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GEOPHYSICAL REPORT FOR ST. ANDREWS GOLDFIELDS LTD. ON THE HISLOP PROPERTY HISLOP TOWNSHIP LARDER LAKE MINING DIVISION NORTHEASTERN, ONTARIO

> Prepared by: J. C. Grant, October 2015

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INTRODUCTION:

The services of Exsics Exploration Limited were retained by Mr. J. V. Bonhomme, on behalf of the Company, St Andrews Goldfields Ltd., to complete a Total field magnetic survey across a portion of their claim holdings, The Hislop Project, located in Hislop Township of the Larder Lake Mining Division.

The purpose of the ground program was to check the claim block for a favorable geological setting that may lend itself to potential gold and or base metal deposition.

PROPERTY LOCATION AND ACCESS:

The Hislop Property is situated approximately 75 kilometers to the east of the City of Timmins and is situated in the southeast section of Hislop Township which is part of the Larder Lake Mining Division in Northeastern, Ontario. Refer to Figures 1 and 2 of this report.

More specifically the property represents Lot 3, Concession 1 of the township. The majority of the gird area lies to the northeast of the Black River which actually cross cuts the southwest corner of the grid.

Access to the grid during the survey period was ideal. Highway 101 runs east from the City of Timmins to the Matheson, 65 kilometers to the east of the City. Ramore lies approximately 16 kilometers to the southeast of Matheson along Highway 11. Highway 572 runs east through Ramore and then north to northwest to the Black River and then east across the Black and continues across the north section of the claim block to Holtyre. Figures 1 and 2. The distance from Ramore to the grid is about 5.3 kilometers. Travelling time from Timmins to the grid is about 90 minutes.

CLAIM BLOCK:

The claim number that represent the Hislop property of St Andrews Goldfields Ltd. Is 4261281 that represents 8 Units that covers Lot 4, Concession 1 of the Township. The three surface patents are, L-2144, L-2145 and L-9317.

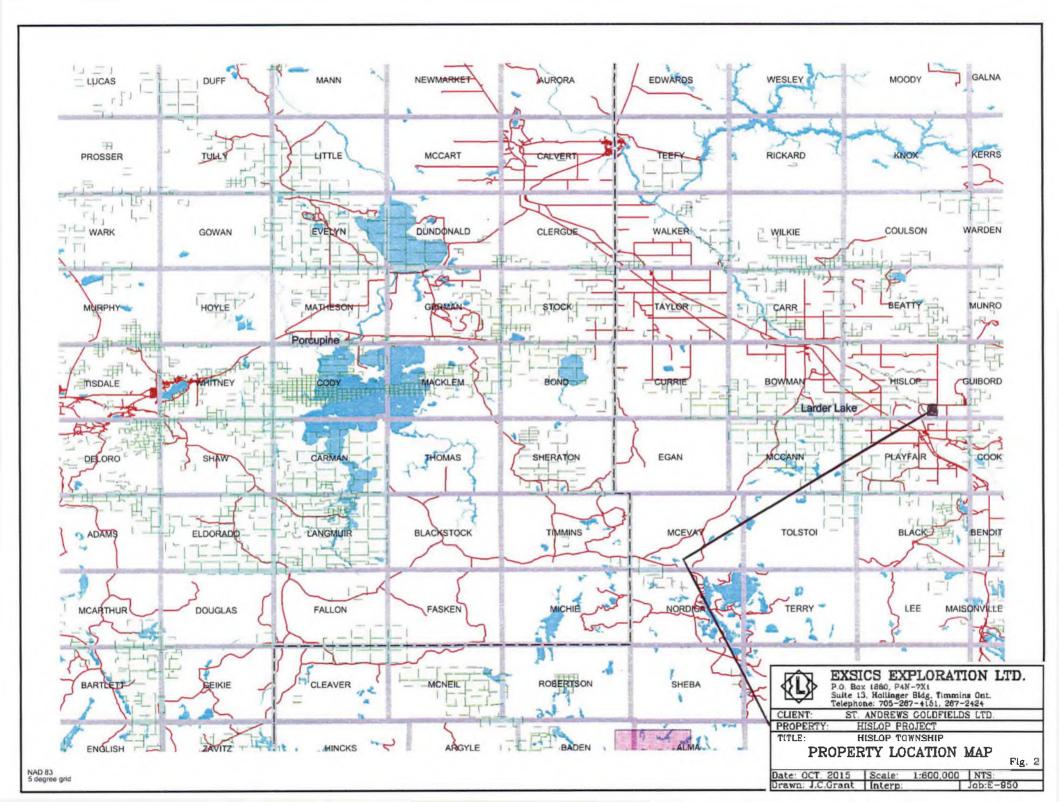
Refer to Figure 3 copied from MNDM Plan Map of Hislop Township for the positioning of the grid and the claim numbers within the Township.

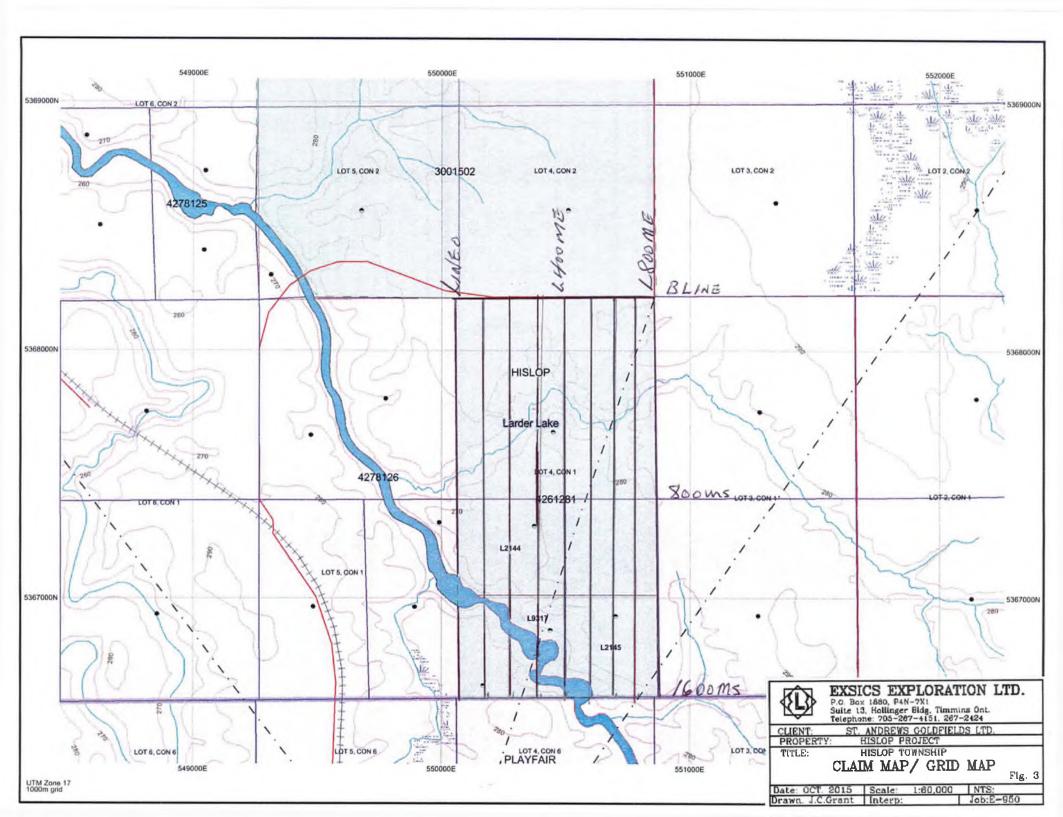
PERSONNEL:

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

J. Francoeur Timmins, Ontario R. Bradshaw Timmins, Ontario The program was completed under the direct supervision of J. Grant and the plotting and report was completed by J. C. Grant of Exsics.







GROUND PROGRAM:

The ground program consisted of 9 compassed and paced grid lines that were turned off of a controlled base line that ran 090 degrees from a control point established on the northwestern corner of the claim block at UTM point 550054E and 5368208N which represented line 0+00 and base line. This base line paralleled a good gravel road that runs along the northern boundary of the claim block. The cross lines were turned off at 100 meter intervals along this base line and were compassed, paced and read to the south boundaries of the claim block. The lines were covered by a total field magnetic survey that was done using the Scintrex Envi Mag System. Specification for the unit can be found as Appendix A of this report.

In all a total of 13.8 kilometers of grid lines were covered by the magnetic survey between October 24^{th} and 27^{th} of 2015.

The following parameters were kept constant throughout the survey period.

Magnetic Surveys:

Line spacing	100 meters
Reading intervals	12.5 meters
Diurnal monitoring	base station recorder
Base record intervals	30 second reading intervals
Reference field	56000 nT
Datum subtracted	55500 nT

The collected and corrected data was then plotted onto a base map at a scale of 1:5000 and then the data was contoured at 50 gamma intervals where ever possible. A copy of this color contoured plan map is included in the back pocket of this report.

PROPERTY GEOLOGY:

The majority of the grid area is underlain by intermediate to mafic metavolcanics that appear to have been cross cut by at least one north-south striking dike like unit located approximately in the center of the claim block. A band of metasediments lie to the east-northeast of the grid and appear to have minor intrusions of flow breccias that appear to parallel a suspected fault running northwest across the eastern section of the township and just to the east of the grid area. Refer to Map 2205 Timmins-Kirkland Lake Geological Compilation Series.

MAGNETIC SURVEY RESULTS:

The magnetic was successful in outlining several structural zones across the grid area. The most predominant magnetic feature is the magnetic high that runs across the northern section of the grid lines that is generally 500 to 900 gammas above the general background of the survey area. The magnetic signature would suggest a possible intrusive. The next most predominant magnetic structure relates to a broad magnetic high that generally parallels line 400ME from top to bottom. The structure suggest a possible dike like unit striking north-south and continuing off of the grid in both directions. Evidence of the northern tip of the dike can be seen in the magnetic low pushing northward into the magnetic high trend at the northern end of line 400ME.

There is a narrow magnetic high unit that strikes west across lines 100ME to 0 at 900MS and continues off of the grid to the west. There was no visible indication on the ground that would explain this structure and it does lie between two magnetic lows.

The last magnetic unit of interest is the modest magnetic high that strikes east across lines 700ME to 800ME that continues off of the grid to the east. This zone is centered at 1300MS.

CONCLUSIONS AND RECOMMENDATIONS:

The ground program was successful in outlining several magnetic trends across the grid area. The north-south striking dike paralleling line 400ME is quite evident in the survey. The magnetic high striking across the northern section of the grid should be followed up with a geological survey as should the narrow high striking west across line 100ME and line 0 at 900MS.

A follow up geophysical program should be considered once the geological program has been completed especially if the magnetic high trends cannot be explained on the ground.

Respectfully submitted

J. C. Grant, CET, FGAC November 2015.

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.
- 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.

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- 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.

TONN GRAME

John Charles Grant, CET., FGAC.

APPENDIX A



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 guickly 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

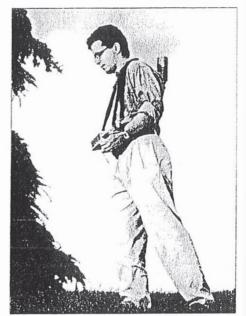
- easily detects buried drums to depths of 10 feet or more
- more sensitive to the steel of a buried drum than EM or radar
- much less expensive than EM or radar
- survey productivity much higher than with EM or radar

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"

Magnetometar/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.

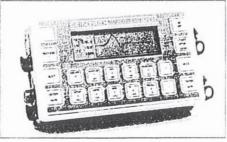
True Simultaneous Gradiometer

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

"Daracheck" 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.

Element I. C. H	Learning on the second second second
SUDDE:	ALCOST .
DURATION: 0.5 Sec	FIELD UNIT
BASE CORRECT, 1 Mes->	START CORPECTING ?
TIE-LN.CORRE.1 no	BUS BUSIC SELECT
Cha?:+-	DATTINS

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 (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

Rochargeable 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 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-cn/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
- e) 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 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)

SCHNUTHERX

Head Office

222 Snidercroft Road Concord, Ontarlo, Canada L4K 135 Telephone: (905) 669-2280 Fax: (905) 669-6403 or 669-5132 Telex: 06-954570

In the USA:

 Scintrex Inc.

 85 River Rock Drive

 Unit 202

 Buffalo, NY 14207

 Telephone
 (716) 298-1219

 Fax:
 (716) 298-1317

