

PO Box 219  
14579 Government Road  
Larder Lake, Ontario  
P0K 1L0, Canada  
Phone (705) 643-1122  
Fax (705) 643-2191

# **AMADOR GOLD CORP.**

**GPS, Magnetometer and VLF  
EM  
Surveys  
Over the**

**AJAX PROPERTY  
Strathy Township, Ontario**

**TABLE OF CONTENTS**

**1. SURVEY DETAILS .....3**

1.1 PROJECT NAME..... 3

1.2 CLIENT ..... 3

1.3 LOCATION ..... 3

1.4 ACCESS ..... 3

1.5 SURVEY GRID ..... 3

**2. SURVEY WORK UNDERTAKEN .....5**

2.1 SURVEY LOG..... 5

2.2 PERSONNEL ..... 5

2.3 SURVEY SPECIFICATIONS..... 5

**3. OVERVIEW OF SURVEY RESULTS.....6**

3.1 SUMMARY INTERPRETATION..... 6

**LIST OF APPENDICES**

- APPENDIX A: STATEMENT OF QUALIFICATIONS**
- APPENDIX B: THEORETICAL BASIS AND SURVEY PROCEDURES**
- APPENDIX C: INSTRUMENT SPECIFICATIONS**
- APPENDIX D: LIST OF MAPS (IN MAP POCKET)**

**LIST OF TABLES AND FIGURES**

Figure 1: Location of Ajax Property ..... 3

Figure 2: Claim Map with Ajax Grid..... 4

Table 1: Survey log..... 5



## 1. SURVEY DETAILS

### 1.1 PROJECT NAME

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

### 1.2 CLIENT

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

### 1.3 LOCATION

The Ajax Property is located in Strathy Township approximately 6.5 km northwest of Temagami, Ontario. The survey area covers a portion of claims numbered S3013126, S3013126 and S4207081 located in the central region of Strathy Township, within the Sudbury Mining Division.



**Figure 1: Location of Ajax Property**

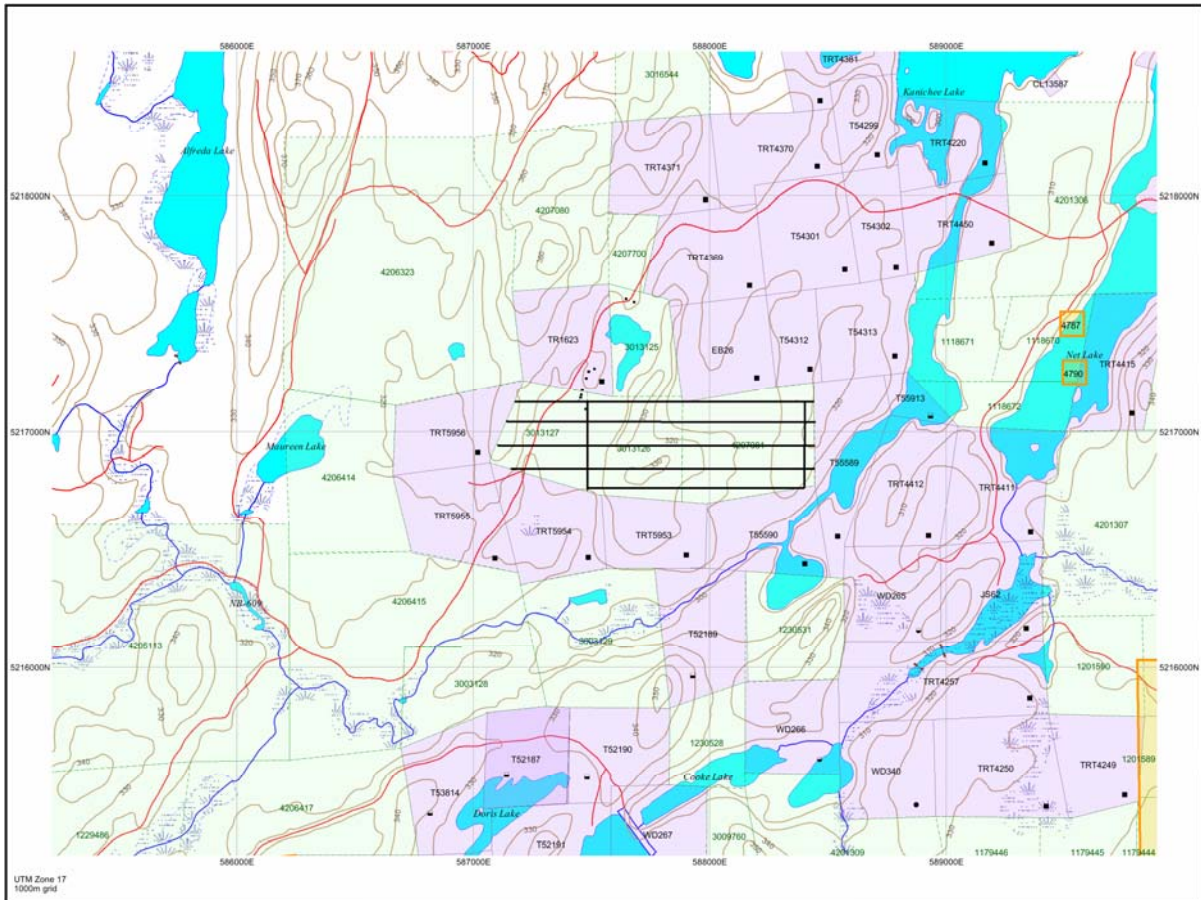
### 1.4 ACCESS

Access to the property was attained with a 4x4 truck via a year around gravel road. The property is located approximately 5km west on the Kanichee Mine Road, which is located approximately 5km north along highway 11 from Temagami, Ontario.

### 1.5 SURVEY GRID

The grid consists of 6.925 kilometers of recently re-established grid lines. The lines are spaced 100

meter increments with stations picketed at 25m intervals. The baseline ran at 0°N for a total length of 400m



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

## 2. SURVEY WORK UNDERTAKEN

### 2.1 SURVEY LOG

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
16 May, 2007	Locate grid and begin both Mag/VLF survey and GPS survey. Complete grid without any problems.	10700N	25W	900E	925
		10800N	350W	950E	1300
		10900N	375W	950E	1325
		11000N	375W	950E	1325
		11100N	300W	950E	1250
		BLO	10700N	11100N	400
		900E	10700N	11100N	400

**Table 1: Survey log**

### 2.2 PERSONNEL

Karl Zancanella of Larder Lake, Ontario, conducted all the magnetic data collection and Stan Veinot of Larder 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 magnetic and VLF EM samples (NAA, NLK and NML) every 12.5m. A Scintrex OMNI PLUS was employed as a base station mode for diurnal correction. GPS waypoints were taken every 25m to establish a better control for future exploration.

The TFM and VLF EM data has been coorelated to the GPS data and has been presented in UTM space.

A total of 6.925 line kilometers of magnetic survey was conducted May 16<sup>th</sup>, 2007. This consisted of 554 magnetometer samples taken at 12.5m intervals.

### 3. OVERVIEW OF SURVEY RESULTS

#### 3.1 SUMMARY INTERPRETATION

A significant magnetic anomaly crosses the property in a north-northeast direction. This magnetic high appears to have a coincident VLF EM axis. This most likely represents the continuation of the mineralized zone mined on the property north of this one.

A second VLF EM conductor crosses the east end of the property in a NE direction. This conductor can be seen on line 10700N at 550E and appears to be associated with a magnetically depressed region. This may indicate a geologic contact or faulted area.

I would recommend a followup HLEM or fixed loop EM survey..

**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  
May 2007



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 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 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  $\pm 200\%$  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 76



#### GPS Performance

Receiver: WAAS-enabled, 12 parallel channel GPS receiver continuously tracks and uses up to 12 satellites to compute and update your position

#### Navigation Features

- Waypoints/icons:** 500 with name and graphic symbol, 10 nearest (automatic), 10 proximity
- Routes:** 50 reversible routes with up to 50 points each, plus MOB and TracBack® modes
- Tracks:** Automatic track log; 10 saved tracks let you retrace your path in both directions
- Trip computer:** Current speed, average speed, resettable max. speed, trip timer and trip distance
- Alarms:** Anchor drag, approach and arrival, off-course, proximity waypoint, shallow water and deep water
- Tables:** Built-in celestial tables for best times to fish and hunt, sun and moon rise, set and location
- Map datums:** More than 100 plus user datum
- Position format:** Lat/Lon, UTM/UPS, Maidenhead, MGRS, Loran TDs and other grids, including user grid

#### Acquisition times

- Warm:** Approximately 15 seconds
- Cold:** Approximately 45 seconds
- AutoLocate®:** Approximately 2 minutes
- Update rate:** 1/second, continuous

#### GPS accuracy

- Position:** < 15 meters, 95% typical\*
- Velocity:** 0.05 meter/sec steady state

#### WAAS accuracy

- Position:** < 3 meters, 95% typical\*
- Velocity:** 0.05 meter/sec steady state

#### Power

- Source:** Two "AA" batteries (not included)
- Battery Life:** Up to 16 hours

#### Physical

- Size:** 2.7"W x 6.2"H x 1.2"D (6.9 x 15.7 x 3.0 cm)
- Weight:** 7.7 ounces

#### Display

- 1.6"W x 2.2"H (4.1 x 5.6 cm)
- 180 x 240 pixels, high-contrast
- FSTN with bright backlighting

<b>Case:</b>	Fully gasketed, high-impact plastic alloy, waterproof to IEC 529 IPX7 standards
<b>Interfaces:</b>	RS232 with NMEA 0183, RTCM 104 DGPS data format and proprietary Garmin®
<b>Antenna:</b>	Built-in quadrifilar, with external antenna connection (MCX)
<b>Differential:</b>	DGPS (USCG and WAAS capable)
<b>Temperature range:</b>	5°F to 158°F (-15°C to 70°C)
<b>Dynamics:</b>	6 g's
<b>User data storage:</b>	Indefinite, no memory battery required

*Specifications obtained from [www.garmin.com](http://www.garmin.com)*

## APPENDIX D

### LIST OF MAPS (IN MAP POCKET)

Posted contoured TFM plan map (1:2500)

- 1) #07-025-AMADOR-AJAX-MAG-CONT

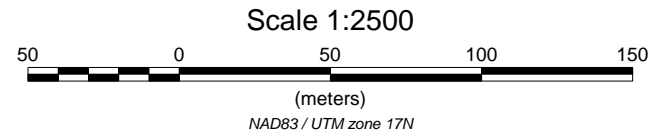
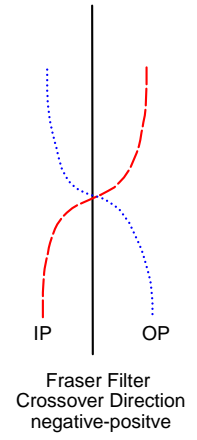
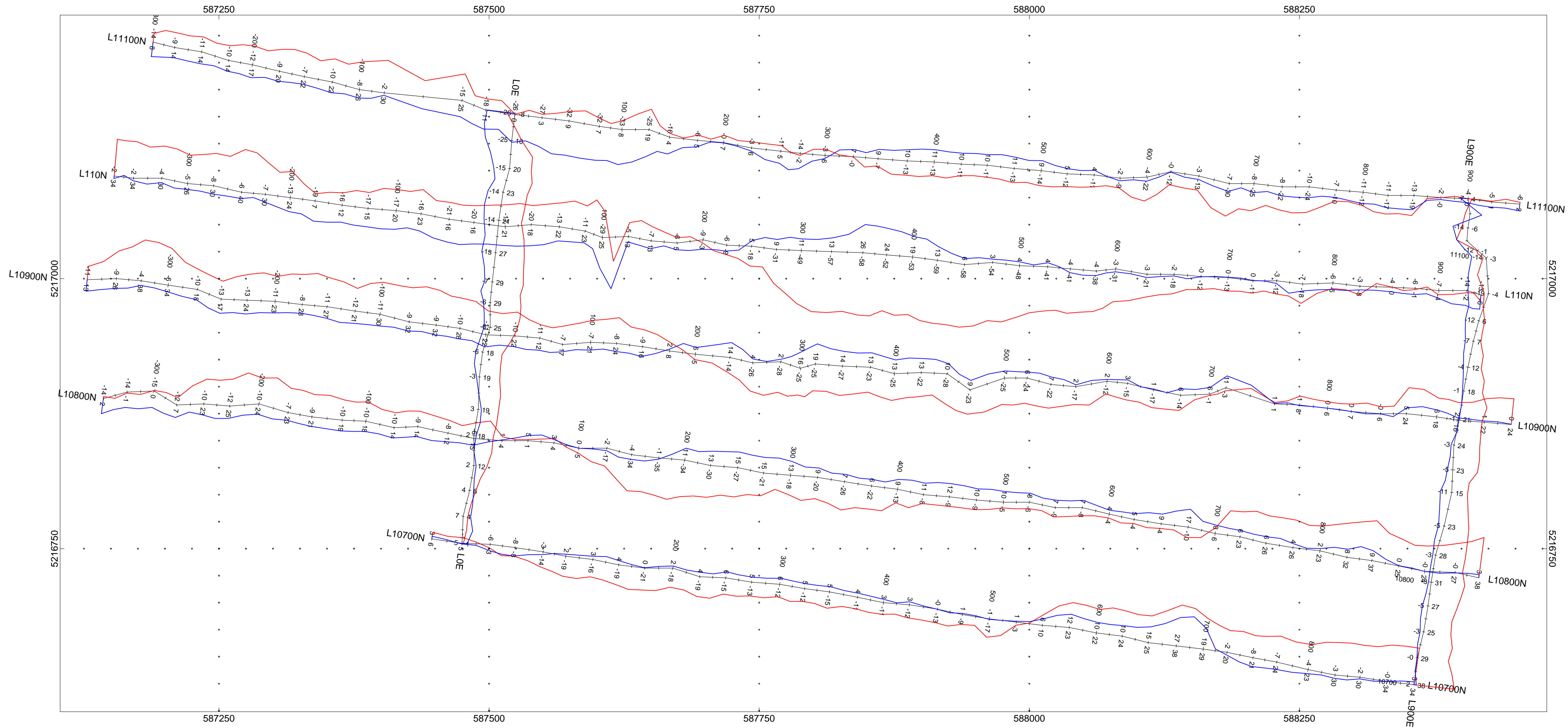
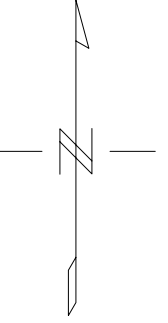
Posted contoured TFM plan map (1:2500)

- 2) #07-025-AMADOR-AJAX-MAG-PROF

Posted contoured TFM plan map (1:2500)

- 3) #07-025-AMADOR-AJAX-VLF-NAA
- 4) #07-025-AMADOR-AJAX-VLF-NLK
- 5) #07-025-AMADOR-AJAX-VLF-NML

**TOTAL MAPS=1**



**AMADOR GOLD CORPORATION**

**AJAX GRID**  
Strathy Township, Ontario

VLF IN PHASE/OUT PHASE PROFILE  
VLF FRASER FILTERED CONTOURED PLAN MAP  
25.2kHz NML - LaMOURE, NORTH DAKOTA, USA


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

Vertical Profile Scales: 2.5 %/mm  
Contour Interval: 0, 5, 10, 15, 20, 25, 50, 100

Station Separation: 12.5 meters  
Posting Level: 0

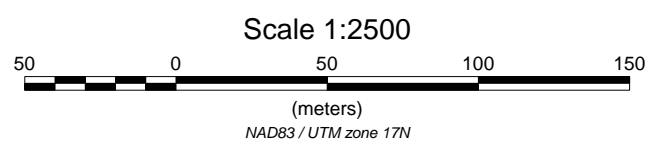
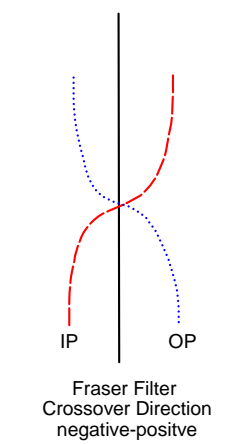
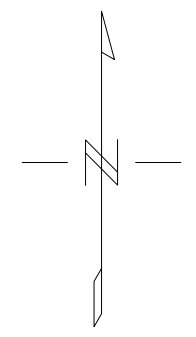
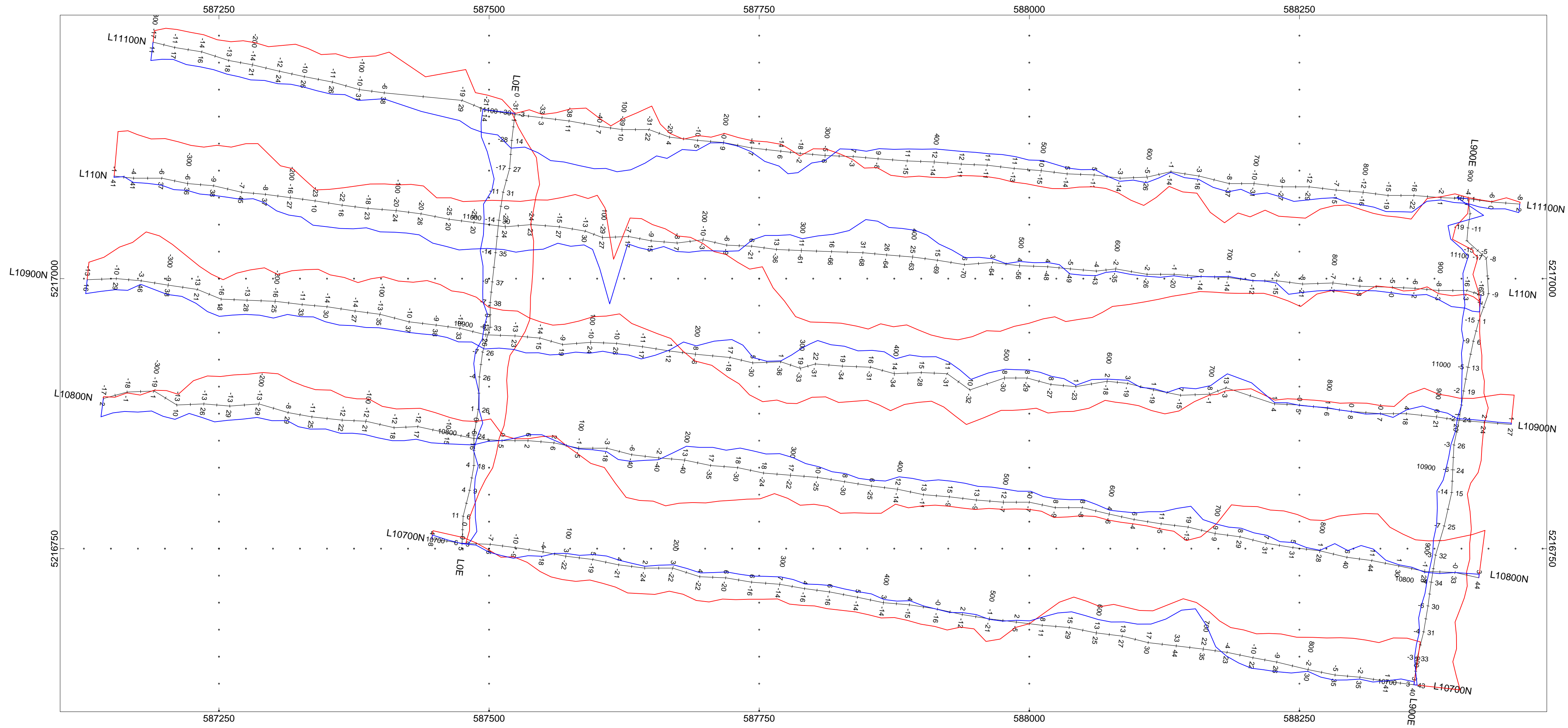
GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Magnetometer Operated by: Karl Zancanella  
GPS Operated by: Stan Veinot  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: Melissa Antoniazzi  
May 16, 2007



Drawing #07-025-AMADOR-AJAX-VLF-NML





**AMADOR GOLD CORPORATION**

**AJAX GRID**  
Strath Township, Ontario

VLF IN PHASE/OUT PHASE PROFILE  
VLF FRASER FILTERED CONTOURED PLAN MAP  
24.8kHz NLK - SEATTLE, USA

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

Vertical Profile Scales: 2.5 %/mm  
Contour Interval: 0, 5, 10, 15, 20, 25, 50, 100

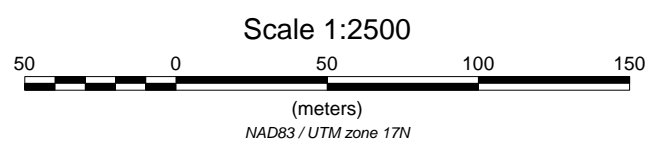
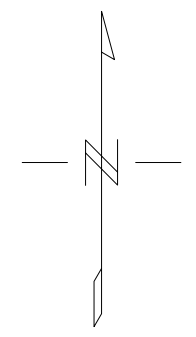
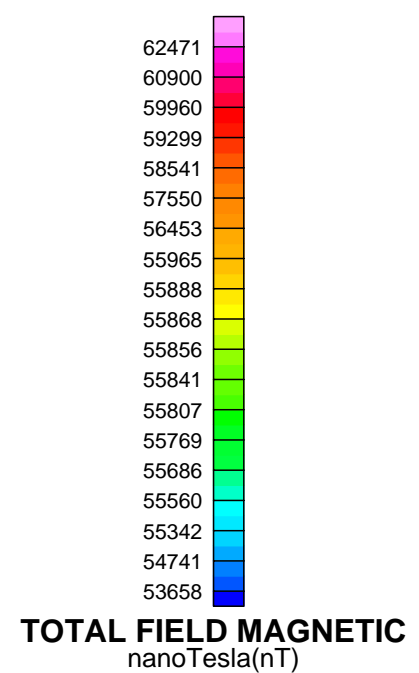
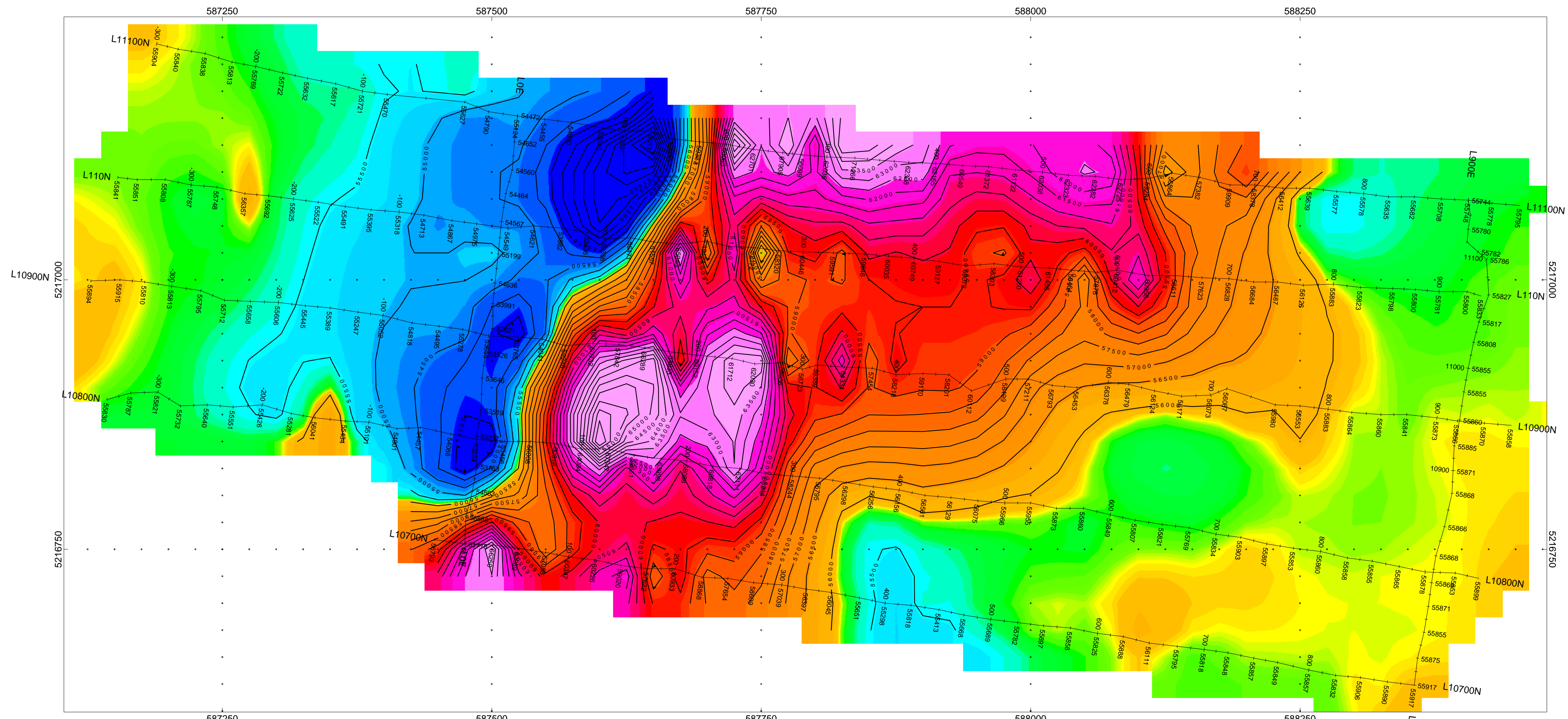
Station Separation: 12.5 meters  
Posting Level: 0

GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Magnetometer Operated by: Karl Zancanella  
GPS Operated by: Stan Veinot  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: Melissa Antoniazzi  
May 16, 2007

**LARDER**  
GEOPHYSICS LTD.  
(705) 643-4122

Drawing #07-025-AMADOR-AJAX-VLF-NML



**AMADOR GOLD CORP.**

**AJAX GRID**  
Strathy Township, Ontario

---

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP  
Base Station Corrected (587062E, 5216726N)

Posting Level: 0nT  
Field Inclination/Declination: 73.1degN/11.5degW  
Station Separation: 25 meters  
Total Field Magnetic Contours: 500nT

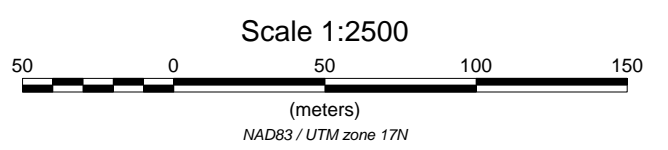
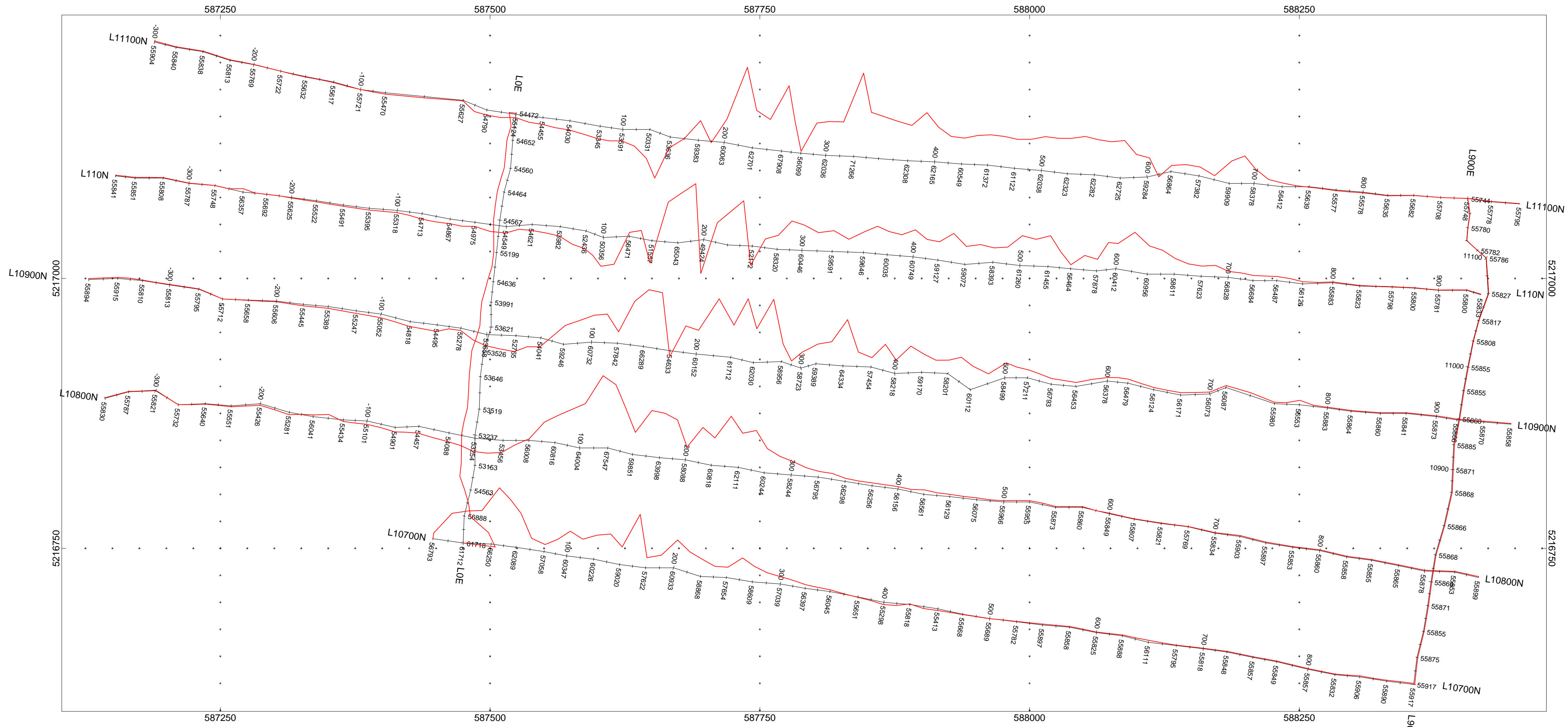
GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Magnometer Operated: Karl Zancanella  
GPS Operated by: Stan Veinot  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: Melissa Antoniazzi  
May 16, 2007

(705) 643-1122

Drawing #07-025-AMADOR-AJAX-MAG-CONT





**AMADOR GOLD CORPORATION**

**AJAX GRID  
Strathy Township, Ontario**

TOTAL FIELD MAGNETIC PROFILED PLAN MAP

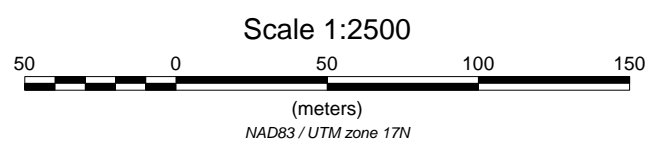
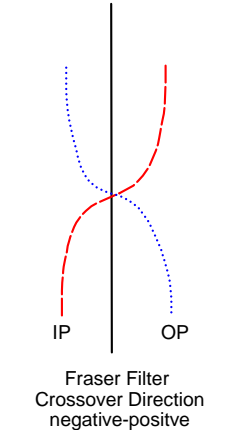
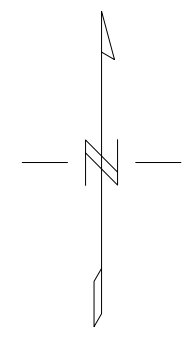
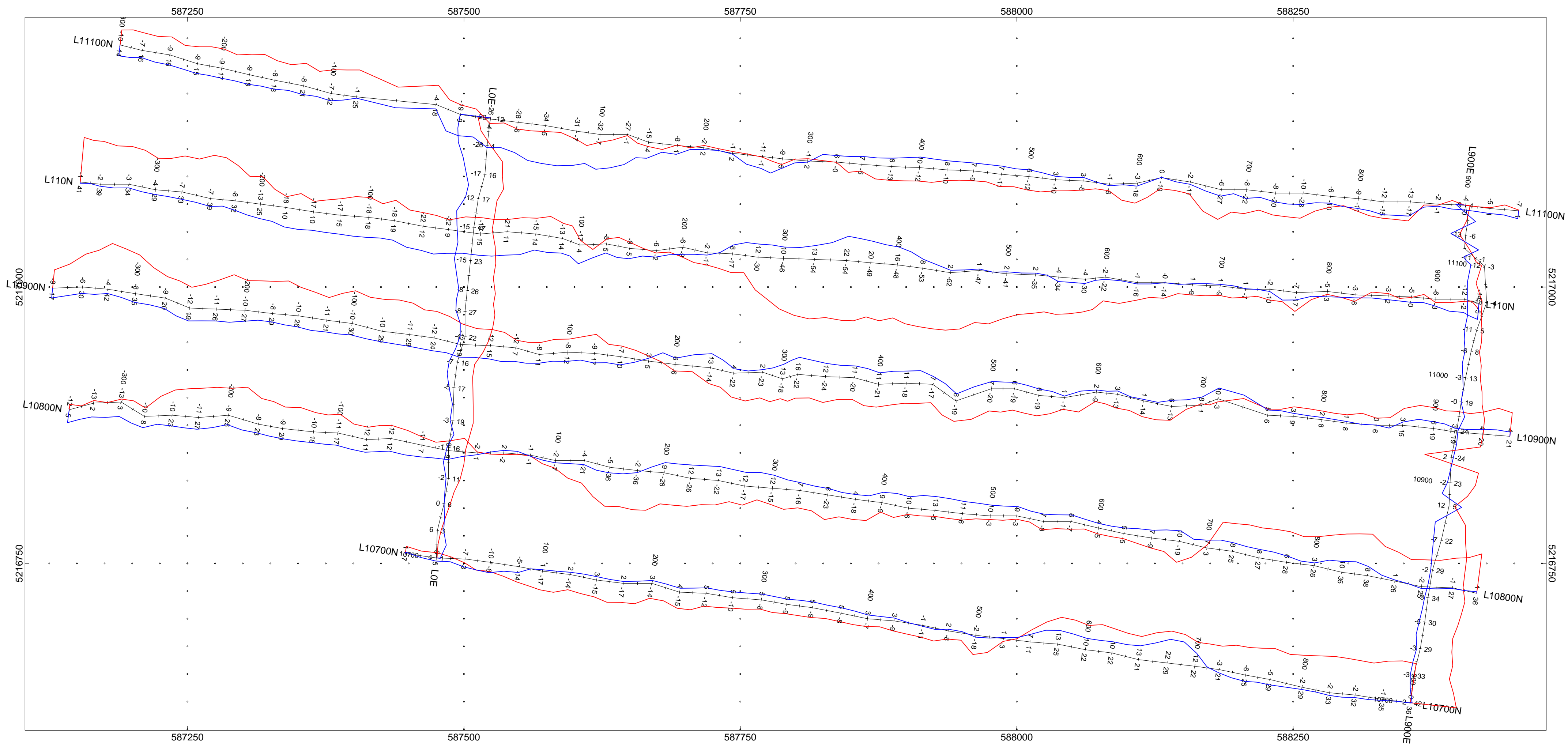
Posting Level: 0nT  
Field Inclination/Declination: 74degN/12degW  
Station Separation: 12.5 meters  
Total Field Magnetic Profile Scale: 500nT/mm

GSM-19 OVERHAUSER MAGNETOMETER/VLF v5

Magnetometer Operated by: Karl Zancanella  
GPS Operated by: Stan Veinot  
Processed by: C Jason Ploeger, B.Sc.  
Map Drawn By: Melissa Antoniazzi  
May 16, 2007



Drawing #07-025-AMADOR-AJAX-VLF-NML



**AMADOR GOLD CORPORATION**

**AJAX GRID  
Strathy 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: 2.5 %/mm  
Contour Interval: 0, 5, 10, 15, 20, 25, 50, 100

Station Separation: 12.5 meters  
Posting Level: 0

GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Magnetometer Operated by: Karl Zancanella  
GPS Operated by: Stan Veinot  
Processed by: C. Jason Ploeger, B.Sc.  
Map Drawn By: Melissa Antoniazzi  
May 16, 2007



Drawing #07-025-AMADOR-AJAX-VLF-NML