

GEOPHYSICAL REPORT
FOR
RYKALA RESOURCES INC.
ON THE
MASSEY PROJECT
MASSEY AND WHITESIDES TOWNSHIPS
PORCUPINE MINING DIVISION
NORTHEASTERN ONTARIO

2.38695

2.38695



Prepared By: J.C. Grant, CET, FAGC
July, 2008

TABLE OF CONTENTS

	PAGE
ABSTARCT	
INTRODUCTION.....	1
PROPERTY LOCATION AND ACCESS.....	1
CLAIM GROUP.....	1,2
PERSONNEL.....	2
GROUND PROGRAM.....	2,3
MAGNETIC SURVEY RESULTS.....	3,4
CONCLUSION AND RECOMMENDATIONS	4
CERTIFICATE	
APPENDICIES: APPENDIX A, SCINTREX ENVI MAG-EM SYSTEM	
LIST OF FIGURES:	
FIGURE 1	LOCATION MAP
FIGURE 2	PROPERTY LOCATION MAP
FIGURE 3	CLAIM MAP
POCKET MAPS:	
CONTOURED TOTAL FIELD MAGNETIC MAP, 1:2500	

ABSTRACT:

The Rykala property, (initially held by D. Lalonde), straddles the Township line between Massey and Whitesides has had several surveys completed across it. In 1996 Morgain Minerals completed a Pulse Electromagnetic, (PEM), survey across a portion of the ground to follow up on a Horizontal Loop Electromagnetic, (HLEM), survey that had been completed on the ground in 1992. The 1992 survey outlined two parallel conductive horizons striking north-south across lines 2600MN to and including 2100MN. Both of these targets were reinterpreted by Grant in 1996 and were found to represent legitimated bedrock conductors ranging from 25 to 50 mhos in conductivity and situated at a depth to source of 35 to 55 meters.

Based on these results, a drill hole was spotted on line 2300MN at approximately 12.5 meters east of the baseline to test the two targets. The drill hole returned ore grade copper and nickel assays in both targets with the eastern zone representing the higher grade zone.

Due to the success of this drill hole and the favourable assay results, it was suggested that the grid should be resurveyed with a deep penetrating EM system.

Exsics Exploration Limited was hire to complete the Deep-EM survey over the drilled HLEM targets with the idea of testing the zone at depth and on strike to better define an area for further drilling.

The PEM survey was successful in locating and defining the original HLEM conductors as was expected. The PEM survey also suggests the zone extends at depth and appears to be as conductive as the upper sections

The PEM survey did confirm the down dip extension of the drilled zones labelled A and B. The survey was also successful in outlining a new parallel zone to the east of the main zone which, from drilling, has proven ore grade assays of copper and nickel. This would make this new zone, C, a prime target for drilling. Due to the success of the initial hole, any and all zones should be followed up by further geophysics as well as drilling.

INTRODUCTION

The services of Exsics Exploration Limited were retained by Mr. D. Lalonde, on behalf of the Company, Rykala Resources Inc., to complete a detailed ground geophysical program across the initial claim block held by Mr. Lalonde and that this grid should be extended south to cover the Warran claim block located to the immediate south of Rykala's block.

The ground program consisted of a detailed line cutting program which was then followed up with a detailed total field magnetic survey and an Induced Polarization, (IP), survey. In all a total of 66.5 kilometers of grid lines were cut and read with the magnetic survey. The IP survey is ongoing at the time of this report.

PROPERTY LOCATION AND ACCESS

The Massey claim group is located in the south central section of Massey Township and the north central section of Whitesides Township. Both of these Townships are located in the Porcupine Mining Division of Northeastern Ontario. Figure 1 and 2.

More specifically the claims are located to the immediate west of the Kamiskotia River that flows generally north-south through the Townships. The river also crosses the eastern boundary of the Warran claim block. The township line between Massey and Whitesides cuts the 4206296 claim group in half in an east-west direction. Figure 3.

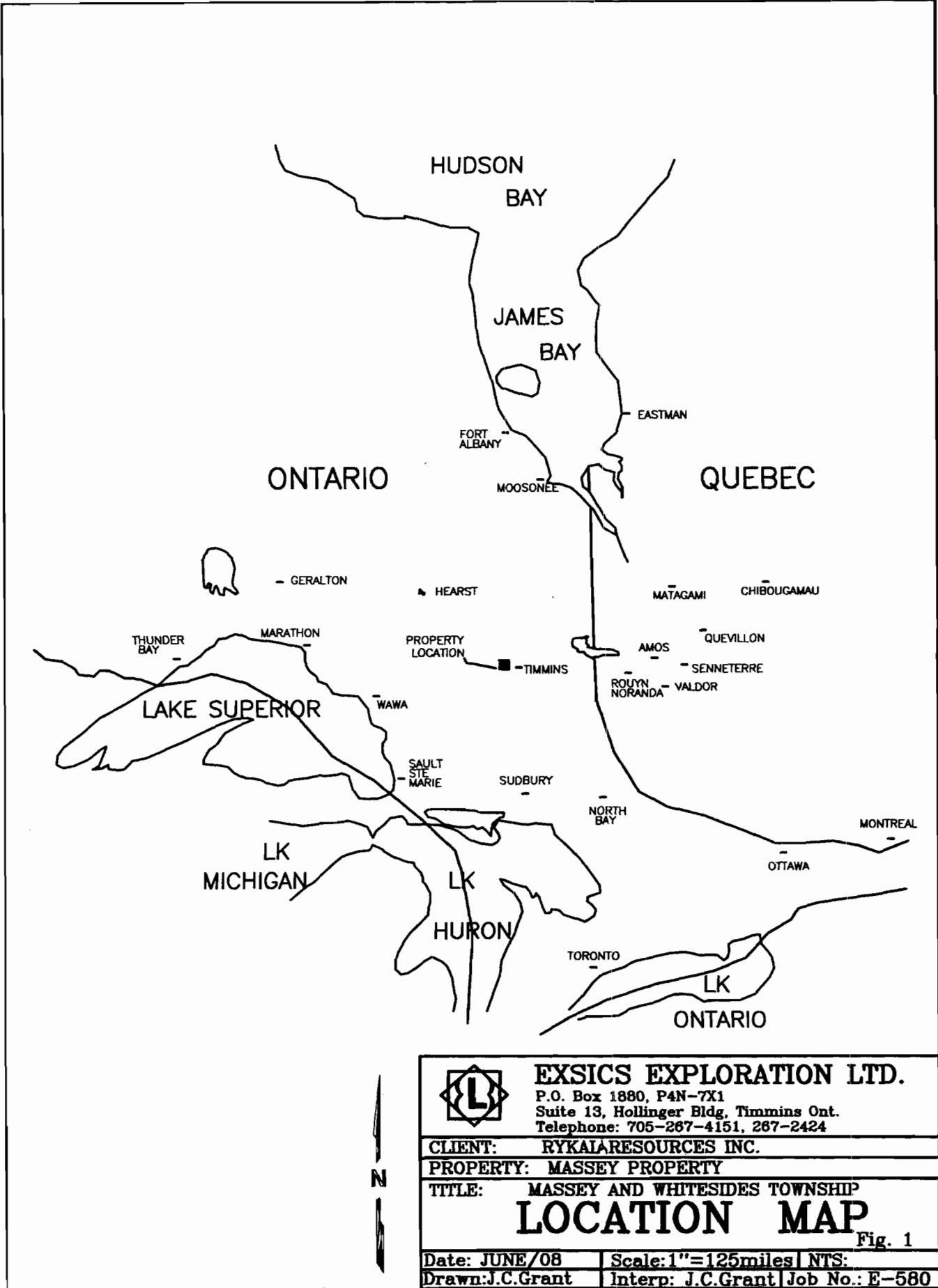
Access to the property during the survey period was relatively easy. Approximately 10 kilometers west of the City of Timmins, Malette Lumber maintains an all weather gravel road to their current and ongoing logging operations in a number of townships to the west and northwest of Timmins.


This gravel road commences immediately west of the Malette Mill and runs north and northwest off of Highway 101 west. A twenty minute ride north-northwest along this gravel road will bring one to the 27 kilometre marker and a bridge across the Kamiskotia River. One kilometre further north-northwest of this bridge will access the old drill road which has been clearly marked. A short ATV ride along this drill road for 6 kilometers will access the grid. Travelling time from Timmins to the grid is approximately 60 minutes.

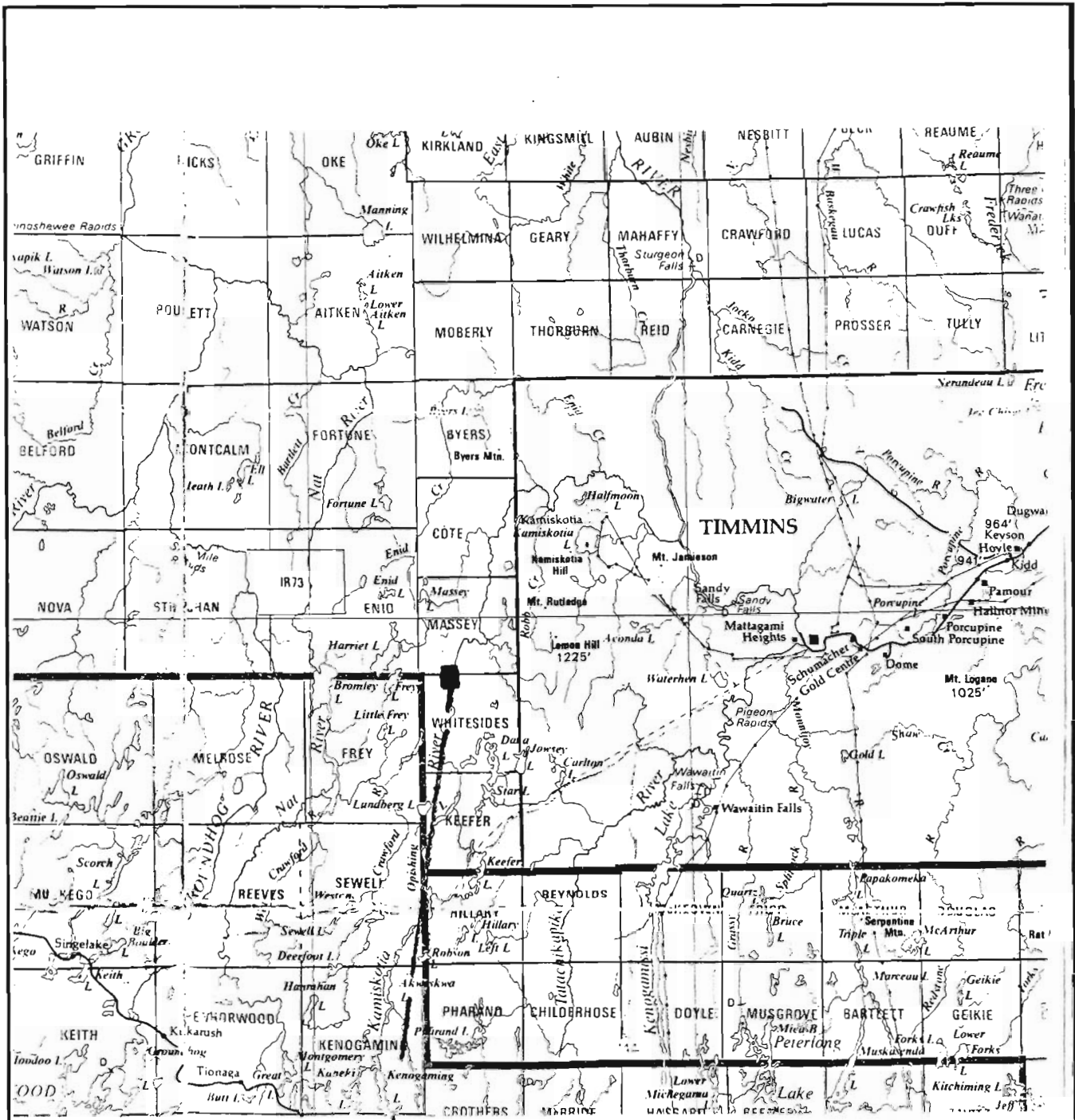
CLAIM GROUP


The claim numbers which were covered by this program are as follows.

P-4206296	16 units Whitesides Township
P-4201798	6 units Massey Township



	
EXSICS EXPLORATION LTD. P.O. Box 1880, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-267-4151, 267-2424	
CLIENT: RYKAIAREOURCES INC.	
PROPERTY: MASSEY PROPERTY	
TITLE: MASSEY AND WHITESIDES TOWNSHIP	
<h1>LOCATION MAP</h1>	
Fig. 1	
Date: JUNE/08	Scale: 1"=125miles NTS:
Drawn: J.C. Grant	Interp: J.C. Grant Job No.: E-580



 EXSICS EXPLORATION LTD. P.O. Box 1880, P4N-7X1 Suite 13, Hollinger Bldg, Timmins Ont. Telephone: 705-287-4151, 287-2424		
CLIENT: RYKALA RESOURCES INC.		
PROPERTY: MASSEY PROPERTY		
TITLE: MASSEY AND WHITESIDES TOWNSHIPS		
PROPERTY LOCATION MAP Fig. 2		
Date: JULY/08	Scale: 1:600,000	NTS:
Drawn: J.C. Grant	Interp: J.C. Grant	Job No.: E-580

Warran Option

P-19074 to P-19079 inclusive, P-19898, P-19895
 P-19374, P-19897, P-18822, P-18821, P-18820, P-18819

Refer to Figure 3, copied from MNDM Plan Map, M-296 and G-3230, of Whitsides and Massey Townships for the location of the claims within the townships.

PERSONNEL

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

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

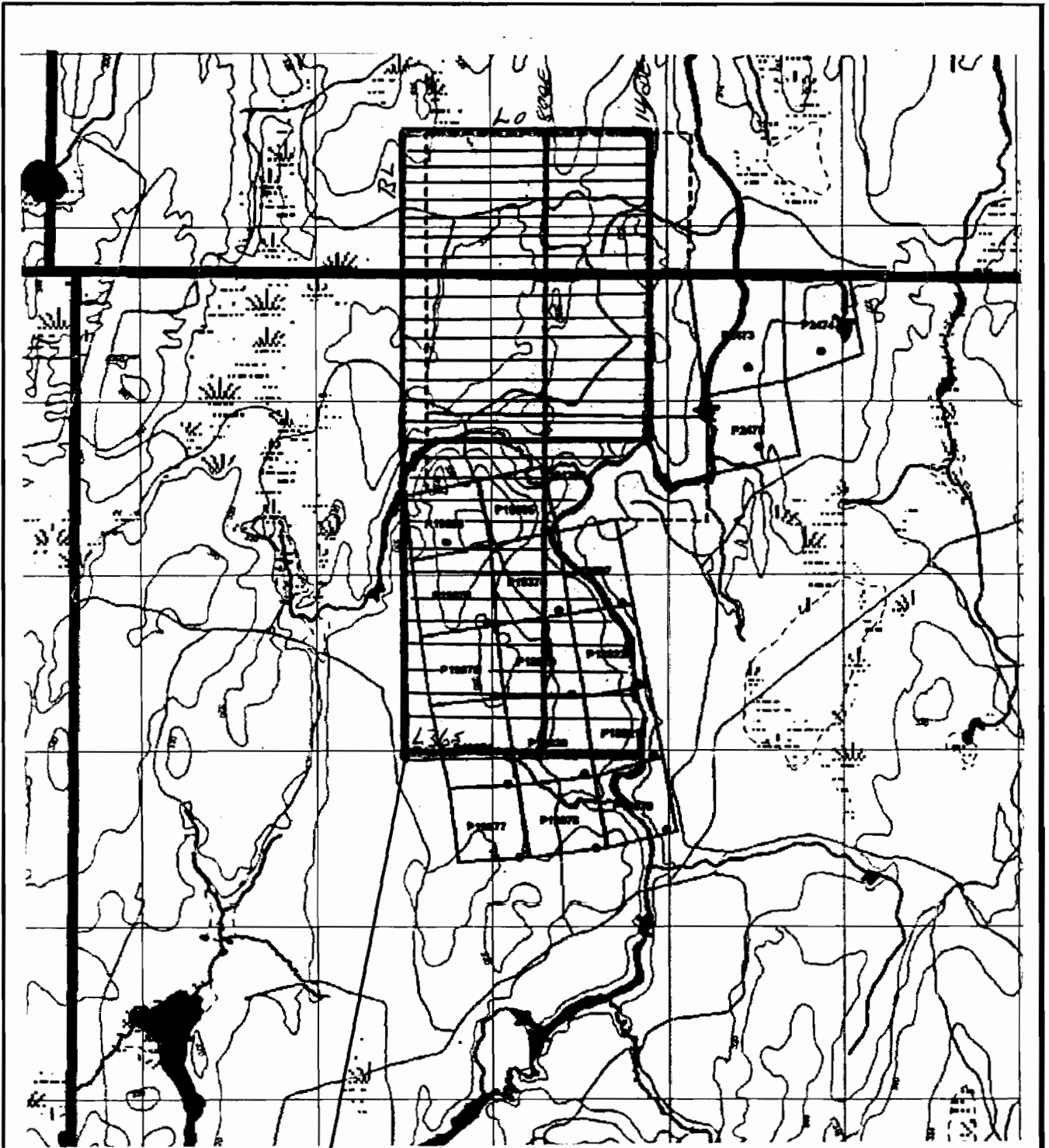
The plotting, compilation, interpretation and report was completed by J. Grant.

GROUND PROGRAM

This program was completed in two phases. The first phase was to establish a detailed metric grid over the entire claim group. This was done by first cutting a tie line from a control point at the centre of the north boundary of the claim block. This tie line was labelled 800ME. Cross lines were then turned off of this tie line at 100 meter intervals from line 0+00 to and including 3600MS. All of the cross lines were then cut west to the base line and east to tie line 1400ME or the Kamiskotia River. A series of 50 meter spaced lines were done between 500MS and 900MS and again between 3100MS and 3400MS to detail the known potential ore zones. All of the cut lines were then chained with 25 meter station intervals that were metal tagged. In all a total of 66.5 kilometers of grid lines were established across the claim block.

The second phase of the program was to then cover the entire cut grid with a total field magnetic survey. This 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:	50,100 meters
Station spacing:	25 meters
Reading intervals:	12.5 meters
Diurnal monitoring:	Base station recorder
Base record intervals:	30 seconds
Base reference field:	56,500 gammas
Datum subtracted:	56,000 gammas
Unit accuracy:	+/- 0.5 gammas



EXSICS EXPLORATION LTD.

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

CLIENT: RYKALA RESOURCES INC.

PROPERTY: MASSEY PROPERTY

TITLE: MASSEY AND WHITESIDES TOWNSHIPS

GRID MAP/CLAIM MAP

Fig. 3

Date: JULY/08

Scale: 1:40,000

NTS:

Drawn: J.C. Grant

Interp: J.C. Grant

Job No.: E-580

Once the data was collected it was then merged with the base station data, corrected, levelled and then plotted onto a base map at a scale of 1:2500. The plotted data was then contoured at 50 gamma intervals where ever possible. A copy of this color contoured base map is included in the back pocket of this report.

The line cutting commenced in early January of 2008 and the magnetic survey was completed by the end of February. The IP survey up to line 1800MS was completed by the 5 of April but break-up prevented the remainder of the grid from being completed.

MAGNETIC SURVEY RESULTS

The magnetic survey was successful in outlining the geological characteristics of the grid area. The property is generally underlain by gabbro rich intrusives with felsic volcanics lying under the western section of the grid.

The most predominant magnetic features are narrow magnetic highs that generally relate to north to northwest striking dike like units that run across the entire grid and continue off of the grid in both directions. These zones are well defined and can be observed along the eastern edge of the grid from 850MS to line 0, from line 1700MS to line 0 generally paralleling the eastern zone. Another zone can be traced from line 3600MS to line 0 paralleling tie line 800ME. Two parallel zones can be followed from line 3600MS at 600ME to line 0 at 100ME and 3400MS at 400ME to 1100MS at the base line. The last zone can be followed from line 3600MS to 2100MS and paralleling the western edge of the grid.

The magnetic high blow outs along these dike like units become the area of interest for potential mineral deposits.

Lalonde's and past work has shown one such area between lines 600MS and 1000MS east of the 800ME tie line. Drilling of this unit returned ore grade intersections of copper and nickel mineralization.

A second area of interest is located on the Warren Patents between lines 3100MS and 3400MS where these magnetic high blow outs have returned copper and nickel values from trenching and drilling that range from 0.33% Cu and 0.24% Ni over widths of 10.6 feet and strike lengths of 140 feet to, Hollinger Consolidated Gold Mines, 1958 to 0.64% Cu and 0.33% Ni over 19 feet, Lyndhurst Mines Ltd. Drilling results from Camador Mining Exploration Ltd., 1964, reported 27 feet of mineralization of which 7.8 feet averaged just over 2% combined copper-nickel.

These results were noted mainly in the underlying Gabbros close to the Felsic and Intermediate volcanic contact.

The magnetic survey also outlined a major area of interest situated between line 400MS at 475ME to line 1400MS at 475ME. This zone is represented by a good magnetic high that lies between two of the dike like units. The zone appears to dip near vertical and it in turn has been cross cut by a fault that has shifted the southern extension of the zone to the south and east. This fault can be seen between lines 1100MS and 1000MS striking east to northeast.

The ongoing IP survey has been completed over this magnetic high and preliminary results have shown an IP anomaly associated with most of this zone strike length suggesting a zone of mineralization.

CONCLUSIONS AND RECOMMENDATIONS

The magnetic survey was successful in locating and outlining the geological characteristics of the grid area. The ongoing IP survey has shown a good correlation between the dike like units as well as the potential mineralized zones drilled and trenched on the northern detailed grid section and on the magnetic trend between 400MS and 1400MS

The Warren ground to the south straddles a north striking contact between a mafic intrusive body and intercalated felsic and intermediate volcanic rocks. Chalcopyrite-pyrrhotite mineralization is mainly present in gabbro within a few hundred feet of the volcanic contact. Passed drilling of two zones has returned assays between 0.31 and 0.32 Cu and 0.19 and 0.10 Ni over average widths of 15.3 feet for a length of 400 feet.

Drilling by Morgain in 1996 in the area of the Lalonde detailed grid returned 3.62% copper over 1.5 feet with the best intercept being 10.8 feet grading 1.03% copper.

The price of copper and nickel has increased significantly since 1996 and this was one of the main reasons to cover the entire grid with a ground geophysical program. These two methods should outline and define the conductive zones to depth that would aid in spotting a detailed drill program.

The Warren ground to the south of the Lalonde claim group has been incorporated into the magnetic coverage and has provided a good geophysical picture of the underlying structures which should also help in a follow up drill program.

Currently the IP coverage has been done to line 1900MS. The grid will have to be cleared out so the remainder of the lines can be covered with the IP survey.

Respectfully submitted

J.C. Grant, CET, FGAC.
July, 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.



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