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# AMADOR GOLD CORP.

## Magnetometer and VLF EM Surveys Over the

## Silverstrike Grid
## Silverstrike Property
## James Township, Ontario

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# 1. SURVEY DETAILS

## 1.1 PROJECT NAME

This project is known as the **Silverstrike Project – Silverstrike Grid**

## 1.2 CLIENT

AMADOR GOLD CORP.

711-675 West Hastings Street.
Vancouver, British Columbia
V6B 1N2

## 1.3 LOCATION

The Silverstrike Grid is located in James Township approximately 2.2 km north-west of Elk Lake, Ontario. The survey area covers a portion of the claims numbered 4201484, 4211842, 4215650, 4240784, 4240785, 4201484, 4217617, 4201486, 4240379, 4211942 4203536, 4211941 and 4214831 located in James Township, within the Larder Lake Mining Division.


***Figure 1: Location of Silverstrike Property***

## 1.4 ACCESS

Access to the property was attained with a 4x4 truck via highway 560, 2.5km west of Elk Lake, Ontario. The property crosses the highway at this point and extends northward.

### 1.5 SURVEY GRID

The grid was established prior to survey execution and consisted of 38.5 line kilometers of cut grid lines. The grid lines were spaced at 100 meter intervals with the stations picketed at 25m intervals with a baseline running at 138°N for a distance of 1.2km.

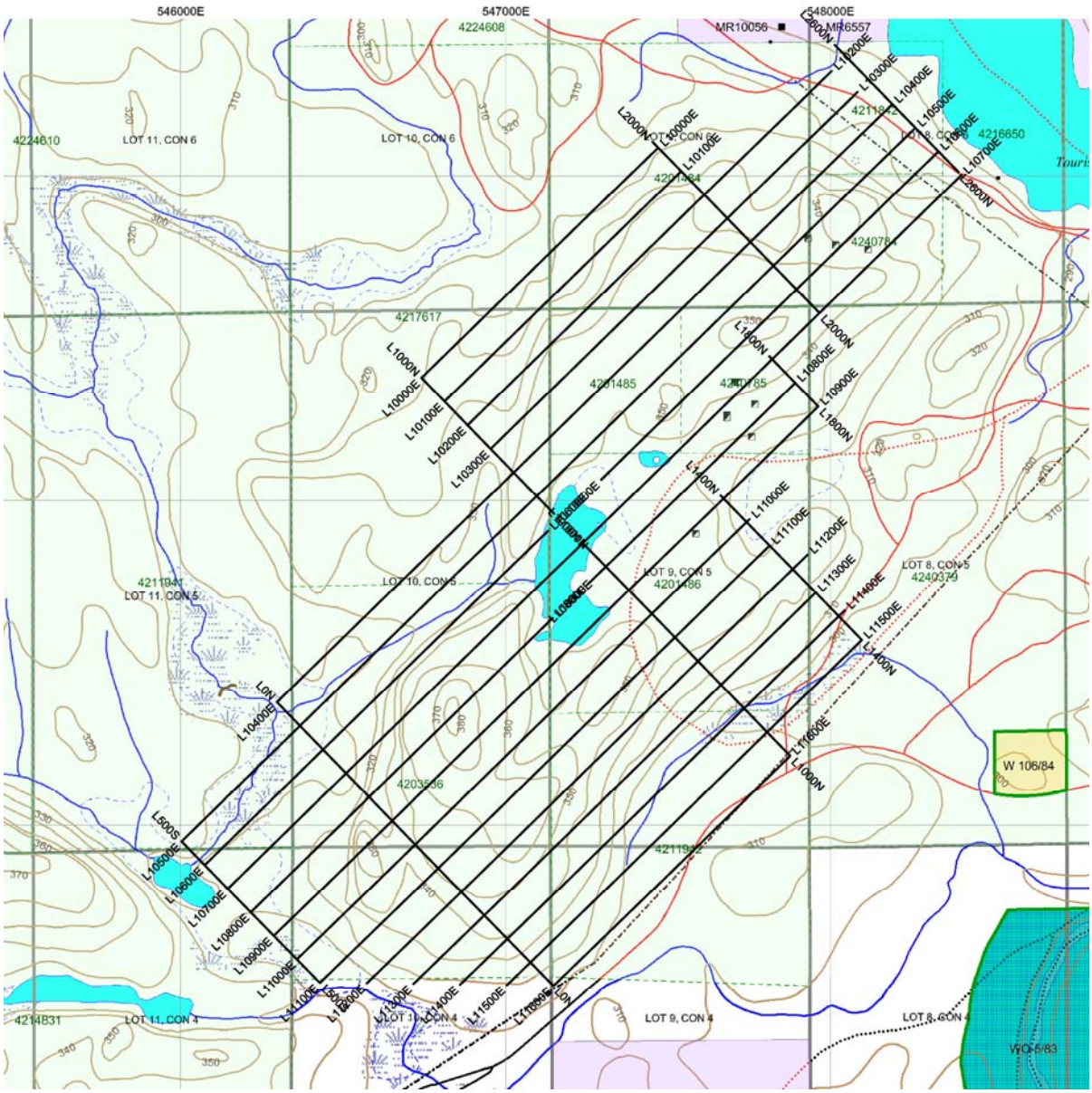



***Figure 2: Claim Map with Projected Grid***

## 2. SURVEY WORK UNDERTAKEN

### 2.1 SURVEY LOG

| Date | Description | Line | Min Extent | Max Extent | Total Survey (m) |
|---|---|---|---|---|---|
| Sept 12, 2008 | Locate survey area and begin walkmag survey. | 10000E | 1000N | 2000N | 1000 |
| | | 10100E | 1000N | 2000N | 1000 |
| | | 10200E | 1000N | 2600N | 1600 |
| | | 10300E | 2000N | 2500N | 500 |
| | | 10400E | 0 | 1000N | 1000 |
| | | 10500E | 0 | 1000N | 1000 |
| | | 10600E | 1050N | 2600N | 1550 |
| | | 10700E | 2000N | 2600N | 600 |
| | | 11600E | 0 | 1000N | 1000 |
| | | 0 | 10400E | 11600E | 1200 |
| | | 1000N | 10000E | 11600E | 1600 |
| | | 2000N | 10000E | 10700E | 700 |
| | | 2600N | 10200E | 10700E | 500 |
| | | | | | |
| Sept 19, 2008 | Continue walkmag survey. | 10800E | 500S | 1400N | 1900 |
| | | 10900E | 500S | 1400N | 1900 |
| | | 11000E | 500S | 1400N | 1900 |
| | | 11100E | 500S | 1400N | 1900 |
| | | 11200E | 400S | 1400N | 1800 |
| | | 11300E | 300S | 1400N | 1700 |
| | | 11400E | 200S | 1400N | 1600 |
| | | 11500E | 100S | 1400N | 1500 |
| | | | | | |
| Sept 23, 2008 | Complete walkmag survey. | 10300E | 1000N | 2000N | 1000 |
| | | 10400E | 1000N | 2600N | 1600 |
| | | 10500E | 500S | 2600N | 3100 |
| | | 10600E | 500S | 800N | 1300 |
| | | 10700E | 500S | 2000N | 2500 |
| | | 10800E | 1400N | 1800N | 400 |
| | | 10900E | 1400N | 1800N | 400 |
| | | 500S | 10500E | 11100E | 600 |
| | | 1400N | 10900E | 11500E | 600 |
| | | 1800N | 10700E | 10900E | 200 |
| | | | | | |
| Sept 24, 2008 | Start VLF EM survey. | 10700E | 500S | 2000N | 2500 |
| | | 10900E | 1400N | 1800N | 400 |
| | | 11100E | 500S | 1400N | 1900 |
| | | 11200E | 400S | 1400N | 1800 |
| | | 11300E | 300S | 1400N | 1700 |
| | | 11400E | 100N | 1400N | 1300 |
| | | 11500E | 100S | 1400N | 1500 |
| | | 500S | 10500E | 11100E | 600 |
| | | 1400N | 10900E | 11500E | 600 |
| | | 1800N | 10700E | 10900E | 200 |
| | | | | | |
| October 2, 2008 | Continue VLF EM survey. | 10400E | 0 | 1000E | 1000 |
| | | 10600E | 500S | 800N | 1300 |
| | | 10800E | 500S | 1000N | 1500 |
| | | 10900E | 500S | 1400N | 1900 |
| | | 11000E | 500S | 1400N | 1900 |
| | | 11400E | 200S | 100N | 300 |
| | | 11600E | 0 | 1000N | 1000 |
| | | 0 | 10400E | 11600E | 1200 |
| | | 1000N | 10400E | 11600E | 1200 |
| | | | | | |
| October 14, 2008 | Continue VLF EM survey. | 10200E | 1000N | 2600N | 1600 |

| Date | Description | Line | Min Extent | Max Extent | Total Survey (m) |
|---|---|---|---|---|---|
| | | 10300E | 1000N | 2500N | 1500 |
| | | 10400E | 1000N | 2600N | 1600 |
| | | 10500E | 1000N | 2600N | 1600 |
| | | 10600E | 1000N | 2600N | 1600 |
| | | 10700E | 2000N | 2600N | 600 |
| | | 10800E | 1000N | 1800N | 800 |
| | | | | | |
| October 15, 2008 | Complete VLF EM survey on grid. | 10000E | 1000N | 2000N | 1000 |
| | | 10100E | 1000N | 2000N | 1000 |
| | | 10500E | 500S | 1000N | 1500 |
| | | 1000N | 10000E | 10400E | 400 |
| | | 2000N | 10000E | 10700E | 700 |
| | | 2600N | 10200E | 10700E | 500 |

***Table 1: Survey log***

### 2.2 PERSONNEL

Rod Milligan of Kirkland Lake conducted all of the magnetic data collection and Shane Buckland of Haileybury conducted all of the 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 38.2 line kilometers of magnetometer survey was conducted between September 12th and September 23rd, 2008. This consisted of approximately 43936 magnetometer samples at 1 second sample interval.

A total of 38.15 line kilometers of VLF EM survey was conducted between September 24th and October 14th, 2008. This consisted of 3052 VLF EM samples taken at 12.5m sample intervals.

# 3. OVERVIEW OF SURVEY RESULTS

## 3.1 SUMMARY INTERPRETATION

The magnetometer survey indicates the presence of a magnetically high region running through the center of the survey area. Grid east of this region appears to be magnetically elevatedwith respect to grid west of the region. The magnetically high region most likely indicates the edge of the diabase sill or the transition from the top of the sill through bottom.

Through these regions is four noticeable VLF EM axis. Two of these axis, north edge of the grid and west edge of the grid, represent the path of powerlines. The two additional axis are most likely related to bedrock occurrences.

The first of these is an axis that crosses the entire survey area at 100S. This linear axis appears to cross a small offset in the magnetic fabric and may represent a structural feature.

The second of feature appears to have a stronger signature than the first; however is only apparent over lines 10400E and 10500E at 150N.

The two axis should be prospected and trenched to help identify the source of the axis.

# 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 president 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.

5. I do have an interest in the properties and securities of **AMADOR GOLD CORP**, but I have no interest in this property**.**

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
April 2009

C. Jason Ploeger, B.Sc. (geophysics)
President 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 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 aerials which are tuned to the frequency of the transmitting station. The direction of the source station is locate 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)

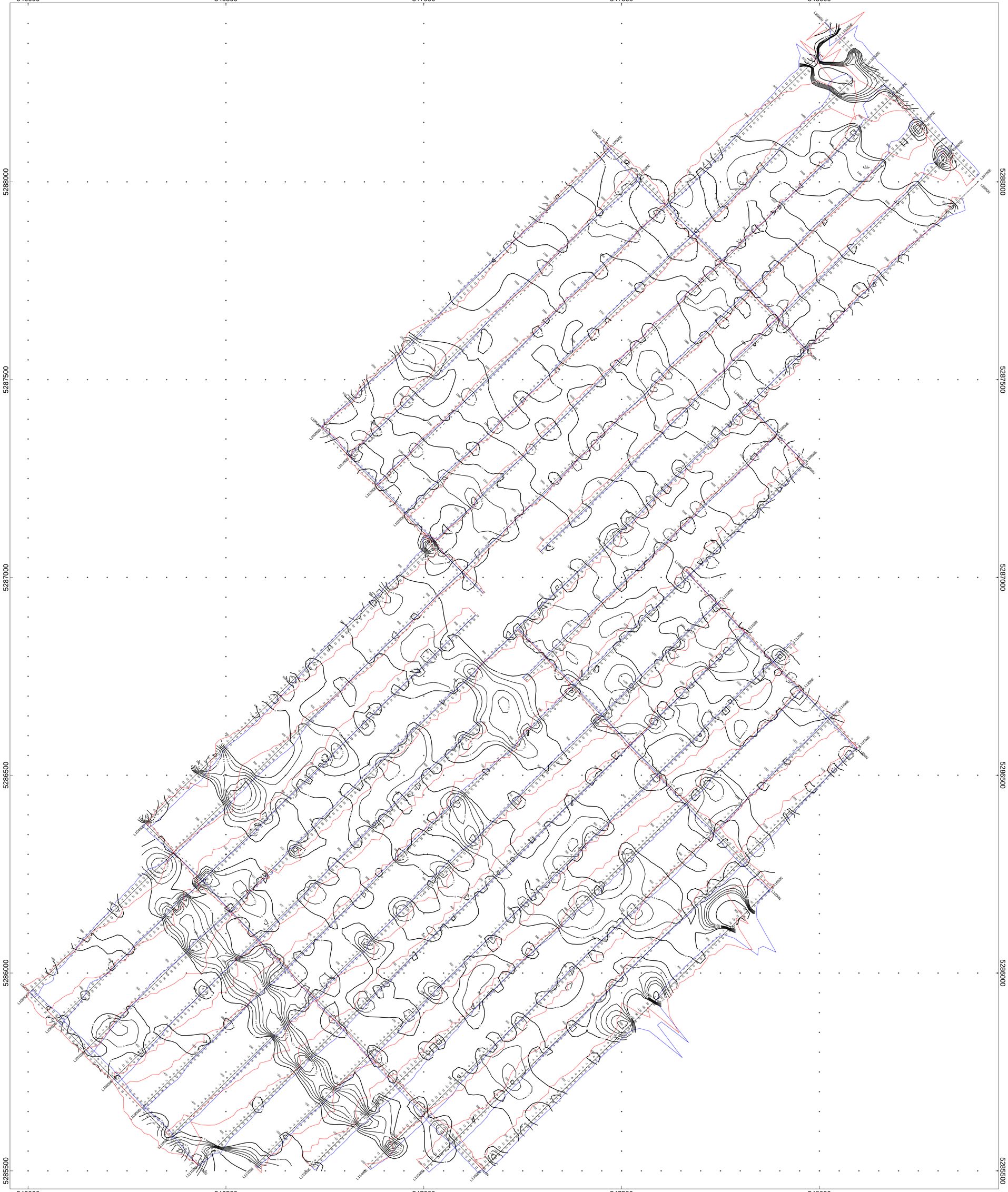
Posted contoured TFM plan map (1:2500)

1) AMADOR-SILVERSTRIKE-MAG-CONT

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

2) AMADOR-SILVERSTRIKE-VLF-NAA
3) AMADOR-SILVERSTRIKE-VLF-NML

**TOTAL MAPS=3**

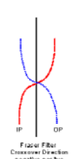



Scale 1:5000

100 0 100 200 300

(meters)

*NAD83 / UTM zone 17N*




Fraser Filter
Crossover Direction
negative-positive

# AMADOR GOLD CORP.

## SILVERSTRIKE GRID
## SILVERSTRIKE PROPERTY
## James Township, Ontario

VLF IN PHASE/OUT PHASE PROFILE
VLF FRASER FILTERED CONTOURED PLAN MAP
24.0kHz NAA - CUTLER USA
Projection: NAD 83, Zone 17

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

Vertical Profile Scales: 2%/mm
Contour Interval: 0, 5, 10, 15, 20, 25, 50, 100

Station Seperation: 12.5 meters
Posting Level: 0

GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

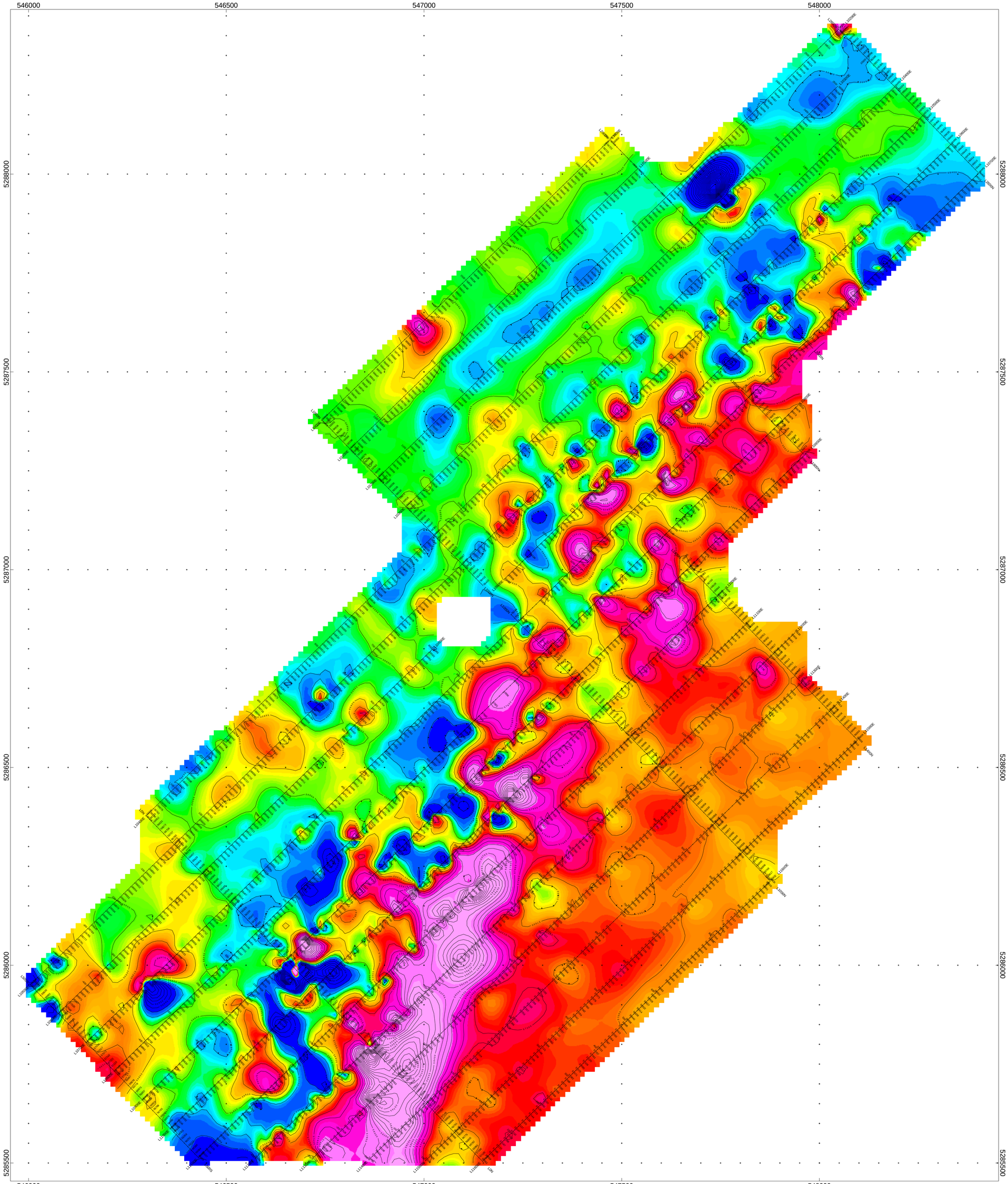
Magnometer Operated: Shane Buckland
Processed by: C Jason Ploeger, B.Sc.
Map Drawn By: Belinda Bailey
October 2 to 18, 2008

LARDER GEOPHYSICS LTD.
(705) 643-1122

*Drawing: AMADOR-SILVERSTRIKE-VLF-NAA*

546000 546500 547000 547500 548000

5288000 5287500 5287000 5286500 5286000 5285500



58295
57756
57488
57329
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57124
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57035
57011
56989
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56915
56878
56838
56797
56762
56729
56698
56669
56643
56621
56603
56586
56570
56554
56535
56515
56494
56473
56451
56428
56403
56369
56310
56194

**TOTAL FIELD MAGNETIC**
nanoTesla (nT)

Scale 1:5000

100 0 100 200 300
(meters)
*NAD83 / UTM zone 17N*

# AMADOR GOLD CORP.

**SILVERSTRIKE GRID**
**SILVERSTRIKE PROPERTY**
**James Township, Ontario**

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

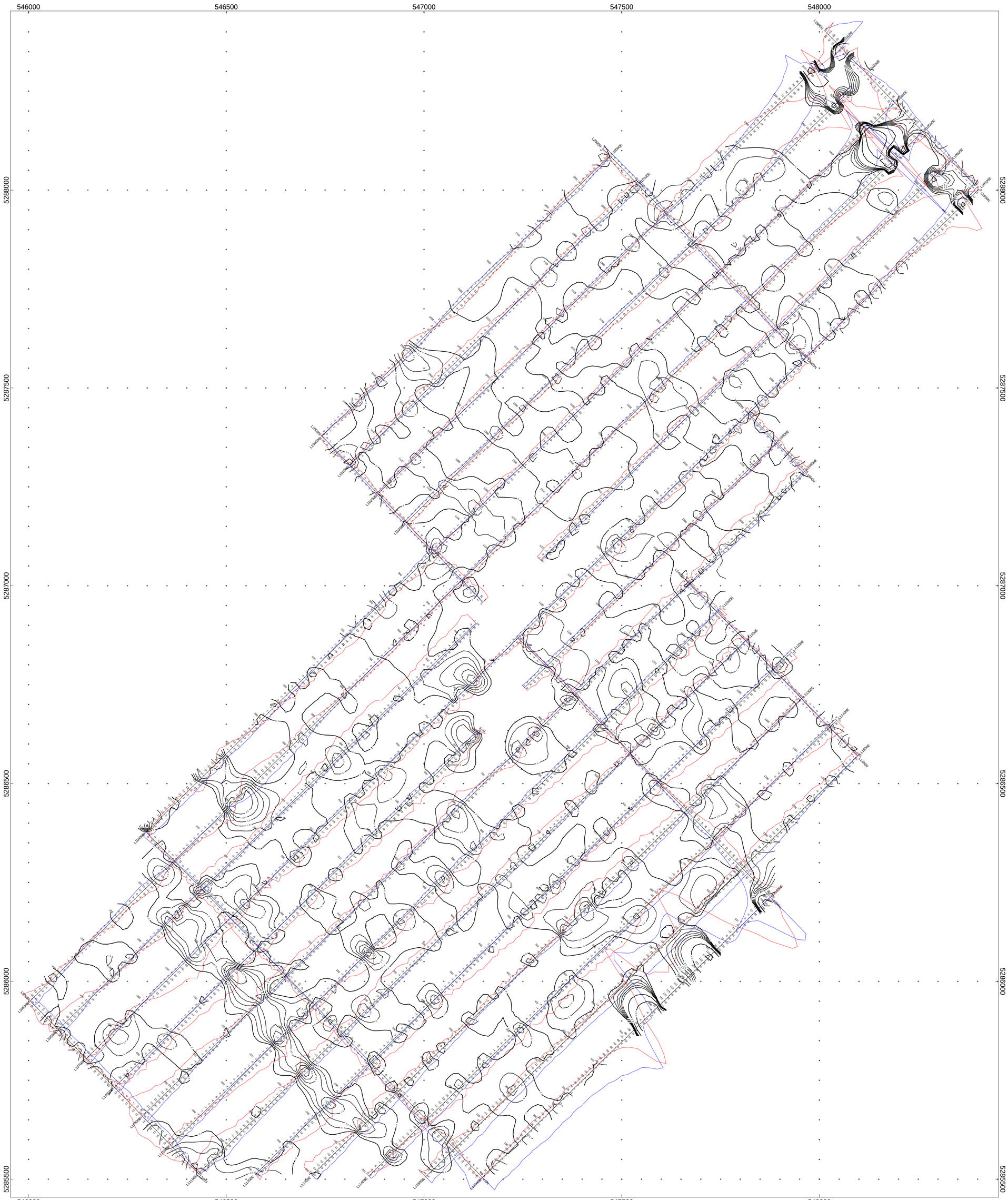
Posting Level: 0nT
Field Inclination/Declination: 74degN/12degW
Station Seperation: Walkmag 1second interval
Total Field Magnetic Contours: 200nT

GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Magnotometer Operated by: Rod Milligan
Processed by: C Jason Ploeger, B.Sc.
Map Drawn By: Belinda Bailey
September 11 to 24, 2008

LARDER GEOPHYSICS LTD.

*Drawing :AMADOR-SILVERSTRIKE GRID-MAG-CONT*




Scale 1:5000

100 0 100 200 300

(meters)

*NAD83 / UTM zone 17N*

IP OP

Fraser Filter
Crossover Direction
negative-positive

# AMADOR GOLD CORP.

## SILVERSTRIKE GRID
## SILVERSTRIKE PROPERTY
## James Township, Ontario

VLF IN PHASE/OUT PHASE PROFILE
VLF FRASER FILTERED CONTOURED PLAN MAP
25.2kHz NML - LaMOURE, NORTH DAKOTAUSA
Projection: NAD 83, Zone 17

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

Vertical Profile Scales: 2%/mm
Contour Interval: 0, 5, 10, 15, 20, 25, 50, 100

Station Seperation: 12.5 meters
Posting Level: 0

GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Magnometer Operated: Shane Buckland
Processed by: C Jason Ploeger, B.Sc.
Map Drawn By: Belinda Bailey
October 2 to 18, 2008

LARDER GEOPHYSICS LTD.
(705) 643-1122

*Drawing: AMADOR-SILVERSTRIKE-VLF-NML*