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CANADIAN EXPLORATION SERVICES LTD

ASHLEY GOLD MINES LIMITED

**Q2433 – Powell Property
Magnetometer Survey**

C Jason Ploeger, P.Ge. – September 26, 2017



Abstract

CXS was contracted by Ashley Gold Mines Ltd to perform 1 day magnetometer survey over its Powell Township Property.

The survey indicated the presence of three magnetic units. The crew also discovered a historic exploration shaft and pit. Both of these features were located along the same magnetic trend.

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Powell Property**.

1.2 CLIENT

Ashley Gold Mines Limited
14579 Government Rd.
Larder Lake, Ontario
P0K1L0

1.3 LOCATION

The Powell Property is located in Powell Township approximately 7 km north-north-west of Matachewan, Ontario. The survey area covers a portion of mining claims 4225519, 4225518, 4225517 and 4259498 in Powell Township, within the Larder Lake Mining Division.

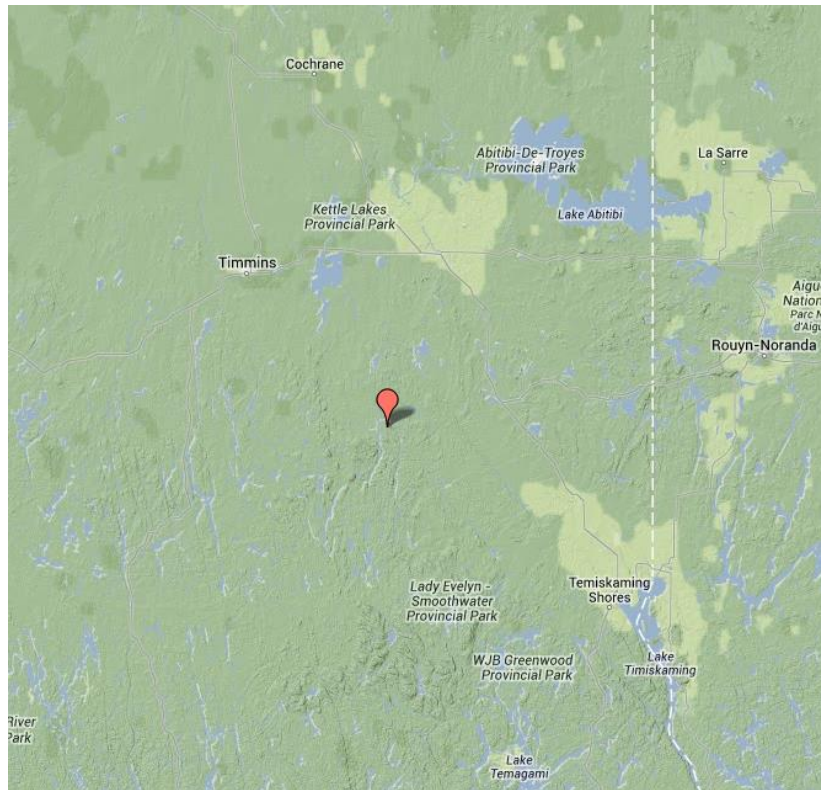


Figure 1: Location of the Powell Property

1.1 ACCESS

Access to the property was attained with a 4x4 truck via highway 66 approximately 3km west of Matachewan, continuing by highway 566 approximately 6km north. At this point, an access road heads northwest, where the survey area can be found.

1.2 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 GPS Map 62S.

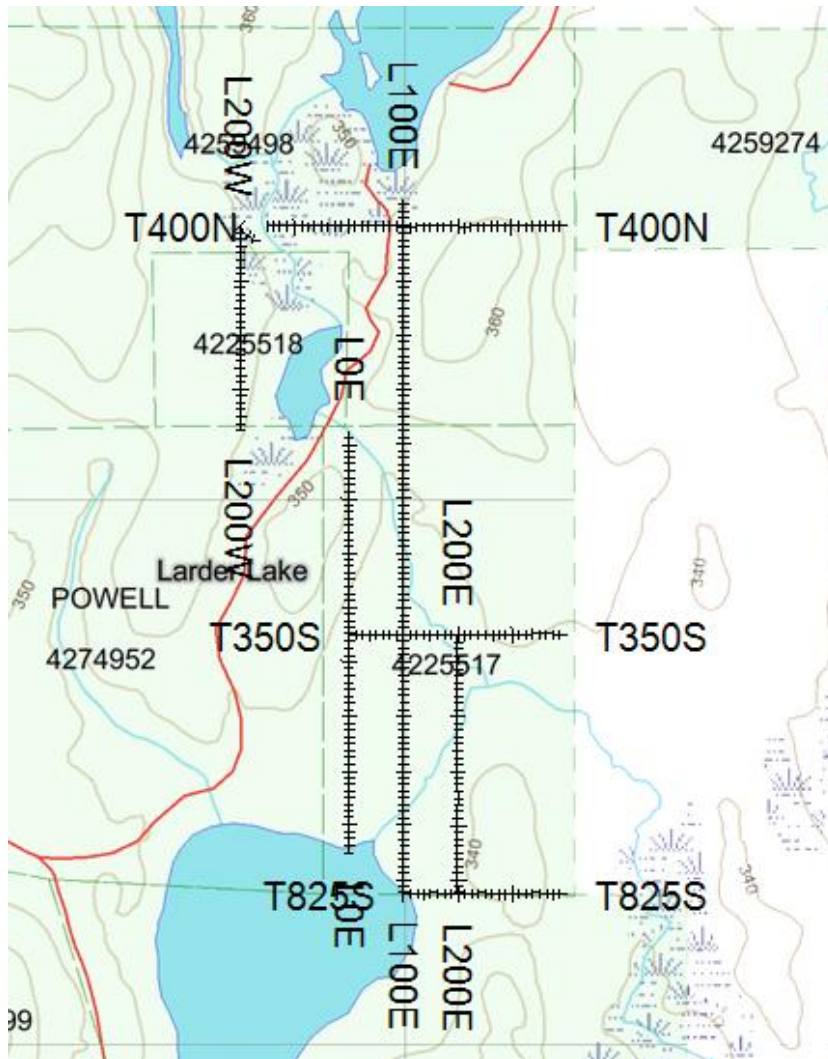


Figure 2: Claim Map with the Powell Traverses

2. SURVEY WORK UNDERTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
September 14, 2017	Locate survey area and conduct survey.	200W	25N	400N	375
		0E	750S	25N	775
		100E	825S	450N	1275
		200E	825S	350S	475
		400N	200W	400E	600
		350S	0	400E	400
		825S	100E	400E	300

Table 1: Survey Log

2.2 PERSONNEL

Claudia Moraga of Britt, Ontario conducted all the magnetic data collection while Bruce Lavalley, also 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 in base station mode for diurnal correction.

A total of 4.2 line kilometers of magnetometer was read over the Powell Property on September 14, 2017. This consisted of 336 magnetometer samples taken at a 12.5m sample interval.

3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY

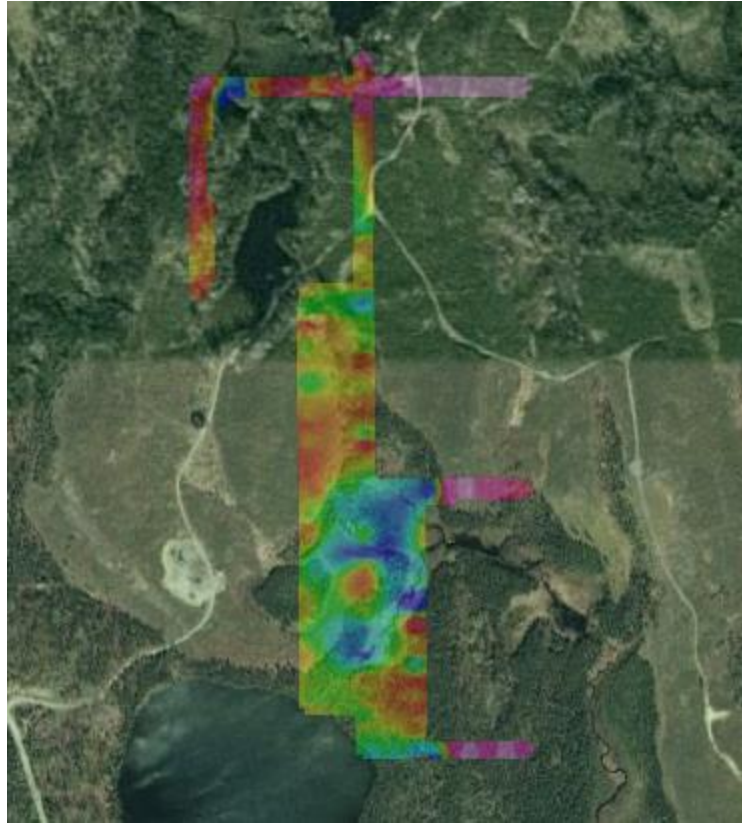


Figure 3: Magnetometer Plan on Google Earth

No culture was noted through the survey area that would influence the results of the magnetic survey. Historic workings were however noted. A shaft or deep pit was noted at 523002E and 5316106N or 12.5N on line 100E and a pit located at 522897E and 5316052N or 50S on line 0E.

The magnetic signature of the survey indicates the presence of three different magnetic units.

The northern unit appears to have a slightly raised signature as compared to the other two signatures. Not much of this signature is visible as little coverage exists over this region.

The central signature appears as a moderate increase in magnetic signature. This appears to be an overprint, which may indicate it is an intrusive such as a porphyry.

The signature of the central unit appears to become more subdued as it strikes south. This may indicate that it plunges below another unit. This may indicate the presence of a unit such as a sedimentary unit

Overprinting the signature on the east side of the survey area appears an intense

magnetic signature. This signature appears as a north south linear magnetic feature. This resembles that which would be expected of the Matachewan Diabase Dikes.

The historic workings appear to fall on a contact area between a small 100nT boundary. This would fall along the transition of units 2 and 3. This may indicate that the sedimentary package is older and may represent the Temiskaming sediments. The indication of shafts and pits may indicate that mineralization was historically noted along this contact.

I would recommend prospecting the shaft and pit area to determine the reasoning behind the pits and shaft. These both appear on the magnetic transition, therefore I would also prospect along the strike of the transition.

If mineralization is found, I would recommend a grid be cut and IP survey be performed on the grid.

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 **Ashley Gold Mines 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
September 26, 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)

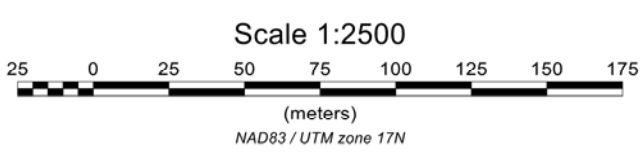
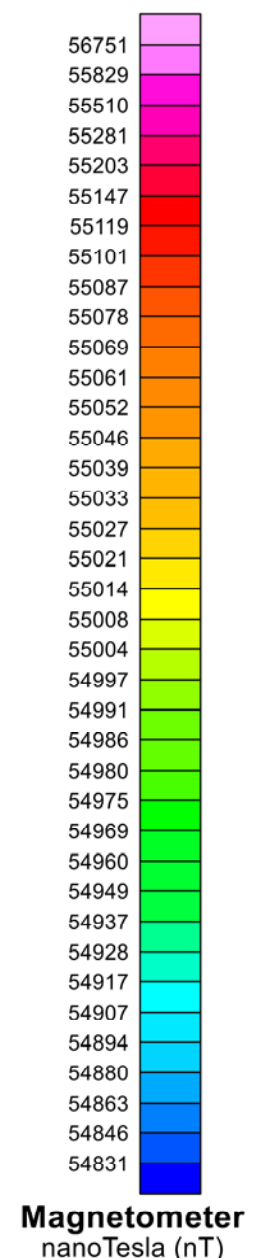
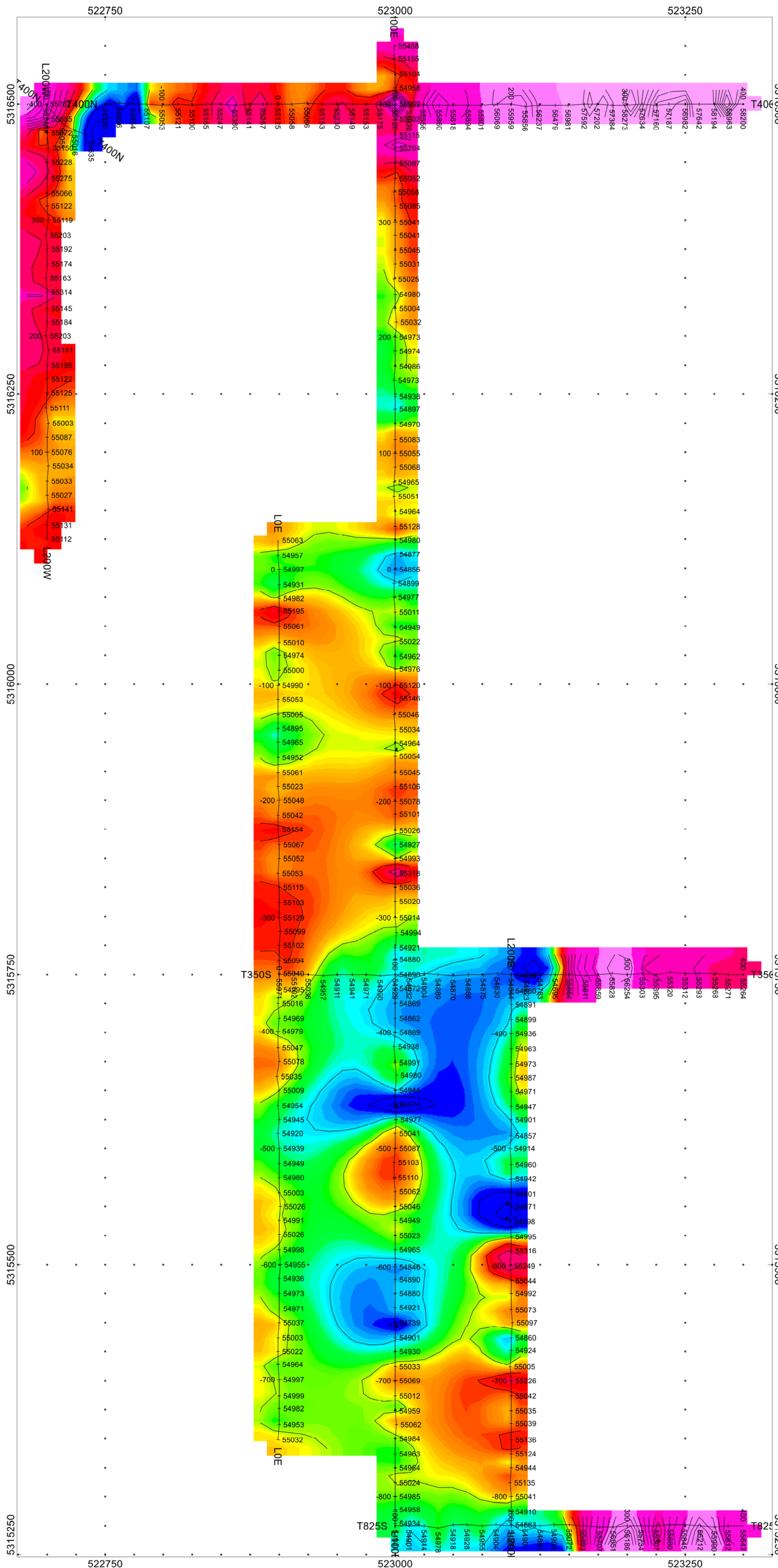
Magnetometer Plan Map (1:2500)

- 1) Q2433-Ashley-Powell-Mag-Cont

Claim Map with Magnetic Traverses (1:20000)

- 2) Q2433-Ashley-Powell-Traverses

TOTAL MAPS = 2



**POWELL PROPERTY
Powell 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:

GSM-19 OVERHAUSER MAGNETOMETER v7

Receiver Operated By: Claudia Moraga
GPS Operated By: Bruce Lavalley
Processed by: C Jason Ploeger, P.Geo.
Map Drawn By: C Jason Ploeger, P.Geo.
September 2017



