

# YALGOO FIELDWORK COMMENCES OVER MAIN TARGET AREAS

21 May 2024



## HIGHLIGHTS

- **Fieldwork commenced at the Yalgoo lithium projects**
- **Large scale soil and rock chip sampling program underway**
- **First phase to test main ML targets with almost 1000 soil samples to be collected**
- **Proximate to known lithium occurrences**

Premier1 Lithium Limited (**ASX:PLC**) ("**Premier1**" or the "**Company**") is pleased to announce the commencement of fieldwork at its Yalgoo lithium projects. Target delineation work includes tenement-wide soil and rock chip sampling over the main target areas previously identified by machine learning (ML) in the northern part of the Yalgoo project and the southeastern part of the Yalgoo West project. A total of 930+ soil samples will be collected on a 200x200m grid for Yalgoo and on a 100x200m grid for Yalgoo West (subject to pending land access approvals).

The two projects are located within the northern part of the Yalgoo-Singleton greenstone belt (YSGB) in the Murchison province. Both sequences are typical greenstones consisting of submarine tholeiitic and high-Mg basalt lava flows, large intrusive gabbro bodies overlain by BIF and volcanic rocks with minor ultramafic and felsic rocks. The greenstone belt is intruded and bounded by granitoids, predominantly granodiorite and monzogranite to tonalite with minor syenogranite. Pegmatites associated with the granites are recognised throughout the project area and especially along the granite greenstone contacts.

Tectonically the greenstone is bounded by major faults and shear zones, with the major Mulloo and Wagga Wagga Shear Zones on the eastern contact covered by the Yalgoo project and the major Salt River Shear Zone covered by the Yalgoo West project. Premier1 (utilising SensOre ML technology) identified a large, predicted lithium target within a region not previously highlighted for its lithium exploration potential. During target analysis lithium mineralised LCT pegmatites were identified by a number of adjoining companies, including Firetail Resources and Zenith Minerals, validating the emerging potential of the area for LCT pegmatites.

At Yalgoo, the predicted target forms a large cluster of Li prospectivity that was previously unidentified and untested representing lithium potential over the northern portion of the greenstone belt. Additionally, the eastern portion of the project is prospective for VMS copper and zinc. At Yalgoo West another cluster of Li prospectivity predicted unidentified and untested lithium potential over the western portion of the greenstone belt.

The greater Yalgoo project area encompasses two joint ventures. In the eastern portion of the project area (Yalgoo), Premier1 has the rights to earn up to 70% of all commodities except Rare Earth Elements in a farm-in announced on 12 May 2023 with Venture Minerals (**ASX:VMS**). In the western portion of the project area (Yalgoo West), the Company is in a farm in with Firetail Resources (**ASX:FTL**) where Premier1 may earn 80% of lithium rights by spending announced 7 November 2023..

The next steps on the broader Yalgoo project involve extensive target delineation activities to generate drilling targets for the second half of 2024.

Premier1 Lithium

10 Queen Street, Melbourne, Australia

[info@premier1lithium.com](mailto:info@premier1lithium.com) | + 61 3 9492 3843

[premier1lithium.com.au](http://premier1lithium.com.au)

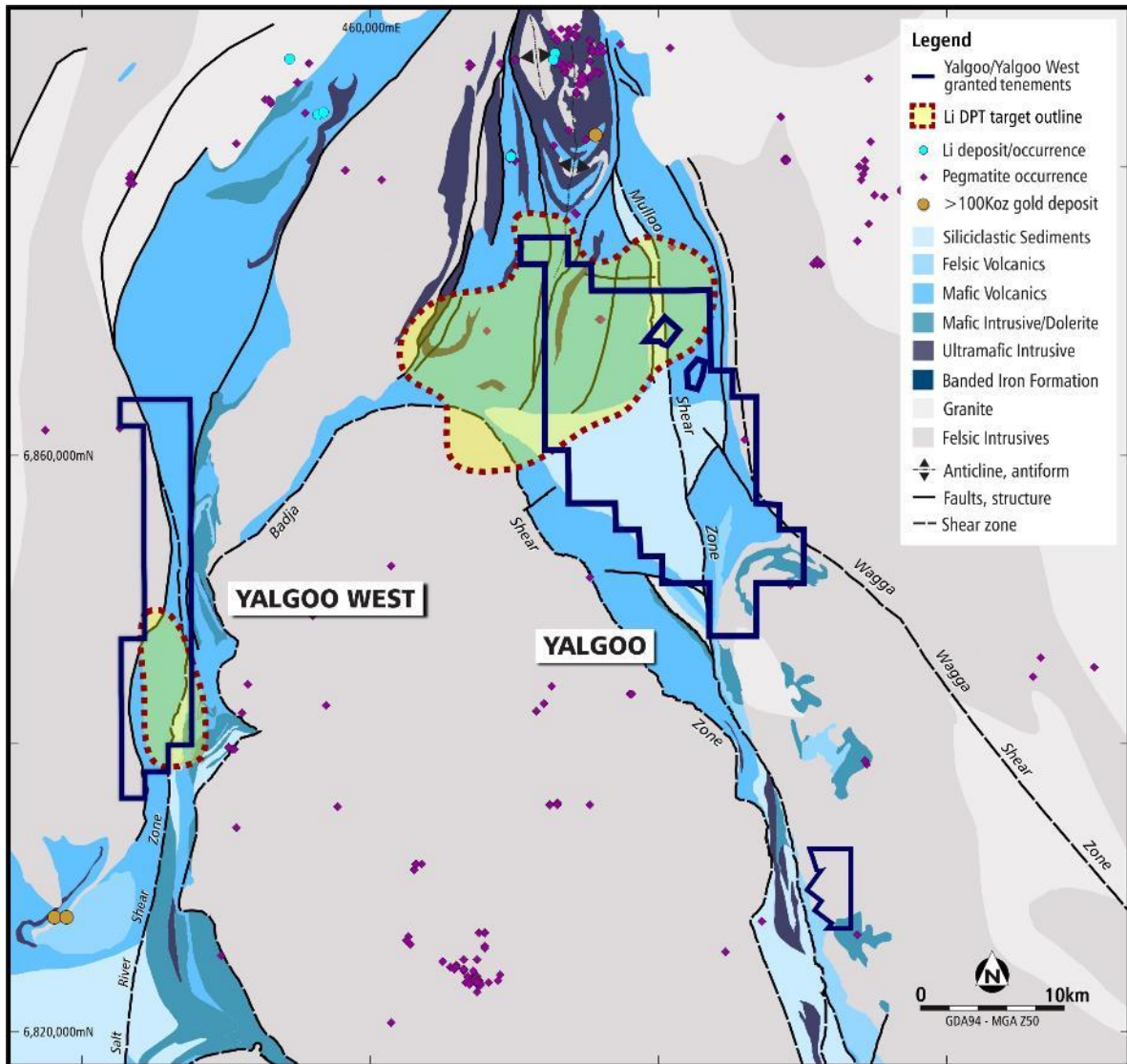


Figure 1: Regional geological map of the greater Yalgoo project area including identified ML targets.

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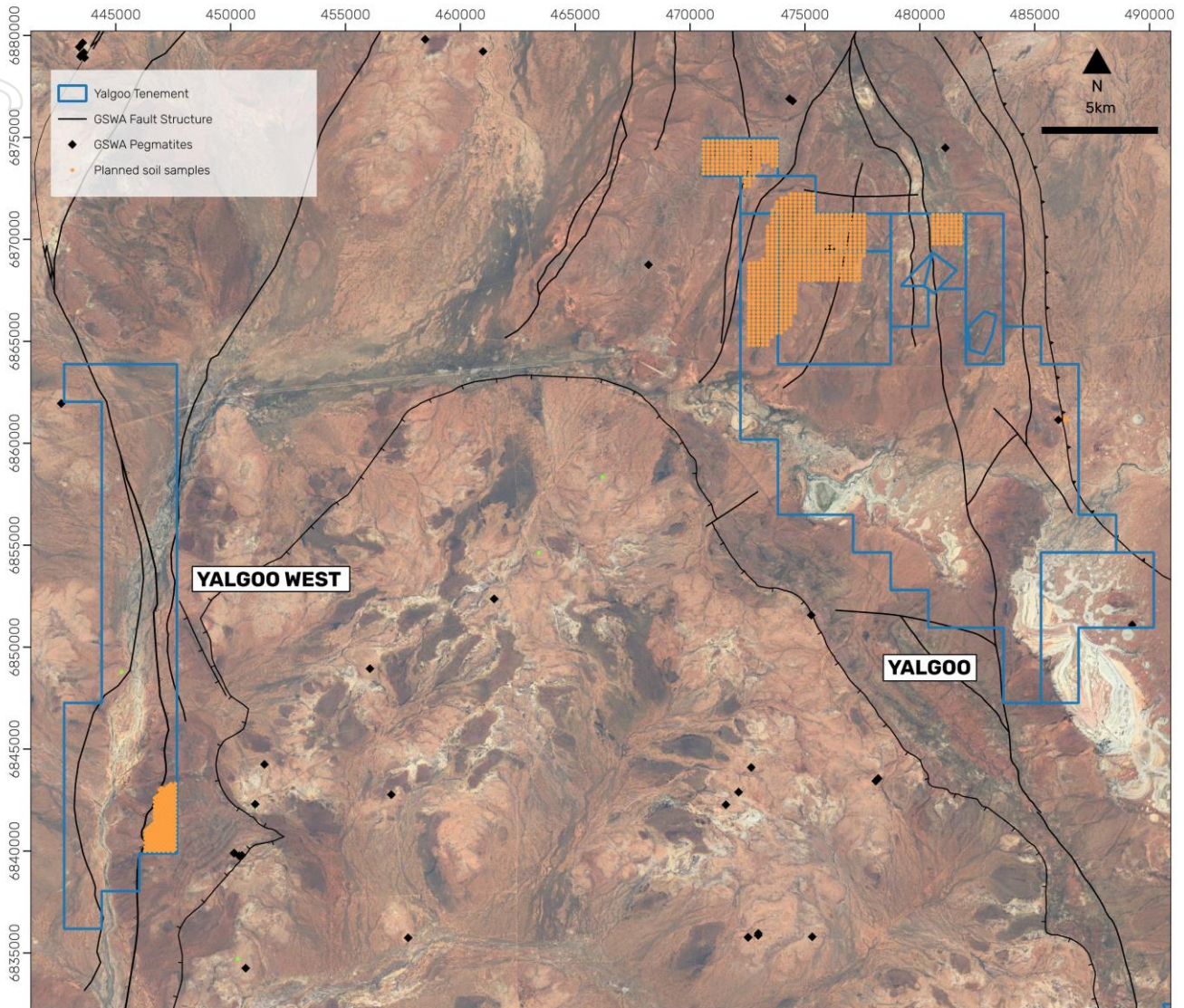


Figure 2: Planned first phase soil samples over greater Yalgoo project area.

This release was approved by the CEO.

## ENQUIRIES

**Richard Taylor**

Chief Executive Officer

**T: +61 3 9492 3843**

[richard.taylor@premier1lithium.com.au](mailto:richard.taylor@premier1lithium.com.au)

## ABOUT PREMIER1 LITHIUM

Premier1 Lithium (**ASX:PLC**), is focused on tapping into the potential of Western Australia's renowned lithium reserves. Our strategic exploration approach in this world-class mining jurisdiction is driven by a commitment to uncover valuable resources efficiently and effectively. Our projects are situated in the heart of Western Australia's renowned greenstone belts, home to the world's largest lithium-bearing LCT pegmatite deposits. Abbotts North is a premier exploration project with outcropping lithium bearing pegmatites. Beyond Abbotts North, we have a pipeline of promising projects.

## COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Robert Rowe, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM) and is a Registered Professional Geoscientist in the field of Mineral Exploration with the Australian Institute of Geoscientists. Mr Rowe is a full-time employee and the Chief Operating Officer of SensOre. Mr Rowe has sufficient experience that is relevant to the style 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 Rowe consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.