ASX Announcement

03 October 2023



Pioneer Lithium Commences Maiden Exploration Program

Systematic fieldwork program underway at the Company's Root Lake Lithium Project in Ontario, Canada.

Highlights

- Field teams have been mobilised and commenced mapping and sampling at the Root
 Lake Lithium Project with the aim of identifying pegmatite outcrops along two highly
 prospective corridors.
- The fieldwork program will employ multiple teams, initially focusing on the Extended Morrison trend in the north-western portion of Project area, adjacent to Green Technology Metals' (ASX: GT1) Morrison-McCombe pegmatite system.
- In parallel teams will be deployed to the Central Corridor in the south-eastern portion
 of the Project area, adjacent to Green Technology Metals' (ASX: GT1) Root Bay
 pegmatite system.

Pioneer Lithium Limited (ASX Code: **PLN**) ('**Pioneer Lithium'** or '**the Company'**) is pleased to announce the commencement of its inaugural Autumn exploration program at the Company's 90%-owned Root Lake Lithium Project in Ontario, Canada.

Commenting on the start of exploration, Pioneer Lithium CEO, Clinton Booth, said:

"This is our first opportunity to explore the ground at Root Lake and we couldn't be more pleased. We have been able to engage and mobilise an experienced team quickly and we are looking forward with great anticipation to seeing the results from the multiple work fronts in the coming weeks."

Autumn Field Work Program

The autumn fieldwork program, which is being undertaken in conjunction with experienced lithium geological consultants Coast Mountain Geological Ltd. ('CMG'), is designed to identify the presence of pegmatite outcrops within two highly prospective corridors located along-strike from the known lithium deposits held by Green Technology Metals (ASX:GT1) as well as to identify new priority targets.

Fieldwork will be conducted in two phases, the first of which will include detailed geological mapping of outcrops and systematic bedrock sampling guided by aeromagnetic and historical exploration data. This will be followed by a second phase of targeted litho-geochemical channel sampling to test the dispersion of lithium-bearing pathfinder minerals associated with LCT pegmatites.





The field team will initially focus on the area designated as Extended Morrison in the north-western portion of the Root Lake Project area, to inform whether this could represent a continuation of GT1s Morrison-McCombe pegmatite system (Inferred Resource $4.5 \mathrm{Mt} \ @ 1.01\% \ \mathrm{Li}_2\mathrm{O})^1$ immediately to the west. Subsequently, fieldwork will be concentrated along the Central Corridor in the south-eastern portion of the Project area, which lies along the same trend as GT1s Root Bay pegmatite system (Inferred Resource $8.1 \mathrm{Mt} \ @ 1.32\% \ \mathrm{Li}_2\mathrm{O})^1$ and recently announced Root Bay West spodumene discovery.

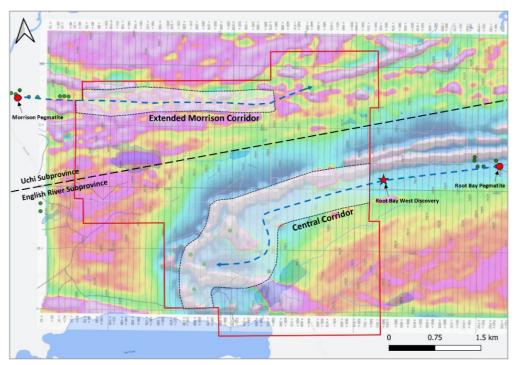


Figure 1. Map of the Root Lake Project showing the Extended Morrison and Central Corridors.



Figure 2. CMG's exploration camp established centrally within the Root Lake Project area.

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¹ For full details of The Root Lithium Project Mineral Resource Estimate, see GT1 ASX releases dated 19 April 2023 & 7 June 2023.

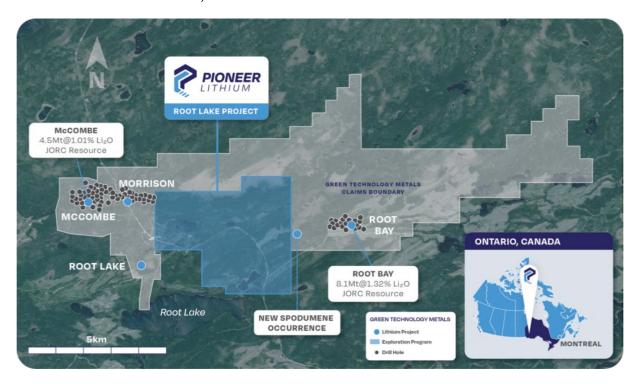


Results from the autumn fieldwork will be used to enhance the geological understanding of the Root Lake Project area and assist with the development of high-confidence drill targets ahead of a maiden winter drilling program.

About the Root Lake Project

The Root Lake Project comprises 94 claims totalling 1,927ha, located within the eastern Superior Province straddling the Sydney Lake-Lake St. Joseph Fault, an east-west trending, steeply dipping brittle-ductile shear zone that defines the boundary between the Uchi and English River Sub-provinces.

Several S-Type, peraluminous granitic plutons hosting lithium and other rare-metal mineralised pegmatites have been discovered in proximity to the Sydney Lake-Lake St. Joseph Fault, including Green Technology Metals' McCombe, Morrison and Root Bay deposits (Root Lake Pegmatite Group), all of which are situated within 5km of the Root Lake Project.



For more information on Pioneer Lithium, refer to the Company's website at: www.pioneerlithium.com.au.

This announcement has been authorised for release by the Board.

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Compliance statement

The exploration results for the Root Lake Project referred to in this announcement were first reported in accordance with ASX Listing Rule 5.7 in the Company's prospectus dated 3 August 2023, which was announced on the ASX market announcements platform on 26 September 2023 and is available to view on www.pioneerlithium.com.au and www.asx.com.au. Pioneer Lithium is not aware of any new information or data that materially affects the information included in the prospectus.

Forward-looking statements

This announcement may contain certain forward-looking statements and projections. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. Pioneer Lithium Limited does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither Pioneer Lithium Limited or any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement.

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