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NTS 31M/4

**Magnetometer Survey Report  
Phase One**

**NEW ATHONA PROPERTY**

**TEMAGAMI GOLD INC.**

**Cassels Township**

**April 2017**

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**1.0 PROPERTY:**

On April 7,8,9,10 2017, a magnetometer survey was carried out on mining claims 4250899 and 4268550 of the New Athona Property on behalf of Temagami Gold Inc. 1 Presley St. Cobalt, Ontario P0J 1C0. The objective of the work was to map magnetic characteristics of a mafic intrusive mapped by OGS geologists in 1986. David Laronde performed the geophysical surveying, grid establishment and authored the report on behalf of the contractor Meegwich Consultants Inc. P.O. Box 482, Temagami, Ontario POH 2H0. A total of 7.8 km of line was established and surveyed. The grid lines were located with a high sensitivity GPS receiver unit and stations were flagged at 25 meter intervals.

**2.0 PROPERTY:**

The property as a whole is extensive and contiguous however the work was done on a single mining claim situated in the southwest corner of Cassels Twp.

4250899 – 9 units June 19, 2017

**3.0 LOCATION AND ACCESS:**

As the crow flies the property is located 6 km northeast of the town of Temagami and is accessible by truck. The route to the property is by taking Fox Run Road east from Temagami for 4 km and then north on a cottage access road for 2 km to the hydro line road. Finally continue northeast to the property. A four wheel drive vehicle is recommended. The road deteriorates as you draw near the destination.



Sudbury Mining Division

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#### **4.0 MAGNETOMETER SURVEY:**

**4.1 Instrumentation:** Gem Systems GSM-19 overhauser magnetometers serial no. 58479 and 712776 were used as field unit and base station for the survey. These units have an accuracy of +/- 1/100th of a gamma. 7.8 km was surveyed taking 1248 readings at 6.25 meter intervals. The base station cycled at 15 second intervals.

**4.2 Survey Results and Interpretation:** The results are presented in contour format on plans at 1:5000 scale.

There are two main magnetic responses trending northeast and an interesting cross-cutting magnetic low to consider.

The most northern of these trends is characterised by isolated spikes that range up to 7000 nT as seen west and central to the grid on L 800 E at 1050 N. From here one could say a narrow band (30-50 meters wide) of magnetic highs trends northeast across the known "mineralized zone" which is also a conductive zone that was surveyed and worked in 1962. Another notable spike is found at the north end of L 1200 E.

A second "sister trend" is partially covered at the southern perimeter of the grid. An indication of true width of 50 meters is found on L 1300 E at 850 N. The magnetic intensity ranges around 1750 nT above a background of 1100 nT. This trend seems to be broken or interrupted at the south end of L 1100 E. This is marked by a 200 meter wide magnetic low which continues northwest

and off the grid. This feature appears to be a sub-parallel splay off a main regional structure one can readily see on a satellite image. It may have some significance in the placement of mineralised fluids.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS:**

A proven historic mineralised trend in the north part of the grid has been outlined by the magnetic survey. The zone is marked by pyrrhotite which would explain the intense spikes. A southern “sister” trend 750 meters away to the southeast has not had the historic scrutiny as the northern trend partly due to topographic restrictions being lower lying. This makes the magnetic zone or trend an interesting target for further work.

There are structural components to consider in any future exploration work. The entire gridded area may be considered a splay off a regional deformation zone that extends some 50 km southwest to the Emerald Lake area and into what is referred to as the “Temagami Anomaly” with magnetic and gravitational similarities to the Sudbury Basin. The cross-cutting magnetic low trend may also be significant in the placement of mineralised fluids considering VMS potential.

For base and precious metal exploration the next logical step would be to outline sulphides that are commonly associated. An HLEM or an IP survey is recommended. These surveys would require chainsaw line cutting. Of course the grid and magnetic coverage should be extended to the south for 500 meters prior to the electrical surveying.

**References**

1969 Geological Map #2423 OGS                      one inch : ½ mile                      1:31,680

1989 Geologic Report 271- P. Born - Precambrian Geology Cassels and  
Riddell Townships

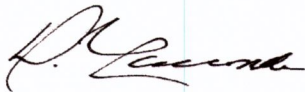


**CERTIFICATE OF AUTHOR**

I, David Laronde of the town of Temagami, Ontario hereby certify:

1. That I am a geology technologist and have been engaged in mineral exploration for the past 36 years.
2. That I am a graduate of Cambrian College in Sudbury with a diploma in Geology Engineering Technology 1979.
3. That my knowledge of the property described herein was acquired by field work and documentation.

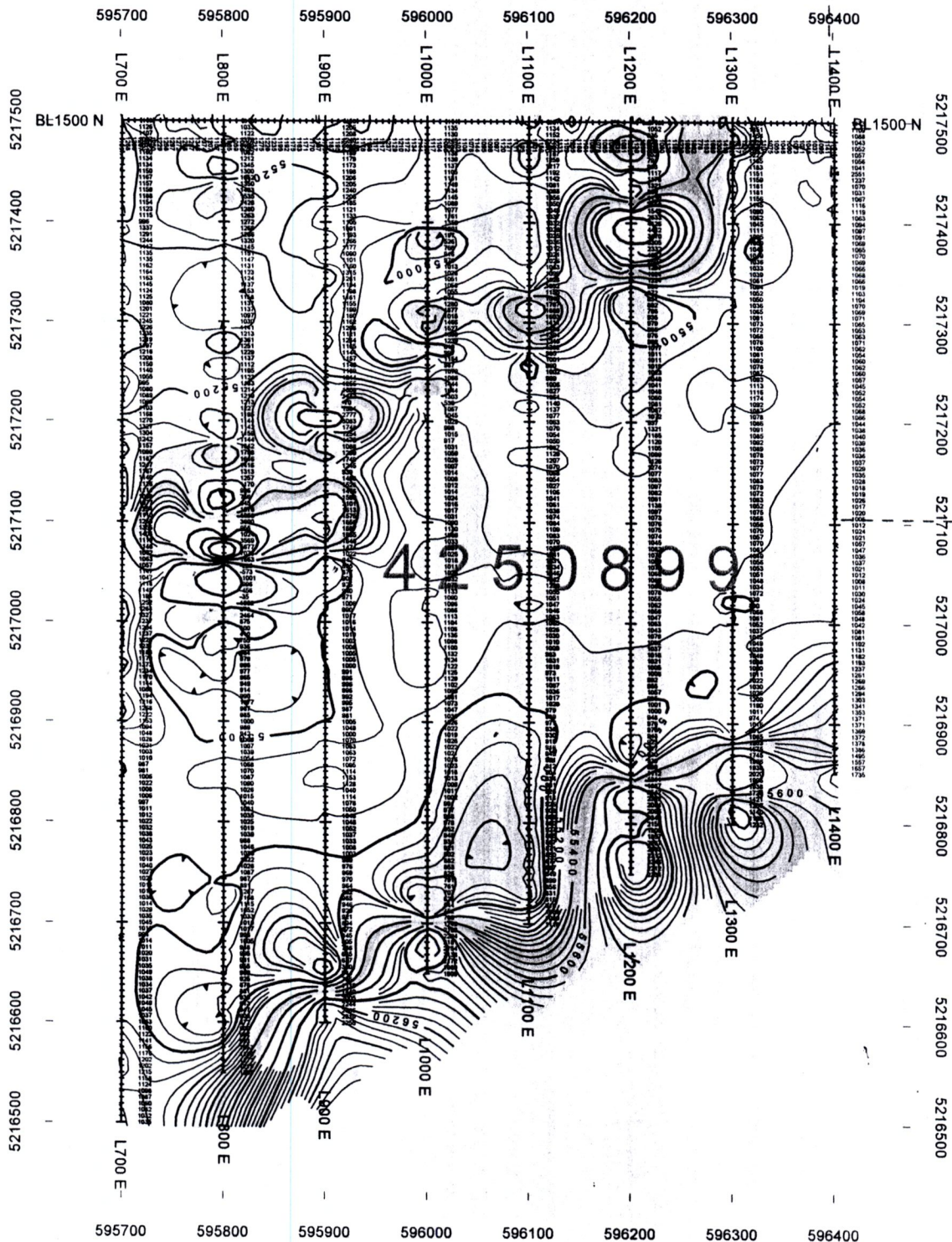
Dated at Temagami this 24th day of April 2017.



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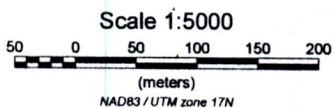
David Laronde





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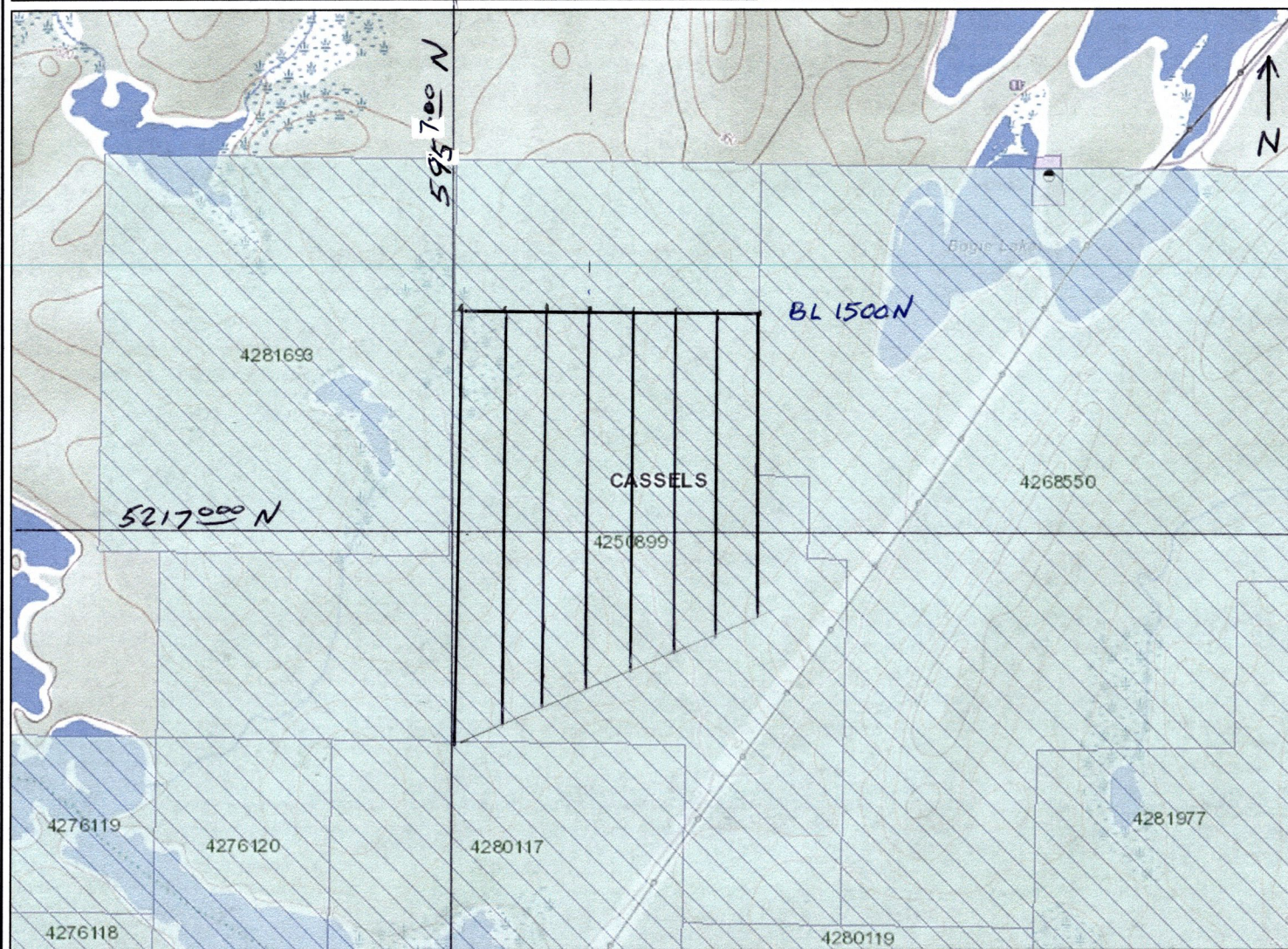
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Instruments:  
GEM Systems GSM-19 Magnetometer Serial #712776  
GEM Systems GSM-19 Magnetometer Serial #7052358

<b>Temagami Gold Inc.</b> <b>New Athona Property</b>		
Cassells Township, Ontario Sudbury Mining Division		
Ground Magnetometer Survey Total Field Contours		
Data Processing and Interpretation by: <b>Meegwich Consultants Inc.</b>	Scale 1:5000	NTS 31 M/4
	April 2017	





Legend

Administration Boundaries

- Mining Divisions
- Resident Geologist District
- Townships and Areas
- UTM Grid
- Geographic Lot Fabric
- Other Federal Land

Mineral Tenure Grid

- DMTG Tenure Grid

Alienations

- Withdrawal
- Notice

Unpatented Claim

- Active
- Reconciled
- Pending

Disposition

- Disposition

Disposition Symbols

- Camp
- Disposition Unknown/Pending
- Freehold Patent Mining Rights Only
- Freehold Patent Surface Rights Only
- Freehold Patent Surface and Mining Rights
- Land Use Permit
- Leasehold Patent Mining Rights Only
- Leasehold Patent Surface Rights Only
- Leasehold Patent Surface and Mining Rights
- License of Occupation Mining Use Only
- License of Occupation Surface Use Only
- License of Occupation Surface and Mining Rights
- License of Occupation Uses Not Specified
- Order in Council
- Tower
- WPLA

Geology Layers

- AMIS Sites
- AMIS Features
- Drill Holes
- Mineral Occurrences

0 0.69 km

Projection: Web Mercator



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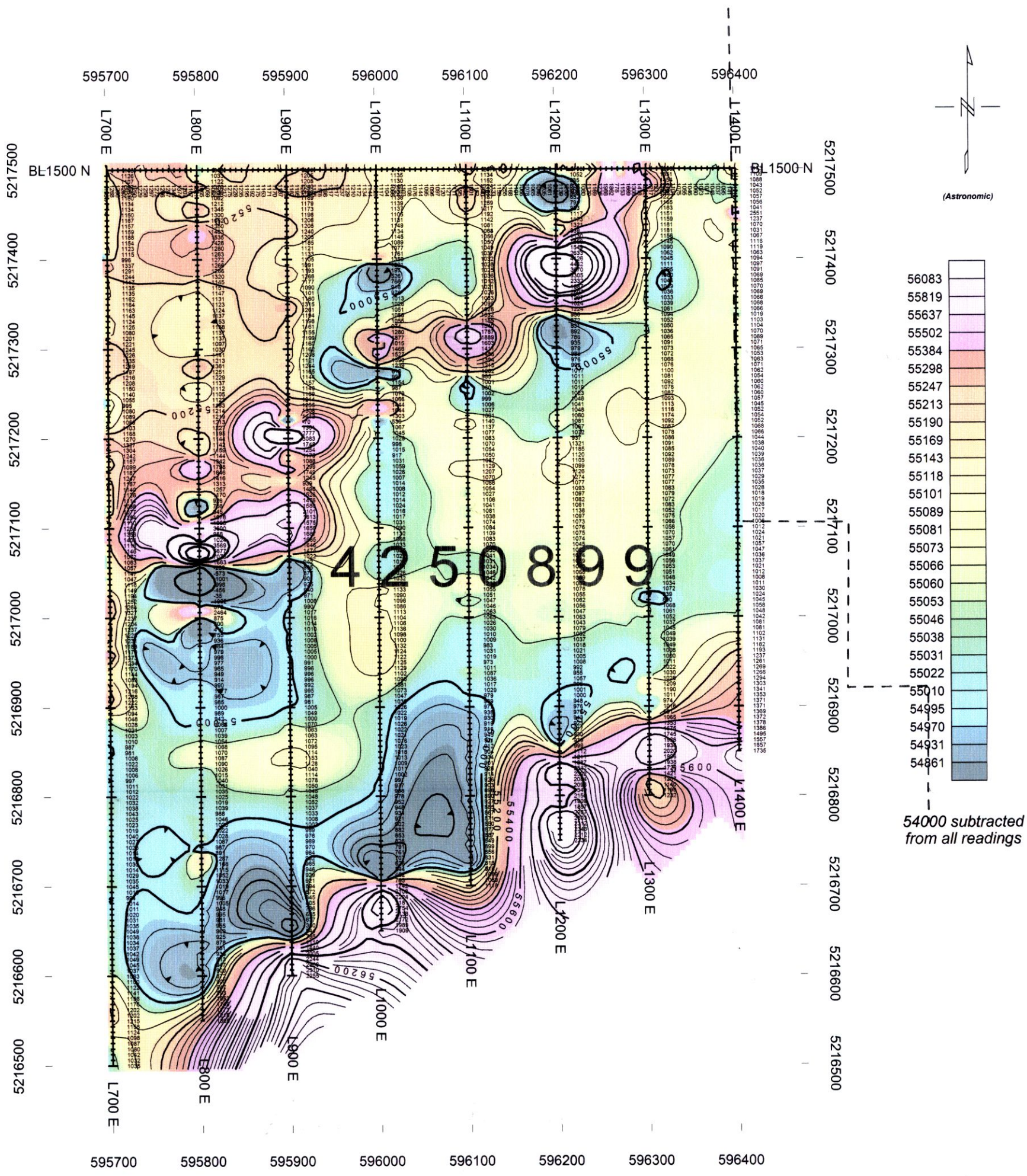
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54000 subtracted  
from all readings

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