

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 MINES Assessment Purposes, 2023 Exploration Program

Greenbush Property

Greenbush Lake Area
Patricia Mining Division
Ontario, Canada

Prepared For:
Steven Dean Anderson



Prepared By:
James Bycroft

Date:
March 23, 2023



Contents

1	Introduction	4
2	Terms of Reference.....	4
3	Disclaimer	4
4	Property Description and Location.....	5
5	Access, Local Resources, and Infrastructure	7
6	Climate and Physiography	8
7	Geological Setting.....	8
	7.1 Regional Geology.....	8
	7.2 Larder Lake Property Geology	9
	7.3 Alteration and Mineralization	10
8	History of Exploration on the Property	11
9	Current Program and Results	12
	9.1 Mapping and Sampling Program	12
	9.1.1 Outcrop Description/Mineralization	13
	9.2 Geophysics Interpretation.....	17
10	Sampling Methods and Approach	20
11	Sample Preparation, Analysis, and Security	20
12	Interpretations and Conclusion	20
13	Recommendations	20
14	References and Literature	21
15	Statement of Qualification	22
16	Appendix I – Schedule of Costs.....	23
17	Appendix II – Assay Certificate.....	23

Figures

Figure 1: Regional Location	6
Figure 2: Greenbush Operational Claims.....	7
Figure 3: Greenbush Property Location	8
Figure 4: Spodumene crystals in very coarse-grained pegmatite, Greenbush property.	10



Figure 5: Mapping from Fladgate 2009 12
Figure 6: 2023 mapping and sampling overview 15
Figure 7: 2023 sample locations 16
Figure 8: Magnetic survey interpretation - grey scale 18
Figure 9: Magnetic survey interpretation..... 19

Tables

Table 1: Greenbush Operational Mining Claims..... 5
Table 2: Geological Summary of Formations - Pashkokogan Lake Area 9
Table 3: Exploration activities completed on Trillium’s Larder Lake Property 11
Table 4: Personnel Log..... 13
Table 5: Daily Logs 13
Table 6: 2023 Rockchip samples..... 13



1 Introduction

This report details the work during the Spring 2023 exploration program completed by Fladgate Exploration Consulting Corporation (Fladgate) and Marigold Minerals inc. on behalf of Steven Dean Anderson (Steven Anderson) on the Greenbush Property (the property) north of Thunder Bay, Ontario, Canada.

Steven Anderson acquired its interest in the property as part of its focus in discovering and developing an economic Lithium deposit.

2 Terms of Reference

This report was prepared at the request of Steven Anderson for the use of filling an assessment report as required under the Ontario Mining Act.

3 Disclaimer

This report is based on information from assessment reports, private reports and general geological reports and maps listed in the References and Literature Section. Although many authors of such reports appear to be qualified and the information appears to have been prepared to standards acceptable at the time, the presentation of the data does not meet present requirements and therefore the author is unable to ascertain the full quality of the information. The author does not take responsibility for the information provided from such sources.



4 Property Description and Location

The Greenbush property is located at the southern end of East Pashkokogan Lake, approximately 113 kilometres northwest of Armstrong, Ontario, Canada (Figure 1 & Figure 2). The property consists of 4 mining claims (546125, 546126, 546127, 546128), held 100% by Steven Anderson, in the Greenbush Lake Area of the Patricia Mining Division (Table 1).

The property terrain has moderate relief with <10% outcrop, however there is good outcrop exposure along the shoreline. There are a few small inland ponds with adjacent sphagnum swamps and marsh tracts. An esker running from the north to the southwest provides moderate topographic contrast.

Table 1: Greenbush Operational Mining Claims

Tenure ID	Township / Area	Tenure Type	Anniversary Date	Tenure Status	Tenure Percentage
546125	GREENBUSH LAKE	Single-cell Mining Claim	25/03/2023	Active	(100) STEVEN DEAN ANDERSON
546126	GREENBUSH LAKE	Single-cell Mining Claim	25/03/2023	Active	(100) STEVEN DEAN ANDERSON
546127	GREENBUSH LAKE	Single-cell Mining Claim	25/03/2023	Active	(100) STEVEN DEAN ANDERSON
546128	GREENBUSH LAKE	Single-cell Mining Claim	25/03/2023	Active	(100) STEVEN DEAN ANDERSON

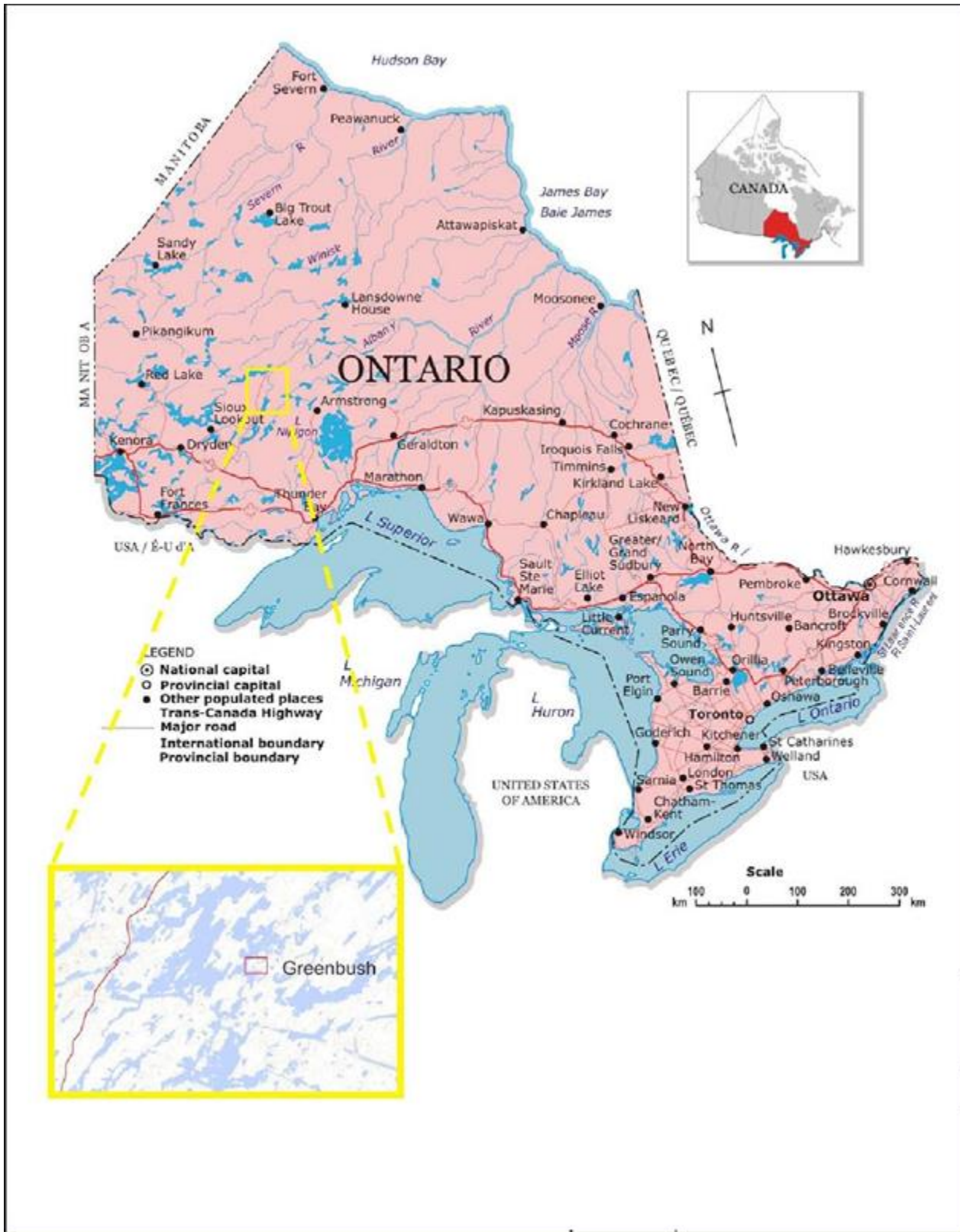


Figure 1: Regional Location

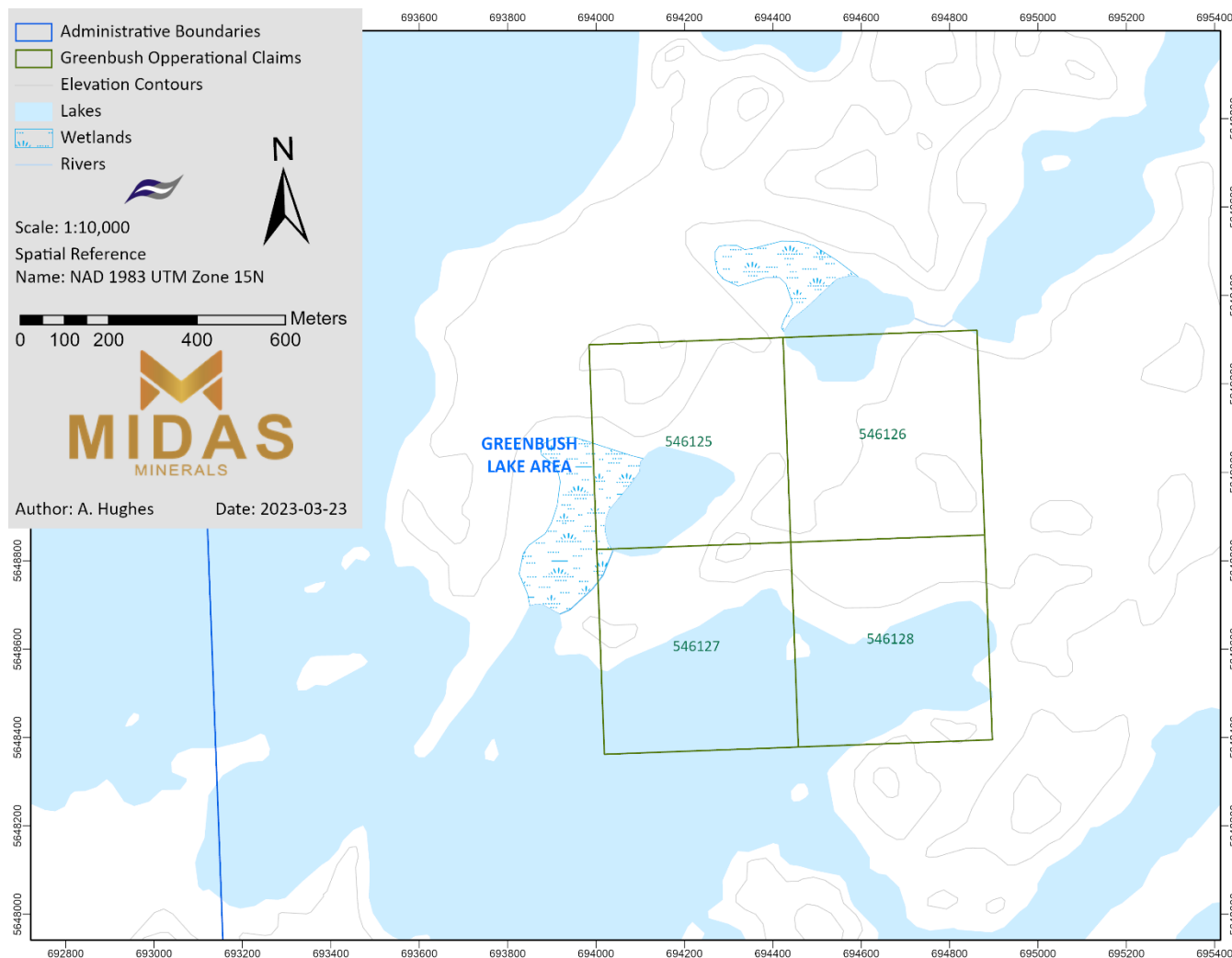


Figure 2: Greenbush Operational Claims

5 Access, Local Resources, and Infrastructure

There are no roads that lead directly to the property; however, the abundance of lakes and rivers in the area provide suitable access to remote areas via watercraft or snow mobile.

Primary access to the property is achieved by Highway 599, approximately 240 kilometers north of Ignace, to the west end of Pashkokogan Lake (inset, Figure 1 & Figure 3). It is a 27km boat ride from the west end of Pashkokogan Lake, north through the narrows, to the southern bay of East Pashkokogan Lake. The pegmatite outcrop of interest is located on the north shore of the southern bay, which lies in claim block 546127.

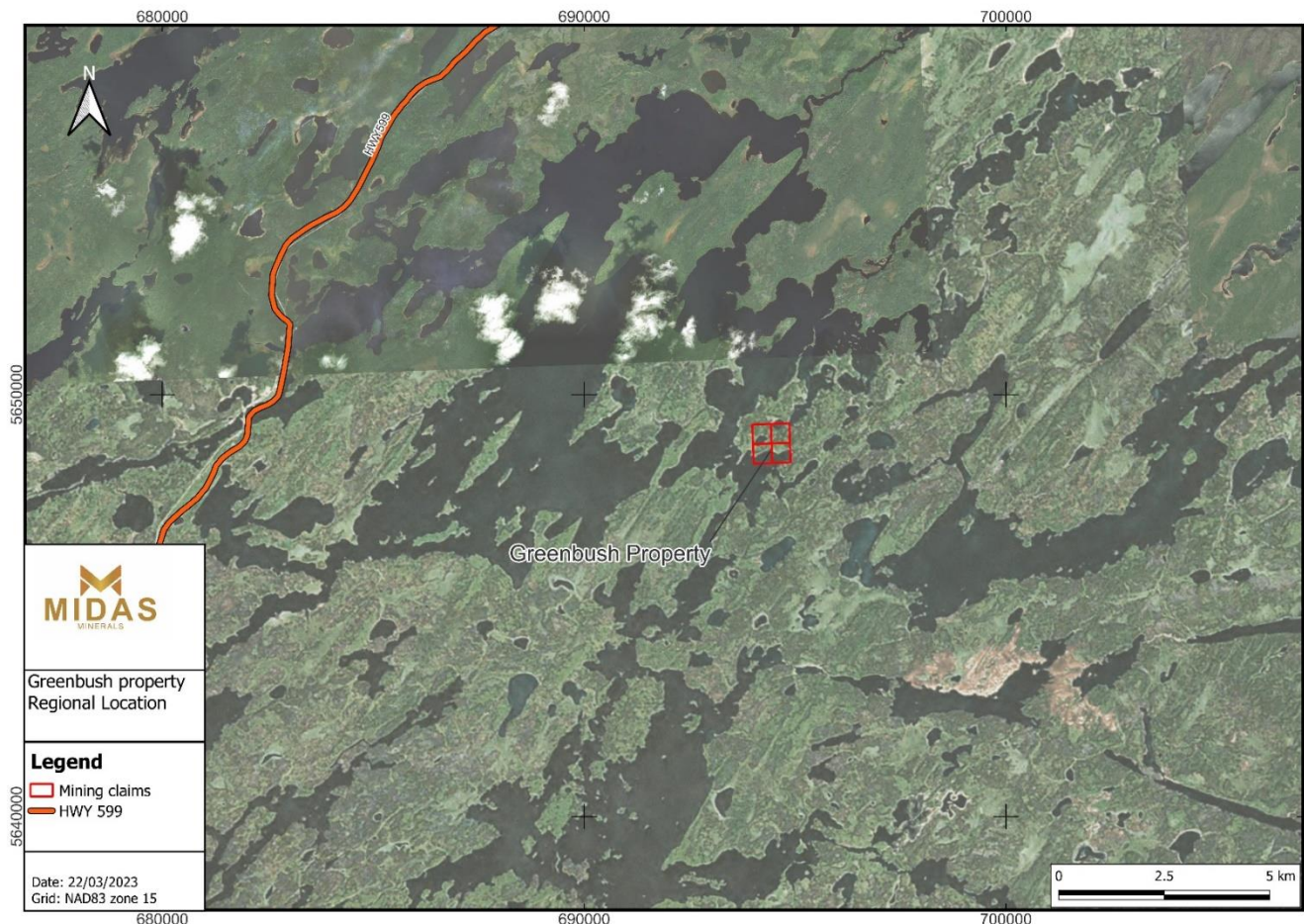


Figure 3: Greenbush Property Location

6 Climate and Physiography

Nearby climate data for March (Pickle Lake) an average temperature fluctuating between -14.4°C (6.1°F) and -2°C (28.4°F)

7 Geological Setting

7.1 Regional Geology

The bedrock in the area is reported (Goodwin, 1965) to be of Precambrian age. It is comprised of an older assemblage of metasediments and metavolcanics and associated mafic intrusions; younger felsic intrusions; and diabase dikes. The metavolcanics consist predominantly of felsic to mafic tuffs, flows and breccias and metamorphic equivalents. There are occasional dikes and sills as well as larger, irregular masses of metadiorite



and metagabbro. The metavolcanics of the older assemblage generally overlie but are also interzoned with the older metasediments.

Generally, the metasediments consist of quartz-mica schist, arkose, greywacke, staurolite-garnet- andalusite schist, pebble conglomerate and banded iron formation. Together they are conformably overlain by a substantial thickness of assorted felsic to mafic volcanic rocks in which several thinner zones of metasediments are associated. The intrusive rocks primarily include a massive to porphyritic granitic batholith extending to the northwest, as well as smaller granitic stocks, dikes and sills. Pegmatites of a wide variety of shapes and sizes occur locally and in great profusion near the south marginal contact of the granite batholith. Other instances of pegmatite dikelets were formed by injection along fractures.

The Precambrian assemblage is unconformably overlain by unconsolidated till, gravel, sand and clay, primarily of Pleistocene age.

The geological history of the Pashkokogan Lake Area has been summarized in Table 2 below, modified from Goodwin, 1965.

Table 2: Geological Summary of Formations - Pashkokogan Lake Area

CENOZOIC	
RECENT	Peat, river deposits.
PLEISTOCENE	Boulder till, gravel, sand, clay. <i>Unconformity</i>
PRECAMBRIAN	
LATE MAFIC INTRUSIONS	Diabase (dikes). <i>Intrusive Contact</i>
FELSIC INTRUSIONS ¹	Granite, granodiorite, porphyry, pegmatite, aplite. Granite gneiss, migmatite, granodiorite, pegmatite <i>Intrusive Contact</i>
EARLY MAFIC INTRUSIONS	Metagabbro, amphibolite, lamprophyre. <i>Intrusive Contact</i>
METAVOLCANICS ²	Mafic to felsic lavas, tuffs, breccias and metamorphic equivalents; iron formation; greywacke, shale and metamorphic equivalents.
METASEDIMENTS	Impure quartzite, arkose, argillite, greywacke, pebble conglomerate and metamorphic equivalents including quartz- mica schist, garnet-staurolite-quartz-feldspar schist, quartz- feldspar-andalusite schist; banded quartz-magnetite iron formation; mafic volcanic tuff and metamorphic equivalents including amphibole schist and feldspar-amphibole schist.

7.2 Larder Lake Property Geology

The Greenbush property is comprised primarily of felsic to intermediate metavolcanics with smaller, isolated outcrops of intermediate to mafic metavolcanics in the southern and eastern claim regions (Figure 5). According

¹ Age relationships between the two groups of felsic intrusions are not known
² The metavolcanics generally overlie but also include some of the metasediments



to Map 2094 in the Goodwin report, the schistosity of the metavolcanics is generally found striking west to southwest with a moderate to steep dip to the north.

A spodumene-bearing pegmatite zone, approximately 50 feet wide and 100 feet in exposed length, is situated on the northeast shore of the southeast bay of East Pashkokogan Lake (Goodwin, 1965).

7.3 Alteration and Mineralization

The mineralization of interest consists of coarse-grained spodumene-bearing pegmatites which are enriched in Li with associated Be, Cs, Ga, Nb, Rb, Sn and Ta (Figure 4).



Figure 4: Spodumene crystals in very coarse-grained pegmatite, Greenbush property.



8 History of Exploration on the Property

Past documentation is summarized in the following table.

Table 3: Exploration activities completed on Trillium's Larder Lake Property

YEAR	OPERATOR	WORK	PRINCIPLE REFERENCE
unknown	Ontario Department of Mines (assumed)	Chip sample across pegmatite outcrop, 50 feet in width	Goodwin, 1965 Geological Report No. 42
1980	Placer Development Limited	Ground magnetic survey, One hand sample	Kowalczyk, 1980 Report on a Magnetic Survey
2009	Canadian Orebodies	Mapping, 10 rockchip samples	Kowalczyk, 1980 Report on a Magnetic Survey

Goodwin (1965) provides little detail regarding past exploration of the historical MDI lithium showing of East Pashkokogan Lake. He does, however note the presence of a spodumene-bearing pegmatite which he himself sampled and later documented in Geological Report No. 42 for the Ontario Department of Mines. The spodumene-bearing zone of the pegmatite is about 50 feet wide and 100 feet in exposed length and is situated on the northeast shore of the southeast bay of East Pashkokogan Lake. A chip sample was taken across the full width of 50 feet and was analysed by the Laboratory Branch of the Ontario Department of Mines with the following results: 1.25% Li₂O; trace Be (about 0.03%); trace Cs (about 0.03%); trace Rb (low, about 0.15%).

Placer Development Limited later performed a ground magnetic survey covering the lithium showing from March 28 to April 22, 1980 (Kowalczyk, 1980). Their principal objective of work was to define a potential for economic tantalum mineralization. The survey was conducted by A.C.A. Howe International Ltd. and comprised of 300 readings over 8.73km of line with 30m station spacing and 120m line separation, and 64 readings over 0.4km of line, with 7.5m station spacing and line separation directly over the outcrop. The magnetic survey was determined unsuccessful in defining the contacts of the lithium-bearing pegmatite and was thus unable to define the potential size of the outcrop. Assay results from X-Ray Analysis Laboratories Ltd. returned 2.46% Li₂O and 0.01% Ta.

In the report, Kowalczyk only mentions the assay results for tantalum, and fails to mention the lithium results, and concludes that although Ta is geochemically anomalous, it is of no interest economically. It is assumed that the anomalous lithium values were of no economic interest at the time of the report.



Canadian Orebodies (2009) carried out reconnaissance mapping and sampling on the southern portion of the property, mainly to locate an historical showing. The program took place over two days where 10 grab samples were taken for analysis. Nearly all of the Greenbush property grab samples returned with anomalous results. Four of the 10 grab samples returned with assay results greater than 4,000 ppm lithium up to 9,120 ppm lithium (0.95% to 1.96% Li₂O), along with associated anomalous spikes in beryllium, cesium, gallium, niobium, rubidium, tin, and tantalum.

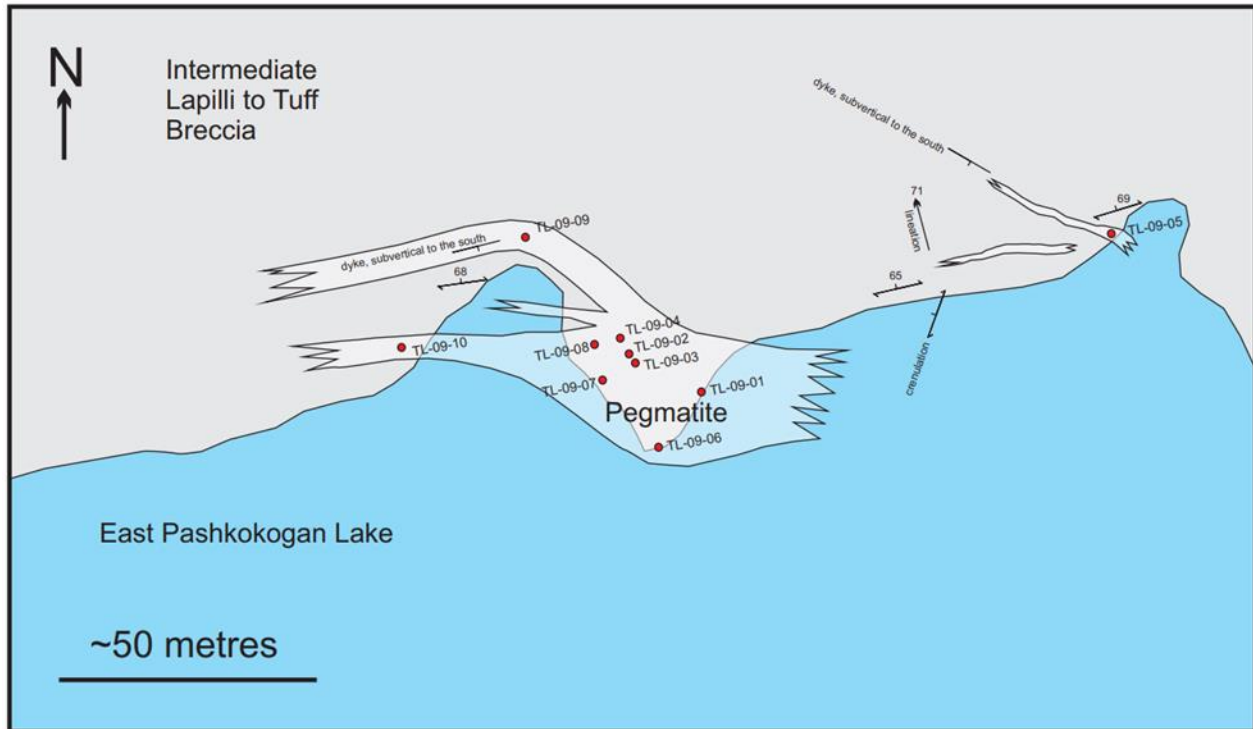


Figure 5: Mapping from Fladgate 2009

9 Current Program and Results

9.1 Mapping and Sampling Program

A mapping and sampling program was organized and performed by James Bycroft and Neil Pettigrew, P. Geo. The aim of the program was to further define the Lithium mineralisation of the historically mapped Pegmatite outcrop. The program was completed on the 14-15th of March 2023.

6 Rock chip grab samples were taken with assays pending. Sample GRK001 was observed to contain 30% Spodumene (see Table 6)

No Lepidolite was observed, possibly due to limited exposure from snow cover.

**Table 4: Personnel Log**

Name	Title	Start Date	End Date	Job Description
N. Pettigrew	Senior Geologist	March 14, 2023	March 15, 2023	Site visit. Prospecting and mapping
J. Bycroft	Senior Geologist	March 14, 2023 March 20, 2023	March 15, 2023 March 23, 2023	Site visit. Prospecting and mapping. Technical report writing
A. Hughes	Project Geologist	March 22, 2023	March 23, 2023	Technical report writing

Table 5: Daily Logs

Date (YYYY-MM-DD)	Work Description
2023-03-14	Travel to site from Thunder Bay by light-duty truck
2023-03-15	Access to site via snowmachine (20km) Pegmatite Outcrop 694269E, 5648683N (NAD83 zone 15)

9.1.1 *Outcrop Description/Mineralization*

The pegmatite was partially exposed on the lake edge, snow and ice obscured the full extent. The pegmatite appears to be frost heaved into 1-3m large blocks which have locally slumped.

Structural orientation was difficult to determine but appears to strike $\approx 75^\circ$ with a subvertical dip.

The pegmatite consists of Albite-Quartz-Microcline with zones of up to 30% Spodumene + Minor Muscovite and fine-grained Tourmaline (abundant in zones). Rare black opaques. Weak foliation along contact. Grain size varies significantly between 200mm to 2mm.

Spodumene are mostly white to light green, Dark green muscovite/cookeite alteration can be observed proximal to joints/minor brittle deformation.

Intermediate Metavolcanic subcrop 694326E 5648716N (NAD83 zone 15)

Metavolcanics were highly foliated, banded felsic/intermediate ortho schist. Disseminated sulphides throughout.

No other outcrops were found due to snow and till cover.

Table 6: 2023 Rockchip samples

Sample ID	Easting	Northing	Lithology	Comment
GRK001	694269	5648683	Pegmatite	grab sample - Qtz rich matrix with spd phenocrysts, low muscovite + minor tourmaline + rare opaques with iron staining. Coarse grained (10-30mm), spd high (30%) Mostly white to greenish tint.
GRK002	694272	5648689	Pegmatite	grab sample - Albite, qtz, spd, muscovite, very coarse grained up 100mm.



GRK003	694267	5648686	Pegmatite	grab sample - Qtz, Albite, Spd, Musc. Finer grained zone (3-10mm). 10% spd with minor chlorite alteration. Minor tourmaline. low albite alteration
GRK004	694268	5648684	Pegmatite	grab sample - K feld, Qtz, Musc. weakly foliated, contains minor zenolith inclusions?
GRK005	694268	5648685	Pegmatite	grab sample - Qtz, K feld, Albite, Spd. Spd rich zone with mod chlorite alteration
GRK006	694326	5648716	Intermediate Metavolcanic	Metavolcanic?, highly foliated, banded felsic/intermediate ortho schist, Disseminated sulphides throughout

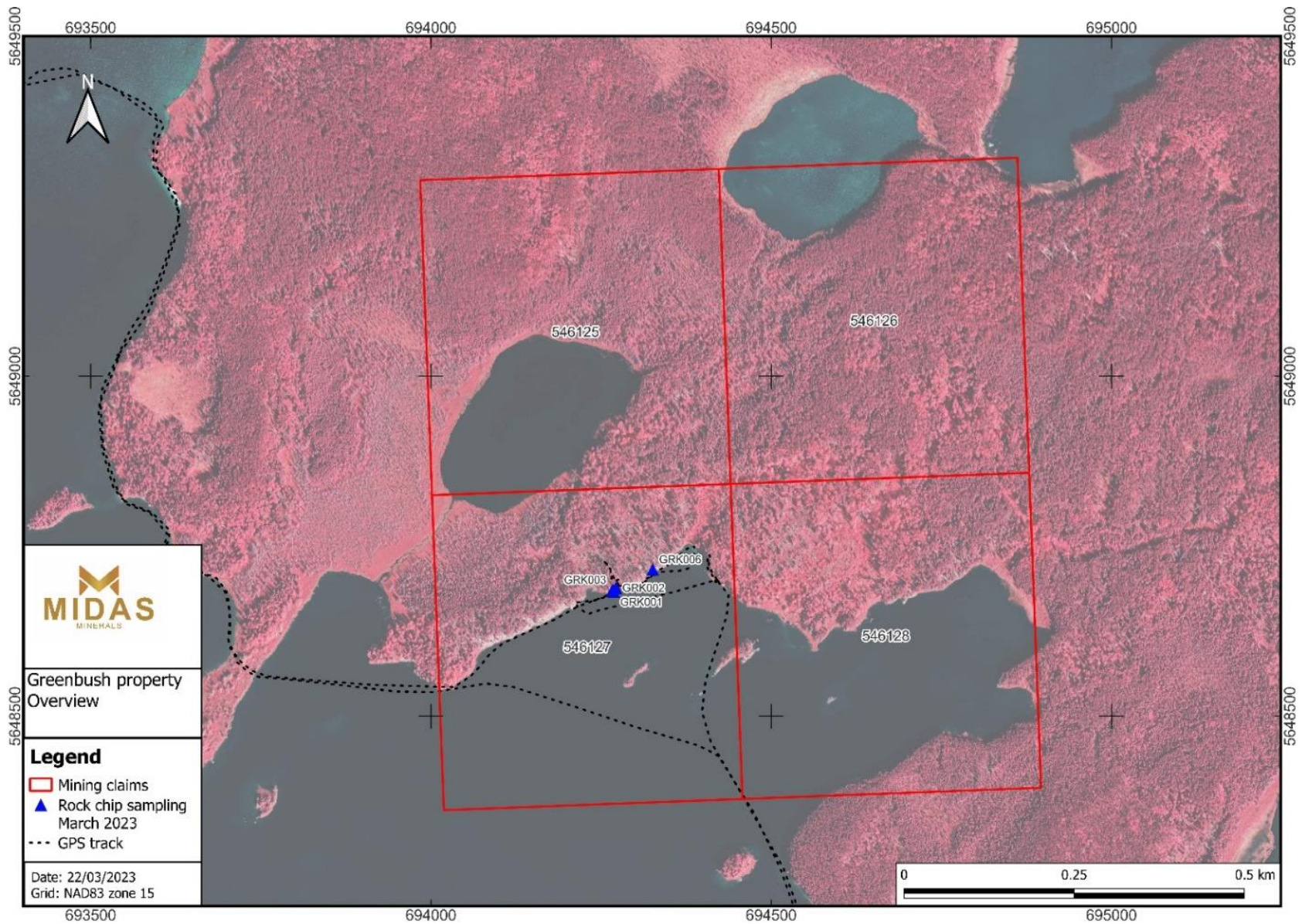


Figure 6: 2023 mapping and sampling overview

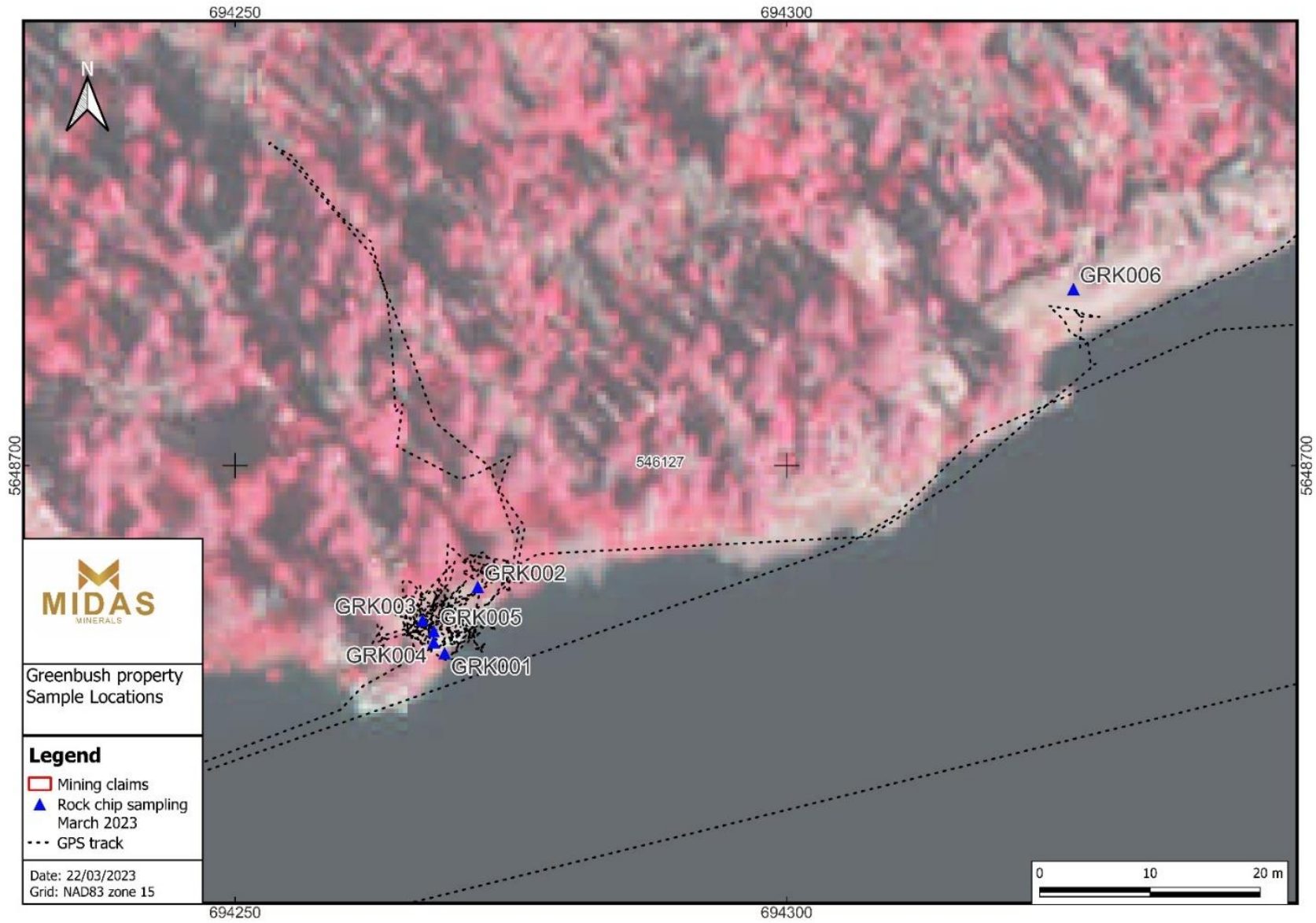


Figure 7: 2023 sample locations



9.2 Geophysics Interpretation

Utilising 2011 airborne magnetic survey (GDS1012-REV, Ontario Airborne Geophysical Surveys, Magnetic and Electromagnetic Data, Grid and Profile Data (ASCII and Geosoft® Formats) and Vector Data, Pickle Lake Area), a structural interpretation has been completed. Kinematic interpretation of magnetic intensity lineaments / offsets has been cross referenced with geological mapping data (Goodwin, 1965 & Jensen, 1991) to produce a project scale geo-structural model.

Specifically, the mapped Tonalite correlates with a broad zone of low magnetic susceptibility, whilst granodiorite appears relatively elevated in comparison - presumably reflecting the abundance of mafic phases. The intensity of magnetic susceptibility with the granodiorite is similar to the surrounding felsic volcanics. However, the orientation of magnetic lineaments is markedly different, with volcanics lineament patterns parallel to the Greenbush Lake fault and granodioritic patterns notably ovoid.

On a belt-scale, there is a pronounced cleavage within the volcanics (measured in field) that is absent/weak within the various igneous intrusives. Given that magnetic susceptibility lineaments parallel this cleavage, the intensity can be utilised as a proxy for paleo stress orientation and highlights the strain partitioning between the units.

This partitioning model predicts a dextral shear sense for the area; easily visualised by the augen-like magnetic lineations anastomosing around the Tonalite, which has behaved as an augen-like porphyroclast during shearing. Hypothetical tension gashes produced in this deformation regime mimic the orientation of the mapped LCT pegmatite. Therefore, the model will be utilised to predict the location of further LCT pegmatites within the tenure.

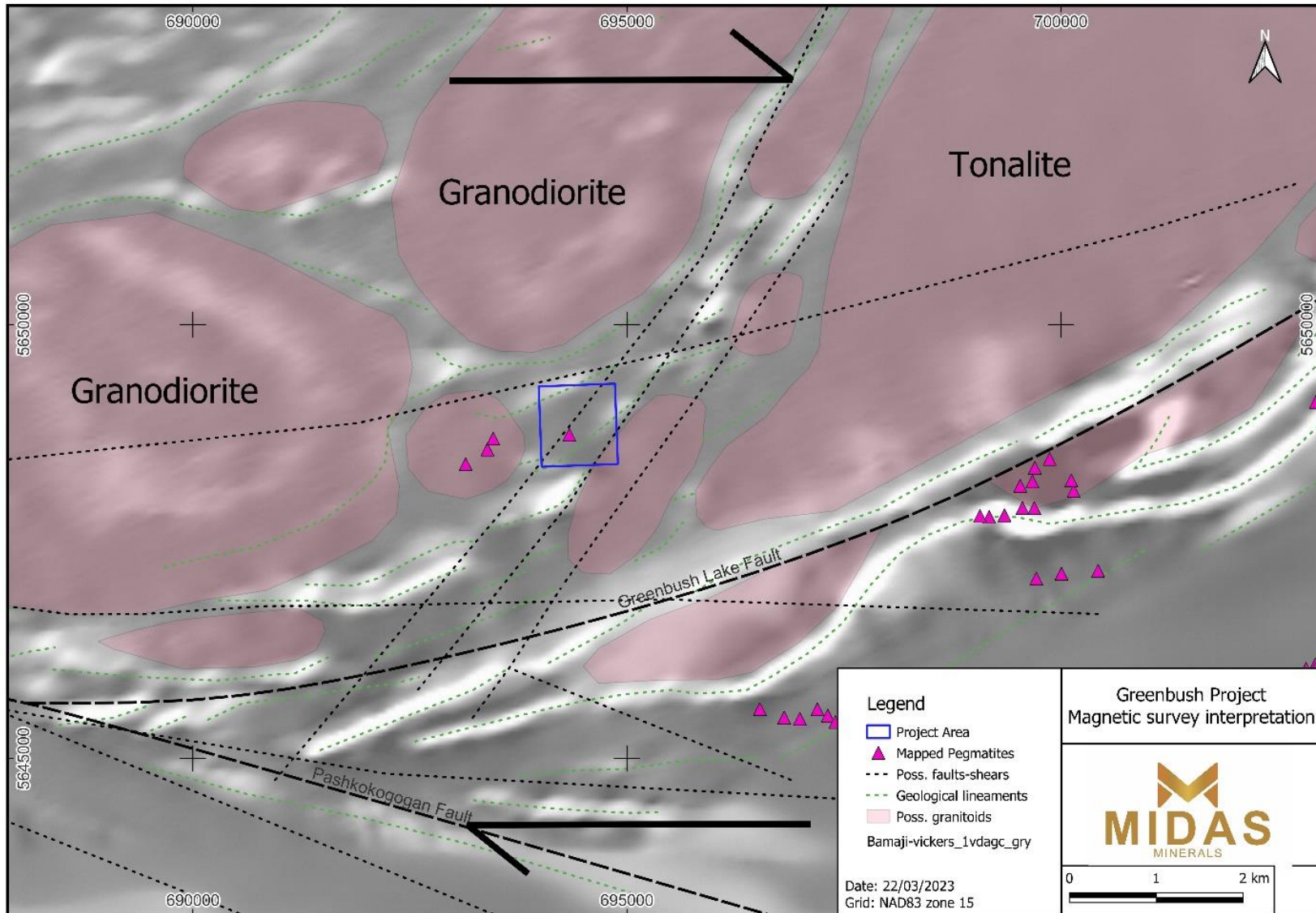


Figure 8: Magnetic survey interpretation - grey scale

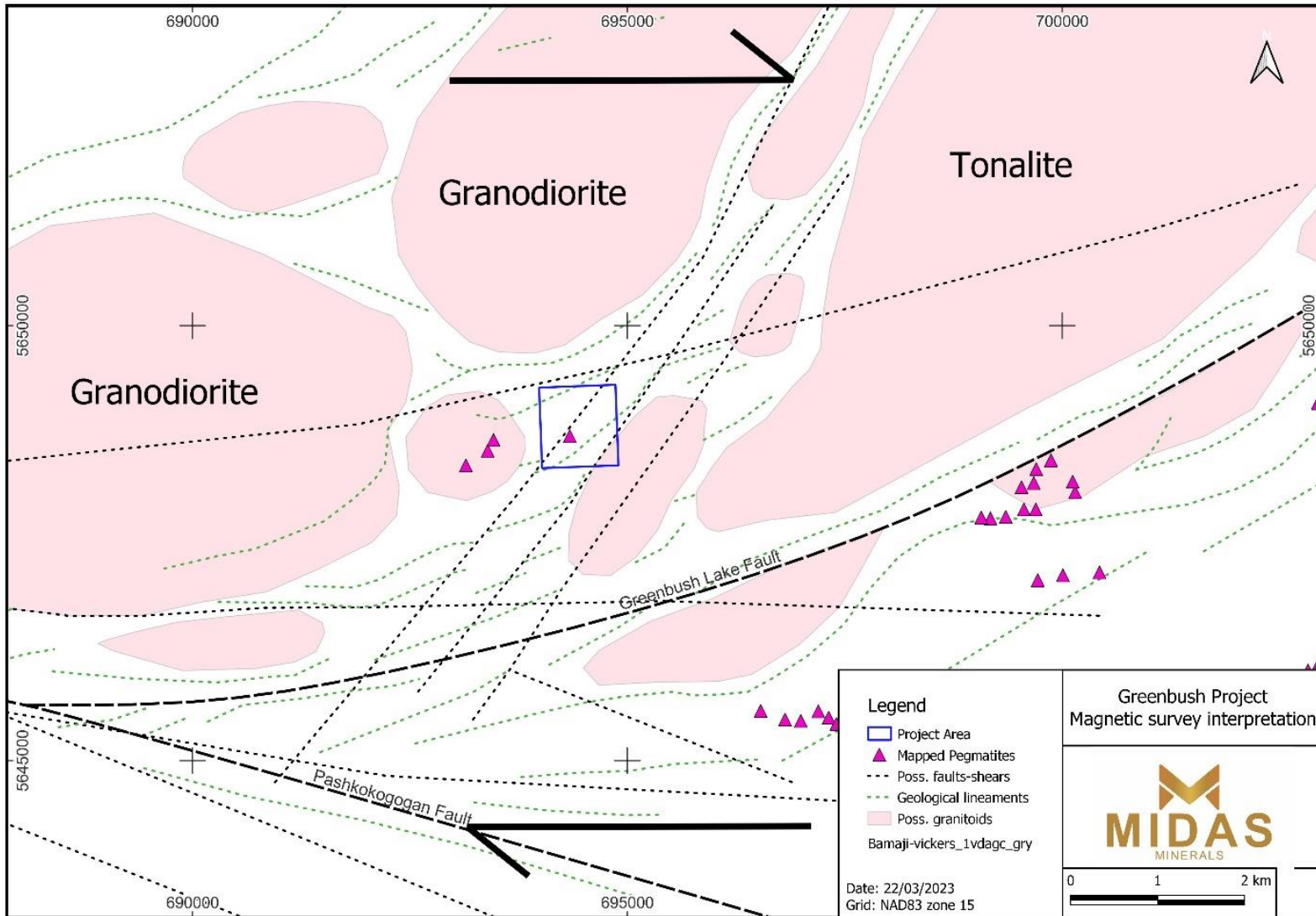


Figure 9: Magnetic survey interpretation



10 Sampling Methods and Approach

Whole rock samples of the pegmatite were taken by hand throughout the program. No standard, blank or duplicate samples were inserted with grab sample analysis.

11 Sample Preparation, Analysis, and Security

Upon collection rock samples were labeled, put in separate polybags, and transported to Fladgate's storage facility in Thunder Bay. At the date of this report there are no assays to report for the collected samples. Assay submittal and analysis is currently pending.

12 Interpretations and Conclusion

Spodumene appears to be the primary source of Lithium mineralisation.

13 Recommendations

It is recommended to follow up with a systematic program including geological mapping and sampling as well as trenching to expose the more of the pegmatite outcrop.



14 References and Literature

Author	Year	Title
Kowalczyk, Peter	1980	Report on a Magnetic Survey. East Pashkokogan Lake Claim Group, Belore Mines Ltd. by Placer Development Limited.
Jensen, L.S.	1991	Precambrian geology, Caron Lake area, south half; Ontario Geological Survey, Preliminary Map P.3087, scale 1:15840
Goodwin, A. M.	1965	Geology of Pashkokogan Lake-Eastern Lake St. Joseph Area, Districts of Thunder Bay and Kenora. Ontario Department of Mines -Geological Report No. 42
Goodwin, A. M.	1965	Map 2094 Pashkokogan Lake Sheet. Geology of Pashkokogan Lake-Eastern Lake St. Joseph Area, Districts of Thunder Bay and Kenora. Ontario Department of Mines - Geological Report No. 42.
https://www.weather-atlas.com/en/canada/pickle-lake-climate		Climate data for Pickle Lake



15 Statement of Qualification

Alexander Hughes, HB.Sc., P.Geo.
Fladgate Exploration Consulting Corporation
101 – 278 Bay St.
Thunder Bay, Ontario
Canada
Telephone: (807) 345.5380

CERTIFICATE OF THE AUTHOR

I, Alexander Hughes, 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 #3669).
3. I am a graduate of the Lakehead University (Hons. B.Sc., 2017).
4. I have practiced geology for 5 years in a variety of settings, mostly in Northwestern Ontario, Canada. I have specific experience in Archean lode gold deposits in Ontario as both a production and exploration geologist at various gold mines throughout Ontario.
5. 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.
6. 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

Dated March 23, 2023

Alexander Hughes, HB.Sc, P.Geo (APGO # 3669)



16 Appendix I – Schedule of Costs

Work Performed			
Date From	Date to	Description	Cost
14-Mar-23	15-Mar-23	Senior Geologist Consulting Fees (N. Pettigrew)	\$1,800.00
14-Mar-23	15-Mar-23	Senior Geologist Consulting Fees (J. Bycroft)	\$900.00
Travel			
Date from	Date to	Description	Cost
14-Mar-23	15-Mar-23	Truck Rental + (Mileage @ \$0.8 x 978km)	\$1,032.40
14-Mar-23	15-Mar-23	Snowmachine rental + emergency kit rental	\$680.00
14-Mar-23	15-Mar-23	Fuel	\$112.73
14-Mar-23	15-Mar-23	Accommodation	\$378.00
		TOTAL exc. HST ON	\$4,903.13

17 Appendix II – Assay Certificate

Assay submittal and analysis is currently pending.