



**DG RESOURCE  
MANAGEMENT**

**Munn Lake Project, NWT**  
LCT Pegmatite

January 16, 2023

# Summary

## DGRM

- DG Resource Management Ltd. (DGRM) is a Canadian based, private, project generator, with a head office in Edmonton, AB.
- DGRM has a successful track record of exploration discovery across multiple commodities: Lithium, Uranium, REE's and Rare Metals, Industrial Commodities, Gold.
- DGRM and a staking partner jointly hold a 100% interest in the Munn Lake Project.

## Munn Lake

- Encompasses 45,062 ha (111,352 ac) comprising 37 contiguous claims
- On annual winter road to Gahcho Kue, provides good access for drilling
- Documented spodumene pegmatites, with numerous under explored targets
- Historical exploration focused on diamonds, with little to no LCT pegmatite exploration, yet shows significant potential

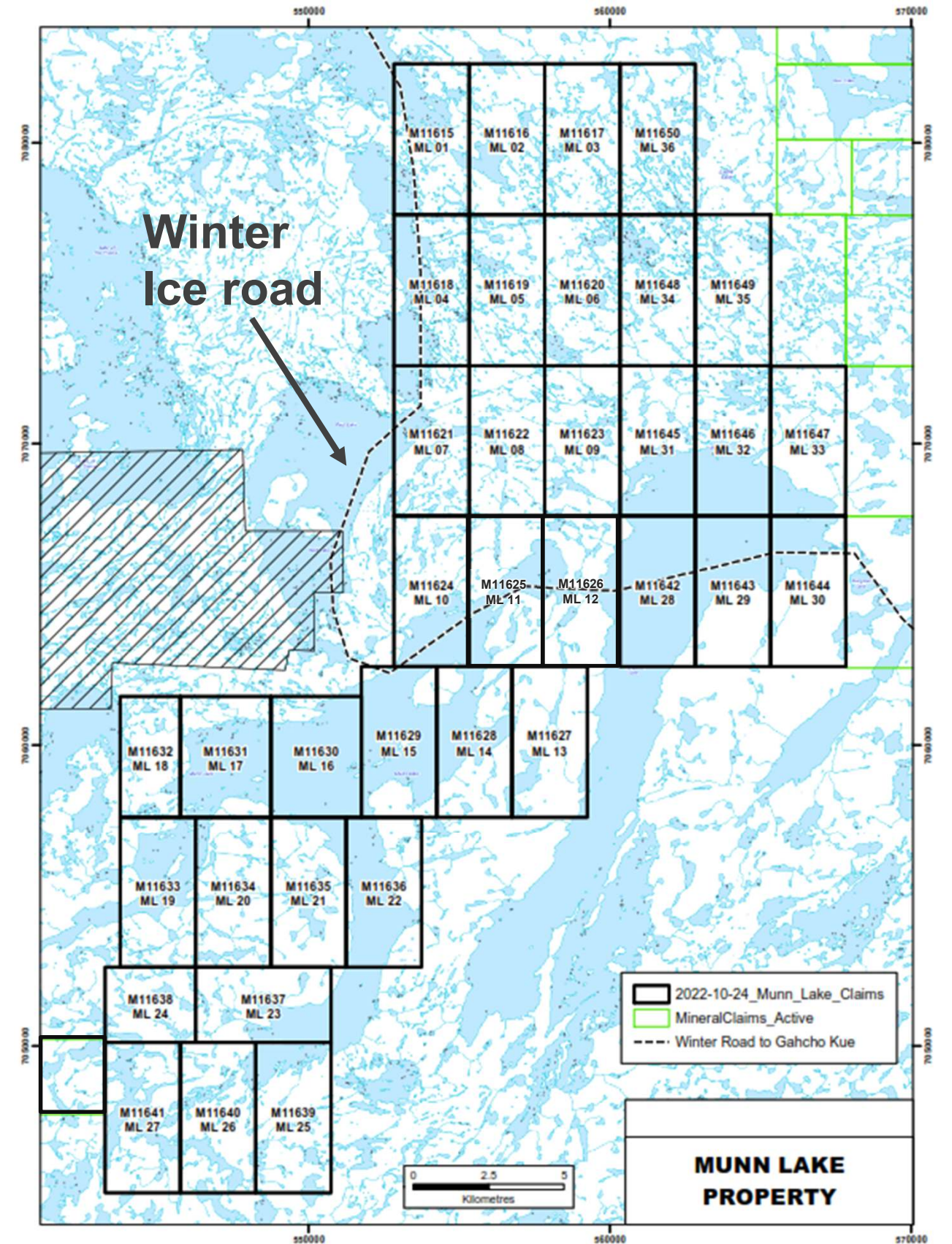
## Strategy

- Q1 2023 complete high-resolution satellite-based targeting and mapping
- Q2-Q3 conduct detailed mapping, and channeling of the OIG pegmatite. Property scale (drone assisted) prospecting, mapping and sampling.
- Q3-Q4 follow up surface work with drill testing of mineralization.



# Project Overview

- The Munn Lake Lithium Project encompasses 45,062 ha (111,352 ac) comprising 37 contiguous claims.
- The Project is located 250 km northeast of Yellowknife, NWT and is accessible by helicopter, float plane and winter road
- A portion of the winter road that connects the NWT Diamond Mines (Gahcho Kué, Ekati, Diavik and Snap Lake) to Highway 4 and Yellowknife, passes directly through the center of the property
- **The winter road facilitates excellent logistical support for exploration, as it is within a few hundred meters of the OIG spodumene occurrence and the Reid Lake Beryllium occurrence**
- This region has undergone significant kimberlite exploration and hosts three known diamond bearing kimberlites, each requires further exploration
- An NI 43-101 Technical Report (2016) details the regions diamond potential

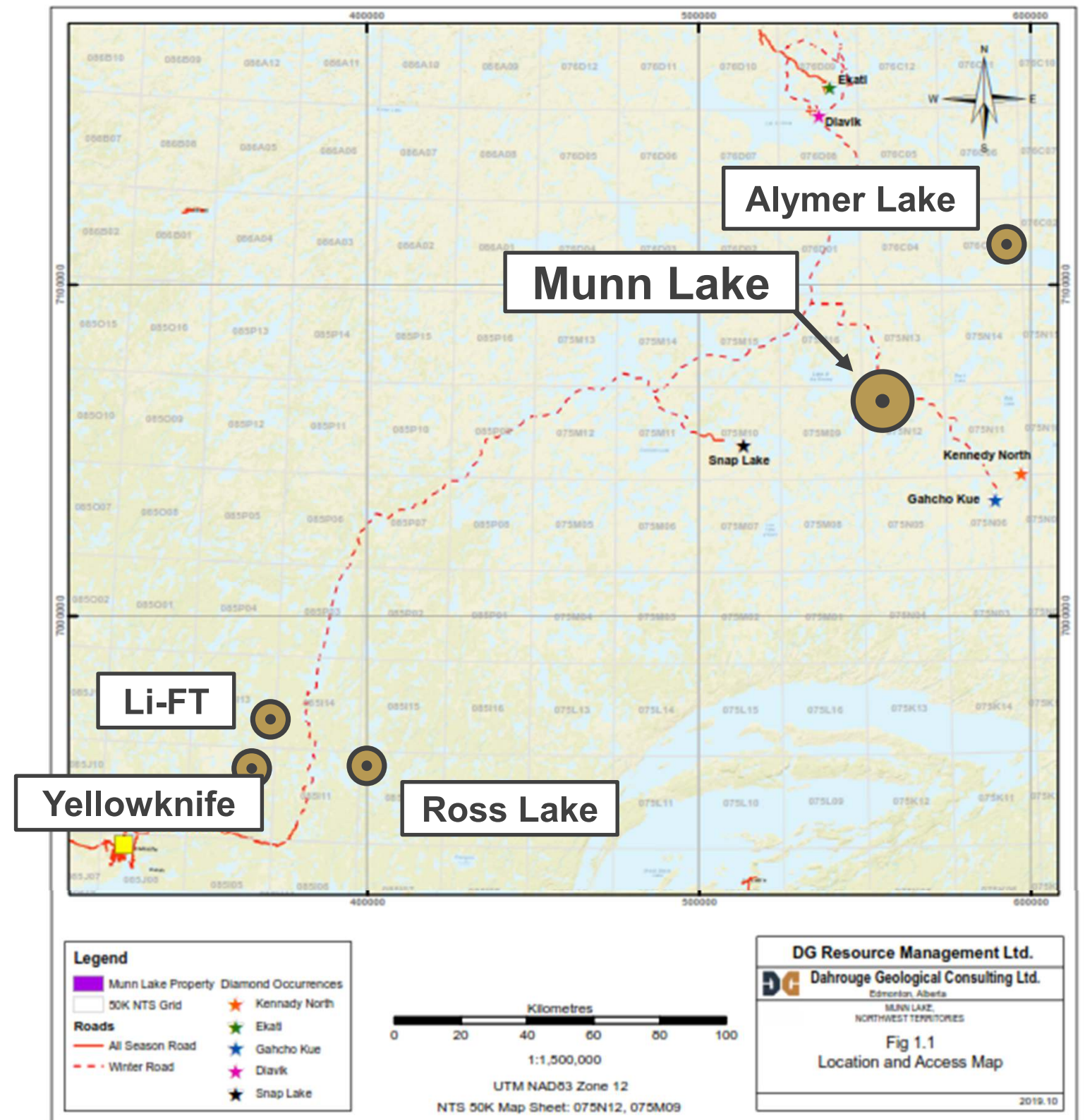


# Location

Munn Lake is located near to both the Yellowknife and Alymer Lake pegmatite fields

Notable pegmatites in the region include:

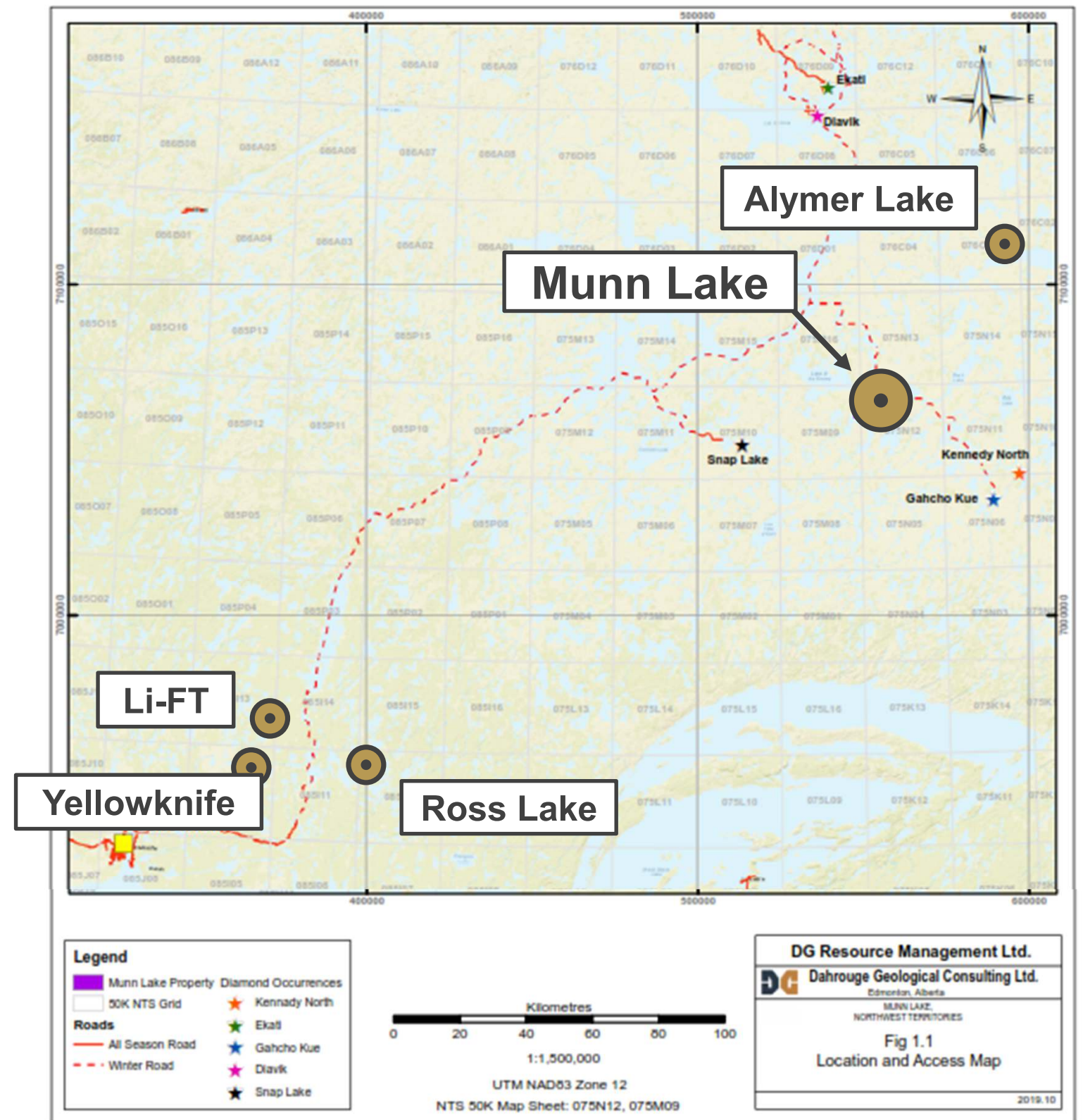
- Hidden Lake Pegmatites (Patriot Battery Metals et al)
  - **D12 Pegmatite:** 1.6% Li<sub>2</sub>O over 9.2 m
  - 40 kg bulk sample produced 6.11% Li<sub>2</sub>O mineral concentrate at high recovery (>80%)
- Alymer Lake Pegmatites
  - **Big Bird Lithium Pegmatite:** 1,280 m strike length, 1.24% Li<sub>2</sub>O over 34.3 m
  - **Curlew Lithium Pegmatite:** 400 m strike length, 1.72% over 14.87 m
- Ross Lake Pegmatites (DGRM)
  - Over 90 pegmatites mapped, many reported to contain spodumene, beryl and/or tantalite



# Location (cont.)

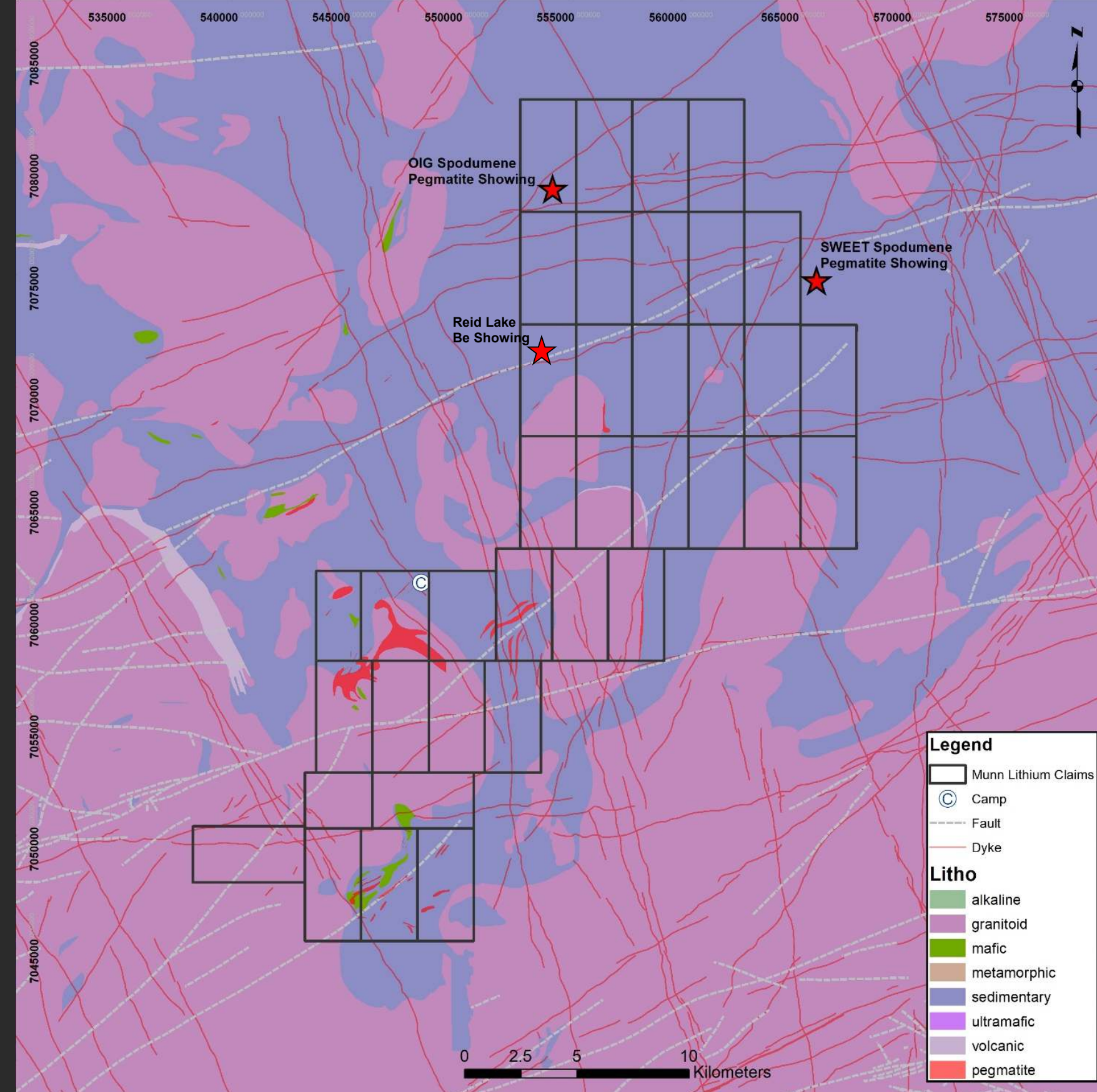
The Yellowknife Region has seen significant gold and diamond exploration in recent years, with little recent attention to LCT pegmatites. The region shows significant potential for future lithium exploration.

- Lithium Yellowknife Project (Li-FT)
  - 14 different lithium pegmatite systems exposed as surface, ranging from 100 to 1,800 meters strike length
  - Historical channel sampling produced average grades from 1.10-1.59% Li<sub>2</sub>O over widths of 7 to 40 meters
  - Includes the Shorty Dyke which is reported to contain 4.2 million tons\* of 1.24% Li<sub>2</sub>O to a depth of 152 m (\*historic resource, not 43-101 compliant)

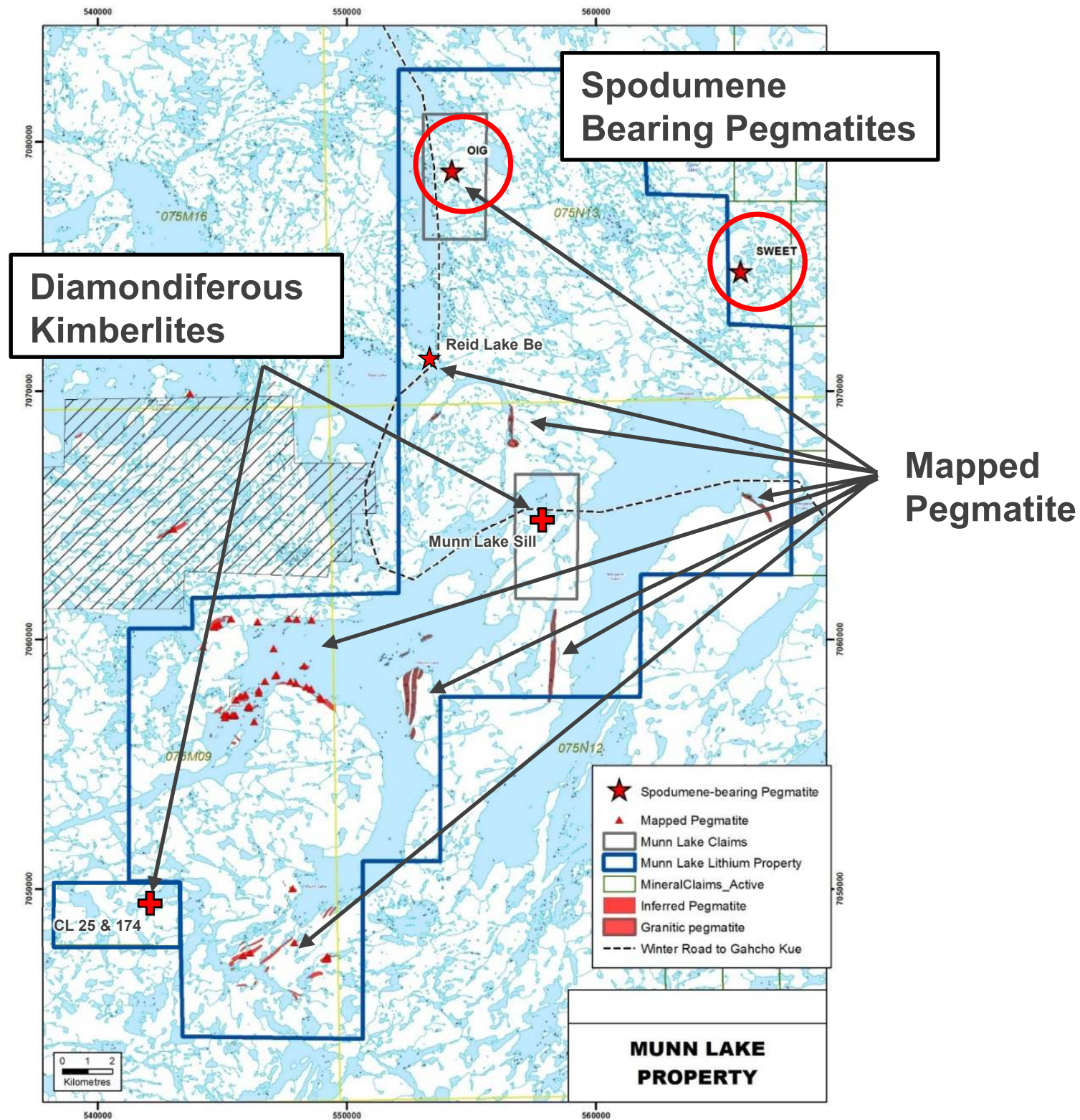


# Geology

- The Munn Lake Property lies within the Slave Craton, which extends from Great Slave Lake to Coronation Gulf. It is primarily underlain by granitoids and supracrustal rocks which range in age from 4.05 Ga to 2.55 Ga.
- The Munn Lake Property is underlain by Archean metavolcanics, metasediments and granitoids
- Historical work by Southern Era noted that most outcrop on the property consisted of granitoids, metasediments, and pegmatites. Several northwest - southeast trending dykes of the Mackenzie Dyke Swarm cross the property. A northeast trending dyke, also crosscutting the property, is thought to belong to the Malley Swarm.

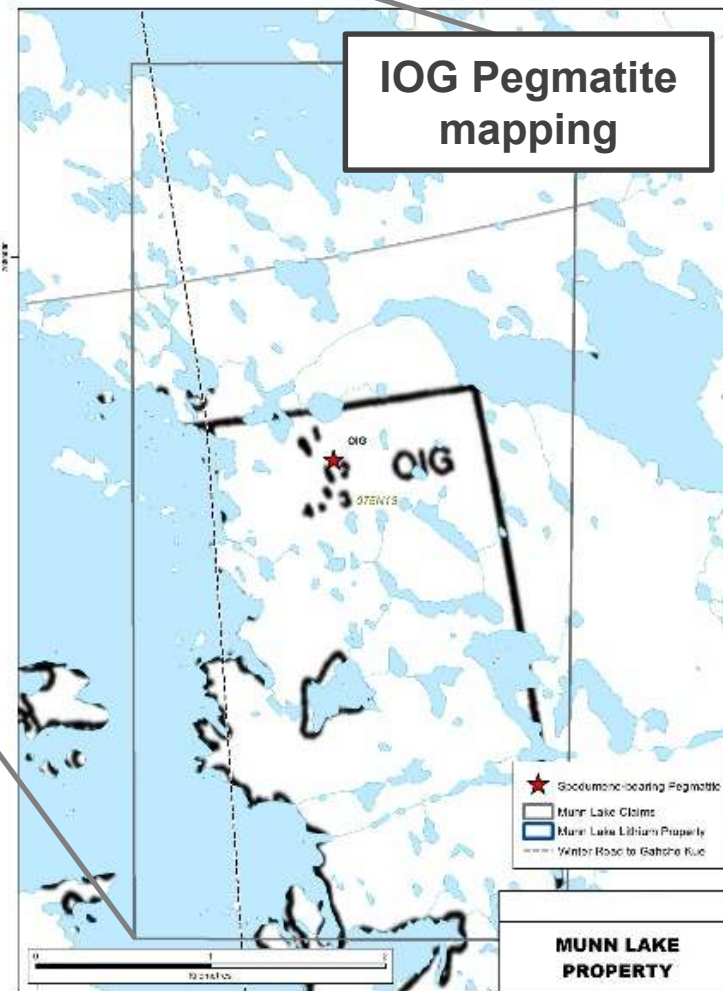
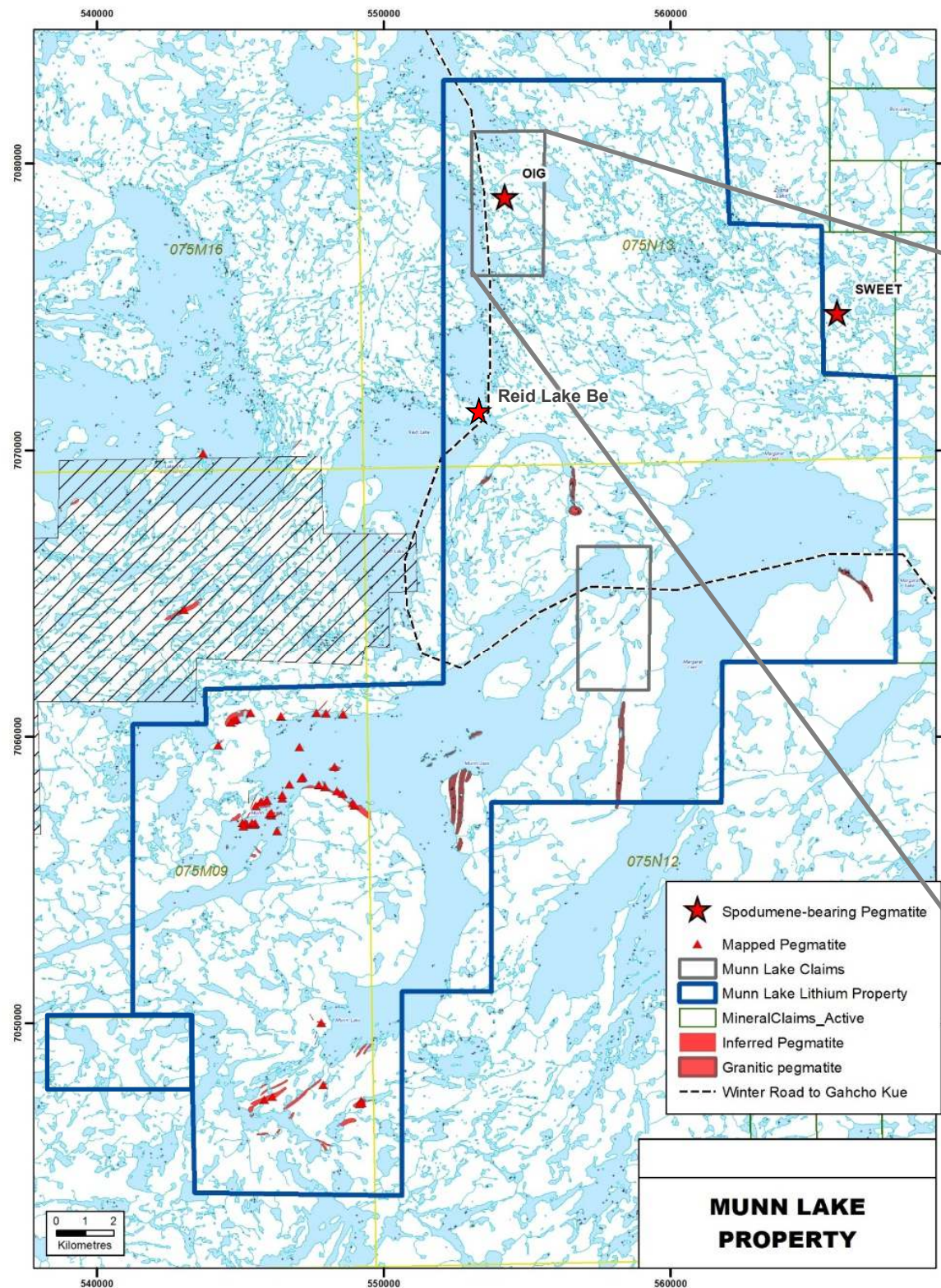


# Mineralization



- Several areas of the project have mapped pegmatite at a regional scale (shown as red on the map)
- Many the pegmatites have not been examined in any detail
- Two pegmatites, OIG and SWEET, occur within and proximal to the property. They are known to contain appreciable quantities of spodumene
- **Given the prominence of spodumene in the OIG and SWEET occurrences, there is a high probability that additional 'mapped pegmatites' will contain spodumene**
- The property also contains three diamondiferous kimberlites known as the Munn Lake Sill, CL 25 and CL 174

# OIG Pegmatites

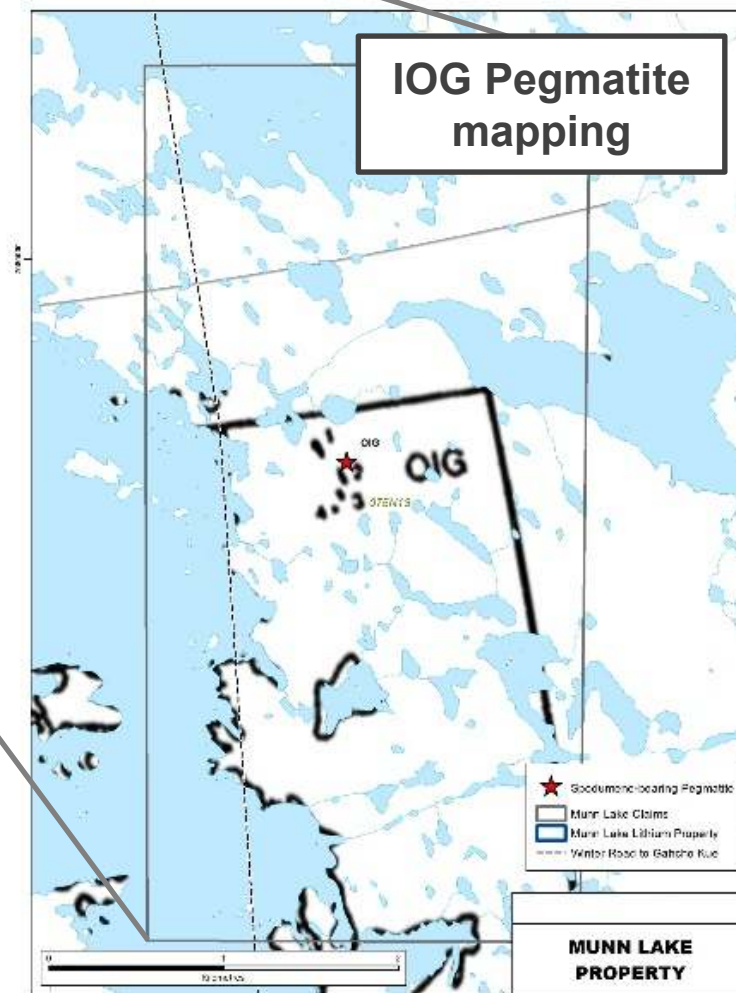
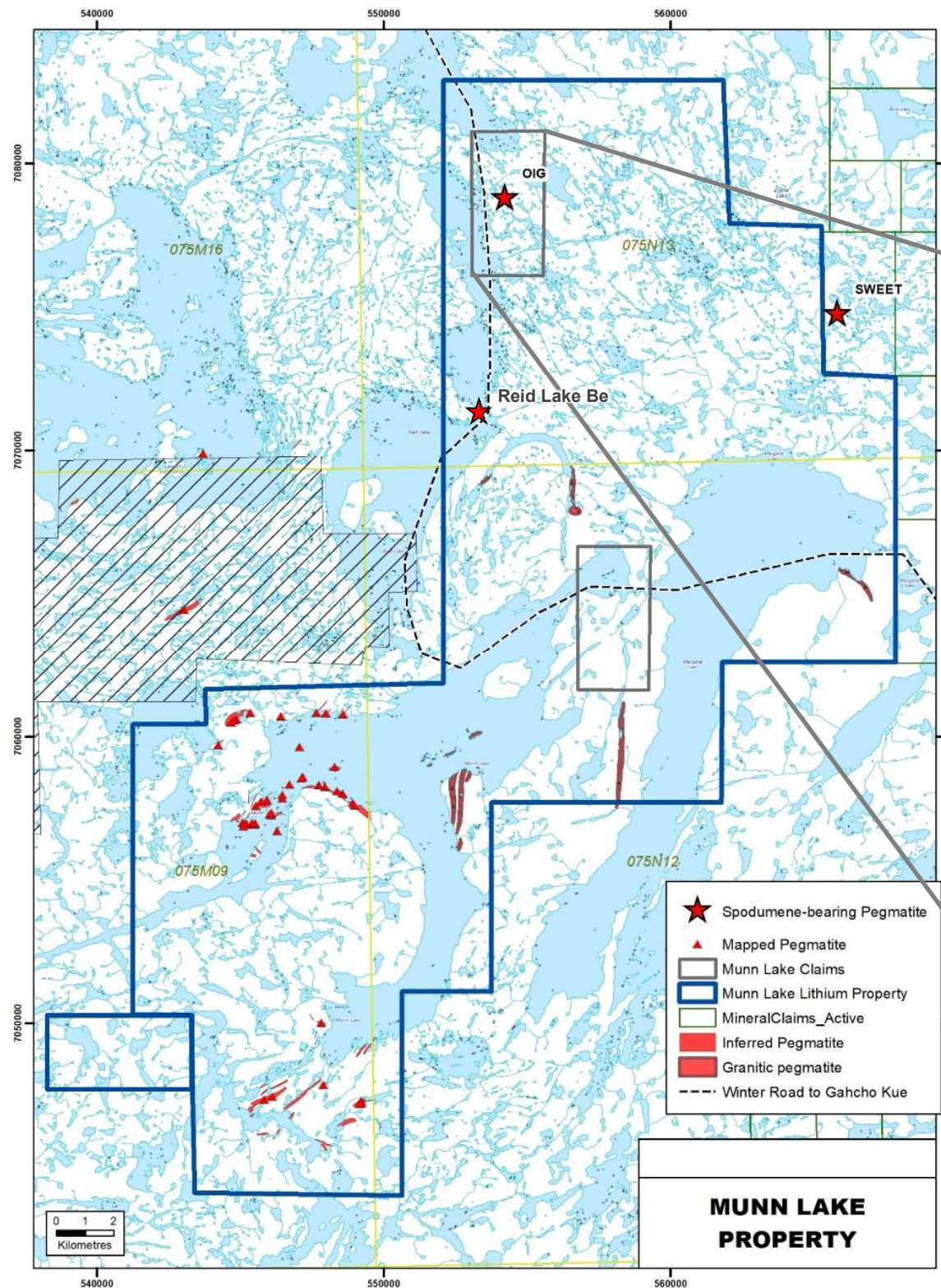


Excerpt from a Masters Thesis by Paul Tomascak (1988) from New Mexico Institute of Mining and Technology:

*The four dikes of this series all contain spodumene and little K-feldspar, although OIG-4 is largely aplitic and the spodumene is not as coarse as it is in all other dikes of the series. Despite the presence of extensive spodumene, dikes are poorly zoned. Dikes are elongate, in general striking north-south. Contact relations are incomplete, but most dikes appear concordant with metasediment schistosity. Lengths of dikes range from 6 to 18 m. Texturally and mineralogically these dikes appear to belong to Cerny's (1982) albite-spodumene type, bearing similarities to the King's Mountain pegmatites of North Carolina, U.S.A. (Kesler, 1976).*



# OIG Pegmatites



- OIG-1, 2, 3 :** These dikes are spodumene-rich and poorly zoned. They consist of a random assemblage of 0.5-4.0 cm spodumene + quartz + plagioclase (usually cleavelandite) ± muscovite ± K-feldspar (some megacrysts up to 5 cm). Randomly distributed pods of blocky spodumene + K-feldspar ± cleavelandite also are present in these dikes. Aside from spodumene they remarkably lack other rare-element minerals.
- OIG-4 :** This dike is much smaller than the others and appears extensively metasomatized. It contains a near-homogeneous and relatively fine-grained assemblage of cleavelandite + spodumene + muscovite + quartz.

# SWEET Pegmatite

- The Sweet Pegmatite (also known as Margaret Lake) is located a few hundred meters from the properties eastern border

- It consists of a single spodumene rich pegmatite outcrop classified as an albite-spodumene subtype

- It is approximately **50 m in diameter** and has steeply dipping walls which are discordant to schistosity of host rocks

- The dike is poorly zoned, containing no visible quartz core, but spodumene is present in all parts of the dike.

- No orientation data could be located within historical data or aerial imagery

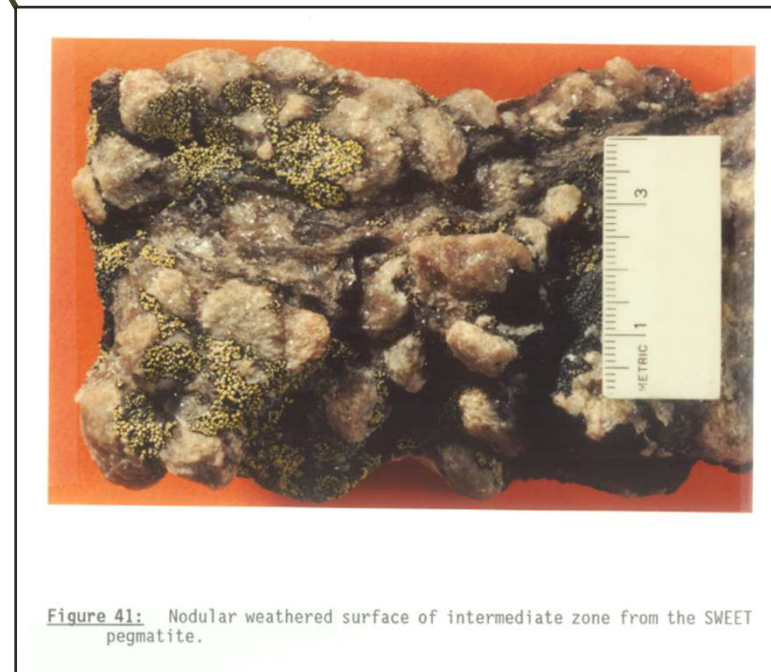
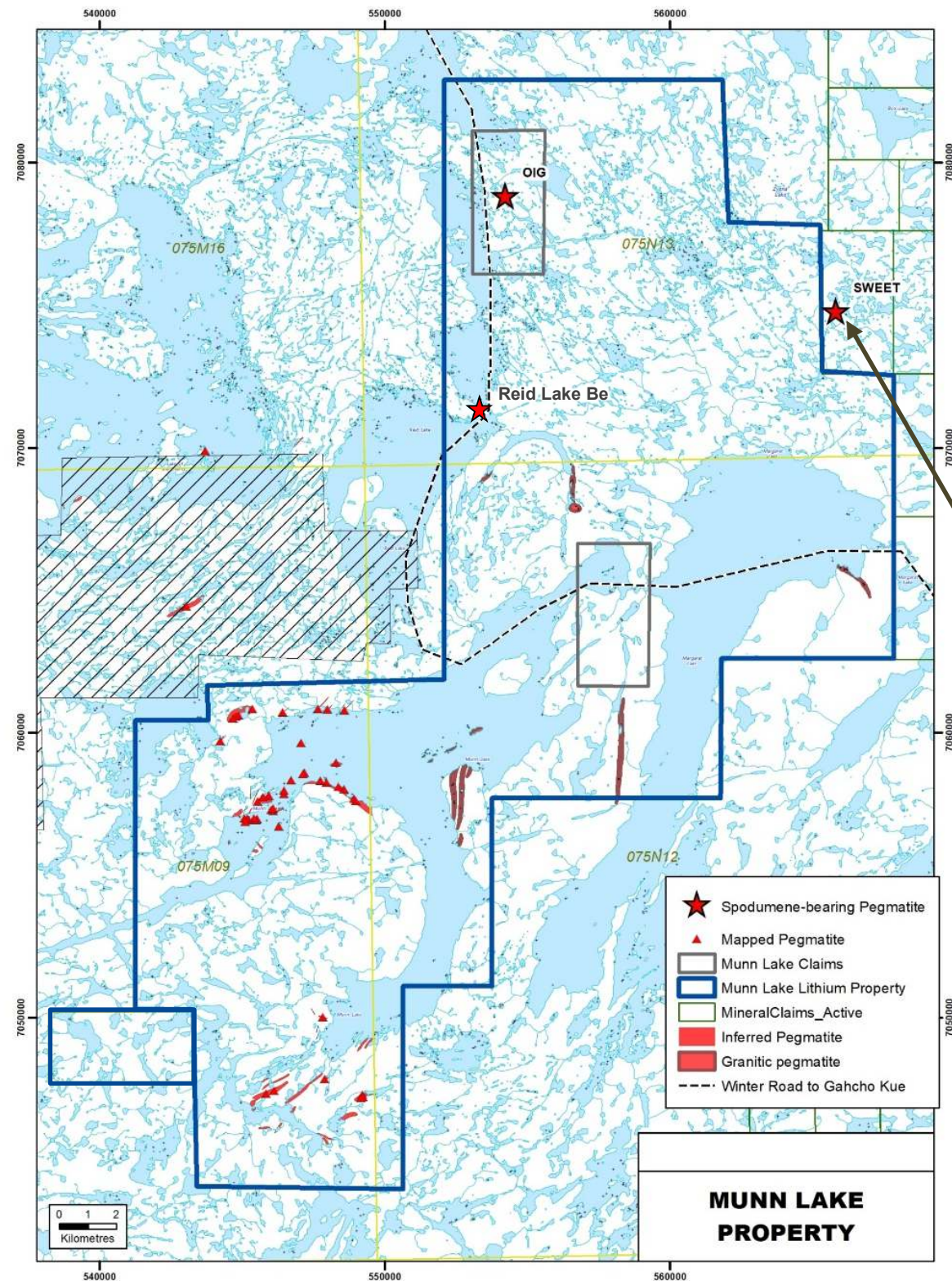
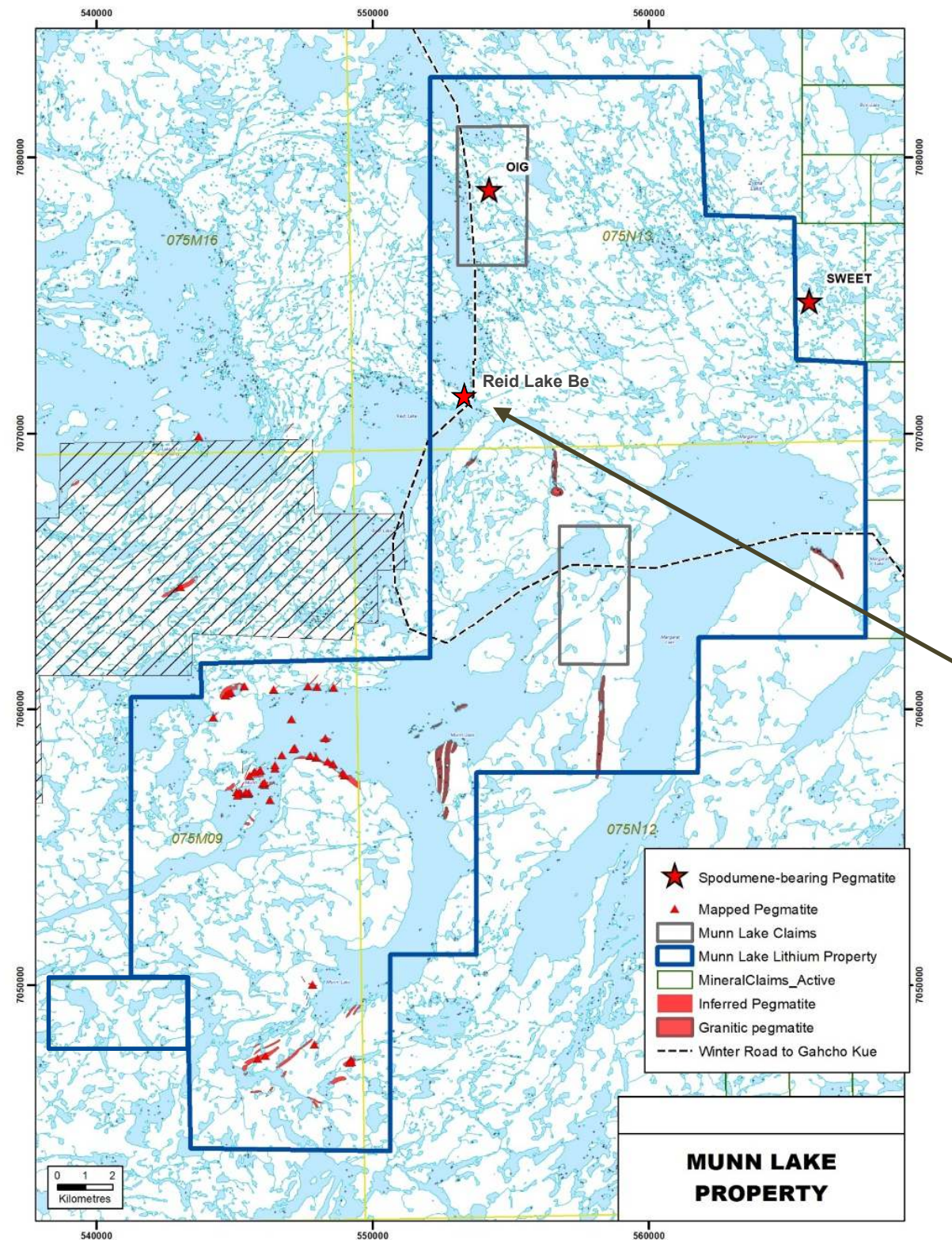


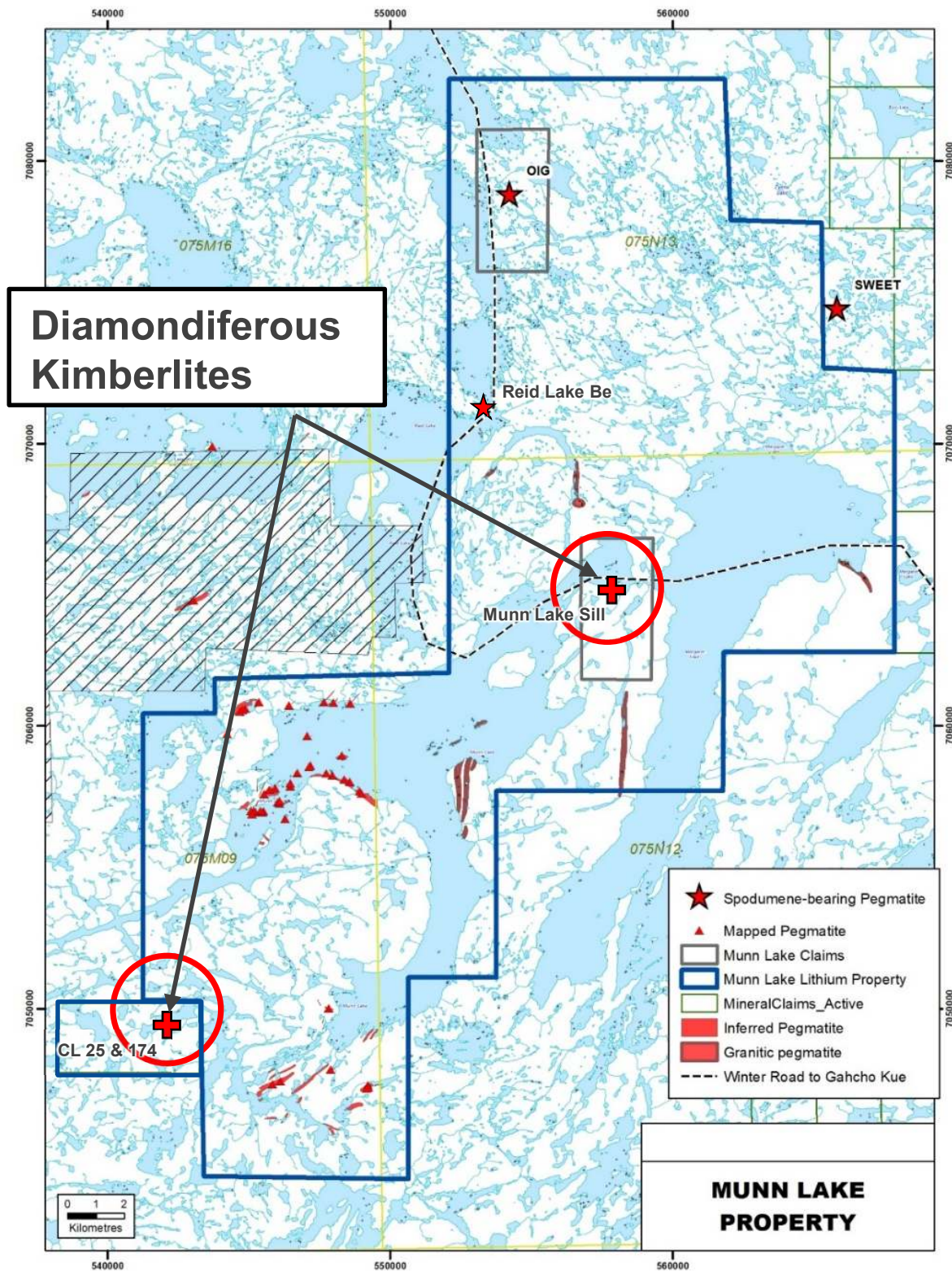
Figure 41: Nodular weathered surface of intermediate zone from the SWEET pegmatite.

# Reid Lake Be

- No assessment report, claims and/or exploration companies found to be associated with this showing.
- The showing is based primarily on information from GSC Map 1013A and accompanying literature. EGS 1988-14 contains a map of the pegmatite types in the Reid Lake area.
- This report states that four beryl-bearing dikes, one of which contains columbite-tantalite, occur in the area identified on GSC Map 1013A.
- The pegmatite outcrops range from 2 by 8 m to 5 by 12 m.
- The map shows this occurrence to be hosted within a rock unit described as a nodular, quartz-mica schist of the Yellowknife Supergroup. Bedding is preserved in these rocks up to the sillimanite schist zone.



# Kimberlite Potential

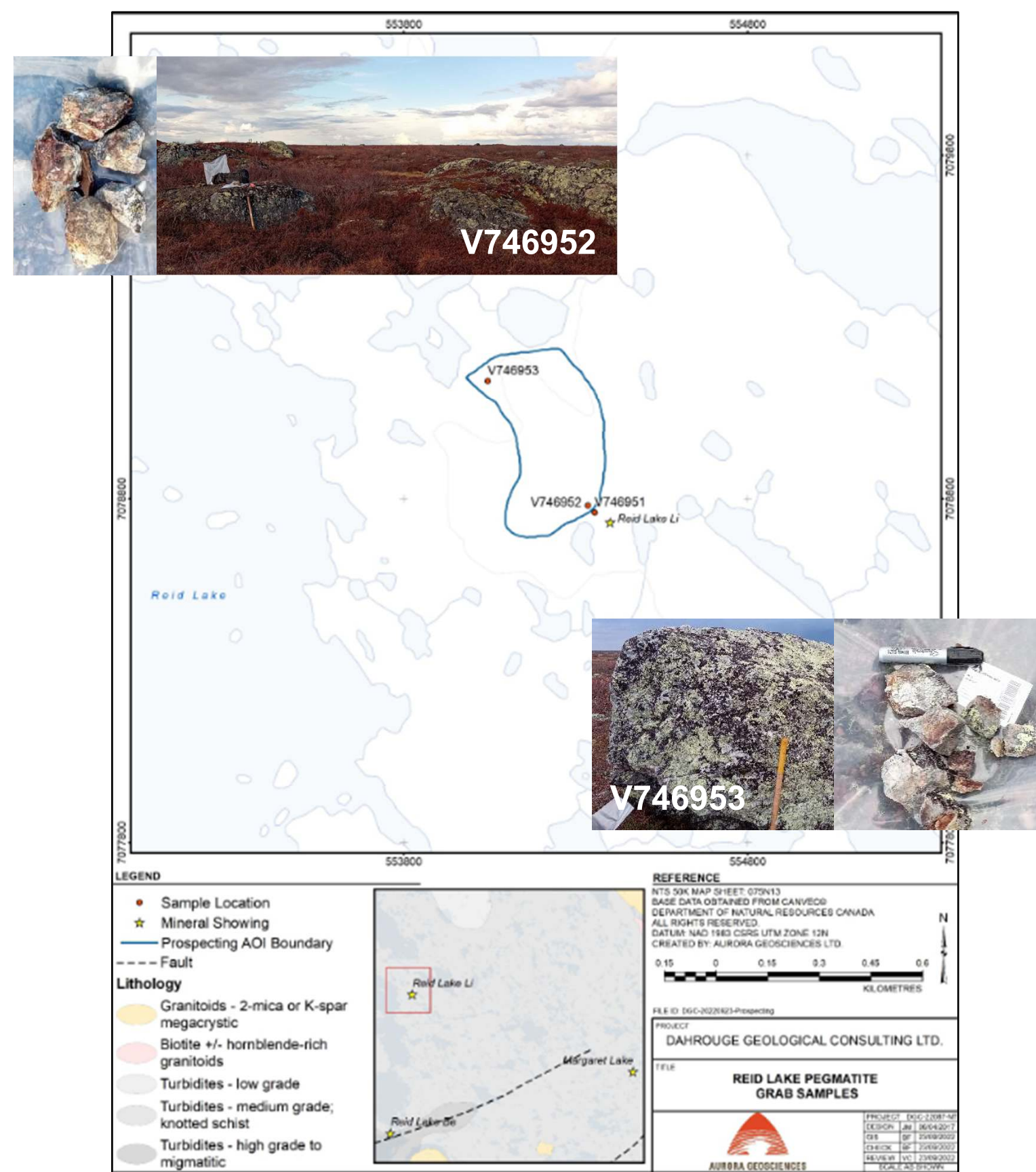


- The Munn Lake Project contains three known diamondiferous kimberlites known as CL-25, CL-174 and the Munn Lake Sill
- Highlights include:
  - **CL 25:** 350.4 kg bulk sample contained a total of 221 diamonds; 9 were macro- (>0.5 mm) and 212 micro-sized (<0.5 mm)
  - **CL 174:** 622.2 kg bulk sample contained 284 total diamonds, with 274 micro- (<0.5 mm) and 10 macro-sized (>0.5 mm)
  - **Munn Lake Sill:** 42 kg bulk sample contained 14 diamonds. The kimberlite has been defined over 1.3 km to a depth of 120 m and up to 12 m width (colored diamonds within the Munn Lake Sill include pink diamonds)
  - **Yuryi Boulder Field:** 581 kg bulk sample contained 226 diamonds including 62 macros. Diamond bearing boulders up to 25 m diameter

# 2022 Exploration

- During 2022 staking three samples were collected of pegmatite around the OIG Showing
- Several pegmatite outcrops and numerous pegmatite boulders were encountered but the main Reid Lake showing was not located
- Three samples were collected of pegmatite material confirming LCT mineralization with Li<sub>2</sub>O up to 0.73%
- Additional pegmatites with described “spodumene?” were located near the SWEET showing but were not sampled

ANALYTE	Be	K	Li <sub>2</sub> O	Cs	Ta	
UNITS	ppm	%	%	ppm	ppm	
V746951		37	3.3	0.0215	30.3	6.5
V746952		279	4.5	0.734	42.9	13
V746953		109	4.5	0.371	31.5	10.9



# Conclusions

- Munn Lake is located directly on the winter road to the regions diamond mines, providing easy access for winter exploration
- Very large land package of 111,352 ac
- A number of documented spodumene pegmatites are situated on the property, with numerous under explored targets
- Three known kimberlites, all under-explored, within the property boundaries
- This region has seen little to no exploration for LCT pegmatites, yet cursory/incidental exploration shows significant potential
- Potential to acquire adjacent ground if additional spodumene pegmatites are documented. The property is open for expansion to the north, west and south





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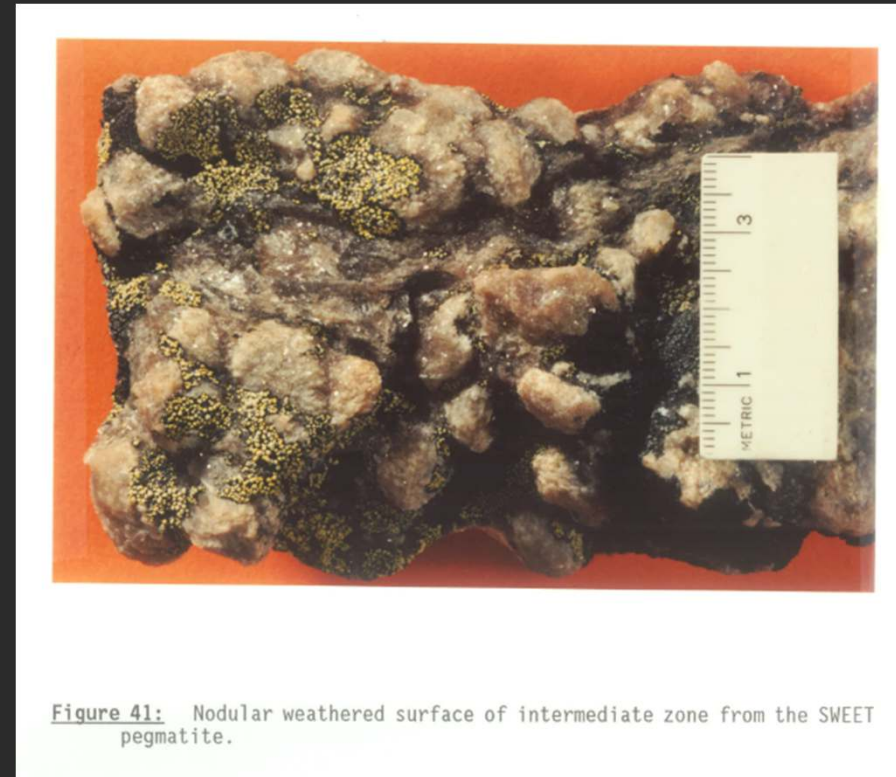


Figure 41: Nodular weathered surface of intermediate zone from the SWEET pegmatite.



Figure 2 Pegmatite located near the Li Margaret Lake showing. Similar pegmatites found at Li Reid Lake showing.

