2.35343

GEOPHYSICAL REPORT

For

SEDEX MINING CORP.

On The

SERPENTINE LAKE PROPERTY

NORTH GRID

SEMPLE TOWNSHIP

PORCUPINE MINING DIVISION

NORTHEASTERN, ONTARIO

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

June, 2007

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INTRODUCTION:

The services of Exsics Exploration Limited were retained by Sedex Mining Corp. to complete a ground geophysical program on the north portion of their Serpentine Lake Property, that is located in the south central portion of Semple Township of the Porcupine Mining Division of Northeastern Ontario.

The purpose of this ground program was to locate and outline the north and northwest section of an ultamafic intrusive horizon that is thought to strike in a horseshoe like pattern around Serpentine Lake and Bears Nets Lake. This intrusive has nickel mineralization associated with it.

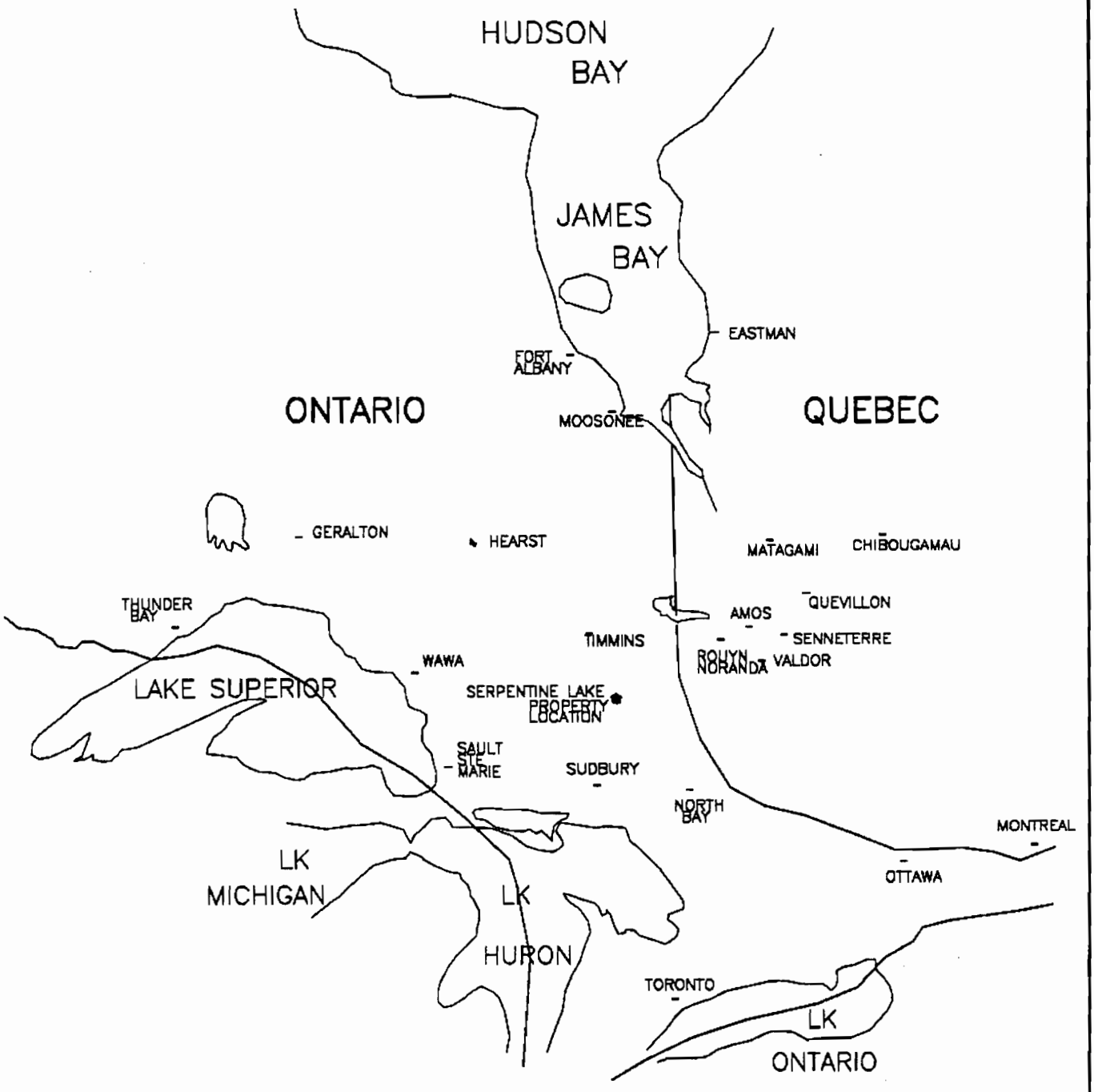
The ground program consisted of line cutting and a total field magnetic survey that was done in conjunction with an Induced Polarization, (IP), survey.

The ground program commenced during the first portion of June with the line cutting and was completed by the 18th of June. In all, a total of 9.6 kilometers of grid lines were cut across the property. All of the lines were covered by the magnetic survey with IP being done on all of the lines including the base line.

PROPERTY LOCATION AND ACCESS:

The Serpentine Lake Property is situated in the south central portion of Semple Township approximately 55 kilometers south of the City of Timmins. More specifically the property that was covered by the ground program lies to the immediate south and southwest of Serpentine lake and Bears Nest Lake and to the east of Parting Lake. Refer to Figures 1 and 2. The area lies within the Porcupine Mining Division of Northeastern, Ontario.

Access to the grids during the survey period was relatively easy. There is a good gravel road locally called the Pine South road that travels south from Timmins to the Town of Matachewan. This road crosses through the center of English Township that is directly north of Semple. A series of ingress gravel roads branch west and southwest off of this main road and then continue south along the northern and western edges of Semple Township. A gravel road eventually swings east and northeast to within about 600 meters of the grid area. The remainder of the road system allows ATV access to the southeast section of the cut grid. Refer to Figures 2 and 3. Traveling time from Timmins to the grid was about 2 hours.



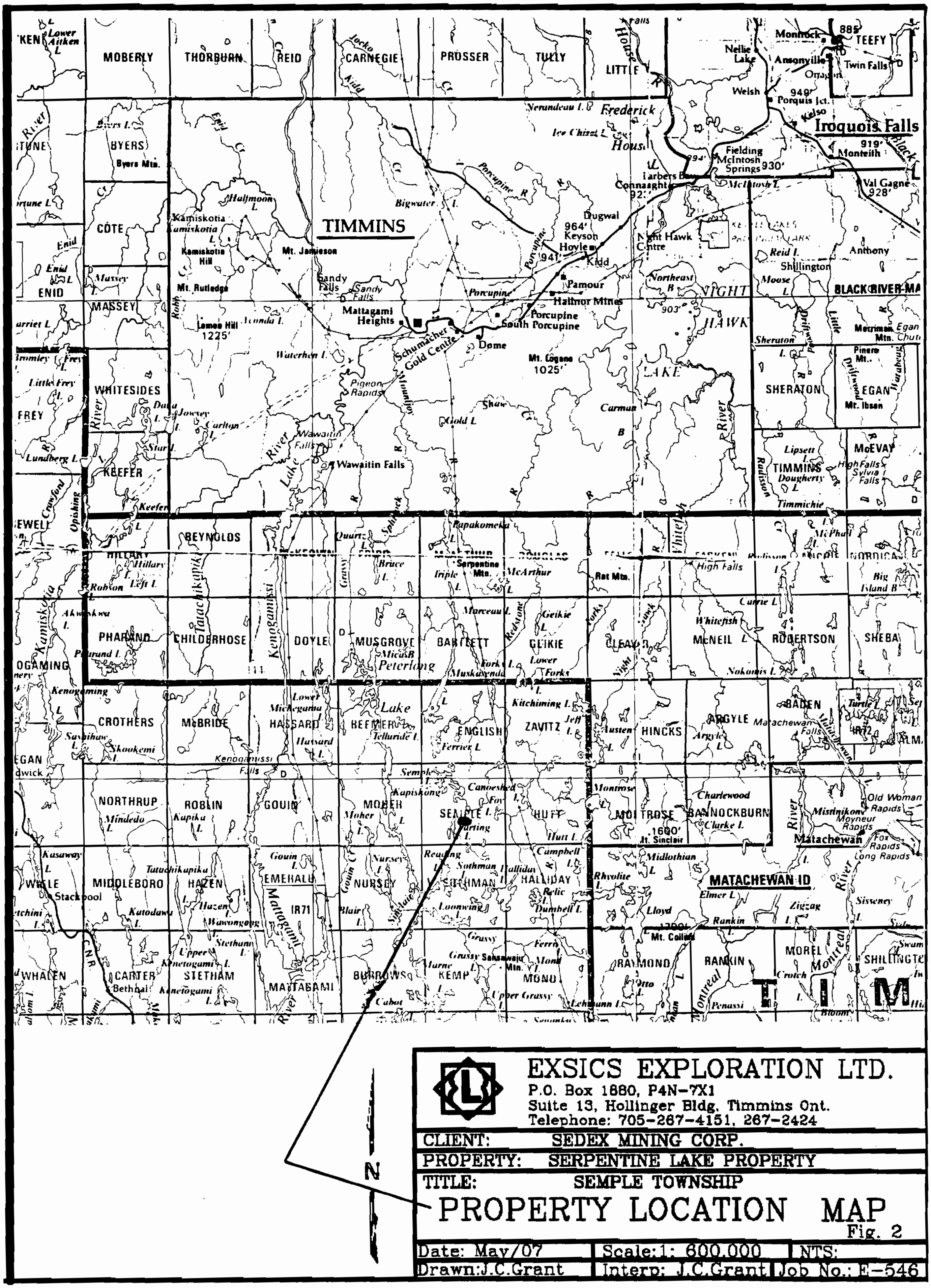
EXSICS EXPLORATION LTD.
P.O. Box 1880, P4N-7X1
Suite 13, Hollinger Bldg, Timmins Ont.
Telephone: 705-267-4151, 267-2424

CLIENT:	SEDEX MINING CORP.
PROPERTY:	SERPENTINE LAKE PROPERTY
TITLE:	SEMPLE TOWNSHIP

LOCATION MAP

Fig. 1

Date: May/07	Scale: 1"=125miles	NTS:
Drawn: J.C.Grant	Interp: J.C.Grant	Job No.: E-546



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CLIENT:	SEDEX MINING CORP.
PROPERTY:	SERPENTINE LAKE PROPERTY
TITLE:	SEMPLE TOWNSHIP

PROPERTY LOCATION MAP

Fig. 2

Date: May/07	Scale: 1: 600,000	NTS:
Drawn: J.C.Grant	Interp: J.C.Grant	Job No.: E-546

CLAIM BLOCK:

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

P-1191895 16 Units

Refer to Figure 3 of this report, which was copied from MNDM Plan Map, M-1100, Semple Township for the positioning of the claims within the area.

PERSONNEL:

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

E. Jaakkola	Timmins, Ontario
M. Cayen	Timmins, Ontario
D. Collins	Timmins, Ontario
J. Hamlin	Timmins, Ontario
R. Bradshaw	Timmins, Ontraio
M. Wing	Timmins, Ontario

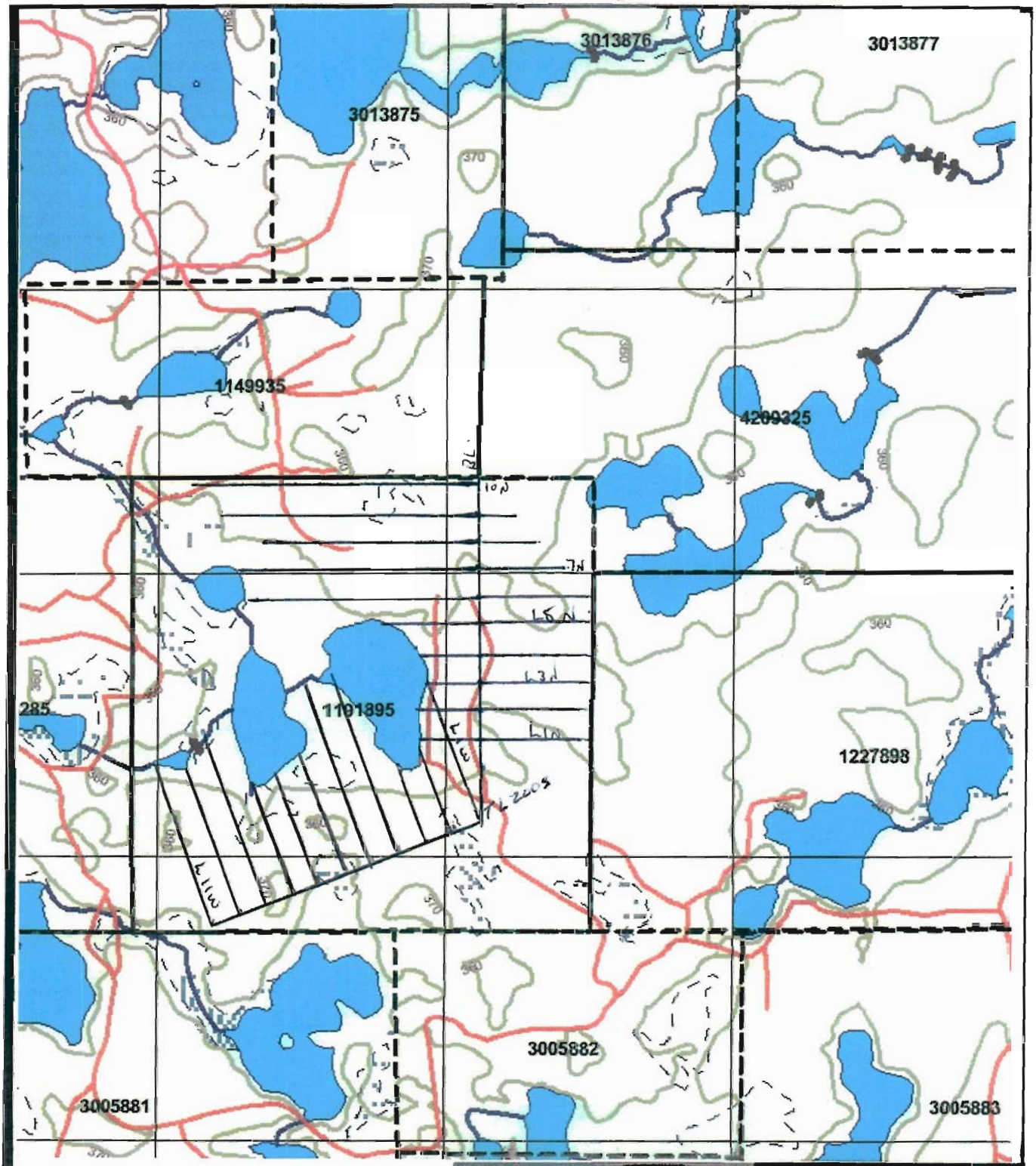
The entire program was completed under the direct supervision of J.C.Grant and all of the plotting; compilation, interpretation and reports were completed by J. C. Grant

GROUND PROGRAM:

The ground program was completed in two stages. The first stage was to cut a detailed metric grid across a portion of the claim block. The grid consisted of a base line initially cut at 360 degrees from tie line 250MS line 100MW. This base line was cut and chained at 25 meter intervals from 250MS to and including line 1000MN. Cross lines were then turned off of this base line at 100 meter intervals from 100MN to 1000MN and cut to 1000MW or the lakes.

In all, a total of 9.6 kilometers of grid lines were established across the north grid and all of these lines were chained with 25 meter pickets that had been metal tagged.

Upon the completion of the cutting the entire grid was then read with a total field magnetic survey that was done in conjunction with an IP survey.



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CLIENT:	SEDEX MINING CORP.
PROPERTY:	SERPENTINE LAKE PROPERTY
TITLE:	SEMPLE TOWNSHIP

CLAIM MAP/GRID MAP

Fig. 3

Date: May/07	Scale:1: 20,000	NTS:
Drawn:J.C.Grant	Interp: J.C.Grant	Job No.: E-546

LOCAL GEOLOGY:

Generally the property is underlain by intermediate to mafic volcanics that have been intruded by a horseshoe shaped ultramafic intrusive that has wrapped itself around both Serpentine Lake and Bears Nest lake. The intrusive is bordered to the east and west by two parallel faults that strike northeast from the major Grassy Lake fault that lies to the southwest of Semple Township.

Several short diabase dikes strike northwest across the southwest corner of the Township and a felsic intrusive is pushing into the southwest corner of the Township and abuts up against one of the northeast striking fault zones.

The intrusive itself contains at least two known asbestos showings and also is host to a nickel showing.

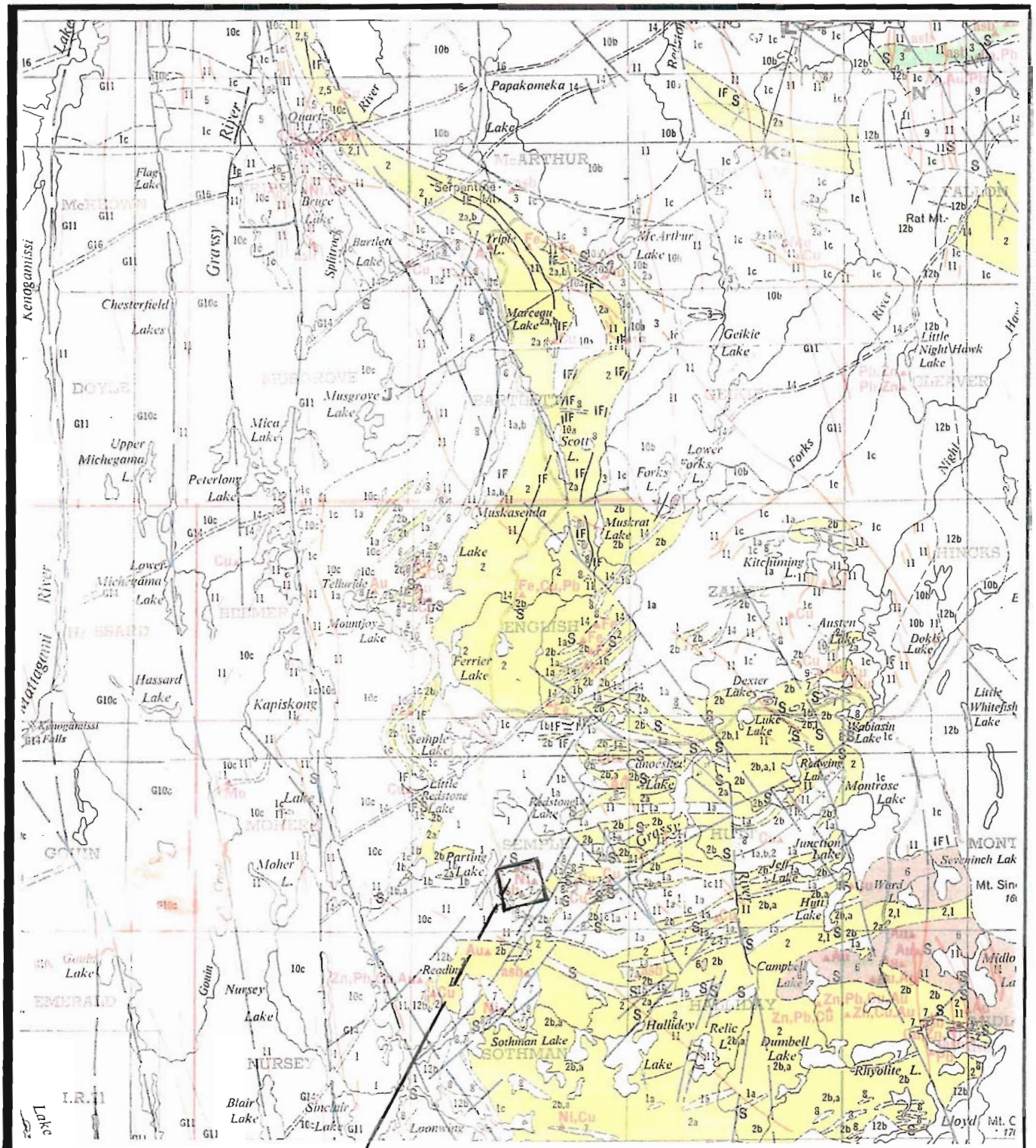
Refer to Figure 4 copied from Map 2205, Timmins-Kirkland lake Geological Compilation Series, scale: 1:253,440.

MAGNETIC SURVEY:

The magnetic survey was completed using the Scintrex Envi Mag system. Specifications for this unit can be found as Appendix A of this report. The following parameters were kept constant throughout the survey period.

Line spacing:	100 meters
Station spacing:	25 meters
Reading intervals:	12.5 meters
Instrument:	Scintrex Envi mag system
Accuracy:	+/- 0.1 %
Reference field:	57,000 nT
Datum subtracted:	56,500 nT
Diurnal monitor:	Base station recorder
Record intervals:	30 seconds

Upon completion of the survey the collected data was corrected, leveled and then plotted onto a base map at a scale of 1:2500 and then contoured at 200 gamma intervals wherever possible. This north grid was merged with the angle grid and then plotted together as one grid that defined the entire lay out of the two cut grids. A color copy of the entire magnetic survey is included in the back pocket of this report.



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CLIENT: SEDEX MINING CORP.

PROPERTY: SERPENTINE LAKE PROPERTY

TITLE: SEMPLE TOWNSHIP

LOCAL GEOLOGY MAP

Fig. 4

Date: May/07	Scale:1:253,440	NTS:
Drawn:J.C.Grant	Interp: J.C.Grant	Job No.: E-546

IP SURVEY:

The IP survey was completed using the IRIS Elrec 10 receiver and the G.D.D. Instrumentation 3.6 kilowatt transmitter.

Line spacing:	100 meters
Station spacing:	25 meters
Reading intervals:	25 meters
IP method:	Time domain
IP array:	Pole-Dipole
Electrode spacing:	a= 25 meters
Electrode number	n= 4
Transmitter:	GDD 3.6 Kilowatt
Receiver:	Elrec 10
Parameters measured:	Chargeability in millivolts/volt Resistivity in ohms/meter

Upon the completion of the survey, the data was then presented as individual line pseudosections at a scale of 1:2500 showing the contoured results of the Chargeability in milli volts/volt, apparent resistivity in ohms/meter and the calculated Metal Factors. Copies of these sections are also included in the back pocket of this report.

MAGNETIC SURVEY RESULTS:

The ground program was successful in locating and outlining the eastern boundary and northern boundary of the horseshoe like intrusive. The shape of the intrusive is quite evident when the two grids were merged. The boundaries of the intrusive are very well defined especially on it's northern extension. The southern extension appears to continue off of the grid in the vicinity of line 100MW at 150 to 200MN.

The intrusive itself appears to contain two distinct and parallel features. The southern feature is represented by a broad magnetic high with a possible blow out to the east between lines 100MN and 500MN just to the east of the lake. This zone then continues around Serpentine Lake to and including 800MN at 300MW.

The second feature closely parallels the southern zone but it is somewhat narrower. This zone can be traced from line 1000MW at 275MN to and including 300MW at 300MN where it runs into Serpentine Lake. The northern extension can then be traced from 600MN at 450MW to line 900MN at 650MW.

A weak high is observed on line 1000MN at 900MW that continues off of the grid to the north.

There may be evidence of minor faulting that parallels line 300MW that appears to cross cut the two zones within the intrusive. This cross structure is evident in the southern shape of Serpentine Lake as well.

IP SURVEYS RESULTS:

The IP survey correlated well with the magnetic survey results. Each of the lines that were covered by the IP survey will be discussed separately and in detail along with any and all magnetic correlation.

LINE 100MN:

The western end of the line stops at the lake and did not cover the extent of the IP target. The zone is building in strength as the line heads west out under the Lake.

The IP target correlates well with the eastern edge of the intrusive.

LINE 200MN:

The western end of this line is also cut short by the positioning of the lake but the IP zone begins to build at the base line and extends as far as 150MW. This correlates well with the strong magnetic build up that represents the nose of the intrusive as it bends northward around Serpentine Lake. This zone lies on the western flank of a moderate resistivity high.

There is a second narrow zone situated at 100ME that relates to the eastern edge of the magnetic high unit suggesting it may be a contact zone.

LINE 300MN:

This line picked up the same narrow IP zone at 100 to 125ME that correlates to the possible blow out mag high that is situated on the eastern edge of the intrusive. The IP zone on the western tip of the line relates to the strong high that is wrapping around the Lake. The zone lies on the western edge of a modest resistivity high.

LINE 400MN:

The IP zone begins to built at 50ME and continues to the west end of the line where it again runs into the Lake. The zone has a correlating resistivity high and represents the eastern edge of the magnetic high and intrusive zone.

LINE 500MN:

This line also hit Serpentine Lake on its western end but it did pickup the eastern edge of the intrusive and correlates well with the magnetic high and a modest resistivity high. The zone appears to cone to or near surface.

LINE 600MN:

Line 600MN is the first survey line that covers the entire intrusive zone as outlined by the magnetic high area. The survey outlined two distinctive IP targets that appear to originate at depth from the same broad source. The first high is situated between 200MW and 275MW and lies to the immediate west of a strong resistive unit. This zone is strengthening at depth. It also correlates well to the eastern high trend that is contained within the broad magnetic zone.

The second zone is situated between 425MW and 500MW and correlates to a modest resistivity high. The zone also correlates to the western high unit that is thought to parallel the strong high unit to the east. These two narrow highs have been traced from 1100MW up to and including 600MN and are contained within the broader magnetic high.

LINE 700MN:

This line also outlined the two IP zones that emanate from the same source at depth. The eastern zone is situated between 275MW and 350MW and appears to be strengthening at depth and or is plunging as the grid continues northward. This zone correlates directly with the center of the narrow eastern magnetic high trend.

The second zone is situated between 475MW and 575MW and also correlates directly with the western narrow magnetic high zone. This zone is quite stronger that the eastern zone possibly suggesting it comes to or near surface. This portion of the zone correlates to a modest resistivity high.

LINE 800MN:

This line again outlined a strong IP zone situated between 300MW and 650MW that remains open to the west. The end of this line is covered by a small lake. The target represents the northern extension of the intrusive and it was still able to separate the two narrow highs within the broader magnetic high. The zone itself appears to be flanked by modest resistivity highs.

LINE 900MN:

The collected data for that portion of the line between 100ME and 100MW was not reliable due to contact problems. The line did outline a good conductive zone situated between 500MW and 700MW that correlates to the western magnetic high trend as well as the western edge of the intrusive zone. The zone correlates to a modest area of resistivity highs and appears to be near or at surface. The zone also appears to be strengthening at depth.

The western edge of the intrusive has now been well defined with this survey line and it is at 725MW.

LINE 1000MN:

This line represents the most northern line covered by the IP survey. The line outlined a strong IP zone situated between 675MW and the west end of the grid line and it remains open to the west. The zone correlates to a west flanks a modest resistivity high zone.

The zone also correlates to a broad and somewhat spotty magnetic high unit that continues off of the grid to the north. This may represent a northwest extension of the intrusive zone.

BASELINE 0:

This line was read to better define the eastern extent of the intrusive zone. The line outlined a modest to strong IP zone between 100MN and 450MN that correlates directly with the limits of the nose fold of the intrusive as outlined by the magnetic survey. The zone also relates to a resistivity low that lies between two flanking resistivity highs.

This zone also appears to continue to depth and is getting stronger at depth.

CONCLUSIONS AND RECOMMENDATIONS:

The ground program that was carried out over the two grids was successful in locating and outlining the eastern and western extensions of the horseshoe shaped intrusive zone. The magnetics show the extend of the intrusive but was also successful in outlining two distinct narrow magnetic high units within the intrusive body. The magnetic survey also suggest that the southwest portion of the northern high unit may have been faulted and or folded by a minor cross structure striking northwest to southeast across the north end of line 800MW. There may also be evidence of faulting between 900MN and 1000MN at the western ends of the lines that may have separated a section of the intrusive to the northwest of the main body.

The IP survey was also successful in outlining the intrusive and defining the edges of the unit. Of particular interest are the two narrow and parallel IP anomalies that were noted within the intrusive units. The IP survey was able to separate the two zones and follow both features across the grid to the southwest, east and northwest limits. The IP results suggest that these may be areas of metallic concentrations that should be followed up with drilling. Both of these zones remain open at depth and along strike.

Initially the IP survey was completed using only 4 dipoles due to the length of the cut lines and the positioning of the lakes. This may have proven wise at the time as the survey was able to separate the two narrow zones. A wider spread is recommended once the lakes are frozen to test the depth extent of the two IP zones.

Respectfully submitted:

J. C. Grant, CET, FGAC
June, 2007

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 into 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

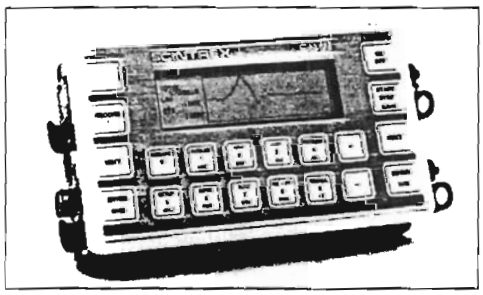
An optional upgrade kit is available to configure ENVI-MAG as a gradiometer to make true, simultaneous gradiometer measurements. Gradiometry is useful for geotechnical and archaeological surveys where small near surface magnetic targets are the object of the survey.

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
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

with line and baseline identification that allows the user to add some title information and build a suitable surround

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, line x 40 characters alphanumerics

Display Heater
Thermostatically controlled, for cold weather operations

Keyboard Input
17 keys, dual function, membrane type

Notebook Function
2 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
Telephone: (905) 669-2280
Fax: (905) 669-6403 or 669-5132
Telex: 06-964570

In the USA:
Scintrex Inc.
85 River Rock Drive
Unit 202
Buffalo, NY 14207
Telephone: (716) 298-1219
Fax: (716) 298-1317

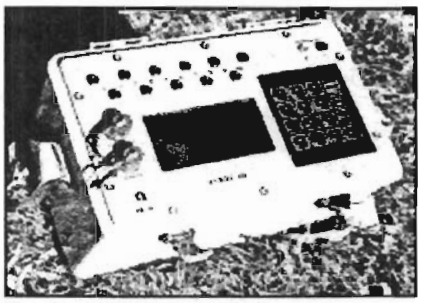
APPENDIX B

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.



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

□ 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.

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

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1.2 Transmitter description

In this section, the Tx II components are shown, named and explained.

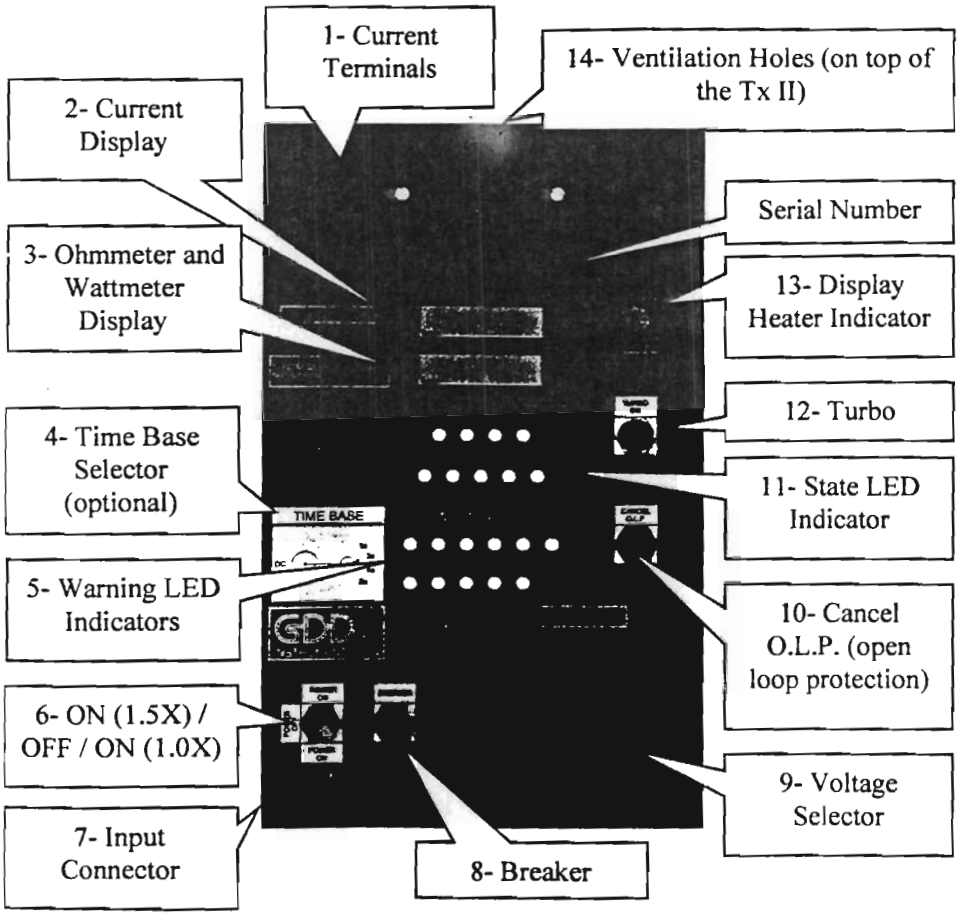

Figure 1 : Transmitter components

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)