

**GEOPHYSICAL REPORT  
FOR  
AMADOR GOLD CORP.  
ON THE  
KEITH NORTH GRID  
KEITH TOWNSHIPS  
PORCUPINE MINING DIVISION  
NORTHEASTERN, ONTARIO**



Prepared by: J. C. Grant,  
May, 2008

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## TABLE OF CONTENTS

	Page
ABSTRACT	
INTRODUCTION	1
PROPERTY LOCATION AND ACCESS	1
CLAIM BLOCK	1
PERSONNEL	2
GROUND PROGRAM	2,3
MAGNETIC and VLF-EM SURVEY RESULTS	3
CONCLUSIONS AND RECOMMENDATIONS.	4
CERTIFICATE	
LIST OF FIGURES:	FIGURE 1, LOCATION MAP FIGURE 2, PROPERTY LOCATION MAP FIGURE 3, CLAIM MAP/GRID SKETCH
APPENDICES:	A: SCINTREX ENVI MAG SYSTEM
POCKET MAPS:	PROFILED VLF-EM SURVEY, SCALE 1:2500 CONTOURED MAGNETIC SURVEY, SCALE 1:2500

**INTRODUCTION:**

The services of Exsics Exploration Limited were retained by Mr. C. Hartley, on behalf of the Company, Amador Gold Corp., to complete a detailed total field magnetic survey that was done in conjunction with a VLF-EM survey over a grid, (the Keith North Property), that was cut across a portion of their claim holdings within the township. The grid was cut during the latter part of February, 2008. The grid cutting was completed by an independent line cutting contractor. Once the cutting was completed the grid was then covered by the magnetic and VLF-EM surveys that was completed by Exsics Exploration Limited.

**The grid area is in close proximity to the Joburke Mine Property that produced 16,467 ounces of gold from 182,292 tons of ore with a recoverable grade of 0.09 opt between 1973 and 1975.**

**PROPERTY LOCATION AND ACCESS:**

The Keith North Property is situated approximately 66 kilometers west southwest of the City of Timmins. The entire claim block is situated in the north central section of Keith Township of the Porcupine Mining Division, Northeastern, Ontario. Refer to figures 1 and 2 of this report. More specifically the grid lies to the north of Palomar Lake , west of the Groundhog River with the southwest corner of the grid touching the CNR rail line.

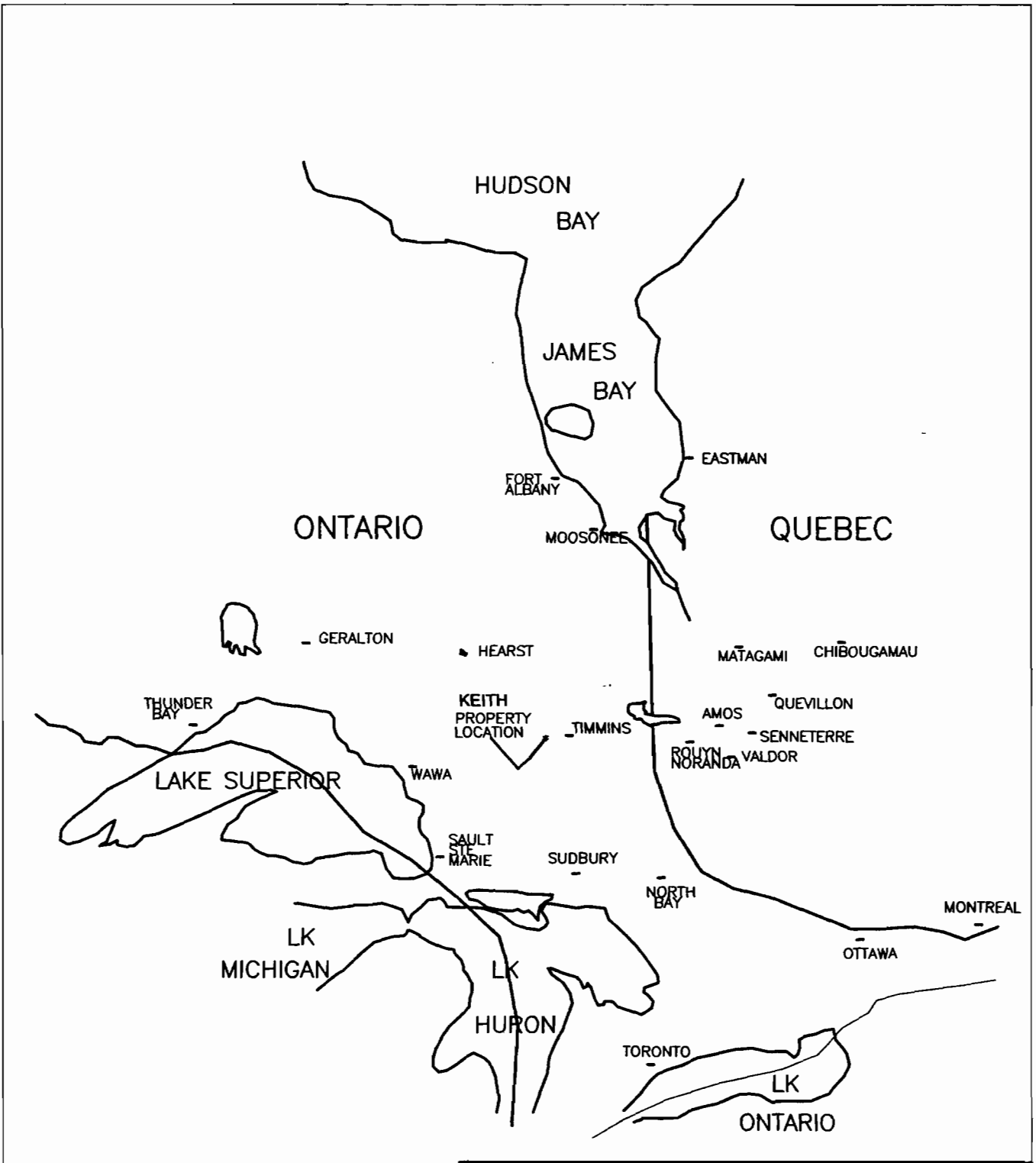
Access to the grid during the survey period is by way of Highway 101 west from Timmins to the Town of Foleyet which lies about 11 kilometers to the west of the grid area. The junction of Highway 616 and 101 lies just to the east of Foleyet and it provided access to the majority of the grid lines. The eastern section of the grid lies just to the west of the old gravel road that led to the Joburke Mine site. Traveling time from Timmins to the grid is about 1.2 hours.


**CLAIM BLOCK:**

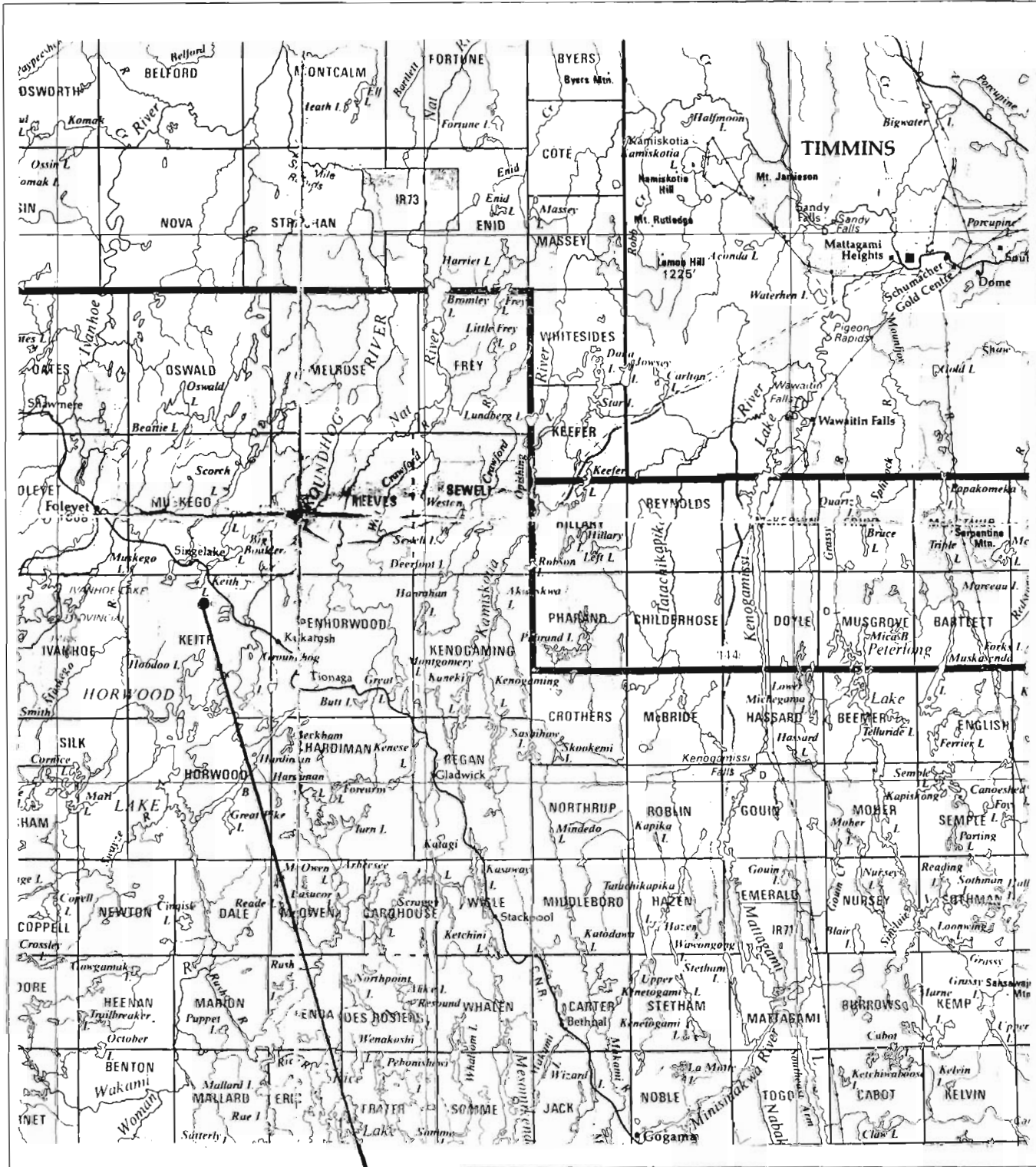
The claim numbers that were covered by the geophysical survey are listed below.

3010211 and 3019025

Refer to Figure 3 copied from MNDM Plan Map of Keith Township for the positioning of the grid and the claim numbers within the Township..



	<b>EXSICS EXPLORATION LTD.</b> P.O. Box 1880, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151, 267-2424	
	<b>CLIENT: AMADOR GOLD CORP.</b>	
<b>PROPERTY: KEITH NORTH PROPERTY</b>		
<b>TITLE: KEITH TOWNSHIP</b>		
<b>LOCATION MAP</b>		
Fig. 1		
<b>Date: APR./08</b>	<b>Scale: 1"=125miles</b>	<b>NTS:</b>
<b>Drawn: J.C. Grant</b>	<b>Interp: J.C. Grant   Job No.: E-597</b>	



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CLIENT: **AMADOR GOLD CORP.**

PROPERTY: **KEITH NORTH GRIP**

TITLE: **KEITH TOWNSHIP**

**PROPERTY LOCATION MAP**

Fig. 2

Date: APRIL/08	Scale: 1:100,000	NTS:
Drawn: J.C. Grant	Interp: J.C. Grant	Job No.: E-603



**PERSONNEL:**

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

R. Bradshaw	Timmins, Ontario
E. Jaakkola	Timmins, Ontario

The work was completed under the direct supervision of J. C. Grant of Exsics.

**GROUND PROGRAM:**

The ground program was completed in two phases. The first phase was to establish a detailed metric grid across the two claims. This was done by first establishing a baseline and line 0 at the junction of the rail line and the southern claim boundary of claim 3010211. This baseline was cut east from this point along the claim line to 1000ME. Cross lines were then turned off of this base line at 100 meter intervals and all of the grid lines were to be cut to tie line 1200MN. Another tie line was established at 600MN to help control the cross lines. All of the cross lines and tie lines were then chained with 25 meter pickets that were metal tagged. In all, a total of 16.2 kilometers of new grid lines were cut and read across the Property between April 24<sup>th</sup> and May 6<sup>th</sup>, 2008

The second phase of the ground program was to complete a detailed total field magnetic survey that was done in conjunction with a VLF-EM survey. The 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.

Line spacing	100 meters
Station spacing	25 meters
Reading intervals	12.5 meters
Diurnal monitoring	base station recorder
Record interval	30 seconds
Reference field	56500 nT
Datum subtracted	56000 nT
VLF-EM transmitter	Cutler, Maine, 24.0kHz
Parameters measured	Inphase and quadrature component, field strength and Tilt angle of the primary field
Parameters plotted	Inphase component

Once the surveys were completed the collected magnetic data was merged with the base station data, corrected and then plotted onto a base map at a scale of 1:2500. A datum of 56000nT has been removed from the readings for ease in plotting only. The plotted results were then contoured at 50 gamma intervals wherever possible. A copy of this colored contoured map is included in the back pocket of this report.

The VLF-EM data was plotted directly onto a base map at the same scale and the results were then profiled at 1cm= $\pm$  10%. Any and all conductor axis were then put on the map and will be correlated to the magnetic survey results. A copy of this profiled VLF map is also included in the back pocket of this report.

#### **MAGNETIC and VLF-EM SURVEY RESULTS:**

The magnetic survey was successful in locating and defining the geological characteristics of the grid area. The most predominant magnetic structure on the grid is the well defined magnetic high that generally covers the southeast section of the grid between lines 300ME and 900ME from the baseline to at least 400MN. This probably relates to an underlying ultramafic intrusive that comes into the grid area from the southeast. This mag high is host to a good VLF-EM zone that strikes east to west from line 900ME to 500ME and continues off of the grid to the east. Another strong EM zone can be traced from 900ME to 600ME that also continues off of the grid to the east and correlates to the northern edge of the magnetic high. This would suggest that the zone may be a contact zone between the intrusive and the host rock.

There appears to be a suspected fault zone that cuts off the western section of the intrusive. This fault zone strikes northeast to southwest and is represented by a magnetic low unit. The suspected fault zone is host to three VLF zones contained within the fault itself as well as a fourth zone that seems to parallel the northern edge of the structure and can be followed from line 600ME to 900ME and off of the grid to the east.

The magnetic high between lines 200ME and 0+00 between 300MN and 800MN may be the western extension of the intrusive. This unit is host to a good VLF zone that strikes between lines 300ME and 100ME.

The northern section of the grid area is magnetically quiet suggesting underlying sediments. Two moderate VLF zones strike across the northern section of the grid area. The southern trend may represent the contact between the sediments and metavolcanics where as the northern trend may be hosted within the sediments and represent a possible graphitic horizon.



**CONCLUSIONS AND RECOMMENDATIONS:**

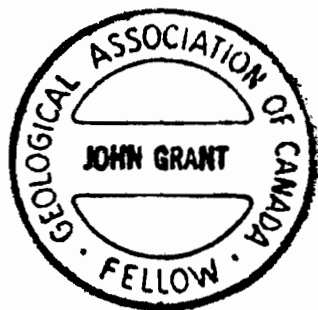
The ground program was successful in outlining and defining the geological structures of the grid area. The most predominant feature on the grid relate to the suspected ultramafic intrusive that generally strikes southeast to northwest across the southern section of the grid area. This intrusive in turn appears to have been cross cut by a possible fault zone that strikes northeast to southwest across the grid splitting the intrusive.

The VLF zones generally correlate to the intrusive or it's edges as well as to the suspected fault zone. The northern EM zones could relate to geological contacts and or graphitic horizons within the sediments.

At the time of this report, the grid is to be recut so the grid can be covered by and IP survey to better define the VLF-EM zones as well as additional targets within and along the edges of the suspected intrusive.

Respectfully submitted

J. C. Grant  
May, 2008



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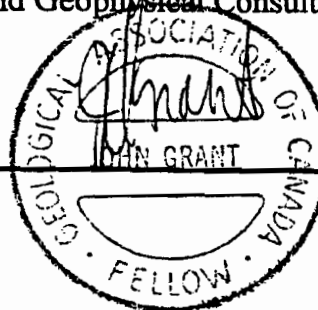
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## CERTIFICATION

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 15<sup>th</sup> 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.



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

### 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.

#### 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.

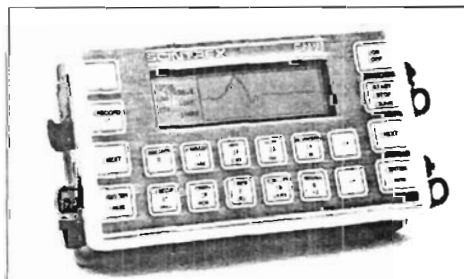


ENVI-MAG Proton Magnetometer in operation

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.

#### 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

## 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 (1/2m) 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 alphanumeric

### Display Heater

Thermostatically controlled, for cold weather operations

### Keyboard Input

17 keys, dual function, membrane type

### Notebook Function

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

### 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:

- read the ENVI-MAG data and reformat it into a standard compatible with the ENVIMAP software
- grid the data into a standard grid format
- 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

- contour the gridded data
- 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
- 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

### 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

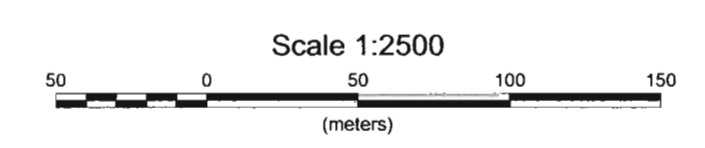
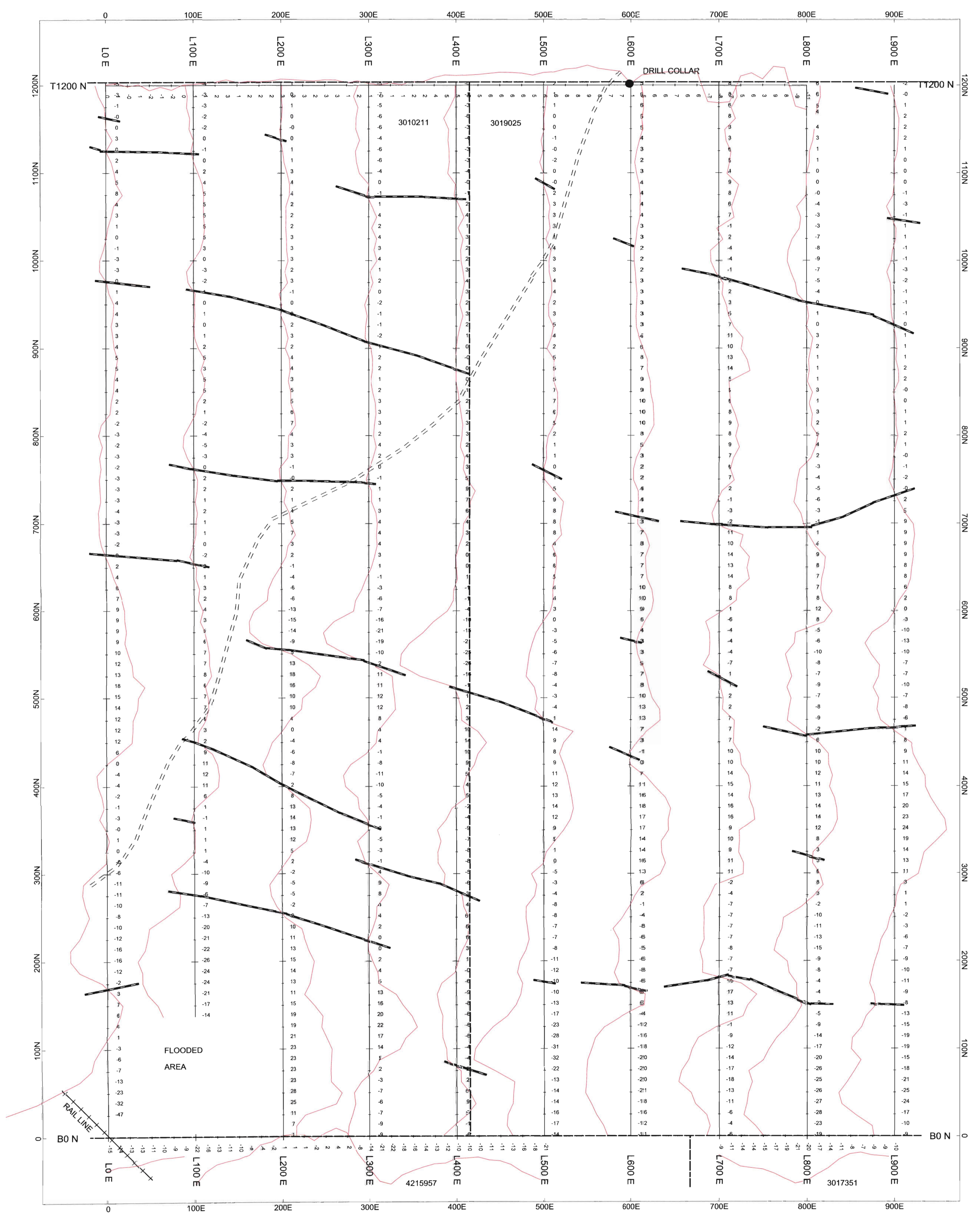
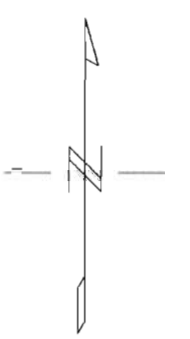
### Head Office

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:

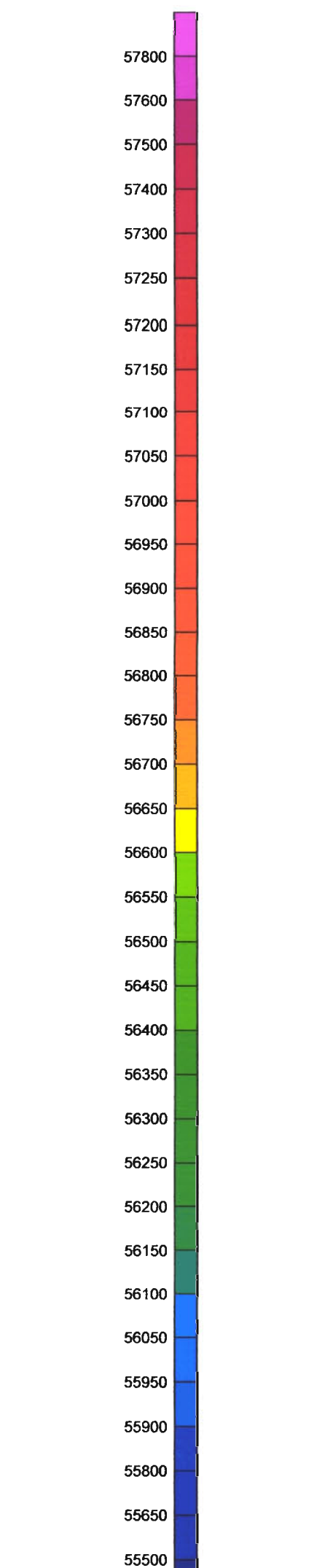
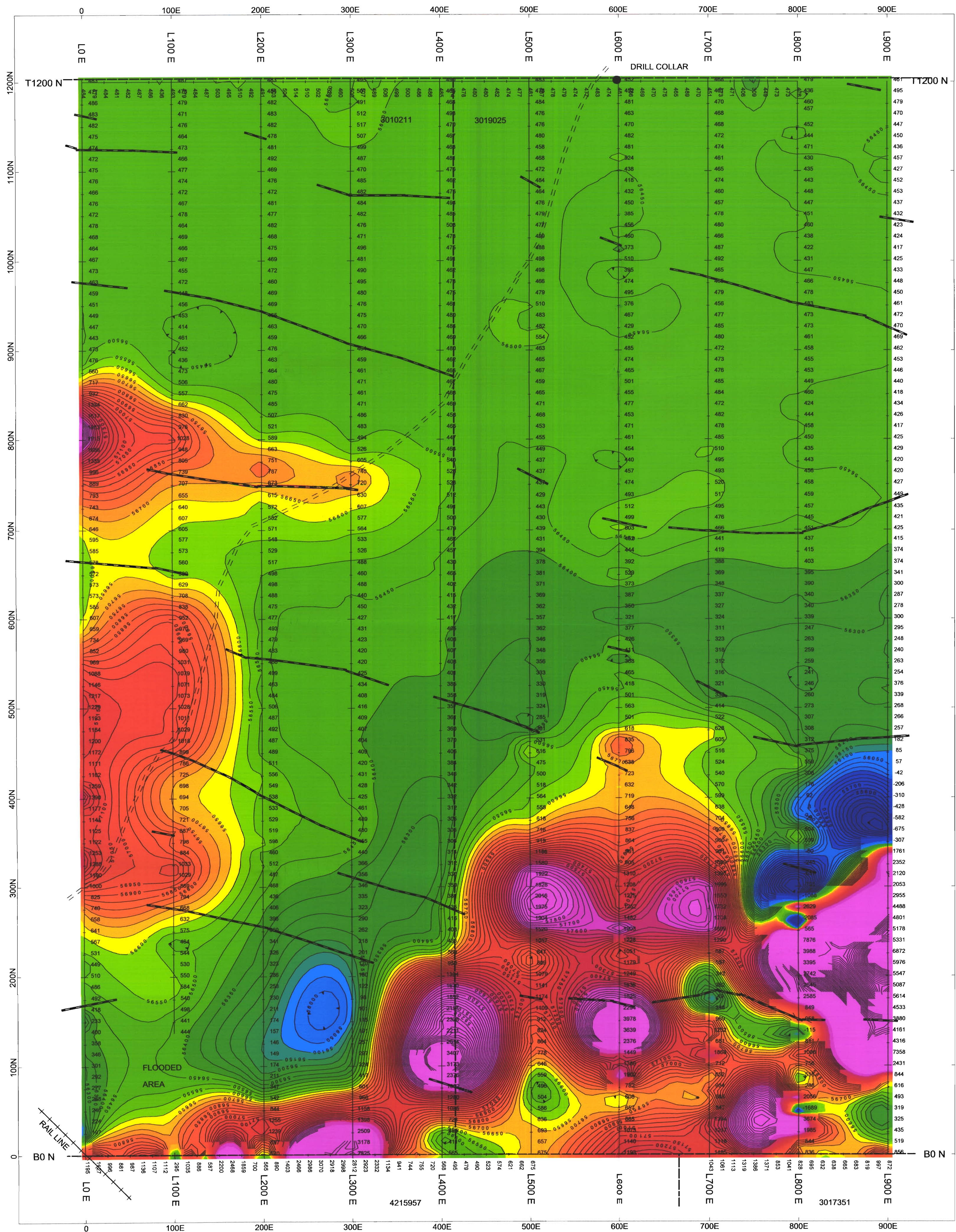
Scintrex Inc.  
85 River Rock Drive  
Unit 202  
Buffalo, NY 14207  
Telephone: (716) 298-1219  
Fax: (716) 298-1317



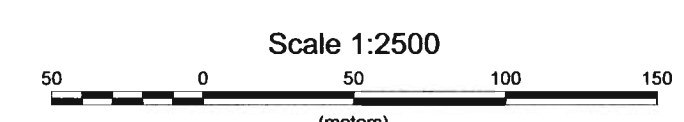


AMADOR GOLD CORP.  
KEITH NORTH GRID-KEITH TOWNSHIP  
VLF-EM SURVEY-CUTLER, MAINE, 24.0KHZ  
SCINTREX ENVI MAG-VLF SYSTEM  
PROFILED: 1CM=+/-10%  
May/08 EXSICS EXPLORATION LIMITED E-597





TOTAL FIELD MAGNETICS  
BASE 56000nT



AMADOR GOLD CORP.  
 KEITH NORTH GRID-KEITH TOWNSHIP  
 TOTAL FIELD MAGNETIC SURVEY  
 SCINTREX ENVI MAG-VLF SYSTEM  
 CONTOURED: 50nT  
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