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Assessment Report

Drone Magnetic Survey

Sturgeon Lake Properties

Fourbay Lake Area

Squash Lake Area

Patricia Mining Division

Prepared for:

Allan Best (107989)

Edward Cottingham (401202)

Prepared by:

Kevin Cool – Technical Report

Mining Claims Surveyed:

15 Mining Claims – Listed on Table 1

October 10, 2022

Revised January 22, 2023

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Appendices

List of Maps and Figures

Map

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Tables

1.0 Introduction

The ***Sturgeon Lake Properties*** consist of 27 Active Mining Claims, covering 2 separate blocks on Sturgeon Lake. This report covers drone magnetic surveys carried out across 15 of the Active Mining Claims.

Drone magnetic surveys were conducted on a portion of the Sturgeon Lake Properties.
(See ***Figure 2*** and ***Table 1***)
Mining claims covered by this survey are located in the Fourbay Lake and Squash Lake Areas, Patricia Mining Division.

Table 1 includes a list of mining claims, including the work value completed on each claim.

1.1 Summary

On September 30th and October 1st,2022 the mining claims were surveyed using a Geometrics MFAM magnetometer mounted on a DJI M600 drone. Zen Geomap Inc. of Timmins, Ontario, carried out the magnetic surveys on a contract basis for the client (**Allan Best – Client # 107989**). The surveys were performed to evaluate bedrock structure related to gold exploration within the survey grid.

Data processing and maps were completed between September 30th and October 10th,2022 and the assessment report was prepared between September 30th and October 10th,2022.

The coordinate system used throughout this report is Nad83, UTM Zone 15. The survey identified 4 magnetic-low anomalies which are described in detail under Section 7.0.

2.0 Location and Access

The property is accessed from Timmins along Highways 655, 11 and 17 to Ignace, ON (**1003km**), then north from Ignace on Hwy 599 to Whiskeyjack Lodge on Sturgeon Lake (**113km**). The total driving distance from Timmins to Whiskeyjack Lodge is **1116km**.

The survey grids were accessed by boat from Whiskeyjack Lodge. The boat route on September 30th was 12.2km (24.4km round trip), to access the **North Grid**. The boat route on October 1st was 17.6km (35.2km round trip), To access the **South Grid**.

Lodging, boat, and guiding services were provided by Whiskeyjack Lodge. The lodge owner (Dale Matthews) transported the crew using a 20ft boat. Sturgeon Lake has many reefs and boulders that require local knowledge to navigate safely. Whiskeyjack Lodge and Dale Matthews provide the expertise needed to navigate safely on Sturgeon Lake.

Figure 1 shows the project location and road access from Ignace to Whiskeyjack Lodge.
Figure 1a shows the project location with boat access routes to North and South Grids.

			$	(sq. m)		$	
Tenure ID	**Anniversary**	**Extension**	**Work**	**Area**	**Area %**	**Work**	
	Date	**Date**	**Required**	**Surveyed**	**of Total**	**Completed**	
563946	2021-11-06	2022-11-06	800				
563947	2021-11-06	2022-11-06	800				
563948	2021-11-06	2022-11-06	800	54548	2.50	581	
563949	2021-11-06	2022-11-06	800	207450	9.51	2205	
563950	2021-11-06	2022-11-06	800	207432	9.51	2205	
563951	2021-11-06	2022-11-06	800	207432	9.51	2205	
563952	2021-11-06	2022-11-06	800				
563953	2021-11-06	2022-11-06	800				
563954	2021-11-06	2022-11-06	800	177104	8.12	1882	
563955	2021-11-06	2022-11-06	800	89116	4.09	947	
563956	2021-11-06	2022-11-06	800	117756	5.40	1252	
563957	2021-11-06	2022-11-06	800				
563958	2021-11-06	2022-11-06	800	207433	9.51	2205	
563959	2021-11-06	2022-11-06	800	207450	9.51	2205	
564465	2021-11-22	2022-11-22	800				
564466	2021-11-22	2022-11-22	800				
564467	2021-11-22	2022-11-22	800				
564468	2021-11-22	2022-11-22	800				
581002	2022-03-06	2023-03-06	800				
581003	2022-03-06	2023-03-06	800				
616632	2022-10-21		400	23085	1.06	245	
616633	2022-10-21		400	163928	7.51	1742	
616634	2022-10-21		400	147210	6.75	1565	
616635	2022-10-21		400	195661	8.97	2080	
616636	2022-10-21		400	45535	2.09	484	
616637	2022-10-21		400	130321	5.97	1385	
			18400	**218.58ha**	**100.00**	**23186**	
			(sq.m)	2185800	Total Area Surveyed on Active Mining Claims		
			($)	**23186**	Total Survey Cost		

Table 1

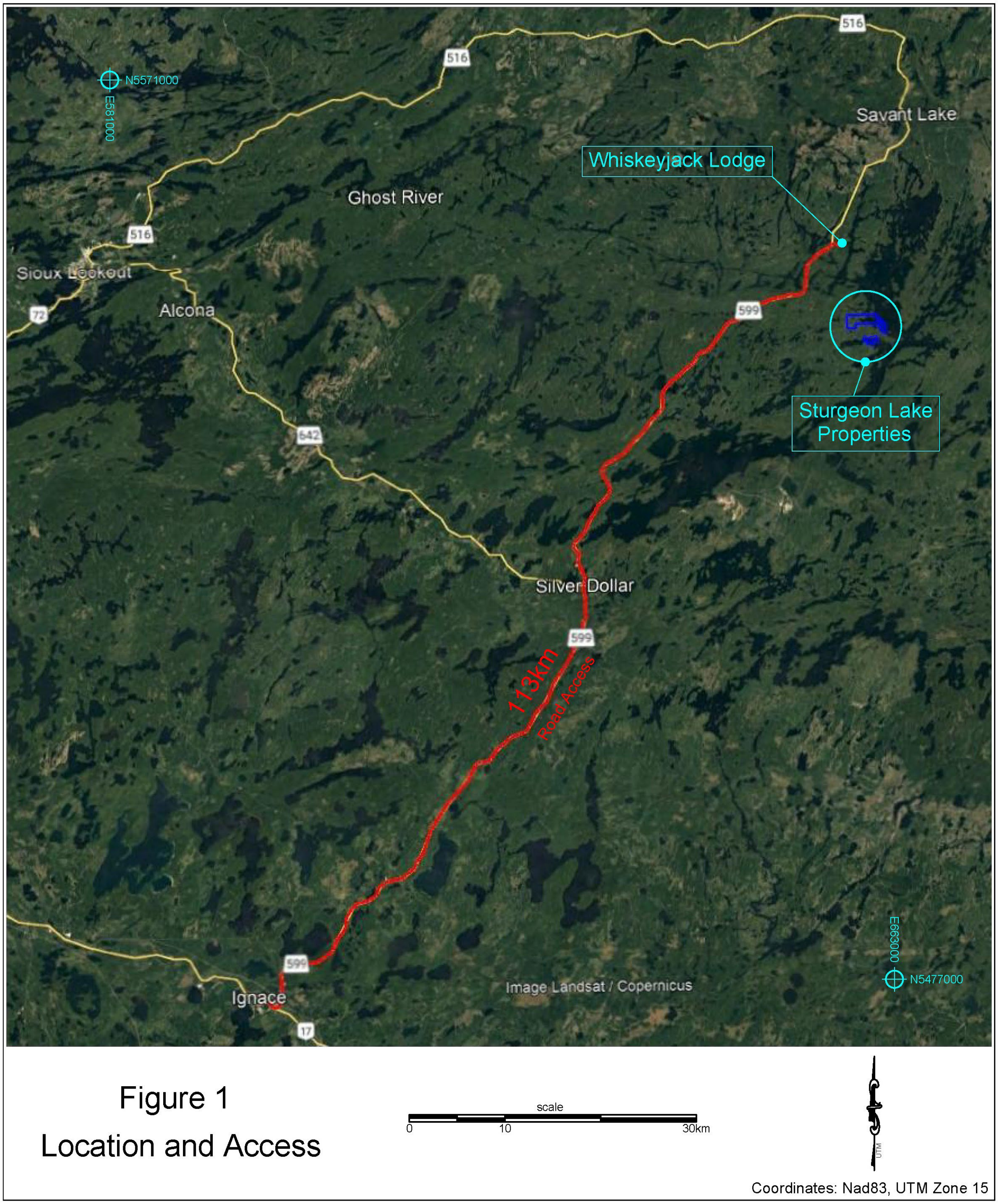


Figure 1 – Location and Access

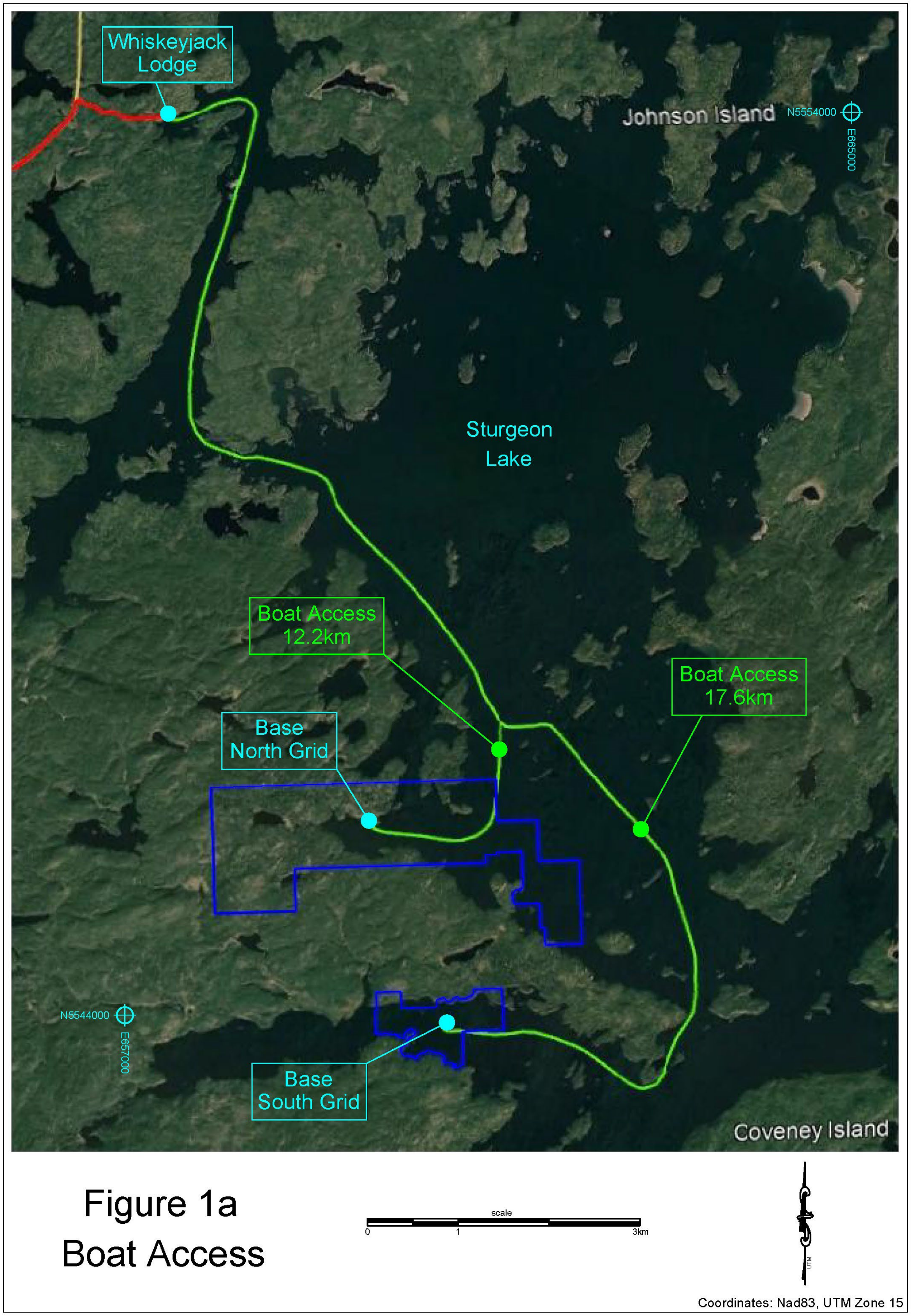


Figure 1a – Boat Access

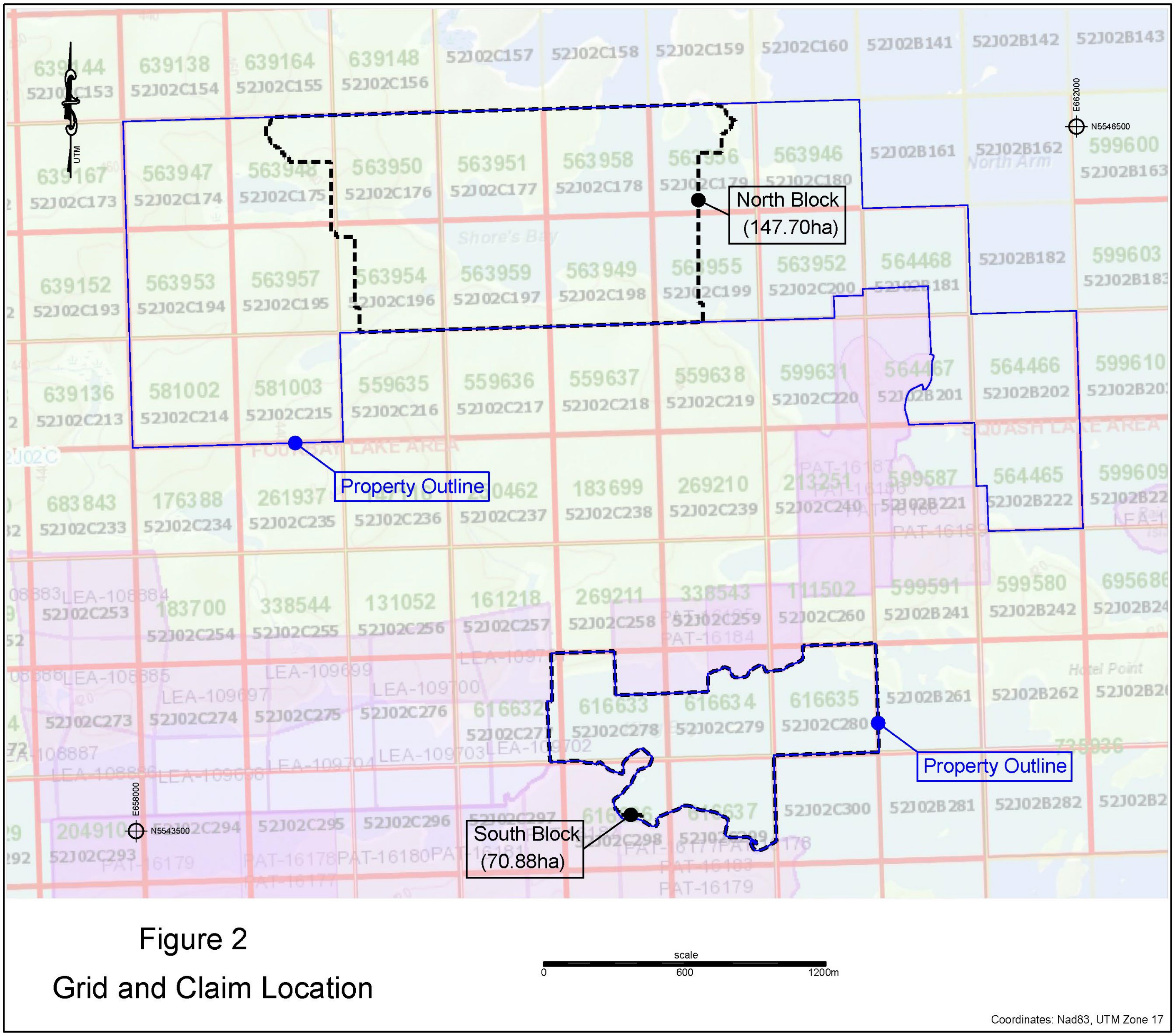


Figure 2 – Grid and Claim Location Map

3.0 Regional and Local Geology

The Sturgeon Lake Properties sit in the central, north part of the Sturgeon Lake Greenstone Belt. ***Figure 3*** shows the project location, within the Sturgeon Lake Greenstone Belt. (see reference 4: Map 39b, Sturgeon Lake Area, 1930).

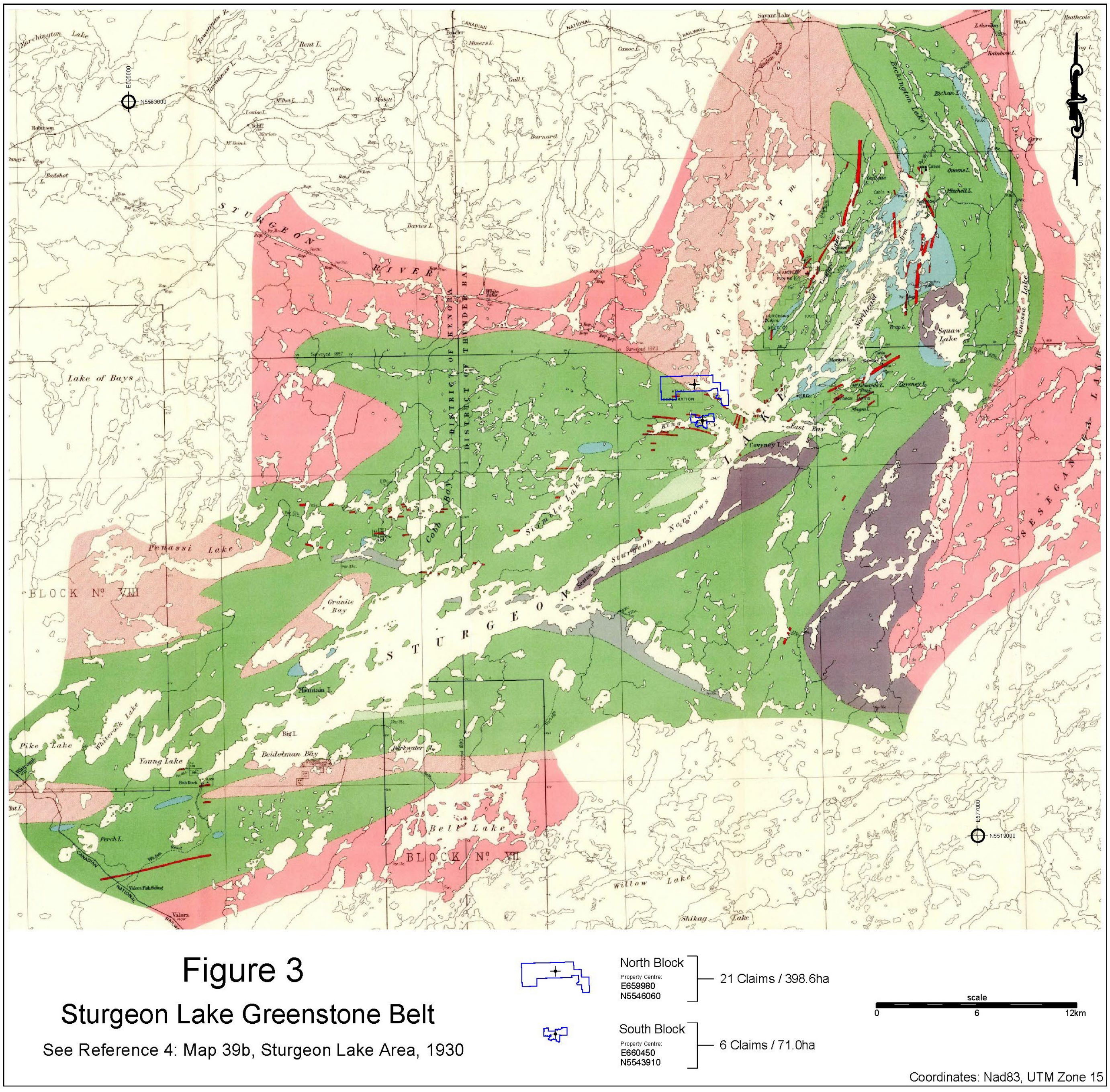


Figure 3 – Project Location within the Sturgeon Lake Greenstone Belt

MRD126

Overlaid on available bedrock geology (see reference 1: MRD126 – Revised Bedrock 250K available through OGS Earth);

The Sturgeon Lake Properties cover rock types 5, 6, 10 and 12, as identified on the MRD126 rock-type legend.

Figure 4 presents above rock types, with the Sturgeon Lake Property outlines and the location of nearby MDI showings (see reference 2: MDI – Mineral Deposits Inventory, available through OGS Earth)

MDI52J02SW00020 (Pat Lake)
Pat Lake is listed as an "occurrence" within MDI Records.

Exploration and Mining History
1984: Hudson Bay Exploration and Development Company Ltd. carried out prospecting and sampling.

Mineralization Comments
02/14/2000 (R Tuomi) - Grab samples from the waste pile around the trenches assayed up to 0.19 ounces gold per ton. 1984: The only record of this showing is contained in Sioux Lookout Resident Geologist's Assessment File 52J02SW-0051. This file includes a sketch map of the location of a trench with assays of several blue quartz vein samples. A 50 m trench was excavated following a layering trending 020 which dips 52 to the south east. The south end of the trench is folded to the east in a rusty fault gouge which assayed 0.005 ounce gold per ton over 1 foot. It is probable that this trench was excavated before 1984.

MDI52J02SW00023 (Rainbow Island NW)
Rainbow Island NW is listed as a "discretionary occurrence" within MDI Records.

Exploration History

1978: J.R. Nixon drilled 1 DDH totalling 81.7 m. 1986: Exploration drill program conducted by Mistango Consolidated Resources Ltd. to sample a number of targets that had been outlined by magnetic and VLF-EM ground surveys over the area. Drill holes were designed to cover the west side of the North Arm of Sturgeon Lake to the north of Rainbow Island. Two DDH totalling 197.2 m were drilled on this showing. M-86-1 was drilled at -40 degrees due south to a depth of 350 feet and M-86-2 was drilled at -40 degrees due north to 297 feet.

Mineralization Comments

Apr 29, 2020 (R Tuomi) - DDH M-86-1 passed through coarse grained trondhjemite into a chilled contact with fine grained metabasalt. Down hole the felsic sills became less frequent and massive metabasalt sections predominated. Carbonate alteration and calcite veins were present in the contact zone. The hole ended in coarse metagabbro. The best assay was 0.02 ounce gold per ton (0.69 g/t Au) over 0.25 m (Assessment report 52J02SE8659).

MDI52J02SW00007 (Rainbow Island)

Rainbow Island is listed as an "occurrence" within MDI Records.

Exploration History

1907: The gold occurrence was discovered by T. K. Bernard prior to 1907 on what is now known as Rainbow Island. 1911: T. K. Barnard sunk a shaft 9 x 7 feet to a depth of 25 feet on a dark quartz vein. Another shaft was sunk on an extension of the same vein. 1912: E.T. Corkill reported on the Rainbow property in Mines of Ontario, Report O.B.M. Vol 21, pt.1, 1912, page 103: On A.L.499, formerly owned by T. K. Bernard, situated on an island about one-half mile from the Sturgeon Lake Hotel, a shaft has been sunk 50 feet, and 20 feet of drifting and crosscutting done. There is no plant on the property. 1934: Mid-Canada Exploration Co. optioned the Rainbow locations from W.S. Ray of Port Arthur. The new company will be Sturgeon Rainbow Gold Mines Ltd. 1938: The Sturgeon Aurora property was taken over by Don Malartic Gold Mines. 1946: Don Malartic Gold Mines property reverted to Crown for non-payment of taxes. 1973: K.F. O'Flaherty carried out trenching. 1982-83: Optioned to K. Kuhner of Thunder Bay. Mr. Kuhner cleaned out and deepened the trenches. He installed a mill to attempt small scale gold mining. 1989: Property optioned to 007 Precious Metals Inc.

who flew airborne magnetic and VLF-EM surveys and drilled 9 DDH on Rainbow Island. 1996: Equator Mining Corp. carried out prospecting and sampling.

Mineralization Comments

Apr 29, 2020 (R Tuomi) - Two shafts were sunk on two en echelon quartz veins which trend 080 degrees and dip 60-70 degrees S. The veins are located at the sinuous contact of a leucocratic granodiorite phase of the Lewis Lake batholith and sheared, carbonated mafic metavolcanics. The hanging wall contact of the veins consists of pea to cobble-sized angular fragments of mafic metavolcanics in a carbonate matrix. The footwall contact is a slightly feldspar porphyritic, fine-grained white granodiorite which would be classed as leucocratic due to a low mafic content. The blue to black quartz vein varies from 0.25 to 0.45m in width. The sulphide mineralization is almost entirely pyrite, with traces of chalcopyrite. The quartz is brecciated and shows crack-seal features. Pyrite content varies widely throughout the vein and gold tenor appears to follow sulphide content. The two shafts were sunk where the veins appear to pinch out; possibly to try and follow the quartz veins at depth. Both veins, which together are exposed for 100m, have been excavated for 8 to 12 m below surface. K. Kuhner set up a small jaw crusher, ball-mill and table which operated for two summers in 1982-1983 to recover gold from the two veins. Mining involved blasting out the footwall, leaving the quartz vein material on the hanging wall. The vein was then scaled off the hanging wall and transported to a small jaw crusher. The crushed ore was fed through a hollow trunion bearing into a small homemade ball-mill. The overflow of the ball mill was sent to a table for gold recovery. That the gold was fine grained is obvious from the fact that little if any visible gold was found, even in samples which assayed up to 11 ounces per ton. The mill proved to be uneconomic and the property was returned to the owner. No records were available of the average gold content of the ore milled. Samples taken and assayed at the Geoscience Labs, OGS, gave values from 4 to 11 oz Au/ton (Janes et al., 1990).

Apr 29, 2020 (Therese Pettigrew) - During the 1989 drill program on Rainbow Island, eight of the nine holes returned intersections from 0.3 to 1.6 m in width with grades ranging from 0.02 to 0.63 oz/t Au (0.69 to 21.6 g/t Au) (Janes et al., 1990). Samples collected by Equator Mining during their 1996 prospecting returned 100 to 340 ppb Au (Assessment report 52J02SE0010).

MDI52J02SW00016 (Mac-Read Vein)

Mac-Read Vein is listed as a "prospect" within MDI Records.

Exploration History

1936: Prospectors R.A. MacDonald and W.C. Read worked the property in 1936. 1937: T.L. Gledhill wrote a brief report on the property in Feb. 1937. Dr. Gledhill commented on a small stripped area and 9 drill holes situated at the west end of the property. 1937: During the winter, Denman Securities of Toronto financed drilling to explore the vein at depth. The drilling program was not encouraging. 1938-39: A pitting and sampling program carried out in 1938 and 1939 increased the known length of the vein. A 28.7 m long section of the vein was channel sampled to give an uncut gold content of 0.46 ounce gold per ton. 1939: Sylvanite Gold Mines Ltd. optioned the property in July and examined the vein. A section of the vein 16.7 m long previously sampled to contain 0.49 ounce gold per ton was resampled and gave 1.1 ounce gold per ton over 13.7 m. Sylvanite Gold Mines concluded that the potential tonnage did not warrant additional work and dropped the option in the fall of 1939. 1946: C.J. Ryan contracted H. Lundberg to conduct prospecting, magnetic and SP surveys. 1982: G. Armstrong and A. Best drilled a new vein system to the south of the Mac-Read prospect. Armstrong and Best optioned their property, which included the Mac-Read, to Steep Rock Resources, who in turn optioned portions of the property to Falconbridge Ltd., Hudson Bay Exploration and Almaden Resources during the period between 1983 to 1987. Surprisingly, little to no work was done on the Mac-Read prospect. 1990: Armstrong and Best regained control of the claim block and pumped out the southern pit to evaluate it for small scale mining. At the same time, the Mac-Read prospect was mechanically stripped and the area of exposed vein significantly increased. 1991: The Sioux Lookout Resident Geologist examined the prospect and suggested that it might have small scale mining potential. A. Best has since taken a 1 ton bulk sample. 1992: A. Best and G. Armstrong carried out stripping and sampling.

Mineralization Comments

Dec 07, 2005 (R Tuomi) - Two chip sampling studies done in 1939 produced assays on blue quartz veins of 0.46 ounce gold per ton over 28.7 m and 1.1 ounce gold per ton over a length of 13.7 m. The veins vary from 0.6 m to 1 m in width.

MDI52J02SW00027 (Armstrong-Best)

Armstrong-Best is listed as a “prospect” within MDI Records.

Exploration History

1949: C.J. Ryan completed 10 diamond drill holes on a property on the north shore of King Bay near the west end of the bay. Several of the holes returned assays from 0.02 to 0.08 ounce gold per ton over widths of 0.2 to 0.85 m. 1980-1982: A. Best and G. Armstrong staked several claims to the west of the Ryan property. They drilled 14 holes, several of which gave better than 1 ounce gold per ton over economic widths. The property was optioned to Steep Rock Resources Inc. 1983: Steep Rock Resources Inc. assembled a block of claims on King Bay and North Bay of Sturgeon Lake. Over the next several years they drilled 45 holes at various locations within the property, at least 20 of which were located on the Armstrong-Best claims. 1984-1987: Steep Rock Resources Inc. sub-optioned parts of their claim block to Hudson Bay Exploration and Development Ltd. (1984), Falconbridge Nickel Ltd.(1986) and Almaden Resources Corp. (1987). Over 4 years the companies drilled 20 holes and did sampling and surface surveys over the claim blocks. 1990-1993: Armstrong and Best regained control most of the ground held by Steep Rock Resources Inc. Armstrong and Best carried out stripping and bulk sampling programs on both the original showing and the Mac-Read property 200 m to the north. Additional strike length was added to both properties by this work. 1993: A. Best and G. Armstrong drilled 7 DDH totalling 334.9 m. 1997: Redbird Gold Corp. drilled 3 DDH totalling 240 m.

Mineralization Comments

Mar 30, 2020 (Therese Pettigrew) - Sample 9470 returned 16.056 oz/t Au (550.4 g/t Au). Sample 9469 returned 12.188 oz/t Au (417.8 g/t Au). Sample 9468 returned 5.316 oz/t Au (182.2 g/t Au) (Assessment report 52J02SW0005). DDH KBN97-1 returned 2.945 g/t Au over 1 m. DDH KBN97-2 assayed up to 1.4 g/t Au over 1 m and 1.29 g/t Au over 0.36 m. DDH KBN97-3 returned 3.06 g/t Au over 1.6 m (Assessment report 52J02SW2001). DDH KB-1 returned up to 137.2 g/t Au over 0.40 m. DDH KB-4 returned up to 61.8 g/t Au over 6.70 m (Assessment report 52J02SW0004).

<u>MDI52J02SW00026 (Shore)</u>

Shore is listed as a "prospect" within MDI Records.

Exploration History

1899: United States Gold Mining Company arrives Sturgeon Lake. 1900: Patented claims registered on property. 1901: Report of Exploration Survey Party # 9. Mine development by Mr. A.E. Shores - 1 Shaft 60 - 70 feet. 1902: 3 shafts and 1 adit on this occurrence, 2 stamp Tremaine mill on site. 1903: Stamp mill in operation, work abandoned at end of year. 1970: Silverside Mines Ltd. commissioned a Scintrex Mag and EM survey on a claim goup adjoining the west side of the patents. 1971: Larchmont Mines Ltd. commissioned a Scintrex Mag and EM survey which extended onto the patents from the south. 1974: Steep Rock Iron Mines Ltd. controlled the patents covering the occurrence. 1982-1994: Extensive work conducted on the N side of King Bay on the Armstrong-Best and other occurrences. 1982-83: Kerr Addison Mines drilled 5 DDH totalling 707.75 m. 1990: Whalex Ltd. acquires the patents. Work completed on ordinary mining claims to north. 1995: Redbird Gold Corp. did a overburden sampling and boulder tracing project on patents and leased claims to south. 1996: Redbird Gold Corp. fills in shafts and adits and completes geological mapping, ground geophysical surveys and extensive mechanical stripping and sampling. No assessment reports were found over the patented land.

Lithology Comments

Dec 07, 2005 (G Seim) - Trowell (1983) Near the water's edge a thin (less than 1.5 m) silicwous sulphide (pyrite, pyrrhotite) bearing unit is confined between two pillowed mafic metavolcanic flows. This unit is traceable for approximately 60 m along the water's edge and near the shaft closest to the water is irregularly intruded by quartz-feldspar trondhjemite porphyry. The open cut and tunnel appear to have followed a silicified and slightly carbonitized zone in a mafic volcanic flow or intrusion.

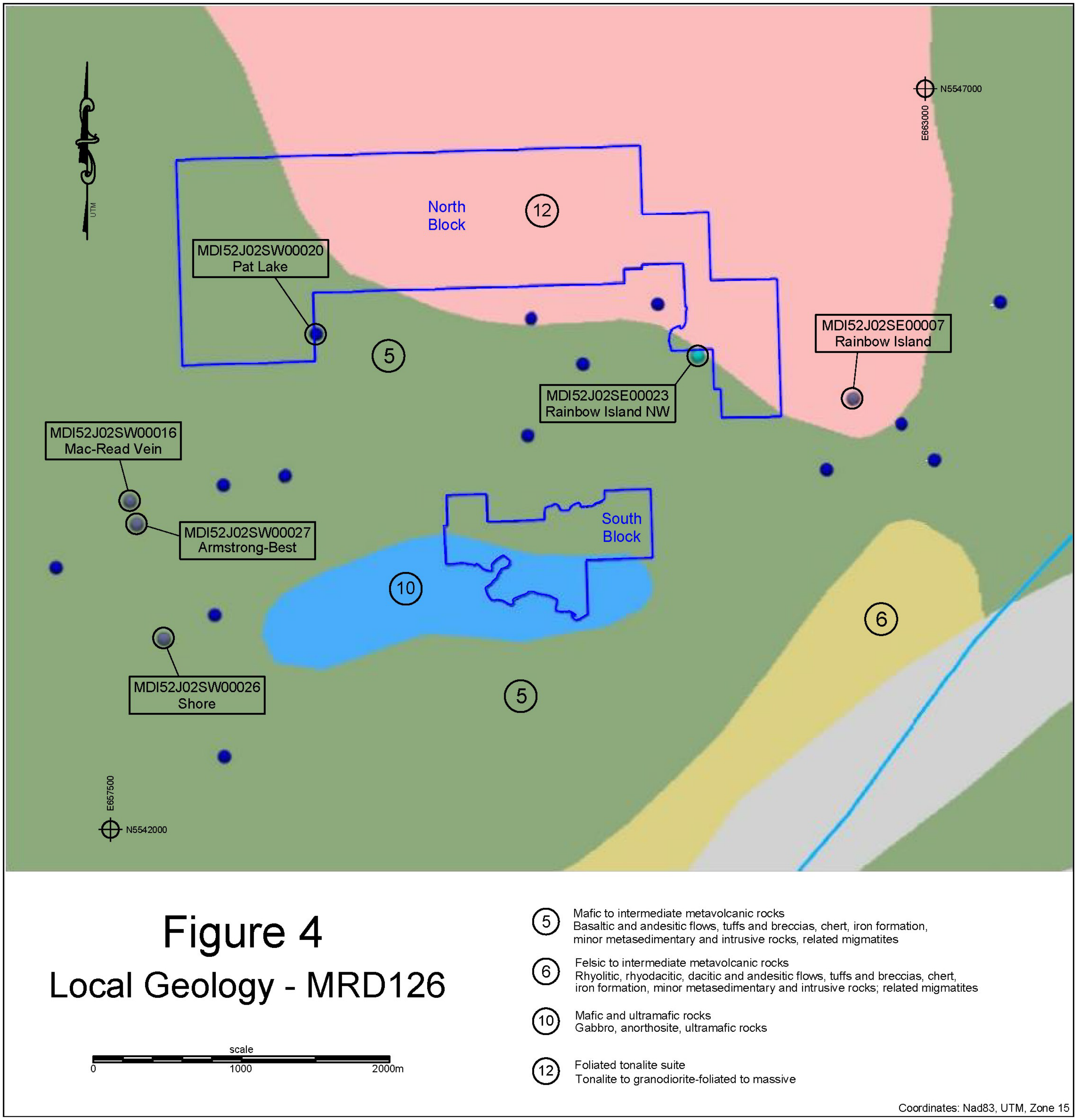


Figure 4 – Sturgeon Lake Properties overlaid on MRD126 bedrock geology

4.0 Property History

Table 2 is a list of past assessment work, file numbers and other basic information available through AFRI. Comments in blue relate to any ground or airborne magnetic surveys completed within or near the 2022 drone magnetic survey. (see reference 3: OAFD – Ontario Assessment File Database, available through OGS Earth)

Table 2 - Past Assessment Work					
	Assessment				
Work Type	File Number	Year	Performed For / Comments relevent to magnetometer survey	**line**	**terrain**
				spacing	**clearance**
Airborne Geophysics	52J02SE0001	1989	007 Precious Metals Inc, Aerodat Ltd. Airborne EM Very Low Frequency, Airborne Magnetometer	100m	60m
	52J02SW0060	1971	Larchmont Mines Ltd. Airborne Electromagnetic, Airborne Magnetometer	400ft	175ft
	52J02SW4444	1970	Amax Exploration Inc. Airborne Magnetometer	660ft	500ft
	52J02SW0035	1982	Moran Resources Corp, Trigg Woollett Consulting Ltd. Airborne EM, VLF, Airborne Magnetometer	15m below helicopter	
	52J02SW0027	1982	Moran Resources Corp. Airborne EM, VLF, Airborne Magnetometer	unknown	
Diamond Drilling	20000013611	2013	Allan P Best		
	52J02SW0303	1978	J R Nixon		
	52J02SE9253	1978	J R Nixon		
	52J02SE8659	1986	Mistango Consolidated Resources Ltd		
	52J02SE9260	1986	Mistango Consolidated Resources Ltd		
Geochemistry	52J02SW0016	1984	Hudson Bay Expl & Dev Co Ltd		
	20000013611	2013	Allan P Best		
	52J02SE8657	1988	Mistango Consolidated Resources Ltd		
	52J02SW8637	1983	Moran Resources Corp		
	52J02SW0027	1982	Moran Resources Corp		
Geology	52J01SW0101	1946	C J Ryan		
	52J02SW0016	1984	Hudson Bay Expl & Dev Co Ltd		
	52J02SW8637	1983	Moran Resources Corp		
	52J02SW0035	1982	Moran Resources Corp, Trigg Woollett Consulting Ltd		
	52J02SW0027	1982	Moran Resources Corp		
Ground Geophysics	52J01SW0101	1946	C J Ryan		
	52J02SW0050	1983	Phantom Expl Services Ltd		
	52J02SW2004	2004	Savant Lake Minerals Inc		
	20000003609	2008	Pacific Iron Ore Corp. Best / King Bay Property. VLF-EM survey 100m line spacing / 25m stations		
	52J02SW8637	1983	Moran Resources Corp		
	52J02SW0027	1982	Moran Resources Corp		
Physical	20000003609	2008	Pacific Iron Ore Corp. Best / King Bay Property. Linecutting.		
	20000005886	2010	Allan P Best, Pacific Iron Ore Corporation		
	52J02SW8637	1983	Moran Resources Corp		
Other	52J02SW0016	1984	Hudson Bay Expl & Dev Co Ltd		
	52J02SE8657	1988	Mistango Consolidated Resources Ltd		

Table 2 – Past Assessment work within Sturgeon Lake Properties

5.0 Summary of 2022 Drone Magnetic Survey

The 2022 drone magnetic survey covers 2 grids summarized as follows:
(Survey dates: Sept 30th and October 1st, 2022)

Surveyed – Line Km:	**Total 34.8 line kilometers**
Altitude:	**45m above ground level**
Area:	**Total Survey Area 218.58 ha**

The grid lines were spaced 100m apart and flown at an azimuth of 0/180 degrees with tie lines spaced between 400m and 800m intervals, at an azimuth of 90/270 degrees.
A Geometrics MFAM magnetometer mounted on a DJI M600 Pro hexacopter drone was used to survey all grid lines.

A Geometrics G856AX proton procession magnetometer was operated as a base station throughout the survey to provide diurnal monitoring of the local magnetic field variations.
(Loc: **E659658 N5546101** Nad83, UTM Zone 15)

Equipment specifications are provided in ***Appendix 1, 2 and 3***.

6.0 Processing

Magnetometer data was collected on 2 Geometrics MFAM sensors operating at 1000hz. The data was processed through a custom program operating in Python. This converts raw data from Geometrics MFAM into a format compatible with Geosoft Oasis Montaj.

Customized import templates were used within Geosoft, to identify and separate mag readings into organized grid and tie lines. This step eliminates extraneous mag data collected as the drone travels to and from the grid.

Grid and tie line data were corrected to remove heading error and lag.
Corrected grid data was then levelled based on tie lines.

7.0 Interpretation, Conclusions and Recommendations

The 2022 drone magnetic survey at the Sturgeon Lake Properties, was successful at identifying 4 magnetic-low anomalies, as outlined on ***Figure 5*** (Interpretive Map). This is the first time that detailed, 1VD magnetics have been applied to this area. The 4 anomalies identified on ***Figure 5***, outline areas that are prospective for gold.

The next step for the client would be to drill in the central area of anomalies 1 and 3.
The 4 identified targets fall in lake / water areas. So there is no simple way to further constrain the target areas (such as sampling outcrop, or soil sampling).

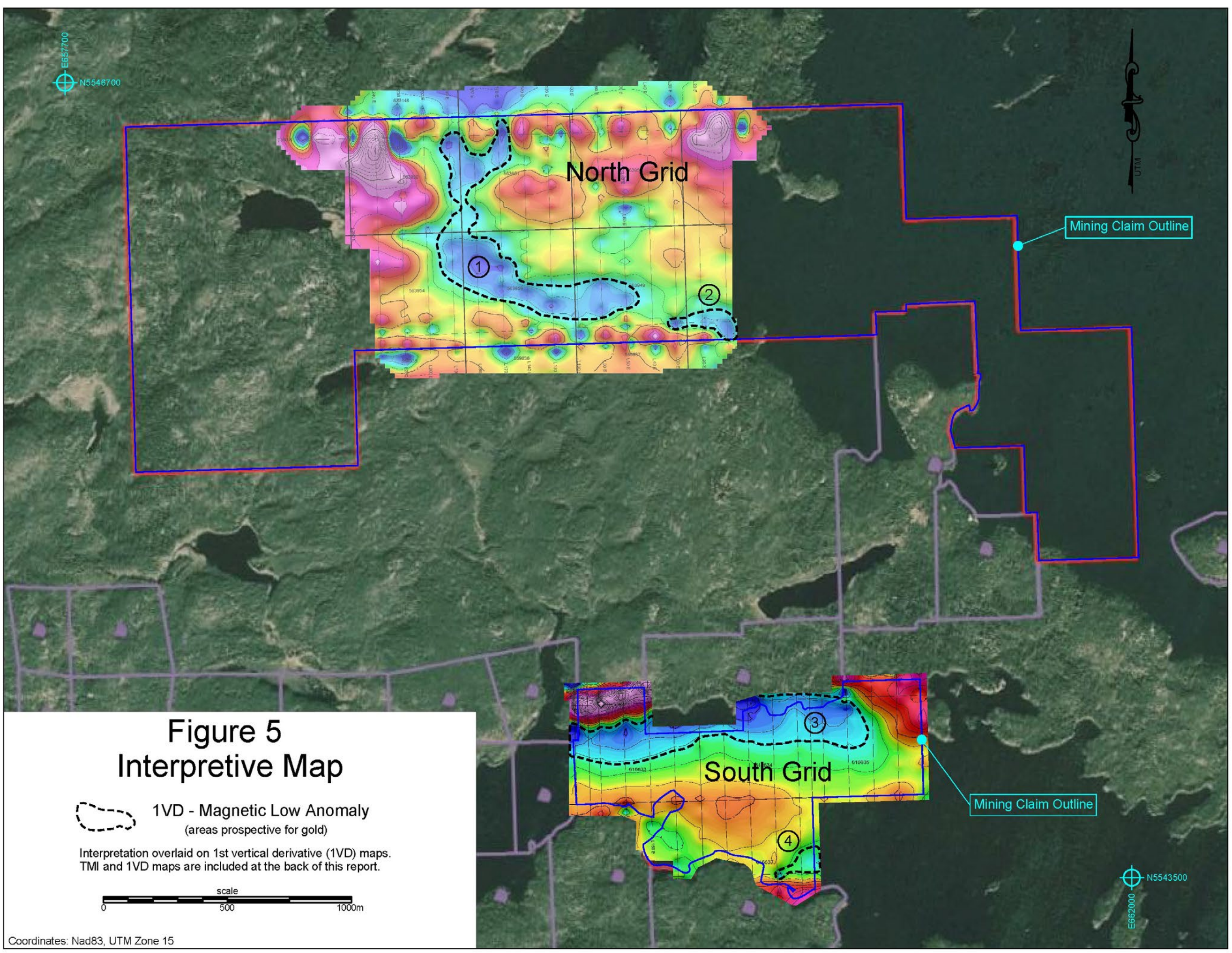


Figure 5 – Interpretive Map

References;

1) MRD126 – Revised Bedrock 250K available through OGSEarth.
OGSEarth can be found at link: geologyontario.mndm.gov.on.ca/ogsearth.html
Under the main menu, you will see "**Bedrock Geology**" which includes a tab to download a KML file.
The KML file will launch automatically if you already have Google Earth installed on your computer.

2) MDI – Mineral Deposits Inventory, available through OGS Earth
OGSEarth can be found at link: geologyontario.mndm.gov.on.ca/ogsearth.html
Under the main menu, you will see "**Ontario Mineral Inventory (OMI)**" which includes a tab to download a KML file.
The KML file will launch automatically if you already have Google Earth installed on your computer.

3) OAFD – Ontario Assessment File Database, available through OGS Earth
OGSEarth can be found at link: geologyontario.mndm.gov.on.ca/ogsearth.html
Under the main menu, you will see "**Ontario Assessment File Database (OAFD)**" which includes a tab to download a KML file.
The KML file will launch automatically if you already have Google Earth installed on your computer.

4) Map 39b, Sturgeon Lake Area: From Ontario Department of Mines annual report 1930
Scale 1:126,720 (2 inches = 1 mile). Report by A.R. Graham.

Statement of Qualifications

		Author - Kevin Cool
		Education
from	to	Description
	1983	Photography - 1 year, Humber College, Toronto Ontario
1988	1990	Survey Engineering Technician - 2 year honours diploma, Northern College Porcupine Campus
	2014	Received Permanent Prospectors Licence, by reason of having held a Prospector's Licence for 25 years or more
	2014	Aviation Ground School, Transport Canada Compliant Unmanned Aerial System training seminar
	2014	Radio Operators Certificate - Aeronautical
		Companies owned and operated
1990	2001	**General Surveys & Exploration** - mining, exploration, aggregate, construction survey and computer drafting.
2000	2005	**Big Red Diamond Corp.** - traded publicly on TSX Venture excahange under symbol DIA. Junior mining company exploring for diamonds.
		Participated in and managed regional-scale airborne geophysical programs, stream sampling, geochem sampling and camp construction.
		Property-scale work includes ground magnetometer, grid cutting and survey.
2005	2011	**True North Mineral Laboratories Inc.** - heavy mineral separation by heavy liquid. Crushing / pulverizing for other assay. 30+ employees.
		Provided services to the mining and exploration industry such as claim staking, till and geochem sampling, magnetometer survey.
2014	current	**UAV Timmins** - drone aerial mapping and survey. 1st company to apply drone air photo survey as valid mining claim assessment in Ontario.
2017	current	**Zen Geomap Inc.** - drone magnetometer survey. 1st company to apply drone mag survey as valid mining claim assessment in Ontario.

I, Kevin Scott Cool, of 15 Prospector St., Gold Centre in the City of Timmins, Province of Ontario, hereby certify that:

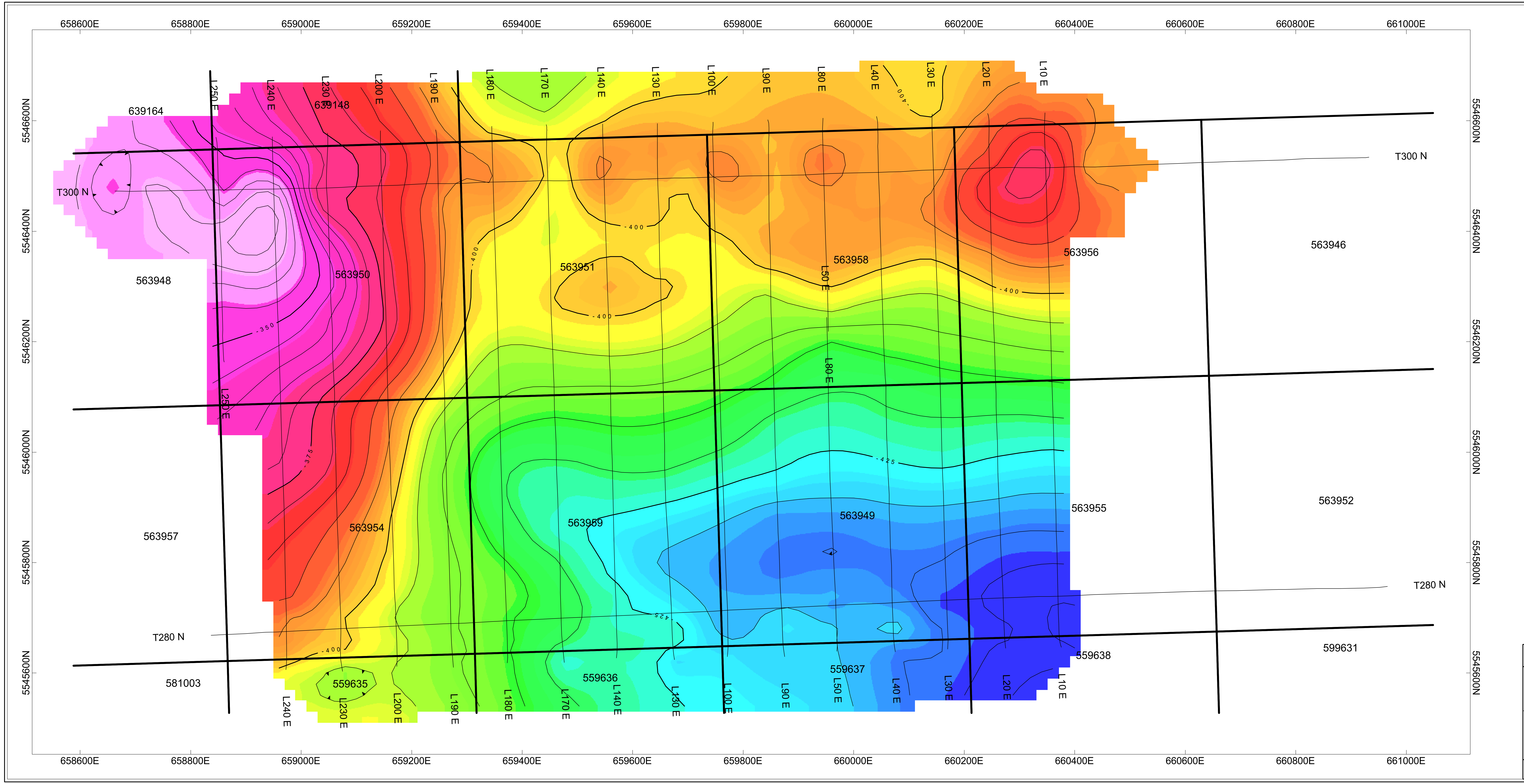
1) I am a graduate of Northern College of Applied Arts and Technology, May 26th 1990, Porcupine Campus, with a 2 year Honors Diploma in Survey Engineering Technology

2) I have subsequently operated above businesses, directly engaged with the mining and exploration industry.

3) I have been actively engaged in my profession since May, 1990, in all aspects of ground and airborne exploration programs including the planning and execution of regional and property-scale programs, supervision, data processing, maps, interpretation and reports.

Kevin Scott Cool

Zen Geomap
204-70C Mountjoy ST. N.
Timmins, ON P4N 4V7

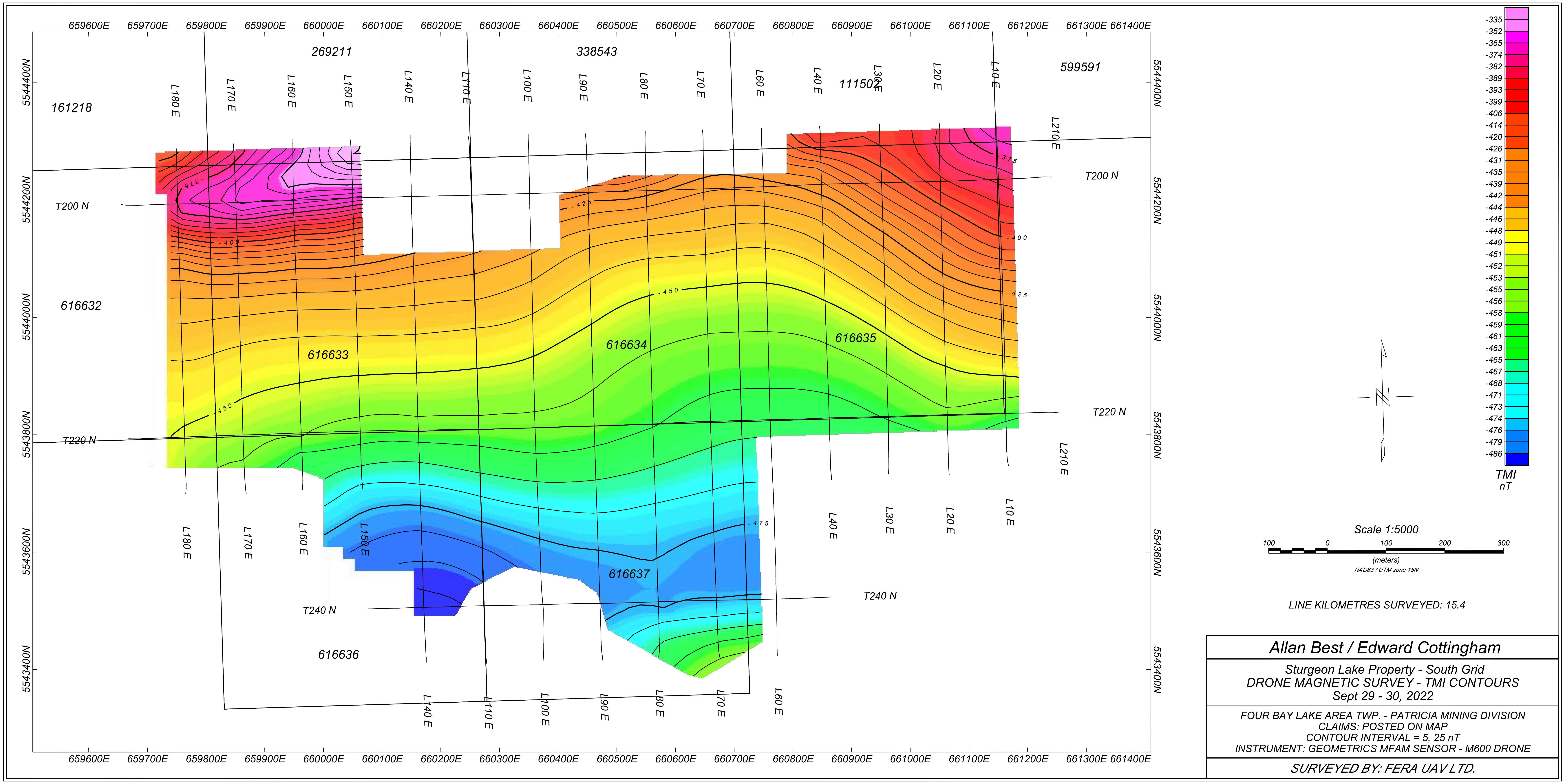


Allan Best / Edward Cottingham

Sturgeon Lake Property - North Grid
DRONE MAGNETIC SURVEY - TMI CONTOURS
Sept 29 - 30, 2022

FOUR BAY LAKE AREA TWP. - PATRICIA MINING DIVISION
CLAIMS: POSTED ON MAP
CONTOUR INTERVAL = 10, 50 nT
INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE

SURVEYED BY: FERA UAV LTD.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616632
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L180 E
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L160 E
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L140 E
L110 E
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L90 E
L80 E
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L40 E
L30 E
L20 E
L10 E
L210 E
T200 N
T220 N
T240 N
-375
-400
-425
-450
-475
-335
-352
-365
-374
-382
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-456
-458
-459
-461
-463
-465
-467
-468
-471
-473
-474
-476
-479
-486
TMI
nT
Scale 1:5000
100 0 100 200 300
(meters)
NAD83 / UTM zone 15N
LINE KILOMETRES SURVEYED: 15.4
Allan Best / Edward Cottingham
Sturgeon Lake Property - South Grid
DRONE MAGNETIC SURVEY - TMI CONTOURS
Sept 29 - 30, 2022
FOUR BAY LAKE AREA TWP. - PATRICIA MINING DIVISION
CLAIMS: POSTED ON MAP
CONTOUR INTERVAL = 5, 25 nT
INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE
SURVEYED BY: FERA UAV LTD.

658600E
658800E
659000E
659200E
659400E
659600E
659800E
660000E
660200E
660400E
660600E
660800E
661000E
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5545600N
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0.049
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-0.071
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-0.093
-0.101
-0.109
-0.121
-0.146
1VD Magnetics
nT/m
Scale 1:5000
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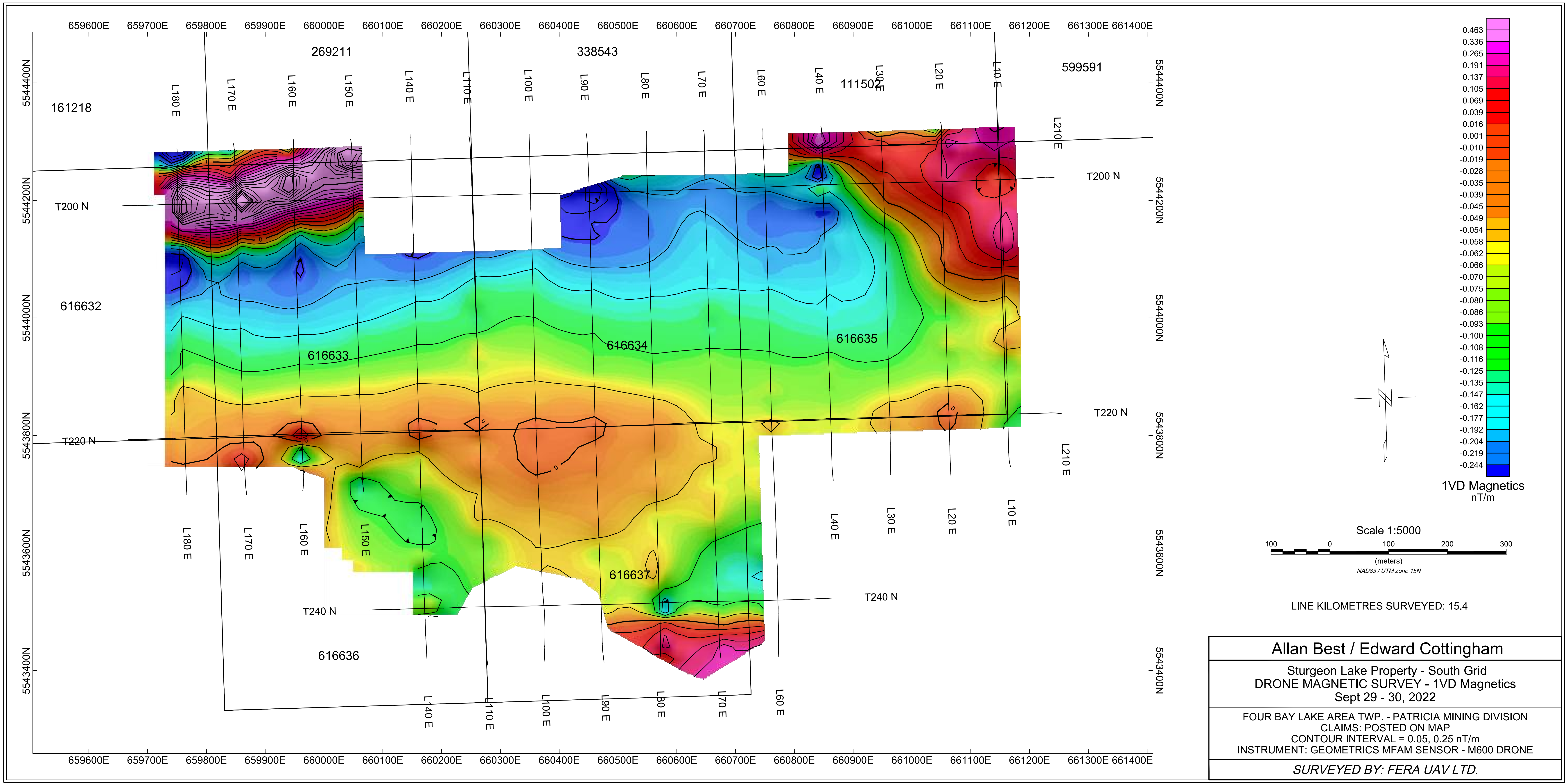
0
100
200
300
(meters)
NAD83 / UTM zone 15N
LINE KILOMETRES SURVEYED: 19.4
Allan Best / Edward Cottingham
Sturgeon Lake Property - North Grid
DRONE MAGNETIC SURVEY - 1VD Magnetics
Sept 29 - 30, 2022
FOUR BAY LAKE AREA TWP. - PATRICIA MINING DIVISION
CLAIMS: POSTED ON MAP
CONTOUR INTERVAL = 0.025, .1 nT/m
INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE
SURVEYED BY: FERA UAV LTD.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T220 N
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-0.125
-0.135
-0.147
-0.162
-0.177
-0.192
-0.204
-0.219
-0.244
1VD Magnetics
nT/m
Scale 1:5000
100 0 100 200 300
(meters)
NAD83 / UTM zone 15N
LINE KILOMETRES SURVEYED: 15.4
Allan Best / Edward Cottingham
Sturgeon Lake Property - South Grid
DRONE MAGNETIC SURVEY - 1VD Magnetics
Sept 29 - 30, 2022
FOUR BAY LAKE AREA TWP. - PATRICIA MINING DIVISION
CLAIMS: POSTED ON MAP
CONTOUR INTERVAL = 0.05, 0.25 nT/m
INSTRUMENT: GEOMETRICS MFAM SENSOR - M600 DRONE
SURVEYED BY: FERA UAV LTD.

Appendix I

Geometrics MFAM Magnetometer Specifications

System Basics

- System utilizes 2 MFAM sensors
- Sensors are controlled by 1 sensor module
- Sensor module communicates with a Texas Instruments main board
- Sensitivity: 0.00003nT
- Sensors operate at 1000Hz (collect 1000 readings per second on both sensors)

Technical Specifications

SPECIFICATIONS:

Mechanical:

Enclosure Dimensions: 9" x 6 5/8" x 1 3/16"

Sensor Cable length (Development box to Sensor): 20.5 inches

Power:

AC adapter: 13.5 to 16 Volts DC at 1.0A

Battery Pack: 12 volt 1800 mA-Hour Lithium Polymer

FEATURES:

1) **TIVA TM4C1294NCPDT Micro controller:** This is a 32 bit ARM Cortex-MF4 based microcontroller running at up to 120 MHz. It has 1024K of flash, with 256K bytes of RAM, and 6 KBytes of EEPROM.

2) **USB 2.0 Micro Connector:** USB functionality is provided by the TIVA microcontroller and TIVAWare support libraries.

3) **Four User LEDs:** Four user controlled LEDs are wired to TIVA microcontroller GPIO pins PK0, PK1, PN0, and PN1.

4) **Two User Switches:** Two user read switches are wired to the microcontroller pins PK6 and PJ1.

5) **One Microcontroller Reset Switch:** This switch is used to reset the microcontroller.

6) **Wi-Fi port for TI CC3100 Wi-Fi Booster Pack:** The Development board layout allows a TI CC3100 Wi-Fi Booster pack to be directly plugged in. Using TIVAWare libraries, software can be developed to allow Wi-Fi communication between the Development board and a computer.

7) **USB XDS110 Port for Firmware Downloading and Debugging:** This second USB port is used as a debug/firmware download interface between the TI Code Composer Studio development suite and the Development Kit.

8) **Two RS-232 Serial Ports with RJ-45 Connectors:** Two general purpose serial ports are available to the user. The first serial port is wired to TIVA microcontroller UART4, and supports RTS and CTS handshaking. The second serial port is wired to TIVA microcontroller UART5. This port supports only TxD and RxD. Both of these ports use +/- 8 volt voltage swings, and support baud rates up to 920 KBaud. Note that these two ports are wired as Data Terminal Equipment (DTE) Thus to connect either of these two ports to a computer it would need to connect through a null modem. .

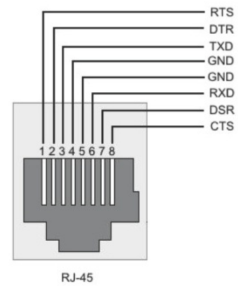


Figure 3: Serial Port Pinout

9) **On Board GPS Module:** An Adafruit GPS module is included with the Development Kit. It features 66 channels, -165 dBm sensitivity, and 3 Meter accuracy. An external GPS antenna is included so that signals can be received inside the box even with the cover in place. By default the GPS powers up to 9600 baud with several GPS sentences being output. The firmware that comes with the Development kit reconfigures the GPS to output only an RMC sentence at 115200 baud. This RMC string is sent with the output TCP data packet as described in the "Ethernet Data Format" section. The GPS is wired to UART7 on the TIVA microcontroller using 0-3.3 volt logic swings.

   The 1PPS pulse from this GPS goes to the MFAM development module and disciplines the cycle rate to exactly 1 kiloSamples per second.

10) **Micro SD Card Slot for Storing Data Locally:** A micro SD card slot is available for the user to read and write data using a SPI interface. It is connected to SPI port 1 of the TIVA microcontroller.

11) **10 MHZ Timing Reference Input Port:** This input port takes a 10 MHz reference signal from a GPS disciplined reference oscillator, buffers and squares it up, and sends it to the MFAM module. The purpose of this signal is to lock the MFAM clocking system to this reference signal so that the Larmor frequency can be measured to an absolute standard. At this time, the MFAM does not support this feature. This function will be implemented in the future.

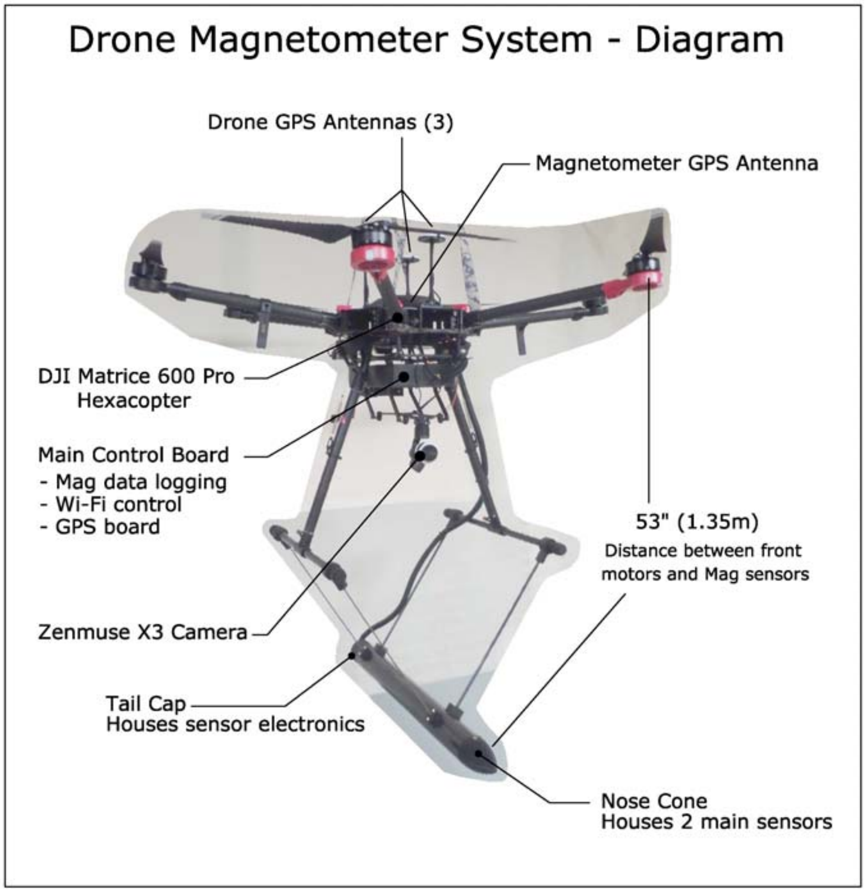
12) **Ethernet port with Power over Ethernet Compatibility**: The Tiva microcontroller contains a fully integrated Ethernet MAC and PHY. In addition, the Ethernet port can power the Development Kit via Power over Ethernet (PoE) using an Ethernet power injector.

13) **1.8 Amp-Hour Battery pack:** Three on board lithium/polymer batteries can power the system for 2 hours. A switch on the Development board allows the battery to be turned on/off. In addition, if the battery voltage falls below 8 volts the MFAM module will automatically shut down while keeping the microcontroller alive.

14) **Integrated Battery Charging system:** A lithium/polymer battery charging system is on board. If the battery switch is turned on, and the AC power adapter is plugged in, the batteries will be charged.

15) **Four Differential Analog Input Channels:** There are four differential analog inputs available for use. Channels 0 and 1 are +/- 2.5 volts full scale, while channels 2 and 3 are 0 to +5 volts full scale. In the firmware supplied with the Development kit (which sends MFAM/GPS data to the MFAMConsole program on the computer), all four channels are sampled synchronously with the MFAM data input to the Tiva are included in the data stream.

16) **On board Power/Status LEDs:** Several Status and Power LEDs are arranged along the front edge of the board. They include the four user LEDs, Power status LEDs (which power source is powering the board, and whether the battery is charging or the voltage low). They are listed in the Front and Back Panel Connection and Indicator section below.



Description and Location of components

The Geometrics MFAM magnetometer "main board" is attached directly below the central body of the DJI Matrice 600 Pro hexacopter drone. This box contains a small, Texas Instruments computer that collects and stores magnetometer readings on a micro-SD card. It also houses a 66 channel Adafruit GPS module, which operates independent of the (3) internal drone GPS modules. The Adafruit GPS collects and stores "GPS readings" (Lat / Long / Altitude / Time). The GPS readings are assigned to each mag reading, as the drone navigates along grid lines. A Wi-Fi module is attached to the Texas Instruments computer, which allows the operator to start and stop the magnetometer at a distance.

The Geometrics MFAM magnetometer operates using 2 separate mag sensors, attached to a "sensor module" with a flexible circuit board. The sensor module and 2 sensors are housed in a carbon graphite tube, which is mounted (suspended) 53 inches (1.35m) below the 2 front motors of the drone.

Magnetic shielding (mu-metal) is installed at 6 locations around the drone body, to provide additional shielding between drone components and the 2 mag sensors.

The magnetometer GPS antenna (for the internal Adafruit GPS) is mounted on top the drone body, to allow for clear signal. The vertical distance between this antenna and the 2 mag sensors, is 1.20m. This value is considered when reporting "mean terrain clearance", by subtracting 1.2m from the elevation assigned to each mag reading.

Appendix II

Geometrics G856AX
Proton procession magnetometer specifications

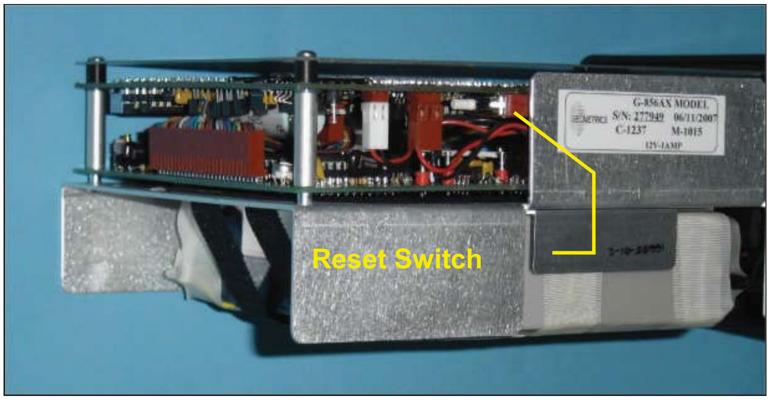


Figure 23. Internal reset switch.

Specifications

- Displays - Six digit display of magnetic field to resolution of 0.1 gamma or time to nearest second. Additional three-digit display of station, day of year, and line number.

- Resolution - Typically 0.1 gamma in average conditions. May degrade to lower resolution in weak fields, noisy conditions or high gradients.

- Absolute accuracy - One gamma, limited by remnant magnetism in sensor and crystal oscillator accuracy.

- Clock - Julian clock with stability of 5 seconds per month at room temperature and 5 seconds per day over the temperature range of -20 to +50 degrees Celsius.

- Tuning - Push button tuning from keyboard with current value displayed on request. Tuning range 20 to 90 µT.

- Gradient - Tolerates gradients to 1800 gammas/meter. When high Tolerance gradients truncate count interval, maintains partial reading to an accuracy consistent with data.

- Cycle Time - Complete field measurement in three seconds in normal operation. Internal switch selection for faster cycle (1.5 seconds) at reduced resolution or longer cycles for increased resolution.

- Manual Read - Takes reading on command. Will store data in memory on command.

- Memory - Stores more than 5700 readings in survey mode, keeping track of time, station number, line number day and magnetic field reading. In base station operation, computes for retrieval but does not store time of recording designated by sample interval, allowing storage of up to 12,000 readings.

- Output - Plays data out in standard RS-232 format at selectable baud rates. Also outputs data in real time byte parallel, character serial BCD for use with digital recorders.

- Inputs - Will accept an external sample command.

- Special - An internal switch allows:
  - adjustment of Functions polarization time and count time to improve performance in marginal areas or to improve resolution or speed operation
  - three count averaging
  - choice of lighted displays in auto mode.

- Physical -
  - Instrument console: 7 x 10 ½ x 3 ½ inches (18 x 27 x 9 cm), 6 LB (2.7 kg)
  - Sensor: 3 1/2 x 5 inches (9 x 13 cm), 4 LB (1.8 kg)
  - Staff: 1 inch x 8 feet (3cm x 2.5m), 2 LB (1kg)

- Environmental: Meets specifications from 1 to 40°C. Operates satisfactorily from -20 to 50°C.

- Power - Depending on version, operates from internal rechargeable Gel-cells or 9 D-cell flashlight batteries . May be operated from external power ranging from 12 to 18 volts external power. Power failure or replacement of batteries will not cause loss of data stored in memory.

- Standard system (P/N 16600-02) components:
  - Sensor (P/N 16076-01) and sensor cable (P/N 16134-01)
  - Console (P/N 16601-01)
  - Staff, one top section (P/N 16535-01), two middle sections (P/N 16536-01) and 1 bottom section (P/N 16537-01)
  - Carry harness (P/N 16002-02)
  - Two sets of rechargeable batteries (P/N 16697-01) and battery charger (P/N 16699-01)
  - Carrying case (P/N 16003-01)
  - Download cable (P/N 16492-01)
  - Hardcopy operation manual (P/N 18101-02)
  - Magnetometer CD (P/N 26648-01)

- Optional accessories:
  - Tripod kit for base-station operation (P/N 16708-02)
  - Gradiometer kit (P/N 166651-01)
  - Gradiometer carry/storage case (16003-01)

Specifications

• Aircraft	
Diagonal Wheelbase	1133 mm
Dimensions	1668 mm × 1518 mm × 727 mm with propellers, frame arms and GPS mount unfolded (including landing gear) 437 mm × 402 mm × 553 mm with propellers, frame arms and GPS mount folded (excluding landing gear)
Weight (with six TB47S batteries)	9.5 kg
Weight (with six TB48S batteries)	10 kg
Max Takeoff Weight Recommended	15.5 kg
Hovering Accuracy (P-GPS)	Vertical: ±0.5 m, Horizontal: ±1.5 m
Max Angular Velocity	Pitch: 300°/s, Yaw: 150°/s
Max Pitch Angle	25°
Max Wind Resistance	8 m/s
Max Ascent Speed	5 m/s
Max Descent Speed	3 m/s
Max Speed	40 mph / 65 kph (no wind)
Max Service Ceiling Above Sea Level	2170 propellers: 2500 m, 2195 propellers: 4500 m
Hovering Time* (with six TB47S batteries)	No payload: 32 min, 6 kg payload: 16 min
Hovering Time* (with six TB48S batteries)	No payload: 38 min, 5.5 kg payload: 18 min
Flight Control System	A3 Pro
Supported DJI Gimbals	Ronin-MX; ZENMUSE™ Z30, Zenmuse X5/X5R, Zenmuse X3, Zenmuse XT, Zenmuse Z15 Series HD Gimbal: Z15-A7, Z15-BMPCC, Z15-5D III, Z15-GH4
Retractable Landing Gear	Standard
Operating Temperature	14° to 104° F (-10° to 40° C)
• 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	FCC Compliant: 3.1 mi (5 km), CE Compliant: 2.2 mi (3.5 km) (Unobstructed, free of interference)
Transmitter Power (EIRP)	10 dBm @ 900M, 13 dBm @ 5.8G, 20 dBm @ 2.4G
Video Output Port	HDMI, SDI, USB
Operating Temperature	14° to 104° F (-10° to 40° C)
Battery	6000 mAh LiPo 2S
• Charger (Model: MC6S600)	
Voltage Output	26.1 V
Rated Power	600 W
Single Battery Port Output Power	100 W
• Standard Battery (Model: TB47S)	
Capacity	4500 mAh
Voltage	22.2 V
Battery Type	LiPo 6S
Energy	99.9 Wh
Net Weight	595 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	180 W
• Optional Battery (Model: TB48S)	
Capacity	5700 mAh
Voltage	22.8 V
Battery Type	LiPo 6S
Energy	129.96 Wh
Net Weight	680 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	180 W

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

CE1313 RoHS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Download the detailed user manual at:
www.dji.com/matrice600-pro

※ This content is subject to change without prior notice.

Drone Operation and Ground Control Methods

The DJI Matrice 600 Pro drone is programmed to fly an automated flight path (the survey grid lines and tie lines), using software that is available and ready to use on a wide variety of drones. Zen Geomap uses UgCS software, Drone Deploy and Pix4D software;

- Drone Deploy and Pix4D, on simple grids that do not require advanced control with regards to following complex terrain (example – flying in relatively flat ground, using Google Earth or other simple elevation model).
- UgCS, in rugged terrain, where we obtain a detailed 3D terrain model (DEM or DTM) using photogrammetric drone prior to magnetic survey. In this case we upload our own, custom DEM into UgCS software and the DJI M600 drone will follow the terrain at a fixed offset.

Using a Drape

The automated flight path will always use (follow) a “drape” in one form or another.

- On simple grids in flat terrain, the drape is generated as an offset of a simple DEM, such as Google Earth or other coarse elevation model such as DEMs available on-line through USGS.
- In complex terrain, the drape is generated as an offset of our own, custom DEM.

All of our piloting software is capable of following a drape at a fixed offset. We typically program the drone to fly 50m above coarse DEMs, such as Google Earth, or USGS. When a custom DEM is available, we typically fly 25-30m above DEM.

The actual / final “height above terrain” (or mean terrain clearance), is determined in the field by our crews. They visually inspect and look for obstacles such as hills, trees, buildings and towers.

The height above terrain (or mean terrain clearance) is included in the logistical and assessment reports we prepare for our clients.

Ground Control Methods

The DJI M600 drone uses a combination of 3 separate GPS receivers and 3 separate barometers. This system developed by DJI is called the A3 Controller.

The A3 controller is designed to maintain a stable altitude, relative to the take-off point. Over a 5 year period (2014 to current), we have found the A3 controller to be reliable to sub-metre accuracy, when it comes to maintaining stable altitude over a typical 20 to 30 minute flight.

Based on this long-term record, we rely on the A3 controller to navigate the drone at a pre-programmed, fixed offset above DEM. Over the same 5 year period, we have observed consistent and accurate agreement between the A3 GPS locations and the Adafruit (Magnetometer) GPS locations. When plotted in plan view, the A3 GPS tracks have always agreed with the Adafruit tracks to approximately 1 metre accuracy.

The author if this report has been an active surveyor since 1990 and is familiar with real-time (RTK) GPS and post-processed GPS methods.

Appendix 4 - Statement of Costs			
Allan Best / Edward Cottingham - Drone Magnetometer Survey			
Fourbay Lake Area / Squash Lake Area			
		$	$
Mobilization (September 29, 2022)	qty	rate	amt
Vehicle Km Timmins to Whiskeyjack Lodge	1116	0.60	669.60
Crew time Timmins to Whiskeyjack Lodge	12	165.00	1980.00
Food and Lodging - Whiskeyjack Lodge	1	300.00	300.00
Mobilization (September 30, 2022)			
Boat from lodge to North Grid (12.2km)	1	165.00	165.00
Boat Rental / guiding services (1/2 day)	1	200.00	200.00
Field Work (September 30, 2022)			
5 flights @ $1100 covering North Grid	5	1100.00	5500.00
Demobilization (September 30, 2022)			
Boat from North Grid to Lodge (12.2km)	1	165.00	165.00
Boat Rental / guiding services (1/2 day)	1	200.00	200.00
Food and Lodging - Whiskeyjack Lodge	1	300.00	300.00
Mobilization (October 1, 2022)			
Boat from lodge to South Grid (17.6km)	1.25	165.00	206.25
Boat Rental / guiding services (1/2 day)	1	200.00	200.00
Field Work (October 1, 2022)			
4 flights @ $1100 covering South Grid	4	1100.00	4400.00
Demobilization (October 1, 2022)			
Boat from South Grid to Lodge (17.6km)	1.25	165.00	206.25
Boat Rental / guiding services (1/2 day)	1	200.00	200.00
Food and Lodging - Whiskeyjack Lodge	1	300.00	300.00
Demobilization (October 2, 2022)			
Vehicle Km Whiskeyjack Lodge to Timmins	1116	0.60	669.60
Crew time Whiskeyjack Lodge to Timmins	12	165.00	1980.00
Computer Processing (September 30 to October 10)			
Download and Process field data	9	88.00	792.00
Process and Level mag data in Geosoft Oasis Montaj	10	88.00	880.00
Generate Total Field and 1VD Maps	7	88.00	616.00
Assessment Report (September 30 to October 10)			
Prepare assessment report to ENDM standards	37	88.00	3256.00
SUB			23185.70
HST			3014.14
Total Project			**26199.84**

Appendix V

Quality Control / Tests and Calibrations / Processing Steps

Quality Control

Throughout the data acquisition phase, data are monitored closely for quality control and error-checking on all channels. Output from the Geometrics MFAM magnetometer includes a wide range of error codes, which are written to the raw data file to help diagnose problems when they occur in the field.

All data are checked on a daily basis, as field data are transferred to Zen Geomap offices in Timmins or North Bay, Ontario. When errors or problems occur, the field crew is instructed to re-fly problem areas.

Tests and Calibrations

The following tests and calibrations are carried-out on all magnetometer equipment and sensors employed by Zen Geomap Inc.;

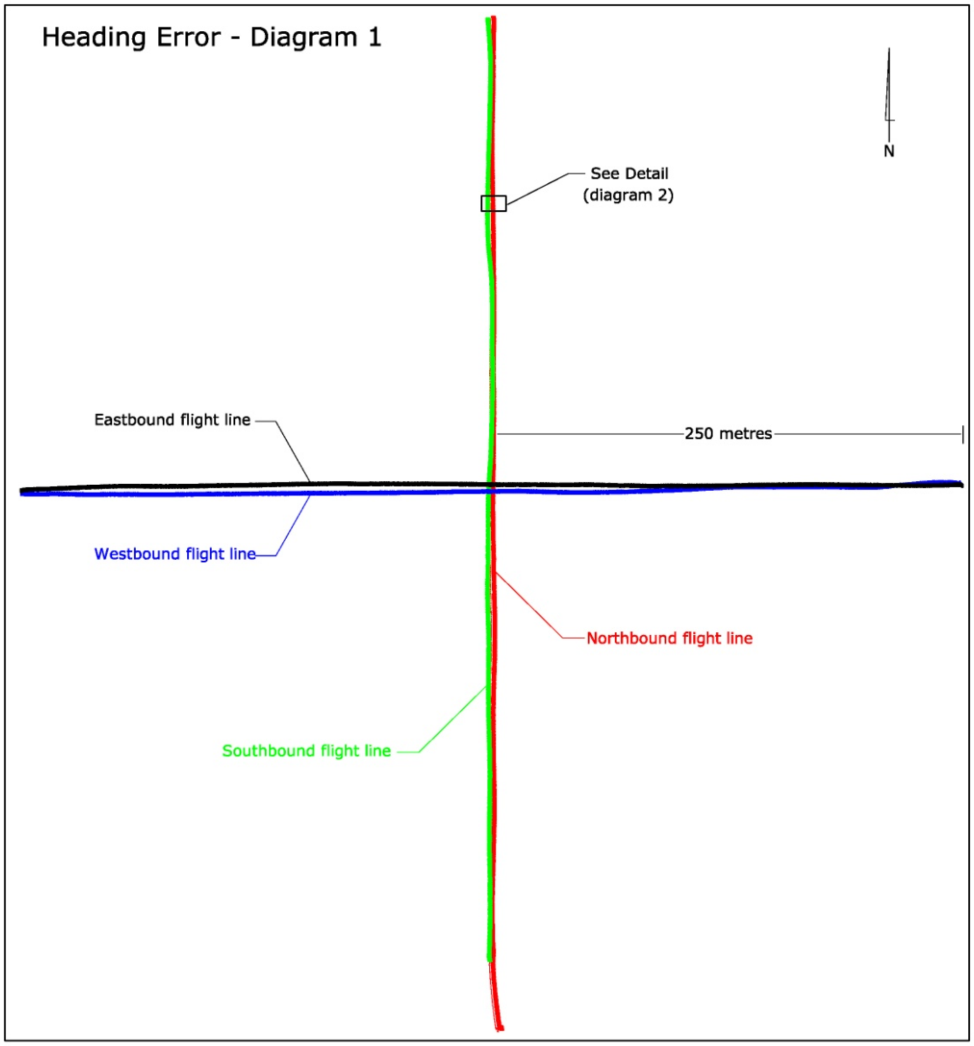
Heading Error

Upon receipt of a new magnetometer (or after significant repair or modification to any system component), a test flight is carried-out to determine heading error.

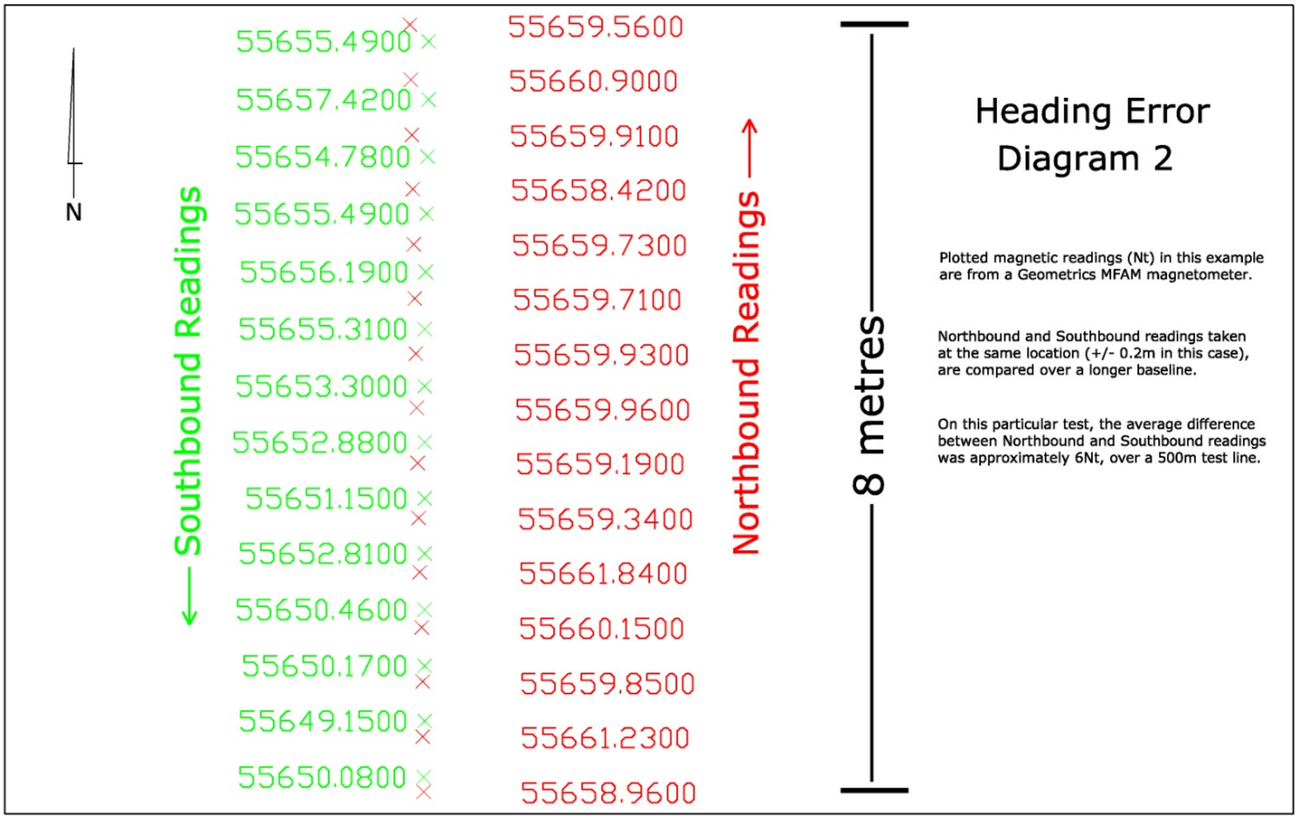
A cross-pattern is flown as shown in ***Diagram 1***, with 500 metre N-S and E-W lines.
Magnetic readings are collected along the same lines, flown in opposite directions.

Northbound and Southbound readings at the same location (+/- 0.2m in this example) are compared.
Eastbound and Westbound readings undergo the same process.

(See: Heading Error – ***Diagram 2***).



Example test flight by Zen Geomap, August, 2019



Example – Geometrics MFAM readings, August, 2019

The difference between Northbound and Southbound readings, averaged over a 500m baseline is calculated. The resulting value (6 Nt in above example), is used to apply a correction for heading error during processing.

Each mag sensor will produce a unique result, however we typically apply a correction of 3Nt or less, to adjacent flight lines.

Lag Correction

Tests are performed to determine lag correction, by flying the drone magnetometer in opposite directions over top a ferrous object. Suitable objects include steel bridges, vehicles or heavy equipment.

Diagram 3 shows a typical flight test to determine lag correction.

A Geometrics MFAM magnetometer will typically have a lag error between 0.5 and 1.5 metres. Each mag sensor will produce a unique value. We typically apply a correction of 1m or less, to the location of magnetic readings on adjacent lines.

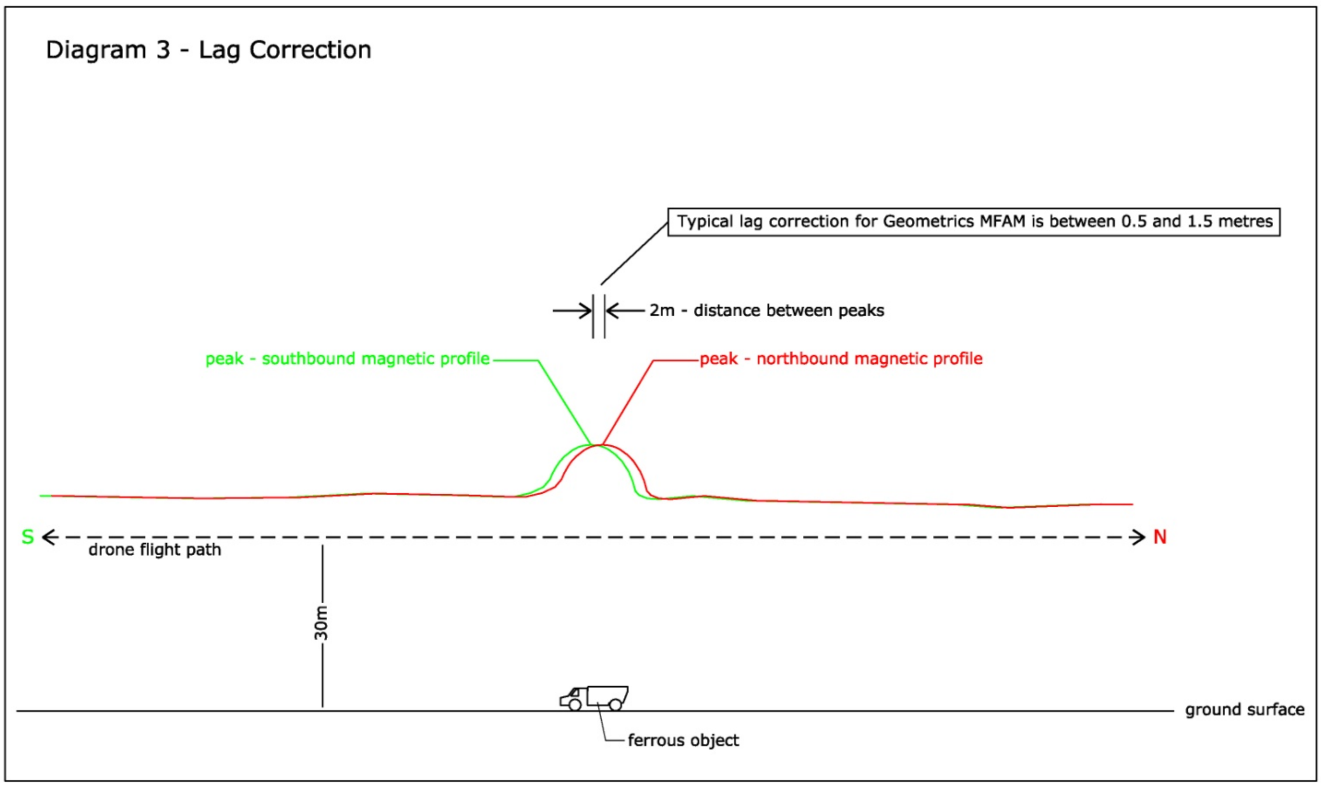


Diagram 3 - Lag Correction

Diurnal Correction

A Geometrics G856AX proton procession magnetometer is operated as a base station on all projects, to provide diurnal monitoring of the local magnetic field variations. Adjustment may be applied to the raw MFAM readings, when variations exceed 10 or more Nt over the course of any flight. However, we typically re-fly grid lines, if the magnetic field variation is excessive.

The location (UTM coordinate) of the base station is included in the report body.

Processing Steps

Diurnal is examined for flights covering tie lines.
If magnetic field variation is excessive during tie line flights, all readings across tie lines are corrected using the base station data.

Tie lines provide a framework for leveling grid lines.
Readings on grid lines (once corrected for heading error and lag), are translated to conform to the tie lines. This process involves adjusting individual grid line segments, based on tie line intersections.

Unlike conventional airborne survey, such as fixed-wing or helicopter, a drone will take-off and land multiple times during the course of a survey. The resulting ferry lines are removed from the overall dataset prior to processing. Zen Geomap has developed import templates that run in Geosoft Oasis Montaj, to accomplish this task.

Geometrics MFAM data is not directly compatible with industry-standard software such as Geosoft.
Zen Geomap has developed software (Python code) to convert raw MFAM data into a format compatible with Geosoft and other industry-standard geophysical software. The raw data from MFAM is processed through Python, prior to initial processing.

The Python code developed by Zen Geomap has been adopted by Geometrics, as the standard conversion software for drone-mounted MFAM. Geometrics has been the industry leader for airborne magnetometer equipment since 1969.