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CANADIAN SILVER HUNTER INC. Q2354 – Gore Claim **Magnetometer Survey** C Jason Ploeger, P.Geo. - April 24, 2017



Abstract

CXS was contracted by Canadian Silver Hunter Inc to perform a small one kilometer magnetometer survey over the Gore Claim. A total of one kilometer of magnetometer survey was performed in April 2017.

CANADIAN SILVER HUNTER INC.

Q2354 – Gore Claim Magnetometer Survey

C Jason Ploeger, P.Geo. - April 24, 2017





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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Gore Claim**.

1.1 CLIENT

Canadian Silver Hunter Inc.

36 Toronto Street, Suite 1000 Toronto, Ontario M5C 2C5

1.2 LOCATION

The Gore Claim is located approximately 26 km southeast of Cobalt, Ontario. The survey area covers part of mining claim numbered 4268658, located in South Lorrain Township, within the Larder Lake Mining Division.



Figure 1: Location of the Gore Claim



1.3 Access

Access to the property was attained with a 4x4 truck via highway 567. Approximately 30 km south of the town of Haileybury, Ontario, a forestry access road extends west. This access road was travelled by ATV for an additional 1 kilometer to a point where the survey area crosses the road.

1.4 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 and magnetic samples were taken every 12.5m along these controlled traverses. The GPS used was a Garmin GPSMAP 62s.

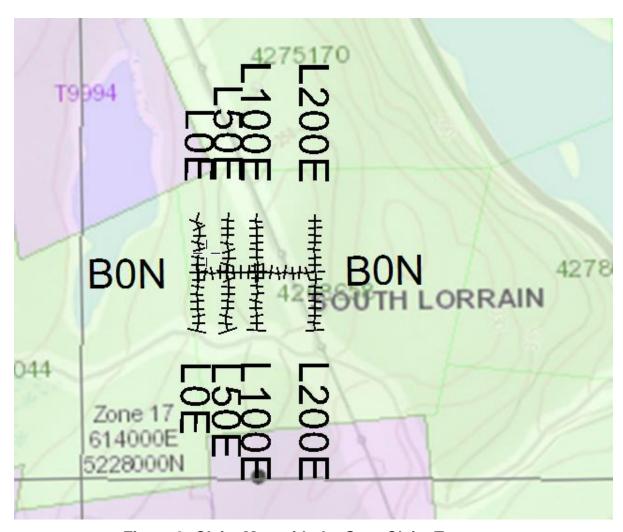


Figure 2: Claim Map with the Gore Claim Traverses





2. SURVEY WORK UNDRTAKEN

2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
April 19, 2017	Establish access and locate				
	survey area. Perform magnetic survey as scheduled.	0E	100S	100N	200
		50E	100S	100N	200
		100E	100S	100N	200
		200E	100S	100N	200
		0N	0	200E	200

Table 1: Survey Log

2.2 PERSONNEL

Claudia Moraga of Britt, Ontario conducted all the magnetic data collection while Bill Bonney of Kirkland Lake, 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 1.0 line kilometers of Magnetometer was read over the Gore Claim on April 19th, 2017. This consisted of 80 magnetometer samples taken at a 12.5m sample interval.



3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY

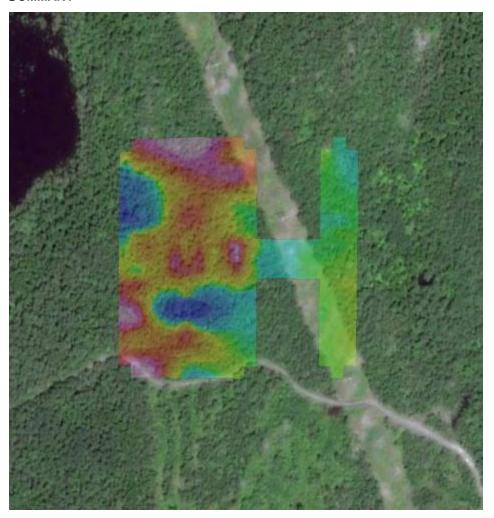


Figure 3: Magnetometer Plan on Google Earth

Some culture was noted on the property. This consisted of a powerline crossing the property. An effort was made to maintain a distance from the powerline as to not influence the data. The baseline did however cross the line but no issues with the data was observed.

Generally, there appears to be two magnetic units present in the dataset with the powerline separating them.

The west part of the survey area indicates strong magnetic relief. This is similar to that expected from the Nipissing Diabase Sill. Within this signature appear some magnetic low responses. These responses may indicate magnetite depletion and alteration. Individual trends are difficult to identify due to the size of the survey; however, the general magnetic trend appears to strike at 100 degrees.





The east portion or line 200E appears to be of uniform signature. This may indicate a that the sill may dip to the west with line 200E being a sedimentary unit sitting under the diabase sill.

I would recommend extending the survey to cover the entire property. The expanded picture would allow for better identification of magnetic trends and features.





APPENDIX A

STATEMENT OF QUALIFICATIONS

- I, C. Jason Ploeger, hereby declare that:
- 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 Practicing 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 **Canadian Silver Hunter Inc.**
- 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 April 24th, 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 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.





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 C

GARMIN GPS MAP 62S



Physical & Performanc	hysical & 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 recom- mended				
Battery life:	20 hours				
Waterproof:	yes (IPX7)				
Floats:	no				
High-sensitivity receiver:	yes				





Maps & Memory: Basemap: yes	
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 yes (with optional mapping for detail	ed
on roads): roads)	
Electronic compass: yes (tilt-compensated, 3-axis)	
Touchscreen: no	
Barometric altimeter: yes	
Camera: no	
Geocaching-friendly: yes (paperless)	
Custom maps compatible: yes	
Photo navigation (navigate to ge-	
otagged photos):	
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 wire-lessly 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)

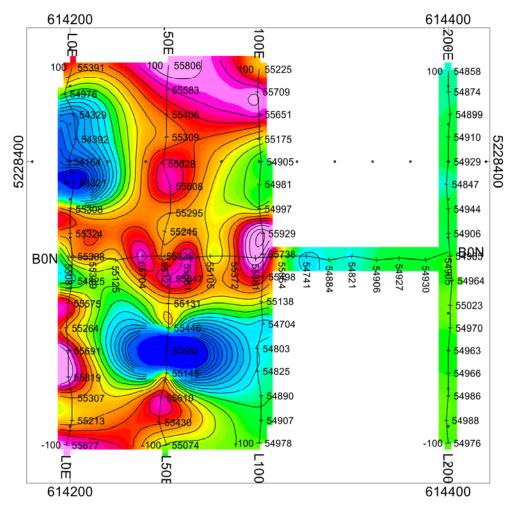
Magnetometer Plan Map (1:2000)

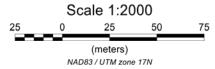
1) Q2354-CSH-Gore-Mag-Cont

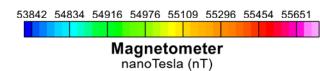
Claim Map with Magnetic Traverses (1:20000)

2) Q2354-CSH-Gore-Traverses

TOTAL MAPS = 2









GORE CLAIM South Lorrain Township, Ontario

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

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

GSM-19 OVERHAUSER MAGNETOMETER v7

Operated By: Claudia Moraga GPS Operated By: Bill Bonney Processed by: C Jason Ploeger, P.Geo. Map Drawn By: C Jason Ploeger, P.Geo.

April 2017



Drawing: Q2354-CSH-GORE-MAG-CONT

