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**Technical Report
On the
Barbara Lake Lithium Pegmatite Property**

**Thunder Bay Mining District
Northwestern Ontario, Canada**

Claims

596216 and 596219

**Prepared by:
Alexander J. R. Pleson
P. Geo
Pleson Geoscience
June 15th, 2022**

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1.0 SUMMARY

The pegmatite dykes, sills and lenses can be subdivided into rare-element pegmatites and granitic pegmatites. The rare-element pegmatites are of economic significance and they contain microcline or perthite, albite, quartz, muscovite and spodumene and minor amounts of beryl, columbite-tantalite and cassiterite. The granitic pegmatites are like the irregular pegmatites described above except that they contain more abundant plagioclase. Some of the pegmatites are parallel to the foliation or bedding of the metasediments, whereas others occur in joints in either the metasediments or granite. Contacts are usually sharp and, except where dykes cut granitic rocks, often found to be marked by a thin border zone of aplite or granitoid composition. A few pegmatites are internally zoned with mica-rich or tourmaline-rich rock along or close to the walls and quartz cores.

2.0 INTRODUCTION

2.1 Purpose of Report

The present report summarizes findings of exploration work carried out by Alex Pleson on August 1st and 2nd 2019. The work consisted of located historically sampled pegmatites and prospecting along strike length over the claims. A VLF survey has been completed on the property to examine the correlation between the surround metasediments, diabase dykes and the granodiorite host rocks. To date, the author is still waiting on the results and interpretation report from the contractor.

2.2 Sources of Information

This report is based on published assessment reports available from the Ministry of Northern Development, Mines (MNDM) Ontario, and published reports by the Ontario Geological Survey (OGS), the Geological Survey of Canada (“GSC”), various researches, websites, and results of present exploration work. All consulted sources are listed in the References section. The sources of the maps are noted on the figures. The exploration work was carried out under the supervision of the author who worked and supervised on the property in August and September 2018.

3.0 PROPERTY DESCRIPTION AND LOCATION

The Georgia Lithium Pegmatite Property consists of 8 mining claim units covering 162 hectares’ of land located in Thunder Bay Mining District of Northwestern Ontario, Canada on NTS sheets 42E05NW and 52H08NE (Figure 1 and 2). It is located approximately 145 to 160 km northeast of Thunder Bay.

Claim data is summarized in the Table 1, while a map showing the claims is presented in Figure 2.

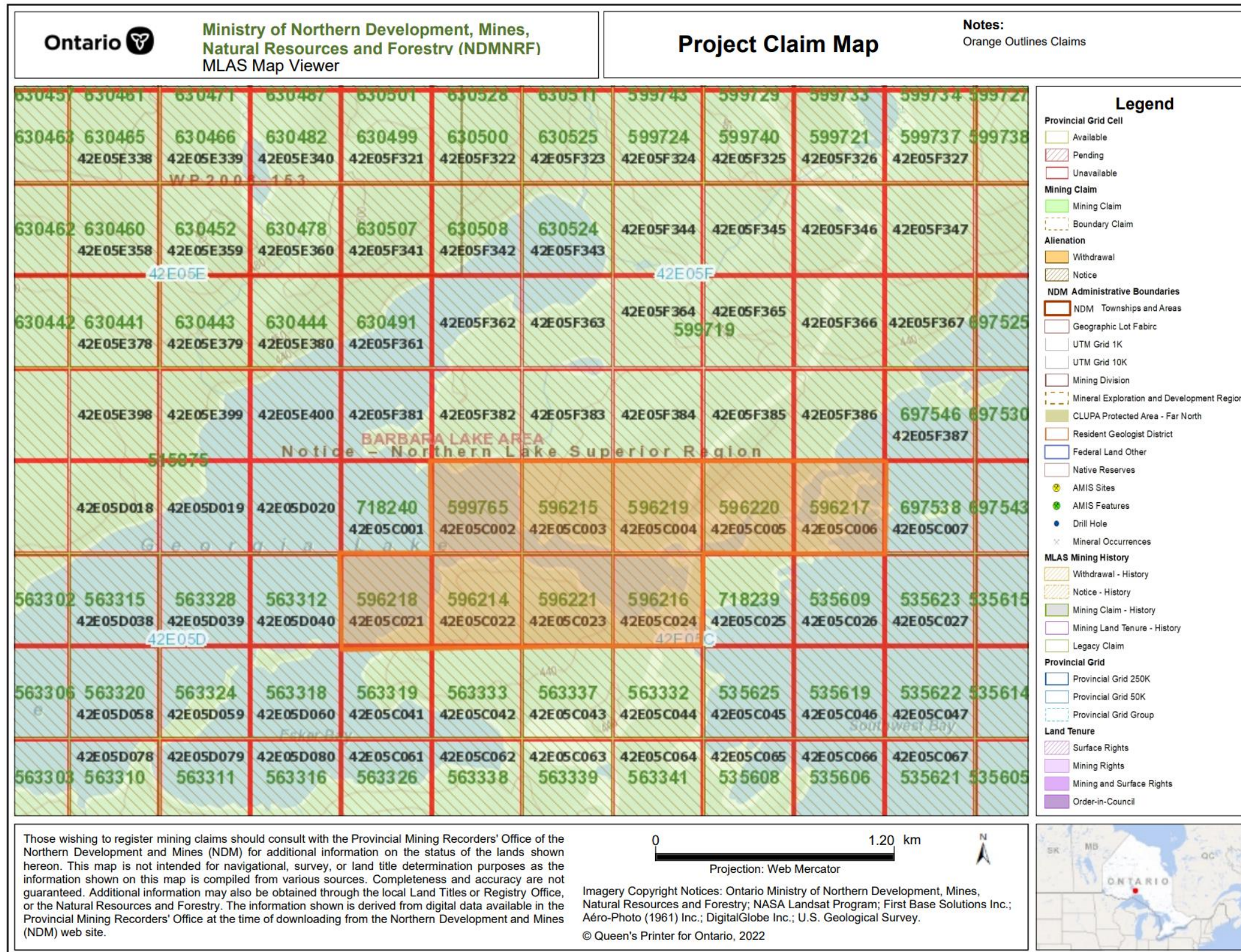
Table 1: Claim Data

Township / Area	Tenure ID	Tenure Type	Tenure Percentage	Work Required
BARBARA LAKE AREA	596221	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596220	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596219	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596218	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596217	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596216	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596215	Single Cell Mining Claim	100	400
BARBARA LAKE AREA	596214	Single Cell Mining Claim	100	400

Figure 1: Property Location Map



Figure 2: Mineral Claim Map



4.0 ACCESS, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES, AND INFRASTRUCTURE

4.1 Access

The Georgia Lithium project can be accessed by dirt roads off Highway 11 north of the town of Nipigon by driving 40 km north of the town of Nipigon on Highway 11, then driving approximately 23 km northeast on the Gorge Creek Road (Camp 75 Rd.) towards Little Jean Lake and continuing south towards Barbara Lake.

The claim block can also be accessed continuing east from the Jean Lake road on the Gorge Creek Road to km 32 where a small gravel road leads to the Barbara Lake Landing. The most efficient means of access is 6.8km south by boat down Barbara Lake. Walleye fishing is world class as well.

4.2 Climate

The forest of the Georgia Lake area is mixed growth of spruce, balsam, jack pine, poplar, birch and cedar (Pye, 1965). Vegetation is typical of continental climate a mixture of coniferous (pine and black spruce) and deciduous (primarily birch and minor poplar).

The climate is continental with cold and long winters (from November to late March) and significant snow accumulations. The temperature in the winter months (January and February) can reach -40° C but typically ranges between -10° and -25°C. The Canadian Climate normals for 1971-2000 from Environment Canada ([/www.climate.weatheroffice.gc.ca/climate_normals/](http://www.climate.weatheroffice.gc.ca/climate_normals/)) for Geraldton (closest weather station to the property) indicate that the daily average temperature ranges from -19°C in January to 17°C in July. The highest average accumulation of rain for a month is 112 mm in July. The highest average accumulation of snow for a month is 49 cm in November. The highest average snow depth is 48 cm in February. Drilling can be conducted year-round except for spring thaw in mid-March and April. Geological mapping and outcrop sampling can be conducted May to November when there is no snow on the ground.

4.3 Physiography

Pye (1965) summarized the topography of the Georgia Lake area:

“The Georgia Lake area is one of topographic contrasts. The parts of the area in which metasediments are exposed are, for the most part, of low relief. In contrast, the parts underlain by granitic rocks are rugged, with rounded hills rising to about 150 ft. (=45.7 m) above the general level. Most conspicuous, however, are high, imposing vertical or near-vertical cliffs at the boundaries of large exposed sheet-like masses of diabase.”

“Rock exposures in the area are abundant, and between the outcrops there is a thin mantle of glacial deposits. These glacial deposits consist mainly of stratified accumulations of unconsolidated sand and gravel. Some of them represent a ground moraine sorted by the action of glacial meltwaters; others form prominent terraces along the shores of Lake Nipigon and in the valley occupied by Keemle and Wanogu Lakes, and are abandoned beach deposits. Esker ridges also are present but are not high and do not extend for any great distances.”

The topography of the Georgia Lake Property is moderate. The minimum elevation is 250 m and the maximum elevation is 560 m above sea level. Thus, the range is 310 m. The low-lying areas are typically underlain by metasediments and the higher areas are underlain by Nipigon diabase.

4.4 Local Resources and Infrastructure

The town of Beardmore is the closest community, located approximately 40 km north of the Georgia Lake Property. Beardmore is part of Greenstone, an amalgamated town encompassing Nakina, Geraldton, Longlac, Beardmore, Caramat, Jellicoe, Macdiarmid and Orient Bay. The population of Greenstone is 4,906 people (Statistics Canada, www.statcan.gc.ca) and the population of Beardmore is approximately 150 people (<http://www.highway11.ca/ThunderBay/06Beardmore>). Beardmore has limited accommodation and restaurants.

The town of Nipigon, located about 50 km to the south of the Property has most of the basic supplies needed for exploration work in the Georgia Lake area. Nipigon has grocery stores, a hardware store, restaurants, hotels, a hospital and an OPP station. The population for Nipigon Township is 1,752 people in 2006 (Statistics Canada, www.statcan.gc.ca).

The town of Thunder Bay, located about 130-150 kilometres from the Property, is the largest city in Northwestern Ontario, serving as a regional commercial Centre. The town is a major source of workforce, contracting services, and transportation for the forestry, pulp and paper and mining industry. Thunder Bay is a transportation hub for Canada, as the TransCanada highways 11 and 17 link eastern and western Canada. It is close to the Canada-U.S. border and highway 61 links Thunder Bay with Minnesota, United States. Thunder Bay has an international airport with daily flights to Toronto, Ontario and Winnipeg, Manitoba, and the United States. There is a large port facility on the St. Lawrence Seaway System which is a principal north-south route from the Upper Midwest to the Gulf of Mexico.

The city of Thunder Bay has most of the required supplies for exploration work including drilling and geophysical survey companies, grocery stores, hardware stores, exploration equipment supply stores, restaurants, hotels, and a hospital. The population of the city of Thunder Bay was 109,140 people in 2006 (Statistics Canada, www.statcan.gc.ca). Many

junior exploration and mining companies are based in Thunder Bay, and thus the city is a source of skilled mining labour.

There are several lakes, rivers and creeks in and around the Property area which can be a source of water. Power lines are also within a few kilometers range.

(Source: http://www.thunderbaydirect.info/about_thunder_bay

http://www.thunderbay.ca/Doing_Business/About_Thunder_Bay.htm)

5.0 HISTORY

The discovery of spodumene in the Georgia Lake area was summarized by Pye (1965):

“One of the topics featured on the program of the annual convention of the Prospectors and Developers Association in spring 1955 was the lithium deposits of the Preissac-Lacorne area in Quebec (Latulippe and Ingham 1955). Samples of the lithium-bearing mineral spodumene were on display. Many years ago, Eric W. Hadley of Auden had discovered a body of pegmatite forming a reef in Georgia Lake (now known as Island Deposit). He noted that the pegmatite contained a prismatic mineral, which he could not identify and which he considered then to be of no value. At the convention, however, he observed that the spodumene on display was very like the mineral in the pegmatite at Georgia Lake. He immediately contacted Gordon Miller of Conwest Exploration Company Limited. An examination was made at once, and impressed with the occurrence, Mr. Miller submitted samples to E.G. Pye for positive identification. Pye, in turn, presented the samples to Dr. H. Quackenbush, a Fort William dentist and amateur mineralogist, who as part of his hobby, had built a spectroscope. With this spectroscope, Dr. Quackenbush confirmed that the mineral was spodumene, and immediately Mr. Miller proceeded to stake a large group of claims for his company.”

“As news of Hadley’s discovery was publicized, prospectors entered the area. About 3,200 claims were staked and within a short time numerous additional lithium deposits were located. Many of these deposits were tested by diamond drilling in 1955 and 1956. Due to lack of adequate markets, however, none of these have been developed. Except for some limited diamond drilling by the Ontario Lithium Company Limited to test the original discovery in July 1957, the area has remained inactive since 1956” (as of Pye’s 1965 report).

Detailed prospecting and diamond drilling completed by Rock Tech Lithium Inc. (Rock Tech), Infinity Lithium Corporation and Ultra Lithium Inc. (See figures 1-3 in the Maps and Charts section), on several of their properties in the Georgia Lake area has lead to the discovery of undocumented lithium-bearing pegmatite dikes.

Rock Tech has been active in this region since 2010 and has completed over 12,100 m of diamond drilling. This work has lead to the discovery of a NI 43-101 resource consisting

of 1.89 Mt grading 1.04% Li₂O (measured), 4.68 Mt grading 1.00% Li₂O (Indicated) and an Inferred resource of 6.72 Mt grading 1.16% Li₂O on the Nama Creek Zone (See Rock Tech’s news release dated August 2, 2018). This resource is located 7 km northwest of Bold’s Jean claim group.

Two diamond drill holes completed by Rock Tech in 2011 intersected the No.4 Dike on the eastern side of the Parole Lake patented claims. Hole PL-11-01 and PL-11-02 were located approximately 250 and 300 m respectively from the boundary with Bold’s newly acquired claims (See figure 3 in the Maps and Charts section). Hole PL-11-01 returned 7.29 m @ 1.76% Li₂O (including 5.15 m of 2.29% Li₂O) and Hole PL-11-02 returned 5.41 m @ 1.25% Li₂O (including 3.0 m @ 1.77% Li₂O). Reference: Caracle Creek International Consulting Inc., Author Adrian Peshkepia, M.Sc., P. Geo., Drill Report For 2010-2011 Winter Drilling Program, June 14, 2011, prepared for Rock Tech Lithium Inc.

An exploration program completed by the author in 2020 identified areas of prospective lithium mineralization. The work was completed over 2 days involving access and traversing around the historically discovered lithium pegmatite, noted in the MDI files as the “Georgia Pegmatite SE”.

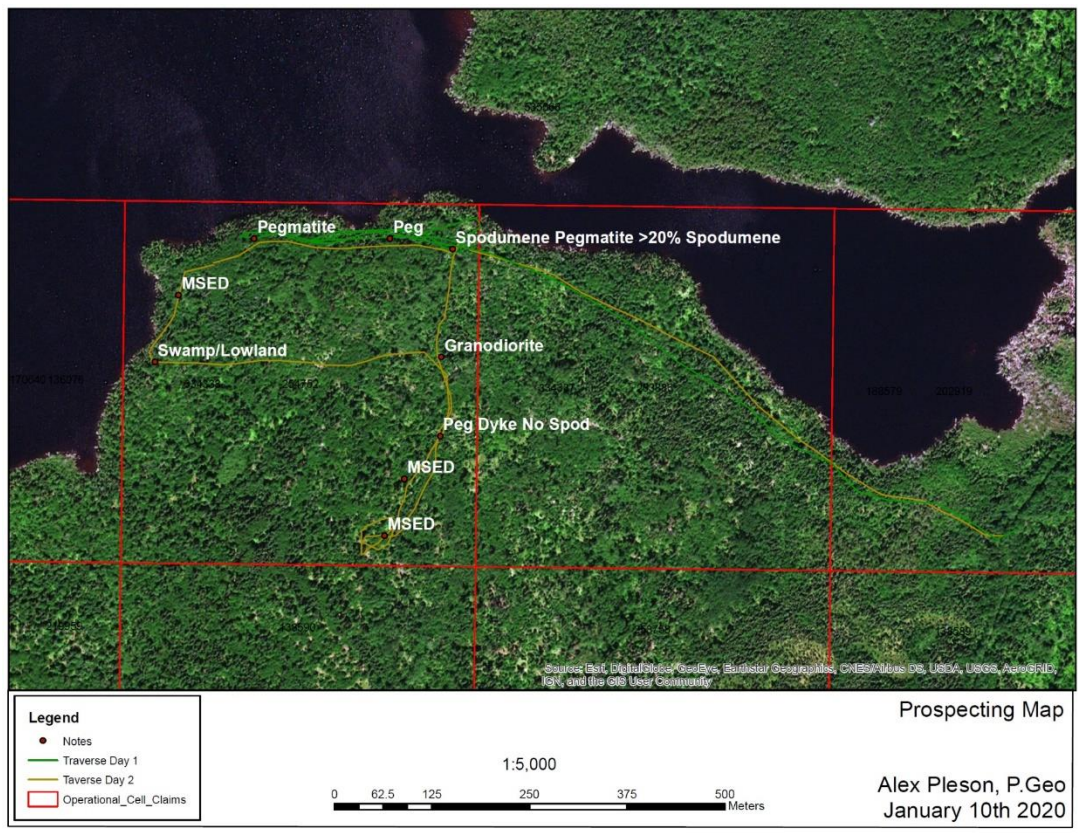


Figure 3 : 2020 Geological/Prospecting Program

6.0 GEOLOGICAL SETTING AND MINERALIZATION

6.1 Regional Geology

The Georgia Lake area is located within the Quetico Subprovince of the Superior Province. The Quetico Subprovince is bounded by the granite-greenstone Wabigoon Subprovince to the north and Wawa Subprovince to the south (Williams, 1991). The Quetico Subprovince is composed of predominantly metasediments consisting of wacke, iron formation, conglomerate, ultramafic wacke and siltstone, which deposited between 2.70 and 2.69 Ga. The igneous rocks in the Quetico Subprovince include abundant felsic and intermediate intrusions, metamorphosed rare mafic and felsic extrusive rocks and an uncommon suite of gabbroic and ultramafic rocks. The earlier felsic intrusions occurred 5 to 10 million years after the accumulation of sediments and are interpreted to be I-type intrusions. The later felsic intrusions occurred 20 million years after the sedimentation and are designated as S-type (White and Chapell, 1983).

The Quetico Subprovince was subjected to four deformational events between approximately 2700 and 2660 million years (Williams, 1991). The predominant stratigraphic-facing direction is north. Regional schistosity is variably developed and oriented and is interpreted to be the result of regional shortening and dextral shearing.

Four major faults cut through the Quetico Subprovince: the easterly trending Quetico fault, the Rainy Lake-Seine River fault, the northeasterly trending Gravel River fault (Williams, 1989) and the Kapuskasing Structural Zone (Selway 2011).

Metamorphism, migmatite formation and granite intrusion occurred between 2.67 and 2.65 Ga (Williams, 1991). The grade of metamorphism ranges from lower greenschist to amphibolite facies and tends to be lower in the marginal rocks of the subprovince and higher in the core regions.

Widespread economic mineralization within the Quetico Subprovince is generally lower than in the adjacent greenstone dominated terranes (Williams, 1991). Minor gold mineralization is associated with veining along the Quetico Fault (Poulsen, 1983). Molybdenite occurs in biotite leucogranites in the Dickinson Lake area. The only potentially important ore deposit type consists of the late-stage pegmatites that contain the rare elements lithium, beryllium, tantalum, niobium and tin (Williams, 1991). The rare-element pegmatites have widespread distribution in the Quetico Subprovince covering at least a 540-km strike length from west to east and a large percentage of pegmatites occur in the centre of the subprovince (Breaks, Selway and Tindle, 2006): Spodumene-subtype pegmatites at Wisa Lake, Lac La Croix area; Fertile granites and beryl-type pegmatites in Niobe-Nym lakes and Onion Lake areas; Albite-spodumene-type pegmatites of the Georgia Lake area; Complex-type, lepidolite subtype Lowther Township pegmatite near Hearst (Breaks, Selway and Tindle, 2003a).

The pegmatites in the Quetico Subprovince are hosted by metasediments and by their parent granite (Pye, 1965; Breaks, Selway and Tindle, 2003a, 2003b).

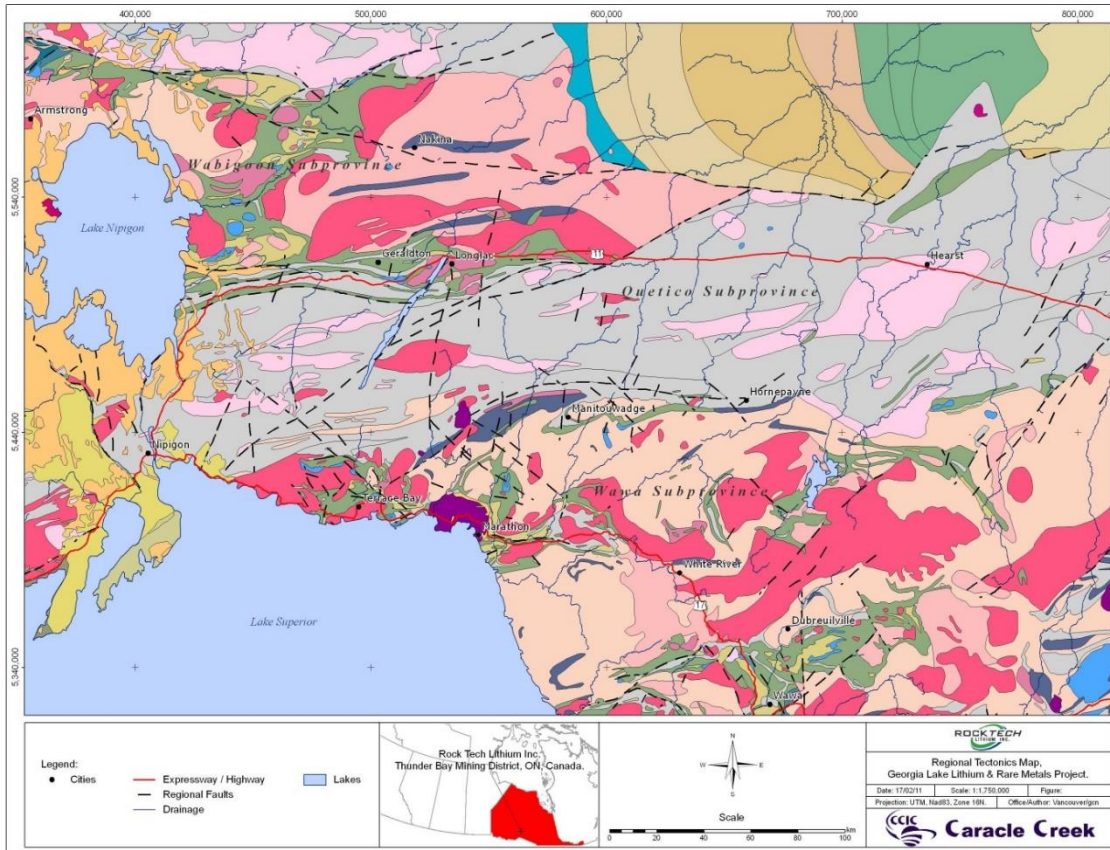


Figure 4: Regional geological map

6.2 Local Geology

The geology of the Georgia Lake area is of Precambrian age and is discussed by Pye (1965).

Metasediments

The oldest rocks are the Archean metasediments. The metasediments strike east-northeast and dip steeply, in general, to the north. The dominant metasedimentary rock is biotite-quartz-feldspar schist or gneiss. It is a grey, rather dark colored rock, having a distinct banded appearance due to compositional variations reflecting an original sedimentary stratification, with individual layers less than an inch to several feet thick. There is a distinct foliation due to parallel alignment of biotite crystals. Microscopic examination of the biotite-quartz-feldspar schist shows that it is made up of: 15-40 vol.% biotite, 20-35 vol.% quartz, 25-45 vol.% plagioclase, 1-3 vol.% magnetite, trace amounts of zircon and rare hornblende. Secondary minerals include chlorite, sericite and epidote. The plagioclase shows myrmekite texture. The most abundant texture in the biotite-quartz-feldspar schist or gneiss is granoblastic, but porphyroblastic rocks are also present with porphyroblasts of garnet, staurolite and cordierite.

Metagabbro

The metagabbro has intrusive relationships and have been metamorphosed and intruded by granitic rocks. East of Cosgrave Lake and south of Barbara Lake, the metasediments were intruded by metagabbro. The metagabbro bodies range in size from a few hundred feet across to 9,500 feet (=2.9 km) across. The metagabbro is dark-colored (mesocratic), medium- to coarse-grained with a brownish weathered surface. For the most part, it is massive, but it is gneissic near its contacts with metasediments. The major minerals are: green hornblende and plagioclase (sodic andesine). The minor minerals include: microcline and biotite and trace amounts of magnetite and apatite. The alteration minerals are chlorite, epidote and sericite.

The porphyritic metagabbro differs from the metagabbro only in the presence of feldspar phenocrysts (usually microcline). The feldspar phenocrysts are pale-pink to red, stubby, rectangular, subhedral to euhedral and range in size from ¼ by 1/8 inch (=0.6 by 0.3 cm) to 2 by 1 inches (5 by 2.5 cm). The porphyritic metagabbro is best developed near the margins of the metagabbro bodies close to the granites.

Metagabbro dykes and sills cross cut the metasediments near Dump and Pawky lakes and near Blay, Georgia and Conner lakes. All the dykes and sills are small with thicknesses of 3 feet or less (=0.9 m). They are thought to be genetically related to the metagabbro, as they are similar in appearance and composition. They are cross cut by pegmatite and feldspar porphyry dykes.

Granite

The metasediments were also intruded by large masses of granitic rocks and by numerous sills and dykes of genetically-related porphyry, pegmatite and aplite. The granitic rocks are

pale-grey or pale-pink in colour and their essential components are: 45-65 vol.% feldspar (microcline and plagioclase), 40 vol.% quartz, and one or both of muscovite and biotite and rarely little hornblende. The plagioclase has a composition of albite. Minor components of the granites include magnetite, zircon, and garnet, and secondary minerals: chlorite, sericite and epidote. For the most part the granites are equigranular, but porphyritic phases with microcline phenocrysts also occur. The contacts between the equigranular granitic rocks and the metasediments are generally abrupt.

Pegmatite

There is an abundance of pegmatites close to and within the large masses of granitic rocks. A regional zoning is apparent and a genetic association of pegmatites and granite is indicated. The pegmatites occur in two geometries: as irregular-shaped bodies and as thin dykes, sills and attenuated lenses. The irregular bodies of pegmatite are intimately associated with the granite bodies often within a few hundred feet of the contact zone. They typically are medium- to coarse-grained, up to very coarse-grained and are made up of quartz, microcline, perthite and little muscovite. These would be classified as potassic pegmatites. Accessory minerals include biotite, tourmaline and garnet.

The pegmatite dykes, sills and lenses can be subdivided into rare-element pegmatites and granitic pegmatites. The rare-element pegmatites are of economic significance and they contain microcline or perthite, albite, quartz, muscovite and spodumene and minor amounts of beryl, columbite-tantalite and cassiterite. The granitic pegmatites are like the irregular pegmatites described above except that they contain more abundant plagioclase. Some of the pegmatites are parallel to the foliation or bedding of the metasediments, whereas others occur in joints in either the metasediments or granite. Contacts are usually sharp and, except where dykes cut granitic rocks, often found to be marked by a thin border zone of aplite or granitoid composition. A few pegmatites are internally zoned with mica-rich or tourmaline-rich rock along or close to the walls and quartz cores.

Diabase

Intrusive into the Proterozoic sedimentary rocks and the older formations are bodies of diabase. The largest occur as flat sheets (Logan sills), up to about 650 ft. (=198.1 m) in thickness, and as dykes of vertical or near-vertical attitude. Most of the dykes are related closely to the sheets and are Keweenawan age. The gently dipping diabase sheets are dark colored and massive. The diabase sheets are well-jointed and most of the joints are vertical or steeply dipping. In outcrop, the diabase shows poorly-formed columnar structure.

There are two types of diabase dykes: one is equigranular and the other is porphyritic. The equigranular dykes are more abundant. Some of the dykes along or close to the contact zone of the large granite mass strike easterly; most dykes in other localities strike north or within 20° of north. With few exceptions, the dykes are vertical or dip steeply. The porphyritic diabase dykes are massive medium-grained, dark-colored rock characterized by

many pale-greenish yellow phenocrysts of highly altered plagioclase. Porphyritic diabase dykes are found near the Jackpot deposit.

6.3 Property Geology

The following lithium pegmatites are located in close proximity to the Georgia Lake Lithium pegmatite.

1. Jean Lake Pegmatites

Giles Pegmatite: is exposed on Treasure Island about midway along the south shore of Jean Lake (ULI claim 4255313). It runs at N80°E strike, dips steeply at 70° - 80° S, and was traced in surface exposures and diamond-drillholes for approximately 200 metres with width of 4-15 metres. Surface sampling during 1956-7 period indicated average lithium content of 1.25% Li₂O.

Trans Pegmatite: is a spodumene bearing lithium pegmatite dike cutting metasediments exposed along the north shore of Jean Lake (ULI claim 4266309). It strikes N50°W and dips vertically to steeply east. It is exposed for about 250 m along the lake shore with width range of 1-2 m.

Camp Pegmatite: occurs in metasediments, on the south shore of a small pond along the river connecting the west end of Jean Lake with Parole Lake (ULI claim 4266308). It strikes N50°W and dips vertically, exposed over a length of 40 metres, having a width of 2-3 m, with 25 to 30% spodumene and lithium content of 1.5% Li₂O or better.

2. Parole Lake Pegmatite

Parole Lake pegmatite: is exposed about 50 ft (=15.2 m) west of the shore of Parole Lake, northeast of Jean Lake. It strikes easterly and dips 80-85°S. This pegmatite appears to be layered perpendicular to strike. The layering consists of a K-feldspar-rich layer with minor fine-grained quartz and muscovite. The matrix between the bands consists of 50 vol.% spodumene, 25 vol.% quartz, 15-20 vol.% feldspar and 5-10 vol.% muscovite. The spodumene is pale green and occurs as slender, well oriented prismatic crystals averaging 2 in (=5.1 cm) or less in length. The spodumene is in a fine-grained matrix of quartz, plagioclase and muscovite. There is weak zonation with the outer parts of the pegmatite is more feldspar and muscovite-rich than the center of the pegmatite which is more spodumene-rich.

7.0 EXPLORATION WORK

The exploration program carried out in June 2022 covered four (4) line kilometers of ground electromagnetic at 100 meter line spacing (readings ever 50 meters) surveys using a Geonic's EM-16 handheld VLF instrument. The goal of the project was to identify any anomalies/conductors which could possibly represent buried pegmatite dykes or prospective fractures which can be traced to discover more lithium pegmatite dykes. The program was designed to cut across structures where the lines were surveyed perpendicular to the 1 known spodumene bearing pegmatite on the property. Currently the project is optioned to United Lithium Corp. (<https://unitedlithium.com/projects/canada/#:~:text=The%20Barbara%20Lake%20Lithium%20Property,Mining%20District%2C%20Ontario%2C%20Canada>)

A total of 3 days (June 6th, 7th, and 8th 2022) were spent surveying the property as access into the pegmatite area is fairly difficult and is easiest using an ATV to arrive at the Narrows between Barbara Lake and Georgia Lake and then taking a short portage and canoeing the shoreline to the west on Georgia Lake. The central portion of the grid crosses the road and an old bridge exists between the narrows to cross. This old road also connects to other lithium showings to the north near Jean Lake (Giles Pegmatite).

Due to an administrative error when transferring the proposed lines to a Garmin GPS to perform the survey, ~5% of the data/survey lines ended up lying off the author's property and the survey accidentally crossed into neighbouring claims. This will reduce the total eligible assessment credit by 5% (from \$7,904.50 to \$7,509). Null readings were also report for any lake lines, which can be infilled this winter and would be recommended (there are multiple pegmatite outcrops on small islands on the western portion of Georgia Lake).

It is important to note that in order to process the data using IXVLF software the author had to add in a "0" or "null" reading for stations which lye in the lake until additional readings can be taken this winter. This gives the appearance of no conductors on the processed map but this could be misleading as no data was collected on the lake.

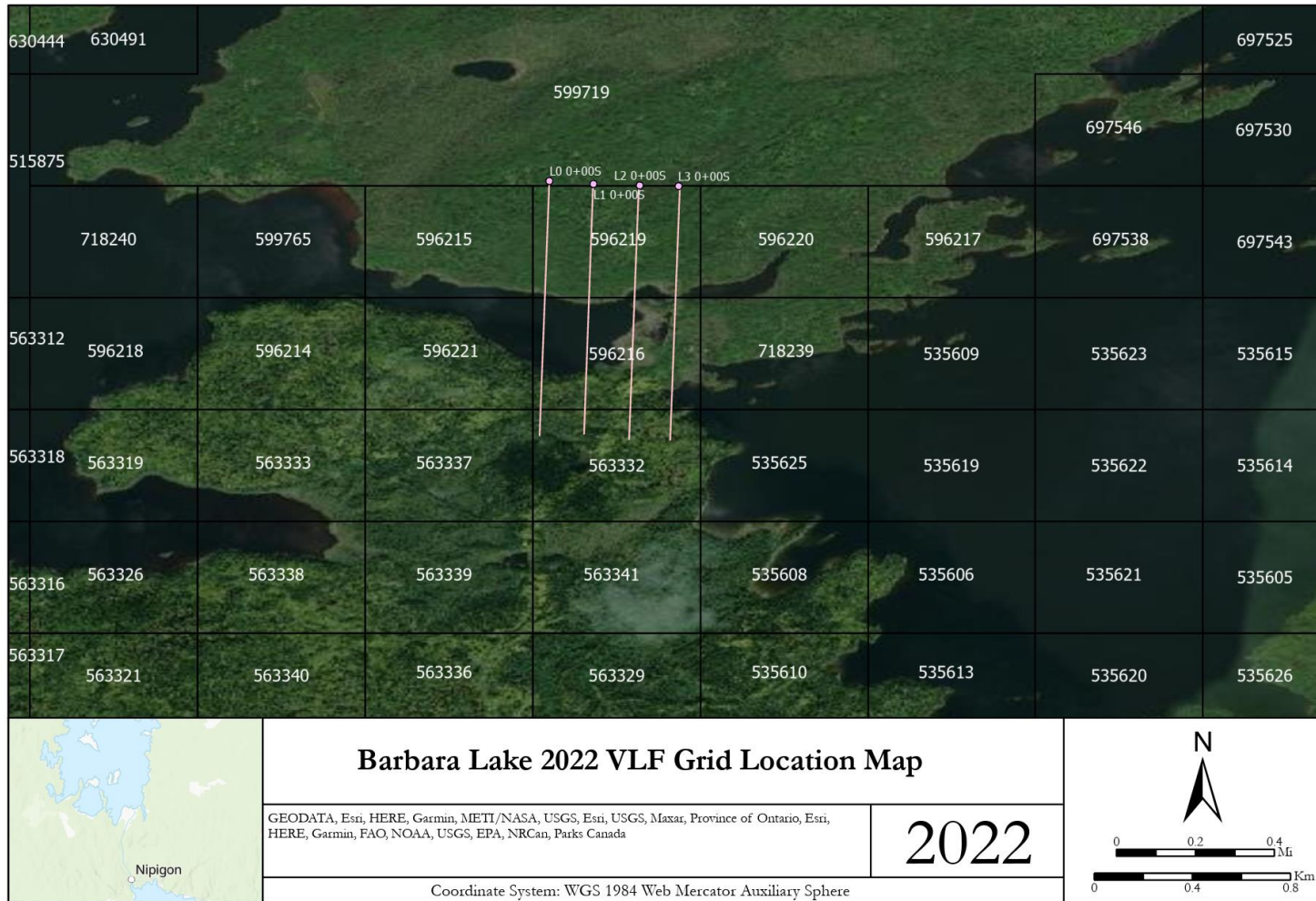
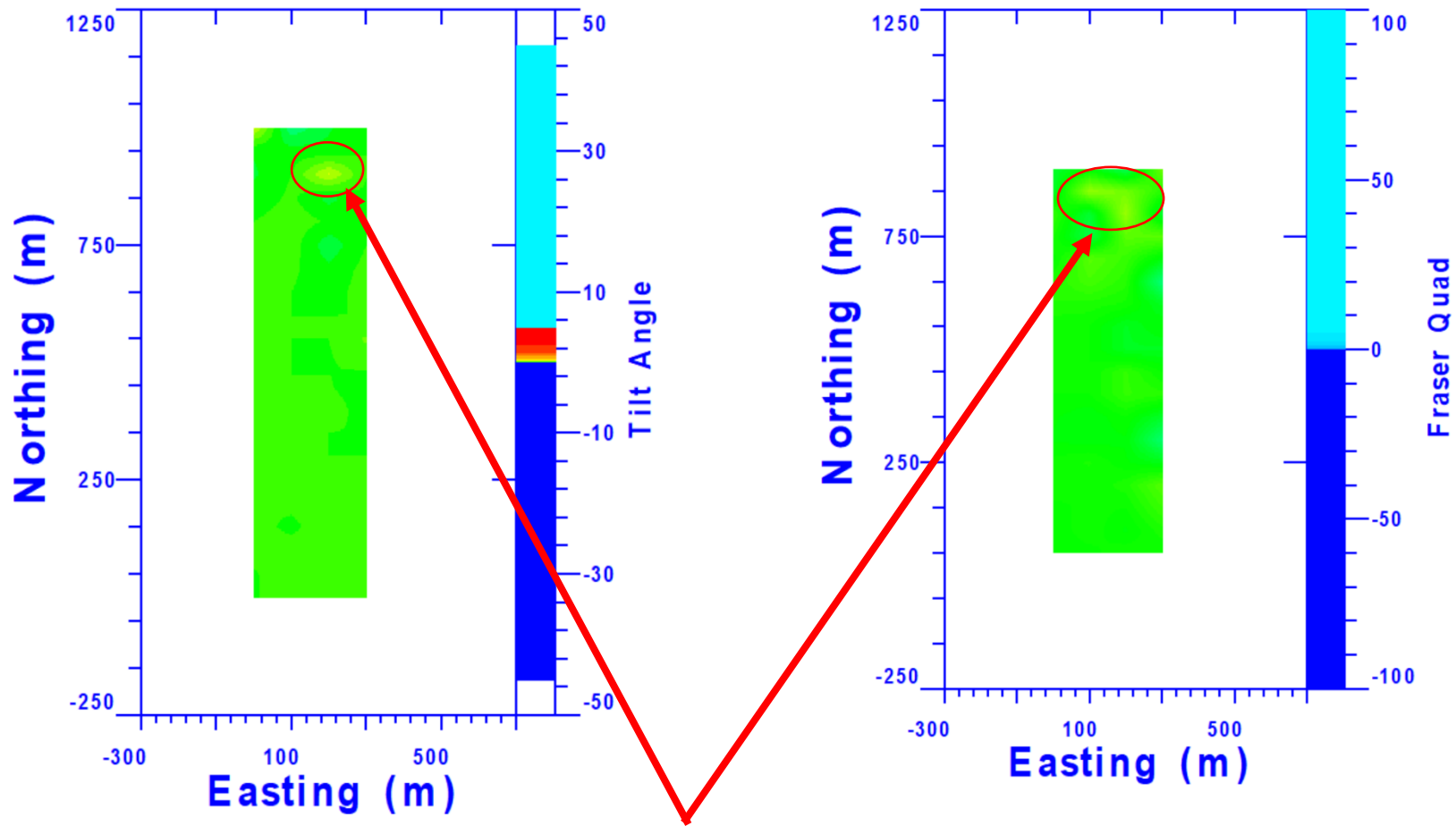


Figure 5: VLF Grid Location Map

Figure 6: Processed VLF Data using Tilt Angle and Fraser Filters to highlight the single anomaly (UTM 16N 438037 E / 5464459 N)



8.0 EXPLORATION RESULTS AND RECOMMENDATIONS

The Georgia Lithium pegmatite was one of the initial discoveries made in the Georgia Lake Area in the 1950s. The dyke prospected in 2020 was determined to be at least 3 meters wide and strikes for at least 400 meters. The observed spodumene content is at least 20% which should translate into at least 1-2% LiO₂ assays. The survey identified 1 linear conductor which requires follow up exploration work. This feature is most likely a diabase dyke, pegmatite, or large fault. Prospecting or trenching can efficiently define the target depending on overburden depth. Soil sampling is recommended before drilling. However, the current bridge across the narrows is not suitable for heavy equipment and machinery would have to be brought in through another trail which would take extensive work.

An exploration permit should be applied for and trenching work along the dyke and discovered anomaly is highly recommended. Soil sampling could also be used to develop trenching targets (International Lithium had minor success in blindly locating pegmatites to 40km west of this project using soil techniques).

11.0 REFERENCES

- Breaks, F.W. (1980): Lithophile mineralization in northwestern Ontario: rare-element granitoid pegmatites; *in* Summary of Field Work and Other Activities 1980, Ontario Geological Survey, Miscellaneous Paper 96, p. 5-9.
- Breaks, F.W., Selway, J.B. and Tindle, A.G. (2003a): Fertile and peraluminous granites and related rare-element mineralization in pegmatite, Superior Province, northwest and northeast Ontario: Operation Treasure Hunt; Ontario Geological Survey, Open File Report 6099, 179p.
- Breaks, F.W., Selway, J.B. and Tindle, A.G. (2003b): Fertile and peraluminous granites and related rare-element pegmatite mineralization, Barbara-Gathering-Barbaro lakes area, north-central Ontario: *in* Summary of Field Work and Other Activities, 2003, Ontario Geological Survey, Open File Report 6120, p.14-1 to 14-13.
- Breaks, F.W., Selway, J.B. and Tindle, A.G. (2008): The Georgia Lake rare-element pegmatite field and related S-type, peraluminous granite, Quetico Subprovince, north-central Ontario; Ontario Geological Survey, Open File Report 6199, 176p.
- Harris, F.R. (1970): Geology of the Moss Lake area; Ontario Department of Mines, Geological Report 85, 61p.
- Latulippe, M. and Ingham, W.N., 1955: Lithium deposits of the Lacorne area, Quebec; paper presented at the 1955 Convention of the Prospectors and Developers Association.
- London, D., 2008: Pegmatites, Mineralogical Association of Canada, Special Publication 10, Quebec City.
- Mulligan, R. (1960): Beryllium occurrences in Canada; Geological Survey of Canada, Paper 60-21.
- Peshkepia, A. (2011): Drill Report for 2010-2011 winter drill program, Nama Creek, Conway, Jean Lake, Aumacho, Georgia Lake pegmatite field, Ontario, Canada, NTS sheets: 42E05NW and 52H08NE, prepared for Rock Tech Lithium Inc., dated June 14, 2011, MNDMF assessment file number pending.
- Percival, J.A. (1989): A regional perspective of the Quetico metasedimentary belt, Superior Province, Canada; Canadian Journal of Earth Sciences, v.26, p.677-693.
- Perdue, H.S. (1938): Couchiching, Kashabowie Lake, Ontario; Journal of Geology, v.46, p.842-867.
- Poulsen, K.H. (1983): Structural setting of vein-type gold mineralization in the Mine Centre-Fort Frances area: implications for the Wabigoon Subprovince; *in* The

- Geology of Gold in Ontario, Ontario Geological Survey, Miscellaneous Paper 110, p.174-180.
- Pye, E.G. (1965): Georgia Lake Area, Ontario Department of Mines, Geological Report No. 31.
- Selway, J.B., Breaks, F.W., and Tindle, A.G. (2005): A review of rare-element (Li-Cs-Ta) pegmatite exploration techniques for the Superior Province, Canada and large worldwide Tantalum deposits, *Exploration and Mining Geology*, v. 14, p. 1-30.
- Selway, J., Magyarosi, Z, Ronacher, E., Tucker, M., Peshkepia, A., McKenzie, J. (2011): Independent Technical Report, Georgia Lake Lithium Property, Beardmore, Ontario, Canada, prepared for Rock Tech Lithium Inc., dated Mar. 25, 2011.
- White, A.J.R. and Chappell, B.W. (1983): Garnitoid types and their distribution in the Lachlan Fold Belt, southeastern Australia; in *Circum-Pacific Plutonic Terranes*, Geological Society of America, Memoir 159, p.21-34.
- Williams, H.R. (1991): Quetico Subprovince; in *Geology of Ontario*, Ontario Geological Survey, Special Volume 4, p.383-404.
- Zayachivsky, B. (1985): Granitoids and rare-earth element pegmatites of the Georgia Lake area, northwestern Ontario; unpublished M.Sc. thesis, Lakehead University, Thunder Bay, Ontario, 234p.

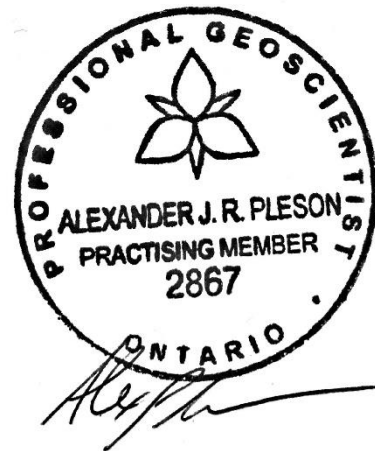
12.0 CERTIFICATE OF AUTHOR

I, Alexander Pleson, P.Geo., as an author of this report regarding the exploration project in the Thunder Bay Mining District, Northwestern Ontario, Canada; do hereby certify that:

1. I am a consulting geologist at Pleson Geoscience of Nipigon, ON, CA P0T 2J0
2. I have B.Sc. degree in Geology from Lakehead University.
3. I am registered as a Professional Geologist in Ontario (License #: 2867).
4. I have been practicing as a professional since 2017, and have 13 years of experience in mineral exploration.
5. The exploration work was carried out under my supervision and I was on site through the duration of the project.
6. I hold 100% interest in the claim(s) noted and connected to this report as defined as the "Barbara Lake Lithium Project"

Dated: June 15th 2022

Signed and Sealed:



APPENDIX A
LIST OF PERSONNEL WORKED ON EXPLORATION WORK

List of Personnel / Contractors Worked on the Project

- 1. Alexander Pleson, P.Geo., - Geologist of Nipigon, ON (Pleson Geoscience)**
- 2. Ramin Ghaderpanah – Geologist and Geophysicist Tech of Kakabeka, ON (Pleson Geoscience)**

APPENDIX B
STATEMENT OF EXPENDITURES

APPENDIX C

Survey Equipment Specs (Genonics EM-16)

EM16/16R Specifications

MEASURED QUANTITIES	EM16: In-phase and Quadrature components of the secondary VLF field, as percentages of the primary field EM16R: Apparent resistivity in ohm-metres, and phase angle between E_x and H_y
PRIMARY FIELD SOURCE	VLF broadcast stations
SENSOR	EM16: Ferrite-core coil EM16R: Stainless-steel electrodes, separated by 10 m; sensor impedance is 100 M Ω in parallel with 0.5 pf
OPERATING FREQUENCY	15 to 28 kHz, depending on VLF broadcasting station
MEASUREMENT RANGES	EM16: In-phase: ± 150 %: Quadrature: ± 40 % EM16R: 300, 3000, 30000 Ω -m, Phase: 0-90°
POWER SOURCE	EM16 or EM16/16R: 9 V battery
OPERATING TEMPERATURE	-30° C to +50° C
DIMENSIONS	EM16 or EM16/16R: 53 x 30 x 22 cm
WEIGHT	EM16: Instrument: 1.8 kg; Shipping: 6.2 kg EM16R: Instrument: 1.5 kg; Shipping: 6 kg

The primary objectives of the survey were to map and characterize geological features that predominantly control the mineralized zones. The VLF survey data was compiled to measure the primary and secondary EM fields which subsequently could be interpreted to show apparent conductivity variations in bedrock geology to delineate well-mineralized structural features. The VLF transmitter located at Cutler, Maine (NAA) operating at a frequency of 24.0 kHz provided the primary electromagnetic field. This report describes the survey results and discusses data interpretation.

The EM field radiated from a VLF transmitter station over a uniform or horizontally layered earth model consists of a Vertical Electrical field component (E_y) and a Horizontal Magnetic field component (H_x), each perpendicular to the direction of the propagation. Herein, that part of the vertical field which is in-phase with the horizontal magnetic field is called the In-phase (Real Component); that part which is out of phase with the horizontal magnetic field is called the out-of-phase (quadrature Component). They are normally expressed as Tilt (Dip) Angle and Ellipticity respectively and measured as percentage (%). Processing of the VLF data included:

- Polarity reversal of alternating quadrature-phase measurements based on traverse direction.
- Correction/Removal of erroneous data points.
- Grid leveling for filtering line-by-line variations.

The in-phase component of the VLF responses was processed and interpreted with a Fraser Gradients and Karous-Hjelt (K-H) filtering approaches. The results reveal the locations of high VLF responses, which may indicate that VLF anomalies are due to conductive zones located along the profiles.

The qualitative analysis of the data along VLF traverses was carried out using Fraser Gradient method and Karous-Hjelt current density procedure developed by Karous and Hjelt (1983). The plot of filtered in-phase VLF data in terms of distance shows positive Fraser and Karous-Hjelt anomalies along the profiles, which is an indication of the probable conductive zones along each of the profiles. Geosoft Oasis montaj and a freely available KHFFILT tool (Pirttijärvi, 2004) were used to perform Karous-Hjelt and Fraser filtering on VLF data. In the following sections, these methods are briefly discussed, and the in-phase component of VLF data (for all the profiles) is interpreted and presented in gridded format.

Fraser Gradient Filter

Fraser Filtering, which was suggested by Fraser (1969), is a simple filtering technique that transforms crossovers into peaks, removes regional gradients and intensifies anomalies from near surface. In this report the Fraser filter has been applied to the in-phase (real) component of the VLF data. The Fraser filter shifts the data by 90 degrees and transforms the anomaly such that those parts with the maximum slope appear with the maximum positive/negative amplitude.