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**Report on a drone magnetic survey
over the claim 514295
Riggs Townships, NTS 42C/08
Ontario, Canada**

Submitted to

**Alamos Gold Inc.
181 Bay Street, Suite 3910
Toronto, ON
M5J 2T3**

By

**Marc Boivin, P.Geo. (PGO #2104)
Geophysical consultant**

March 2020



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Deliverables

- Logistic report (PDF format)
- Total magnetic Intensity (TMI) map (PDF format)
- First Vertical Derivative (1VD) map (PDF format)
- Second Vertical Derivative (2VD) map (PDF format)
- GIS Files (SHP and Geotif)
- Grid files (Geosoft .grd format)
- Database (Geosoft GDB format and ACSII format)

1. INTRODUCTION

At the request of Alamos Gold Inc, a high-resolution drone magnetic survey was carried out by Vision4K in March 2020, over the claim 514295. This report summarizes the field operations and the results.

2. SURVEY AREA

The Claim 514295 is located approximately 22 kilometres south-east of Dubreuilville in Ontario (figure1).



Figure 1 (Project location)

The drone magnetic survey has entirely covered the claim number 514295, held by Alamos Gold Inc (figure 2).

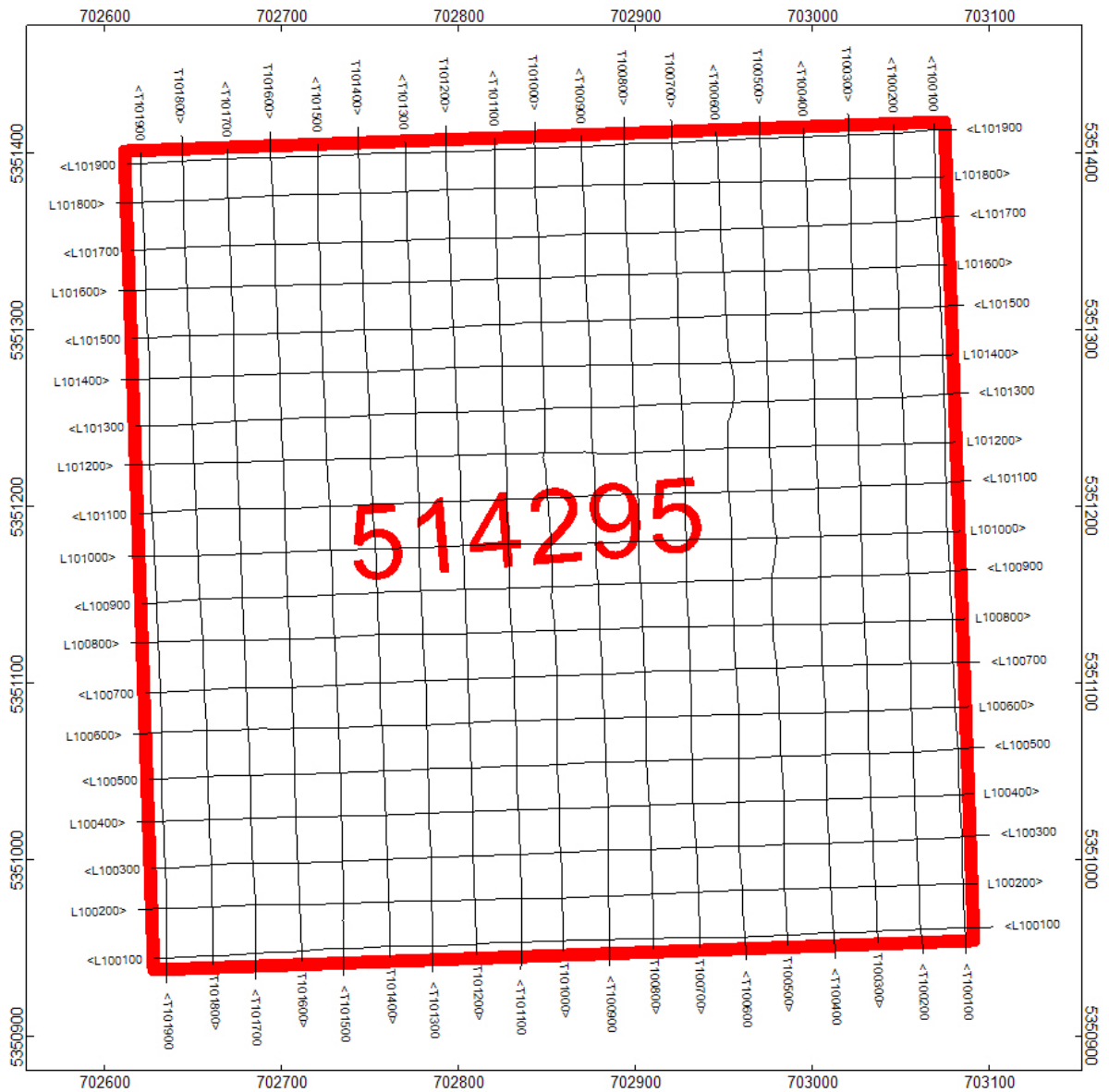


Figure 2 (claim vs flight path)

3. DATA ACQUISITION

3.1 EQUIPMENT

3.11 DRONE

The drone used for this survey is a DJI Matrice 600 model. This drone is a multi-rotor (six motors) with a weight of 9.1 kg (including batteries). A telemetry link always allows the pilot to know the position and orientation of the drone, as well as the video image of a camera pointed towards the front.

An independent control computer allows system navigation and precise control of flight altitude. The pilot can take control of the drone at any time. If a software flaw is detected, the drone returns to its take-off point autonomously.

The survey was carried out in accordance with Transport Canada regulations. The drone was correctly registered with Transport Canada, and Vision4K's operators held pilot certificates. Survey operations meet Transport Canada's Visual-line-of-sight requirements.

3.12 MAGNETOMETER

The magnetometer used for the survey was a Scintrex CS-VL cesium vapour device. This magnetometer is powered by an independent battery. The CS-VL has a measurement range between 15,000 nT and 105,000 nT with a sensitivity of $0.0006\text{nT}/\sqrt{\text{Hz}}$.

The magnetometer is installed in a custom-built plastic bird shell (Figure 2), allowing a controlled orientation of the magnetometer during flights. The bird shell is towed at five (5) metres below the drone. The height of the sensor is variable for each survey according to the client's request and security requirements.

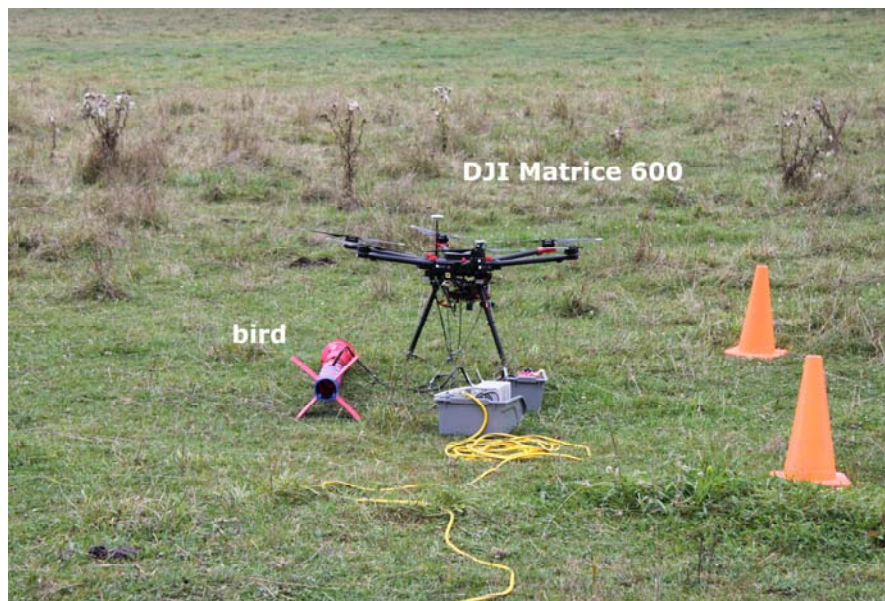


Figure 3 (MAG-DRONE system)

3.12 ACQUISITION SYSTEM AND AIM LOW™ TECHNOLOGY

The acquisition system is built by Devbrio Geophysics, partner with Vision4K. The system is linked with the magnetometer to obtain measurements using counting circuit at a frequency of 10 Hz. The navigation software used a GPS system installed on the drone.

The system is also equipped with an active real-time altitude control and collision avoidance called AIM LOW™ and built by Devbrio Geophysics. The AIM LOW™ allows data acquisition as close as 3 metres from the treetops, much lower than any competing technology in similar conditions.

3.2 FLIGHT SPECIFICATIONS

The magnetic survey was carried out along orthogonal lines pattern. One set of lines was flown at $N88^{\circ}$ with the spacing of 25 metres and the second set of lines was flown at $N258^{\circ}$ with the spacing of 25 metres.

The magnetometer was maintained at a mean altitude of 29 metres above the ground with an average survey speed of 11.5 m/s (41 km/hour).

The entire survey totalling 17.892 line-kilometres.

4. DATA PROCESSING

Data processing was carried out by Devbrio Geophysics, using proprietary software. Final data processing was carried out by Marc Boivin, P.Geo. using Geosoft OASIS Montaj.

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the WGS84 Datum, UTM Zone 16N.

The diurnal magnetic corrections were completed using a base station magnetometer located near the survey site. A correction of the lag (shift between the position of the magnetometer and the drone) was applied on the data. Heading errors generated by movements of the magnetometer during flights were filtered.

No levelling correction was needed nor applied on the data.

5. RESULTS

The final total magnetic intensity (TMI) data were gridded using a ten (10) metres cell size. Figure 4 shows the image of the total magnetic field (TMI).

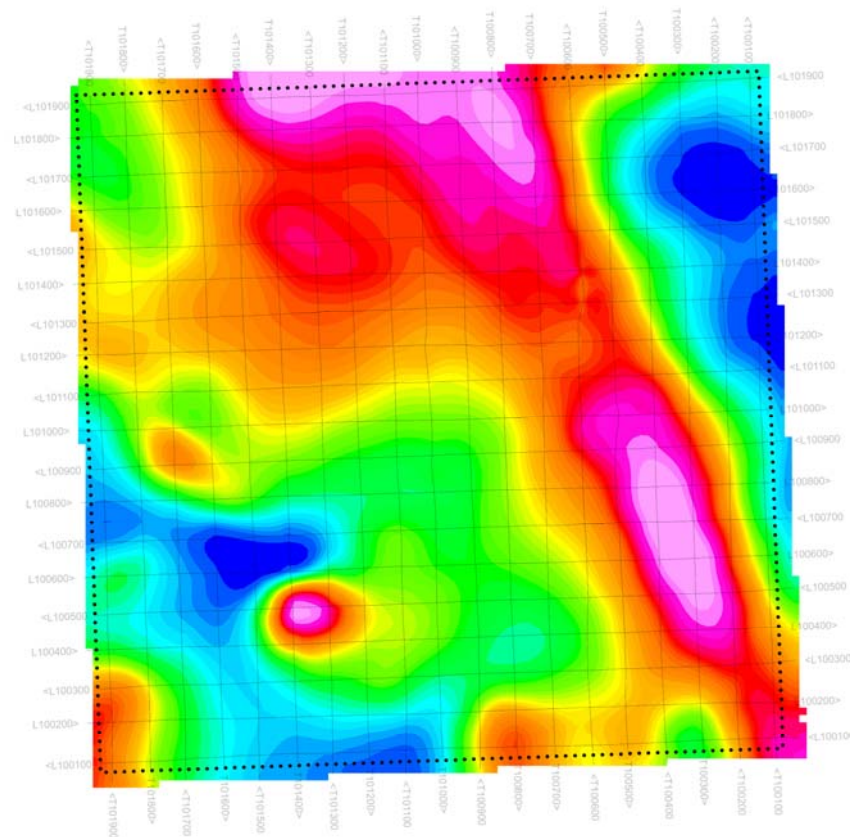


Figure 4 (TMI Image)

The first vertical derivative (1VD) of the TMI, the second vertical derivative (2VD) of the TMI and the tilt derivative (TiltD) grids were calculated using a 2D FFT algorithm. Figure 5 shows the image of the first vertical derivative (1VD).

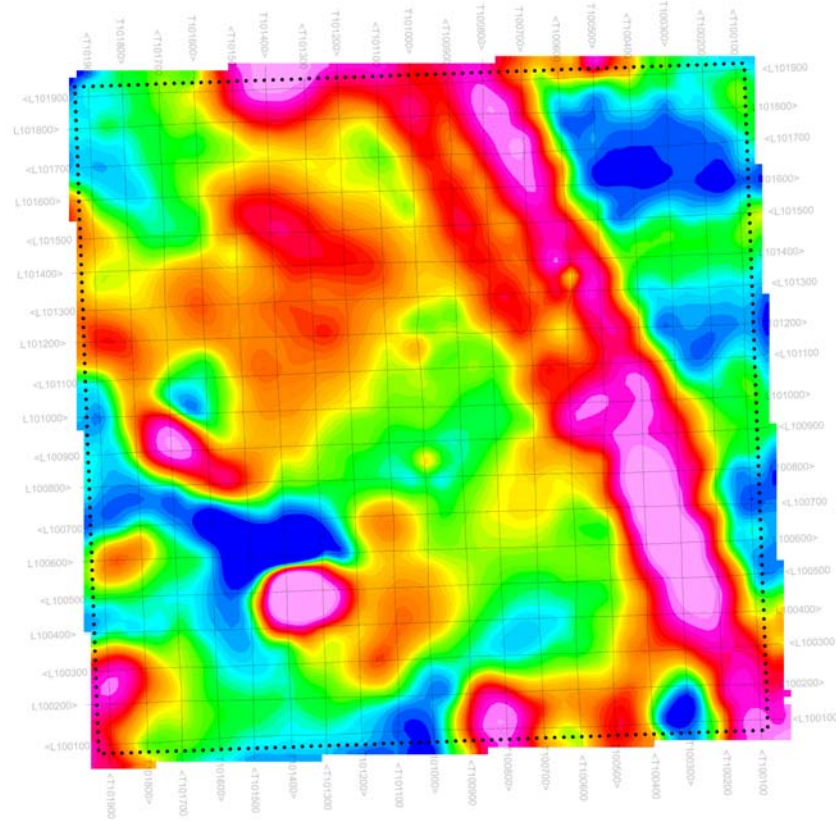


Figure 5 (1VD image)

6. CONCLUSIONS

A high-resolution drone magnetic survey totalling 17.892 km was completed over the claim 514295. The results show highly detailed magnetic images that can be used as a new tool for geological and structural mapping. It is recommended integrating any geological, geochemical or geophysical information to this new magnetic survey in order to generate exploration targets.

Respectfully submitted,

Marc Boivin, P.Geo. (PGO #2104), Geophysicist

Statements of Qualification

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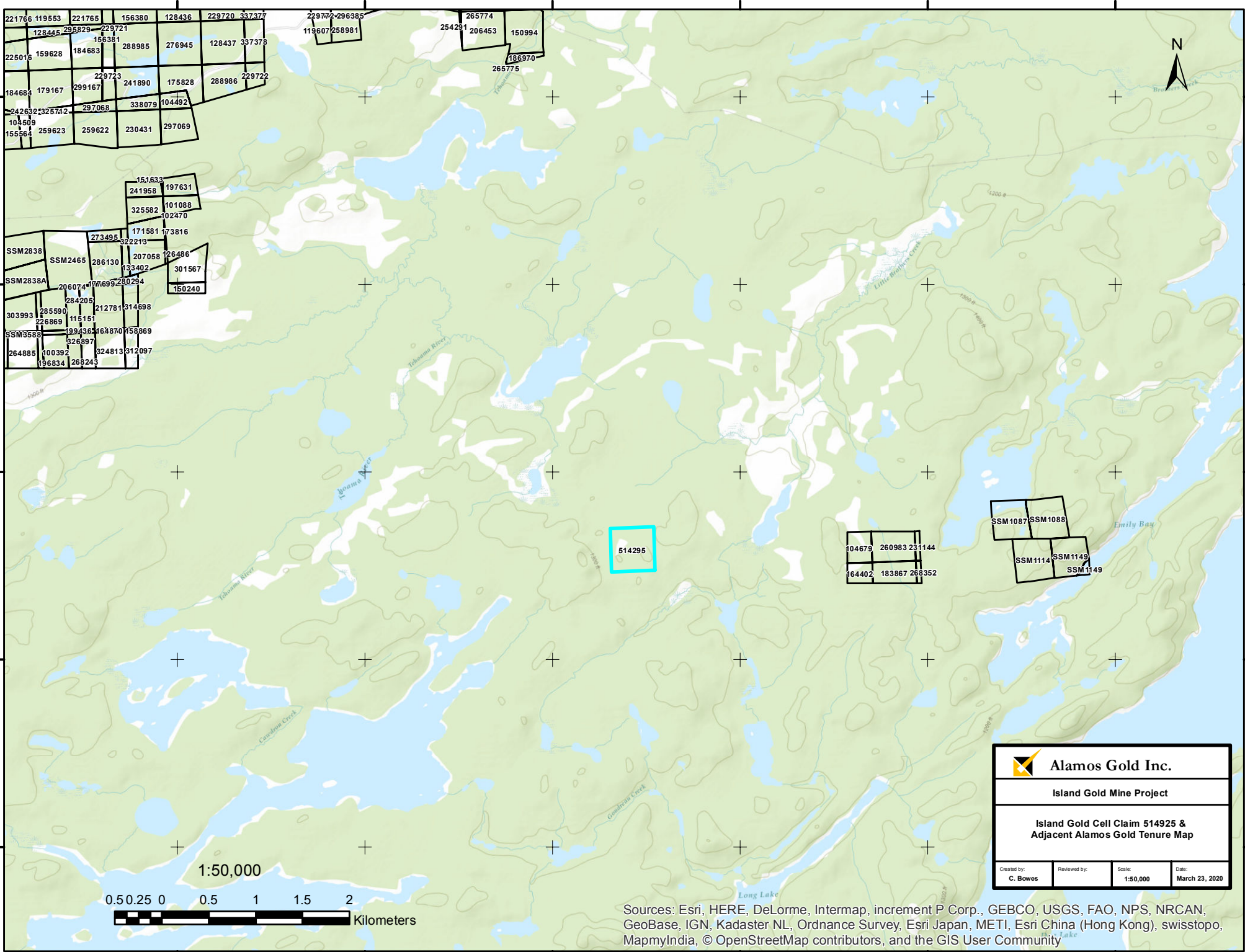
I, Marc Boivin, P.Ge., do hereby certify that:

1. I am an independent consulting geophysicist, good-standing member of Professional Geoscientists Ontario (#2104)
2. I earned a Bachelor of Science in Geology in 1983 at Université du Québec à Montréal.
3. I have practised my profession for 35 years in mining exploration geophysics.
4. I have not received and do not expect to receive a direct or indirect interest in the project covered by this report.
5. I wrote the report **“Report on a drone magnetic survey over the claim 514295, Riggs Townships, NTS 42C/08, Ontario, Canada**

March 20, 2020



Marc Boivin, P.Ge., (PGO) #2104



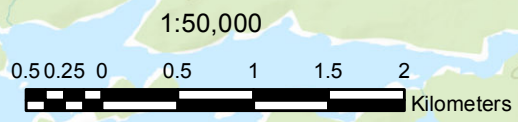
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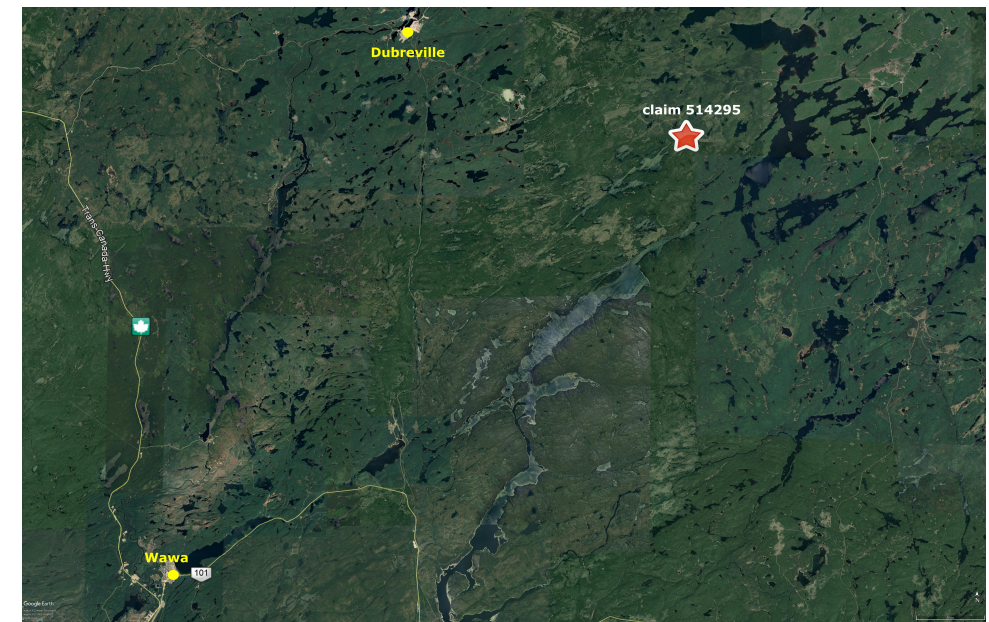
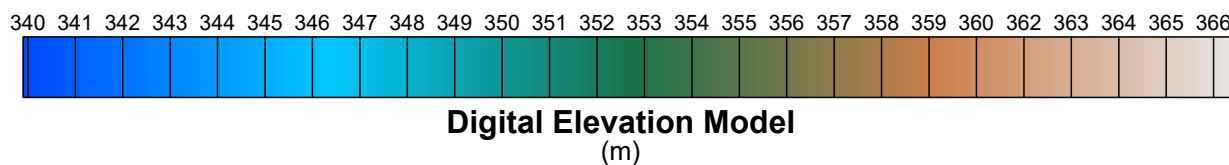
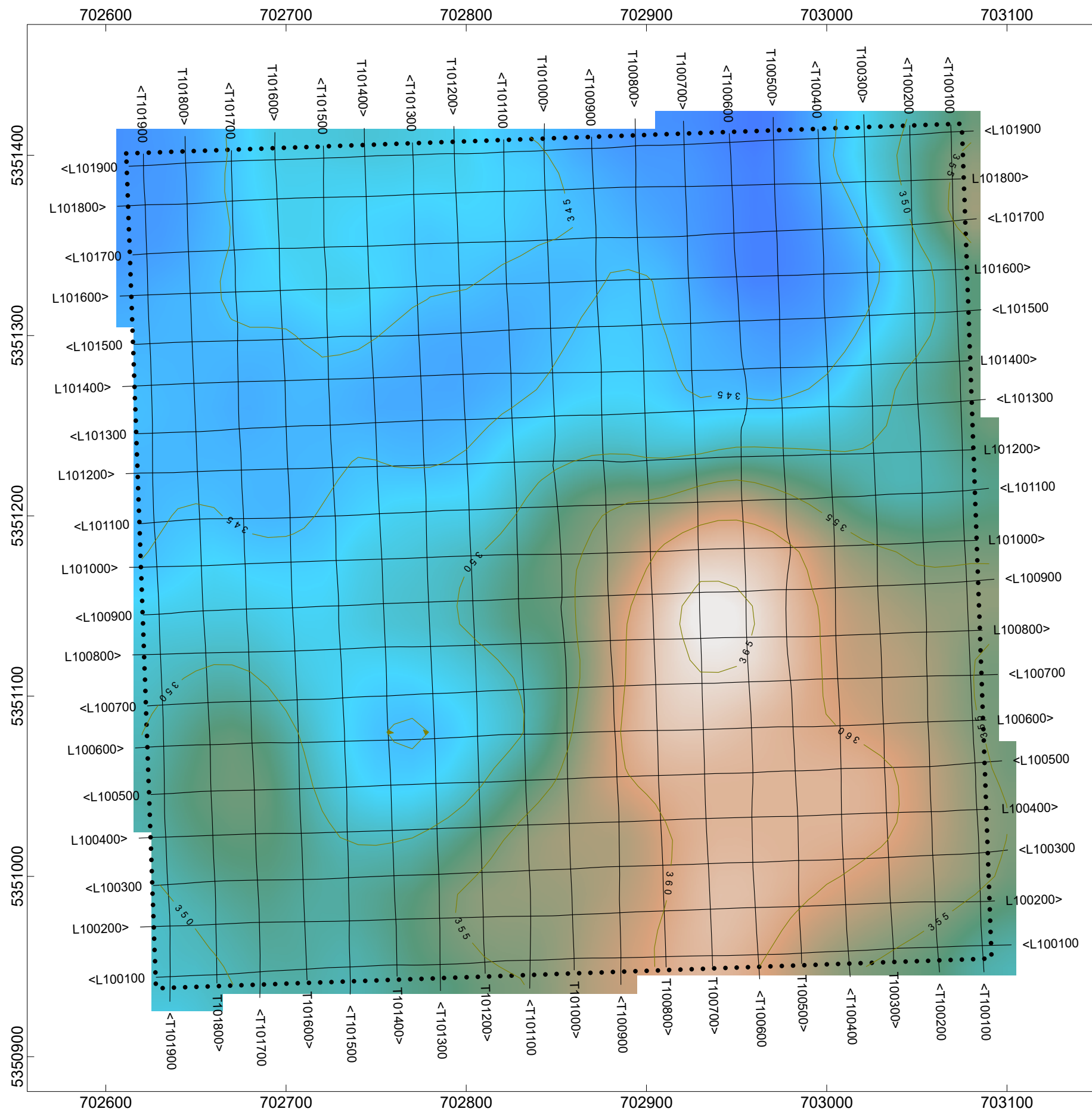


Island Gold Mine Project			
Island Gold Cell Claim 514925 & Adjacent Alamos Gold Tenure Map			
Created by: C. Bowes	Reviewed by:	Scale: 1:50,000	Date: March 23, 2020

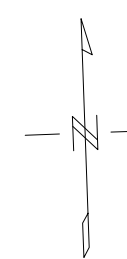
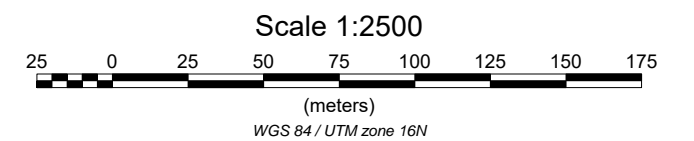
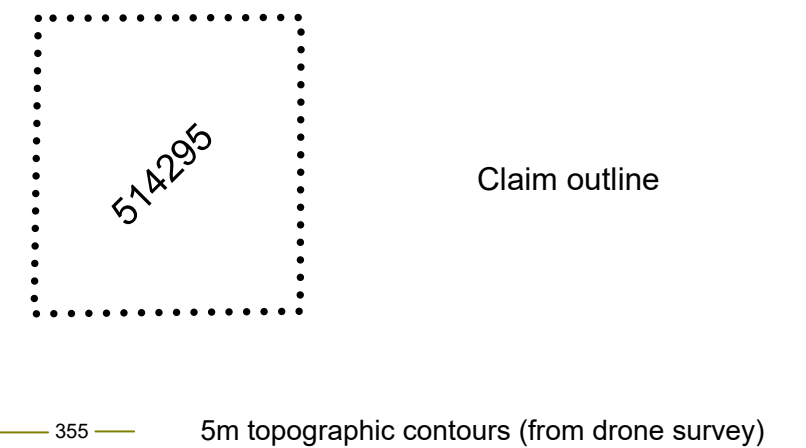
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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MAG drone system: AIM-LOW™
 Drone: DJI M600
 Magnetometer: Scintrex CS-VL
 Line spacing: 25m
 Nominal magnetic sensor height: 29m
 Technology developed by: Devbrio Geophysics
 Survey flown by: Vision 4K

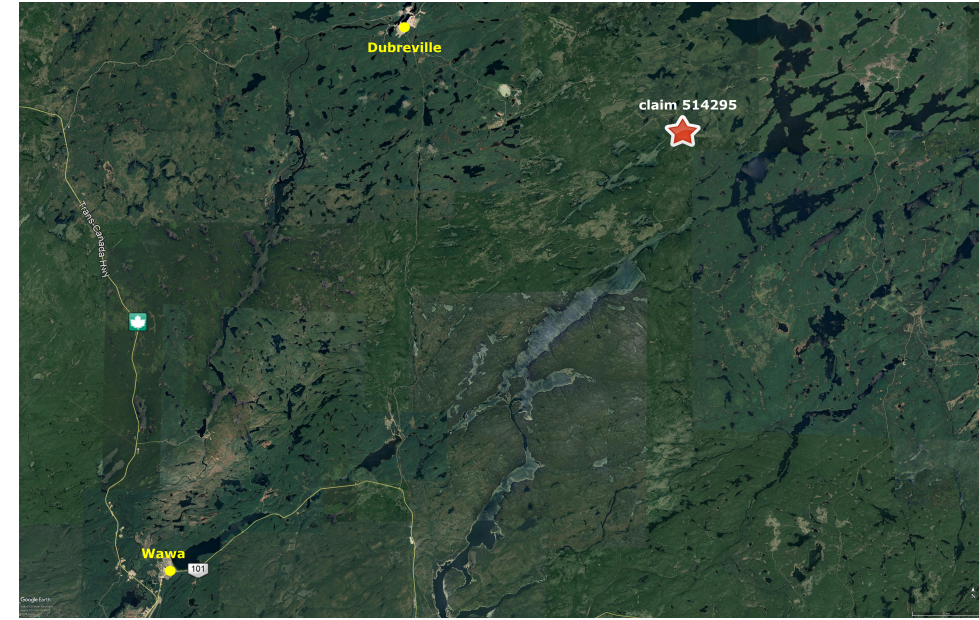
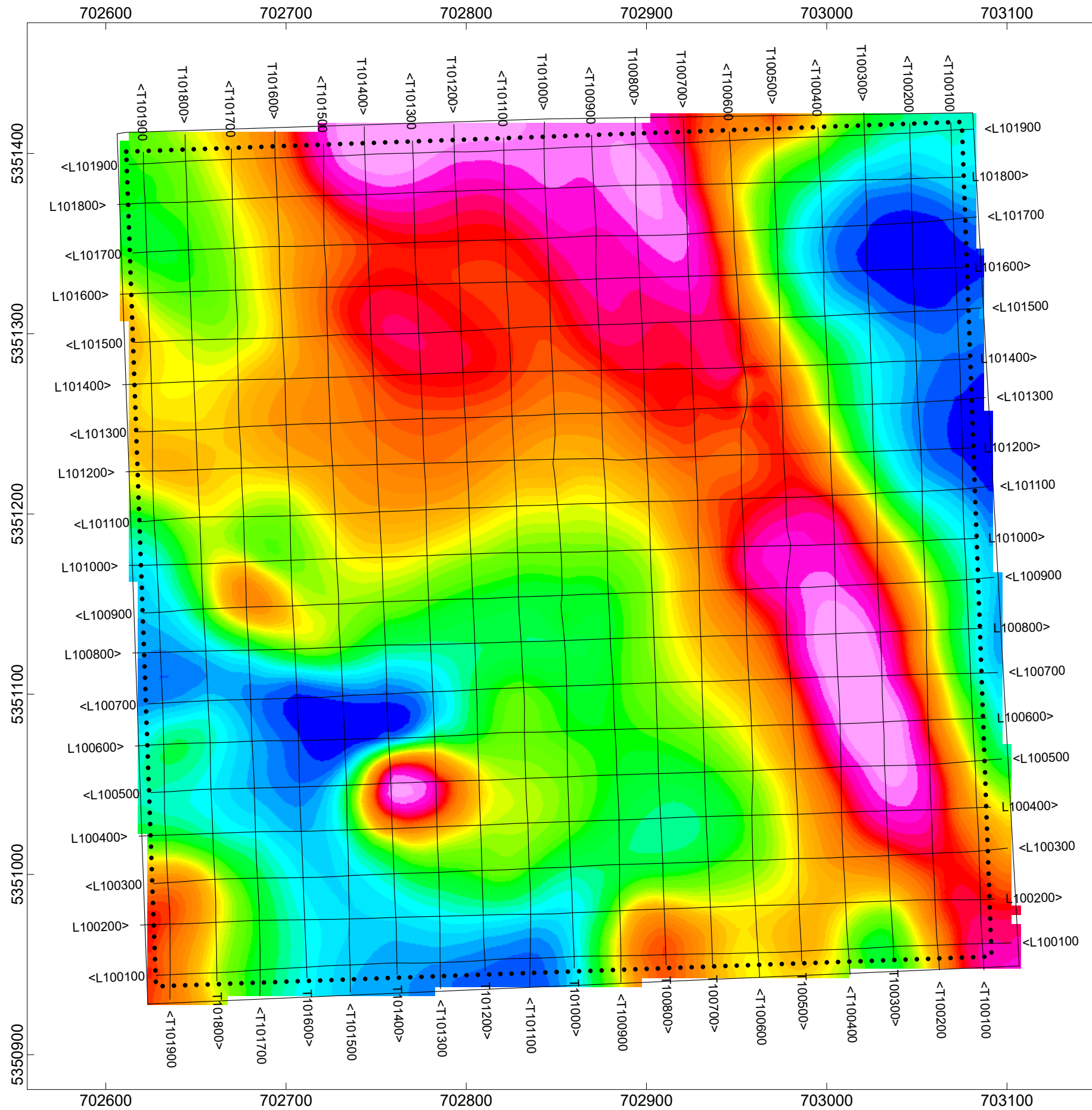


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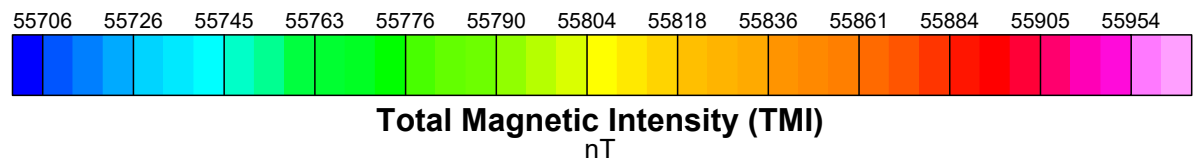
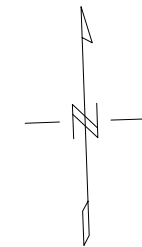
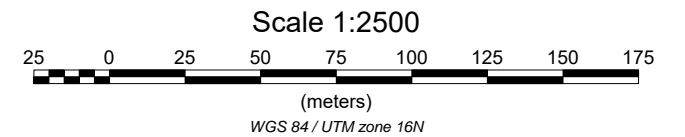
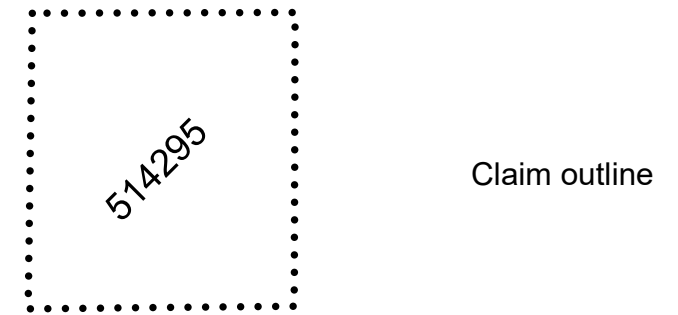
Claim 514295 (Island Gold Mine area)
High resolution drone magnetic survey
Flight path and digital elevation model (DEM) map
NTS sheet: 42C/08 Townships: Riggs


Surveyed by: Vision4K (March 2020)
 Processed by: Marc Boivin, P.Geo. (March 2020)

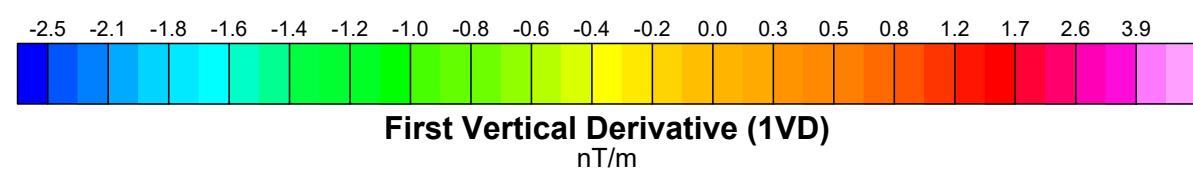
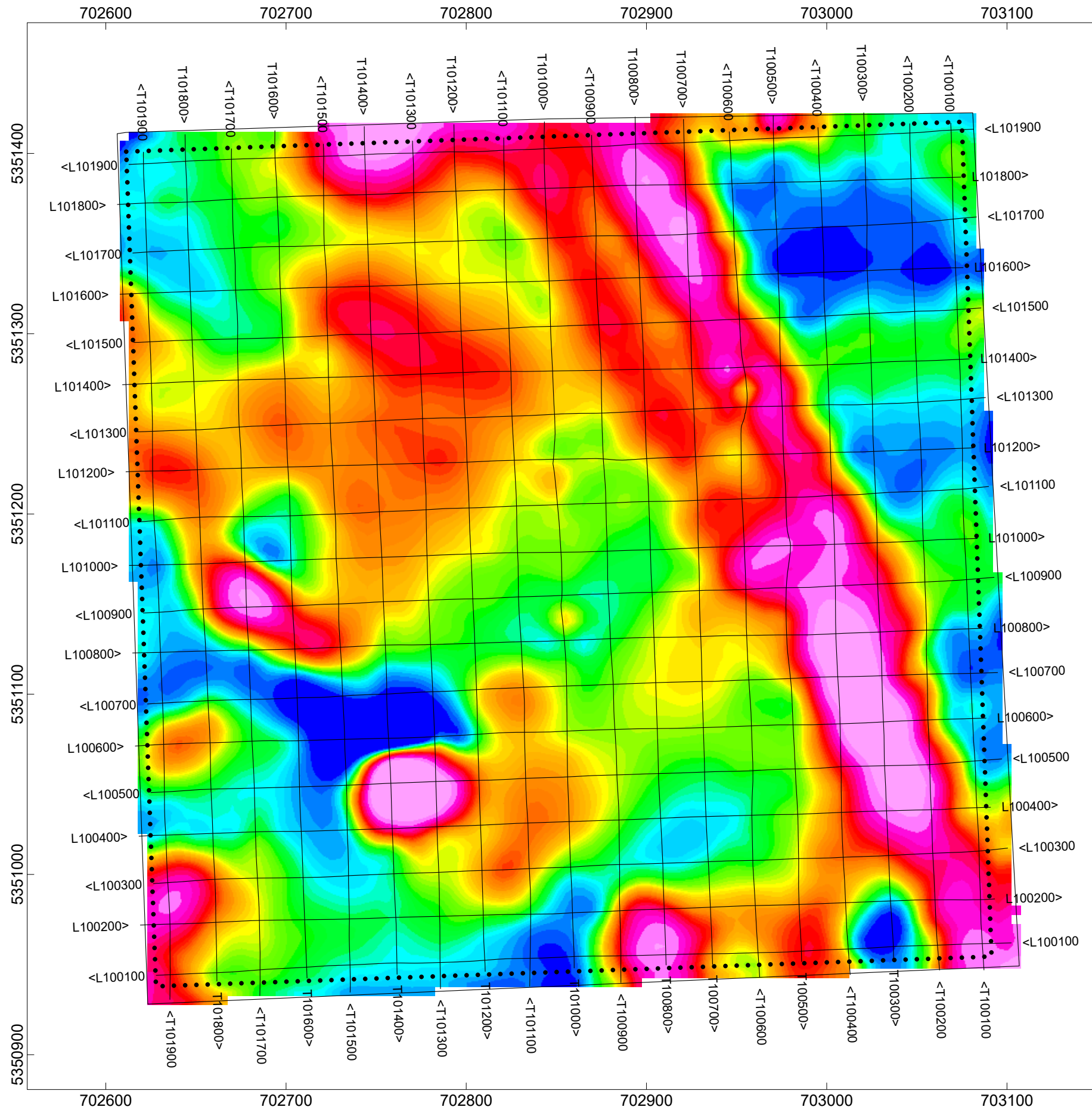
MB Geosolutions



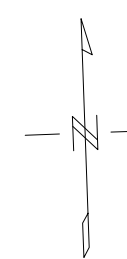
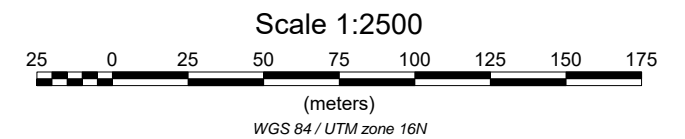
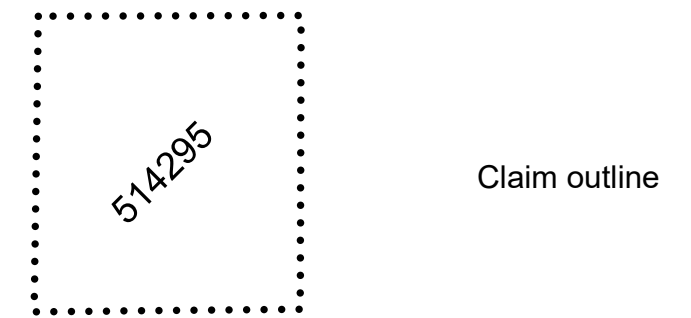
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 Line spacing: 25m
 Nominal magnetic sensor height: 29m
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 Survey flown by: Vision 4K




Alamos Gold Inc.
Claim 514295 (Island Gold Mine area)
High resolution drone magnetic survey
Total Magnetic Intensity (TMI) map
NTS sheet: 42C/08 Townships: Riggs
 Surveyed by: Vision4K (March 2020)
 Processed by: Marc Boivin, P.Geo. (March 2020)
MB Geosolutions



MAG drone system: AIM-LOW™
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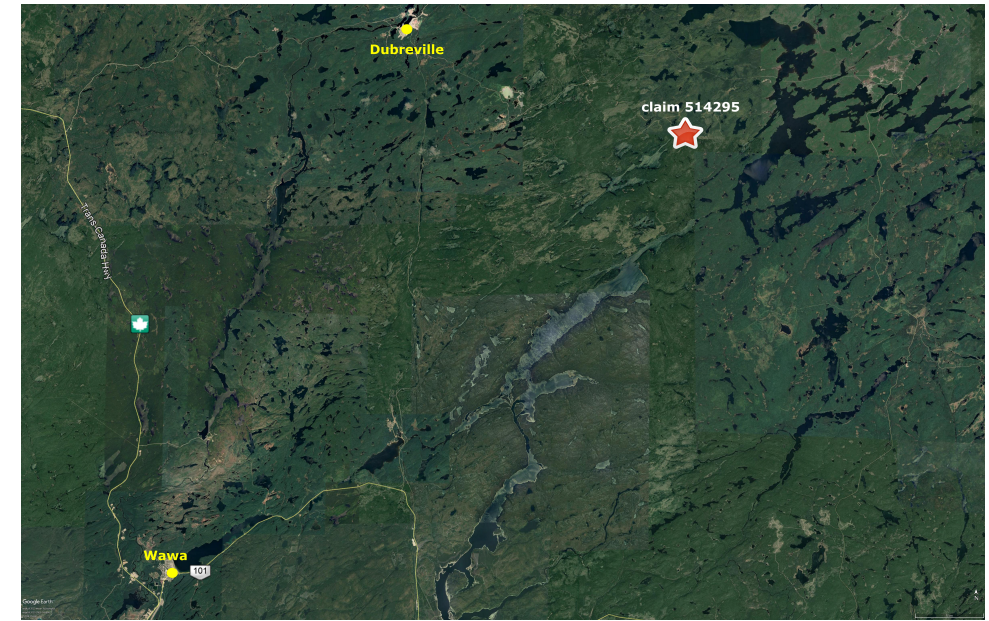
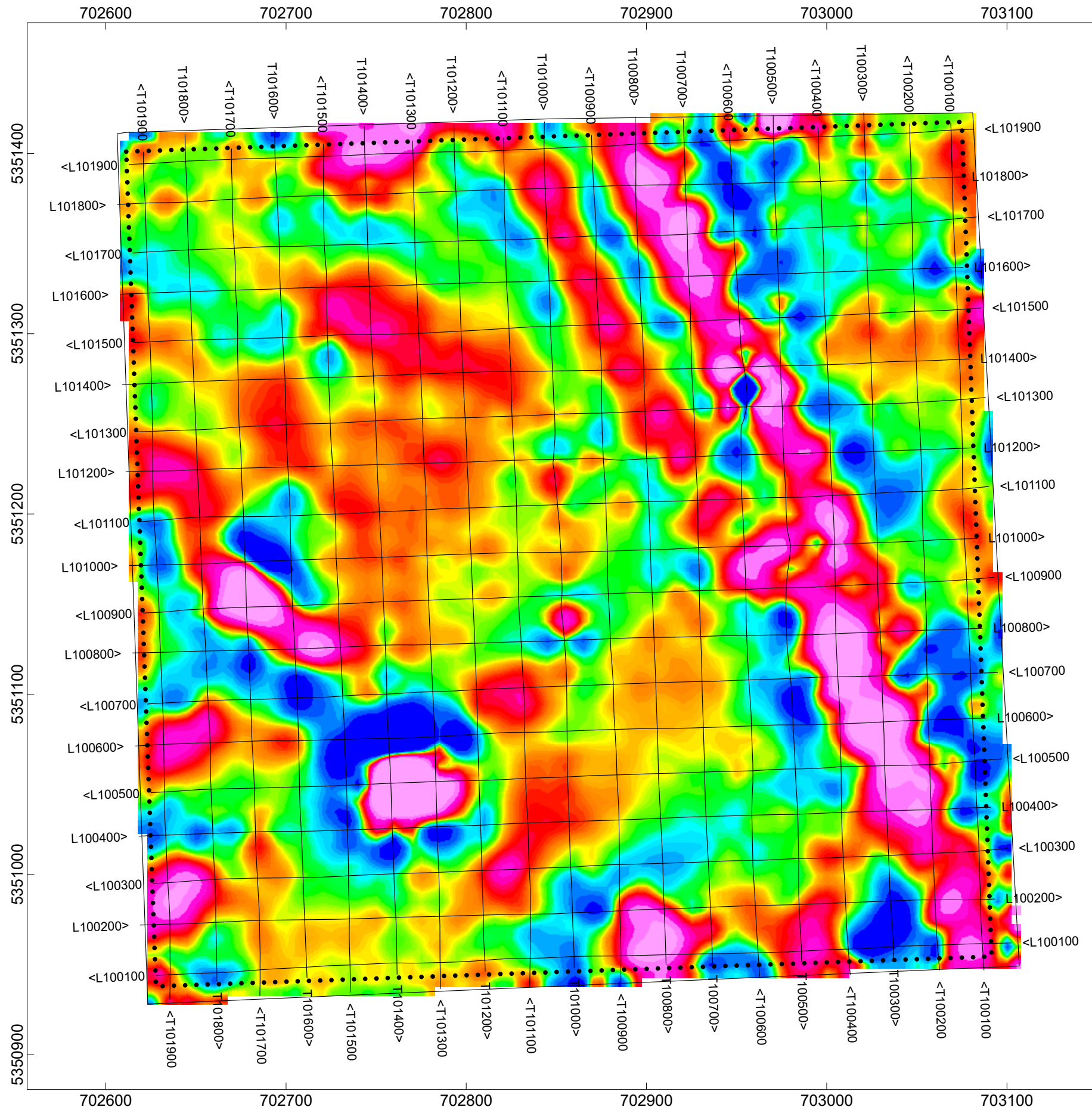


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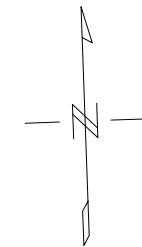
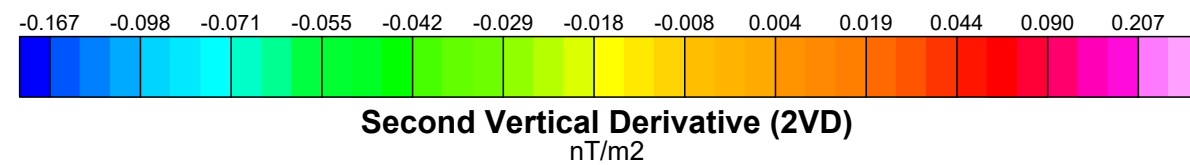
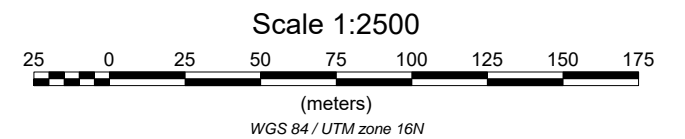
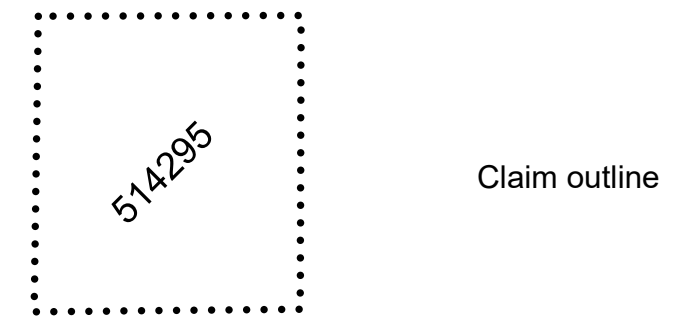
**Claim 514295 (Island Gold Mine area)
 High resolution drone magnetic survey
 First Vertical Derivative (1VD) map
 NTS sheet: 42C/08 Townships: Riggs**


Surveyed by: Vision4K (March 2020)
 Processed by: Marc Boivin, P.Geo. (March 2020)

MB Geosolutions



MAG drone system: AIM-LOW™
 Drone: DJI M600
 Magnetometer: Scintrex CS-VL
 Line spacing: 25m
 Nominal magnetic sensor height: 29m
 Technology developed by: Devbrio Geophysics
 Survey flown by: Vision 4K



 Alamos Gold Inc.
Claim 514295 (Island Gold Mine area) High resolution drone magnetic survey Second Vertical Derivative (2VD) map NTS sheet: 42C/08 Townships: Riggs
Surveyed by: Vision4K (March 2020) Processed by: Marc Boivin, P.Geo. (March 2020)
MB Geosolutions