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GEOPHYSICAL REPORT FOR ROGUE RESOURCES INC. ON THE NAT RIVER IRON PROJECT KEITH, KENOGAMING AND PENHORWOOD TOWNSHIP PORCUPINE MINING DIVISION NORTHEASTERN, ONTARIO



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May 2012

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ABSTARCT

The Nat River Iron Formation is a 12 kilometer long magnetic, geological unit on the eastern half of Rogue's property approximately 8 kilometers east of Radio Hill. Five holes totaling 1235 meters were completed in the vicinity of the middle target zone in 1956. An airborne VTEM and magnetic survey were conducted on the entire 12,000 hectare property in 2008 by Geotech Ltd that defines the formation definitively, Figure 5. The thicker parts of the formation have not been drill tested and are considered an exploration priority. Aside from this airborne survey the Nat River Formation has not seen any iron exploration work since 1959.

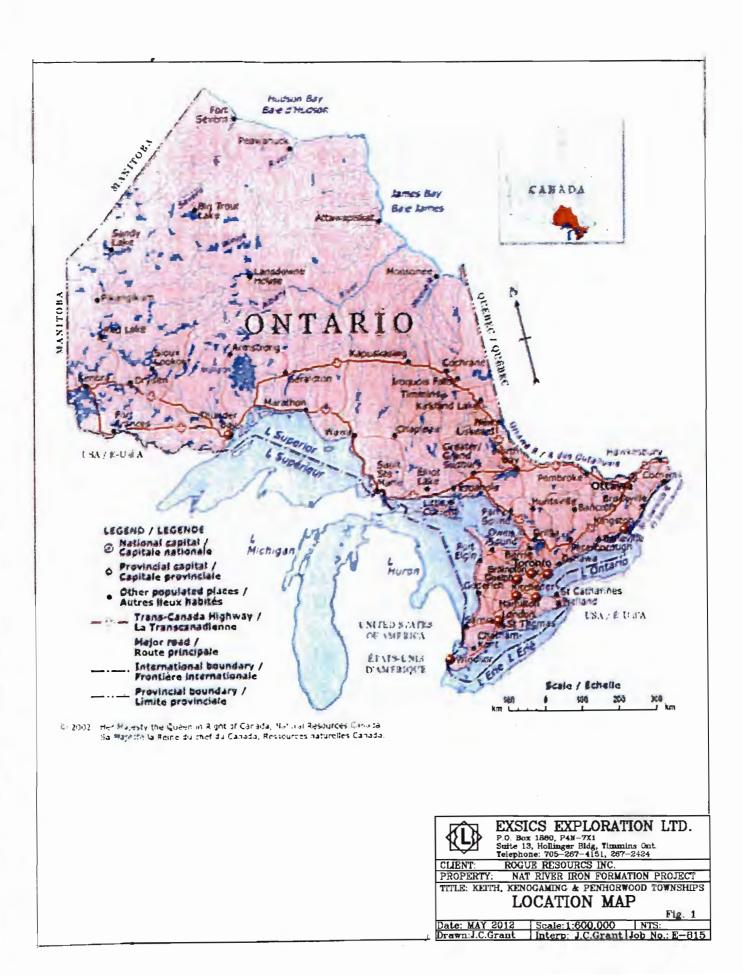
The Radio Hill Iron Formation located 8 kilometers to the west consists of a 4 kilometer long formation which hosts the bulk of historic resources. The name "Radio Hill" is a result of the iron formation forming a hill above the surrounding relief on which a radio tower was located in the 1960's. This hill makes the formation more amendable to open pit mining methods. Between 1959 and 1965 an estimated 10 million dollars of work was completed with no iron exploration having occurred since. This historical work was completed on a 2600 meter long section of the formation with varying widths up to 500 meters and included 140 drill holes, 3000 tonnes in bulk samples and full metallurgical test work. The Radio Hill formation along with the Nat River Formation is located 85 kilometers southwest of the City of Timmins.

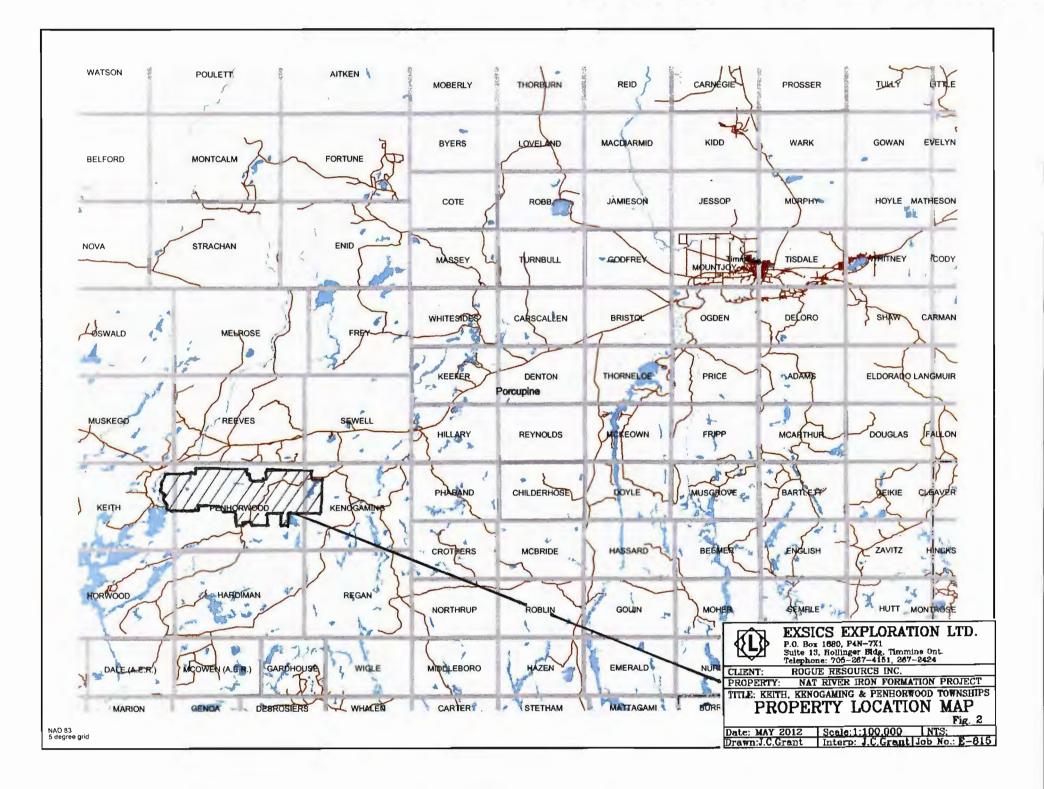
INTRODUCTION:

The services of Exsics Exploration Limited were retained by Mr. Kevin Montgomery, on behalf of the Company, Rogue Resources Inc., to complete a detailed total field magnetic survey on the Nat River Iron Formation Property. The survey was to be completed across 2 grids, Grid A and Grid B that were compassed, paced and GPS controlled over a portion of their claim holdings within Keith, Kenogaming and Penhorwood Townships. The purpose of the ground program was to locate and outline the Iron rich formation, (Nat River Iron Formation) that represents a tightly folded northeast-southwest to east striking unit cutting across the eastern section of Penhorwood Township and the western section of Kenogaming Township. The ground program was completed between March 25th and April 17th 2012.

PROPERTY LOCATION AND ACCESS:

The Nat River Iron Formation is located approximately 77 kilometers southwest of the City of Timmins and covers the north central section of Penhorwood Township, the eastern section of Keith Township and the western section of Kenogaming Township of the Porcupine Mining Division in Northeastern Ontario. More specifically it encompasses Hanrahan Lake and lies to the north of Montgomery Lake and the Nat River runs through the west central section of Grid A. Groundhog Lake touches the southwest corner of the claim block. Figures 1 and 2.





Access to the survey area was relatively easy. Highway 101 west connects Timmins to the Towns of Foleyet that lies about 85 kilometers to the west of Timmins. There is a good gravel road locally called the Kenogaming lumber road that runs south to southwest off of Highway 101 about 60 kilometers west of the City that runs west and then south across Kenogaming and Penhorwood Townships and also cuts across the northeast corner of Grid A and the southwest corner of Grid B. There are a number of old ingress roads and trails that run south off of this gravel road that provided skidoo, ATV and foot access to most of the grid areas. Travelling time from Timmins to the survey areas about 2 hours.

CLAIM BLOCK:

The claim number that were covered by the ground geophysical survey and represent a portion of Rogue's holdings in the area are as follows:

4207037, 4220806, 4207057, 4207045, 4207044, 4207043 4207036, 4207049, 4207048, 4207054, 4207055

Refer to Figure 3 copied from MNDM Plan Map G-3244, Penhorwood Township and G-3239, Kenogaming Township and G-3238, Keith Township for the positioning of the grid and the claim numbers within the Townships.

PERSONNEL:

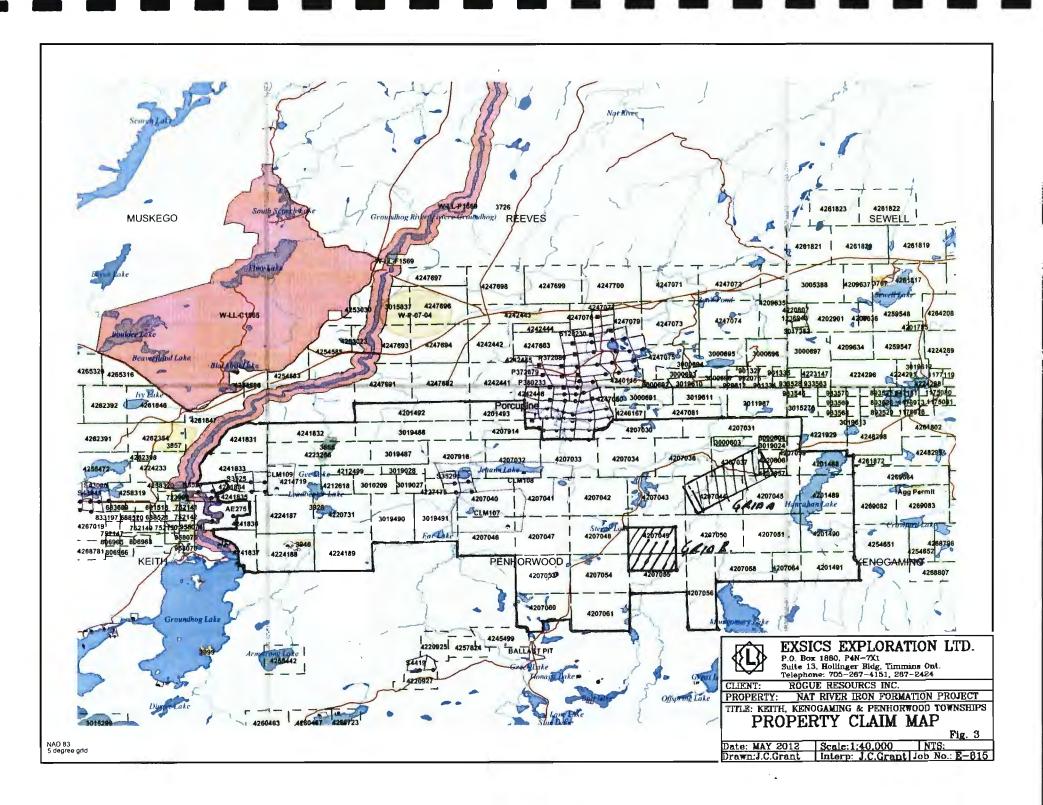
The field crew directly responsible for the collection of all the raw data were as follows.

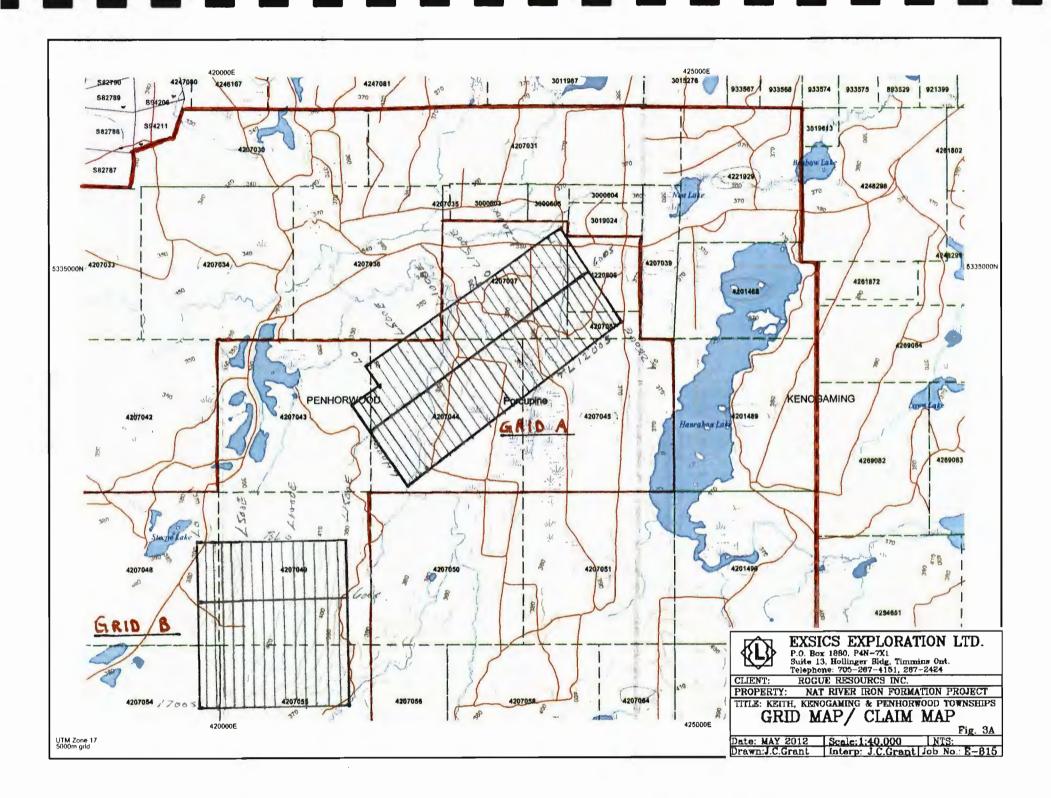
R. Bradshaw	Timmins, Ontario
J. Francoeur	Timmins, Ontario
M. Cayen	Timmins, Ontario
D. Poirier	Timmins, Ontario

The work was completed under the direct supervision of J. C. Grant of Exsics and all of the plotting and interpretations were completed by in-house staff.

GROUND PROGRAM:

The ground program was completed in two phases. The first phase was to establish a series of compass, paced and flagged grid lines across each of the two grids. These lines were to be controlled using hand held GPS units. A start point was established on each grid and all of the grid lines were set up according to these points.





Grid A consisted of a series of east-west cross lines that were turned off of a base line that was first established across the claim block at an azimuth of 235 degrees. This base line ran from line 2500ME to and including 0+00. 100 meter spaced cross lines were turned off of the base line at 90 degrees and all of these lines were chained to 1200MS. Lines 100MW to 400MW were turned off of the 1200MS tie line at 100 meter intervals and these lines were chained to 300MS. A control line, called tie line 600MS, was put in parallel to the base line and it was flagged from 2500ME to 400MW. All of the lines were chained with 25 meter flags. Once the grid was established it was then covered with a detailed total field magnetic survey that was read at 5 meter intervals. In all a total of 36.0 kilometers were flagged and surveyed across this grid.

Grid B consisted of a series of grid lines spaced 100 meters apart that were turned off of an east-west baseline that commenced on the Kenogaming lumber road. This point of the grid represented line 0+00/ base line of the claim block. Cross lines were then turned off of this base line at 90 degrees from 0+00 to 1500ME and all of the cross lines extended to 1700MS. A control line was also put in parallel to the base line and it was labeled tie line 600MS. Once this grid was flagged it was also covered by the total field magnetic survey 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.

MAGNETIC SURVEY:

Line spacing	100 meters
Station spacing	25 meters
Reading intervals	5 meters
Diurnal monitoring	base station recorder
Record interval	30 seconds
Reference field	56500 nT
Datum subtracted	56000 nT

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 1:5000, one base map for each grid. A datum of 56000nT has been removed from the readings for ease in plotting only. The plotted results were then contoured at 100 gamma intervals, Grid A, and 200 gamma intervals, Grid B, wherever possible. A copy of these colored contoured base maps are included in the back pocket of this report. In all a total of 31.6 kilometers of grid lines were flagged a surveyed across this portion of the claim block.

The ground program was completed between March 25th and April 17th 2012.

PROPERTY GEOLOGY:

Generally the grid is underlain by mafic to intermediate metavolcanics that have been intruded by felsic to intermediate metavolcanics coming into the township from the east. This unit in turn has been intruded by an ultrmafic intrusive that cuts across the southern end of Hanrahan lake. The Nat River Iron Formation appears to run along the contact between the felsics and mafic units. The Porcupine-Destor Fault runs across the northern section of the eastern contact between the felsic unit and mafic unit and continues across the township in a west to southwest direction north of Groundhog Lake and on into Keith Township to the west.

A second fault appears to run off of the Porcupine-Destor Fault in a southwest direction paralleling the northwest arm of the Iron formation and it continues across the claim block to the southwest. Figure 4

MAGNETIC SURVEY RESULTS:

<u>GRID A:</u>

The Iron formation has been well defined across this grid. The zone comes into the grid just to the northwest of the 600MS tie line and strikes southwest to line 700ME. At this point it appears to be cut by a significant cross structure that is striking northwest and this cross structure can be followed from the north end of lines 200ME and 300ME to at least 50MS on line 900ME. The cross structure may continue as far as line 1300ME at 950MS to 1000MS. The Iron formation continues southwest of this main cross structure albeit somewhat distorted, until it hits the Nat River where it then seems to fold back on itself. It then continues northeast just to the south of the 600MS tie line where it again seems to fold back on itself and then continue all the way back to line 200ME and the Nat River. The main portion of the formation continues southwest and off of the grid to the southwest but there appears to be some off shoots striking off of this main feature in the vicinity of lines 0+00 and 200MW. These two highs appear to have been cross cut by a magnetic low unit that may represent a portion of the suspected southwest striking fault that is thought to follow this portion of the iron formation.

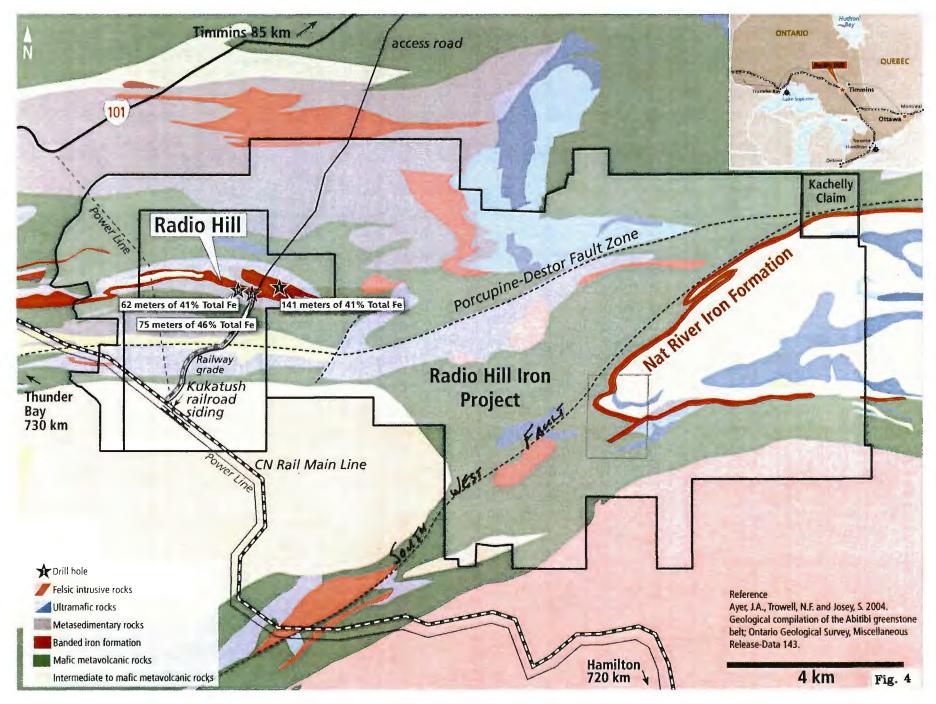
Localized shearing may also be evident in the iron formation that appears to have pinched the strike of the zone, altered the strike and or cut off the formation. These suspected shear zones are usually represented by modest to strong magnetic lows scattered across the survey area.

<u>GRID B:</u>

The Iron formation outlined on this portion of the grid is somewhat more distorted. Initially the formation comes into the grid from the north along lines 700ME and 800ME for about 200 meters and then it swings to the southwest to line 300ME at 400MS at which point it swings to the southeast and east and continues off of the grid at line 1500ME just to the north of tie line 1100MS. I would assume that this magnetic high represents the main Iron formation.







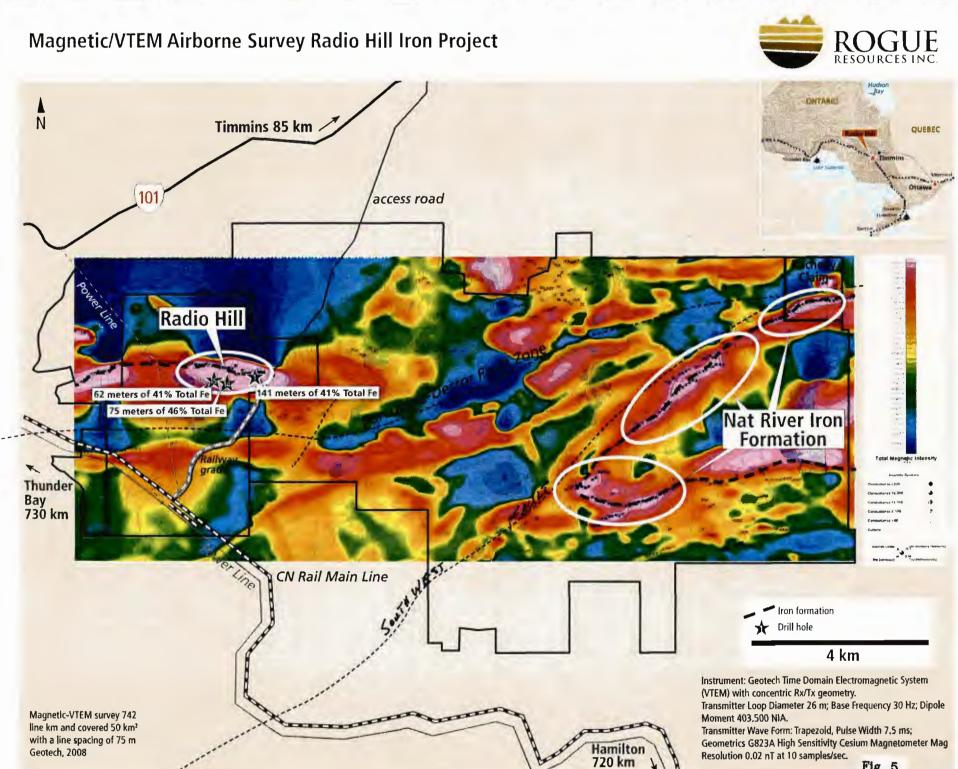


Fig. 5

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This main formation has been cross cut by the southwest striking fault zone that is coming into this grid from the northeast. The fault can be followed from line 1500ME at 525MS to line 1100ME at 1100ME and then more into a west to southwest direction from 1100ME to 600ME at 1200MS.

This may suggest that the magnetic high striking into the grid from line 1500ME at 950MS could represent another fold of the main formation, southwest of the cross fault, that continues in a southwest direction over to line 600ME at 1400MS. The formation appears to have been cut off and or folded by a potential structure running northwest between lines 600ME at the southern tip to line 200ME at the northern tip. This portion of the formation between 1500ME and 600ME is quite distorted and appears to have been cross cut by several areas of localized shearing and or minor faulting represented by magnetic low trends.

There also appears to be formation striking east from the main zone and it is represented by the broad magnetic highs between lines 800ME at 400MS and 1300ME at 600MS that may continue as a narrow magnetic high as far as line 1500ME at 500MS and continuing off of the grid to the east. This magnetic high unit would represent the northwest section of the southwest striking fault zone that is cross cut the entire area.

CONCLUSIONS AND RECOMMENDATIONS:

The detailed magnetic survey was successful in mapping the Iron formation across the two grid areas. It would suggest that the formation has been folded and faulted along its strike length by numerous areas of shearing, minor faulting and at least two main cross structures. The most predominant of the cross structures correlates to a possible southwest striking fault zone that seems to parallel the strike of the iron formation and in places has offset and or folded the main formation. The second cross structure has also offset and or folded that portion of the formation covered by grid A. The folds and nose of the Nat River Iron formation has been well defined by the ground program; however I would suggest that the area between the two grids be completed to better define which of the iron formation match up with each other on the two grids. This fill in may also help determining where that cross fault is running between the two grids. At this writing the iron formation could also be followed up with drilling especially where the magnetic unit is quite broad and quite strong. These drill holes should be spotted on portions of the formation that may correlate to multiple lenses of the iron rich formations too closely spaced for the magnetic survey to adequately define each lens separately.

Respectfully submitted

J. C. Grant, CET, FGAC May 2012.

CERTIFICATION

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

- 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.
- 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 GRAME

John Charles Grant, CET., FGAC.

APPENDIX A

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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

Specifications \equiv

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

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:

- 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

Standard Memory

Total Field Measurements:28,000 readingsGradiometer Measurements:21,000 readingsBase 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, Leadacid 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

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

- d) 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 dotmatrix 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

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 ibs (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)



Head Office

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