Report of a Geophysical Survey

On the

Carr Township Property

Carr Township, Ontario

Claim No. 1245008
N 1/2 LOT 7, CON 2

Larder Lake Mining Division

For

St. Andrew Goldfields Ltd.

April 5, 2003
Timmins, Ontario

Matthew Johnston
Consulting Geophysicist
1226 Gatineau Blvd.
Timmins, Ont. P4R 1E3
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<td>1:5000</td>
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1.0 INTRODUCTION

The Carr township property of St. Andrew Goldfields Ltd., consists of 1 unpatented 4 unit mining claim located in Carr Township, N 1/2 LOT 7, CON 2; claim number 1245008, Larder Lake Mining Division. During April 2003, a program of flagged and picketed lines and geophysical surveys was conducted over a portion of this claim group. The geophysical program consisted of total magnetic field surveys. Exsics Exploration Limited, carried out the geophysical survey; and Mr. Dan Dunstan employed by St. Andrew Goldfields Ltd. performed the gridding program.

2.0 Location And Access

The Carr Township property is located approximately 75 kilometers east of the City of Timmins, in Carr Township. Access to the property is via Highway 11 from Timmins to the town of Matheson; then along highway 101 to Carr Township. Driving north on the Carr Township road leads to an east west Carr township concession road; where the north side of the claim boundary is located. (See figures 1 to 2).

3.0 Summary of 2003 Geophysical Program

The gridding on the Carr grid totaled 12.65 kilometers, which consisted of a 0.80-kilometer long baseline striking at 090 degrees. The base line was laid alongside a concession road with 4-foot lathe positioned every 100 meters. The grid lines were hip-chained every 100 meters along this baseline and each was hip chained south to a length of 400 or 800 meters (see maps in pocket). The grid lines were hip chained every 100 meters and marked with 4 foot wooden lathe; with marked flagging placed at 25-meter intervals along all lines.

The geophysical program consisted of total field magnetic surveying. The magnetic survey, using a Scintrex Envi proton precession magnetometer, totaled 12.65
kilometers with readings collected every 12.5 meters along all lines. The results of the survey and interpretation have plotted on maps at a scale of 1:5000 and accompany this report.

A description of the instrument and survey methods can be found in appendix A.

4.0 Discussion of Results

The magnetic survey on the Carr grid indicates a relatively quiescent magnetic background, with two prominent linear magnetic highs disrupting the overall magnetic fabric. Measured magnetic values in the grid area range between 56536 and 58261 nT. The background magnetic field strength is 57247 nT. The isomagnetic contour pattern suggests an underlying lithology striking in a northeast-southwest direction. The most significant magnetic anomalies on the Carr grid are 2 linear magnetic highs trending northeast-southwest in the northwest portion of the grid area. These two linear magnetic highs have amplitudes up to 1200 nT above background magnetic values. The magnetic anomalies are identified and labeled as Magnetic anomaly A and B, on the magnetic contour map. All of the anomalies are easily identified on the contour map. These anomalies are interpreted to reflect diabase dykes, or possibly banded iron formations, that commonly occur in this area. No other significant magnetic anomalies were mapped within the grid area.

5.0 Conclusions and Recommendations

The magnetic surveys over the Carr grid did locate several significant geophysical anomalies, which may be prospective for mineral exploration and possibly aid in defining the underlying lithology. The most significant magnetic anomalies in the grid area are the two prominent linear magnetic highs labeled as Magnetic Anomaly A and B. The source lithology causing these anomalies is likely located at very shallow
depths and may possibly outcrop. Any existing geological or geochemical information for the surveyed grid will aid in further assessing any geophysical anomalies.

Any existing geological or geochemical information for the surveyed grid will aid in further assessing any geophysical anomalies.

Respectively Submitted,

Matthew Johnston
Consulting Geophysicist
Statement of Qualifications

This is to certify that: MATTHEW JOHNSTON

I am a resident of Timmins; province of Ontario since June 1, 1995.

I am self-employed as a Consulting Geophysicist, based in Timmins, Ontario.

I have received a B.Sc. in geophysics from the University of Saskatchewan; Saskatoon, Saskatchewan in 1986.

I have been employed as a professional geophysicist in mining exploration, environmental and other consulting geophysical techniques since 1986.

Signed in Timmins, Ontario, this April 5, 2003
Appendix A
Survey Theory - Total Field Magnetics

Magnetic Survey

Theory:

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally occurring magnetic field caused by changes in the magnetization of the rocks in the earth. These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals. Magnetic anomalies in the earth's field are caused by changes in two types of magnetization: (1) Induced, caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals. (2) Remanent magnetism is independent of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc.) in the rocks. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same direction as the present earth's field, due to changes in the orientation of the rock or the field. The unit of measurement (variations in intensity) is commonly known as the Gamma which is equivalent to the nanotesla (nT).

Method:

The magnetometer, a Scintrex Envi Mag with a proton precession sensor measures the Total Magnetic Field (TFM) perpendicular to the earth's field (horizontal position in the polar region). The unit has no moving parts, produces an absolute and relatively high resolution measurement of the field and displays the measurement on a digital lighted display and is recorded (to memory). Initially, the tuning of the instrument should agree with the nominal value of the magnetic field for each particular area. The procession magnetometer collected the data with a 0.2 nanoTesla accuracy. The operator read each and every line at a 12.5 m interval with the sensor attached to the top of four (56cm), aluminum tubing sections. The readings were corrected for changes in the earth's magnetic field (diurnal drift) with a similar Envi Mag magnetometer, acting as a stationary base station which automatically read and stored the readings at every 30 seconds. The data from both units was then downloaded to PC and base corrected values were computed.
Saves You Time
Only one instrument is needed for magnetometer, gradiometer, VLF and VLF resistivity surveying. A complete ENVI System can calculate and record 4 VLF magnetic field parameters from 3 different transmitters, a magnetic total field reading and a simultaneous magnetic gradient reading. It can also measure and record 2 VLF electric field parameters from 3 different transmitters with the VLF Resistivity option.

Upgrade Your Unit at any Time
The ENVI is based on a modular design, you can upgrade your system at any time. This built-in flexibility allows you to purchase an ENVI system with only the surveying equipment that you need for now but does not limit you to one application. When your surveying needs grow, so can your ENVI system. Existing users of OMNI systems can also upgrade their consoles.

SYSTEM CONFIGURATIONS
- ENVI MAG
- ENVI GRAD
- ENVI VLF
- ENVI MAG/VLF
- ENVI GRAD/VLF

ENVI MAG
The ENVI system when configured as a total field magnetometer is referred to as the ENVI MAG. In this setup the ENVI system can be operated a traditional stop and measure mode, thus providing the full sensitivity obtainable with a proton magnetometer, ideally suited for mineral exploration. Alternatively the ENVI MAG can be operated in the "WALKMAG" mode, where readings may be made continuously at a user selectable rate of up to 2 readings per second. Although this reduces the accuracy marginally, it does allow the user to collect increased volumes of data and cover more area in a shorter period of time. This is particularly important for large signal near surface targets as typically found in environmental surveys. This makes the ENVI a very cost effective tool for environmental surveys. The ENVI MAG provides the following information:
- Total Magnetic Field
- Time/Date of Reading
- Co-ordinates of Reading
- Statistical Error of the Reading
- Signal Strength and Decay Rate of the Reading

As a magnetic base station instrument the ENVI can be set up to record variations of the earth's magnetic field. Using this information from a stationary ENVI MAG the total field readings obtained with other roving magnetometers can be corrected for these fluctuations thus improving the accuracy of your magnetic data. All ENVI MAG systems can be operated as either field of base station instruments. The optional base station accessories kit is recommended for base station applications.

ENVI GRAD
The ENVI System configured as an ENVI GRAD enables true simultaneous gradiometer measurements to be obtained. The ENVI GRAD provides you with an accurate means of measuring both the total field and the gradient of the total field. It reads the measurements of both sensors simultaneously to calculate the true gradient measurement.

In the gradient mode, the ENVI sharply defines the magnetic responses determined by total field data. It individually delineates closely spaced anomalies rather than collectively identifying them under one broad magnetic response. The ENVI GRAD is well suited for geotechnical and archaeological surveys where small near surface magnetic targets are the object of the survey. In addition to what the ENVI MAG provides the ENVI GRAD also provides the gradient of the total magnetic field.
ENVI VLF is the ideal groundwater exploration tool.

With the gradiometer option there is no lost survey time as the ENVI enables you to conduct gradient surveys during magnetic storms. The technique of simultaneously measuring the two sensors cancels the effects of diurnal magnetic variations.

**ENVI VLF**

The ENVI VLF is ideal for environmental, geotechnical and mineral/water exploration application.

The ENVI VLF unit allows you to read the vertical in-phase, vertical quadrature, total field strength, dip angle, primary field direction, apparent resistivity, phase angle, time, grid coordinates, direction of travel along grid lines and natural and cultural features. The ability to obtain data from as many as 3 VLF transmitting stations provides complete coverage of an anomaly regardless of the orientation of the survey grid or of the anomaly itself.

The unique, 3-coil sensor does not require orientation of the VLF sensor head toward the transmitter station. This simplifies VLF field procedures and saves considerable survey time.

The ENVI VLF can measure up to three VLF frequencies. The display indicates the signal to noise ratio which provides you with an immediate indication of how usable a frequency is. The ENVI also enables you to automatically scan the entire VLF spectrum for the most usable stations between 15 kHz to 30 kHz. Using up to three frequencies optimizes conductor coupling even in the most complex geological environments. The ENVI VLF system’s ability to obtain repeatable readings from weak signals offers a number of benefits:

- extends the use of VLF to countries where its use was previously marginal
- increases the number of frequencies with which you can operate

**VLF Resistivity Option**

The ENVI also offers a non-orientation VLF resistivity option.

**ENVI MAG/VLF**

The ENVI MAG/VLF has the features of both the ENVI MAG and ENVI VLF combined in one instrument.

**ENVI GRAD/VLF**

The ENVI GRAD/VLF has the features of both the ENVI GRAD and ENVI VLF combined in one instrument.

**ENVI MAP Software**

Supplied with the ENVI MAG and ENVI GRAD and custom designed for this purpose, is an easy to use, menu-driven data processing and mapping software for magnetic data called ENVI MAP. The software enables you to:

- read the ENVI MAG/GRAD data and reformat it into a standard, compatible with the ENVI MAP 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 map surround
- contour the grided data
- autoscale the combined results of the posting/surround step and the contouring step to fit on a standard 8.5 inch wide dot-matrix printer
- rasterize and output the results of the autoscaling to the printer

The ENVI MAP software is fully compatible with Geosoft programs. More advanced data processing, modeling and interpretation software is also available.
Total Field Operating Range
20,000 to 100,000 nT (gammas)

Total Field Absolute Accuracy:
±1 nT

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

Gradiometer Option
Includes a second sensor, 1/2m (20 inch) staff extender and processor module.

VLF Option
Includes a VLF sensor and harness assembly

'WALKMAG' Mode
continuous reading, cycling as fast as 0.5 seconds

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

Standard Memory
Total Field Measurements: 28,000 readings
Gradiometer Measurements: 21,000 readings
Base Station Measurements: 151,000 readings
VLF Measurements: 4,500 readings for 3 frequencies

Expanded Memory
Total Field Measurements: 140,000 readings
Gradiometer Measurements: 109,000 readings
Base Station Measurements: 750,000 readings
VLF Measurements: 24,000 readings for 3 frequencies

Real-Time Clock
Records full date, hours, minutes and seconds with 1 second resolution, ±1 second stability over 24 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. High speed Binary Dump. Selectable formats for easy interfacing to commercial software packages.

Analog Output
0-999 mV full scale output voltage with keyboard selectable range of 1, 10, 100, 1000 or 10,000 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: -40° to 60°C

Dimensions & Weight
Console: 250mm x 152mm x 55mm (10" x 6" x 2.25")
2.45 kg (5.4 lbs) with rechargeable battery

Magnetic Sensor: 70mm x 175mm (2.75"d x 7")
1 kg (2.2 lbs)

Gradiometer Sensor: 70mm x 675mm (2.75"d x 26.5")
(with staff extender) 1.15 kg (2.5 lbs)

Sensor Staff: 25mm x 2m (1"d x 76")
8 kg (1.75 lbs)

VLF Sensor Head: 140mm x 130mm (5.5"d x 5.1")
9 kg (2 lbs)

VLF Sensor: 280mm x 190mm x 75mm (11" x 7.5" x 3")
1.7 kg (3.7 lbs)

Options
Base Station Accessories Kit
GPS
Software Packages
Training Programs

SCINTREX

HEAD OFFICE
222 Snidercroft Road, Concord, Ontario L4K 1B5
Telephone: (905) 669-2280 Fax: (905) 669-6403
e-mail: scintrex@scintrex.com
website: www.scintrex.com

IN THE U.S.A.
900 Woodrow Lane, Suite 100, Denton, Texas 76205
Telephone: (940) 591-7755 Fax: (940) 591-1968
e-mail: richard@scintrexusa.com

IN S.E. ASIA
P.O. Box 125 Summer Park, 83 Jijaws Street, Brisbane
Telephone: +61-7-3376-3188 Fax: +61-7-3376-0626
E-mail: australiate@australia.com.au
Website: www.australia.com.au
Work Report Summary

Transaction No: W0380.00557  Status: APPROVED
Recording Date: 2003-APR-07  Work Done from: 2003-APR-01
Approval Date: 2003-MAY-09  to: 2003-APR-07

Client(s): 203056 TREMBLAY, MICHAEL A

Survey Type(s): LC MAG

Work Report Details:

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External Credits: $0

Reserve: $795

Reserve of Work Report#: W0380.00557

Total Remaining $795

Status of claim is based on information currently on record.
Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Ron Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist
    Michael A Tremblay
    (Claim Holder)

Assessment File Library
    Michael A Tremblay
    (Assessment Office)
Those wishing to stake mining claims should consult with the Provincial Mining Recorder's Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data available in the Provincial Mining Recorder's Office at the time of downloading from the Ministry of Northern Development and Mines website.

This map may not show unregistered land tenure and interests in Toll Free Map Datum: NAD 83 land including certain patents, leases, easements, rights of way, mining rights, licences, or other forms of disposition of rights and withdrawals from the Crown. Also certain land tenure and land uses that may restrict or prohibit free entry to stake mining claims may not be illustrated.

© 2003
Lac Professional Services
933 Ramsay Lake Road
Sudbury, ON P3E 4B3
Mining Land Tenure
Source: Provincial Mining Recorder's Office
Ministry of Natural Resources

LAND TENURE WITHDRAWAL DESCRIPTIONS

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IMPORTANT NOTICES

This map was not given complete land tenure and information on the status of the lands shown hereon. The information shown is derived from digital data available in the Provincial Mining Recorder's Office at the time of downloading from the Ministry of Northern Development and Mines website.
CLAIM NO. 1245008

MAG ANOMALY A

MAG ANOMALY B

CLAIM POST #1

CLAIM POST #2

ST. ANDREW GOLDFIELDS LTD.

CARR TOWNSHIP PROPERTY

TOTAL FIELD MAGNETIC SURVEY - POSTED DATA

CLAIM NO. 1245008

LARGER LAKE MINING DIVISION ONTARIO

CLAIM NO. 1245008 - N 1/2 OF LOT 7, CONCESSION 2

MAGNETIC REFERENCE FIELD = 57,500 nT

INSTRUMENT: SCINTREX ENVI MAGNETOMETER

DRAWN BY: JOHNSTON GEOPHYSICS

LINE KM'S. SURVEYED = 12.65