

We are committed to providing [accessible customer service](#).

If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).

Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).



Technical Report for MNDM Assessment Purposes, Fall 2022 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: February 27, 2023

1	Introduction and Summary	4
2	Terms of Reference	4
3	Disclaimer	4
4	Property Description and Location	5
5	Access, Local Resources, and Infrastructure	11
6	Climate and Physiography	11
7	Geological Setting	11
	7.1 Regional Geology	11
	7.1.1 The Superior Province	11
	7.1.2 The Abitibi Subprovince	12
	7.2 Local Geology – Lizar Property	14
8	History of Exploration on the Property	14
9	Current Program	15
	9.1 Personnel	17
10	Data Filtering and Processing	18
11	Results	19
12	Conclusion and Recommendations	20
13	References	20
14	Statement of Qualification	21
	Appendix I – Instrument Specifications	22
	Appendix II – Maps	26
	Appendix III – Program Expenditures and Cost per Claim	27
	 Figure 1 - Lizar Property Location	 6
	Figure 2 - Lizar Claim Map	7
	Figure 3 - Regional Geology of Northwestern Ontario	13
	Figure 4 - Lizar Property Geology	14
	Figure 5 – Map of Lizar Drone Survey	16
	Figure 6 – Map of Total Field Magnetics	19



Table 1 – Lizar Claims	8
Table 2 – Distribution of Work by Mining Claims	15
Table 3 – Personnel Log	17
Table 4 : Raw Geophysical Drone Data	18



1 Introduction and Summary

The Lizar Property consists of 112 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 August 20-22 and September 6-7, 2022. Fladgate provided all the required geological, geotechnical, and sub-contractor services on the program described herein. The program consisted of 183 flight lines and 14 perpendicular tie lines totaling 359.6 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 northwest-southeast trending magnetic anomalies as well as larger northeast-southwest trending 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 112 unpatented mining claims (**Figure 2**). A list of all claims can be found in **Table 1**.

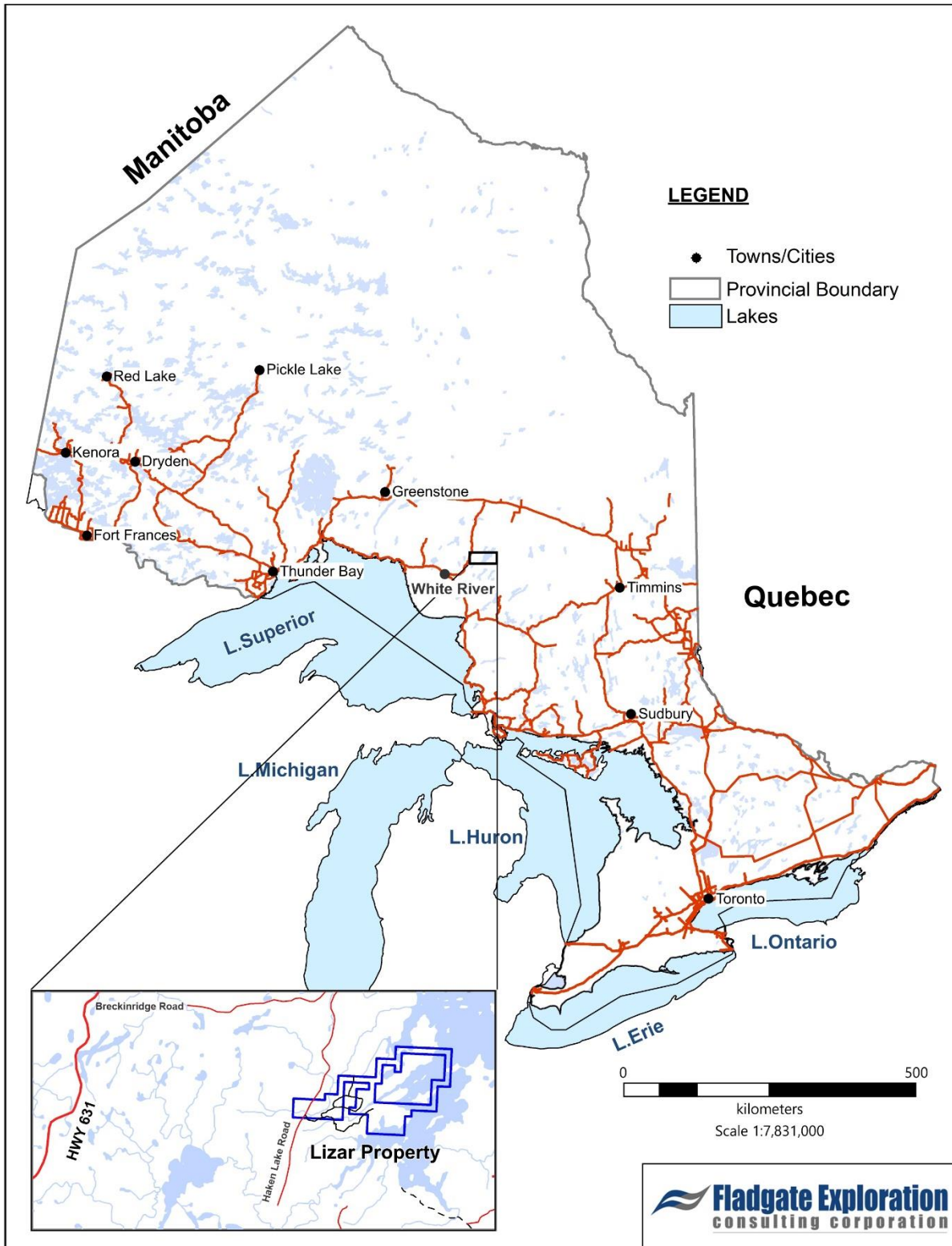


Figure 1 - Lizar Property Location

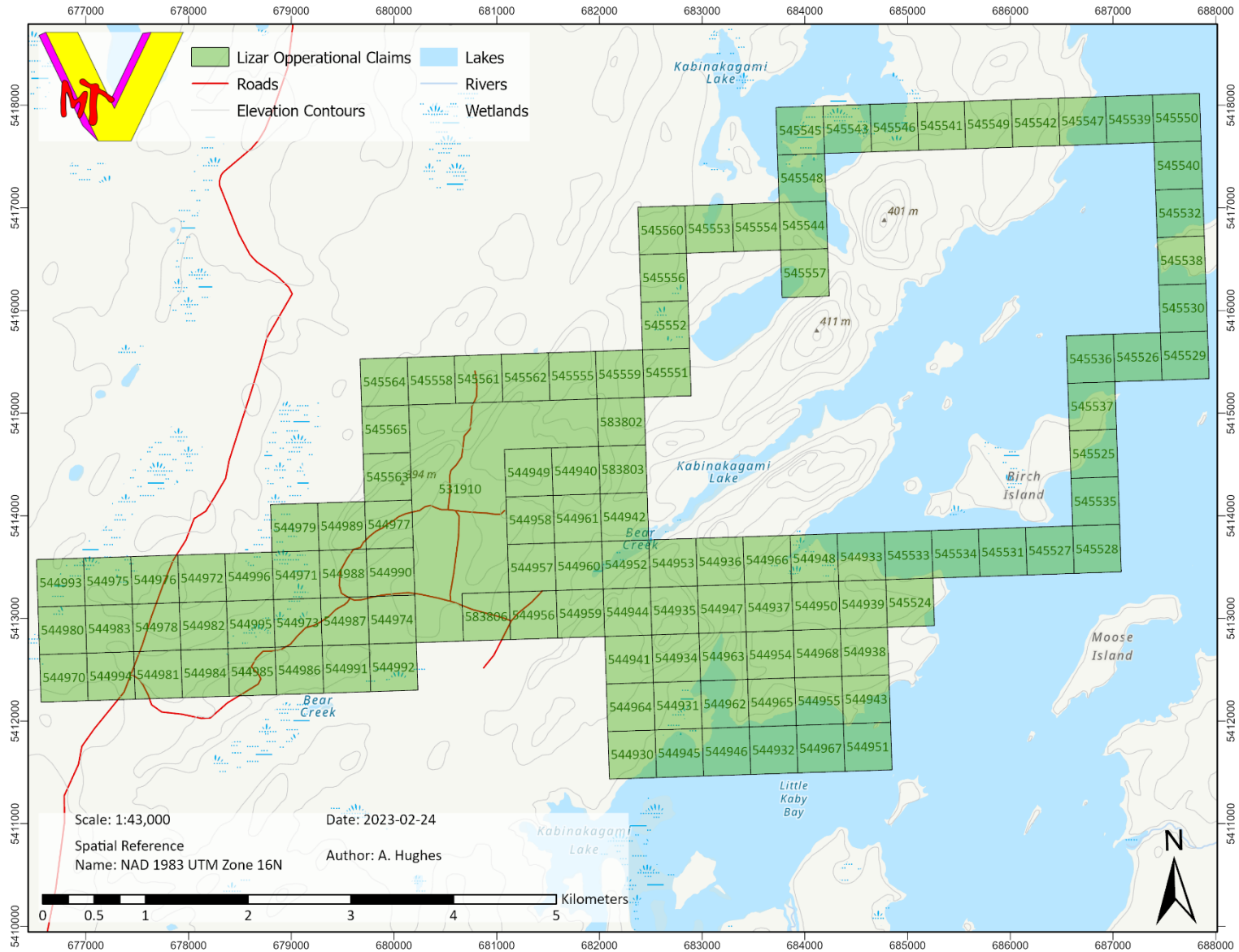


Figure 2 - Lizar Claim Map

**Table 1 – Lizar Claims**

Claim Number	Township	Units	Claim Due Date	% Option	Ownership
544939	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544943	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544961	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544965	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544972	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544973	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544974	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544985	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544991	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544994	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544995	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545528	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545534	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545543	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545546	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545547	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545550	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545563	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
583802	LIZAR	1.0	13-Apr-2023	100	Michael Thompson
583803	LIZAR	1.0	13-Apr-2023	100	Michael Thompson
544935	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544948	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544949	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544953	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544954	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544955	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544962	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544967	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544975	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544976	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544977	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544992	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544993	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544996	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545524	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545525	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545526	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545527	LIZAR	1.0	10-Mar-2023	100	Michael Thompson



Claim Number	Township	Units	Claim Due Date	% Option	Ownership
545529	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545535	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545544	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
583806	LIZAR	1.0	13-Apr-2023	100	Michael Thompson
544931	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544932	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544947	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544951	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544956	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544957	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544982	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544986	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544988	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544990	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545532	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545536	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545540	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545541	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545552	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
544934	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544936	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544940	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544958	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544980	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544984	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544987	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545538	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545565	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
544930	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544941	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544944	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544970	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544979	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545533	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545545	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545549	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545556	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545561	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
544938	LIZAR	1.0	06-Mar-2023	100	Michael Thompson



Claim Number	Township	Units	Claim Due Date	% Option	Ownership
544950	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544952	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544960	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544971	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544983	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544989	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545553	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545554	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545555	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545562	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
544933	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544945	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544963	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544964	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544966	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544968	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544978	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544981	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545531	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545539	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545542	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545548	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545557	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545559	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545560	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
531910	LIZAR	11.0	30-Sep-2023	100	Michael Thompson
544937	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544942	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544946	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
544959	LIZAR	1.0	06-Mar-2023	100	Michael Thompson
545530	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545537	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545551	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545558	LIZAR	1.0	10-Mar-2023	100	Michael Thompson
545564	LIZAR	1.0	10-Mar-2023	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 Subprovince 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 (Kapusking 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, Shriber-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 Neoproterozoic 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).

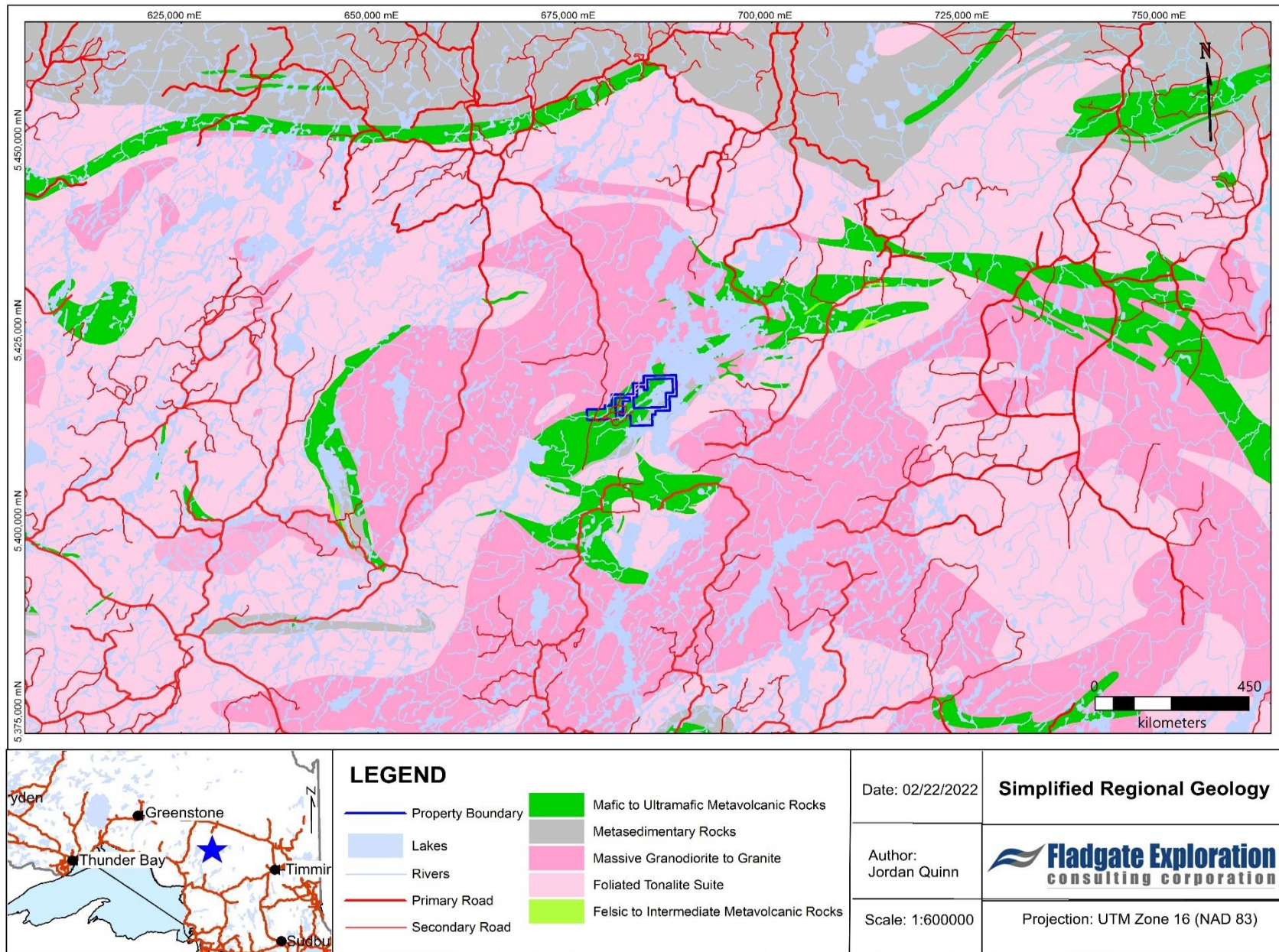


Figure 3 - Regional Geology of Northwestern Ontario



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**.

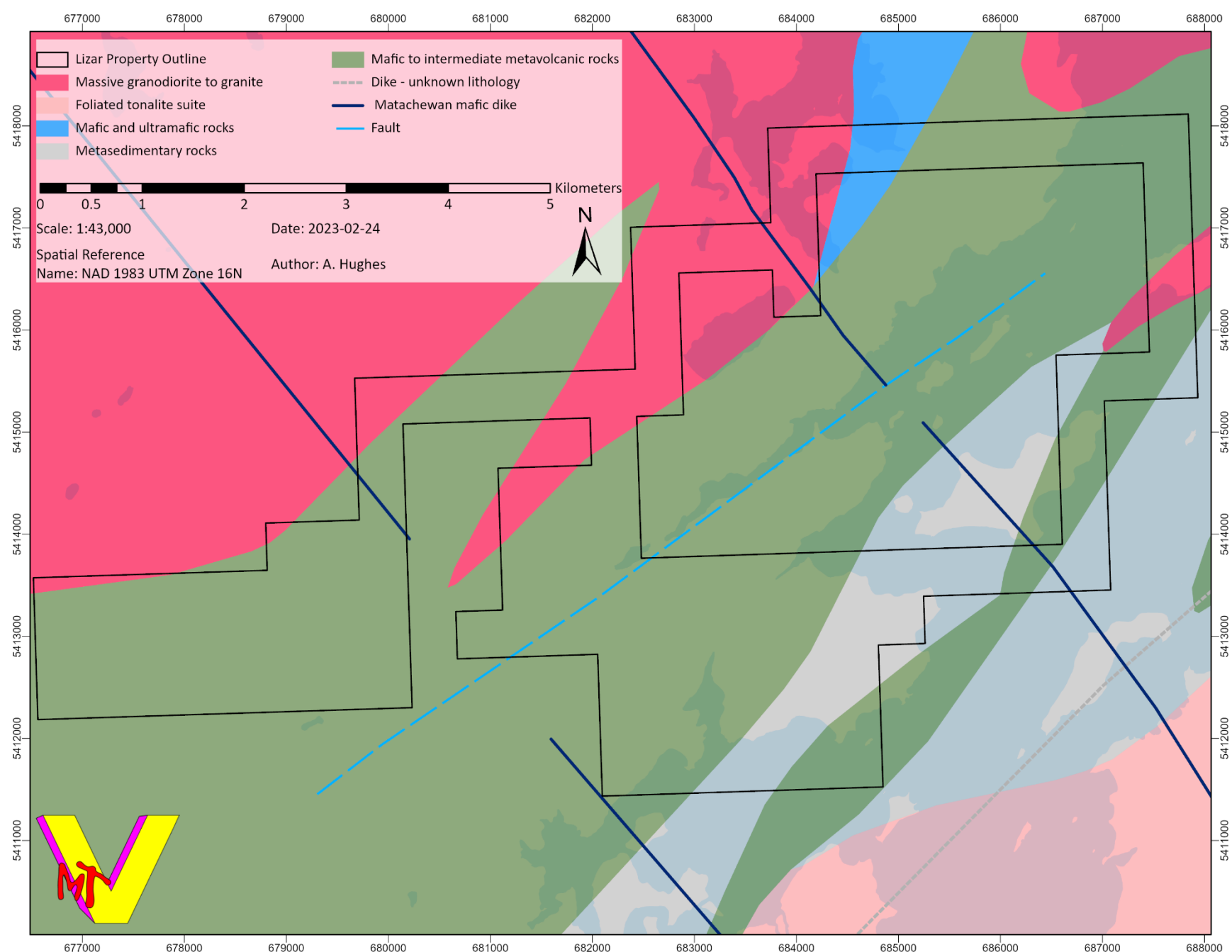


Figure 4 - Lizar Property Geology

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	<p>Freewest carries out soil surveys, prospecting and trenching, successfully discovers eight new gold occurrences.</p> <p>Teck Cominco enters a joint venture agreement with Freewest from 2002 to 2004.</p> <p>Teck Cominco Limited flies a GEOTEM airborne survey over the property and surrounding area outlining several priority EM anomalies.</p>
2004	<p>Teck Cominco conducts ground UTEM surveys over selected airborne EM targets and geological maps and prospects property.</p> <p>Teck Cominco extends I.P. Resistivity coverage on the Patent Grid.</p> <p>Teck Cominco Drills 1514 metres over 8 holes. Two holes LIZ-01 and 02 test priority EM conductors in northern portion of property while the 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</p>
2007	<p>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.</p>
2011	<p>Rencore Resources contracts Geotech Ltd. to carry out a Helicopter borne VTEM and Aeromagnetic Geophysical survey. An interpretation of the data revealed 18 areas of interest.</p> <p>(Mackie, 2011)</p> <p>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 and 15) 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</p>
2016	<p>Dan Patrie Exploration Ltd. is contracted to perform a field magnetic survey for Johnathan Camilleri. A total of 121.5 kilometers was surveyed over 5 claims.</p>
2018	<p>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;</p> <p>(Winter, 2018)</p> <ol style="list-style-type: none"> (1) the main NE geological trend in the area 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 August 20-22 and September 6-7, 2022, a drone magnetic survey was carried out on the Lizar property. The survey consisted of 183 North-South flight lines spaced at 25m and 14 East-West tie lines spaced at 200m (**Figure 5**). The height of the survey was 50m. The total line kilometres flown were 359.6 kms. **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
544993	9.3
544980	9.3
544970	9.8
544975	9.3
544983	9.3
544994	9.8
544976	9.8
544978	9.8
544987	10.3
544972	9.3
544982	9.3
544984	9.8
544996	9.3
544995	9.3
544985	9.8
544979	10.3
544971	9.8
544973	9.8



Claim #	Line Kilometers Flown
544986	10.3
544989	9.8
544988	9.3
544987	9.3
544991	9.8
545563	1.2
544977	9.8
544990	9.3
544974	9.3
544992	9.8
545558	1.1
545561	0.9
531910	87
583806	9.3
TOTAL	359.6

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 8.0 m/s.

The principle geophysical sensor used was a Gem Systems Canada GSMP-35U potassium vapor sensor mounted on a UAV platform. General specifications of the magnetometer 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.

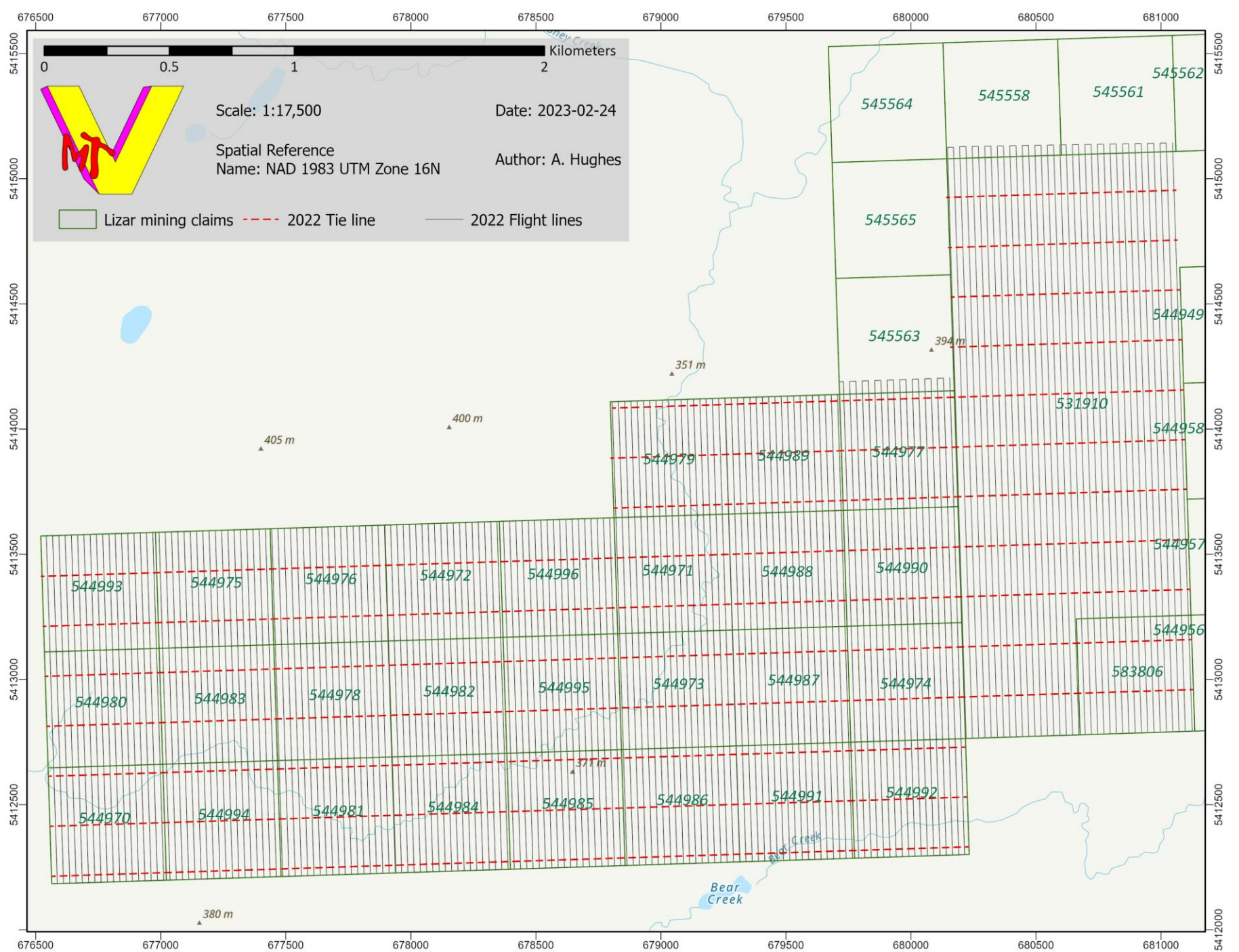


Figure 5 – Map of Lizar Drone Survey



9.1 Personnel

Field operations were supervised and all technical staff was provided by Fladgate and began with logistics and flight planning on August 20, 2022.

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	August 20-22, 2022; September 6-7, 2022; February 20-24, 2023; February 27, 2023
Adam Gilbert	Geologist	Mobilization, Assist in flight setup and operations, Demobilization	August 20-22, 2022; September 6-7, 2022



10 Data Filtering and Processing

Raw aerial magnetometer data was collected at a rate of 10 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 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 a total field magnetics map. A larger version of the map can be found in Appendix II – Maps.

The results from the magnetic survey indicate a relatively quiet magnetic background with the overall magnetic field is disrupted by multiple linear anomalies. When comparing the total field magnetic map to the geologic map in the area, the nature of these anomalies can be readily determined. The north-west, south-east trending anomalies are believed to be caused by mafic dykes which are common in the area and have been labeled from D1-D4 respectively. The larger north-east, south-west trending anomalies most likely represents a fault which has been observed on the property previously. This fault appears to be offset and each segment has been labeled F1 and F2. In the upper area of the survey, a linear anomaly with the same orientation of the main fault is observed. The anomaly is labeled F3 cautiously as it has been previously unmapped and seems to be closely related to the mafic dykes.

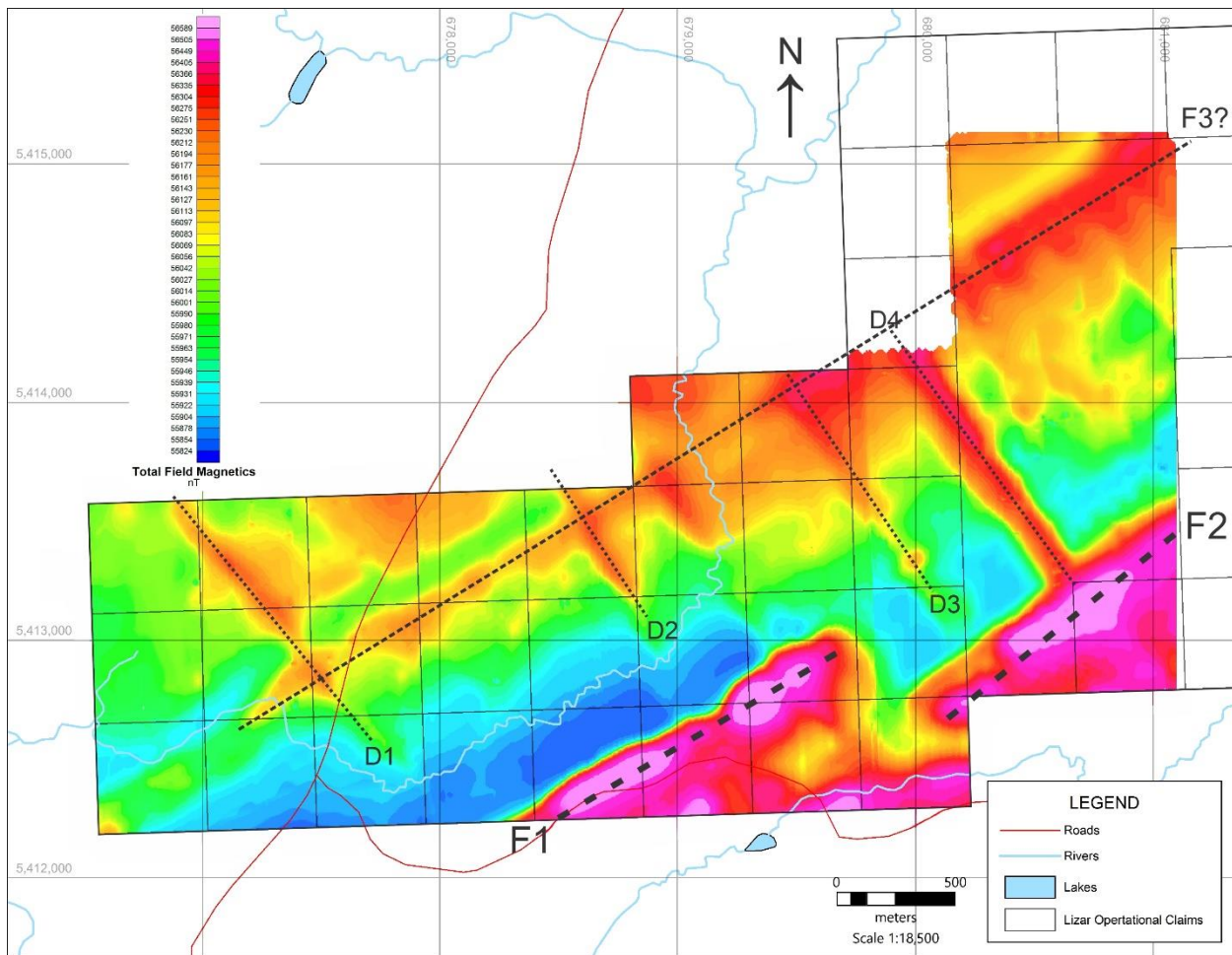


Figure 6 – Map of Total Field Magnetics



12 Conclusion and Recommendations

The magnetic survey completed over the Lizar property was successful in mapping magnetic anomalies and underlying geological trends. The location and presence of both mafic dykes and faulting which are common to the area, have been confirmed through this magnetic survey. Also identified has been the presence of a possible unmapped fault near the top half of the survey area. The origin of this unmapped structure as well as the offset seen on the main fault should be followed up on.

It is recommended that a detailed prospecting and ground mag survey be carried out on the property to better understand the nature of the magnetic anomalies identified during this survey.

13 References

- Ayer, J.A. and Trowell, N.F (2001) The Abitibi Greenstone Belt: a program update; in Summary of Field Work and Other Activities 2001, Ontario Geological Survey, Open File Report 6070, p.4.1 to 4.9.
- Berger, B. (2001) Variation in styles of gold mineralization along the Porcupine-Destor Deformation Zone in Ontario: an exploration guide. In: Summary of Field Work and Other Activities. Ontario Geological Survey; Open File Report 6070, pages 9.1 -9.13.
- Brisbin, D.I. (1997) Geological Setting of Gold Deposits in the Porcupine Gold Camp Timmins, Ontario; unpublished PhD thesis, Queen's University, Kingston, Ontario, 523p.
- Lashbrook, R.L. (2005) Line cutting magnetic survey report Heenan and Marion townships.
- Mackie, B. (2011) Assessment Report on the Lizar Claim Group, Kabinkakagami Lake Area, North-Central Ontario for Rencore Resources Ltd. Assessment file number 20009824.
- Winter, L. (2018) Gradient IP Survey on the Lizar Property, Lizar Township, District of Algoma Ontario for C. Brent Patrie. Assessment file number 20000017136.



14 Statement of Qualification

Jordan Quinn, B.Sc., P.Geo.

Fladgate Exploration Consulting Corporation
278 Bay St, Suite 101
Thunder Bay, Ontario
Canada
Telephone: (807) 345.5380
Email: jordan.quinn@fladgateexploration.com

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: February, 2023

Date of signing: February, 2023

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



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: $300^\circ/\text{s}$, Yaw: $150^\circ/\text{s}$

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 mm

Propulsion System

Motor Model: DJI 6010
Propeller Model: DJI 2170

Battery

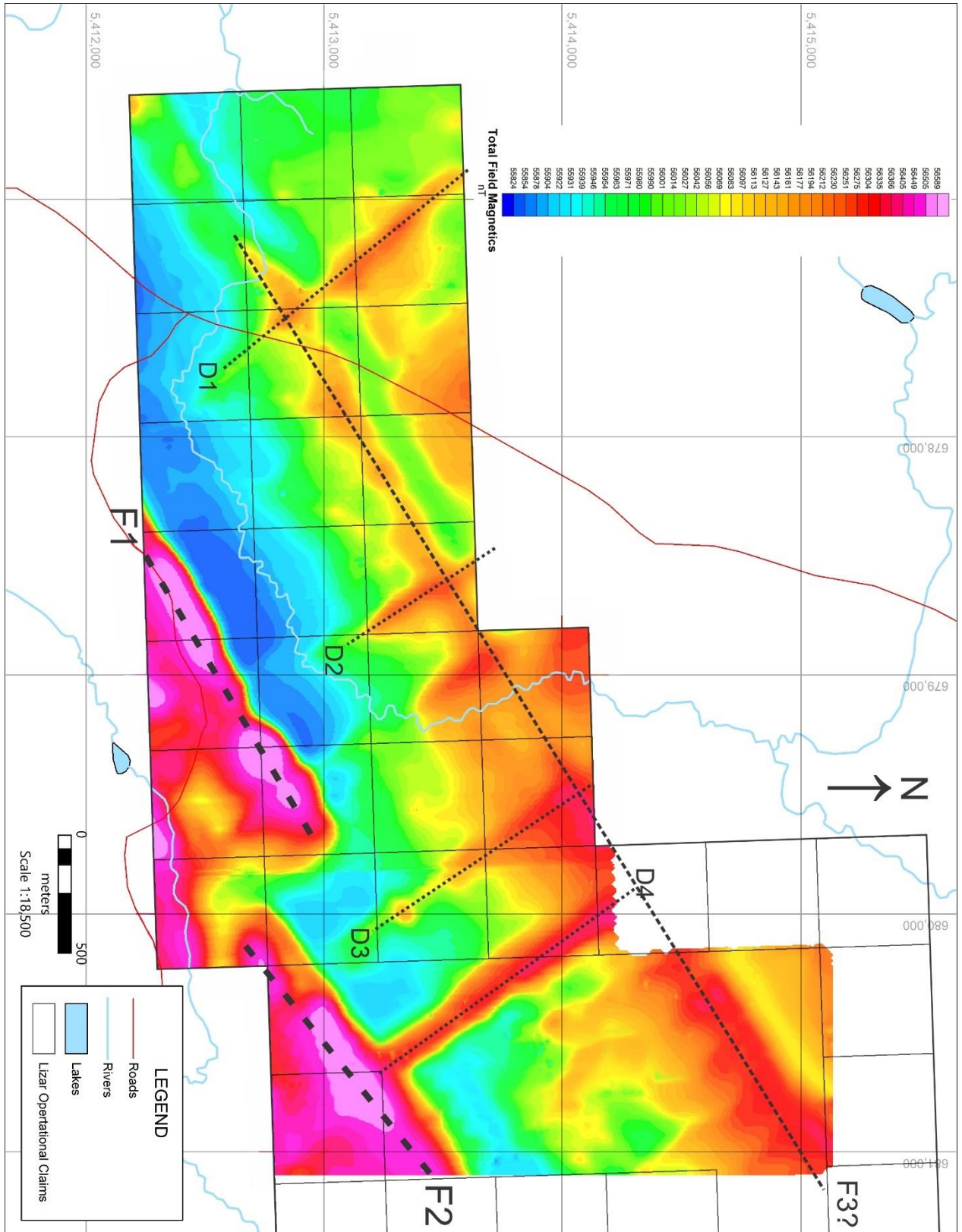
Model: TB48S
Capacity: 5700 mAh
Voltage: 22.8 V
Type: LiPo 6S
Energy: 129.96 Wh
Net Weight: 680 g
Operating Temperature: 14° to 104° F (-10° to 40° C)
Storage Temperature: Less than 3 months: -4° to 113° F (-20° to 45° C) More than 3 months: 72° to 82° F (22° to 28° C)
Charge Temperature: 41° to 104°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





Appendix III – Program Expenditures and Cost per Claim

	Date From MM/DD/YYYY	Date To MM/DD/YYYY	Item	Rate	Per Unit	Units	subtotal
Data Collection	8/20/2022	8/22/2022	Truck Rental	\$100	day	5	\$500
	9/06/2022	9/07/2022	Mileage	\$0.60	km	3800	\$2,280
			Project Manager	\$700	day	5	\$3,500
			Assistant	\$500	day	5	\$2,500
			Accomodation	\$50	day	10	\$500
			Line kms	\$200	km	359.6	\$71,920
			Mod/DeMob	\$1,000	day	4	\$4,000
			Food	\$50	day	10	\$500
			Lift Rental	\$250	day	5	\$1,250
						<i>subtotal</i>	<i>\$86,950.00</i>
Processing & Report	02/20/2023	02/23/2023	processing	\$700	day	4	\$2,800
	02/24/2023	02/27/2023	report writing	\$700	day	2	\$1,400
						<i>subtotal</i>	<i>\$4,200</i>
						TOTAL	\$91,150.00

Claim #	Cost Per Claim (\$)
544993	2357
544980	2357
544970	2484
544975	2357
544983	2357
544994	2484
544976	2484
544978	2484
544987	2611
544972	2357
544982	2357
544984	2484
544996	2357
544995	2357
544985	2484
544979	2611
544971	2484
544973	2484



Claim #	Cost Per Claim (\$)
544986	2611
544989	2484
544988	2357
544987	2357
544991	2484
545563	306
544977	2484
544990	2357
544974	2357
544992	2484
545558	279
545561	228
531910	22052
583806	2357
TOTAL	91150