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CANADIAN EXPLORATION SERVICES LTD

BATTERY MINERAL RESOURCES LTD.

Q2406f – Gowganda Project Magnetometer Survey

C Jason Ploeger, P.Geo. – September 14, 2017



Abstract

CXS was contracted by Battery Mineral Resources to perform approximately 7.5 kilometres of magnetometer work over the Gowganda Property.

Numerous north-south linear magnetic features were identified; however, no apparent exploration targets were generated.

BATTERY MINERAL RESOURCES LTD. Q2406f – Gowganda Project Magnetometer Survey





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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Gowganda Project**.

1.2 CLIENT

Battery Mineral Resources Ltd. Level 36 Governor Phillip Tower 1 Farer Place Sydney Australia

1.3 LOCATION

The Gowganda Project is located in Milner, Knight, Van Hise, Nicol, Haultain, Chown and Lawson Townships. The traverse area is located approximately 25 km southwest of Elk Lake, Ontario. The survey area covers a portion of mining claims 4286328 and 4286329 located in Lawson Township, within the Larder Lake Mining Division.



Figure 1: Location of the Gowganda Project





1.4 Access

Access to the property was attained with a 4x4 truck on the Beauty Lake Road. The Beauty Lake Road heads south from Hwy 560 approximately 23 km west of Elk Lake, Ontario. The Beauty Lake Road was travelled for approximately 7.5 km to the survey area.

1.5 SURVEY GRID

The traversed lines were established using a GPS in conjunction with the execution of the survey. The GPS operator would establish sample locations while remaining approximately 12.5m in front of the magnetometer operator. GPS waypoints and magnetic samples were taken every 12.5m along these controlled traverses. The GPS used was a Garmin GPSMAP 62s with an external antenna for added accuracy.

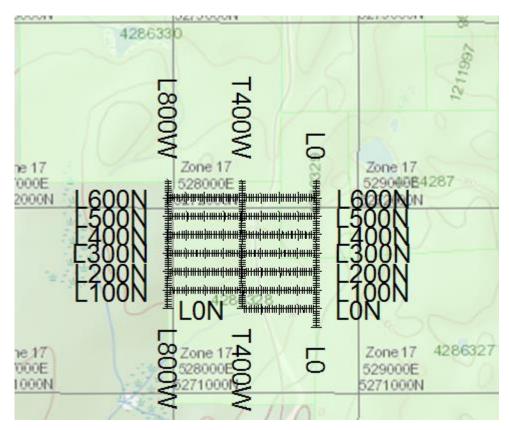


Figure 2: Claim Map with the Gowganda Traverses



2. SURVEY WORK UNDRTAKEN

2.1 SURVEY LOG

			Min	Max	Total Survey
Date	Description	Line	Extent	Extent	(m)
September 12,	Locate survey area and conduct				
2017	magnetometer survey.	100N	800W	300W	500
		200N	800W	325W	475
		300N	800W	325W	475
		400N	800W	350W	450
		500N	800W	325W	475
		600N	800W	400W	400
		400W	0	700N	700
		800W	0	700N	700
September 13,	Complete magnetometer sur-				
2017	vey.	0N	400W	0	400
		100N	300W	0	300
		200N	325W	0	325
		300N	325W	0	325
		400N	350W	0	350
		500N	325W	0	325
		600N	400W	0	400
		400W	100S	700N	800

Table 1: Survey Log

2.2 Personnel

Claudia Moraga of Britt, Ontario conducted all the magnetic data collection while Bruce Lavalley of Britt, Ontario was responsible for the GPS control and GPS way-point collection.

2.3 SURVEY SPECIFICATIONS

The survey was conducted with a GSM-19 v7 Overhauser magnetometer with a second GSM-19 magnetometer for a base station mode for diurnal correction.

A total of 7.4 line kilometers of magnetometer was read over the Gowganda Project between September 12th and 13th, 2017. This consisted of 592 magnetometer samples taken at a 12.5 meter sample interval.





3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY

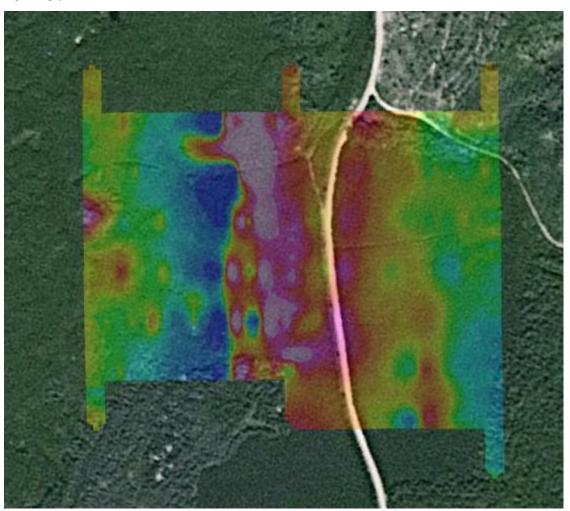


Figure 3: Magnetometer Plan of Gowganda Traverses on Google Earth

No culture that would influence the data was noted throughout the traverse area.

A moderate background magnetic signature is visible. This magnetic signature most likely represents the archean.

Through this magnetic domain appear numerous north-south magnetic features. These most likely represent diabase dikes. These appear to trend similar to that of the Matachewan Diabase what can be seen within the region; however, the magnetic signatures most likely represent a Nipissing Diabase intrusive.

No offsets or low regions are noted, therefore no apparent exploration targets are noted. I would recommend compiling these results with historic results. This may generate some exploration targets.



APPENDIX A

STATEMENT OF QUALIFICATIONS

- I, C. Jason Ploeger, hereby declare that:
- 1. I am a professional geophysicist with residence in Larder Lake, Ontario and am presently employed as a Geophysicist and Geophysical Manager of Canadian Exploration Services Inc. of Larder Lake, Ontario.
- 2. I am a Practicing Member of the Association of Professional Geoscientists, with membership number 2172.
- 3. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
- 4. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
- I am a member of the Ontario Prospectors Association, a Director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.
- 6. I do not have nor expect an interest in the properties and securities of **Battery Mineral Resources.**
- 7. I am responsible for the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.



C. Jason Ploeger, P.Geo., B.Sc. Geophysical Manager Canadian Exploration Services Inc.

> Larder Lake, ON September 14, 2017



APPENDIX B

THEORETICAL BASIS AND SURVEY PROCEDURES

TOTAL FIELD MAGNETIC SURVEY

Base station corrected Total Field Magnetic surveying is conducted using at least two synchronized magnetometers of identical type. One magnetometer unit is set in a fixed position in a region of stable geomagnetic gradient, and away from possible cultural effects (i.e. moving vehicles) to monitor and correct for daily diurnal drift. This magnetometer, given the term 'base station', stores the time, date and total field measurement at fixed time intervals over the survey day. The second, remote mobile unit stores the coordinates, time, date, and the total field measurements simultaneously. The procedure consists of taking total magnetic measurements of the Earth's field at stations, along individual profiles, including Tie and Base lines. A 2 meter staff is used to mount the sensor, in order to optimally minimize localized near-surface geologic noise. At the end of a survey day, the mobile and base-station units are linked, via RS-232 ports, for diurnal drift and other magnetic activity (ionospheric and sferic) corrections using internal software.

For the gradiometer application, two identical sensors are mounted vertically at the ends of a rigid fiberglass tube. The centers of the coils are spaced a fixed distance apart (0.5 to 1.0m). The two coils are then read simultaneously, which alleviates the need to correct the gradient readings for diurnal variations, to measure the gradient of the total magnetic field.



APPENDIX C

GSM 19



Specifications

Overhauser Performance

Resolution: 0.01 nT

Relative Sensitivity: 0.02 nT Absolute Accuracy: 0.2nT Range: 20,000 to 120,000 nT

Gradient Tolerance: Over 10,000nT/m Operating Temperature: -40°C to +60°C

Operation Modes

Manual: Coordinates, time, date and reading stored automatically at min. 3 second interval.

Base Station: Time, date and reading stored at 3 to 60 second intervals. Walking Mag: Time, date and reading stored at coordinates of fiducial. Remote Control: Optional remote control using RS-232 interface.

Input/Output: RS-232 or analog (optional) output using 6-pin weatherproof

connector.

Operating Parameters

Power Consumption: Only 2Ws per reading. Operates continuously for 45 hours on standby.

Power Source: 12V 2.6Ah sealed lead acid battery standard, other batteries

available

Operating Temperature: -50°C to +60°C

Storage Capacity

Manual Operation: 29,000 readings standard, with up to 116,000 optional. With 3 VLF stations: 12,000 standard and up to 48,000 optional.

Base Station: 105,000 readings standard, with up to 419,000 optional (88

hours or 14 days uninterrupted operation with 3 sec. intervals)

Gradiometer: 25,000 readings standard, with up to 100,000 optional. With 3

VLF stations: 12,000, with up to 45,000 optional.





Omnidirectional VLF

Performance Parameters: Resolution 0.5% and range to ±200% of total field. Frequency 15 to 30 kHz.

Measured Parameters: Vertical in-phase & out-of-phase, 2 horizontal components, total field coordinates, date, and time.

Features: Up to 3 stations measured automatically, in-field data review, displays station field strength continuously, and tilt correction for up to ±10° tilts.

Dimensions and Weights: 93 x 143 x 150mm and weighs only 1.0kg.

Dimensions and Weights

Dimensions:

Console: 223 x 69 x 240mm

Sensor: 170 x 71mm diameter cylinder

Weight:

Console: 2.1kg

Sensor and Staff Assembly: 2.0kg

Standard Components

GSM-19 magnetometer console, harness, battery charger, shipping case, sensor with cable, staff, instruction manual, data transfer cable and software.

Taking Advantage of a "Quirk" of Physics

Overhauser effect magnetometers are essentially proton precession devices except that they produce an order-of magnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field. The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal-- that is ideal for very high-sensitivity total field measurement. In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and reduces noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

• The unique Overhauser unit blends physics, data quality, operational efficiency, system design and options into an instrumentation package that ... ex-





ceeds proton precession and matches costlier optically pumped cesium capabilities



APPENDIX C

GARMIN GPS MAP 62S



Physical & Performance:					
Unit dimensions, WxHxD:	2.4" x 6.3" x 1.4" (6.1 x 16.0 x 3.6 cm)				
Display size, WxH:	1.43" x 2.15" (3.6 x 5.5 cm); 2.6" diag (6.6 cm)				
Display resolution, WxH:	160 x 240 pixels				
Display type:	transflective, 65-K color TFT				
Weight:	9.2 oz (260.1 g) with batteries				
Battery:	2 AA batteries (not included); NiMH or Lithium recom- mended				
Battery life:	20 hours				
Waterproof:	yes (IPX7)				
Floats:	no				
High-sensitivity re- ceiver:	yes				





Interface: high-speed USB and NMEA 0183 compatible

Maps & Memory:				
Basemap:	yes			
Preloaded maps:	no			
Ability to add maps:	yes			
Built-in memory:	1.7 GB			
Accepts data cards:	microSD™ card (not included)			
Waypoints/favorites/locations:	2000			
Routes:	200			
Track log:	10,000 points, 200 saved tracks			

Features & Benefits:				
Automatic routing (turn by turn routing on	yes (with optional mapping for detailed			
roads):	roads)			
Electronic compass:	yes (tilt-compensated, 3-axis)			
Touchscreen:	no			
Barometric altimeter:	yes			
Camera:	no			
Geocaching-friendly:	yes (paperless)			
Custom maps compatible:	yes			
Photo navigation (navigate to geotagged photos):	yes			
Outdoor GPS games:	no			
Hunt/fish calendar:	yes			





Sun and moon information:	yes
Tide tables:	yes
Area calculation:	yes
Custom POIs (ability to add additional points of interest):	yes
Unit-to-unit transfer (shares data wire-lessly with similar units):	yes
Picture viewer:	yes
Garmin Connect™ compatible (online community where you analyze, categorize and share data):	yes

Specifications obtained from www.garmin.com



APPENDIX D

LIST OF MAPS (IN MAP POCKET)

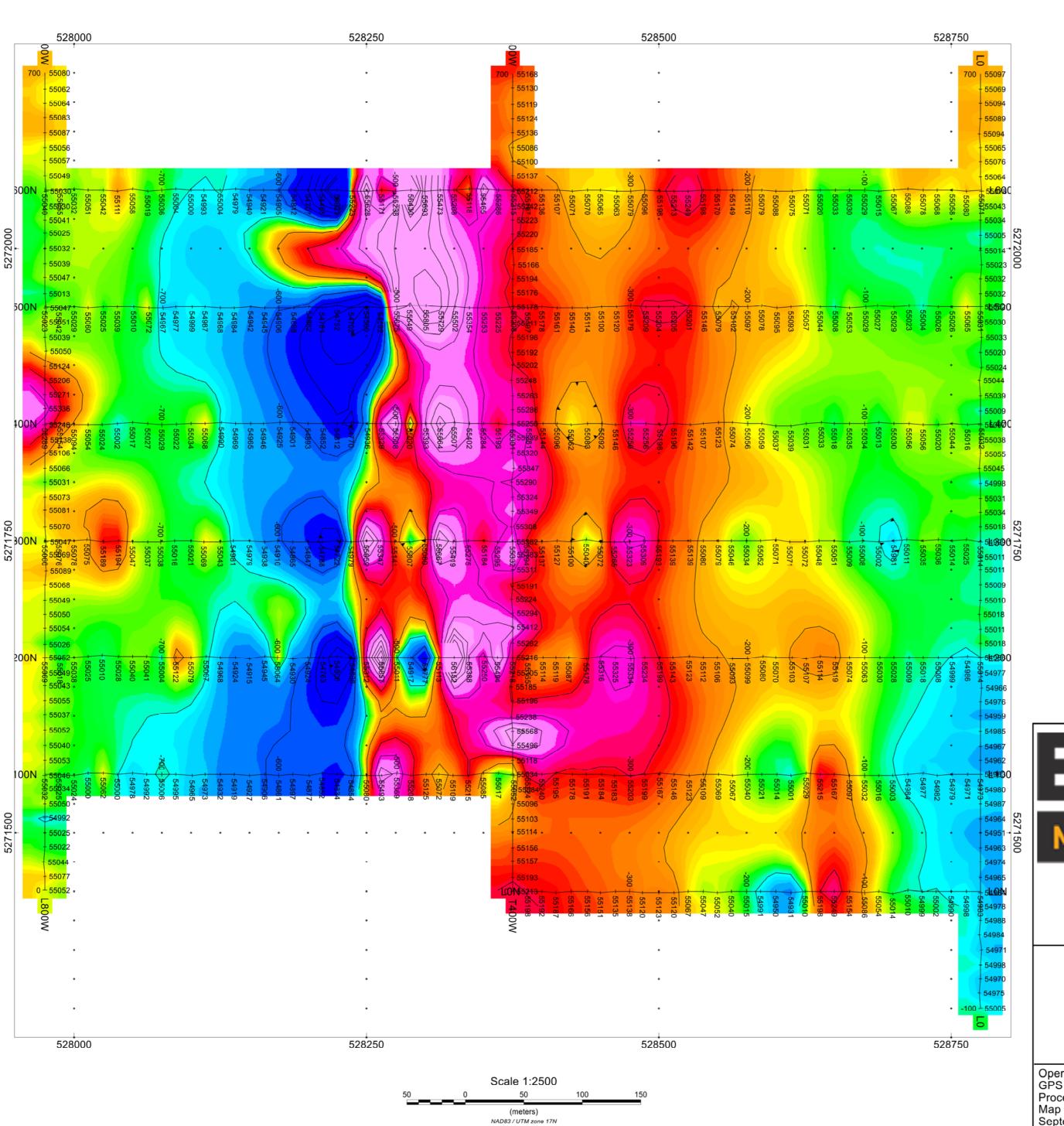
Magnetometer Plan Map (1:2500)

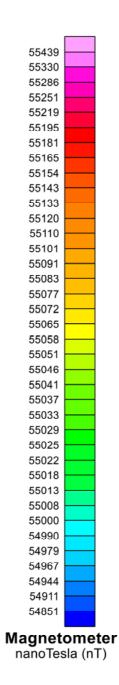
1) Q2406f-Battery-Gowganda-Mag-Cont

Claim Map with Magnetic Traverses (1:40000)

2) Q406f -Battery-Gowganda-Traverses

TOTAL MAPS = 2





BAT+ERY MINERAL RESOURCES

GOWGANDA PROJECT Lawson Township, Ontario

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

Posting Level: 0nT
Field Inclination/Declination: 74degN/12degW
Station Seperation: 12.5 meters
Total Field Magnetic Contours: 100nT

GSM-19 OVERHAUSER MAGNETOMETER v7

Operated By: Claudia Moraga GPS Operated By: Bruce Lavalley Processed by: C Jason Ploeger, P.Geo. Map Drawn By: C Jason Ploeger, P.Geo. September 2017



Drawing: Q2406f-Battery-Gowganda-Mag-Cont

