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Magnetometer and VLF EM Surveys Over the

LITTLE BEAR GRID Priske Township, Ontario

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the Little Bear Property.

1.2 CLIENT

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

1.3 LOCATION

The Little Bear Property is located in the Priske Township within the Thunder Bay Mining Division. The property is located approximately 4km northeast of Schreiber and is comprised of mining claims numbered 4254146 and 4254295.

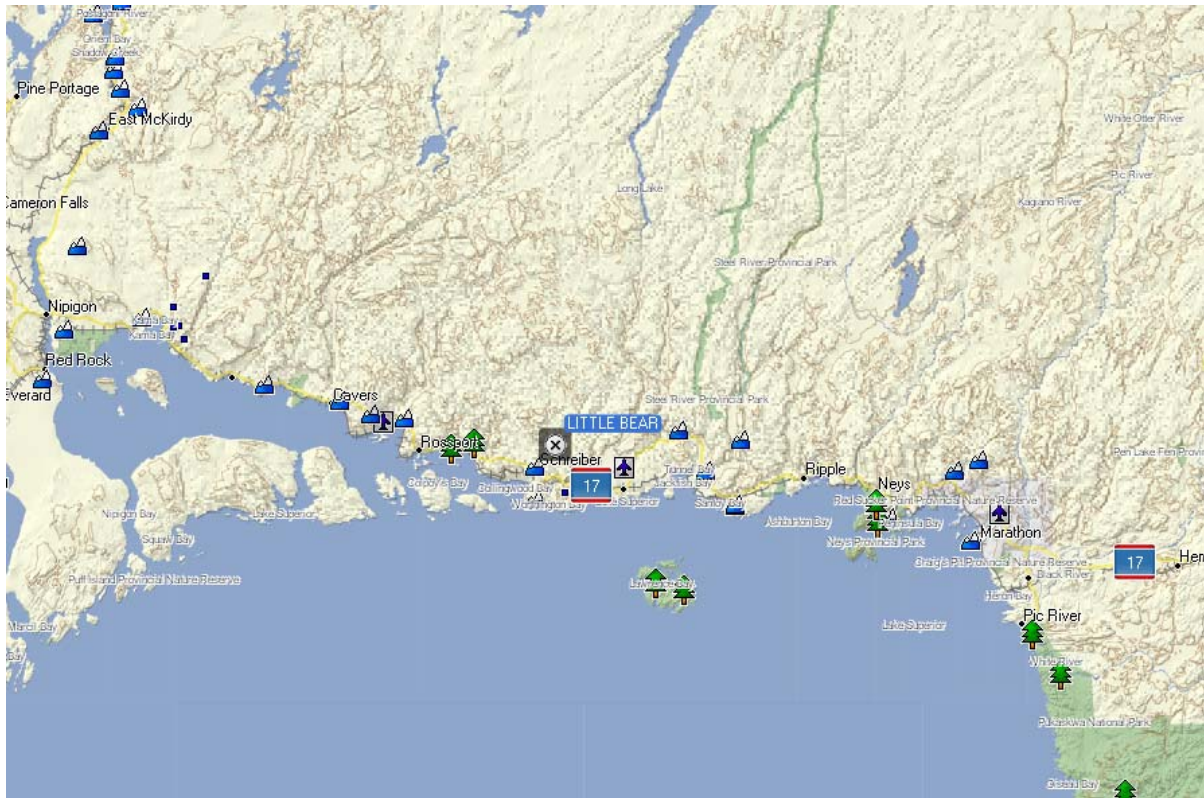


Figure 1: General Location of Little Bear Grid

1.4 ACCESS

The property is best reached by driving 2.7 kilometers north along Peary Street in Schreiber. At this point, a secondary ATV heads eastward. The baseline is located approximately 3km down this ATV trail.

1.5 SURVEY GRID

The grid was established prior to survey execution and consisted of 8.075 line kilometers of cut grid lines. The grid lines were spaced at 25-100 meter intervals with the stations picketed at 25m intervals with a baseline running at 0°N for a distance of 2075m.

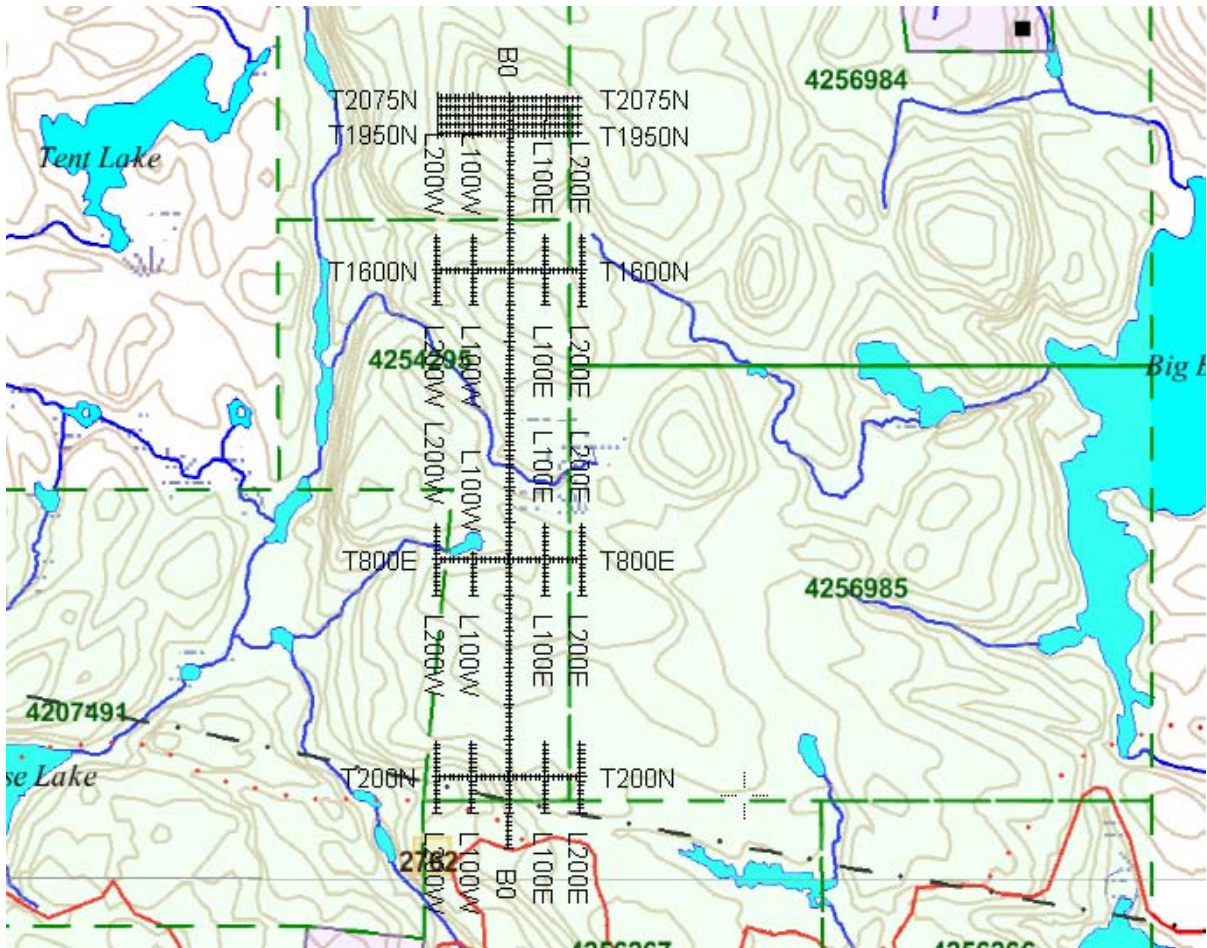


Figure 2: Claim Map with Little Bear Grid

2. SURVEY WORK UNDERTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
August 17, 2010	Locate survey area and conduct survey.	2075N	200W	200E	400
		2050N	200W	200E	400
		2025N	200W	200E	400
		2000N	200W	200E	400
		1975N	200W	200E	400
		1950N	200W	200E	400
		1600N	200W	200E	400
		800N	200W	200E	400
		200N	200W	200E	400
		200E	1500N	1700N	200
		200E	700N	900N	200
		200E	100N	300N	200
		100E	1500N	1700N	200
		100E	700N	900N	200
		100E	100N	300N	200
		0	0	2075N	2075
		100W	1500N	1700N	200
		100W	700N	900N	200
		100W	100N	300N	200
		200W	1500N	1700N	200
		200W	700N	900N	200
		200W	100N	300N	200

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 8.075 line kilometers of magnetometer/VLF EM survey was read on the 17th of August, 2010. This consisted of approximately 646 magnetometer/VLF EM samples with a 12.5m sample interval.

3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY INTERPRETATION

This survey area is broken into four different grids. The grid reference I will be using increases from one through four starting with the most southerly grid moving north.

Grid One

It was found during the course of the survey that the powerlines were overpowering the VLF readings. It was decided to turn the VLF off because no valid data could be acquired.

A strong magnetic high was found crossing the western half of the property at approximately 300°. The strongest response occurs on line 100W at 225N where it was difficult to acquire a reading. This magnetic response should be investigated further and most likely represents an iron formation.

Grid Two

A strong magnetic response can be observed on line 100E north of the baseline with the reading at 25N being difficult to acquire. From this point, it appears the response strikes at 300 degrees onto line 200W. The VLF would indicate a small corresponding response. This magnetic response should be investigated further and most likely represents an iron formation.

Grid Three

No real strong magnetic responses were found in this area with exception to a magnetically depressed east-west trend crossing the north part of all of the lines.

The VLF indicates the presence of an axis crossing lines 0 at 25N and line 100E near tieline 1600N. This also exhibits a slight increase in magnetic response and may indicate a mineralized contact, structural or graphitic horizon.

Grid Four

Grid four indicates a strong north-south magnetic trend paralleling the baseline at about 12.5 to 25 meters east. The magnetic trend indicates this may be the resulting of a folded magnetic sequence that can be again seen weakening to the east. This response indicates the presence of a weak VLF EM axis and may indicate a narrow iron formation. This area occurs in a low spot on the hill and may be difficult to prospect.

A second strong magnetic signature can be seen building to the northwest. This area was off the cut grid and should be investigated at a later date.

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
September 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 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.

VLF Electromagnetic

The frequency domain VLF electromagnetic survey is designed to measure both the vertical and horizontal in-phase (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 aeriels 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 $\pm 200\%$ 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 D

LIST OF MAPS (IN MAP POCKET)

Posted contoured TFM plan map (1:2500)

- 1) FOWLER-LITTLE BEAR-MAG-CONT

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

- 2) FOWLER-LITTLE BEAR-VLF-NAA

TOTAL MAPS=2