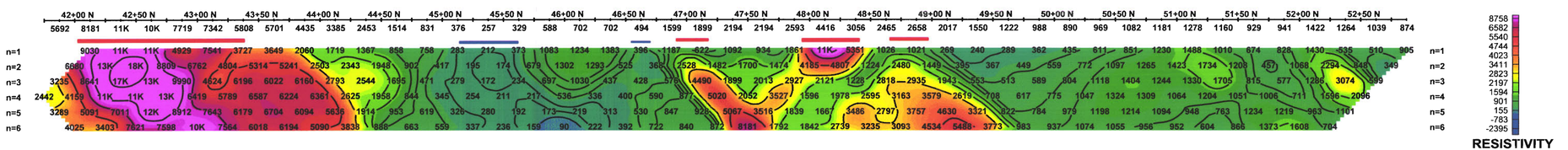



CHARGEABILITY
mV/V



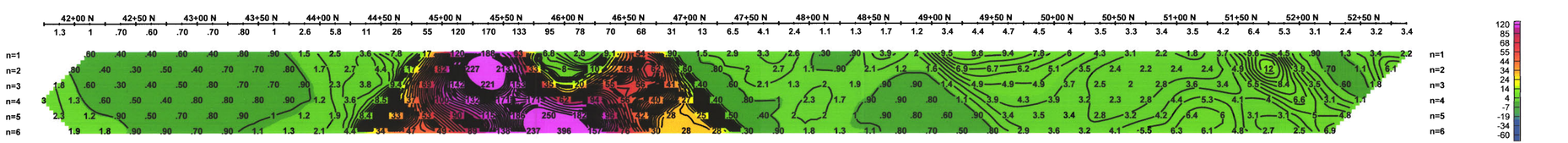

**CHARGEABILITY**
MV/V

APPARENT
RESISISTIVITY
ohm-m




**RESISTIVITY**
OHMS/M

METAL
FACTOR




**METAL FACTOR**
IPX1000/RES

Filter
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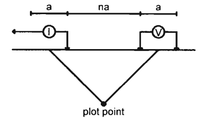
Pole-Dipole Array




**DIPOLE LENGTH : a=25M**
**DIPOLE SPACINGS : n = 6**
**FREQUENCIES :**

**CHARGEABILITY**
**Interval 1%, 10%**
**RESISTIVITY**
**Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..**
**METAL FACTOR**
**Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..**

**INSTRUMENTS**
**RECEIVER : ELREC 10**
**TRANSMITTER : GDD 3.6KWATT**

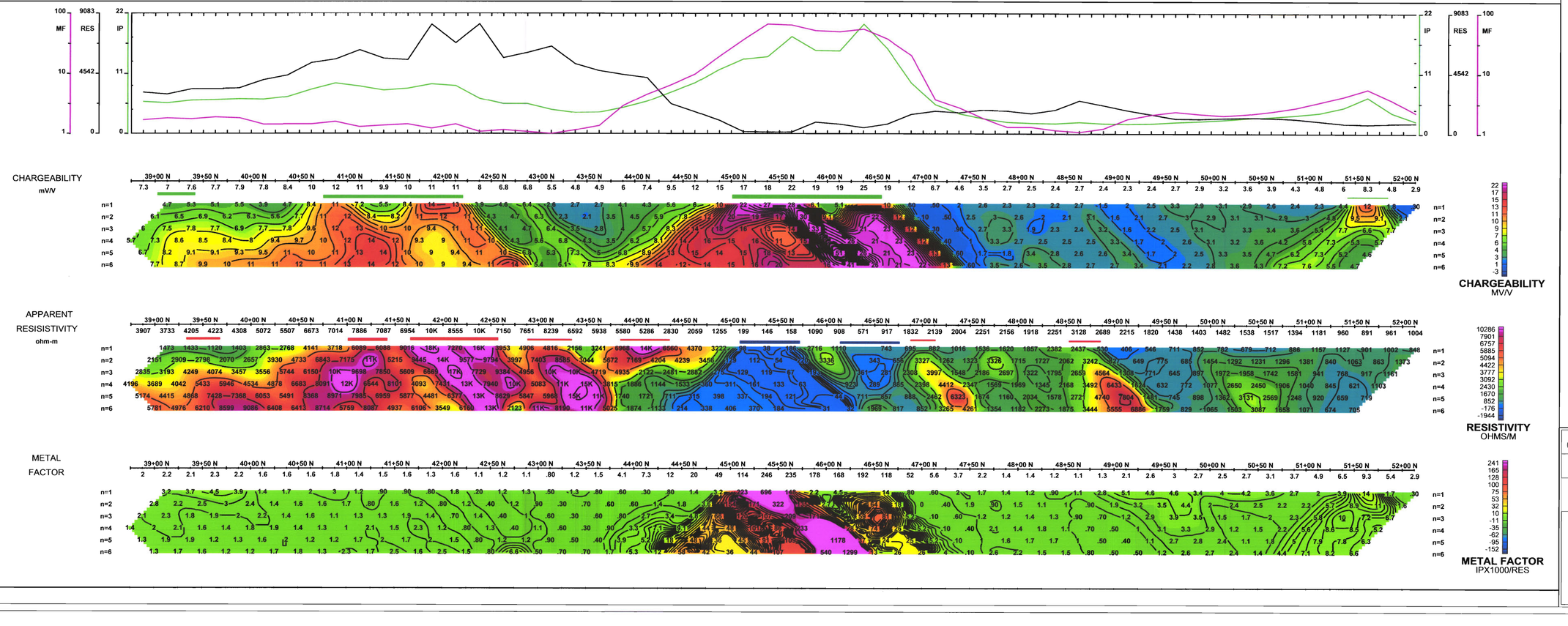
Scale 1:2500


GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

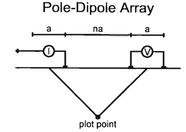
## LINE L33+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Filter

Pole-Dipole Array




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

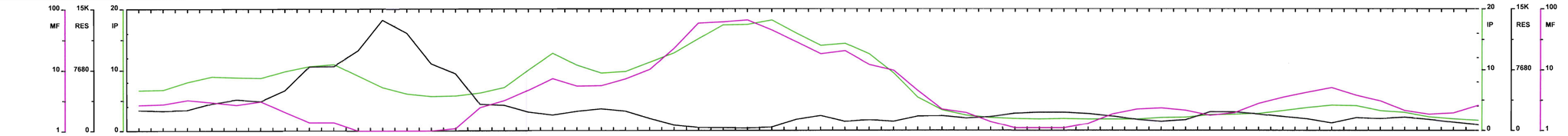
25 0 25 50 75
(metres)

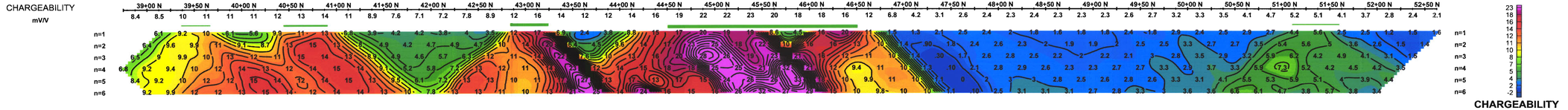
GOLDEN CHALICE RESOURCES INC.

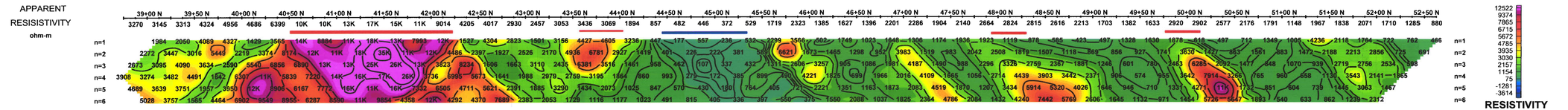
# INDUCED POLARIZATION

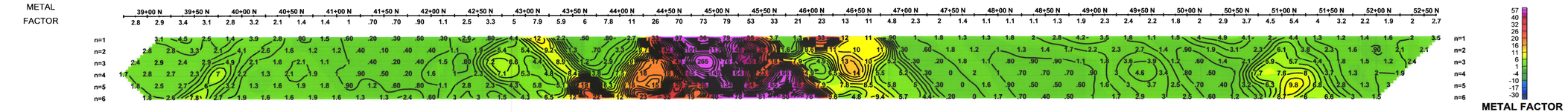
## LINE L32+50E

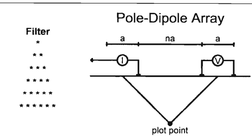
Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

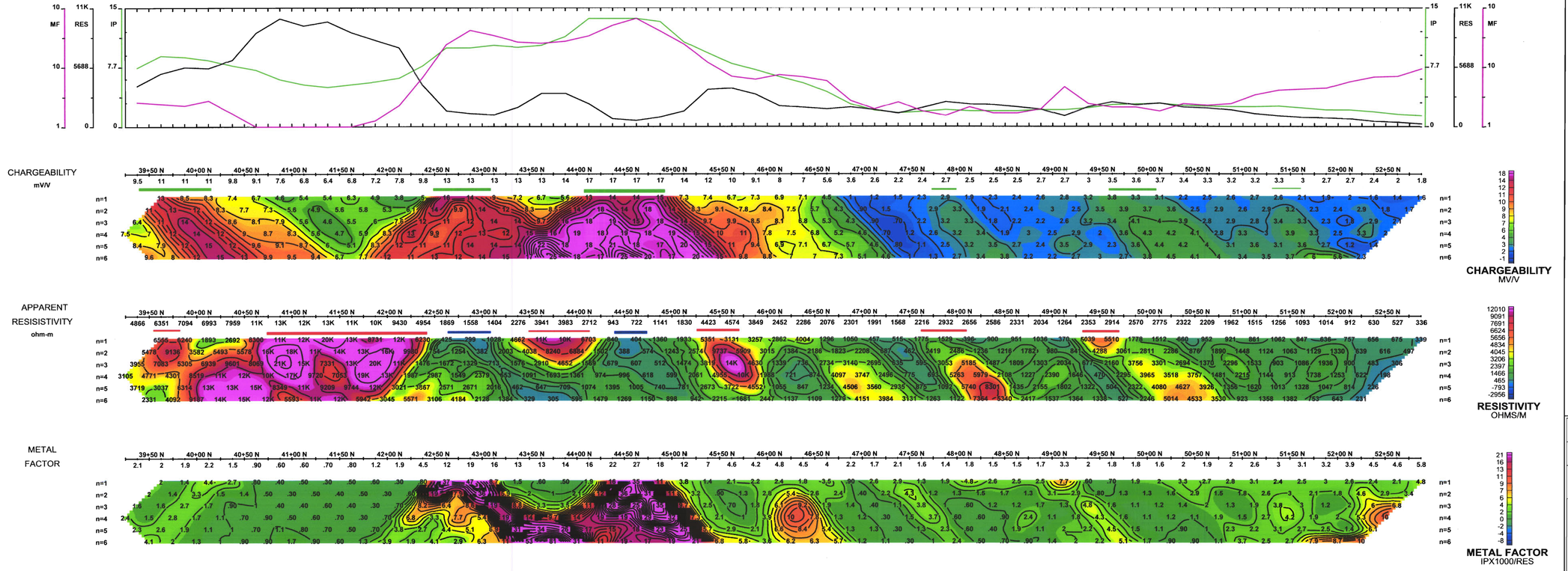
25 0 25 50 75
(metres)

GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

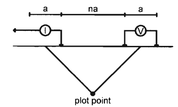
## LINE L31+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.




Filter

Pole-Dipole Array




DIPOLE LENGTH : a=25M
DIPOLE SPACINGS : n = 6
FREQUENCIES :

CHARGEABILITY
Interval 1%, 10%
RESISTIVITY
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..
METAL FACTOR
Logarithmic 1, 1.5, 2, 3, 5, 7.5, 10,..

INSTRUMENTS
RECEIVER : ELREC 10
TRANSMITTER : GDD 3.6KWATT

Scale 1:2500

25 0 25 50 75
(metres)

GOLDEN CHALICE RESOURCES INC.

# INDUCED POLARIZATION

## LINE L30+50E

Date : JAN. 2008
Property : PENHORWOOD PROJECT
Township : PENHORWOOD TOWNSHIP
Survey by : EXSICS EXPLORATION LTD.