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**ASSESSMENT REPORT ON A HIGH-RESOLUTION HELIBORNE
MAGNETIC SURVEY**

MARR LAKE PGE-CU-NI PROPERTY

REDHORSE LAKE AREA, ONTARIO

THUNDER BAY MINING DIVISION

FOR

CONQUEST RESOURCES LTD.

Prepared by:

Joerg M. Kleinboeck, P.Geol.

January 9th, 2023

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1. INTRODUCTION

In September 2022, Prospectair Geosurveys Inc. (“Prospectair”) was contracted by Conquest Resources Ltd. (“Conquest”) to complete a high-resolution heliborne magnetic survey on the Marr Lake PGE-Cu-Ni Property (“Property”).

The Property is situated within the Thunder Bay Mining Division approximately 230 km east of Thunder Bay, 65 km southwest of Atikokan, and within the Redhorse Lake Area, Ontario.

The Property is comprised of 87 staked mining claim cells totaling approximately 1,885 ha, and is bound by UTM NAD83 Z15N coordinates 547,160E to 554,584E, and 5,360,952N to 5,364,250N.

The Property hosts the Marr Lake ultramafic intrusion (“MLI”) where historical work has discovered the presence of PGE-Cu-Ni mineralization along the shoreline of Marr Lake. A large magnetic body is present underneath the lake, and likely corresponds with the surficial extent of the MLI.

From September 7th to 13th, 2022, Prospectair completed a 419 line-km high-resolution heliborne magnetic survey covering the Marr Lake PGE-Cu-Ni Property. Flight lines were orientated N-S at 50 m spacings, and E-W tie lines were flown at 500 m spacings. The orientation of the survey was optimized to cover the interpreted E-W orientated MLI, as well as to cover any other structural features that may control the potential emplacement of other similar types of intrusions and rare-element pegmatites that are a second deposit type being explored for on the Property. The survey was successful in mapping the magnetic properties of the MLI and surrounding geology.

2. PROPERTY DESCRIPTION AND LOCATION

2.1 Location and Access

The Property is situated within the Thunder Bay Mining Division approximately 230 km east of Thunder Bay, 65 km southwest of Atikokan, Ontario, and within the Redhorse Lake Area (Figure 1, Figure 2).

Access to the Property is provided by the Lac La Croix Rd./Flanders Rd. South that extends south from Highway 11 at 566420E/5397728N. The Lac La Croix Rd. is a well-maintained all-season gravel road that services Lac La Croix First Nation. An old logging road/skid path provides partial access by foot down to Marr Lake, however, the last kilometre is by foot and is fairly rugged due to east-west orientated ridges. Alternatively, a boat can be used to access Marr Lake from Redhorse Lake where an ATV trail has been cut down to Redhorse Lake off of the Lac La Croix Rd at the northwest corner of the lake. Access to Marr Lake is also feasible by boat through Vie Lake located to the east of Marr Lake.

2.2 Topography and Vegetation

The Property is characterized by relatively gentle to moderate relief with broad rolling hills and steep ridges that rarely exceed 25 m of elevation above the low-lying bogs, ponds, and streams. The elevation of the Property ranges from approximately 345 to 380 m ASL. The Property is mostly vegetated with white pine and white spruce in the areas of higher relief, with poplar, white birch, and jack pine common in lower relief areas, along with alders and cedar within the swamps.



Figure 1: Location of the Marr Lake PGE-Cu-Ni Property, Ontario, Canada.

2.3 Claims

The Project is comprised of 87 staked mining claim cells totaling approximately 1,885 ha, and is bound by UTM NAD83 Z15N coordinates 547,160E to 554,584E, and 5,360,952N to 5,364,250N.

On July 6th, 2022, Conquest announced that it can earn a 100% interest in the Marr Lake PGE-Cu-Ni Property by making cash payments of \$92,000 and issuing 940,000 shares over a period of three years. The Property is subject to a 2% NSR which the Company has a right to buy back 1% at any time for \$1 million.

A list of claims is provided in Appendix II, and Map 1, located within the back pocket, displays the claim tenure of the Property. Figure 2 also shows the claim fabric with respect to local resources such local waterways, access roads, etc.

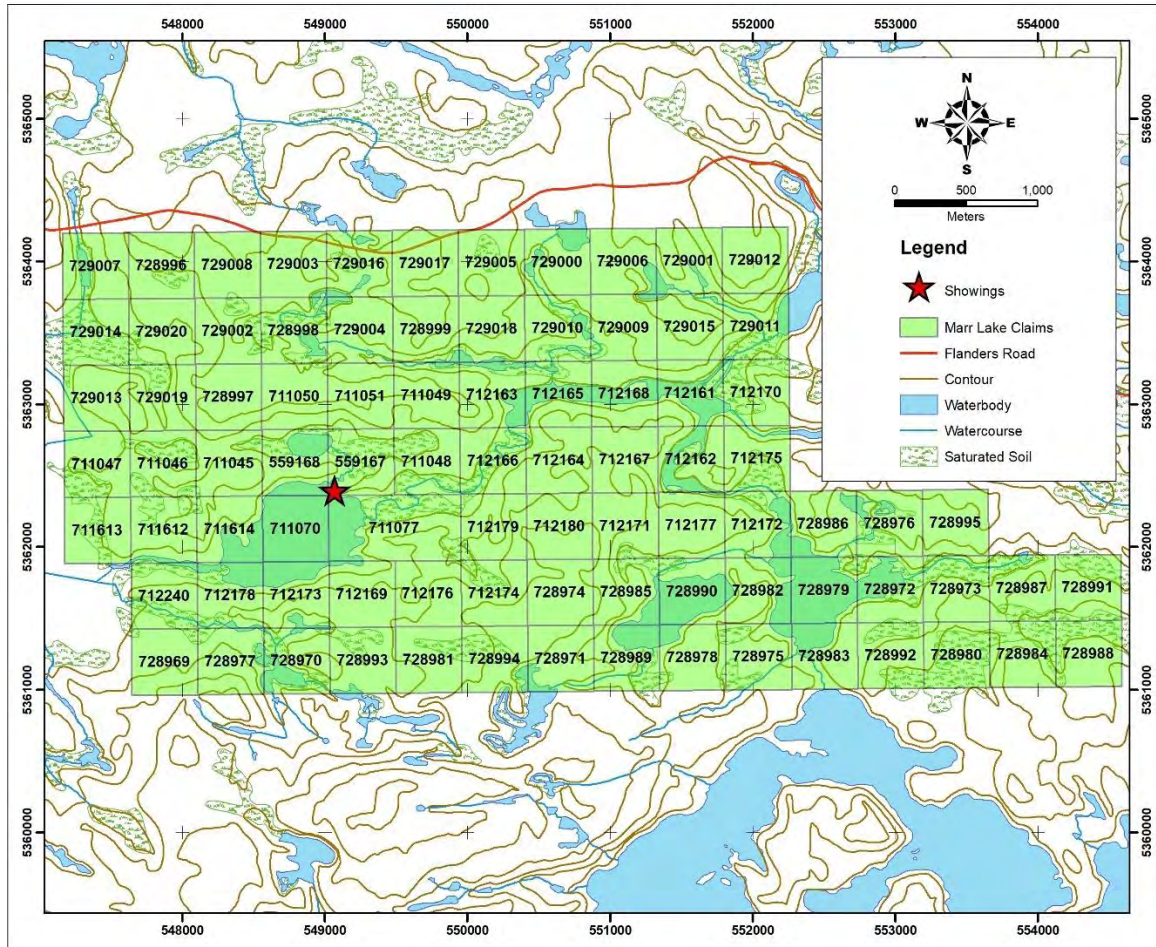


Figure 2: Tenure of the Marr Lake PGE-Cu-Ni Property

3.0 PREVIOUS WORK

The Property has seen a limited amount of historical exploration. A brief summary of the historical work is provided below.

1950's: Prospecting and trenching was completed on the shoreline of Marr Lake.

1988: Freewest Resources Inc. and Ashton Mining Ltd. completed line cutting, geophysical surveys (magnetometer, VLF-EM), prospecting, geological mapping and 5 diamond drill holes totaling 602 m (drill holes 88-3 through to 88-7). Drill hole 88-3 was drilled on the west side of Marr Lake and intersected 31.40 m of pyroxenite before intersecting metasediments. Drill hole 88-4 was drilled beneath the trenches on the northeast shoreline of Marr Lake and intersected mainly pyroxenite from 2.46 m to 79.12 m before being terminated in metasediments at 84.45 m. The drill log mentions interstitial and remobilized sulphides (pyrite>chalcopyrite>pyrrhotite) generally <1% in abundance. Drill hole 88-5 was drilled from the north shore of Marr Lake south towards a large magnetic feature interpreted to be the main part of the MLI, however it was not drilled to a sufficient depth to test the target. A 1.27 m wide ultramafic dyke was intersected within the mainly metasedimentary package encountered in this drill hole. Drill hole 88-6 and 88-7 were drilled from the ice on Marr Lake and were vertical holes. These holes did intersect the MLI beneath the lake, however they intersected the intrusive for a length of 7.00 m and 31.33 m before being terminated in the MLI. Pyrite and native copper were noted in the drill logs. All drill holes show that samples were selected, however, no analytical results were provided.

1997-1999: Murgor Resources Inc. completed line-cutting and prospecting. Grab samples of the main showing on Marr Lake ranged from 606 to 1,235 ppb Pd, 548 to 1,389 ppb Pt, and 146 to 458 ppm Au. The program did not locate any gabbro or ultramafic rocks outside of the MLI.

2005: Mr. William Hood staked one claim covering the MLI and completed a small reconnaissance prospecting and geochemical programs on the Property.

4.0 GEOLOGY

4.1 Property Geology

The Marr Lake PGE-Cu-Ni Property is located within the Archean-age Quetico belt within the Superior Province of the Canadian Shield (Figure 3). The Quetico belt is a 10 to 100 km wide belt of rocks that extends for at least 1,200 km from beneath cover to the west to the Kapuskasing structure in the east, and probably continues further east for another 800 km as the Opatika belt, and consists of marginal metasedimentary schists of turbidite origin and interior metasedimentary migmatite and peraluminous leucogranite (Percival, 1989).

Schistosity and bedding within the metasediments are generally orientated east-west between 075° to 100°, dipping north between 45° to 70°.

The Marr Lake Intrusive corresponds with a 300 m by 900 m wide magnetic anomaly that, for the most part, falls under the waters of Marr Lake. Only two known outcroppings of the intrusion are known to be exposed on the surface, at the main showing, and 700 m west-southwest at the southern part of a small peninsula. The outcrops are comprised of black coarse to very coarse-grained massive pyroxenite containing up to 1% finely disseminated pyrite, chalcopyrite, and pyrrhotite. Malachite is present along blasted surfaces at the main showing. North of the contact of the MLI, outcroppings of a medium to coarse-grained gabbro were discovered, however, no appreciable mineralization was noted besides trace amounts of pyrite. A narrow bed of iron-formation or magnetite-rich metasediments was also discovered east of the MLI, corresponding with narrow east-west orientated linear magnetic features.

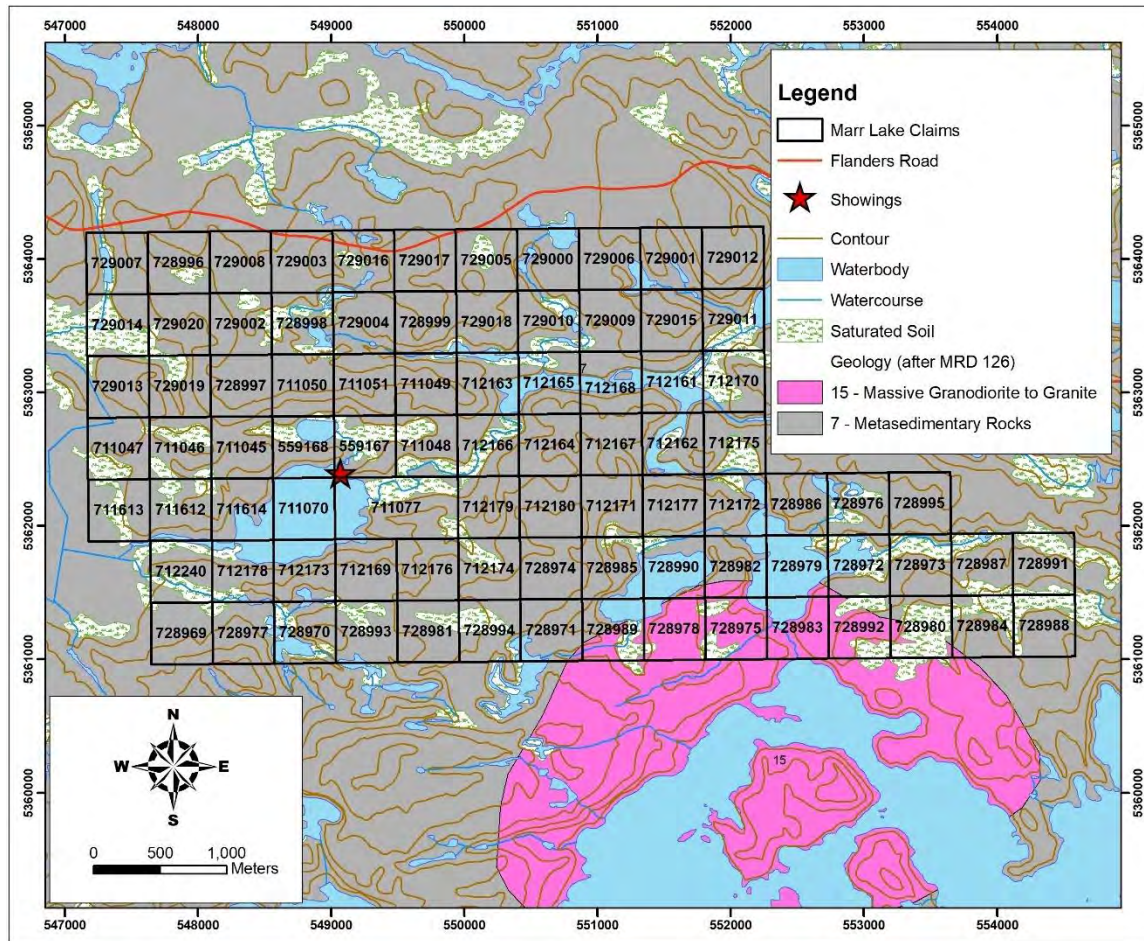


Figure 3: Property Geology (after MRD 126 Rev.)

5.0 SUMMARY OF THE HIGH-RESOLUTION HELIBORNE MAGNETIC SURVEY

From September 7th to 13th, 2022, Prospectair completed a 419 line-km high-resolution heliborne magnetic survey covering the Marr Lake PGE-Cu-Ni Property. The geophysical survey was completed on mining claims 559168, 559167, 711077, 711070, 711051, 711050, 711049, 711048, 711047, 711046, 711045, 711614, 711613, 711612, 712240, 712180, 712179, 712178, 712177, 712176, 712175, 712174, 712173, 712172, 712171, 712170, 712169, 712168, 712167, 712166, 712165, 712164, 712163, 712162, 712161, 729020, 729019, 729018, 729017, 729016, 729015, 729014, 729013, 729012, 729011, 729010, 729009, 729008, 729007, 729006, 729005, 729004, 729003, 729002, 729001, 729000, 728999, 728998, 728997, 728996, 728995, 728994, 728993, 728992, 728991, 728990, 728989, 728988, 728987, 728986, 728985, 728984, 728983, 728982, 728981, 728980, 728979, 728978, 728977, 728976, 728975, 728974, 728973, 728972, 728971, 728970, and 728969.

Flight lines were orientated N-S at 50 m spacings, and E-W tie lines were flown at 500 m spacings. The orientation of the survey was optimized to cover the interpreted E-W orientated MLI, as well as to cover any other structural features that may control the potential emplacement of other similar types of intrusions and rare-element pegmatites that are a second deposit type being explored for on the Property.

The survey was successful in mapping the magnetic properties of the MLI and surrounding geology.

A detailed report completed by Prospectair can be found in Appendix III, and map products can be found in Appendix IV.

6. INTERPRETATION AND CONCLUSIONS

The high-resolution heliborne magnetic survey completed by Prospectair was successful in mapping the geophysical (magnetic) properties of the Marr Lake Intrusive, as well as identifying a number of other magnetic anomalies.

Further work should include the following:

- 1) A 3D geophysical inversion of the magnetic data over the Marr Lake area should be completed to better understand the extent and orientation of the MLI, and to identify any possible feeder dykes that would make additional exploration targets to further pursue by diamond drilling.
- 2) Ground truthing/prospecting of the remaining magnetic anomalies is required to evaluate them for their PGE-Cu-Ni potential.
- 3) Regional prospecting/till sampling for LCT pegmatites is also suggested. Results from the airborne geophysical survey should be processed and interpreted to direct fieldwork.

7. REFERENCES

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APPENDIX I: STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Joerg Martin Kleinboeck of 147 Lakeside Drive, North Bay, Ontario, do hereby certify that:

I am a graduate of Laurentian University, Sudbury, Ontario with a B.Sc. Geology, 2000, and have been practising my profession as a geologist since.

I am a member with the Association of Professional Geoscientists of Ontario (#1411).

I have an active prospector's license for the province of Ontario (#1002600).

I am a member of the Prospectors and Developers Association of Canada.

I am the Vice President, Exploration for Conquest Resources Ltd.

I own securities of Conquest Resources Ltd. and I hold an interest in the mining claims that comprise the Marr Lake PGE-Cu-Ni Property.



Joerg Martin Kleinboeck

January 9th, 2023

North Bay, Ontario

APPENDIX II: DETAILED CLAIM LIST

Township / Area	Tenure ID	Tenure Type	Anniversary Date	Tenure Status	Work Required	Work Applied	Total Reserve
REDHORSE LAKE AREA	728998	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728997	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728996	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728995	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728994	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728993	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728992	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728991	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728990	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728989	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728988	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728987	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728986	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728985	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728984	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728983	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728982	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728981	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728980	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728979	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728978	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728977	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728976	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728975	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728974	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728973	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728972	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728971	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728970	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0
REDHORSE LAKE AREA	728969	Single Cell Mining Claim	2024-05-27	Active	\$400	\$0	\$0

Note: Claims 559167 and 559168 are under extension until June 18th, 2023

APPENDIX III: PROSPECTAIR GEOSURVEYS INC. MARR LAKE GEOPHYSICAL REPORT

Technical Report

High-Resolution Heliborne Magnetic Survey

***Marr Lake Property, Atikokan Area
Thunder Bay Mining Division, Ontario, 2022***

***Conquest Resources Ltd.
55 University Avenue, Suite 1805
Toronto, ON, Canada
M5J 2H7***



Prospectair Geosurveys

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I. INTRODUCTION

Prospectair Geosurveys conducted a heliborne high-resolution magnetic (MAG) survey for the mineral exploration company Conquest Resources Ltd. on its Marr Lake Property located in the Atikokan area, Thunder Bay Mining Division, Province of Ontario (Figure 1). The survey was flown from September 7 to 13, 2022.

Figure 1: **General Survey Location**

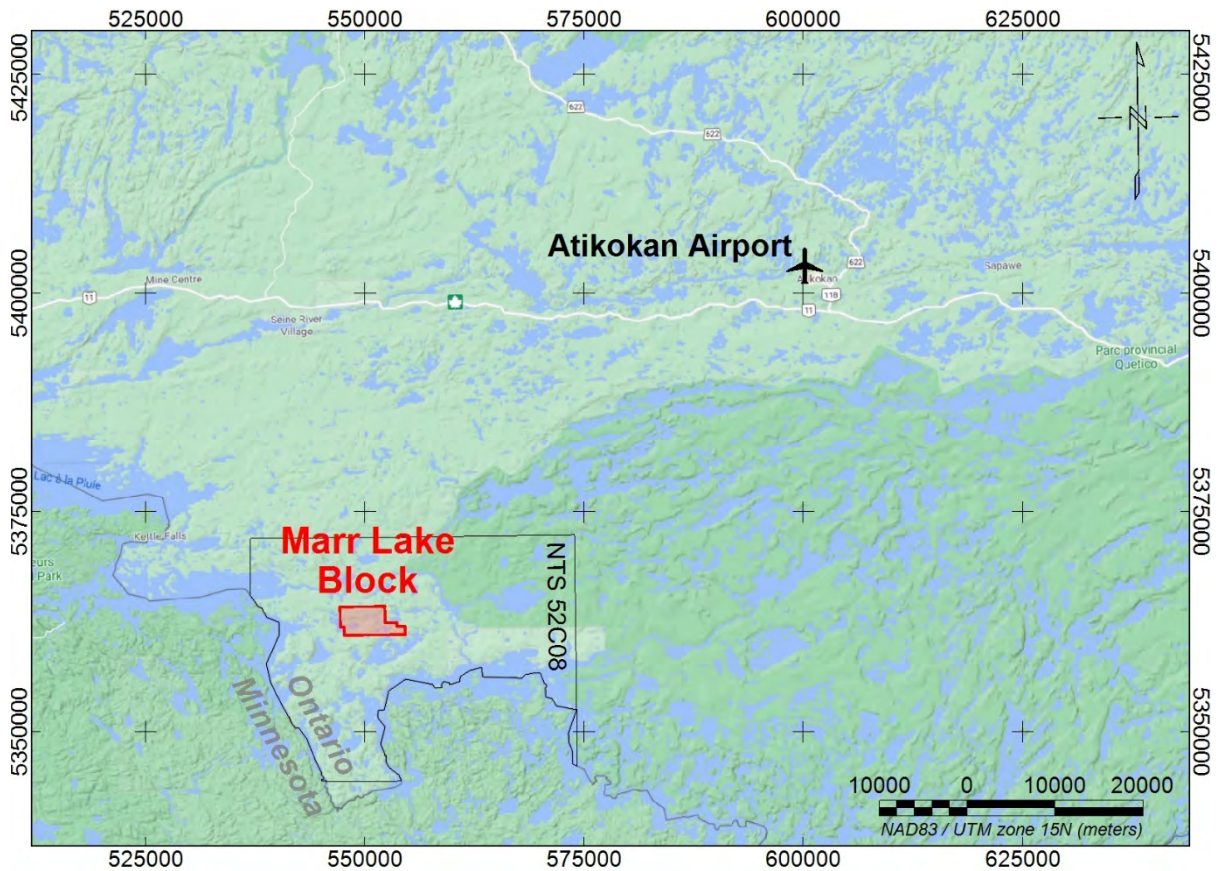


One survey block was flown for a total of 419 l-km. A total of 6 production flights were performed using Prospectair’s Robinson R-44, registration C-GBOU. The helicopter and survey crew operated out of the Atikokan Airport located 65 km to the northeast of the block (Figure 2).

Table 1: Survey block particulars

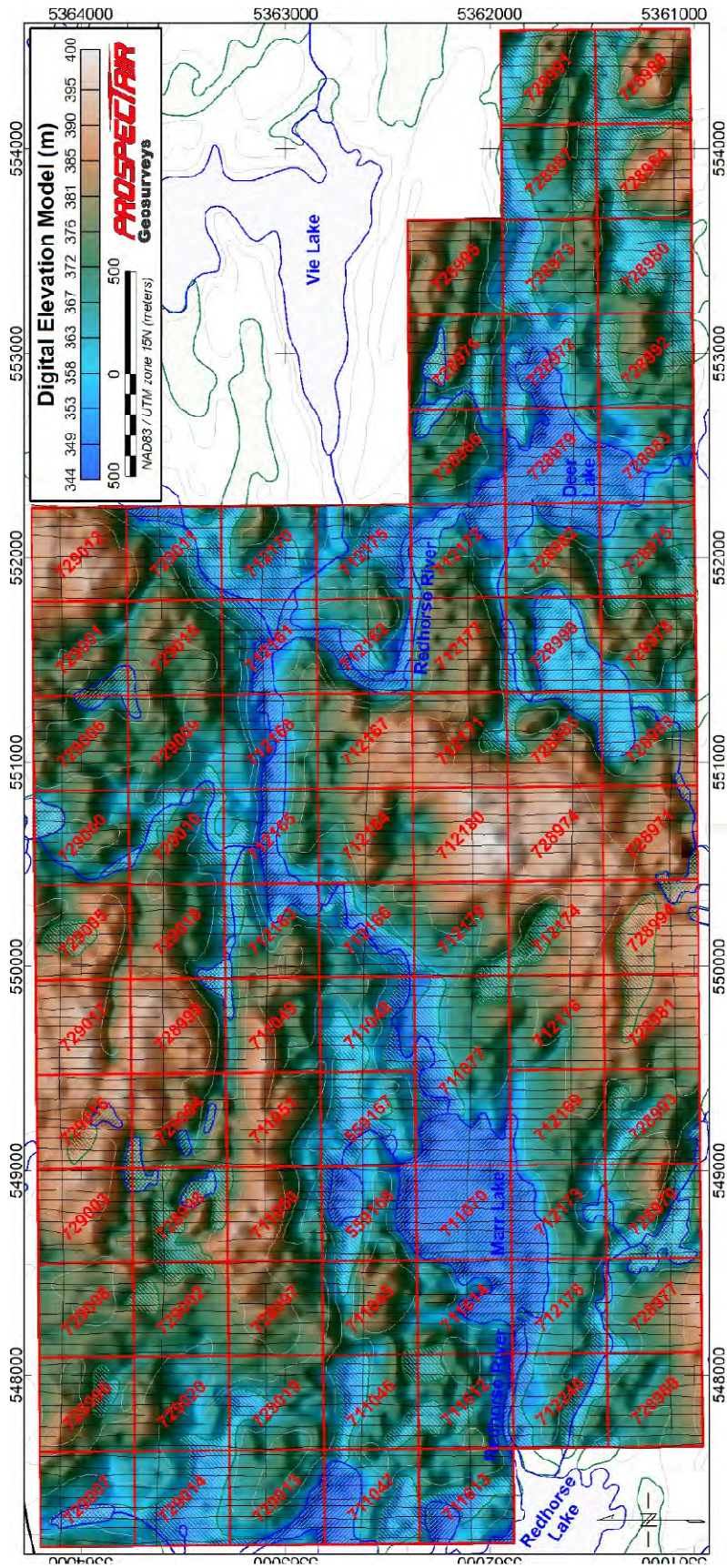
Block	NTS Mapsheet	Line-km flown	Flight numbers	Dates Flown
Marr Lake	052C08	419 l-km	Flt 1 to 6	September 7 to 13

Figure 2: Survey Location and base of operation



The Marr Lake block was flown with traverse lines at 50 m spacing and control lines spaced every 500 m. The survey lines were oriented N000 and control lines were flown at an azimuth of N090. The average height above ground of the helicopter was 38 m and the magnetic sensor was at 19 m. The average survey flying speed was 26.6 m/s. The survey area is covered by forest, lakes and some wetlands. The topography is mostly gently undulating, with a few low-level hills. The elevation is ranging from 344 to 400 m above mean sea level (MSL). The block covers Marr Lake and Deer Lake and the Redhorse River flows through it, passing by both lakes. From the ground the block can be easily accessed via secondary forestry roads linking the Trans-Canada Highway 11, to the north, to the Lac La Croix First Nation community, which is located about 10 km to the southeast of the block. Coordinates outlining the survey block are given in Appendix A, with respect to NAD-83 datum, UTM projection zone 15N. The location of the Marr Lake Property claims (in red) and of the survey lines is shown on Figure 3. The Property claims numbers, as well as the approximate amount of line-km flown over each claim, are also listed in Appendix B.

Figure 3: Survey lines and Marr Lake Property claims



II. SURVEY EQUIPMENT

Prospectair provided the following instrumentation for this survey:

Airborne Magnetometer

Geometrics G-822A

The heliborne system used a non-oriented (strap-down) optically-pumped Cesium split-beam sensor. These magnetometers have a sensitivity of 0.005 nT and a range of 15,000 to 100,000 nT with a sensor noise of less than 0.02 nT. The heliborne sensor was mounted in a bird made of non-magnetic material located 19 m below the helicopter when flying. Total magnetic field measurements were recorded at 10 Hz in the aircraft.

Real-Time Differential GPS

Omnistar DGPS

Prospectair uses an OmniStar differential GPS navigation system to provide real-time guidance for the pilot and to position data to an absolute accuracy of better than 5 m. The *Omnistar* receiver provides real-time differential GPS for the Agis on-board navigation system. The differential data set was relayed to the helicopter via the Omnistar network appropriate geosynchronous satellite for the survey location. The receiver optimizes the corrections for the current location.

Airborne Navigation and Data Acquisition System

Pico-Envirotec AGIS-XP system

The Airborne Geophysical Information System (AGIS-XP) is advanced, software driven instrument specifically designed for mobile aerial or ground geophysical survey work. The AGIS instrumentation package includes an advanced navigation system, real-time flight path information that is displayed over a map image of the area, and reliable data acquisition software. Thanks to simple interfacing, the radar and barometric altimeters and the Geometrics magnetometer are easily integrated into the system and digitally recorded. Automatic synchronization to the GPS position and time provides very close correlation between data and geographical position. The AGIS is equipped with a software suite allowing easy maintenance, upgrades, data QC, and project and survey area layout planning.

Magnetic Base Station

GEM GSM-19

A GEM GSM-19 Overhauser magnetometer, a computer workstation and a complement of spare parts and equipment serve as the base station. Prospectair establish the base station in a secure location with low magnetic noise. The GSM-19 magnetometer has resolution of 0.01 nT, and 0.2 nT accuracy over its operating range of 20,000- to 100,000 nT. The ground system was recording magnetic data at 1 Hz.

Altimeters

Free Flight Radar Altimeter

The Free Flight radar altimeter measures height above ground to a resolution of 0.5 m and an accuracy of 5% over a range up to 2,500 ft. The radar altimeter data is recorded and sampled at 10 Hz.

Digital Barometric Pressure Sensor

The barometric pressure sensor measures static pressure to an accuracy of ± 4 m and resolution of 2 m over a range up to 30,000 ft above sea level. The barometric altimeter data are sampled at 10 Hz.

Survey helicopter

Robinson R-44 (registration C-GBOU)

The survey was flown using Prospectair's Robinson R-44 helicopter that handles efficiently the light equipment load and the survey range for magnetic surveys. Table 2 presents the helicopter technical specifications and capacity, and the aircraft is shown in Figure 4.

Table 2: **Technical specifications of the R-44 Robinson helicopter**

Item	Specification
Powerplant	One 195kW (260hp) Textron Lycoming O-540
Rate of climb	1,000 ft/min
Cruise speed	223 km/h – 120 kts
Service ceiling	14,000 ft
Range with no reserve	645 km
Empty weight	635 kg
Maximum takeoff weight	1,090 kg

Figure 4: **C-GBOU Robinson R-44**



III. SURVEY SPECIFICATIONS

Data Recording

The following parameters were recorded during the course of the survey:

In the helicopter:

- GPS positional data: time, latitude, longitude, altitude, heading and accuracy (PDOP) recorded at intervals of 0.1 s;
- Total magnetic field: recorded at intervals of 0.1 s;
- Pressure as measured by the barometric altimeter at intervals of 0.1 s;
- Terrain clearance as measured by the radar altimeter at intervals of 0.1 s;

At the base and remote magnetic ground stations:

- Total magnetic field: recorded at intervals of 1 s;
- GPS time recorded every 1 s to synchronize with airborne data.

Technical Specifications

The data quality control was performed on a daily basis. The following technical specifications were adhered to:

- *Height* – 50m mean terrain clearance for the helicopter except in areas where Transport Canada regulations prevent flying at this height, or as deemed by the pilot to ensure safety. Traverse lines and control lines must be flown at the same altitude at points of intersection; the altitude tolerances are limited to no more than 30 m difference between traverse lines and control lines.
- *Airborne Magnetometer Data* – A 0.5 nT noise envelope not to be exceeded for more than 500 m line-length without a reflight.
- *Diurnal Specifications* – A maximum tolerance of 5.0 nT (peak to peak) deviation from a long chord of one minute at the base station.
- *Flying Speed* – The average ground speed for the survey aircraft should be 120 kph. The acceptable high limit is 180 kph over flat topography.
- *Radar Altimeter* – minimal accuracy of 5%, minimum range of 0-2500 m.
- *Barometer* – Absolute air pressure to 0.1 kPa.
- *Flight Path Following* – The line spacing not to vary by more than 30% from the ideal spacing over a distance of more than 300 m, except as required for aviation safety.

For Marr Lake Block:

- Traverse lines: Azimuth N000, 50 m spacing.
- Control Lines: Azimuth N090, 500 m spacing.

IV. SYSTEM TESTS

Magnetometer System Calibration

The survey configuration using a bird towed 19 m below any magnetic piece of the helicopter allows the simplification of the magnetic calibration requirement. Consequently, heading error and aircraft movement noise was considered negligible and no correction was applied to the data.

Instrumentation Lag

The magnetometer lag is a combination of two factors: 1) the time difference between when a reading is sensed, and when that value is recorded by the acquisition system, and 2) the time taken for the sensor to arrive at the location of the GPS antenna. The second factor is defined by the physical distance between the GPS antenna and any given sensor, and the speed of the aircraft. The average total magnetic lag value for the AGIS acquisition system has been calculated to 1.72 s for this survey.

V. FIELD OPERATIONS

The survey operations were conducted out of the Atikokan Airport from September 7 to 13, 2022. The data acquisition required 3 flights. At the end of each production day, the data were sent to the Dynamic Discovery Geoscience office via internet. The data were then checked for Quality Control to ensure they fulfilled contractual specifications. The full dataset was inspected prior to provide authorization for the field crew to demobilize. The GSM-19 magnetic base station was set up in a magnetically quiet area close to the airport, at latitude 48.7798803°N, longitude 91.6320937°W. The survey pilot was Marc Patenaude and the survey system technician was Johnathan Drolet.

Figure 5: **Example of a magnetic base station setup**



VI. DIGITAL DATA COMPILATION

Data compilation including editing and filtering, quality control, and final data processing was performed by Joël Dubé, P.Eng. Processing was performed on high performance computers optimized for quick daily QC and processing tasks. Geosoft software Oasis Montaj version 2022.1 was used.

Magnetometer Data

General

The airborne magnetometer data, recorded at 10 Hz, were plotted and checked for spikes and noise on a flight basis. An average of 1.72 second lag correction was applied to the data to correct for the time delay between detection and recording of the airborne data.

Ground magnetometer data were recorded at 1 sample per second and interpolated by a spline function to 10 Hz to match airborne data. Data were inspected for cultural interference and edited where necessary. Low-pass filtering was deemed necessary on the ground station magnetometer data to remove minor high frequency noise. The diurnal variations were removed by subtracting the ground magnetometer data from the airborne data and then adding back the average magnetic field value of the ground magnetometer.

The levelling corrections were applied in several steps. First, a correction for altitude was applied by multiplying the First Vertical Derivative (FVD) of the Total Magnetic Intensity (TMI) by the difference between the actual survey altitude and the average survey altitude. Standard levelling corrections were then performed using intersection statistics from traverse and tie lines. After statistical levelling was considered satisfactory, decorrugation was applied on the data to remove any remaining subtle non-geological features oriented in the direction of the traverse lines.

Once the Total Magnetic Intensity (TMI) was gridded, its First Vertical Derivative (FVD) and Second Vertical Derivative (SVD) were calculated to enhance narrow and shallow geological features. Finally, the component of the normal Earth's magnetic field, described by the International Geomagnetic Reference Field (IGRF), has been removed from the TMI to yield the residual TMI.

Tilt Angle Derivative

In order to enhance the subtle magnetic features some more, the Tilt Angle Derivative (TILT) was also computed for this project.

It has been shown that it is possible to use the Tilt Angle Derivative to estimate both the location and depth of magnetic sources (Salem et al., 2007).

When two bodies of different magnetic susceptibility are in contact, the vertical and horizontal gradients along a horizontal line perpendicular to the vertical contact are governed by the following equations:

$$\delta M/\delta h = 2KFc(z_c/(h^2+z_c^2))$$

$$\delta M/\delta z = 2KFc(h/(h^2+z_c^2))$$

where

K = susceptibility contrast

F = magnetic field's strength

c = $1 - \cos^2(\text{field Inclination})\sin^2(\text{field Declination})$

h = location along an horizontal axis perpendicular to the contact

z_c = contact depth

$$\delta M/\delta h = \text{sqrt}((\delta M/\delta x)^2 + (\delta M/\delta y)^2)$$

The Tilt Angle (θ) is defined as

$$\theta = \tan^{-1}[(\delta M/\delta z)/(\delta M/\delta h)]$$

By substitution of the gradients we get

$$\theta = \tan^{-1}[h/z_c]$$

This has two main implications for any given anomaly:

- 1- The 0° angle line is located directly above the contact between a magnetic source and the surrounding rock. This allows for accurate estimation of source location.
- 2- The distance between the 0° and the $+45^\circ$ contour lines as well as the distance between the -45° and the 0° contour lines are equal to the depth of the source at the contact. This allows for a direct estimation of the depth of the source of the anomaly. The depth estimated with this method is actually the distance between the magnetic sensor and the top of the source. Knowing that the sensor was 19 m above the ground in average enables direct depth estimates.

In practice, the signal originating from multiple sources at different depth within a same area will cause juxtaposition of the Tilt Angle values, and complicate location and depth estimation. Nevertheless, the method remains an excellent tool for rapid assessment of sources characteristics, without the need for complex assumptions to be made or heavy computer requirements, as is the case with 3D Euler deconvolution or 3D data inversions.

Gridding

The magnetic data were interpolated onto a regular grid using a bi-directional gridding algorithm to create a two-dimensional grid equally incremented in x and y directions. The final grids of the magnetic data are supplied with a 10 m grid cell size. Traverse lines were used in the gridding process.

Radar Altimeter Data

The terrain clearance measured by the radar altimeter in metres was recorded at 10 Hz. The data were filtered to remove high frequency noise using a 1 sec low pass filter. The final data were plotted and inspected for quality.

Positional Data

Real time DGPS correction provided by Omnistar was applied to the recorded GPS positional data.

Positional data were originally recorded at 10 Hz sampling rate in geographic longitude and latitude with respect to the WGS-84 datum. The delivered data locations are provided in X and Y using the UTM projection zone 15 North, with respect to the NAD-83 datum. Altitude data were initially recorded relative to the GRS-80 ellipsoid, but are delivered as orthometric heights (MSL elevation).

Terrain Data

Terrain elevation data (also referred to as digital elevation model, or DEM) are computed from the altitude of the helicopter, given by DGPS recordings, and the radar altimeter data.

VII. RESULTS AND DISCUSSION

The residual Total Magnetic Intensity (TMI) of the Marr Lake block, presented in Figure 6, is slightly active and varies over a range of 1,254 nT, with an average of -107 nT and a standard deviation of 98 nT.

The magnetic textures and low amplitude signal variations seen in most of the block are typical of areas dominated by meta-sedimentary rocks. Magnetic anomalies, occurring either in compact or linear shapes, are likely related to small size stocks or dykes, or to meta-sedimentary bands slightly enriched in pyrrhotite or magnetite. Stronger anomalies are best seen on Figure 7 which shows the residual TMI data with a linear color distribution. Note however that these stronger anomalies are actually not very strong in absolute terms.

Magnetic lineaments are preferentially trending in a general E-W direction in the area, varying from NE-SW to NW-ES. A majority of lineaments appear curved, either by shearing or folding structures, or possibly also at the contact zone with some possible intrusions in the area. These evidences are attesting that the area underwent strong deformation events in the past. In general terms, magnetic lineaments are related to rock formations that are enriched in magnetic minerals (magnetite and/or pyrrhotite).

In some areas, it is possible to detect structural features offsetting observed magnetic lineaments and causing abrupt interruption or changes of the magnetic response. These features are typically caused by faults, fractures and shear zones. If they are thought to be favorable structures in the exploration context of the Marr Lake project, they should be paid particular attention and should be the object of a comprehensive structural interpretation, which is beyond the scope of this report.

Shorter wavelength anomalies are greatly enhanced on the FVD (Figure 8) and on the TILT (Figure 9) products. Since the FVD attenuates longer wavelength anomalies, and the TILT enhances very weak amplitude anomalies, they are the preferred products for structural interpretation.

Figure 6: Residual Total Magnetic Intensity with equal area color distribution

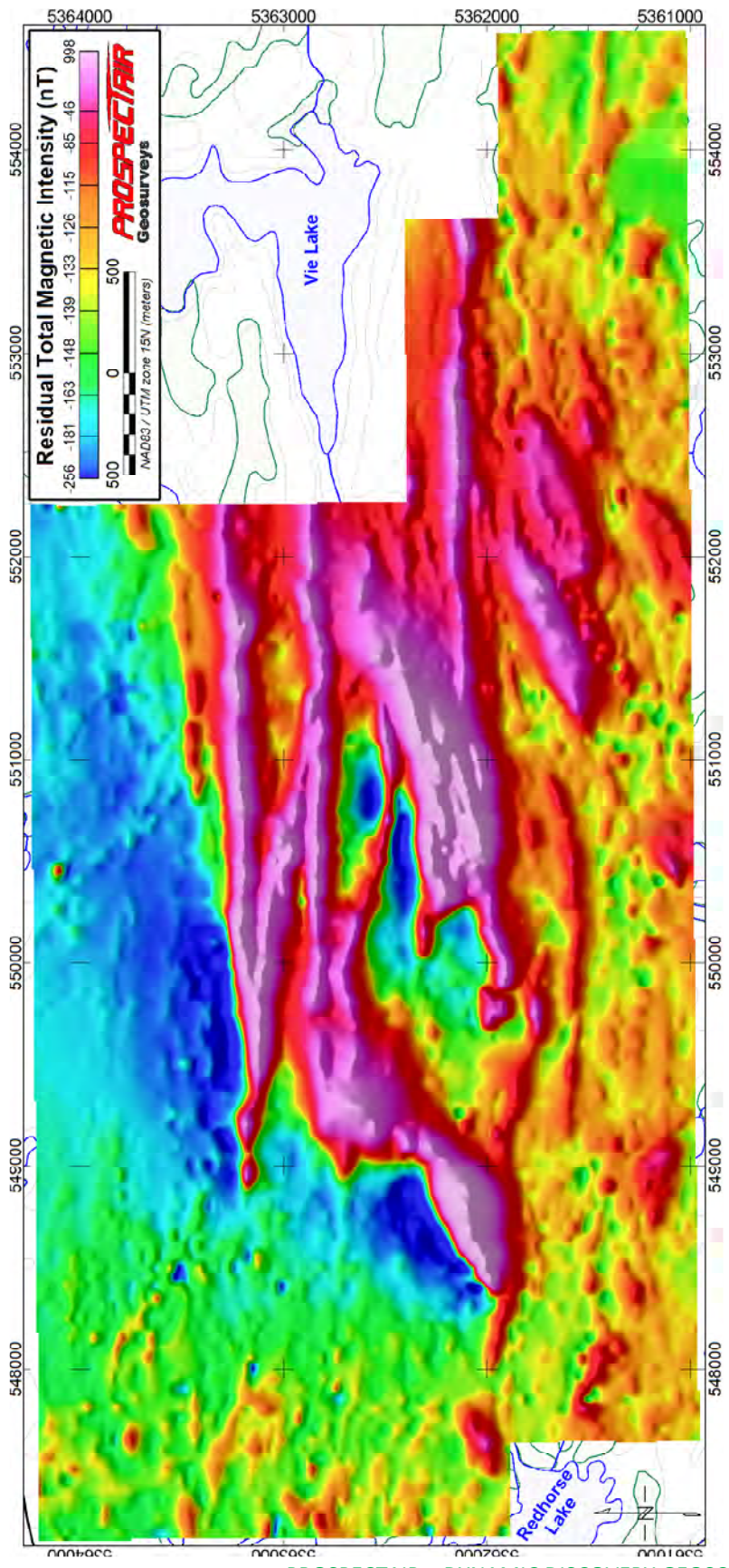


Figure 7: Residual Total Magnetic Intensity with linear color distribution

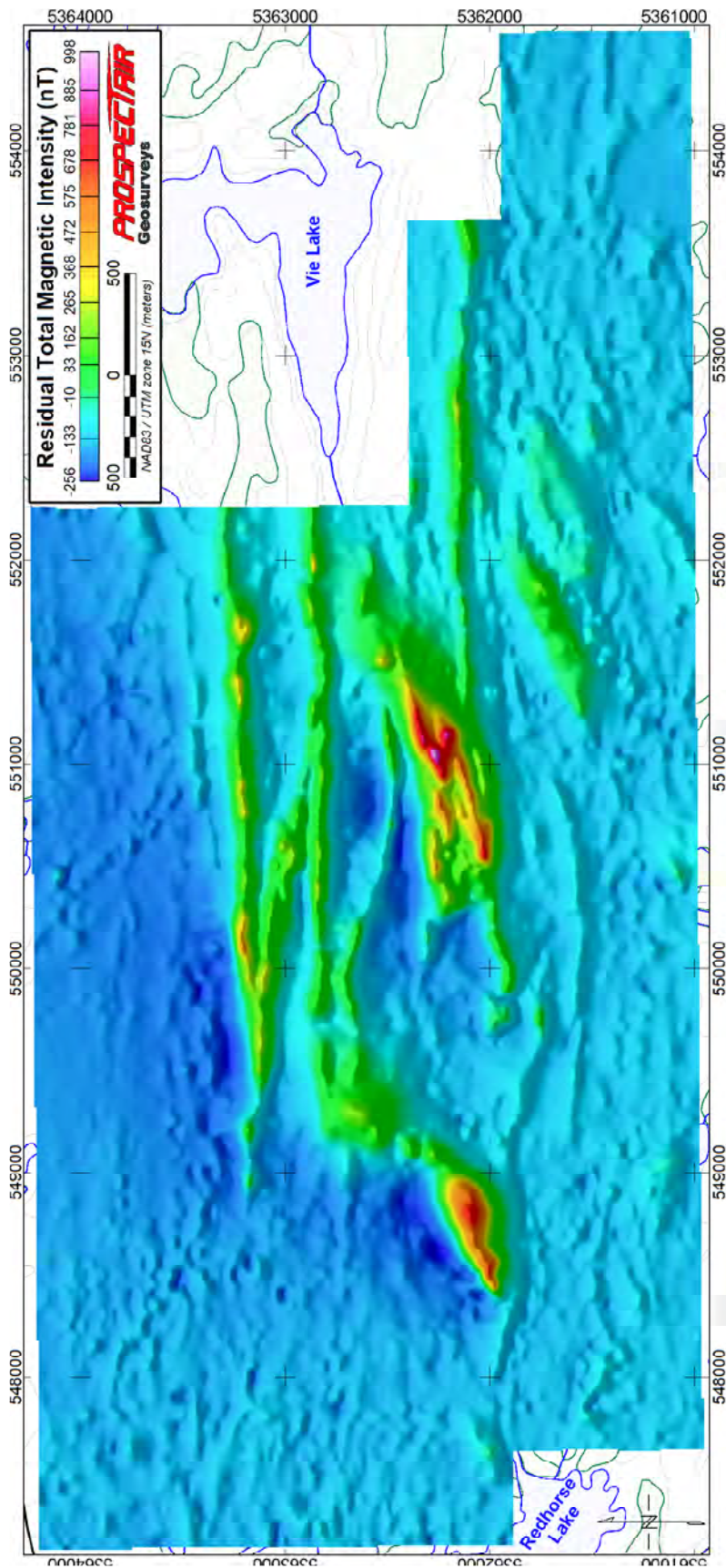


Figure 8: First Vertical Derivative of TMI

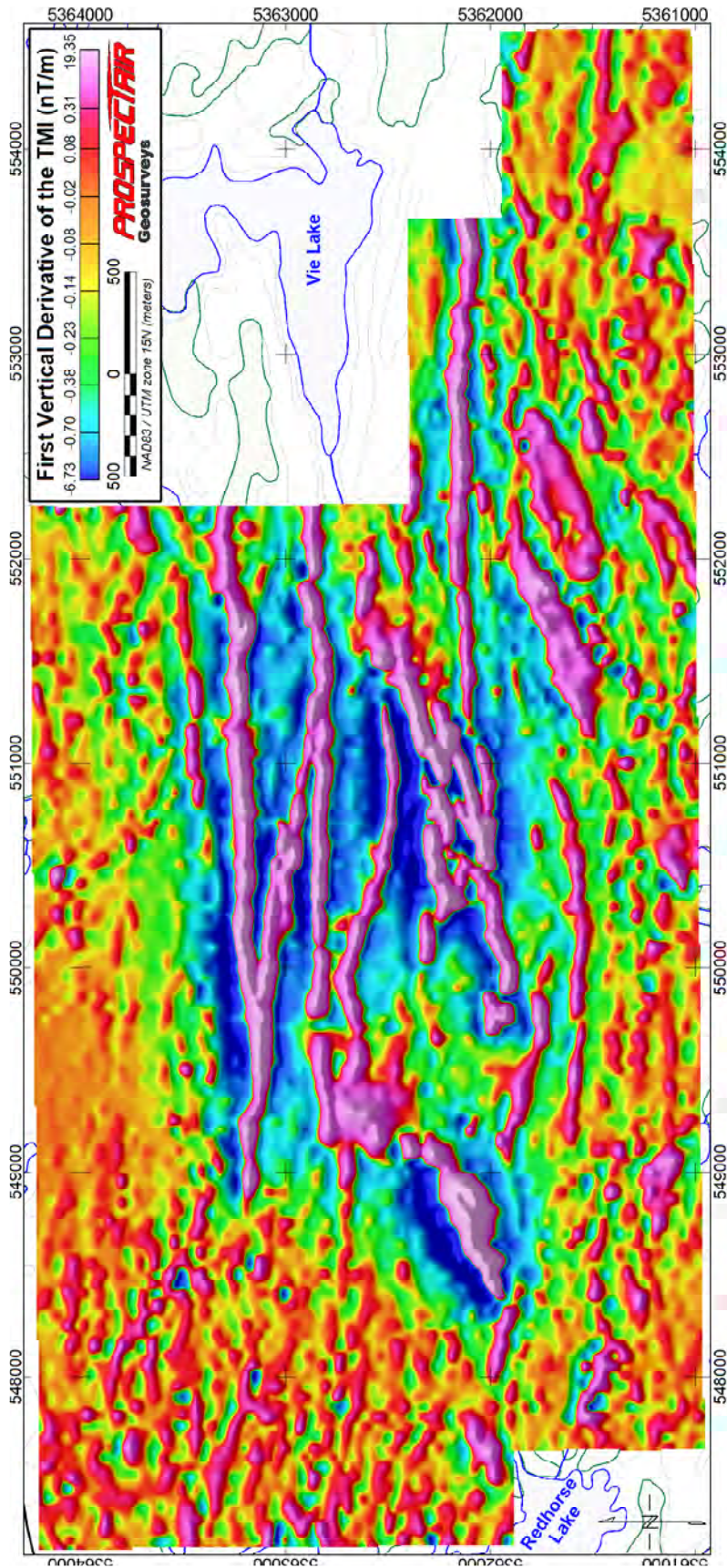
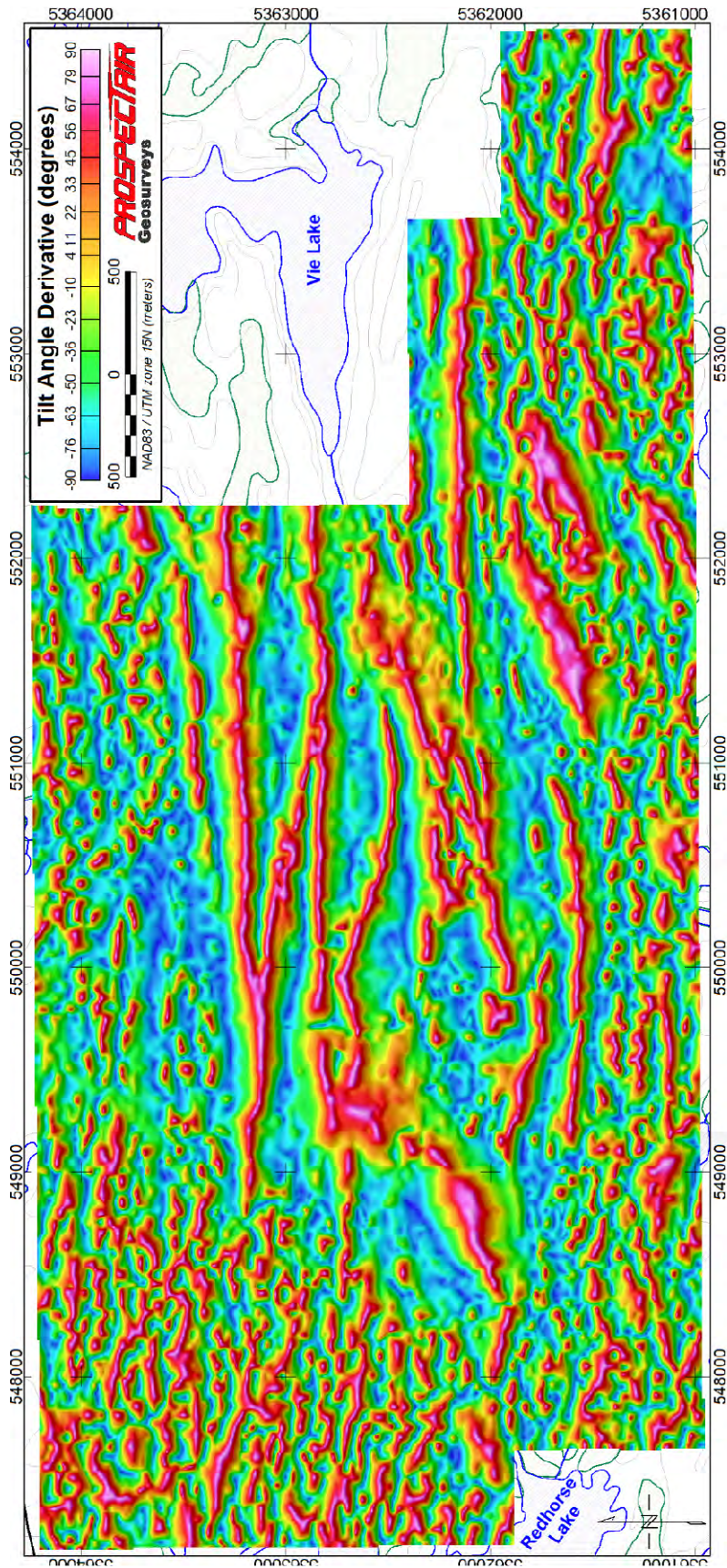


Figure 9: Tilt Angle Derivative



VIII. FINAL PRODUCTS

Digital Line Data

The Geosoft database is provided with the channels detailed in Table 3.

Table 3: **MAG line data channels**

No.	Name	Description	Units
1	UTM_X	UTM Easting, NAD-83, Zone 15N	m
2	UTM_Y	UTM Northing, NAD-83, Zone 15N	m
3	Lat_deg	Latitude in decimal degrees	Deg
4	Long_deg	Longitude in decimal degrees	Deg
5	Gtm_sec	Second since midnight GMT	Sec
6	Radar	Ground clearance given by the radar altimeter	m
7	Terrain	Calculated Digital Elevation Model (w.r.t. MSL)	m
8	GPS_Z	Helicopter altitude (w.r.t. MSL)	m
9	Mag_Raw	Raw magnetic data	nT
10	Mag_Lag	Lagged magnetic data	nT
11	Gnd_mag	Base station magnetic data	nT
12	Mag_Cor	Magnetic data corrected for diurnal variation	nT
13	TMI	Fully levelled Total Magnetic Intensity	nT
14	TMIres	Residual TMI (IGRF removed)	nT

Maps

All maps are referenced to NAD-83 datum in the UTM projection Zone 15 North, with coordinates in metres. Maps are at a 1:10,000 scale and are provided in PDF, PNG and Geosoft MAP formats for the products detailed in Table 4.

Table 4: **Maps delivered**

No.	Name	Description
1	DEM+FlightPath+Claims	Digital Elevation Model with flight path and property claims
2	TMI	Residual Total Magnetic Intensity
3	FVD	First Vertical Derivative of the TMI
4	TILT	Tilt Angle Derivative

Grids

All grids are referenced to NAD-83 in the UTM projection Zone 15 North, with coordinates in metres. Grids are provided in Geosoft GRD format, with a 10 m grid cell size, as well as in the Geotiff format for the products listed in Table 5.

Table 5: **Grids delivered**

No.	Name	Description	Units
1	Terrain	Calculated Digital Elevation Model	m
2	TMI	Total Magnetic Intensity	nT
3	FVD	First Vertical Derivative of TMI	nT/m
4	SVD	Second Vertical Derivative of TMI	nT/m ²
5	TMIres	Residual TMI (IGRF removed)	nT
6	TILT	Tilt Angle Derivative	Degree

Project Report

The report is submitted in PDF format.

Respectfully submitted,




Joël Dubé, P.Eng.
October 13, 2022

IX. STATEMENT OF QUALIFICATIONS

Joël Dubé
7977 Décarie Drive
Ottawa, ON, Canada, K1C 3K3

Telephone: 819.598.8486
E-mail: jdube@ddgeoscience.ca

I, Joël Dubé, P.Eng., do hereby certify that:

1. I am a Professional Engineer specialized in geophysics, President of Dynamic Discovery Geoscience Ltd., registered in Canada.
2. I earned a Bachelor of Engineering in Geological Engineering in 1999 from the École Polytechnique de Montréal.
3. I am an Engineer registered with the Ordre des Ingénieurs du Québec, No. 122937, and a Professional Engineer with Professional Engineers Ontario, No. 100194954 (CofA No. 100219617), with the Association of Professional Engineers and Geoscientists of New Brunswick, No. L5202 (CofA No. F1853), with the Association of Professional Engineers of Nova Scotia, No. 11915 (CofC No. 51099), with Engineers Geoscientists Manitoba, No. 43414. (CofA No. 6897), with Professional Engineers & Geoscientists Newfoundland & Labrador, No. 10012 (PtoP No. N1134) and with the Northwest Territories Association of Professional Engineers & Geoscientists, No. L4447 (PtoP No. P1414).
4. I have practised my profession for 23 years in exploration geophysics.
5. I have not received and do not expect to receive a direct or indirect interest in the properties covered by this report.

Dated this 13th day of October, 2022




Joël Dubé, P.Eng. #100194954

X. Appendix A – Survey block outline

Marr Lake Block

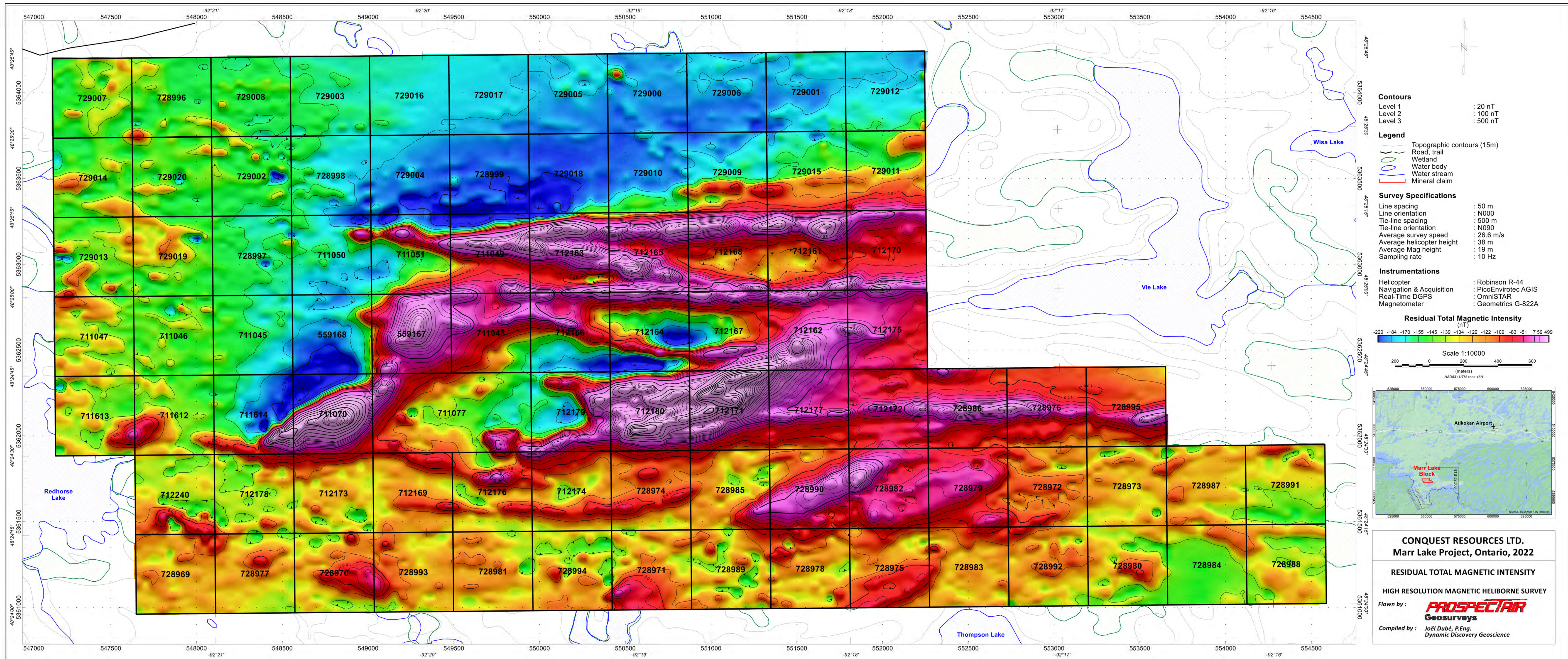
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547642	5361448
547638	5361884
547176	5361880
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552261	5364246
552248	5364100
552252	5363707
552258	5363625
552259	5363528
552254	5363425
552261	5362732
552266	5362619
552263	5362542
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554578	5361952

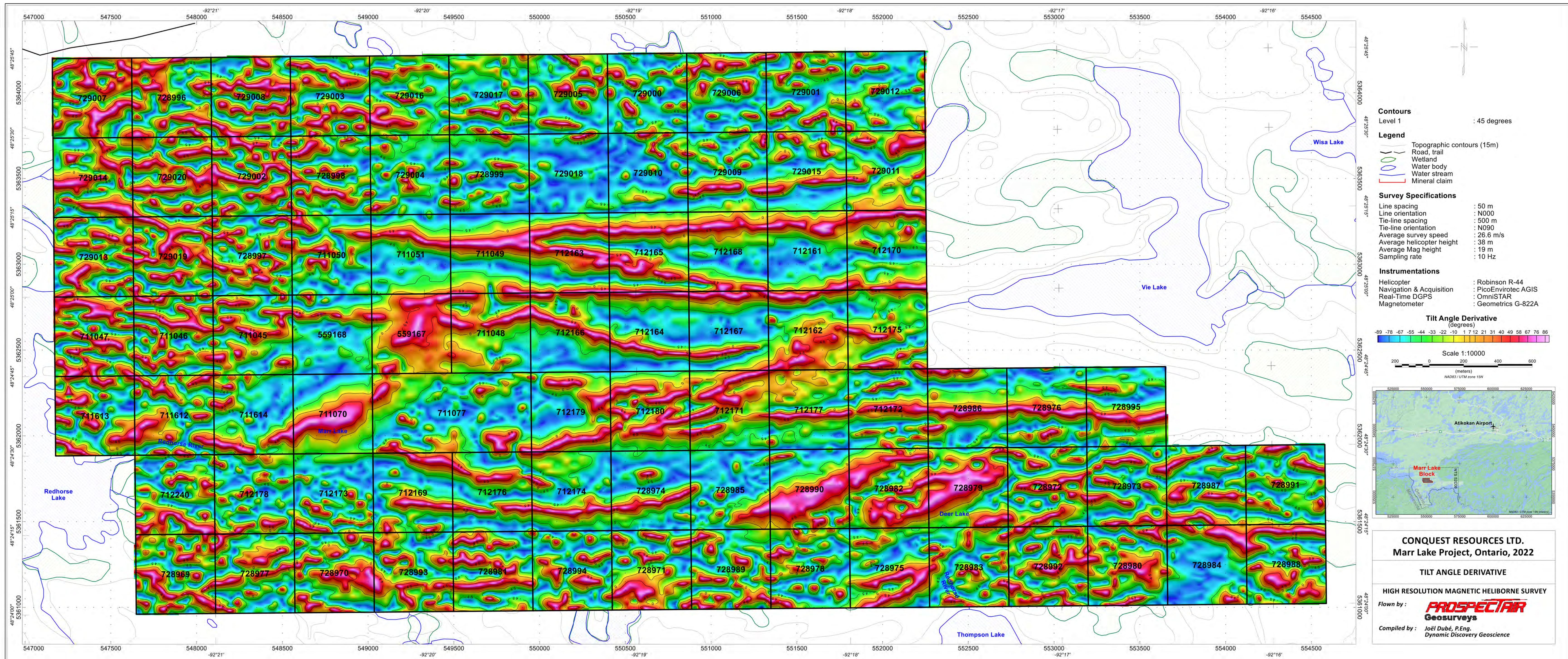
XI. Appendix B – Property claims covered by the survey

Tenure number	Holder	l-km within claim
559167	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
559168	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711045	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711046	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711047	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711048	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711049	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711050	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711051	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711070	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711077	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	46.566
711612	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711613	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
711614	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712161	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712162	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712163	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712164	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712165	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712166	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712167	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712168	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712169	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712170	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712171	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712172	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712173	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712174	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712175	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712176	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712177	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712178	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712179	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712180	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
712240	(50) JOERG MARTIN KLEINBOECK, (50) ALLAN GEORGE ONCHULENKO	23.278
728969	(100) JOERG MARTIN KLEINBOECK	23.289
728970	(100) JOERG MARTIN KLEINBOECK	23.289
728971	(100) JOERG MARTIN KLEINBOECK	23.289
728972	(100) JOERG MARTIN KLEINBOECK	23.278
728973	(100) JOERG MARTIN KLEINBOECK	23.278
728974	(100) JOERG MARTIN KLEINBOECK	23.278
728975	(100) JOERG MARTIN KLEINBOECK	23.289
728976	(100) JOERG MARTIN KLEINBOECK	23.278
728977	(100) JOERG MARTIN KLEINBOECK	23.289
728978	(100) JOERG MARTIN KLEINBOECK	23.289
728979	(100) JOERG MARTIN KLEINBOECK	23.278
728980	(100) JOERG MARTIN KLEINBOECK	23.289
728981	(100) JOERG MARTIN KLEINBOECK	23.289

Tenure number	Holder	l-km within claim
728982	(100) JOERG MARTIN KLEINBOECK	23.278
728983	(100) JOERG MARTIN KLEINBOECK	23.289
728984	(100) JOERG MARTIN KLEINBOECK	23.289
728985	(100) JOERG MARTIN KLEINBOECK	23.278
728986	(100) JOERG MARTIN KLEINBOECK	23.278
728987	(100) JOERG MARTIN KLEINBOECK	23.278
728988	(100) JOERG MARTIN KLEINBOECK	23.289
728989	(100) JOERG MARTIN KLEINBOECK	23.289
728990	(100) JOERG MARTIN KLEINBOECK	23.278
728991	(100) JOERG MARTIN KLEINBOECK	23.278
728992	(100) JOERG MARTIN KLEINBOECK	23.289
728993	(100) JOERG MARTIN KLEINBOECK	23.289
728994	(100) JOERG MARTIN KLEINBOECK	23.289
728995	(100) JOERG MARTIN KLEINBOECK	23.278
728996	(100) JOERG MARTIN KLEINBOECK	23.278
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728998	(100) JOERG MARTIN KLEINBOECK	23.278
728999	(100) JOERG MARTIN KLEINBOECK	23.278
729000	(100) JOERG MARTIN KLEINBOECK	23.278
729001	(100) JOERG MARTIN KLEINBOECK	23.278
729002	(100) JOERG MARTIN KLEINBOECK	23.278
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729008	(100) JOERG MARTIN KLEINBOECK	23.278
729009	(100) JOERG MARTIN KLEINBOECK	23.278
729010	(100) JOERG MARTIN KLEINBOECK	23.278
729011	(100) JOERG MARTIN KLEINBOECK	23.278
729012	(100) JOERG MARTIN KLEINBOECK	23.278
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729017	(100) JOERG MARTIN KLEINBOECK	23.278
729018	(100) JOERG MARTIN KLEINBOECK	23.278
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729020	(100) JOERG MARTIN KLEINBOECK	23.278

APPENDIX IV: MAPS



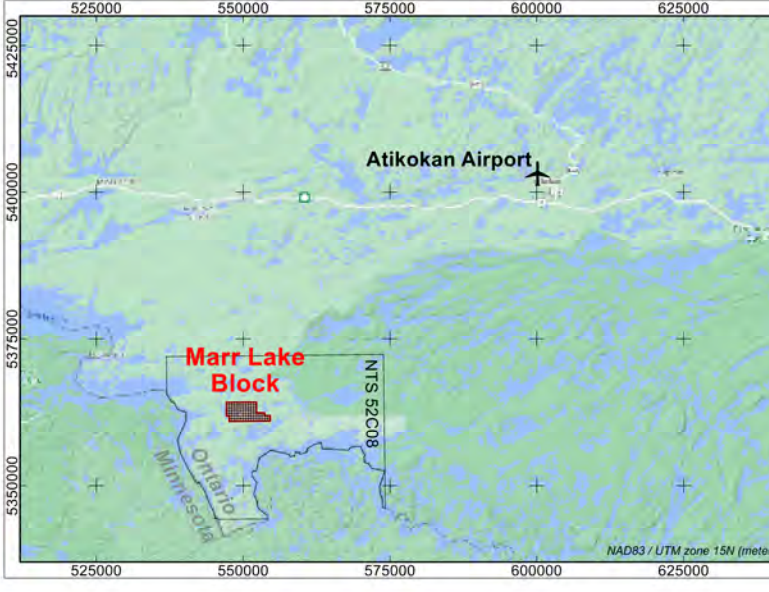
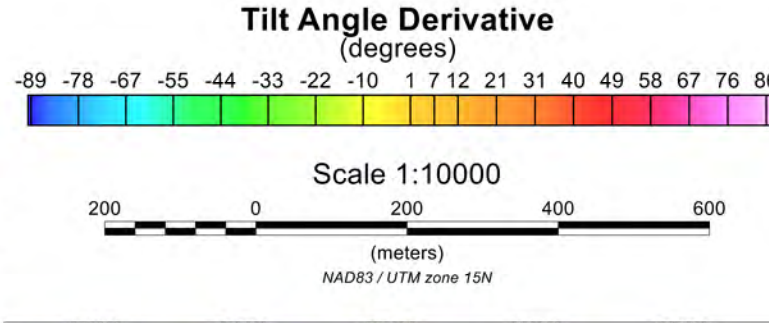


Contours
Level 1 : 45 degrees

Legend
 Topographic contours (15m)
 Road, trail
 Wetland
 Water body
 Water stream
 Mineral claim

Survey Specifications
 Line spacing : 50 m
 Line orientation : N000
 Tie-line spacing : 500 m
 Tie-line orientation : N090
 Average survey speed : 26.6 m/s
 Average helicopter height : 38 m
 Average Mag height : 19 m
 Sampling rate : 10 Hz

Instrumentations
 Helicopter : Robinson R-44
 Navigation & Acquisition : PicoEnvirotec AGIS
 Real-Time DGPS : OrnniSTAR
 Magnetometer : Geometrics G-822A



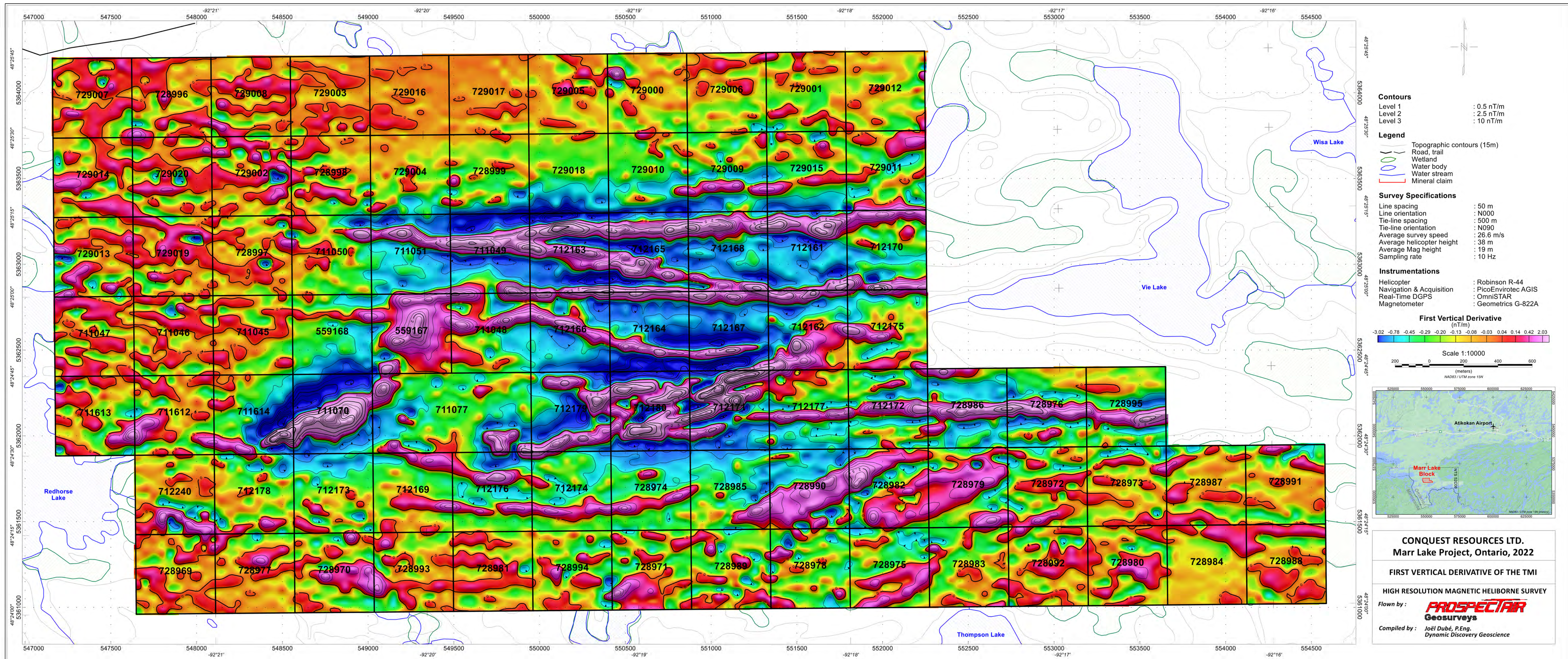
CONQUEST RESOURCES LTD.
Marr Lake Project, Ontario, 2022

TILT ANGLE DERIVATIVE

HIGH RESOLUTION MAGNETIC HELICOPTER SURVEY

Flown by: **PROSPECTAR Geosurveys**

Compiled by: **Joshi Dubé, P.Eng.**
Dynamic Discovery Geoscience

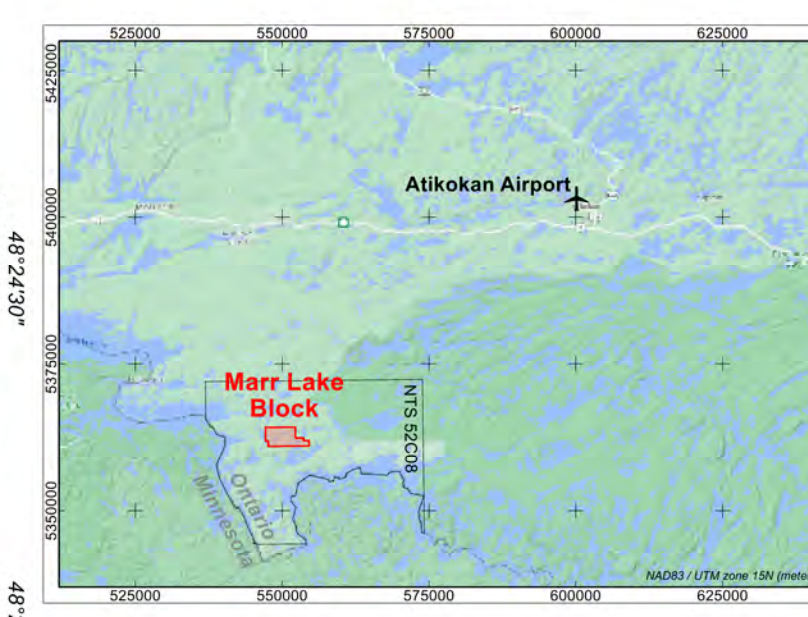
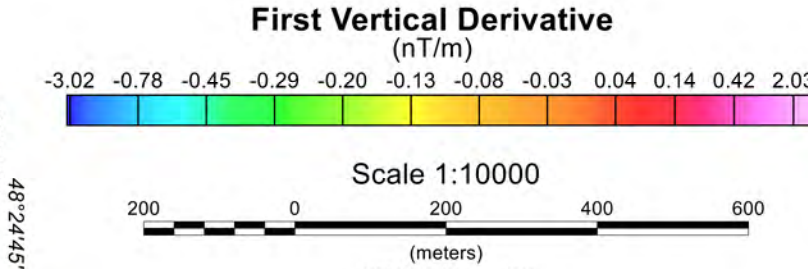


Contours
 Level 1 : 0.5 nT/m
 Level 2 : 2.5 nT/m
 Level 3 : 10 nT/m

Legend
 Topographic contours (15m)
 Road, trail
 Wetland
 Water body
 Water stream
 Mineral claim

Survey Specifications
 Line spacing : 50 m
 Line orientation : N000
 Tie-line spacing : 500 m
 Tie-line orientation : N090
 Average survey speed : 26.6 m/s
 Average helicopter height : 38 m
 Average Mag height : 19 m
 Sampling rate : 10 Hz

Instrumentations
 Helicopter : Robinson R-44
 Navigation & Acquisition : PicoEnvirotec AGIS
 Real-Time DGPS : OmniSTAR
 Magnetometer : Geometrics G-822A



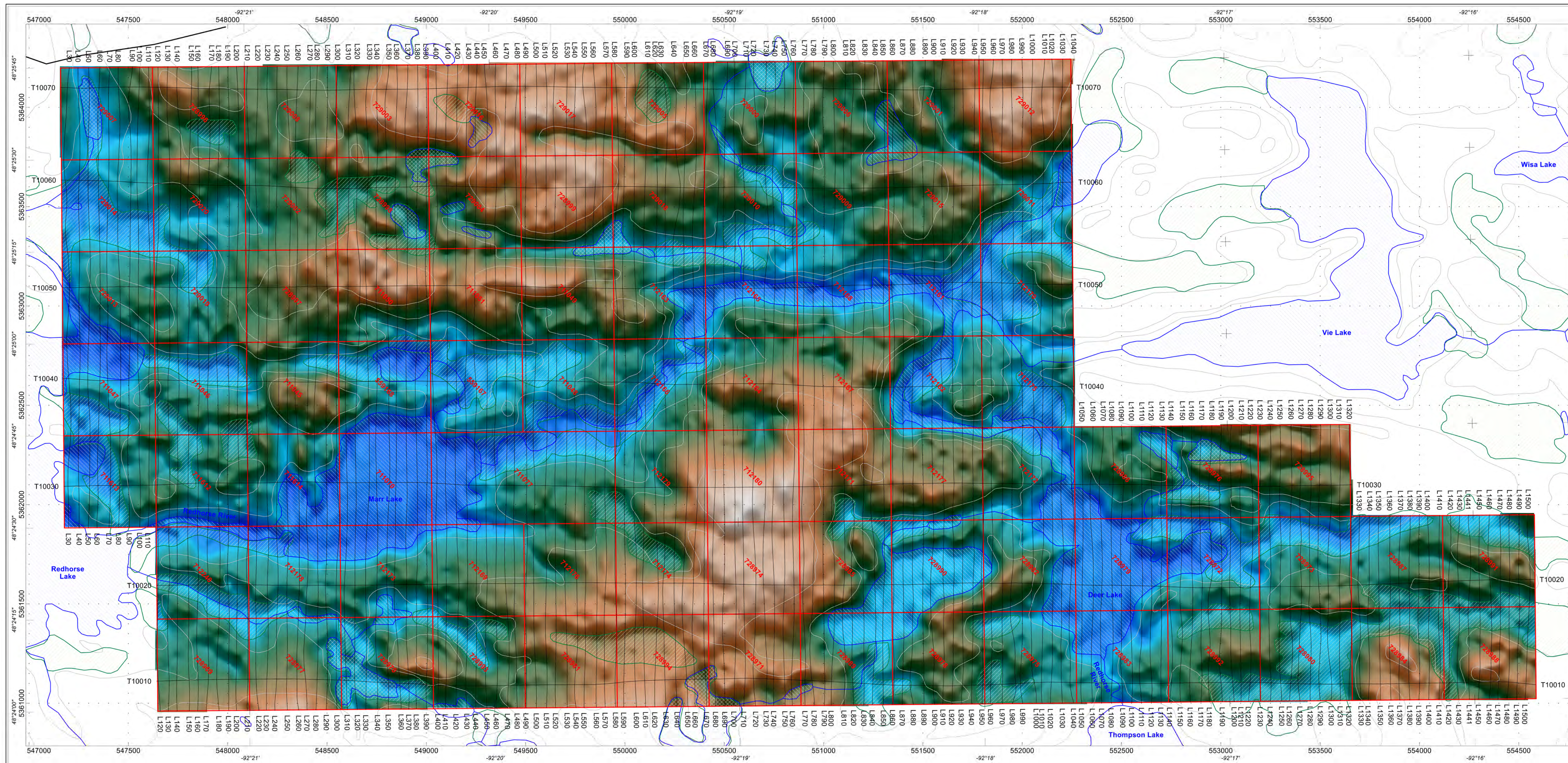
CONQUEST RESOURCES LTD.
 Marr Lake Project, Ontario, 2022

FIRST VERTICAL DERIVATIVE OF THE TMI

HIGH RESOLUTION MAGNETIC HELIBORNE SURVEY

Flown by: **PROSPECTAR Geosurveys**

Compiled by: **Joshi Dubé, P.Eng.**
 Dynamic Discovery Geoscience



Legend

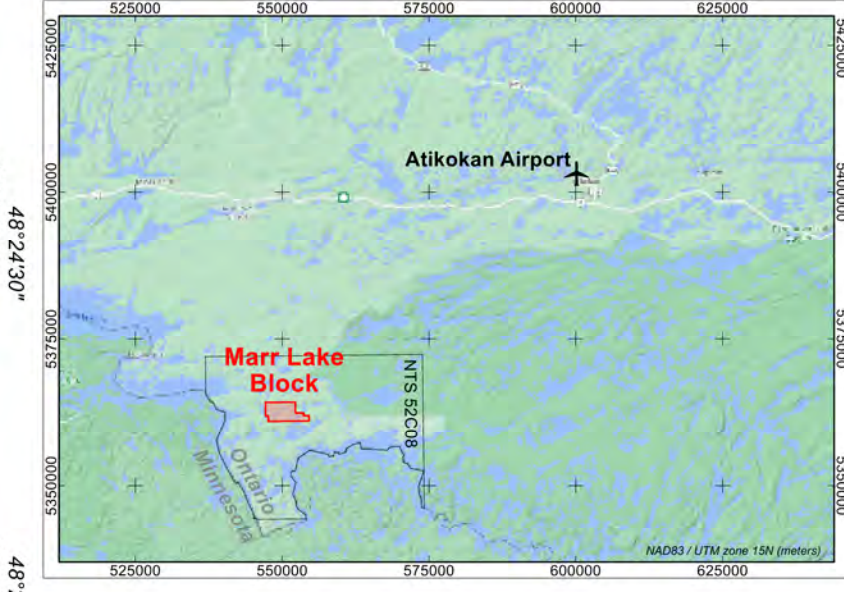
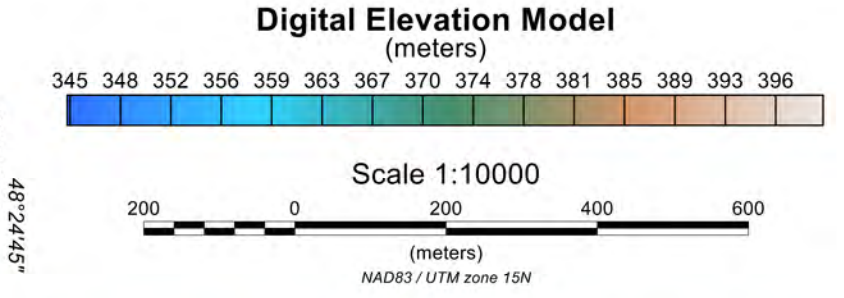
- Topographic contours (15m)
- Road, trail
- Wetland
- Water body
- Water stream
- Mineral claim

Survey Specifications

- Line spacing : 50 m
- Line orientation : N000
- Tie-line spacing : 500 m
- Tie-line orientation : N090
- Average survey speed : 26.6 m/s
- Average helicopter height : 38 m
- Average Mag height : 19 m
- Sampling rate : 10 Hz

Instruments

- Helicopter : Robinson R-44
- Navigation & Acquisition : PicoEnvirotec AGIS
- Real-Time DGPS : OmniSTAR
- Magnetometer : Geometrics G-822A



CONQUEST RESOURCES LTD.
 Marr Lake Project, Ontario, 2022

**DIGITAL ELEVATION MODEL WITH
 FLIGHT PATH AND PROPERTY CLAIMS**

HIGH RESOLUTION MAGNETIC HELIBORNE SURVEY

Flown by: **PROSPECTAR Geosurveys**

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