

We are committed to providing [accessible customer service](#).
If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).



CANADIAN EXPLORATION SERVICES LTD

BATTERY MINERAL RESOURCES LTD.

**Q2394 – Gowganda Project
Magnetometer Survey**

C Jason Ploeger, P.Geo. – June 27, 2017

BATTERY

MINERAL RESOURCES

Abstract

CXS was contracted by Battery Mineral Resources to perform approximately 18.5 kilometres of magnetometer work over the Gowganda Property.

BATTERY MINERAL RESOURCES LTD.
Q2394 – Gowganda Project
Magnetometer Survey

C Jason Ploeger, P.Geol. – June 27, 2017

TABLE OF CONTENTS

1.	SURVEY DETAILS	3
1.1	PROJECT NAME	3
1.2	CLIENT.....	3
1.3	LOCATION	3
1.4	ACCESS	4
1.5	SURVEY GRID.....	4
2.	SURVEY WORK UNDRTAKEN	5
2.1	SURVEY LOG	5
2.2	PERSONNEL	6
2.3	SURVEY SPECIFICATIONS	6
3.	OVERVIEW OF SURVEY RESULTS	7
3.1	SUMMARY	7

LIST OF APPENDICES

- APPENDIX A: STATEMENT OF QUALIFICATIONS**
APPENDIX B: THEORETICAL BASIS AND SURVEY PROCEDURES
APPENDIX C: INSTRUMENT SPECIFICATIONS
APPENDIX D: LIST OF MAPS (IN MAP POCKET)

LIST OF TABLES AND FIGURES

Figure 1: Location of the Gowganda Project.....	3
Figure 2: Claim Map with the Gowganda Traverses	4
Figure 3: Magnetometer Plan of Gowganda Traverses on Google Earth	7
Table 1: Survey Log.....	6

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 south-west of Elk Lake, Ontario. The survey area covers a portion of mining claim 4278552 located in Dufferin Township, within the Larder Lake Mining Division.

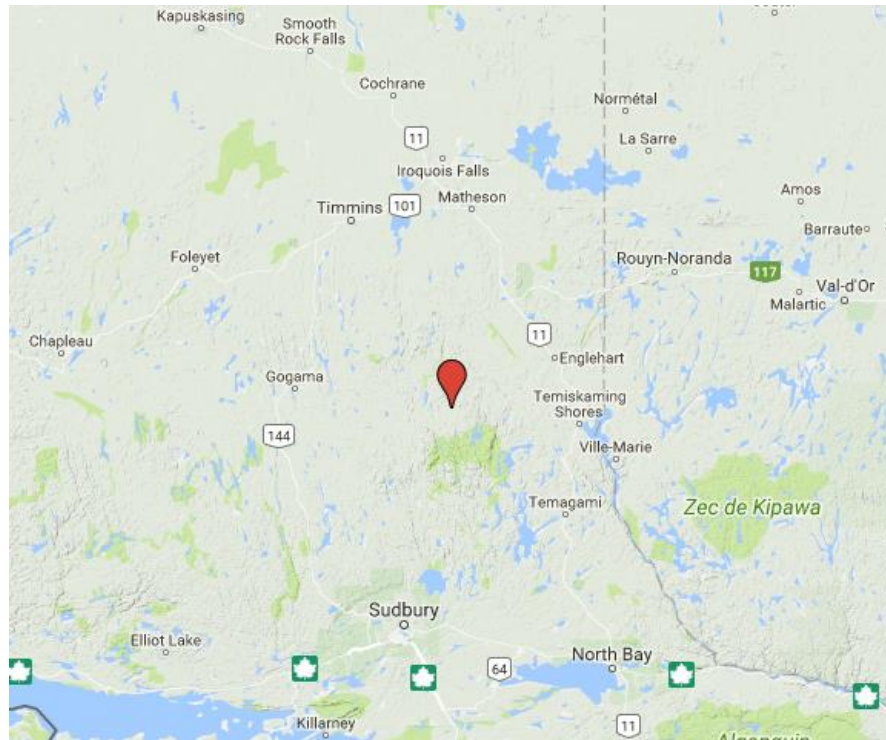


Figure 1: Location of the Gowganda Project

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 kilometres west of Elk Lake, Ontario. The Beauty Lake Road was travelled for approximately 7.5 kilometres 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, 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.

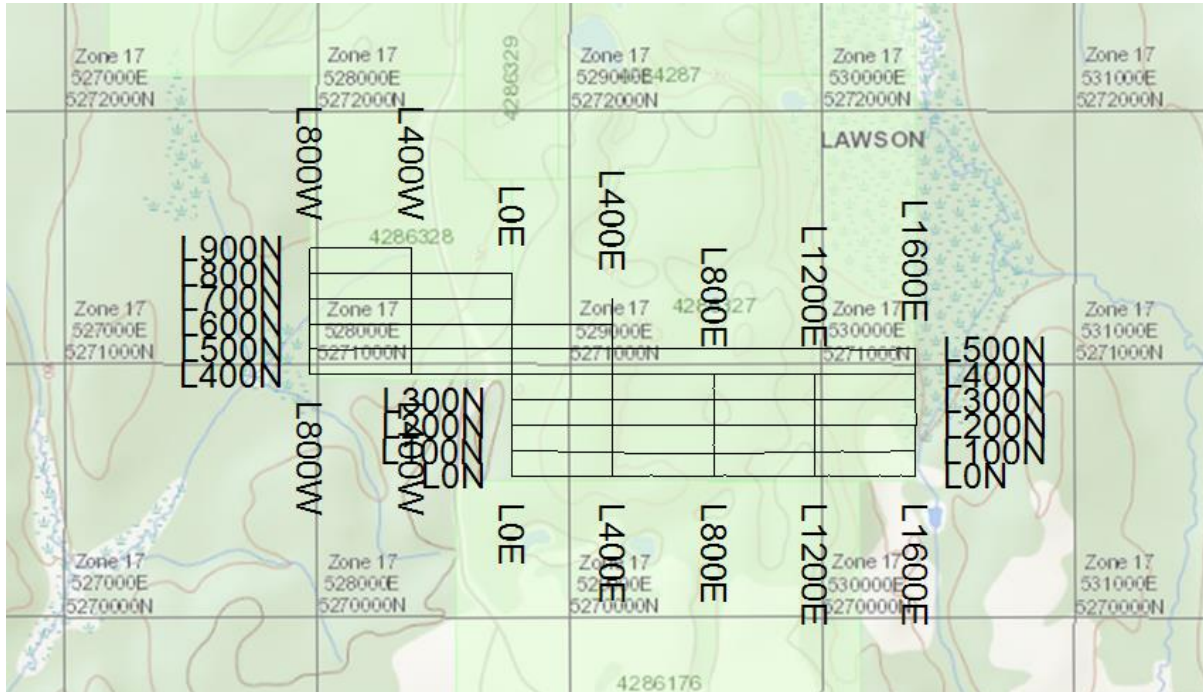


Figure 2: Claim Map with the Gowganda Traverses

2. SURVEY WORK UNDERTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
June 19, 2017	Locate survey area and conduct magnetometer survey.	0N	0E	1600E	1600
		100N	0E	1600E	1600
		0E	0N	200N	200
		1600E	0N	100N	200
June 20, 2017	Continue survey.	200N	0E	1600E	1600
		300N	0E	1600E	1600
		400E	0N	200N	200
		800E	0N	200N	200
		1200E	0N	200N	200
		1600E	100N	300N	300
June 21, 2017	Continue survey.	400N	0E	1600E	1600
		500N	400E	1600E	1200
		0E	200N	500N	300
		400E	200N	400N	200
		800E	200N	400N	200
		1200E	200N	400N	200
		1600E	300N	500N	200
June 22, 2017	Continue survey.	400N	800W	0E	800
		500N	800W	400E	1200
		600N	225W	400E	625
		0E	500N	600N	100
		400E	400N	700N	300
		400W	400N	600N	200
		800W	400N	700N	300
June 23, 2017	Complete magnetometer survey.	900N	800W	400W	400
		800N	800W	0E	800
		700N	800W	0E	800
		600N	800W	225W	575
		800W	700N	900N	200
		400W	600N	900N	300
		0E	600N	800N	200

Table 1: Survey Log

2.2 PERSONNEL

Patrick McGuinty of Pickering, Ontario conducted all the magnetic data collection while Claudia Moraga of Britt, Ontario was responsible for the GPS control and GPS waypoint 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 18.4 line kilometers of magnetometer was read over the Gowganda Project between June 19th and 23rd, 2017. This consisted of 1472 magnetometer samples taken at a 12.5 metre sample interval.

3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY

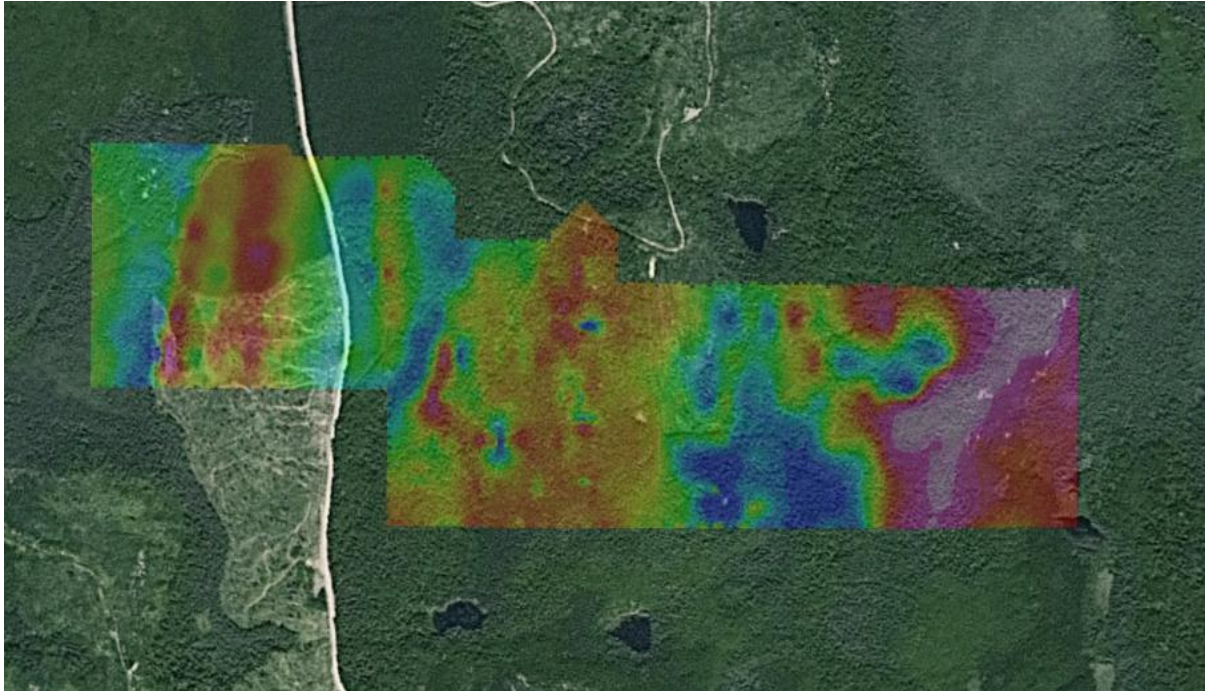


Figure 3: Magnetometer Plan of Gowganda Traverses on Google Earth

No culture that would influence the data was noted through the traverse area. A historic shaft was located at 529429E 5270749N or 200N and 650E.

The magnetic survey indicates the presence of three magnetic domains. The underlying magnetic signature appears as an average magnetic signature between 55000nT and 55100nT. This may represent a granitic pluton.

Overprinting this appears a series of moderate magnetic high linear north-south features. These magnetically elevated features most likely represent Nipissing Diabase sills or dikes.

The east part of the survey area indicates a strong magnetic high trend. This trend peaks approximately 5000nT higher than the background in the region. This magnetic anomaly indicates a geological shift to a unit with exhibiting a strong increase in magnetite content.

I would recommend prospecting along some of the magnetic lows within the probable Nipissing Diabase unit. This would indicate regions of magnetic depletion with probable alteration. These would include the trend from line 500N at 225E and 0N at 350E. I would also recommend examining the magnetic high on the east side of the property.

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 Practising 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.
5. 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
June 27, 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 spheric) 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 $\pm 200\%$ 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 $\pm 10^\circ$ 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 recommended
Battery life:	20 hours
Waterproof:	yes (IPX7)
Floats:	no
High-sensitivity receiver:	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 roads):	yes (with optional mapping for detailed roads)
Electronic compass:	yes (tilt-compensated, 3-axis)
Touchscreen:	no
Barometric altimeter:	yes
Camera:	no
<u>Geocaching-friendly:</u>	yes (paperless)
<u>Custom maps compatible:</u>	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 wirelessly 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)

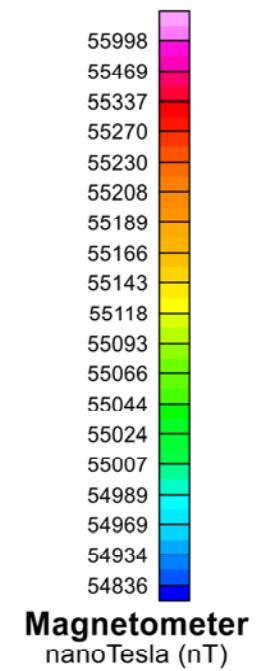
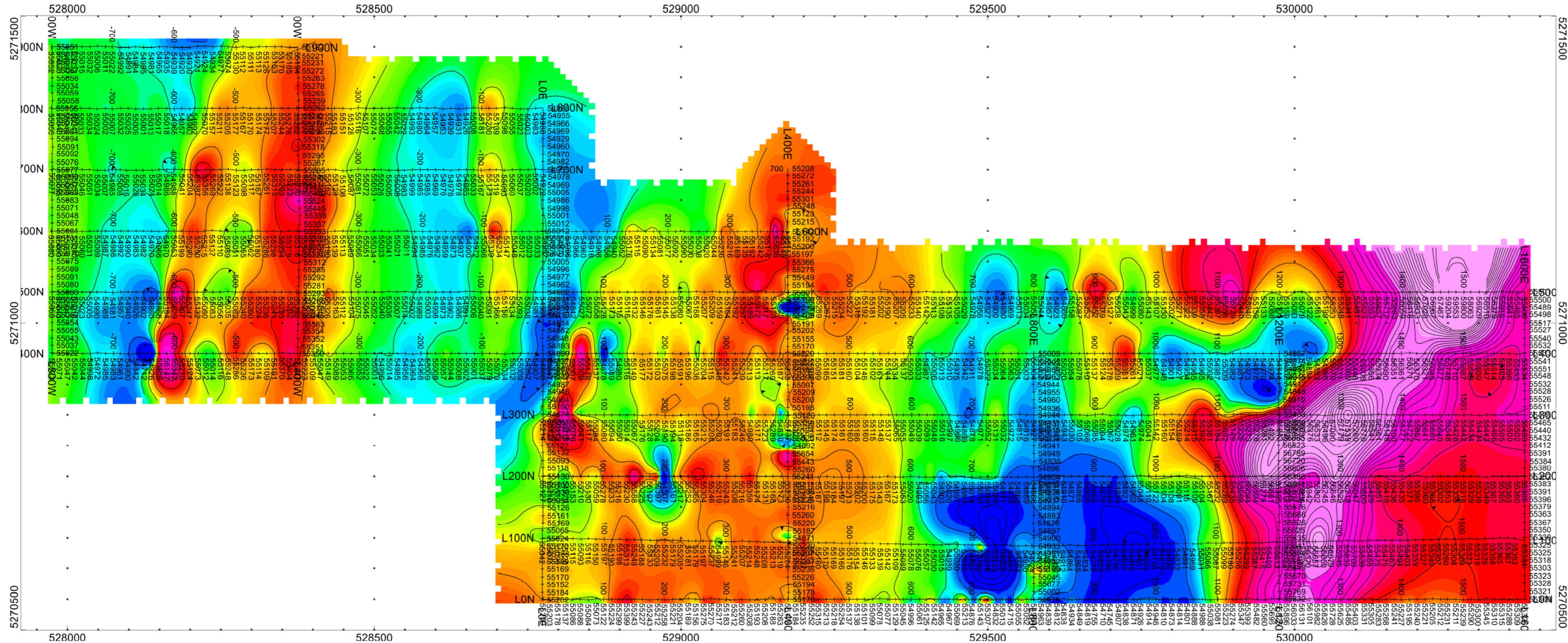
Magnetometer Plan Map (1:5000)

- 1) Q2394-Battery-Gowganda-Stubbs-Mag-Cont

Claim Map with Magnetic Traverses (1:40000)

- 2) Q2394-Battery-Gowganda-Stubbs-Traverses

TOTAL MAPS = 2



BAT+ERY

MINERAL RESOURCES

GOWGANDA PROJECT Lawson Township, Ontario

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

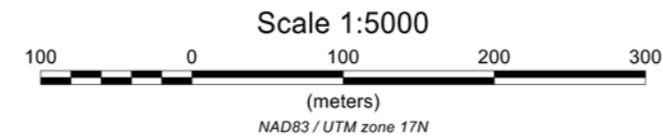
Posting Level: 0nT
Field Inclination/Declination: 74degN/12degW
Station Separation: 12.5 meters
Total Field Magnetic Contours: 50nT

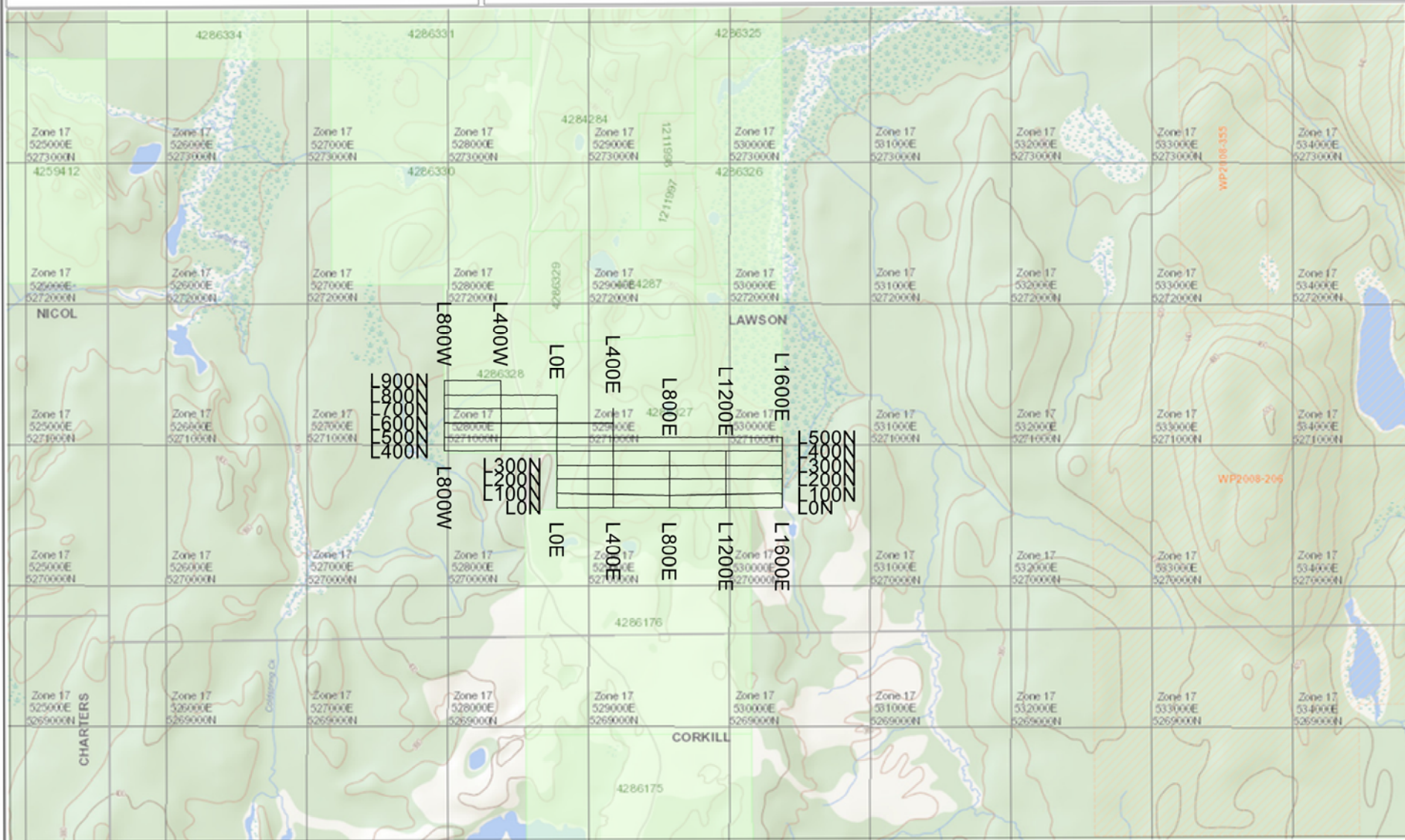
GSM-19 OVERHAUSER MAGNETOMETER v7

Operated By: Patrick McGuinty
GPS Operated By: Claudia Moraga
Processed By: C Jason Ploeger, P.Geo.
Map Drawn By: C Jason Ploeger, P.Geo.
June 2017



Drawing: Q2394-BATTERY-GOWGANDA-MAG-CONT





Legend

Administration Boundaries

- Mining Division
- Regional Geologic District
- Townships and Areas
- UTM Grid
- Geographic Lot Fabric
- Other Federal Land

Mineral Tenure Grid

- DR15 Tenure Grid

Alterations

- Immunal
- Taxic

Unpatented Claim

- Active
- Recorded
- Pending
- Disposition

Disposition

- Disposition

Disposition Symbols

- Camp
- Disposition Unresolved/Pending
- Freehold Patent Mining Rights Only
- Freehold Patent Surface Rights Only
- Freehold Patent Surface and Mining Rights
- Leasehold Patent
- Leasehold Patent Mining Rights Only
- Leasehold Patent Surface Rights Only
- Leasehold Patent Surface and Mining Rights
- License of Occupation Mining Use Only
- License of Occupation Surface Use Only
- License of Occupation Surface and Mining Rights
- License of Occupation Uses Not Specified
- Order in Council
- Taxer
- WFLA

Geology Layers

- ASR1 Sites
- ASR1 Features
- DR1 Holes
- Mineral Occurrences



Projection: Web Mercator

