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BRIAN FOWLER

Magnetometer and VLF EM Surveys Over the

LITTLE STEEL GRID
Tuuri Township, Ontario

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the Little Steel Property.

1.2 CLIENT

Brian Fowler

Apt. 17, 30 Alexander Ave.
General Delivery
Pinawa, Manitoba
R0E 1L0

1.3 LOCATION

The Little Steel Property is located in the Tuuri Township within the Thunder Bay Mining Division. The property is located approximately 40km west of Marathon and is comprised of mining claim numbered 4240819.

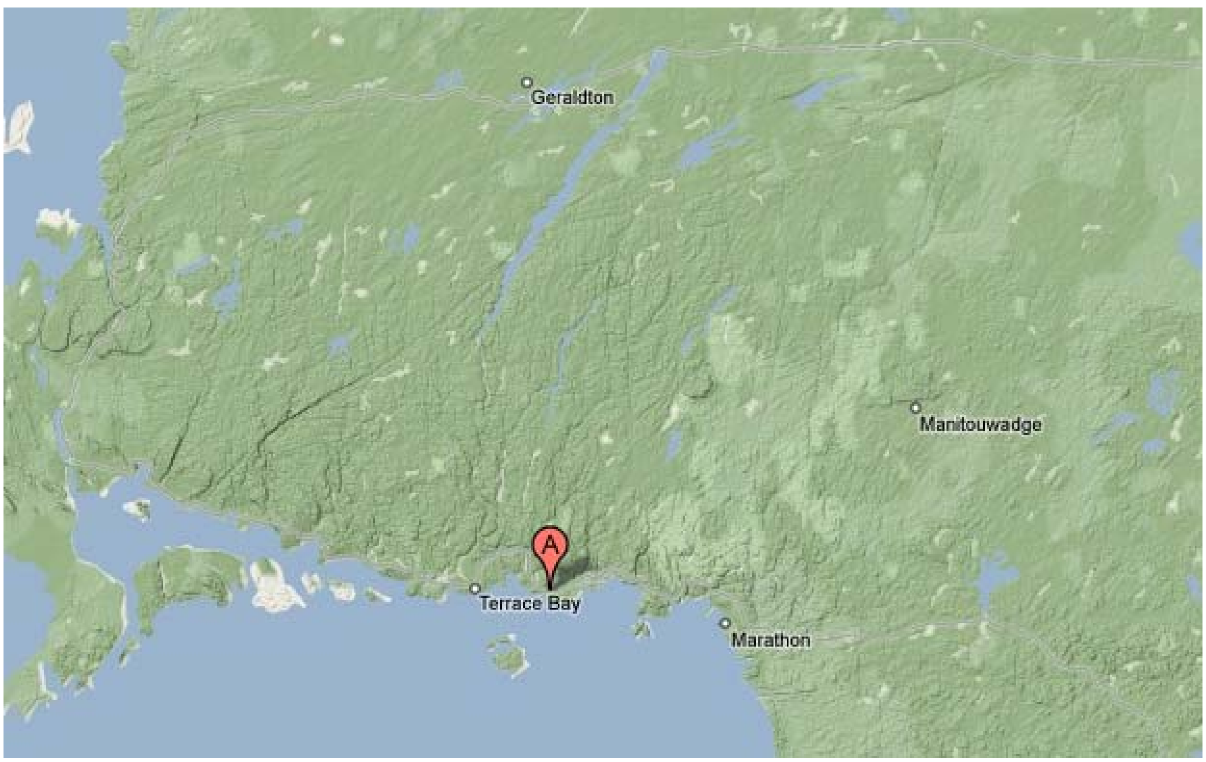

Figure 1: General Location of Little Steel Grid

1.4 ACCESS

The property is best reached by driving 30 kilometers east on highway 17 from the town of Terrace Bay. At this point, a snow-plow turn around is located on the south side of the highway. From here a 200m walk southward down a trail will lead to the grid.

1.5 Survey Grid

The grid was established prior to survey execution and consisted of 1.0 line kilometers of cut grid lines. The grid lines were spaced at 50 meter intervals with the stations picketed at 25m intervals with a baseline running at 62°N for a distance of 300m.

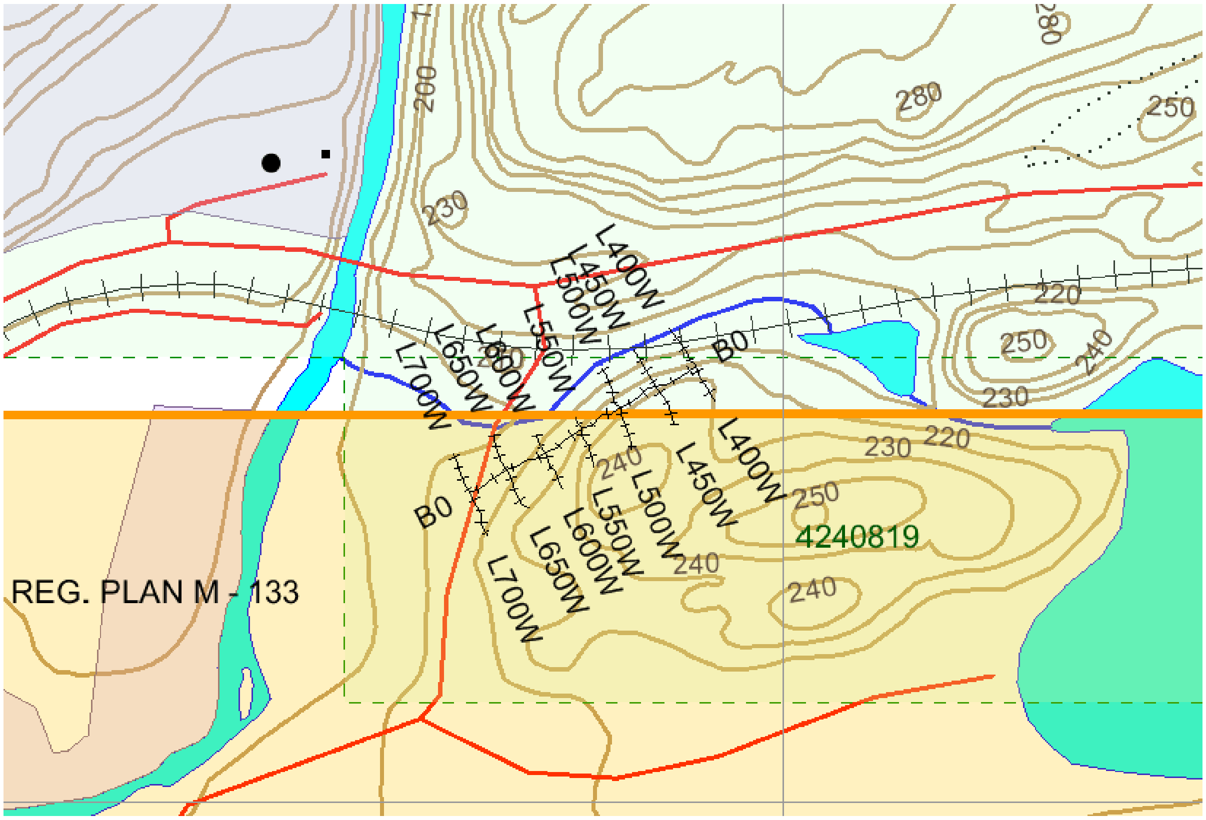

Figure 2: Claim Map with Little Steel Grid

2. SURVEY WORK UNDERTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
19 August 2010	Locate survey area and read grid.	700W	50S	50N	100
		650W	50S	50N	100
		600W	50S	50N	100
		550W	50S	50N	100
		500W	50S	50N	100
		450W	50S	50N	100
		400W	50S	50N	100
		0	700W	400W	300

Table 1: Survey log

2.2 PERSONNEL

Jason Ploeger of Larder Lake, Ontario, conducted all of the magnetic and VLF EM data collection.

2.3 SURVEY SPECIFICATIONS

The magnetic and VLF EM surveys were conducted with a GSM-19 v7 Overhauser magnetometer with a second GSM-19 v7 Overhauser magnetometer as base station for diurnal correction.

A total of 1 line kilometer of magnetometer/VLF EM survey was read on the 19th of August, 2010. This consisted of approximately 80 magnetometer/VLF EM samples with a 12.5m sample interval.

3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY INTERPRETATION

The strongest magnetic response occurs in the vicinity of line 400W and 25S. This response correlates with an east-west trending VLF EM response that appears to be the railway. This strong magnetic response most likely represents a cultural source associated with the railway such as a railway truss.

Magnetically elevated regions occur within the survey area, however with the short line extents, trends cannot be established.

The only intense VLF EM signature noted over the survey area appears on the northern extents of lines 400W and 450W. The CPR railway tracks are present at these two locations and the response appears to be a result of this. This response is strong enough that any additional responses may be masked by this one.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, C. Jason Ploeger, hereby declare that:

1. I am a geophysicist (non-professional) with residence in Larder Lake, Ontario and am presently employed as geophysical manager of Larder Geophysics Ltd. of Larder Lake, Ontario.

2. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.

3. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.

4. 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.

5. I do not have nor expect an interest in the properties and securities of **Brian Fowler**

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 professional opinion based on my consideration of the information available to me at the time of writing this report.

Larder Lake, ON
August 2010

C. Jason Ploeger, B.Sc. (geophysics)
Geophysical Manager of Larder Geophysics Ltd.

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.

VLF Electromagnetic

The frequency domain VLF electromagnetic survey is designed to measure both the vertical and horizontal inphase (IP) and Quadrature (OP) components of the anomalous field from electrically conductive zones. The sources for VLF EM surveys are several powerful radio transmitters located around the world which generate EM radiation in the low frequency band of 15-25kHZ. The signals created by these long-range communications and navigational systems may be used for surveying up to several thousand kilometres away from the transmitter. The quality of the incoming VLF signal can be monitored using the field strength. A field strength above 5pT will produce excellent quality results. Anything lower indicates a weak signal strength, and possibly lower data quality. A very low signal strength (<1pT) may indicate the radio station is down.

The EM field is planar and horizontal at large distances from the EM source. The two components, electric (E) and magnetic (H), created by the source field are orthogonal to each other. E lies in a vertical plane while H lies at right angles to the direction of propagation in a horizontal plane. In order to ensure good coupling, the strike of possible conductors should lie in the direction of the transmitter to allow the H vector to pass through the anomaly, in turn, creating a secondary EM field.

The VLF EM receiver has two orthogonal aerials which are tuned to the frequency of the transmitting station. The direction of the source station is located by rotating the sensor around a vertical axis until a null position is found. The VLF EM survey procedure consists of taking measurements at stations along each line on the grid. The receiver is rotated about a horizontal axis, right angles to the traverse and the tilt recorded at the null position.

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 ... exceeds proton precession and matches costlier optically pumped cesium capabilities.

APPENDIX D

LIST OF MAPS (IN MAP POCKET)

Posted contoured TFM plan map (1:2500)

1) FOWLER-LITTLE STEEL-MAG-CONT

Posted profiled/fraser filtered contoured VLF plan maps (1:2500)

2) FOWLER-LITTLE STEEL-VLF-NAA

TOTAL MAPS=2