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Technical Report for MNDM Assessment Purposes, Fall 2021 Drone Magnetometer Survey

Lizar Property

Lizar Township, Sault Ste. Marie Mining Division
Ontario, Canada

Prepared For:

Michael Thompson

Prepared By:
Jordan Quinn

DATE OF COMPLETION: March 1, 2022

1 Introduction and Summary

The Lizar Property consists of 111 mining claims within the Lizar Township in the Sault Ste. Marie Mining Division. The property is fully owned by Michael Thompson and located approximately 60 km Northwest of White River, Ontario along Highway 631.

Michael Thompson contracted Fladgate Exploration Consulting Corporation ("**Fladgate**") to conduct an unmanned aerial geophysical survey on the Lizar property from November 9-11 2021. Fladgate provided all the required geological, geotechnical, and sub-contractor services on the program described herein. The program consisted of 137 flight lines and 13 perpendicular tie lines totaling 102 flown line kilometers. The survey was performed in order to map the magnetic signature of the underlying geology.

The results of the survey indicate the presence of multiple northeast-southwest trending magnetic anomalies. Subsequent and more detailed geophysical surveys are recommended to enhance the boundaries and locations of magnetic anomalies on the property.

2 Terms of Reference

This report was prepared at the request of Michael Thompson for the use of filing assessment as required under the Ontario Mining Act. Unless otherwise noted, Universal Transverse Mercator ("UTM") coordinates are provided in the datum of NAD83 Zone 16 North.

3 Disclaimer

The author disclaims responsibility for portions of the current report that rely on information from historic assessment files and government maps and reports which may not have been prepared in compliance with current standards.

4 Property Description and Location

The Lizar property is located in the Lizar Township within the Sault Ste. Marie Mining Division in Northwestern Ontario, approximately 60 km Northwest of White River (**Figure 1**). The property is centered on UTM coordinates 682,330 mE, 5,414,370 mN (NAD83 Zone 16N) and is accessed from White River by traveling 60 kilometers Northwest along HWY 631 followed by 25 kilometers of driving down all-weather accessible major and minor logging roads. Total travel time from White River to the Lizar property is approximately 1.5 hours. The property consists of 111 unpatented mining claims (**Figure 2**). A list of all claims can be found in **Table 1**.

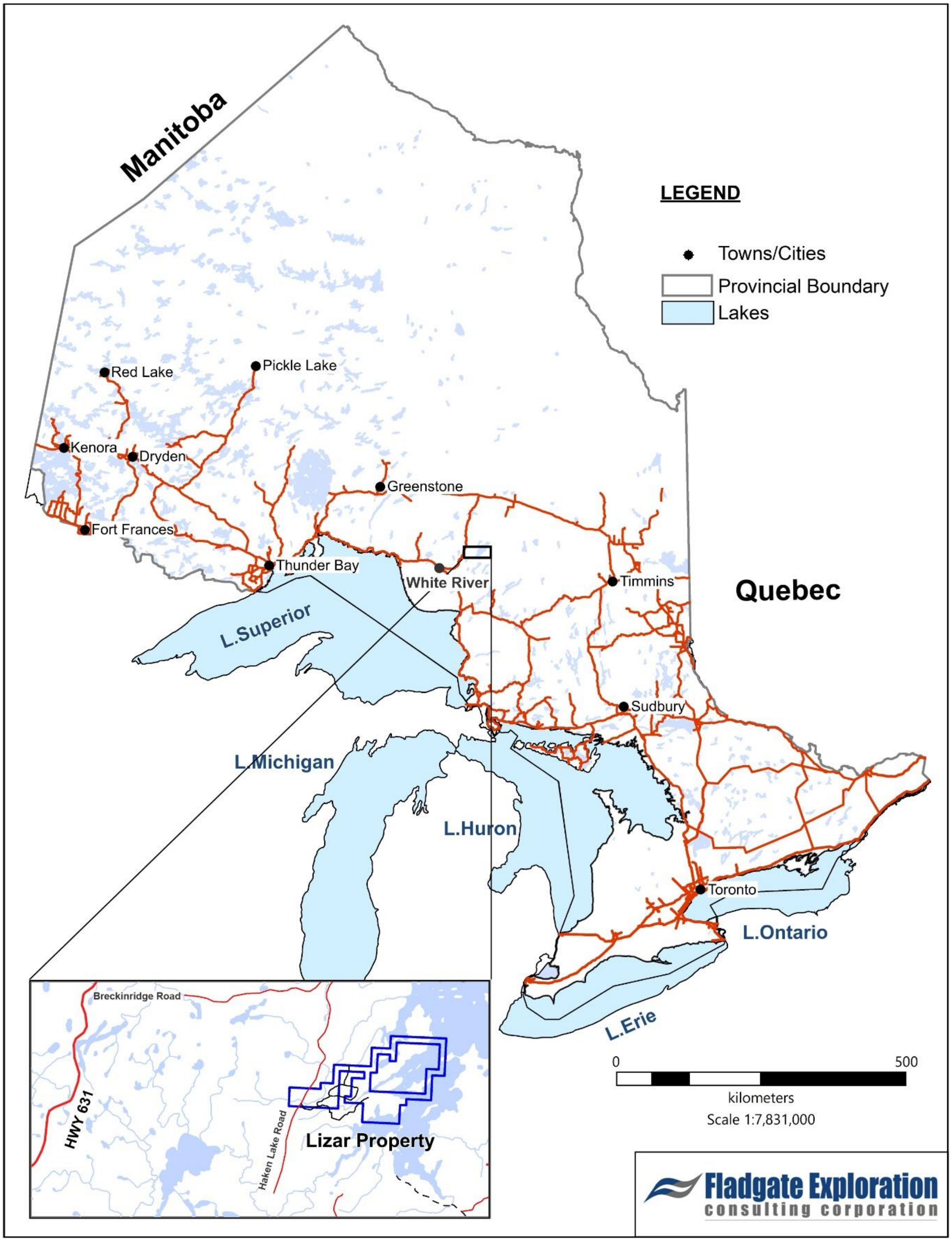

Figure 1 - Lizar Property Location

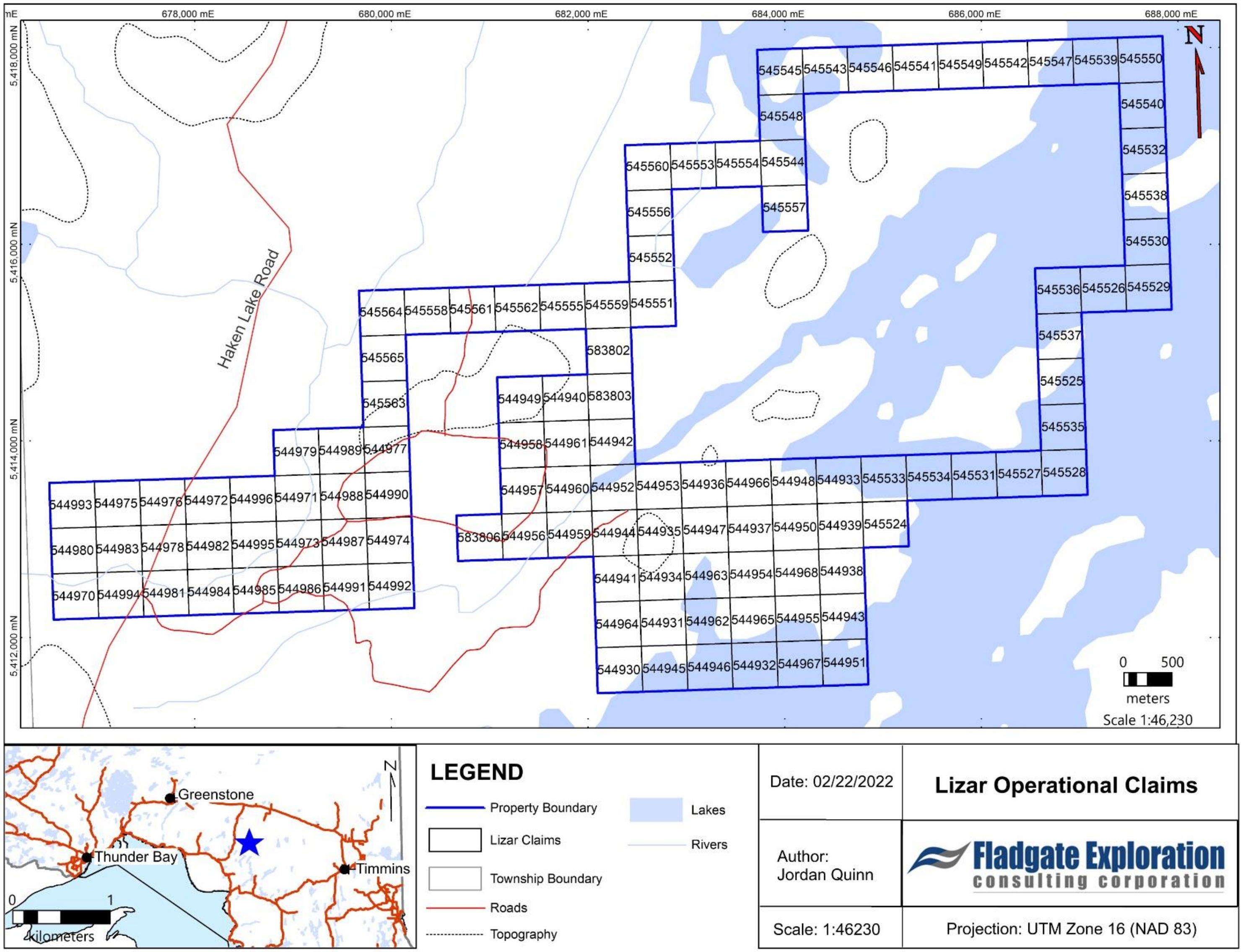

Figure 2 - Lizar Claim Map

Table 1 – Lizar Claims

Claim Number	Township	Units	Ha	Claim Due Date	% Option	Ownership
544930	LIZAR	1	16	2022-03-06	100	Michael Thompson
544931	LIZAR	1	16	2022-03-06	100	Michael Thompson
544932	LIZAR	1	16	2022-03-06	100	Michael Thompson
544933	LIZAR	1	16	2022-03-06	100	Michael Thompson
544934	LIZAR	1	16	2022-03-06	100	Michael Thompson
544935	LIZAR	1	16	2022-03-06	100	Michael Thompson
544936	LIZAR	1	16	2022-03-06	100	Michael Thompson
544937	LIZAR	1	16	2022-03-06	100	Michael Thompson
544938	LIZAR	1	16	2022-03-06	100	Michael Thompson
544939	LIZAR	1	16	2022-03-06	100	Michael Thompson
544940	LIZAR	1	16	2022-03-06	100	Michael Thompson
544941	LIZAR	1	16	2022-03-06	100	Michael Thompson
544942	LIZAR	1	16	2022-03-06	100	Michael Thompson
544943	LIZAR	1	16	2022-03-06	100	Michael Thompson
544944	LIZAR	1	16	2022-03-06	100	Michael Thompson
544945	LIZAR	1	16	2022-03-06	100	Michael Thompson
544946	LIZAR	1	16	2022-03-06	100	Michael Thompson
544947	LIZAR	1	16	2022-03-06	100	Michael Thompson
544948	LIZAR	1	16	2022-03-06	100	Michael Thompson
544949	LIZAR	1	16	2022-03-06	100	Michael Thompson
544950	LIZAR	1	16	2022-03-06	100	Michael Thompson
544951	LIZAR	1	16	2022-03-06	100	Michael Thompson
544952	LIZAR	1	16	2022-03-06	100	Michael Thompson
544953	LIZAR	1	16	2022-03-06	100	Michael Thompson
544954	LIZAR	1	16	2022-03-06	100	Michael Thompson
544955	LIZAR	1	16	2022-03-06	100	Michael Thompson
544956	LIZAR	1	16	2022-03-06	100	Michael Thompson
544957	LIZAR	1	16	2022-03-06	100	Michael Thompson
544958	LIZAR	1	16	2022-03-06	100	Michael Thompson
544959	LIZAR	1	16	2022-03-06	100	Michael Thompson
544960	LIZAR	1	16	2022-03-06	100	Michael Thompson
544961	LIZAR	1	16	2022-03-06	100	Michael Thompson
544962	LIZAR	1	16	2022-03-06	100	Michael Thompson
544963	LIZAR	1	16	2022-03-06	100	Michael Thompson
544964	LIZAR	1	16	2022-03-06	100	Michael Thompson
544965	LIZAR	1	16	2022-03-06	100	Michael Thompson
544966	LIZAR	1	16	2022-03-06	100	Michael Thompson
544967	LIZAR	1	16	2022-03-06	100	Michael Thompson

Claim Number	Township	Units	Ha	Claim Due Date	% Option	Ownership
544968	LIZAR	1	16	2022-03-06	100	Michael Thompson
544970	LIZAR	1	16	2022-03-06	100	Michael Thompson
544971	LIZAR	1	16	2022-03-06	100	Michael Thompson
544972	LIZAR	1	16	2022-03-06	100	Michael Thompson
544973	LIZAR	1	16	2022-03-06	100	Michael Thompson
544974	LIZAR	1	16	2022-03-06	100	Michael Thompson
544975	LIZAR	1	16	2022-03-06	100	Michael Thompson
544976	LIZAR	1	16	2022-03-06	100	Michael Thompson
544977	LIZAR	1	16	2022-03-06	100	Michael Thompson
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544985	LIZAR	1	16	2022-03-06	100	Michael Thompson
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544988	LIZAR	1	16	2022-03-06	100	Michael Thompson
544989	LIZAR	1	16	2022-03-06	100	Michael Thompson
544990	LIZAR	1	16	2022-03-06	100	Michael Thompson
544991	LIZAR	1	16	2022-03-06	100	Michael Thompson
544992	LIZAR	1	16	2022-03-06	100	Michael Thompson
544993	LIZAR	1	16	2022-03-06	100	Michael Thompson
544994	LIZAR	1	16	2022-03-06	100	Michael Thompson
544995	LIZAR	1	16	2022-03-06	100	Michael Thompson
544996	LIZAR	1	16	2022-03-06	100	Michael Thompson
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545531	LIZAR	1	16	2022-03-10	100	Michael Thompson
545532	LIZAR	1	16	2022-03-10	100	Michael Thompson
545533	LIZAR	1	16	2022-03-10	100	Michael Thompson
545534	LIZAR	1	16	2022-03-10	100	Michael Thompson

Claim Number	Township	Units	Ha	Claim Due Date	% Option	Ownership
545535	LIZAR	1	16	2022-03-10	100	Michael Thompson
545536	LIZAR	1	16	2022-03-10	100	Michael Thompson
545537	LIZAR	1	16	2022-03-10	100	Michael Thompson
545538	LIZAR	1	16	2022-03-10	100	Michael Thompson
545539	LIZAR	1	16	2022-03-10	100	Michael Thompson
545540	LIZAR	1	16	2022-03-10	100	Michael Thompson
545541	LIZAR	1	16	2022-03-10	100	Michael Thompson
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545555	LIZAR	1	16	2022-03-10	100	Michael Thompson
545556	LIZAR	1	16	2022-03-10	100	Michael Thompson
545557	LIZAR	1	16	2022-03-10	100	Michael Thompson
545558	LIZAR	1	16	2022-03-10	100	Michael Thompson
545559	LIZAR	1	16	2022-03-10	100	Michael Thompson
545560	LIZAR	1	16	2022-03-10	100	Michael Thompson
545561	LIZAR	1	16	2022-03-10	100	Michael Thompson
545562	LIZAR	1	16	2022-03-10	100	Michael Thompson
545563	LIZAR	1	16	2022-03-10	100	Michael Thompson
545564	LIZAR	1	16	2022-03-10	100	Michael Thompson
545565	LIZAR	1	16	2022-03-10	100	Michael Thompson
583802	LIZAR	1	16	2022-04-13	100	Michael Thompson
583803	LIZAR	1	16	2022-04-13	100	Michael Thompson
583806	LIZAR	1	16	2022-04-13	100	Michael Thompson

5 Access, Local Resources, and Infrastructure

The property is accessible year-round, as it is located 25 km east of HWY 631, which is a major north-south route connecting White River to Hornepayne (**Figure 1**). After driving 60 km Northwest of White River on Hwy 631, access to the property is gained by driving ~16km east along Breckinridge Road followed by 9km south along Haken Lake Road. Both roads are well maintained gravel roads that provide year-round access to the property (**Figure 2**).

White River is ~60 km to the southwest and is the nearest population centre, with services and amenities for industrial, educational, and leisure activities. Local experienced labour is available.

Watson's Windy Point Lodge is located on the most eastern edge of the property. This permanent structure provides lodging and fishing tours during the spring, summer and falls months.

6 Climate and Physiography

The Lizar Property is located within the Canadian Shield, which is a major physiographic division of Canada. The property is situated in an area of swamps, rivers, and small lakes.

Climate in the area is typical of Northern Ontario, with cold winters and warm summers. Average January temperatures range from -11˚C to -23˚C, and average July temperatures are between 11˚C and 24˚C. Work can be done (subject to snow and freezing) for most of the year.

There is relatively moderate relief topography for a majority of the property which makes outcrop easy to find. This topography is caused by the abundance of faulting and the presence of dikes on the property.

7 Geological Setting

7.1 Regional Geology

As illustrated in **Figure 3** the Lizar Property is located in the southwestern end of the western portion of the Abitibi Supbrovince within the Archean age Superior Province.

7.1.1 *The Superior Province*

The Superior Province is a major geological province comprised of Archean age rocks that forms the core of the North American continent. In Ontario, the Superior is surrounded by younger Grenville and Southern Provinces to the south and southeast. The Superior Province consists of alternating granite-greenstone and metasedimentary belts in the central portion, and has been subdivided into smaller subprovinces based on rock type: granite-greenstone plutonic and metavolcanic rocks (Uchi, Wawa, and Abitibi subprovinces), metasedimentary rocks (English River and Quetico subprovinces), plutonic granitic rocks (Winnipeg River subprovince), and high-grade greenstone rocks to the north (Kapuskasing Zone). Subprovinces are commonly fault-bounded and display contrasting lithological assemblages, metamorphic and structural styles, geophysical characteristics, and ages.

7.1.2 *The Abitibi Subprovince*

The Abitibi Subprovince consists of a series of relatively small greenstone belts including the Manitouwadge, Shrieber-Hemlo, Mishibishu and Michipicoten as well as the Dayohessarah-Kabinakagami greenstone belt. The Lizar Property is located within the Kabinakagami portion of the Dayohessarah-Kabinakagami greenstone belt.

Stratigraphically, the Abitibi Subprovince comprises a continuous succession of Neo- to Mesoarchean metavolcanic and metasedimentary rocks interpreted to have developed in an ensimatic basin (Ayer, 2001). These supracrustal rocks are intruded by multiple generations of felsic to ultramafic igneous rocks. This intrusive activity extended from the Neoarchean into the late Proterozoic.

The rocks of the Abitibi Subprovince have experienced variable degrees of deformation and metamorphism. Of particular significance in the Timmins region, due to its relationship with gold mineralization (Berger, 2001), is the Porcupine-Destor Fault Zone (PDFZ). The fault zone is a major structural feature that strikes east-northeast and has been traced along strike for over 450 km across the Abitibi Subprovince (Berger, 2001). The PDFZ is offset by numerous north-northwest-striking faults that partition the Abitibi greenstone belt into distinct blocks that display different styles of alteration associated with gold mineralization, deformation and metamorphism (Berger, 2001). Early Proterozoic Matachewan dikes are also offset by the north-northwest-striking faults (Brisbin, 1997).

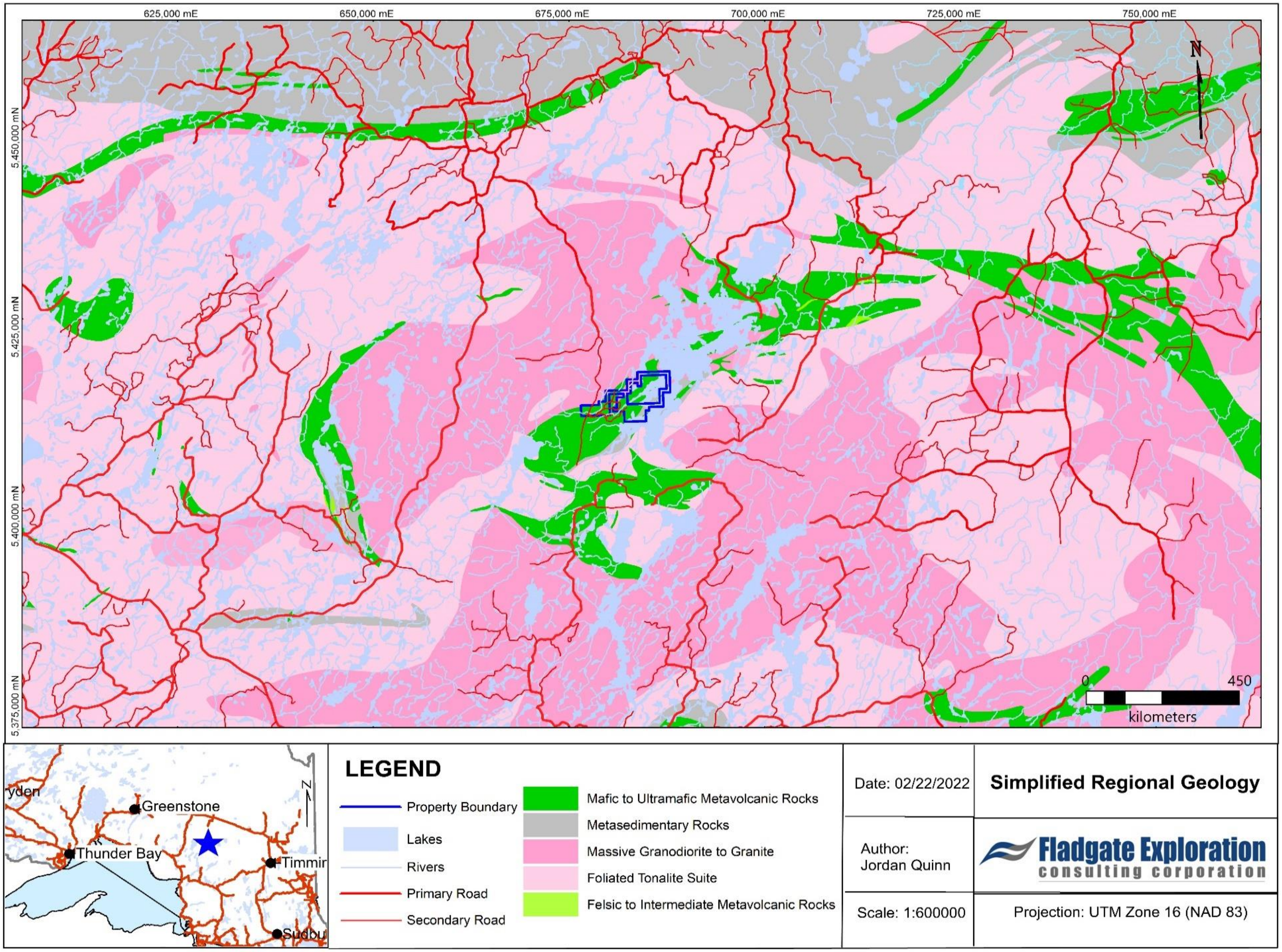

Figure 3 - Regional Geology of Northwestern Ontario

7.2 Local Geology – Lizar Property

From Lashbrook (2005), the Lizar township is underlain by the Woman River Metasedimentary package – Algoma Type iron formation-magnetite, jasper, hematite, chert and sulphide – which is conformably overlain by the pillowed to massive Fe-Mg tholeiites of the October Lake Formation. Felsic and mafic dykes cut through all units and are presumed to be extensive on the property.

On a property scale the Lizar Property is underlain by a northeast-trending and vertical to sub-vertical dipping suite of mafic metavolcanic flows. The folded metavolcanics have been strongly sheared along the northeast trend and a feldspar porphyry dyke in turn has intruded the shear zone. Lamprophyre dykes are also present within this structural corridor.

Mineralization varies from sericitization of the granite and pyritization to extensive silicification with numerous parallel stringers of quartz, 0.5 to 6.0 inches in width. Numerous showings of free gold have been found in the quartz stringers, but altered granite in the shear appears to be barren. Likewise, all the gold appears to be free, with little or none in the sulphides. In addition to pyrite, chalcopyrite, galena and molybdenite are associated with the gold mineralization.

A detailed property geology map can be found in **Figure 4**.

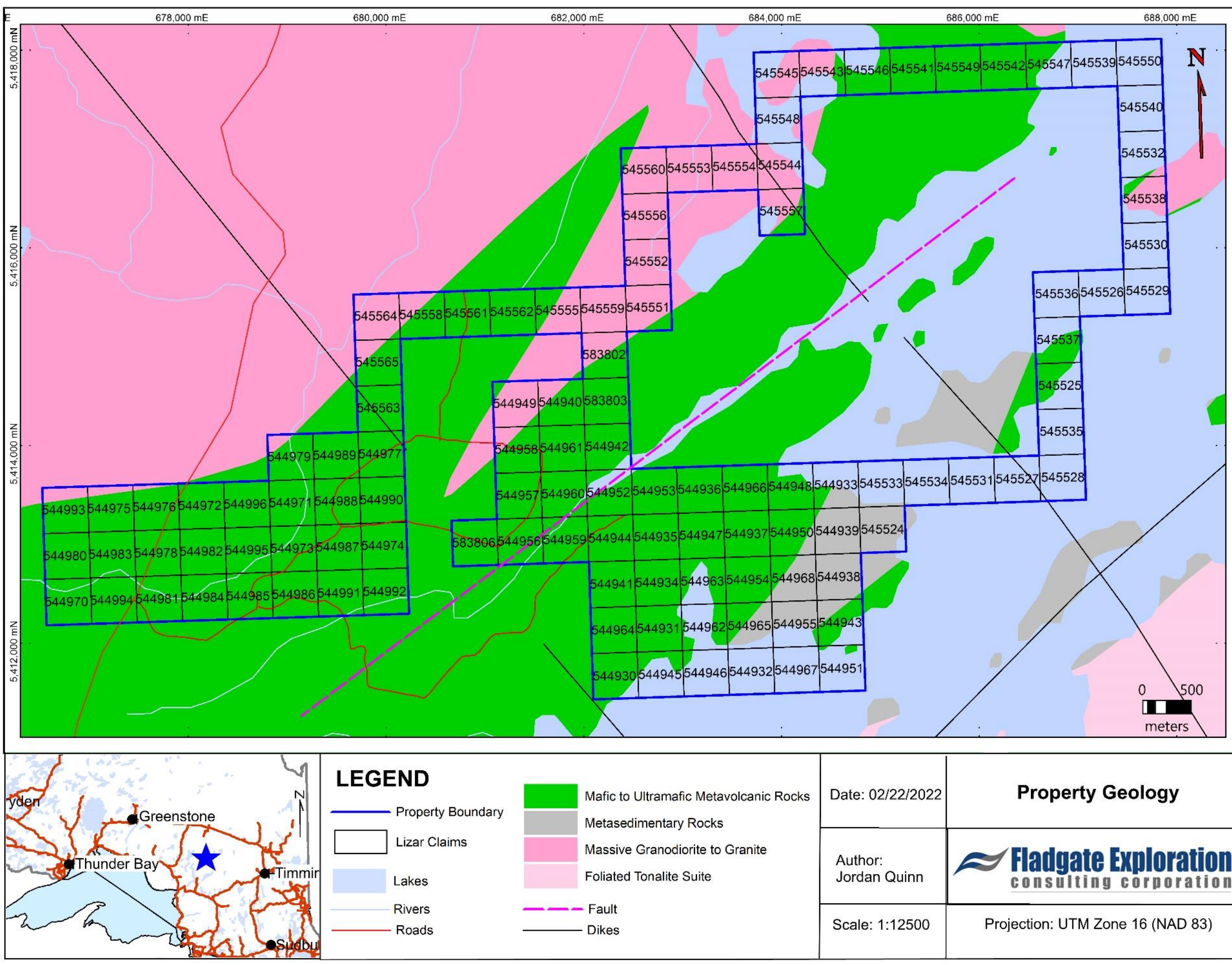

Figure 4 - Lizar Property Geology

8 History of Exploration on the Property

1930's	Hiawatha Gold Mine, located northeast of the current Lizar property was discovered and subsequently produced 1931 tons of ore grading 0.074 opt. gold, J. E. Stenabough discovered several gold-polymetallic occurrences, in addition the Kalibak prospects were found by person(s) unknown, Hollinger Gold Mines worked the Charpentier Showings.
1950's	Neoscope Explorations Limited completed an airborne magnetic and scintillometer survey over Kabinakagami area and outlined a massive magnetite body hosted by a pyroxenite approximately 4 kms. northeast of the Hiawatha Mine (Perkin Occurrence).
1960's	Primrock Mining and Exploration dewatered the Hiawatha gold mine and drilled two exploration holes.
1960's	Rio Tinto and Nickel Rim Mines Ltd. carried out limited exploration programs in and around the Lizar Property.
1980's	The area around the Lizar Property was worked by numerous companies including, Sveinson Way Minerals Services Inc, Pryme Energy, Tundra Gold Mines, Noranda Exploration and Golden Trio resources amongst others. Very little diamond drilling was carried out by any of these companies.
1990's	Two local prospector's, Doug Kakeeway and Lloyd Halverston prospected the area and came up with several new gold showings in altered, pyritic felsic rocks.
2001	The property is optioned by Freewest Resources Ltd. Freewest establishes two grids (Nameigos and Patent Grids), to conduct a Max-Min survey and I.P. Resistivity.

2002	Freewest carries out soil surveys, prospecting and trenching, successfully discovers eight new gold occurrences. Teck Cominco enters a joint venture agreement with Freewest from 2002 to 2004. Teck Cominco Limited flies a GEOTEM airborne survey over the property and surrounding area outlining several priority EM anomalies.
2004	Teck Cominco conducts ground UTEM surveys over selected airborne EM targets and geological maps and prospects property. Teck Cominco extends I.P. Resistivity coverage on the Patent Grid. Teck Cominco Drills 1514 metres over 8 holes. Two holes LIZ-01 and 02 test priority EM conductors in northern portion of property while he remaining 6 holes (LIZ-03-08) were collared to test I.P. Conductors on the southern extension of the Patent Grid. Highlights included the discovery of a potential new magmatic Ni, Cu, PGM target in hole LIZ-01-01 which intersected a 3.0 metre interval at the base of a peridotite sill that ran 0.54% nickel, 1.26 gpt palladium and 0.23 gpt platinum
2007	Freewest in 2007 drills 15 holes totalling 2160 metres. Twelve holes (LIZ-07-01 to 12) were drilled to test various gold targets on the Patent Grid, while three holes (LIZ-07-12 to 15) were collared to test the volcanogenic massive sulphide target on the Nameigos Grid. All drill holes located on the Patent Grid encountered significant zones of alteration and pyrite mineralization, while anomalous gold values were commonly encountered the best values obtained were 1.31 gpt/1.0 metres in hole LIZ-07-06 and 1.67 gpt/0.8 metres in holes LIZ-07-09. All three holes drilled on the Nameigos Target interested minor amounts of chalcopyrite and sphalerite. Of note was that hole LIZ-07-15 encountering a chloritic stockwork alteration zone that contained 5.8 metres grading 1596 ppm copper and 996 ppm zinc.
2011	Rencore Resources contracts Geotech Ltd. to carry out at a Helicopter borne VTEM and Aeromagnetic Geophysical survey. An interpretation of the data revealed 18 areas of interest. (Mackie, 2011) Rencore conducts a reconnaissance prospecting and geological mapping was conducted over select areas of the Lizar property identified from the VTEM survey. It was determined that the strong conductive trend located in the northwestern portion of the property (EM 14 and15) offer the best potential to host volcanogenic massive sulphide style mineralization. Outcrops and hand dug trenches along Anomaly 15 returned consistently anomalous Zn, +/- Cu, and Au values over 900 metre strike length. Best values obtained were 1.03% zinc, 0.26% copper and 1.43 gpt gold
2016	Dan Patrie Exploration Ltd. is contracted to preform a field magnetic survey for Johnathan Camilleri. A total of 121.5 kilometers was surveyed over 5 claims.
2018	Brent Patrie conducted a Gradient IP on the Lizar property with 23 lines of variable lengths being surveyed for a total of 29.1 line-km. Interpretation of the IP results highlighted two trends; (Winter, 2018) (1) the main NE geological trend in the are with the rock units being folded mafic to intermediate to felsic metavolcanics. (2) The NNW trend is one of later cross faulting with some of these structures hosting Proterozoic age diabase dykes.

9 Current Program

From November 9-11, 2021, a drone magnetic survey was carried out on the Lizar property. The survey consisted of 137 Northwest-Southeast flight lines spaced at 25m and 13 Northeast-Southwest tie lines spaced at 200m (**Figure 5**). The height of the survey was 50m, with the exception of the survey containing flight lines 71-89; this survey was flown at a height of 75m due to the height of the treetops in the area. The total line kilometres flown were 102 km. **Table 2** summarizes the total line kilometers flown per claim on the Lizar property. The goal of the survey was to map the magnetic signature of the underlying geology.

Table 2 – Distribution of Work by Mining Claims

Claim #	Line Kilometers Flown
544956	11.5
544957	10
544958	8
544959	2.5
544960	10
544961	6.5
544971	2.5
544973	8.5
544974	8.5
544987	8
544988	11.5
544989	4.5
544990	4
583806	6
TOTAL	**102**

Universal Ground Control Software (UgCS) was used in planning the drone survey. Flight lines were planned as perpendicular as possible to the known underlying geology and at a flight speed of 5.0 m/s.

The principle geophysical sensor used was a Gem Systems Canada GSMP-35U potassium vapor sensor mounted on a UAV platform. A GSM-19 Overhauser Magnetometer base station was used in conjunction with the UAV magnetometer. General specifications of both magnetometers can be found in Appendix 1 of this report: Instrument Specifications.

Fladgate used the DJI Matrice 600 Pro UAV to complete this survey. Specifications of the UAV used can also be found in Appendix 1 of this report.

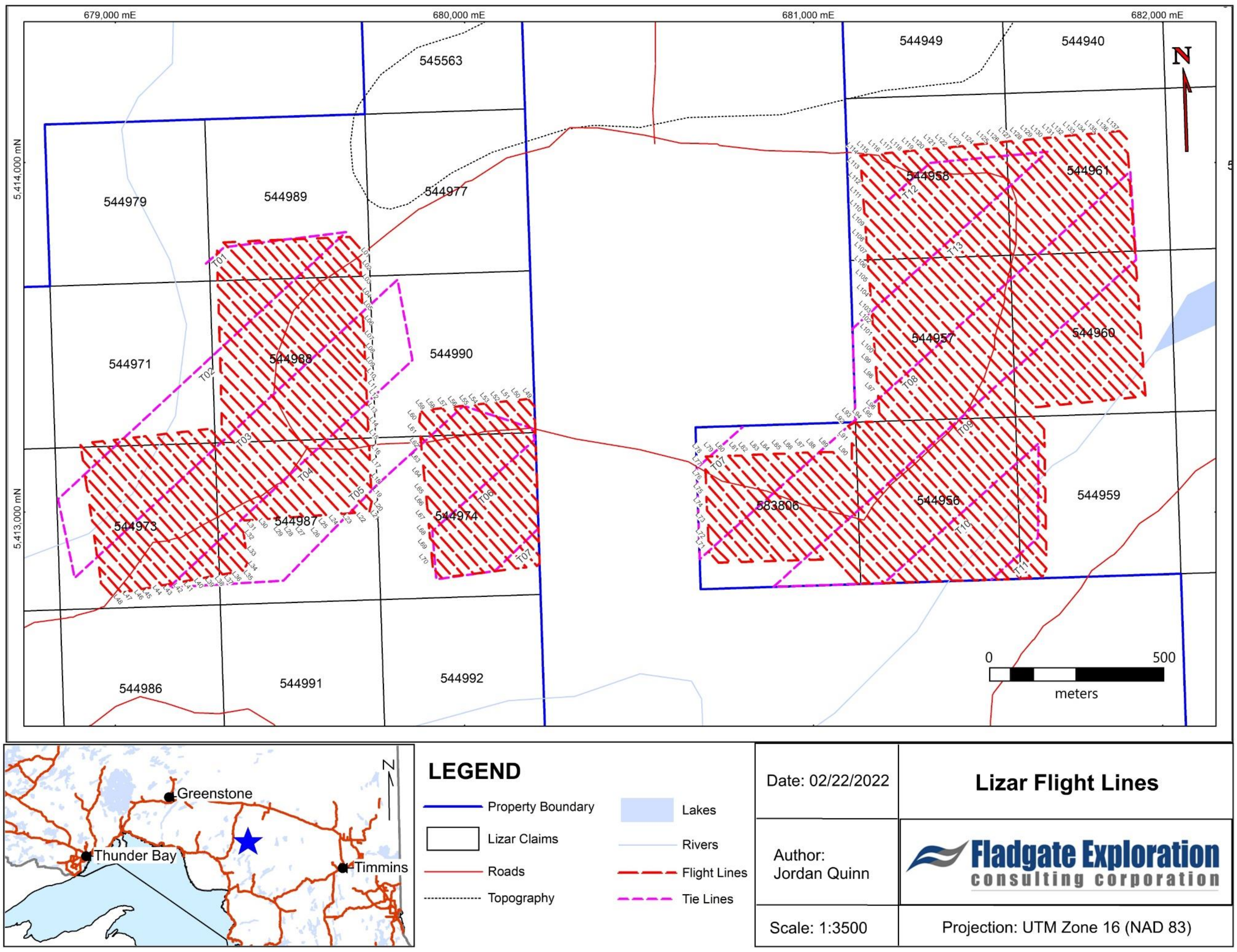

Figure 5 – Map of Lizar Drone Survey

9.1 Personnel

Field operations were supervised and all technical staff was provided by Fladgate and began with logistics and flight planning on November 9, 2021.

Table 3 – Personnel Log

Name	Working Title	Responsibilities	Dates on Project
Jordan Quinn	Project Geologist	Mobilization, Pilot, Drone route planning, Demobilization, Processing Geophysics/Map Creation, Report writing	November 9-11, 2021; December 10-14, 2021; February 22-25, 2022 March 1, 2022
Alex Wytiahlowsky	Geologist	Mobilization, Assist in flight setup and operations, Demobilization	November 9-11, 2021

10 Data Filtering and Processing

Raw aerial magnetometer data was collected at a rate of 10 Hz while base station data was collected at a rate of 0.5 Hz. Total field and GPS UTC time was recorded with each data point which enabled diurnal corrections to be applied during subsequent data processing. An example of the raw data required to carry out the filtering and processing steps is given in **Table 4**.

Table 4 – Raw Geophysical Drone Data

UTC Time	Total Field Mag (nT)	Lock Status	Signal Strength	UTM Easting	UTM Northing	GPS Altitude (m)	Laser Altimeter (m)
144803.7	55377.1	1	309	454931.73	5366619.93	333	8.66
144803.9	55424.3	1	143	454931.71	5366619.89	333	9.24
144804	55441.3	1	504	454931.7	5366619.86	334	9.48
144804.1	55454.9	1	233	454931.7	5366619.87	334	9.79
144804.2	55465.0	1	152	454931.7	5366619.86	334	10.26
144804.3	55471.9	1	208	454931.7	5366619.85	335	10.58

The raw data was then imported into Oasis Montaj Software to be further processed. The steps involved in filtering the data are as follows:

1. A filter was applied to the data based on the lock parameter of the magnetometer. All values that were recorded that did not have a lock value of 1 were removed. The datapoints which remained after this filter were correctly oriented with the Earth's magnetic field.
2. The second filtering step was based on the geometry of the survey area. Data outside the defined survey area were removed. This included data that was gathered while the UAV was in flight to and from the takeoff/landing site and data that was gathered as the UAV takes corners at the end of survey lines. This step reduced edge effects and insured that sampling points were evenly distributed throughout the survey area.
3. A filter was applied that removed any data that was not collected at the programmed survey elevation. This step removes any data that was collected while the UAV was on the ground in between surveys or while the UAV was rising to the programmed survey elevation.

After the data was filtered, the data was processed for interpretation through the following steps:

1. The Earth's magnetic field was subtracted from the total magnetic field reading of the magnetometer. The resulting residual magnetic field data represents the component of the field that is caused by the subsurface.
2. The second processing step involved the subtracting of the observed diurnal variations from the residual magnetic field data. This was achieved by analyzing the change of the magnetic field in the base station measurements with time and correcting for this change.

3. The residual magnetic data was then leveled and a reduction to pole calculation was performed. The resulting data was then used for various interpolations using Oasis Montaj's gridding and mapping functions.

11 Results

The results of the magnetic survey are presented as contoured total field and 1st vertical derivative maps. Larger versions of these maps can be found in Appendix 2 – Maps. The results from the magnetic survey indicate a relatively quiet magnetic background with the overall magnetic field is disrupted by three northeast-southwest trending, linear anomalies. These anomalies can be seen in both the total magnetic field and 1st vertical derivative maps below.

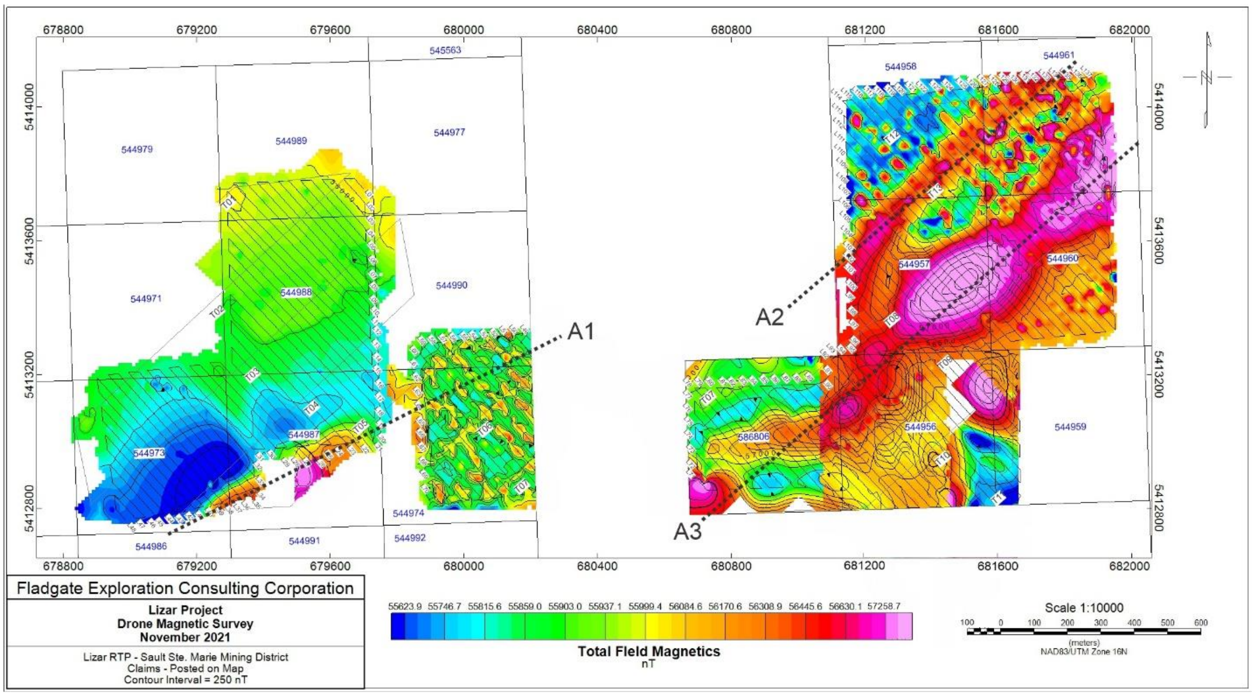

Figure 6 – Map of Total Field Magnetics

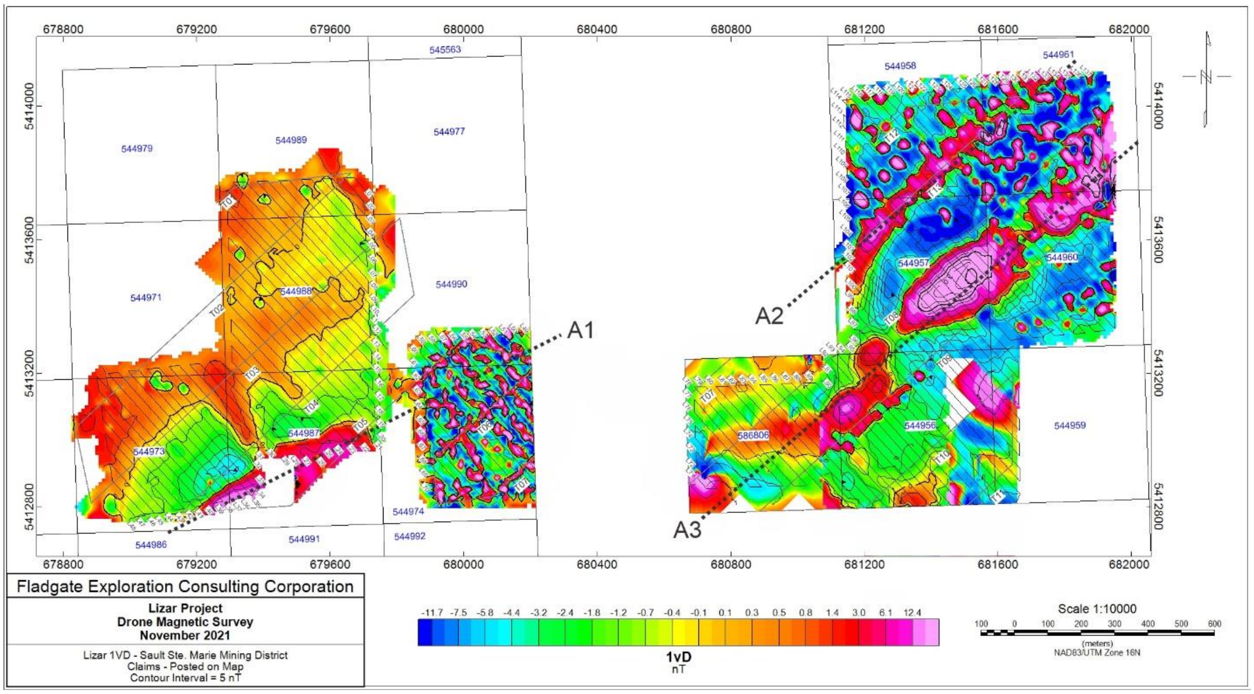

Figure 7 – 1st Vertical Derivative Map

The anomalies displayed on both maps are attributed to underlying geology or possible mafic diabase dikes which are common in the survey area. Both anomalies are speculative due to inconsistencies in the data and would require a follow up detailed ground mag survey to confirm these anomalies.

12 Conclusion and Recommendations

The magnetic survey completed over the Lizar property was successful in mapping magnetic anomalies and underlying geological trends. The northeast-southwesterly trending magnetic anomalies shown on the total magnetic field map are presumed to be derived from underlying bedrock geology or large mafic diabase dikes.

It is recommended that another mag survey be flown at a lower elevation in conjunction with a detailed ground mag survey to more confidently confirm the location of these anomalies.

13 References

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14 Statement of Qualification

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CERTIFICATE OF THE AUTHOR

I, **Jordan Quinn**, do hereby certify that:

1. I am an employee of Fladgate Exploration Consulting Corporation, the geological consulting firm tasked with this report.
2. I am a member in good standing of the Association of Professional Geoscientists of Ontario (APGO #3151).
3. I am a graduate of Lakehead University (Hons. B.Sc., 2014).
4. I have practiced geology for 7 years in a variety of settings, mostly in Northwestern Ontario, Canada. I have specific experience in Archean lode gold deposits in Ontario, mostly working as both a production and exploration geologist at various gold mines throughout Ontario.
5. I have no previous involvement with the property that forms the subject of this Technical Report.
6. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
7. I consent to the filing of this Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their website accessible by the public.

Effective Date: March 1, 2022
Date of signing: March 1, 2022

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Jordan Quinn, H.B.Sc., P.Geo. (APGO #3151)

Appendix I – Instrument Specifications

GEM GSMP-35UA: Ultra Light-Weight Potassium Magnetometer

Magnetometer Specifications

Sensitivity: 0.0002 nT @ 1 Hz
Resolution: 0.0001 nT
Absolute Accuracy: +/- 0.1 nT
Heading Error: + / – 0.05 nT
Dynamic Range: 15,000 to 120,000 nT
Gradient Tolerance: 50,000 nT/m
Sampling Intervals: 1, 2, 5, 10, 20 Hz
Operating Temperature: -40°C to +55°C

Orientation

Sensor Angle: optimum angle 35° between sensor head axis & field vector.
Proper Orientation: 10° to 80° & 100° to 170
Heading Error: +/- 0.05 nT between 10° to 80°and 360° full rotation about axis.

Environmental

Operating Temperature: -40°C to +55°C
Storage Temperature: -70°C to +55°C
Humidity: 0 to 100%, splashproof

Dimensions & Weight

Sensor: 161mm x 64mm (external dia) with 2m cabling ; 0.43 kg
Electronics Box: 236mm x 56mm x 39mm; 0.46 kg
Option 1 cabling; .125kg
Option 3 light weight battery; .250kg

Power

Power Supply:18 to 32 V DC
Power Requirements: approx. 50 W at start up, dropping to 12 W after warm-up
Power Consumption:12 W typical at 20°C Warm-up Time: <15 minutes at -40°C

Outputs

20 Hz RS-232 output with comprehensive Windows Personal Computer (PC) software for data acquisition and display.

Outputs UTC time, magnetic field, lock indication, heater, field reversal, GPS position (latitude, longitude altitude, number of satellites)

Components

Sensor, pre-amplifier box, 2m sensor /pre-amplifier cable (optional cable 3-5m), manual & shipping case

GSM-19 Overhauser Magnetometer

Performance

Sensitivity: Standard
GSM-19 0.022 nT @ 1 Hz
GSM-19PRO 0.015 nT @ 1 Hz
Resolution: 0.01 nT
Absolute Accuracy: 0.1 nT
Dynamic Range: 20,000 to 120,000 nT
Gradient Tolerance: up to 10,000 nT/m
Samples at: 60+, 5, 3, 2, 1, 0.5, 0.2 sec
Operating Temperature: -40°C to +50°C

Operating Modes

Manual: Coordinates, time, date and reading stored automatically at up to 0.2 sec.
Base Station: Time, date and reading stored at 1 to 60 second intervals.
Remote Control: Optional remote control using RS-232 interface.
Input/Output: RS-232 using 6-pin weatherproof connector with USB adapter.

Memory - (# of Readings in millions)

Mobile: 1.4M
Base Station: 5.3M
Gradiometer: 1.2M
Walking Mag: 2.6M

Dimensions

Console: 223mm x 69mm x 240 mm(8.7x2.7x9.5in)
Sensor: 175mm x 75mm diameter cylinder (6.8in long by 3 in diameter)

Weights

Console with Belt: 2.1 kg Sensor and Staff Assembly: 1.0 kg

Matrice 600

Structure

Diagonal Wheelbase: 1133 mm
Aircraft Dimensions: 1668 mm x 1518 mm x 759 mm (Propellers, frame arms and GPS mount unfolded)
640 mm x 582 mm x 623 mm (Frame arms and GPS mount folded)
Package Dimensions : 620 mm x 320 mm x 505 mm
Intelligent Flight Battery Quantity: 6
Weight (with six TB47S batteries): 9.1 kg
Weight (with six TB48S batteries): 9.6 kg
Max Takeoff Weight: 15.1 kg

Performance

Hovering Accuracy (P-Mode, with GPS) Vertical: ±0.5 m, Horizontal: ±1.5 m
Max Angular Velocity: Pitch: 300°/s, Yaw: 150°/s
Max Pitch Angle: 25°
Max Speed of Ascent: 5 m/s
Max Speed of Descent: 3 m/s
Max Wind Resistance: 8 m/s
Max Flight Altitude above Sea Level: 2500 m
Max Speed: 18 m/s (No wind)
Hovering Time (with six TB47S batteries)* No payload: 35 min, 6 kg payload: 16 min
Hovering Time (with six TB48S batteries)* No payload: 40 min, 5.5 kg payload: 18 min

* The hovering time is based on flying at 10 m above sea level in a no-wind environment and landing with 10% battery level.

Remote Controller

Operating Frequency:

- 920.6 MHz to 928 MHz (Japan)
- 5.725 GHz to 5.825 GHz
- 2.400 GHz to 2.483 GHz

Max Transmission Distance (unobstructed, free of interference) :
- FCC Compliant: 3.1 miles (5 km)
- CE Compliant: 2.1 miles (3.5 km)

EIRP:
- 10 dBm @ 900 M/li>
- 13 dBm @ 5.8 G
- 20 dBm @ 2.4 G

Video Output Port: HDMI, SDI, USB

Dual Users Capability: Master-and-Slave control
Mobile Device Holder: Supports smartphones and tablets
Output Power: 9 W
Operating Temperature: 14° to 104° F (-10° to 40° C)
Storage Temperature:
Less than 3 months: -4° to 113° F (-20° to 45° C)
More than 3 months: 72° to 82° F (22° to 28° C)

Charge Temperature: 32° to 104° F (0° to 40° C)
Built-in Battery: 6000 mAh, 2S LiP
Max Tablet Width: 170 m

Propulsion System

Motor Model: DJI 6010
Propeller Model: DJI 2170

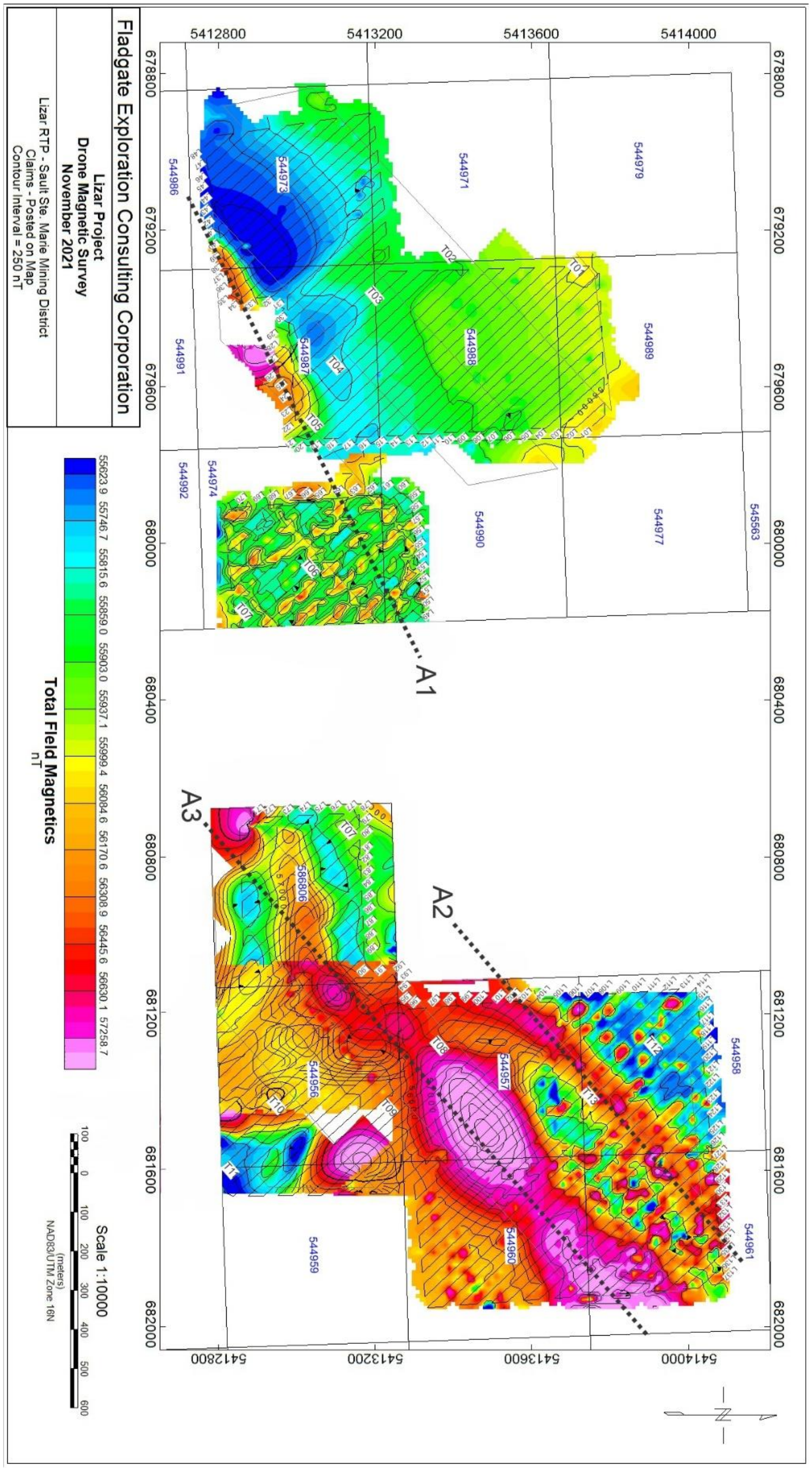
Battery

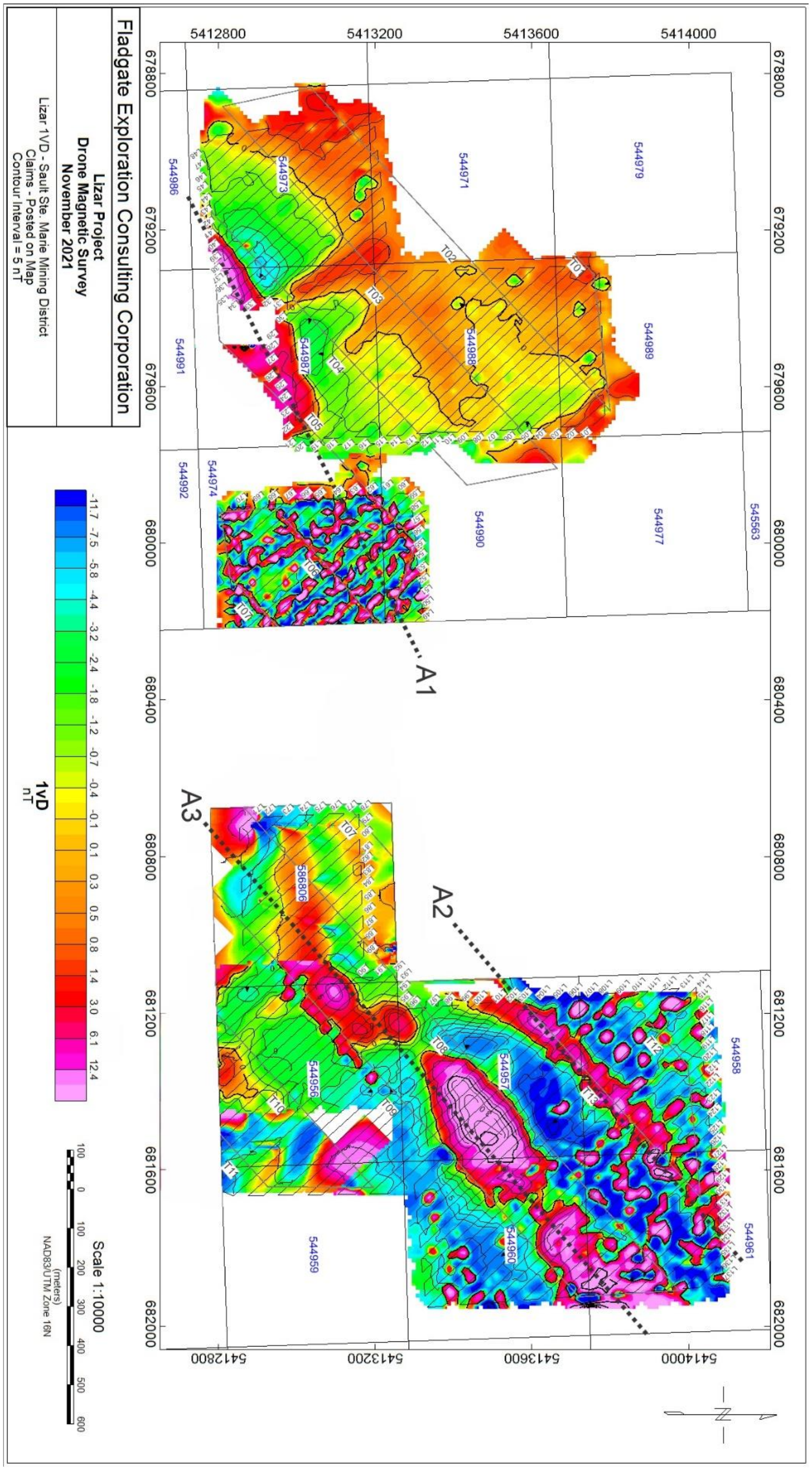
Model: TB48S
Capacity: 5700 mAh
Voltage: 22.8 V
Type: LiPo 6S
Energy: 129.96 Wh
Net Weight: 680 g
Operating Temperature: 14° to 104° F (-10° to 40° C)
Storage Temperature: Less than 3 months: -4° to 113° F (-20° to 45° C) More than 3 months: 72° to 82° F (22° to 28° C)
Charge Temperature: 41° to 104° F (5° to 40° C)
Max Charging Power: 180 W

Charger

Model: MC6S600
Voltage: Output 26.1 V
Power Rating: 100 W

Appendix II – Maps




Fladgate Exploration Consulting Corporation
Lizar Project
Drone Magnetic Survey
November 2021
Lizar 1VD - Sault Ste. Marie Mining District
Claims - Posted on Map
Contour Interval = 5 nT
1vD
nT
Scale 1:10000
(meters)
NAD83/UTM Zone 16N
A1
A2
A3

Appendix III – Program Expenditures & Cost Per Claim

	Date From MM/DD/YYYY	Date To MM/DD/YYYY	Item	Rate	Per Unit	Units	subtotal
Data Collection	11/9/2021	11/11/2021	Truck Rental	$100	day	3	$300
			Mileage	$0.70	km	1520	$1,064
			Project Manager	$700	day	3	$2,100
			Assistant	$500	day	3	$1,500
			Room & Board	$225	day	6	$1,350
			Line kms	$200	km	102	$20,400
			Mob/DeMob from site	$1000	day	2	$2,000
						subtotal	*$28,714*
Processing & Report	12/10/2021	12/14/2021	processing	$700	day	5	$3,500
	02/22/2022	02/25/2022; 03/01/2022	report writing	$700	day	5	$3,500
			Oasis Software	$254.25	day	4	$1,017
						subtotal	*$8,017*
						TOTAL	***$36,731***

Claim #	Cost Per Claim ($)
544956	4,099.22
544957	3,574.01
544958	2,873.74
544959	947.98
544960	3,574.01
544961	2,348.53
544971	947.98
544973	3,048.81
544974	3,048.81
544987	2,873.74
544988	4,099.22
544989	1,648.26
544990	1,473.19
583806	2,173.46
TOTAL	**36,731**