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CANADIAN EXPLORATION SERVICES LTD

**BATTERY MINERAL RESOURCES
LIMITED**

**Q2406d – Elk Lake Project
Magnetometer Survey**

C Jason Ploeger, P.Geo. – August 23, 2017



Abstract

CXS was contracted by Battery Mineral Resources Limited to perform a magnetometer survey over a portion of the Elk Lake Project. Approximately 2.75 line kilometers of magnetic traverses were performed.

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the Elk Lake Project - Mickle.

1.2 CLIENT

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

1.3 LOCATION

The Elk Lake Property is located in Mickle Township, approximately 6 km west of Elk Lake, Ontario. The survey area covers parts of claims numbered 4284295 and 4284296, both located in Mickle Township, within the Larder Lake Mining Division.

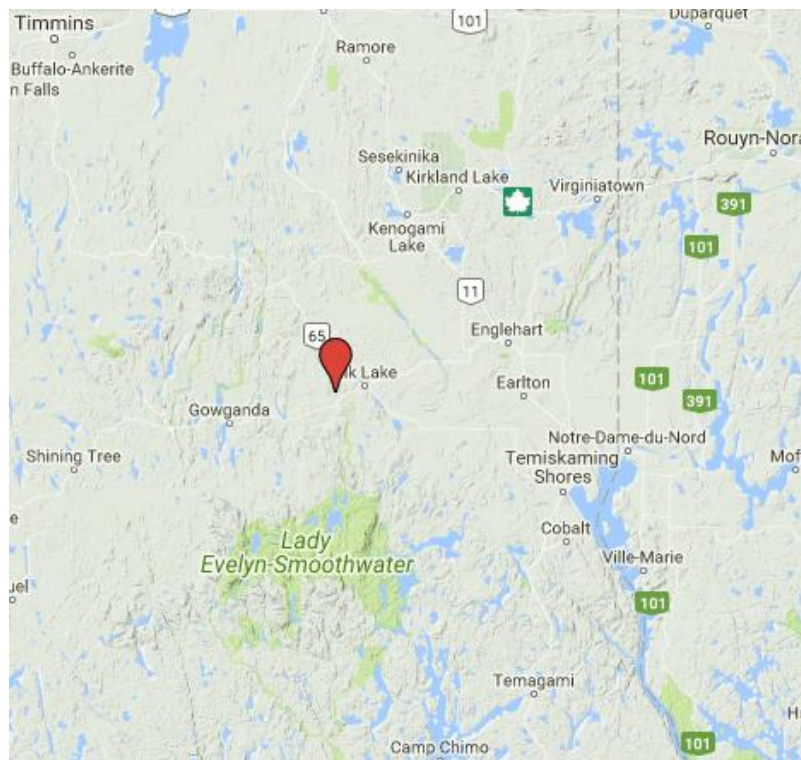


Figure 1: Location of the Elk Lake Property

1.4 ACCESS

Access to the property was attained with a 4x4 truck via a gravel road. The property is located approximately 5km west of Elk Lake on highway 560 then an additional 5km along the Silverclaim Lake access road.

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.

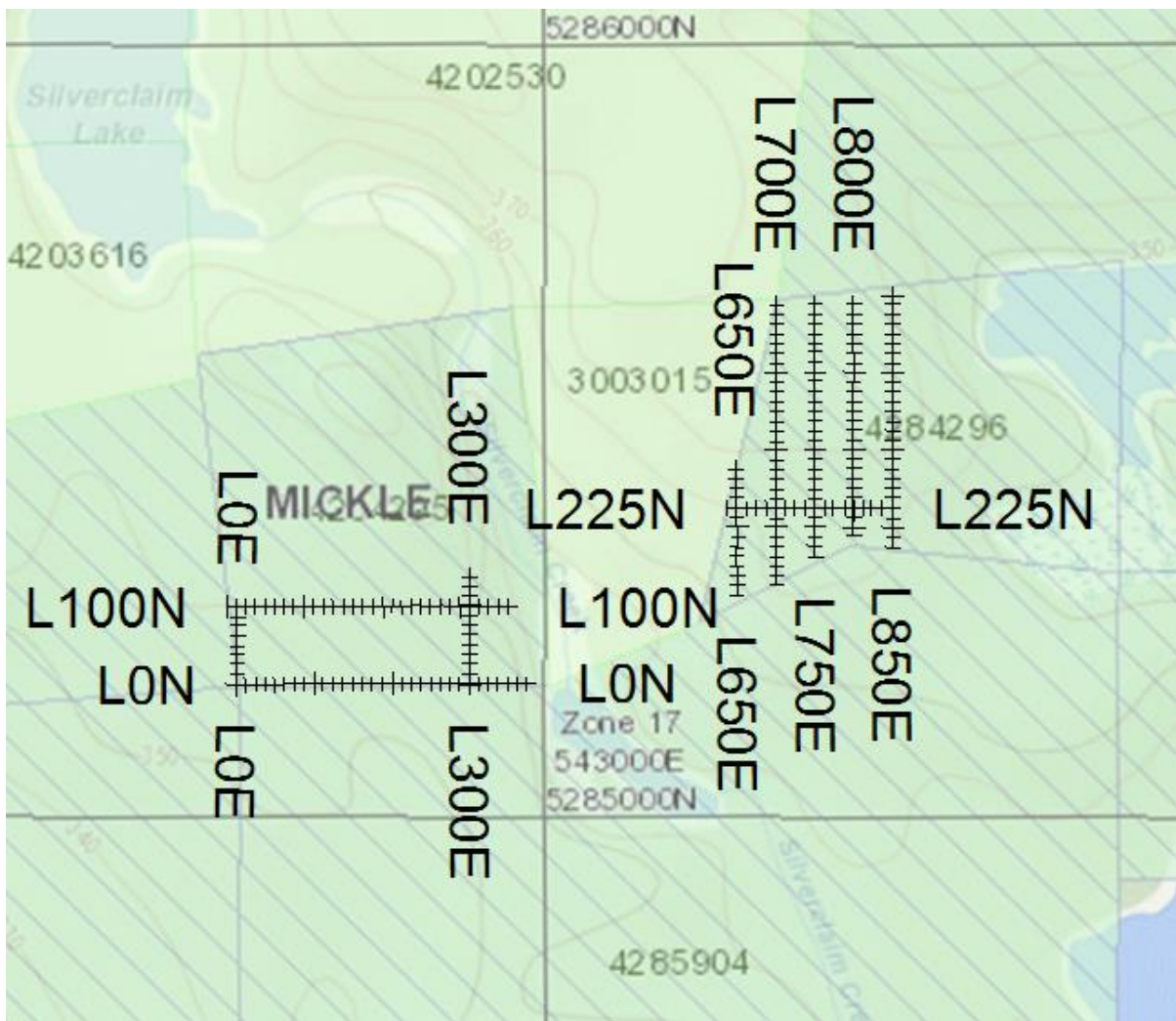


Figure 2: Claim Map with Elk Lake Traverses

2. SURVEY WORK UNDERTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
August 18, 2017	Locate survey area and begin magnetometer survey.	850E	175N	512.5N	337.5
		800E	187.5N	500N	312.5
		750E	162.5N	500N	337.5
		700E	125N	500N	375
		650E	112.5N	287.5N	175
		300E	0	150N	150
		0E	0	100N	100
		0N	0	387.5E	387.5
		100N	0	375E	375
		225N	637.5E	850E	212.5

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 2.7625 line kilometers of magnetometer was read over the Elk Lake Project on August 17, 2017. This consisted of 221 magnetometer samples taken at a 12.5 metre sample interval.

3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY

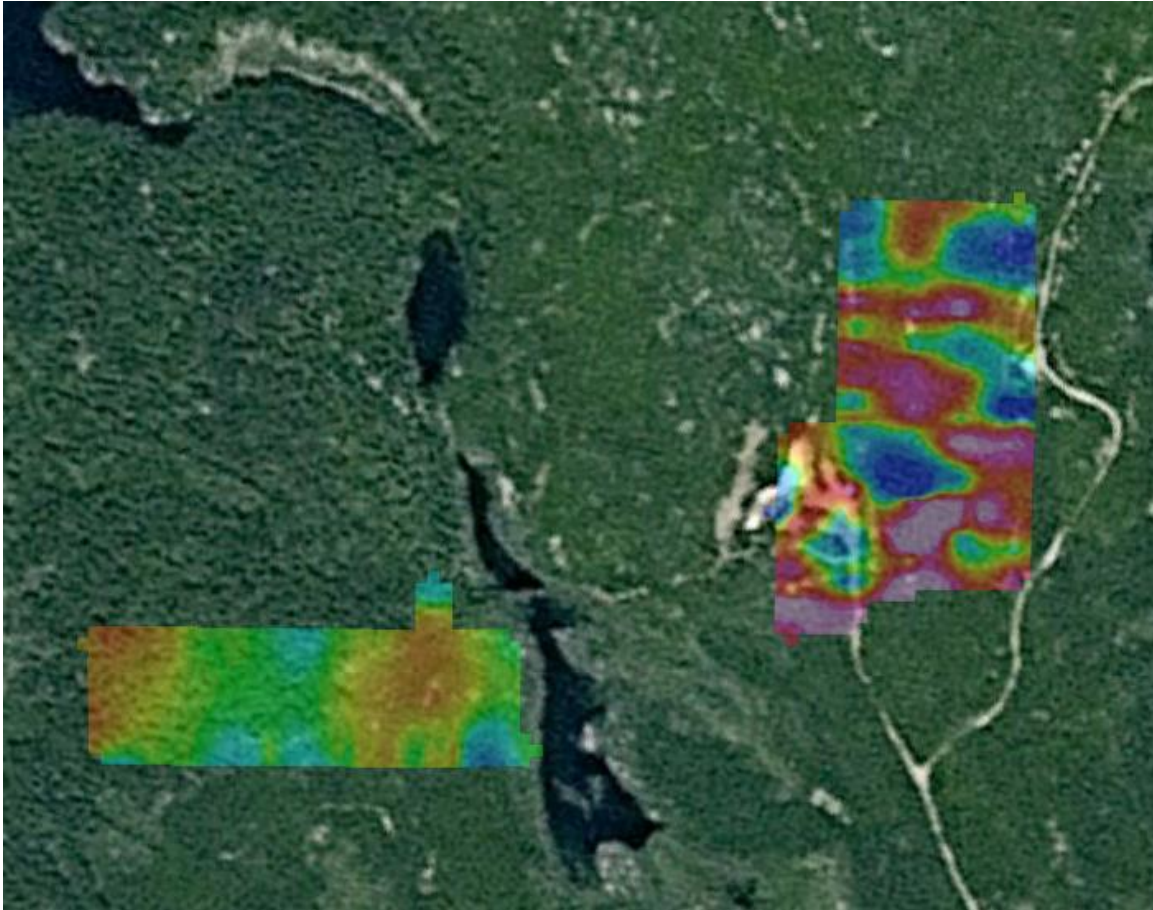


Figure 3: Magnetometer Plan on Google Earth

The survey covered a portion of claims number 4284295 and 4284296 which falls within the Elk Lake Project. The magnetometer crew reported that historical workings were encountered. These included a shaft and trenches, none of which resulted in interference with the magnetic survey.

The magnetometer survey over the east and west survey areas indicate two separate magnetic signatures. The west survey area's signature lines, 0E through 300E, appear to exhibit little variation where the east survey area indicates a strong magnetic variation.

The strong magnetic variation over the eastern survey area is similar to what is expected from the Nipissing Diabase in the region. Within this, various magnetic high and low regions can be seen. This may indicate multiple events within the intrusive. The survey crew indicated locating a historic shaft near line 650E and station 187.5N. This appears to fall along a narrow, magnetically low, trend striking ap-

proximately 70 degrees. This may represent an alteration feature. I would recommend prospecting this trend.

The west survey area exhibits a more subdued variation within the magnetic signature. This may indicate that the Nipissing intrusive dipping below it, is a second unit. This most likely represents a Huronian cover over the diabase. Two elevated magnetic regions can be seen within this region. These may represent areas where the Nipissing Diabase sill shallows below the Huronian.

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 Limited**.
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
August 23, 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 ... exceeds 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)

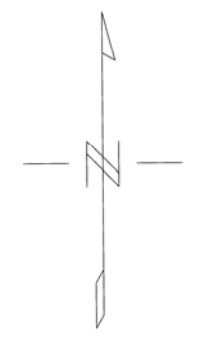
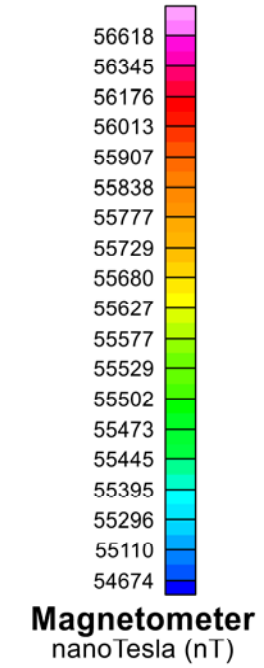
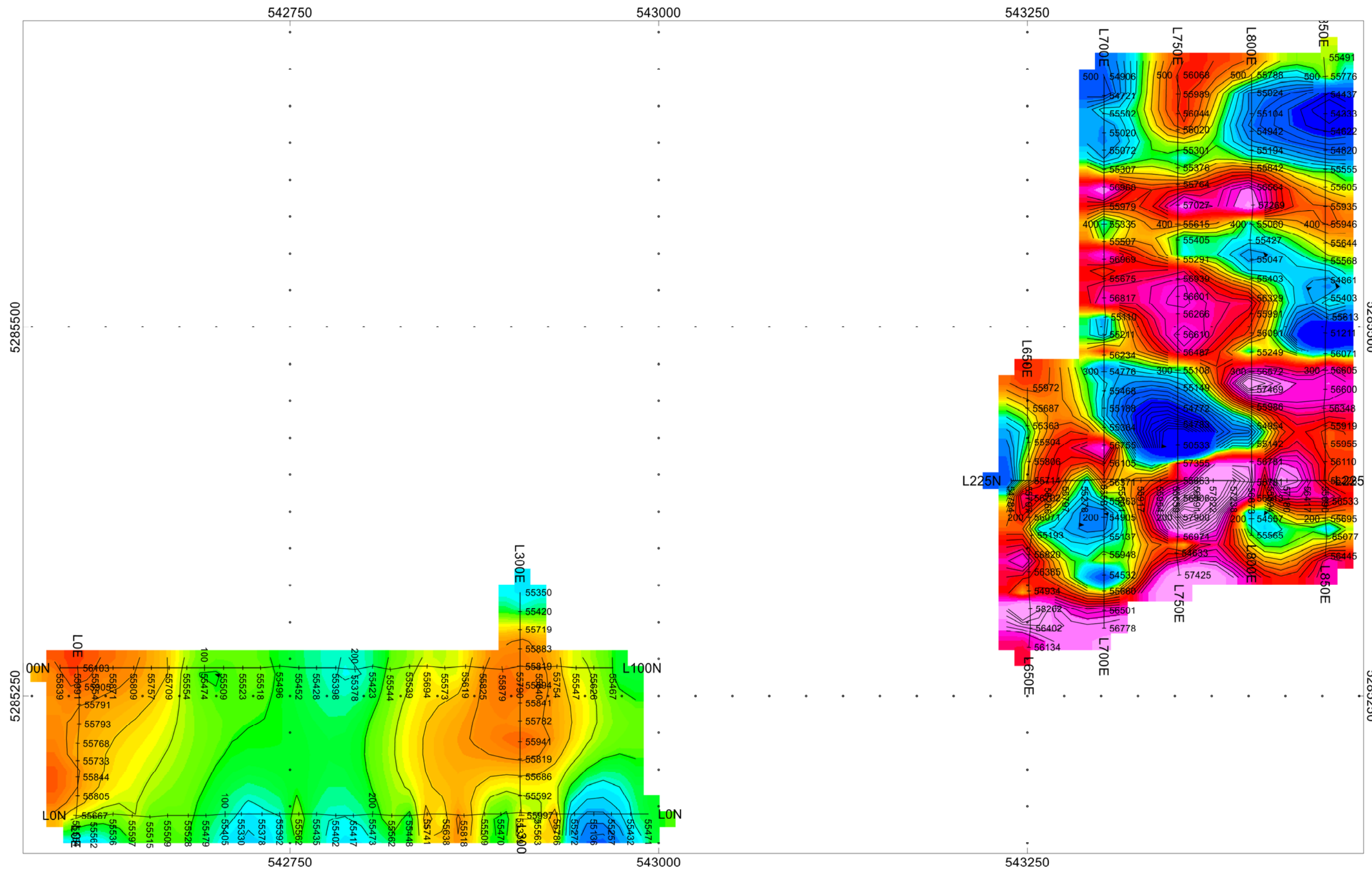
Magnetometer Plan Map (1:2500)

- 1) Q2406c-Battery-Elk Lake-Mickle-Mag-Cont

Traverse Plan Map (1:20000)

- 2) Q2406c-Battery-Elk Lake-Mickle-Traverse

TOTAL MAPS = 2



BATTERY

MINERAL RESOURCES

ELK LAKE PROJECT - MICKLE Mickle Township, Ontario

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

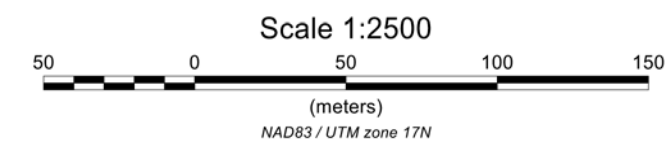
Posting Level: 0nT
Field Inclination/Declination: 74degN/12degW
Station Separation: 12.5 meters
Total Field Magnetic Contours: 100nT

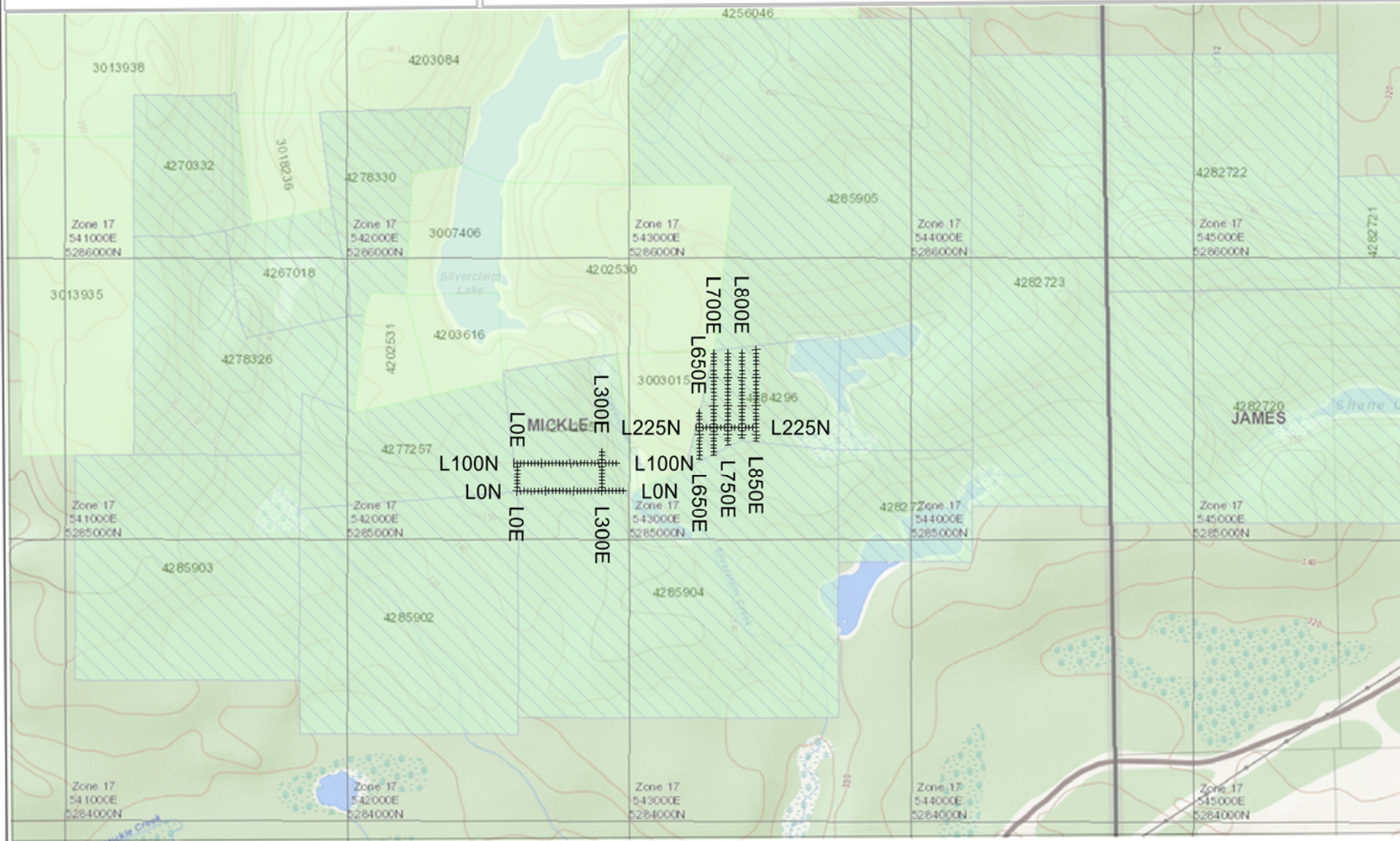
GSM-19 OVERHAUSER MAGNETOMETER v7

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



Drawing: Q2406d-Battery-Elk Lake-Mickle-Mag-Cont





Legend

Administration Boundaries

- Existing Occurrence
- Resident Geographical District
- Townships and Areas
- UTM Grid
- Geographic Lot Fabric
- Other Federal Land

Mineral Tenure Grid

- DMTC Tenure Grid

Alienations

- Withdrawal
- Notice

Unpatented Claim

- Active
- Reactivated
- Forfeited

Disposition

- Disposition

Disposition Symbols

- Case
- Disposition Unresolved/Pending
- Freehold Patent Mining Rights Only
- Freehold Patent Surface Rights Only
- Freehold Patent Surface and Mining Rights
- Land Use Permit
- 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
- Tax
- WFLA

Geology Layers

- AMS Sites
- AMS Features
- Drill Holes
- Mineral Occurrences



Projection: Web Mercator



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