ASX Announcement

24 November 2025



Root Lake Lithium Project Poised for Re-Activation Following Improved Lithium Market Outlook

Highlights

- Strategic Location: Pioneer Lithium holds a 90% interest in the Strategically located Root Lake Lithium Project in Ontario, Canada, covering 94 contiguous claims (~1,927 ha). The project lies adjacent to and along-trend of Green Technology Metals' (ASX:GT1) McCombe pegmatite fields (ASX:GT1 18/10/2023).
- Exploration Success: Previous Pioneer exploration has confirmed multiple LCT pegmatite corridors, including:
 - Central Corridor: Identification of 85 pegmatite outcrops along the Central Corridor (ASX: PLN 16/10/2023).
 - ➤ **Red Squirrel Discovery:** Spodumene-bearing pegmatite discovered at Red Squirrel, located within ~500m of GT1's Root Bay West trend (ASX: PLN 24/10/2023).
 - **Extended Morrison & Central Corridors:** Completion of maiden fieldwork identifying 89 pegmatite outcrops across Extended Morrison and Central Corridors (ASX: PLN 26/10/2023).
 - **2024 Trenching Program:** Grab samples up to 2.95% Li₂O and channel samples up to 3,530 ppm Li, delineating multiple new drill targets (ASX: PLN 04/12/2024).
- **Market-Driven Re-Activation:** Strengthening lithium market conditions have prompted prompting Pioneer to initiate planning for the re-activation of exploration programs at Root Lake.
- **Project Potential:** Root Lake is strategically positioned within one of the Ontario's most active lithium corridors, hosting multiple high-potential spodumene-bearing pegmatite trends.
- **Tenement Status:** All claims remain in good standing, preserving full optionality for rapid restart of field programs rapidly as lithium market conditions strengthen.
- **Forward-Looking Strategy:** Pioneer is advancing a disciplined exploration strategy designed to systematically test high-priority targets and rapidly progress the most prospective pegmatite corridors.

Pioneer Lithium Limited (ASX: **PLN**) ("**Pioneer**" or "the Company") is pleased to provide an update to the market on its strategically located Root Lake Lithium Project adjoining Green Technology Metals' (ASX:GT1) Root Project, as lithium market conditions show encouraging signs of recovery.

Pioneer's Chief Executive Office, Michael Beven commented:

"Root Lake is situated within a proven lithium district, strategically located between GT1's McCombe and Root Bay resource. Our prior exploration has confirmed multiple spodumene-bearing pegmatite corridors, underscoring the significant upside potential of the project.

With early signs of improving lithium pricing, we are preparing to recommence exploration, focusing on high-priority targets identified during our 2023–2024 programs. We are adopting a disciplined, phased approach that enables rapid field mobilisation and targeted drilling while maintaining operational flexibility."



Root Lake - Strategic Update

Pioneer Lithium Limited provides an update on the Root Lake Lithium Project, located in the Root Bay region of north-western Ontario, Canada. With global lithium pricing and sentiment beginning to stabilise after an extended downturn, the Company has commenced internal planning for the potential re-activation of field programs at Root Lake. Pioneer's strategy has been to preserve capital during low-price conditions while maintaining the flexibility to advance high-quality assets as the market conditions improve.

Root Lake occupies a favourable structural and geological position, directly adjoining and situated between GT1's McCombe and Root Bay lithium resources (ASX:GT1 18/10/2023). This corridor continues to be one of the most active spodumene exploration and development regions in Ontario.

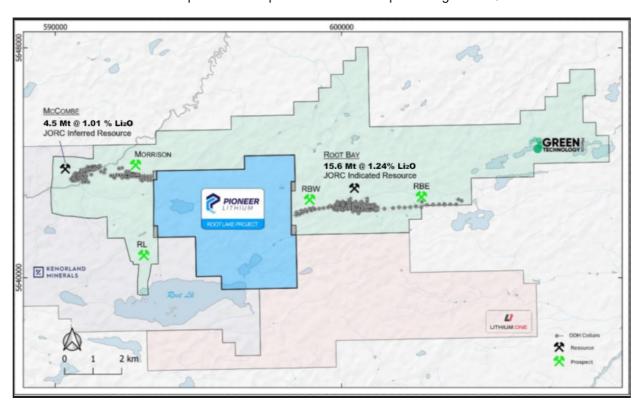


Figure 1: Location map of the Root Lake Project adjacent to neighbouring assets and claim holders.

Summary of Previous Exploration at Root Lake

Pioneer has completed several field programs since listing, confirming the presence of multiple LCT pegmatite systems across the project.

2023 Filed Programs

- A total of 85 pegmatites were identified across the Central Corridor, displaying LCT fractionation indicators (ASX:PLN 16/10/2023).
- Extensive mapping of the Extended Morrison Corridor confirmed favourable host geology and continuity with GT1's McCombe trend (ASX:PLN 26/10/2023).

Red Squirrel Spodumene Discovery

 Pioneer identified a spodumene-bearing pegmatite with visible spodumene at Red Squirrel, located approximately 500m from GT1's Root Bay West system (ASX:PLN 24/10/2023).



2024 Trenching and Mechanical Stripping

- The 2024 field program included 1,320 metres of trenching, which exposed new pegmatite zones.
- Results included grab samples up to 2.95% Li₂O and channel samples up to 3,530 ppm Li, confirming multiple new target areas (ASX:PLN 04/12/2024).
- More than 90 pegmatite outcrops have now been mapped within the Root Lake property.
- These results collectively indicate that Root Lake hosts several LCT pegmatite trends, some of which may represent structural extensions of GT1's nearby deposits.

Community Milestone

• Slate Falls First Nations: Early exploration agreement enhances social license and permits future exploration.



Figure 2: Photo of spodumene bearing pegmatite outcrop hosted within metasediments (left) and medium grained spodumene lathes within a pegmatitie sample (right) from the central corridor, mineralised sample returned 2.95% Li₂O (ASX:PLN 24/10/2023)



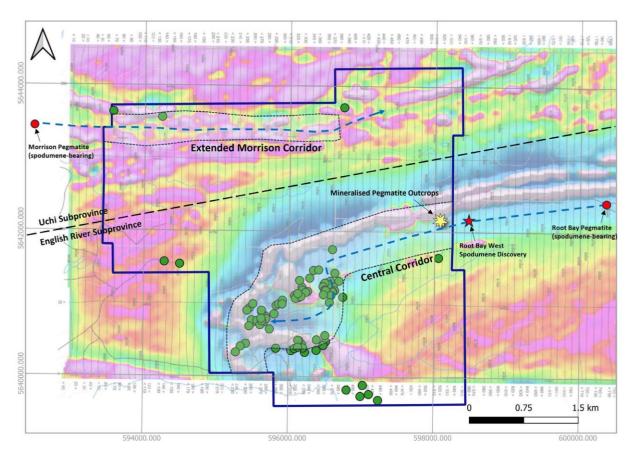


Figure 3: Map of the Root Lake Project showing the location of pegmatite outcrops (shown in green and yellow) identified during the 2023 exploration program (ASX:PLN 26/10/2023).

Forward Looking Exploration Strategy

Pioneer is currently designing the next phases of exploration at Root Lake project, focused on systematically following up the results generated during the 2023 and 2024 field programs. This planning includes the assessment of priority targets, refinement of proposed work programs and identification of the most effective methods to advance each corridor.

As part of this process, the Company is preparing the required documentation and securing the appropriate approvals to ensure that field activities can recommence. This disciplined yet ready-to-execute approach allows Pioneer to maintain momentum and respond quickly as lithium markets continue their upward trend.

For further information on Pioneer: www.pioneerlithium.com.au.

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Competent Person Statement

The information in this announcement that relates to geological data for the Root Lake Lithium Project is based on information compiled and reviewed by Mr Michael Beven, a Member of the Australasian Institute of Geoscientists and Metallurgy. Mr Beven has sufficient experience relevant to the style of mineralisation under consideration and consents to the inclusion of this information in the form and context in which it appears.

Compliance Statement

This report contains information on the Root Lake project extracted from ASX market announcements dated 10/10/2023 16/10/2023, 24/10/2023, 26/10/2023 and ,04/12/2024 released by the Company and reporting in accordance with the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). The original market announcements are 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 original market announcement which continue to apply.

Forward-looking statements

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