



ASX ANNOUNCEMENT

19 September 2023

Spodumene Bearing Pegmatites Visually Confirmed at High-Grade Lithium Project

HIGHLIGHTS:

- Field trip to McLaughlin Lake involving mapping and ground-based sampling has identified multiple pegmatite dykes at the highly prospective McLaughlin Lake Lithium Project (MEL 1208A)
- **29 samples of multiple dykes have been collected from both McLaughlin Lake and Magill Lake areas and assays are expected in 3-4 weeks.**
- **Visual confirmation of spodumene in two pegmatite dykes** on the shoreline of McLaughlin Lake which have been sampled.
- Targeted mapping and rock chip sampling has traced **multiple pegmatite dykes over a 5km long trend** both east and west of known spodumene dyke at McLaughlin Lake.
- Multiple dykes up to 5 metres wide identified over a 70 metre wide area in a previously unmapped section of the Magill Lake shoreline
- At Magill Lake, a second set of dykes were mapped 1.2km to the west and these dykes display a similar trend of 100°.
- Geophysical survey has been postponed due to bad weather delays and is expected to be completed near-term.
- Previous work in MEL 1208A has highlighted:
 - *A 1.5m long channel sample across the width of the dyke **assayed 1.32% Li₂O**.*
 - *Grab sampling of a 2nd dyke returned assays of **0.98% & 2.87% Li₂O**.*
 - *The pegmatites pinch and swell with higher concentrations of spodumene found in wider sections*
- The Godslith Property (Vision Lithium; TSX.V – VLI) is situated about 50 kilometers east of McLaughlin Lake and has undergone testing to a depth of 243 meters, with drilling returning results of **15.2 meters grading at 1.49% Li₂O***

(*<https://visionlithium.com/godslith/>)

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Figure 1: Abundant Pale Green Spodumene Blades in Barry Dyke at McLaughlin Lake

Commenting on the initial field work program in Canada NMR's Managing Director, Blake Cannavo, said *"NMR is delighted with the outcomes from our maiden exploration campaign in Canada, and although hampered somewhat by challenging weather conditions, the information gathered by our team so far is hugely encouraging. Initial observations from mapping and sampling completed across key targets has confirmed NMR's belief that McLaughlin Lake has the potential to be an exciting Lithium-cesium-tantalum (LCT) pegmatite deposit.*

The real highlight of the limited fieldwork is the fact that pegmatites were mapped over a 5km long trend that hosts the McLaughlin Lake spodumene occurrence with the trend remaining open in both directions. Additionally, geologists noted multiple parallel dykes at several locations along the trend.

Although we were unable to complete the planned heli-mag and radiometric survey due to the weather, we have established a solid foundation which our team will build upon over the coming months.

This early-stage work concentrated on ground truthing the spodumene-bearing dyke and locating as much pegmatite over the largest area possible and that was accomplished, leading to NMR having the confidence to commit to further exploration later in 2023 and into 2024."

Native Mineral Resources Holdings Limited (ASX: NMR), or ("NMR" or "the Company"), is pleased to announce that a first pass field work program has been completed at the newly acquired McLaughlin Lake Lithium Project in Manitoba, Canada. The exploration work focussed on extending the known

shoreline pegmatite occurrences from previous work into the wooded and moss-covered ground along strike from the known outcrops.

NMR is pleased to report that several samples of multiple dykes have been collected from both McLaughlin Lake and Magill Lake areas and assays are expected in 3-4 weeks.

This initial work program, being undertaken with New Age Metals Inc (TSXV: NAM), was to include an airborne magnetic and radiometric survey of the entire Mineral Exploration Licence (MEL) 1208A, but due to delays with helicopter availability, the short time that the helicopter was available for, and the forecast of bad weather at the site restricting the helicopter flying time, it was decided that due to the likelihood of the survey not being able to be completed in whole NMR and NAM would postpone the survey to later in the year.

This decision impacted the length of the planned field mapping and sampling program, with multiple additional Tier-1 targets prioritised for testing in follow-up work programs later this year.

NMR has entered into an agreement (Acquisition Agreement) to acquire 51% of the McLaughlin Lake Lithium Project for \$200,000 AUD in NMR shares, \$75,000 CAD in cash and \$500,000 CAD funding of exploration over 18 months. NMR can acquire up to 75% of Mineral Exploration License (MEL 1208A) after meeting certain milestones (for further details see ASX announcement dated 17 July 2023).

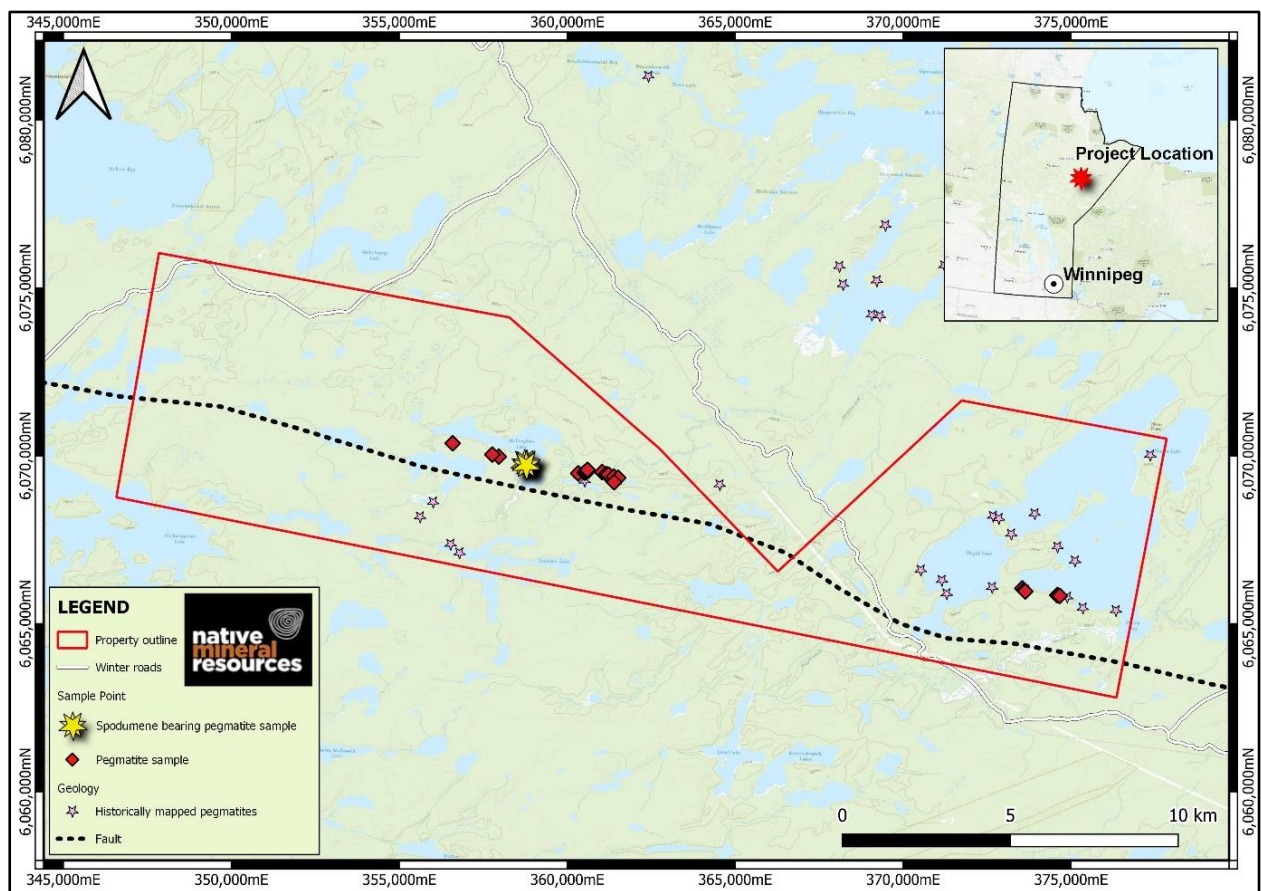


Figure 2: McLaughlin Lake Project and Pegmatite Sample Location

McLaughlin Lake Fieldwork Summary

As the recently completed fieldwork was considered by the NMR and NAM team to be a first pass exploration program, the work was undertaken based on priority:

- Confirm the presence of LCT pegmatites at McLaughlin Lake
- Test the lateral trend of the known McLaughlin Lake shoreline pegmatites
- Map and sample Magill pegmatite outcrops
- Map and sample historic pegmatite occurrences
- Identify new pegmatite occurrences along the McLaughlin Lake trend

Mapping and sampling of the LCT pegmatites at McLaughlin Lake was positive with two parallel dykes separated by 15 metres being recorded, with the main dyke being the same dyke as described by Barry in his 1957 and 1962 mapping and sampling of the area which returned an assay of 1.5 metres @ 1.32% Li₂O (Fig 2 – Fig 4).

The main pegmatite has a general trend of 100° and a sub-vertical dip. Tracing of the dyke proved difficult due to the amount of overburden and moss cover over the area and the pegmatite was traced from the lakeshore intermittently for ~65 metres before disappearing under cover.

The 2nd dyke is a 30cm wide spodumene bearing dyke parallel to the main dyke but pinched out 15 metres from the shoreline.

The general trend was prospected to the west and a pegmatite was discovered 800 metres away from the shoreline. The pegmatite is 3 metres wide with the same orientation as the Barry dyke. It is layered comprising quartz, orthoclase, and silver-green muscovite. This quartz rich layered pegmatite was followed intermittently for 200 metres to the west. Along trend to the west a similar quartz-rich pegmatite was discovered 1.2 km away with a width of 2 metres.

In total, a 2.3 km long trend of the lakeshore spodumene occurrence was identified and pegmatites were intermittently mapped throughout the trend, though no spodumene was identified in the later dykes, but indicator minerals such as green mica and blue apatite were observed in several samples suggesting elevated levels of lithium are likely to be returned. There are likely pegmatites along the entirety of the main trend, but near impossible to map from surface due to the very poor exposure.



Figure 3: Spodumene Bearing Pegmatite Dyke on Lakeshore of McLaughlin Lake



Figure 5: Large ~30cm Spodumene Blade on McLaughlin Lake

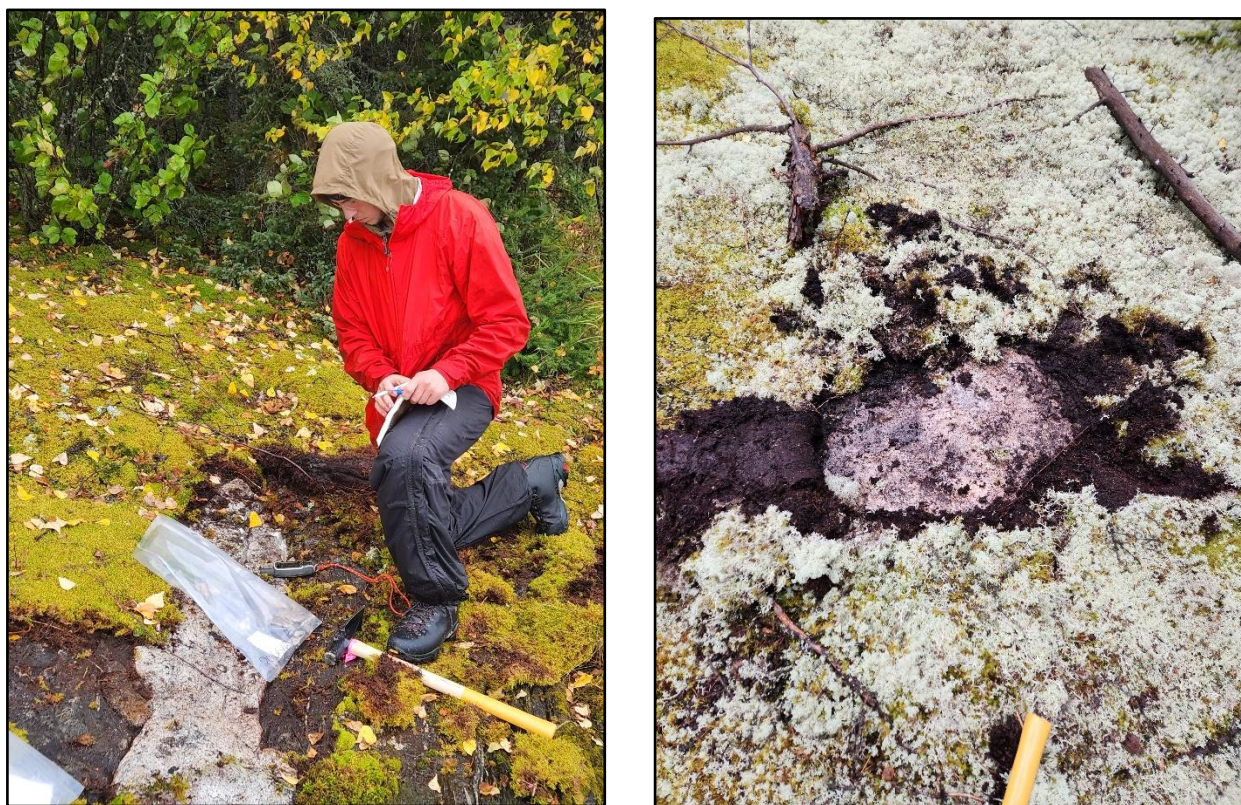


Figure 6: Sampling pegmatite dyke under moss cover.

Sampling east of the spodumene occurrence at McLaughlin Lake commenced 1.5km east of the known spodumene occurrence and multiple, parallel pegmatite dyke was mapped and sampled over a 1.3km long trend that appears to be a continuation of the similarly observed trend west of McLaughlin Lake.

Although no spodumene was observed from the mapped pegmatites, several of the dykes did display indicator minerals such as green mica and blue apatite that were also observed in the western trend.

Unfortunately, mapping and sampling planned for between the eastern zone and McLaughlin Lake has been delayed by the decision to postpone the heli-mag survey, and this area will be a priority during the next field trip.

Mapping and sampling at Magill Lake, in the eastern portion of MEL1208A, followed up on historical documented pegmatites along the same trend as the McLaughlin Lake spodumene dyke. The area featured abundant sub-meter to meter scale parallel pegmatite dykes.

In the western section of Magill Lake, a 200 metre zone of multiple dykes were mapped and sampled in an area where a historical pegmatite occurrence is logged.

Approximately 1km along strike, a large outcropping along the south shore of the lake contained approximately 15 parallel dykes with the largest being 10 metres in width and trending 100° which is the same as the observed dykes in the McLaughlin Lake area.



Figure 7: Repeated metre-scale Pegmatite Dykes within Folded black Oxford Lake Group Country Rock

All of the dykes at Magill Lake consist of quartz, microcline, orthoclase and micro garnets, and several of the dykes contain green mica. Additionally, the country rock was strongly deformed (Fig 6 & 7).



Figure 8: Aerial view of Magill Lake pegmatites (lighter material) displaying pinch and swelling characteristics.

The Board of Native Mineral Resources Holdings Ltd authorised this announcement to be lodged with the ASX.

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Competent Person Statement:

The information in this report relating to Exploration Results is based on information compiled by and/or provided to Mr Greg Curnow, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Greg Curnow is a full-time employee of Native Mineral Resources. Mr Curnow has sufficient experience that is relevant to the styles of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Curnow has no potential conflict of interest in accepting Competent Person responsibility for the information presented in this report and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.