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CANADIAN EXPLORATION SERVICES LTD

BATTERY MINERAL RESOURCES LTD.

**Q2372b – Iron Mask Project
HLEM Max-Min Survey**

**C Jason Ploeger, P.Ge.
Melanie Postman, B.Sc.**

April 5, 2018



Abstract

CXS was contracted by Battery Mineral Resources to perform a Max Min HLEM survey on the Iron Mask Property.

The survey failed to identify any strong anomalies.

BATTERY MINERALS RESOURCES LTD.

**Q2372b – Iron Mask Project
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**C Jason Ploeger, P.Ge.
Melanie Postman, B.Sc.**

April 5, 2018

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Iron Mask Project**

1.2 CLIENT

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

1.3 LOCATION

The Iron Mask Project is located approximately 53 km northwest of Sudbury, Ontario. The survey area covers a portion of mining claims 4281826, 4281827, 1098665, 1229443, 4271831, 1211355, 1211181, 1211361, 4281828, 1210841, 4284371, and 4248721 and a portion of disposition blocks S66022, S66020, and S66019 located in Hart Township, within the Sudbury Mining Division.

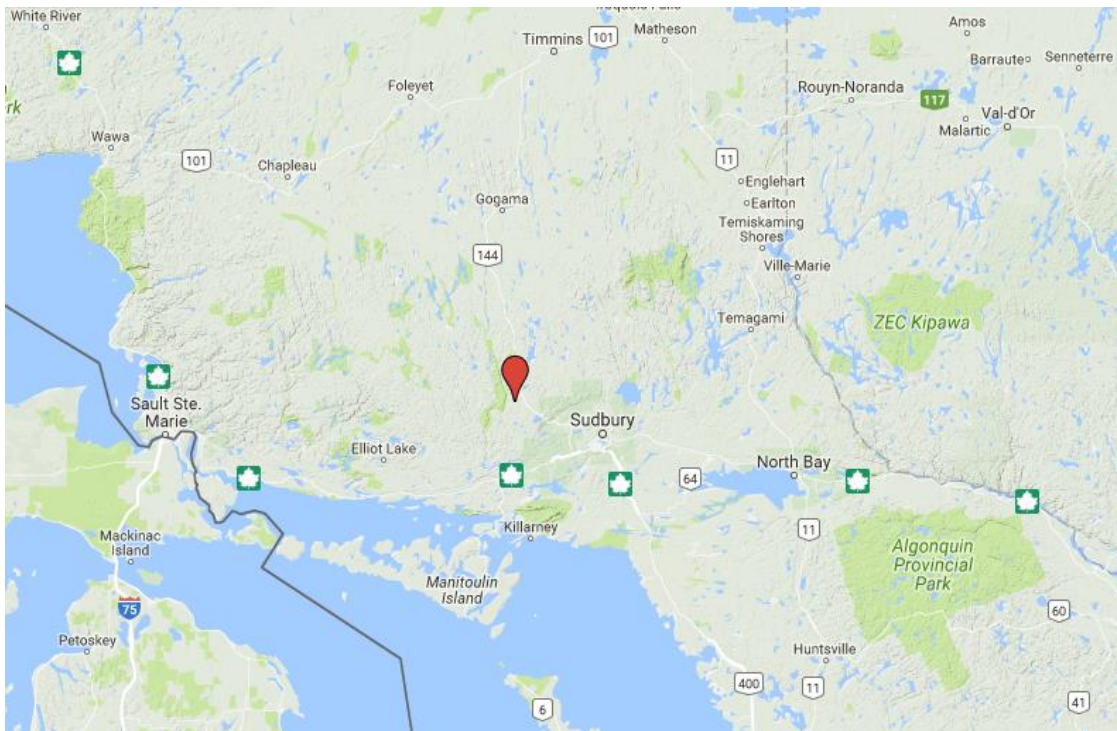


Figure 1: Location of the Iron Mask Project

1.4 ACCESS

Access to the property was via a 4x4 pickup truck and snowmobiles. Highway #144 is travelled north from Sudbury. 2 kilometers north of the town of Cartier the Cartier municipal dump road is travelled west for a short period. Parking was found along this road, just before the garbage dump. From this point snowmobiles were used for another 6 kilometers until the survey area was reached.

1.5 SURVEY GRID

The grid consists of 34.25 kilometers of previously established grid lines. The grid lines are spaced at 100-meter increments going from Line 0E (southwest) to Line 3200E (northeast), with stations picketed at 25-meter intervals along these lines from 500S (southeast) to 500N (northwest). The N40°E baseline begins in the southwest at 0E and extends to 3200E.



Figure 2: Claim Map with Cut Grid

2. SURVEY WORK UNDRTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
February 6, 2018	Mobilization. Begin max min survey.	200E	325S	450N	775
February 7, 2018	Continue max min survey.	0E	500S	500N	1000
		100E	450S	462.5N	1012.5
					2012.5
February 8, 2018	Continue max min survey.	300E	500S	175S	325
		400E	500S	412.5N	912.5
		300E	250N	450N	200
					1437.5
February 9, 2018	Continue max min survey. Demobilize.	300E	175S	250N	425
February 27, 2018	Remobilize. Continue max min survey.	500E	475S	50S	425
		600E	500S	462.5N	962.5
					1387.5
February 28, 2018	Continue max min survey.	500E	50S	500N	550
		700E	500S	150S	350
		800E	500S	50N	550
					1450
March 1, 2018	Continue max min survey.	700E	150S	500N	650
		800E	50N	487.5N	437.5
		900E	150S	500N	650
					1737.5
March 2, 2018	Continue max min survey.	900E	500S	150S	350
March 3, 2018	Continue max min survey.	1000E	600S	100S	500
		1100E	500S	500N	1000
					1500

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
March 4, 2018	Continue max min survey.	1000E	25N	600N	575
		1200E	500S	175S	325
		1300E	500S	0N	500
					1400
March 5, 2018	Continue max min survey.	1300E	0N	500N	500
		1200E	175S	500N	675
		1400E	500S	25N	525
					1700
March 6, 2018	Continue max min survey.	1400E	25N	450N	425
		1500E	125S	450N	575
		1600E	125S	250N	375
		1700E	250S	150N	400
					1775
March 7, 2018	Continue max min survey. Demobilization.	1900E	462.5S	500N	962.5
		1800E	225S	500N	725
					1687.5
March 12, 2018	Mobilization and setup of equipment to Windy Lake.				-
March 13, 2018	Continue max min survey.	1700E	150N	500N	350
		1600E	250N	400N	150
		2000E	600S	50S	550
					1050
March 14, 2018	Continue max min survey.	2000E	50N	600N	550
		2100E	325S	500N	825
		2200E	475S	50N	525
					1900
March 15, 2018	Continue max min survey.	2200E	50N	500N	450
		2300E	500S	500N	1000
					1450
March 16, 2018	Continue max min survey.	2400E	487.5S	25N	512.5
		2500E	500S	500N	1000

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
					1512.5
March 17, 2018	Continue max min survey.	2400E	25N	500N	475
March 18, 2018	Test lines.				-
March 19, 2018	Test lines.				-
March 20, 2018	Test lines.				-
March 21, 2018	Complete max min survey. Demobilize.	2600E	175N	500N	325
		2700E	500S	500N	1000
					1325
Total survey km	25.35				

Table 1: Survey Log

2.2 PERSONNEL

Gerry Dumouchel of Ottawa, Ontario, and Sebastian Braganza of Kingston, Ontario, alternated between operating the Max Min receiver and transmitter.

2.3 SURVEY SPECIFICATIONS

Max Min Survey

The survey was conducted with an Iris Promis Multi Frequency EM System. Frequencies 440Hz, 880Hz, and 1760Hz were used with a 100m coil separation. A Suunto PM-5 clinometer was used to measure slopes between picketed stations. These slopes were averaged over 100m to determine the correct tilt readings.

A total of 25.35-line kilometers of Max-Min was read between February 6th and March 21st, 2018. This consisted of 2028 samples taken in 440Hz, 880Hz, and 1760Hz at a 12.5-meter sample interval. A comparison to the Apex MaxMin was also performed, the final total of MaxMin performed was 28.4625 km.

3. OVERVIEW OF SURVEY RESULTS

3.1 ANOMALY NOTES AND SUMMARY INTERPRETATION

No culture was encountered that would have influenced the Max Min data. A shaft, pits, and trenches were noted around the baseline on line 200E-400E and on lines 1600E. The area was also found to be topographically challenging for the Max Min system.

No strong anomalous signatures were noted over the survey area. Since a response was expected from this apparent skarn, a test was conducted to compare the Iris Promis EM system data with an Apex Max Min unit. This test was performed over three lines in an area of mineralization on line 200E, 300E, and 400E. The results repeated that of the Iris Promis EM system. As seen in figures 3, 4, and 5 the two Max Min systems appeared to follow the same trends.

No strong anomalous EM signatures were encountered on the grid. After seeing the lack of the expected strong anomalous EM signatures, a decision was made to terminate the survey. Therefore, data was not collected over every survey line on the grid.

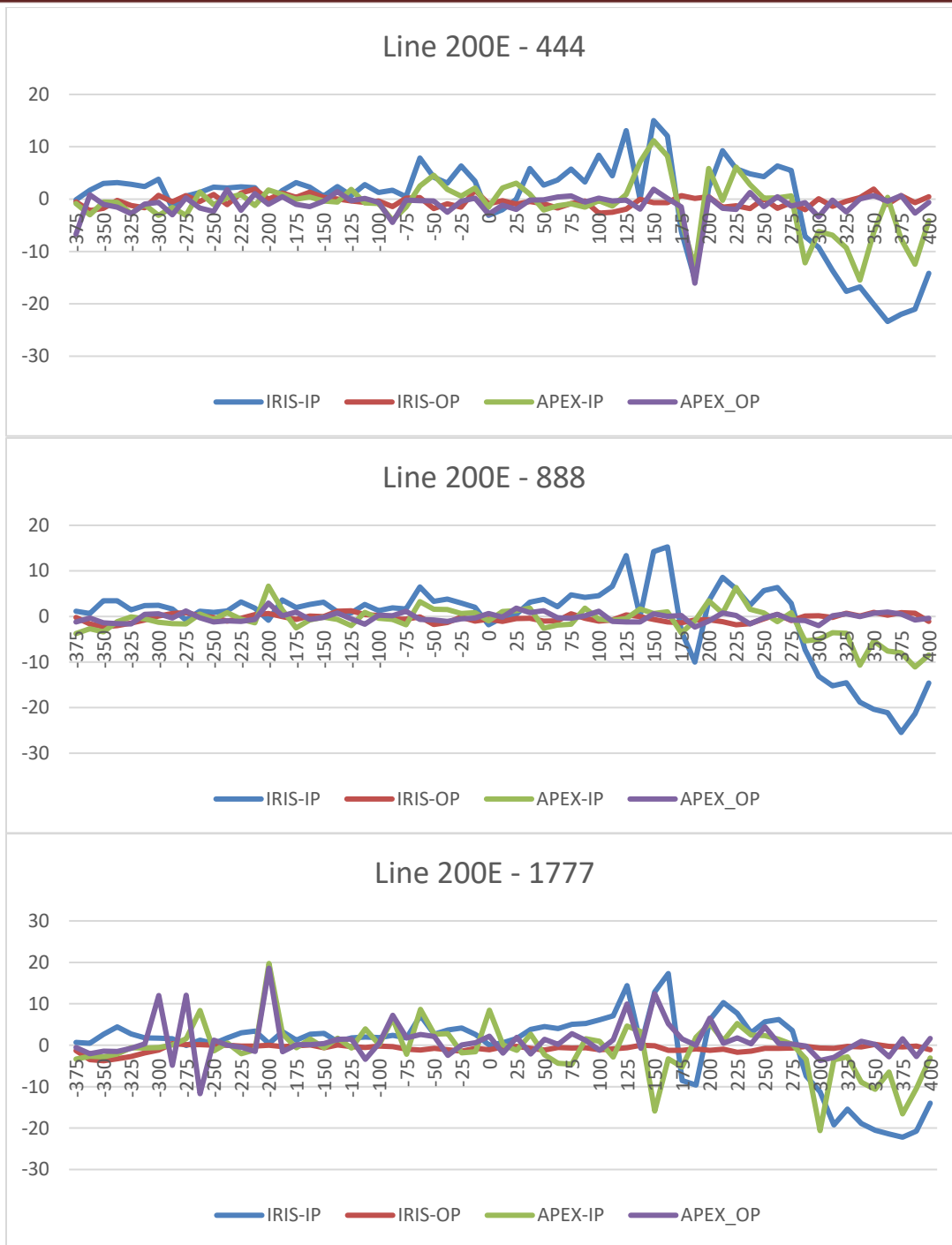


Figure 3: Line 200E - Iris vs Apex Comparison

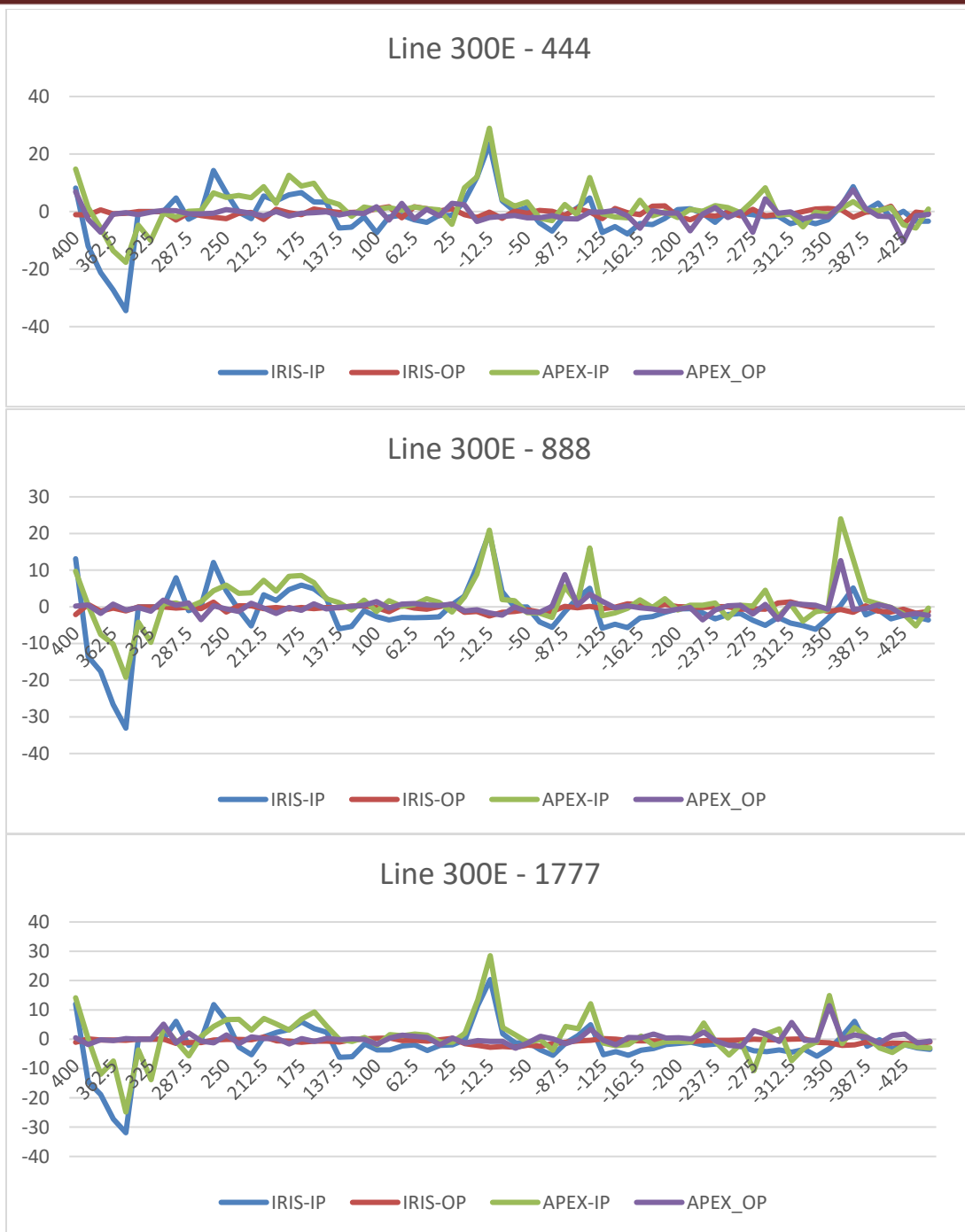


Figure 4: Line 300E - Iris vs Apex Comparison

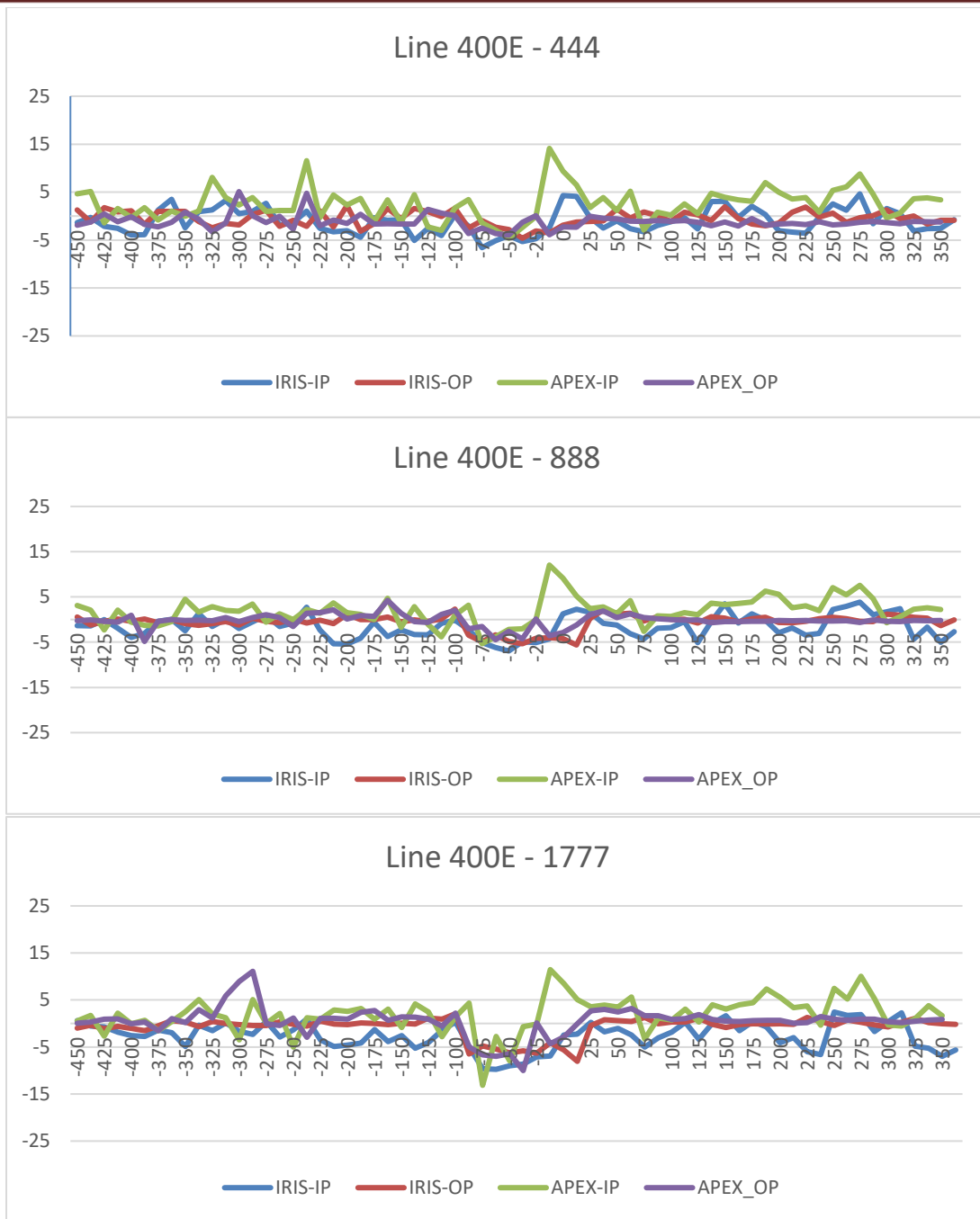


Figure 5: Line 400E - Iris vs Apex Comparison

3.2 RECOMMENDATIONS

The Max Min data collected indicates that the Iron Mask zone does not respond as well as expected to Max Min. As a result, the Max Min program was terminated prior to completion. I would recommend inputting the data into the Maxwell software to determine if a weak response can be modeled from the data.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Melanie Postman, hereby declare that:

1. I am a soon-to-be Geoscientist-in-Training with residence in Virginiatown, Ontario and am presently employed as a Junior Geophysicist with Canadian Exploration Services Ltd. of Larder Lake, Ontario.
2. I graduated with a Bachelor of Science Honors specialization degree in geophysics for professional registration from the University of Western Ontario, in London Ontario, in 2017.
3. I am currently undergoing the application process to register as a Geoscientist-in-Training to later become a practicing member of the Association of Professional Geoscientists.
4. I have previous geophysical work experience during and following my education.
5. I do not have nor expect an interest in the properties and securities of **Battery Mineral Resources Limited**
6. 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 opinion based on my consideration of the information available to me at the time of writing this report.

Melanie Postman, B.Sc.
Junior Geophysicist
(non-professional)

Larder Lake, ON
April 5, 2018

STATEMENT OF QUALIFICATIONS

I, C. Jason Ploeger, hereby declare that:

7. 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.
8. I am a Practising Member of the Association of Professional Geoscientists, with membership number 2172.
9. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
10. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
11. 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.
12. I do not have nor expect an interest in the properties and securities of **Battery Mineral Resources Limited**
13. 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.



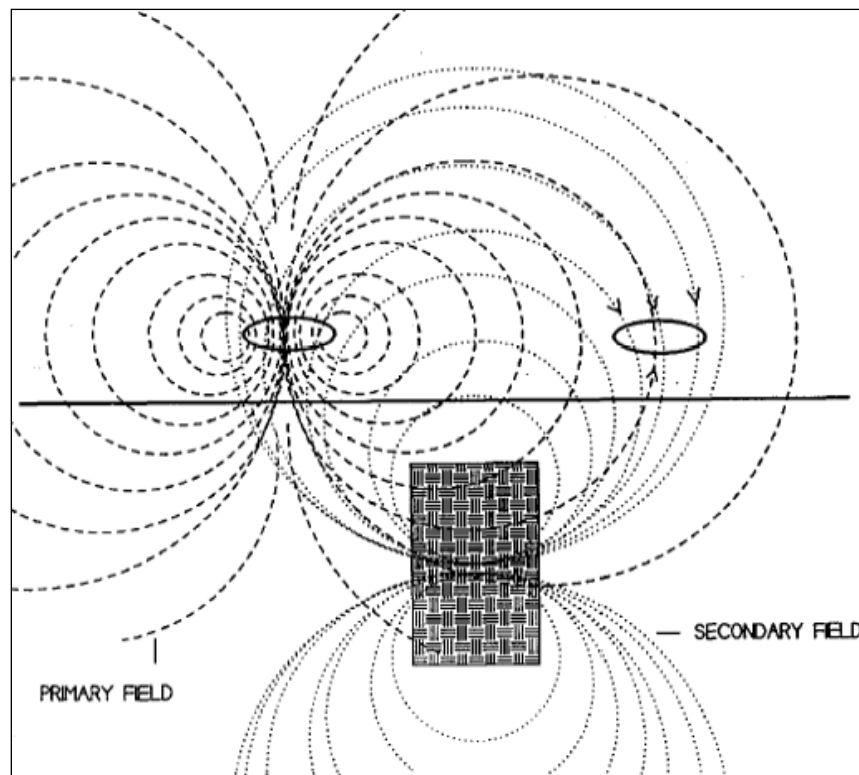
C. Jason Ploeger, P.Geo., B.Sc.
Geophysical Manager
Canadian Exploration Services Inc.

Larder Lake, ON
April 5, 2018

APPENDIX B**THEORETICAL BASIS AND SURVEY PROCEDURES****HLEM Electromagnetic**

The HLEM method involves the use of a pair of separated horizontal coils (Figure MMI). Most commonly, the surveys are conducted in the frequency domain. In this method, a sine wave of variable frequency is sent through one of the coils to create a time-varying vertical magnetic dipole source. The second coil is a receiver which detects both the primary signal from the transmitting coil and a secondary signal created by magnetic induction in a conductive target in the earth.

The HLEM method requires that a sample of the transmitted signal be sent along a wire to the receiver where it is used to synchronize the phase of the receiver with the transmitter. This permits the receiver to remove the effect of the transmitter signal (primary field) and to split the remaining secondary field into two components. One phase with the primary field (in-phase component). The second component is the portion of the secondary field which lags the primary field by one quarter cycle (90° - quadrature component). The ratio of the in-phase to quadrature components is used to determine the electrical conductance of a target.

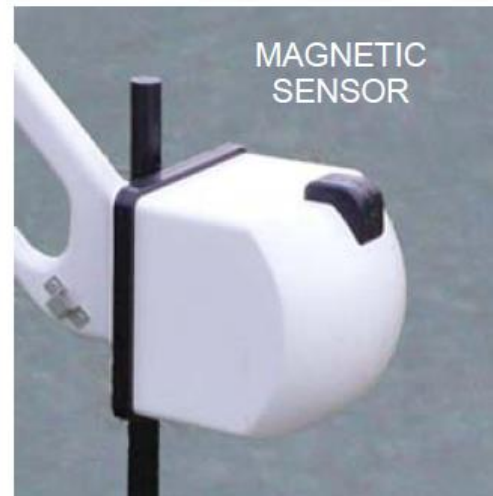
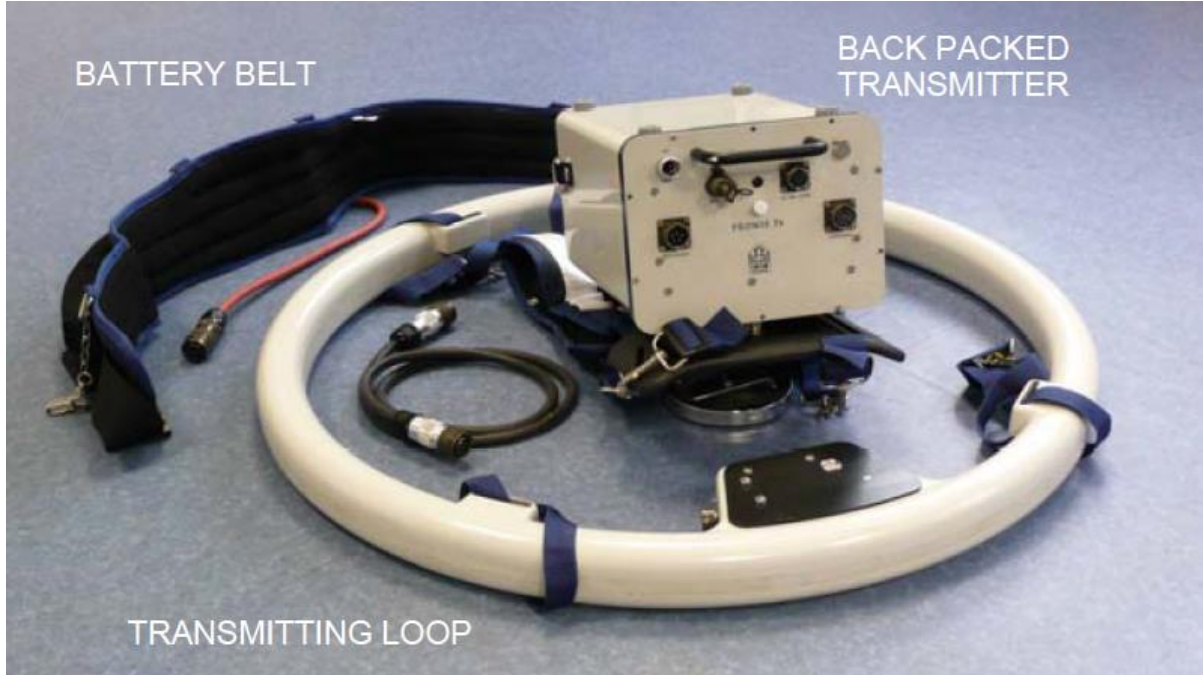


MMI: HLEM source field

HLEM instruments remove the primary field from the signal to leave only the secondary field. By convention, a secondary field in the same direction as the primary field is recorded as positive while a secondary field in the opposite direction to the primary field is recorded as negative. HLEM data is commonly plotted as profiles with the reading plotted at the midpoint between the transmitter and receiver. The reason for this is that the response from a steeply dipping conductor, the most common target of this method, is strongest when the two coils straddle the conductor.

APPENDIX C

IRIS PROMIS MULTI FREQUENCY EM SYSTEM



Specifications

TRANSMITTER

- Power supply: NiMh battery belt (10 Ah)
- 200 readings typ. autonomy for 10 frequencies
- 500 readings, 3 freq., 100m spacing, at 20°C
- 10 frequencies from 110 Hz to 56 320 Hz
- Magnetic moments:
 - 360 Am² @ 110 Hz
 - 320 Am² @ 220 Hz
 - 280 Am² @ 440 Hz
 - 235 Am² @ 880 Hz
 - 220 Am² @ 1 760 Hz
 - 160 Am² @ 3 520 Hz
 - 110 Am² @ 7 040 Hz
 - 60 Am² @ 14 080 Hz
 - 30 Am² @ 28 160 Hz
 - 15 Am² @ 56 320 Hz
- 2 inclinometers for horizontal position
- 2 leds, green & red for end / start of reading
- Back packed transmitter: 30x20x20cm, 5.8kg
- Loop: 75cm diameter, 7kg; Battery belt: 4kg
- Optional loop: 1.3m diameter, 12kg, for doubling the magnetic moments of the 75cm loop

RECEIVER

- Control of complete system by microprocessor
- Four simultaneous channels for 3 magnetic components H_x, H_y, H_z, and the current
- Selection of number of frequencies to measure
- 16 key keyboard: graphic display 12cm diagonal
- A/D converter: 16 bits; dynamic range: 24 bits
- Resolution: 0.01% of primary field
- 50 Hz notch filters; overload detection
- 2 inclinometers for horizontal position, gps input
- Power supply: internal NiMh battery
- Autonomy: 900 data of 10 frequencies (20°C)
- Temperature range: -20°C, +70°C
- Dimensions: 30x15x20cm; weight 5kg
- Magnetic sensor: 20x20x20cm, 2.6kg

MEASURING PROCESS

- Digital synchronous detection

-
- Digital filtering of harmonics
 - Computation of received frequency
 - Processing for eliminating noisy data
 - Selection of stacking number for each frequency
 - Data storage: 20 000 readings capacity
 - Stored parameters: in-phase and out-of-phase parts of the three magnetic components Hx, Hy, Hz, standard deviation, tilt angles of transmitter & receiver, battery levels, temperature, gps data

TRANSMITTER RECEIVER CABLE

- Cable for distance setting, for transmitter control and for phase reference
- Length: 20, 50, 100, 200, 400m, other on request

APPENDIX D

LIST OF MAPS (IN MAP POCKET)

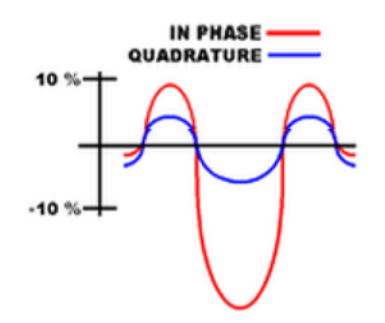
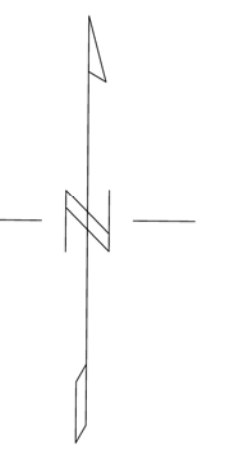
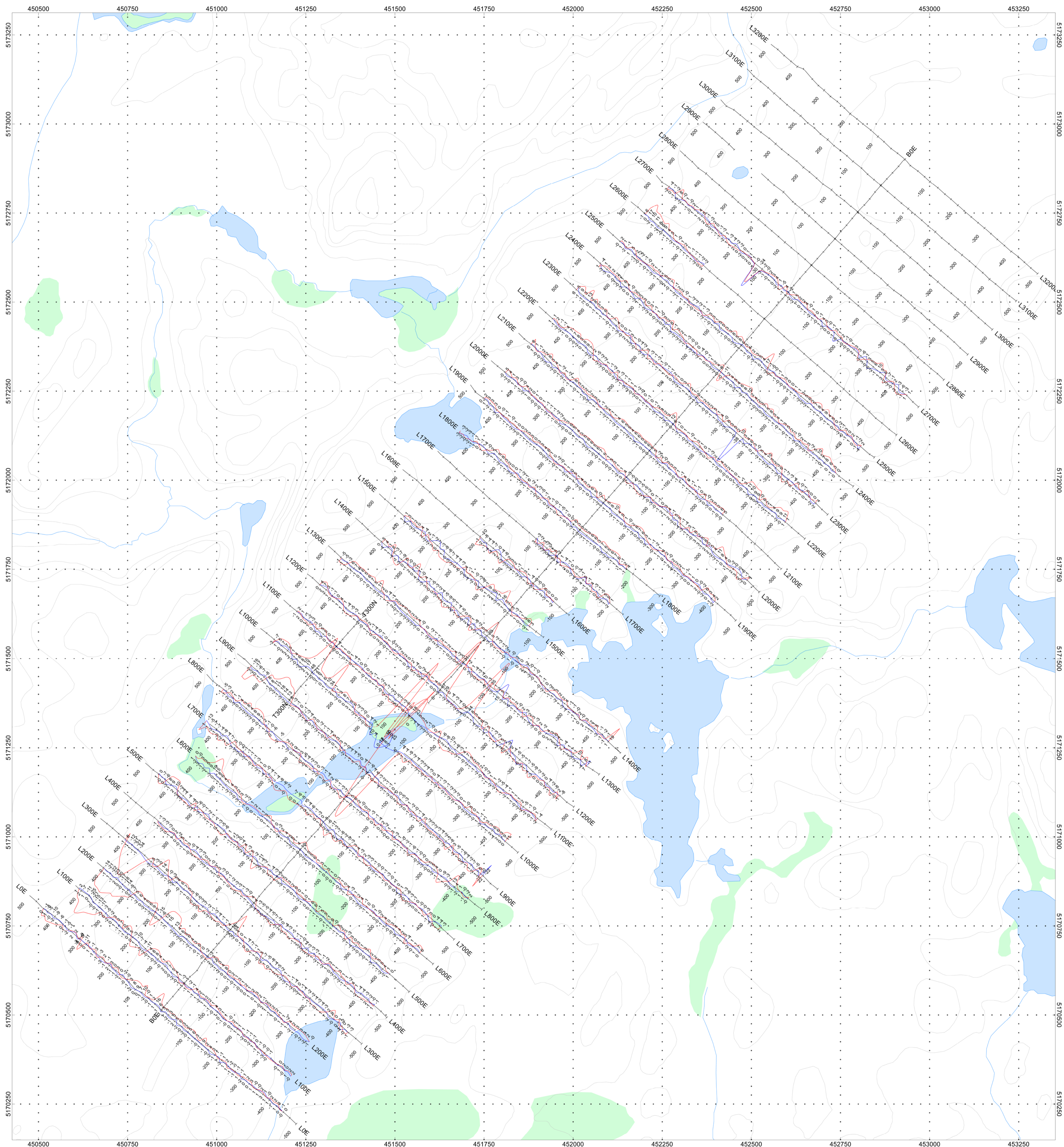
Posted profiled Max-Min plan maps (1:5000)

- 1) Q2372b-Battery-IronMask-MaxMin-440
- 2) Q2372b-Battery-IronMask-MaxMin-880
- 3) Q2372b-Battery-IronMask-MaxMin-1760

Claim Map with Traverses (1:40000)

- 4) Q2372b-Battery-IronMask-Grid

TOTAL MAPS = 4



BATTERY

MINERAL RESOURCES

IRON MASK PROJECT Hart Townships, Ontario

MAX-MIN PROFILED PLAN MAP
440 Hz - 100m Cable Separation

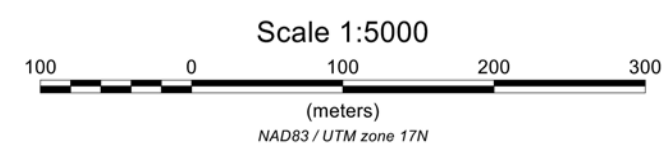
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Quadrature: Posted Left/Top (Blue)

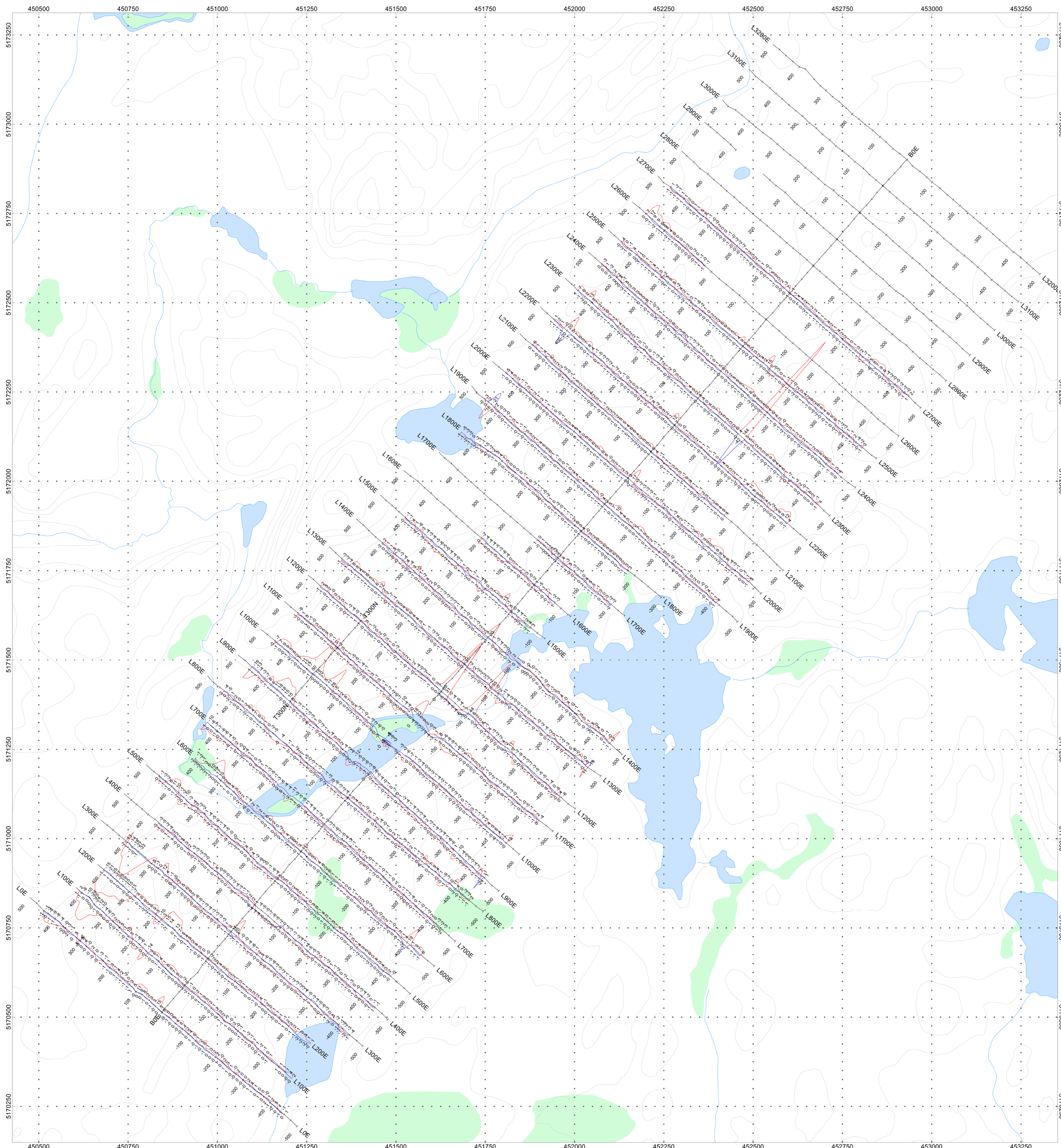
Vertical Profile Scales: 2%/mm
Vertical Quadrature Profile Scales: 2%/mm

Station Separation: 12.5 meters
Posting Level: 0

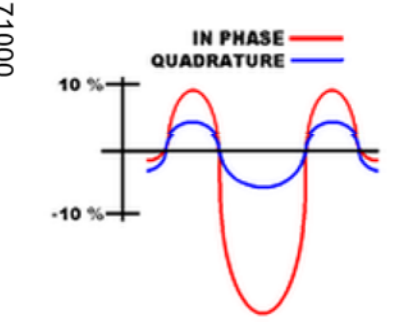
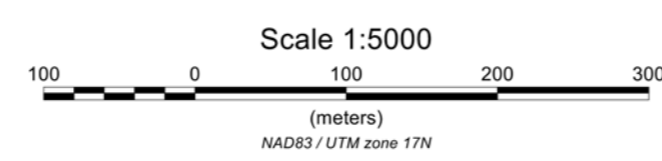
APEX PARAMETRICS MAXMIN II

Operated By: Gerry Dumouchel and
Sebastian Braganza
Processed By: C Jason Ploeger, P.Geo.
Map Drawn By: Melanie Postman, B.Sc.
April 2018





5173250
5173000
5172750
5172500
5172250
5172000
5171750
5171500
5171250
5171000
5170750
5170500
5170250



BATTERY

MINERAL RESOURCES

IRON MASK PROJECT
Hart Townships, Ontario

MAX-MIN PROFILED PLAN MAP
880 Hz - 100m Cable Separation

In Phase: Posted Right/Bottom (Red)
Quadrature: Posted Left/Top (Blue)

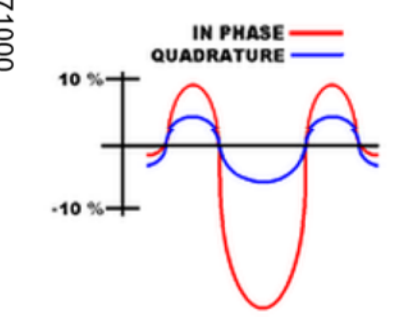
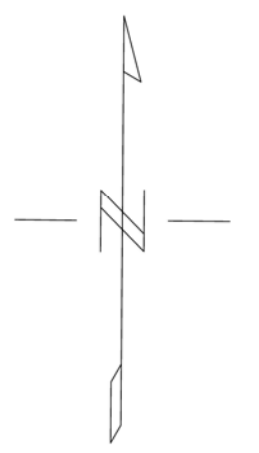
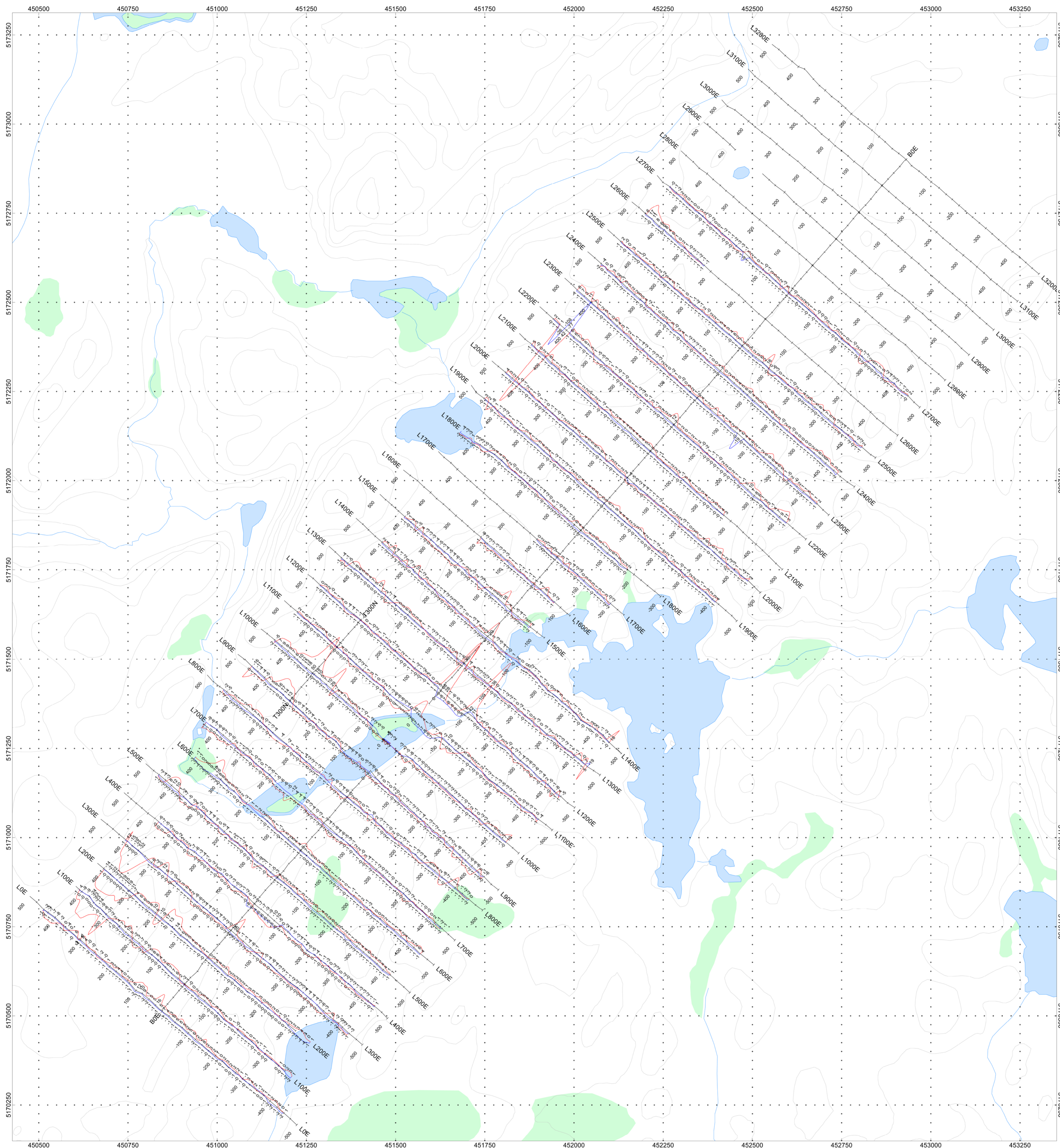
Vertical Profile Scales: 2%/mm
Vertical Quadrature Profile Scales: 2%/mm

Station Separation: 12.5 meters
Posting Level: 0

APEX PARAMETRICS MAXMIN II

Operated By: Gerry Dumouchel and Sebastian Braganza
Processed By: C Jason Ploeger, P.Geo.
Map Drawn By: Melanie Postman, B.Sc.
April 2018





BATTERY

MINERAL RESOURCES

IRON MASK PROJECT Hart Townships, Ontario

MAX-MIN PROFILED PLAN MAP
1760 Hz - 100m Cable Separation

In Phase: Posted Right/Bottom (Red)
Quadrature: Posted Left/Top (Blue)

Vertical Profile Scales: 2%/mm
Vertical Quadrature Profile Scales: 2%/mm

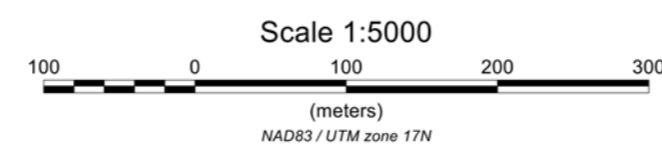
Station Separation: 12.5 meters
Posting Level: 0

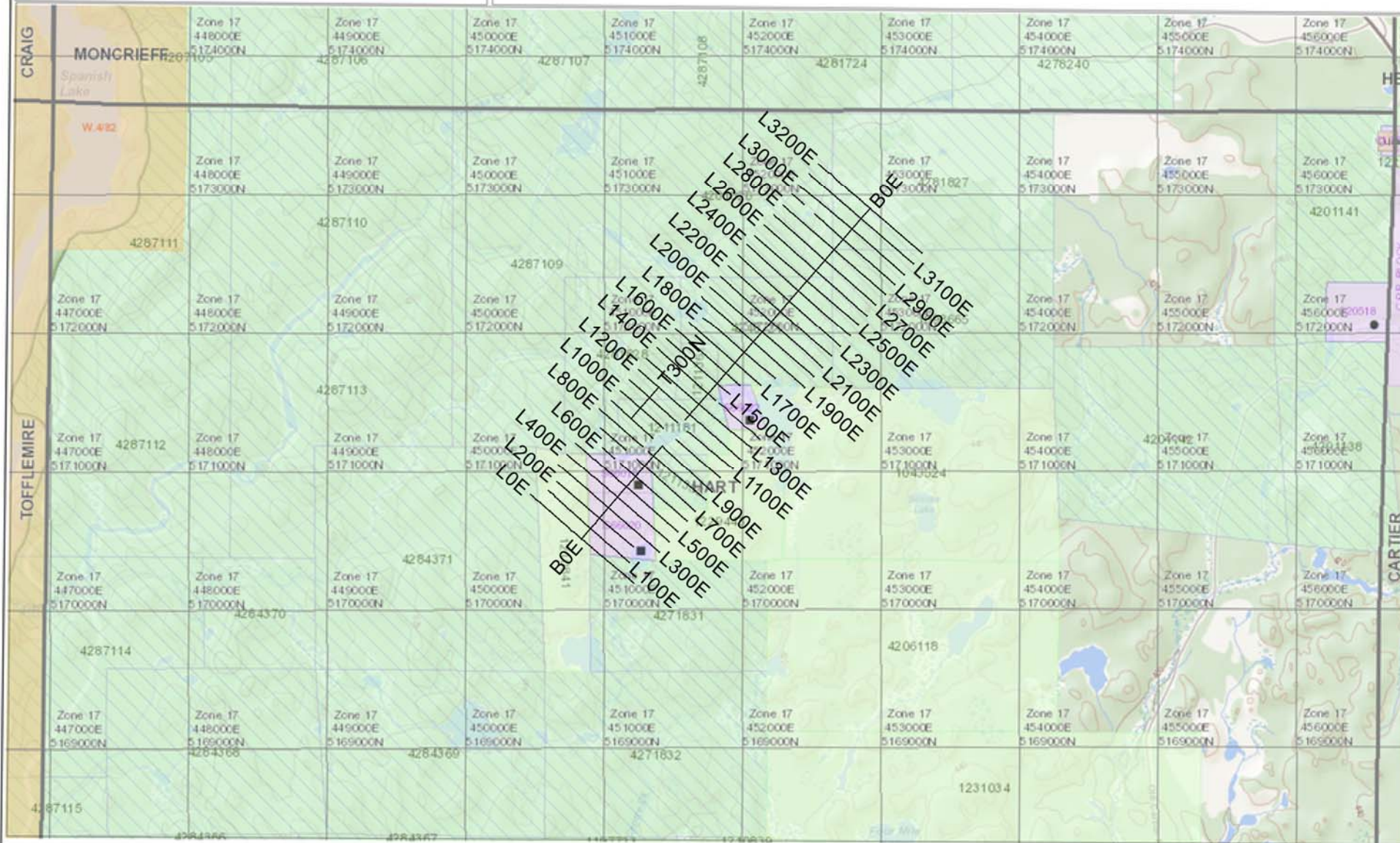
APEX PARAMETRICS MAXMIN II

Operated By: Gerry Dumouchel and
Sebastian Braganza
Processed By: C Jason Ploeger, P.Geo.
Map Drawn By: Melanie Postman, B.Sc.
April 2018



Drawing: Q2372b-Battery-IronMask-MaxMin-1760





Legend

- Administration Boundaries**
 - Mining Division
 - Resident Geological District
 - Townships and Areas
 - UTM Grid
 - Geographic Lat/Long
 - Other Federal Land
- Mineral Tenure Grid**
 - DMTG Tenure Grid
- Alterations**
 - Withdrawal
 - Notice
- Unpatented Claim**
 - Active
 - Recorded
 - Pending
- Disposition**
 - Disposition
- Disposition Symbols**
 - Camp
 - Disposition Unknown/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
 - Tower
 - WPA
- Geology Layers**
 - 4000 Series
 - DBH Features
 - DBH Holes
 - Mineral Occurrences



Projection: Web Mercator



The Ontario Ministry of Northern Development and Mines shall not be liable in any way for the use of, or reliance upon, this map or any information on this map. This map should not be used for: navigation, a plan of survey, routes, nor locations.
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