

# HIGH RESOLUTION AIRBORNE MAGNETIC SURVEY COMPLETED AT YALGOO

13 November 2024



## HIGHLIGHTS

- Premier1 has completed a high-resolution magnetic survey across the Yalgoo project, covering 700 line kilometres of data
- The survey targets key prospects including Crescent, Olive Queen, and Cumberland
- Spartan Resources co-funded the survey, extending coverage into their neighbouring tenure
- The survey includes exploration of the untested Mulloo shear zone, a potential area for new discoveries
- A detailed geological interpretation will follow to guide drill targeting
- Reprocessed historic magnetic survey data reveals complex structural features potentially linked to mineralisation across multiple prospects

Premier1 Lithium Limited (**ASX:PLC**) ("**Premier1**" or the "**Company**") is pleased to announce the completion of a high-resolution magnetic survey at its Yalgoo project, covering approximately 700 line kilometers. This survey, co-funded by Spartan Resources, an adjacent tenure holder, aims to enhance the understanding of mineralisation across key prospects, including Crescent, Olive Queen, and Cumberland.

### Managing Director Jason Froud commented:

*"Following the completion of our successful and strongly supported raise last week, we are committed to rapidly advancing exploration across our key project area. The high-resolution data from the drone survey is currently being processed and will enable a detailed interpretation of the geological and structural setting of the area and better understanding of the controls on known mineralisation. The new data, in combination with recent geological and structural mapping as well as geochemical sampling, will greatly enable improved drill targeting."*

The program comprised the acquisition of approximately 700 line kilometres of drone magnetic data at 25m traverse line spacings with 250m tie lines. The data was acquired using a PAS HE-01 rotary wing UAV and carried out by Pegasus Airborne Systems as a sub-contractor to Atlas Geophysics Pty Ltd.

Prior to the commencement of the survey, the Company reprocessed historical airborne magnetic survey data from the 1980s and 1990s. This data recently released from confidentiality, whilst relatively coarse grained, highlighted the structural complexity of the Wadgingarra area and the benefit of detailed geophysical data. Notably, several north and northwest structures are seen in the data that appear to be related to mineralisation at many of the prospects including Olive Queen, Crescent, Cumberland and Carlisle.

The current survey covers the broader Wadgingarra area (Figure 1) which includes the Crescent, Olive Queen, Carlisle, Cumberland, Broken Mount and Consuelo prospects and, extend into Spartan Resources Limited's ("**Spartan**") tenure. This extension covers the entirety of the Crescent and Olive Queen deposits with the aim of understanding the structural and lithological controls on mineralisation. Spartan has agreed to co-fund the drone survey.

Additionally, the survey has also been extended to the west of the main project area to cover the Mulloo shear zone and contact with late basin conglomerates and the mafic/ultramafic package which hosts the known deposits in the region. The mineralisation potential of this contact and late basin area is completed untested by exploration.

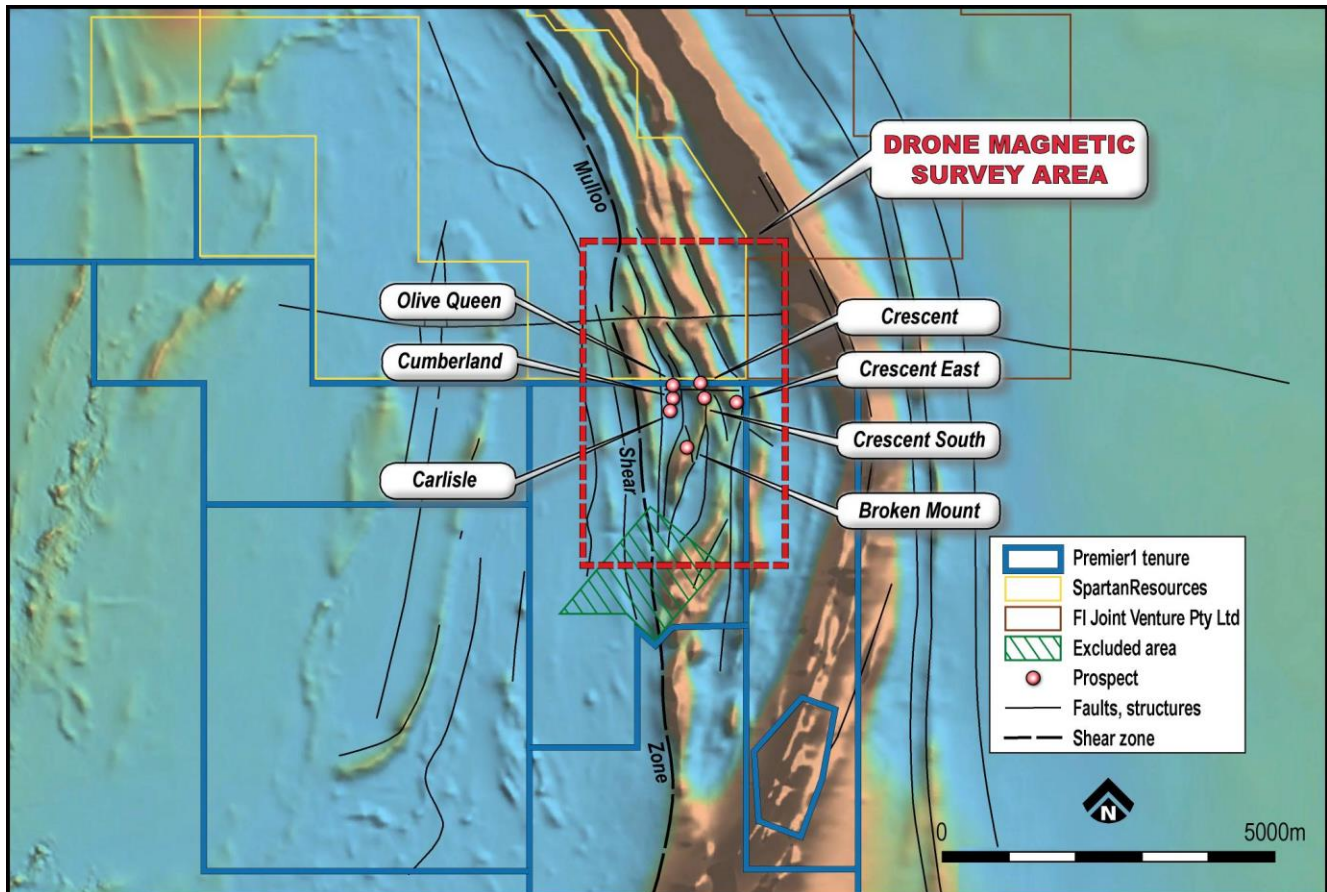


Figure 1: Location of drone survey over existing reprocessed magnetic imagery.

### Yalgoo Project background

The Yalgoo project, located approximately 400km north of Perth within the Yalgoo-Singleton Greenstone Belt, is a highly prospective region hosting major copper-gold mines including Golden Grove and Deflector. Premier1 is earning a 70% interest in project from Critica Limited which covers 220 km<sup>2</sup> and includes over 25 km of untested mineralised shear zones. Historical exploration, primarily limited to shallow drilling, identified high-grade gold mineralisation. This mineralisation remains largely untested at depth and along strike, presenting significant upside potential. Notably, the historical work, which dates back over 30 years, focused on oxide zones near surface and was almost solely focused on known gold mineralisation around old (circa 1900) mine workings. Deeper high-grade zones and mineralising structures along strike and down dip/plunge are largely untested by modern drilling techniques.

This release was approved by the Premier1 Lithium Board.

## ENQUIRIES

**Jason Froud**

Managing Director

**T:** +61 8 6188 8181

[info@premier1lithium.com.au](mailto:info@premier1lithium.com.au)

**Aiden Bradley**

Media & Investor Relations

**M:** +61 414 348 666

[aiden@nwrcommunications.com.au](mailto:aiden@nwrcommunications.com.au)

## ABOUT PREMIER1 LITHIUM

Premier1 Lithium (**ASX:PLC**), is focused on tapping into the potential of Western Australia's renowned mineral resources. Our strategic exploration approach in this world-class mining jurisdiction is driven by a commitment to uncover valuable resources efficiently and effectively. Our processes are driven by strict project review, capital discipline and focus on highest impact exploration opportunities within lithium, gold and copper. 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.

## COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to Exploration Results is based on information compiled by Jason Froud, a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG). Mr Froud is a full-time employee and the Managing Director of Premier1 Lithium Limited. Mr Froud 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 Froud consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.