

2 JUNE 2022

ASX ANNOUNCEMENT

MULWARRIE LITHIUM POTENTIAL

Geology similar to neighbouring Mt Ida lithium deposit

Western Australian explorer **Olympio Metals Limited (ASX:OLY) (Olympio or the Company)** is pleased to announce the results of a review of the lithium potential of its 100% owned Mulwarrie Project in the Eastern Goldfields of Western Australia.

Highlights

- **Mulwarrie Project is located along strike from, and in similar geology to Red Dirt's (ASX:RDT) Mt Ida lithium project;**
- **Lithium bearing pegmatites identified adjacent to the Mulwarrie Project;**
- **Program of rock chip sampling, mapping and soils to commence next week to test lithium prospectivity.**

The Company has completed a review of the lithium prospectivity of the Mulwarrie Project, with encouraging signs warranting a detailed follow up field program.

Olympio's Mulwarrie Project (Figure 1) is hosted in the same geological setting as Red Dirt Metals Ltd's (ASX:RDT) Mt Ida lithium project.¹ Venus Metals Ltd (ASX:VMC) announced rock chip samples with grades up to 5.8% Li₂O along strike to the north² and Ora Banda Mining Ltd (ASX:OBM) have mapped a 10km zone of lithium bearing pegmatites to the west of the Riverina mine³ adjacent to Olympio's Mulline prospect.

Historically, pegmatites have been identified in the Olympio project area, however lithium was not the focus of exploration at that time. The geological setting in this area is ideal to host economic grades of spodumene-bearing pegmatites.

The Company has engaged Geosmart Consulting to review the lithium potential of the project and assist with the planned exploration program. Geosmart Consulting's personnel have significant lithium experience and the first mapping and sampling program starts next week.

Olympio's Managing Director, Sean Delaney, commented:

"Our Mulwarrie Project area is hosted in the right geology for a lithium discovery, with Red Dirt's Mt Ida discovery proving the potential of the region.

"Whilst the Mulwarrie Project was initially acquired for its strong gold potential, we believe there is also significant potential for economic lithium within the project area.

¹ ASX Announcement – Red Dirt Metals (RDT) – Presentation Investor Update – May 2022

² ASX Announcement – Venus Metals (VMC) – Henderson Project – Encouraging lithium assays received

³ ASX Announcement – Ora Banda Mining (ORM) – Production update and Lithium Occurrences – October 2021

"We look forward to building our understanding of the geology using experienced lithium explorers."

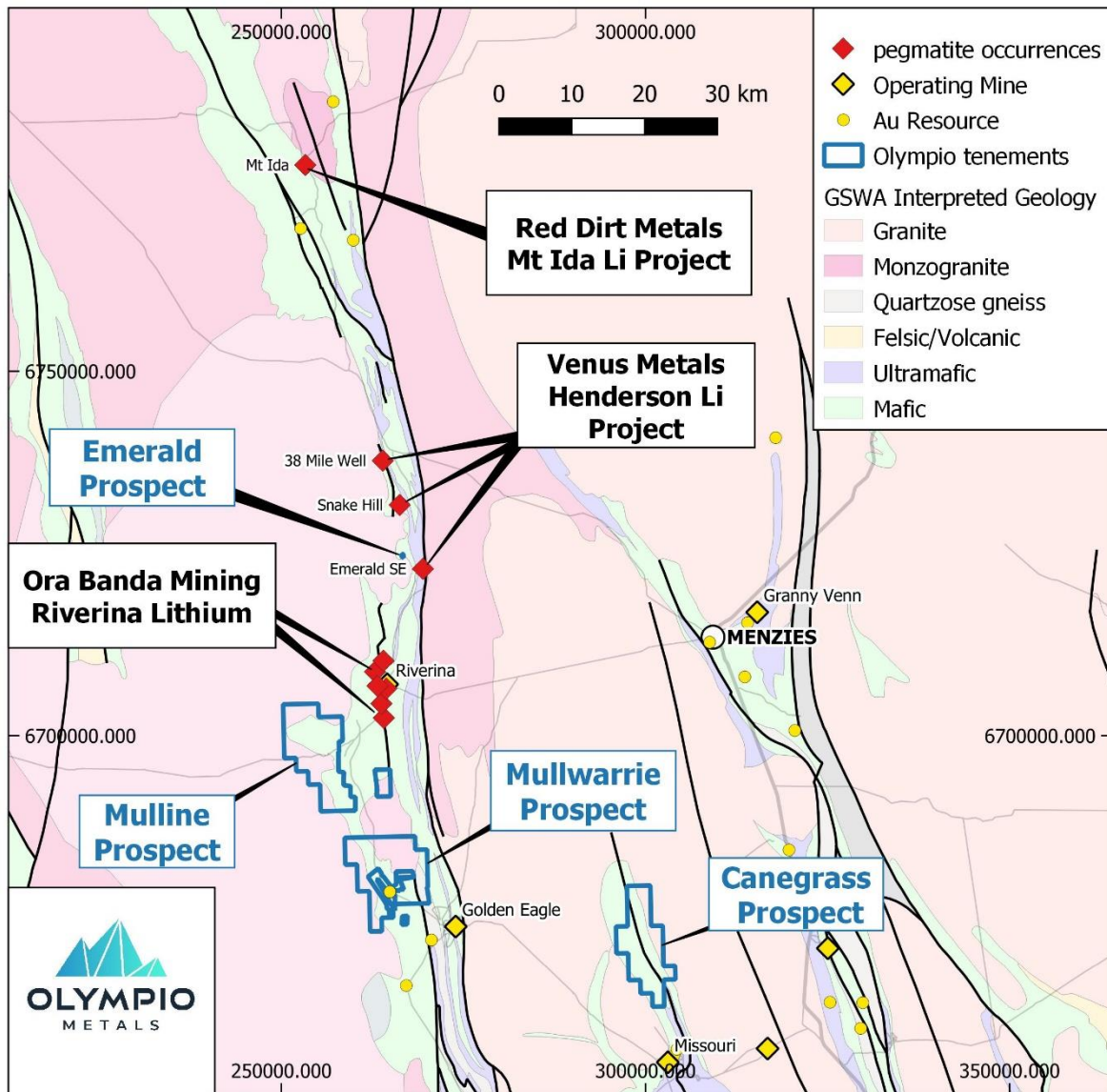


Figure 1: Regional geological setting, Mulwarrie Project

Pegmatite Geology

Lithium-caesium-tantalum (LCT) pegmatites are normally intruded during the latter stages of tectonic activity in geodynamic environments related to plate convergence. In these settings, they may be emplaced both during deformation and regional metamorphism or after these events (Bradley et al. 2010).

In pegmatite provinces, including those in Western Australia (Duuring 2020), there are commonly several generations of pegmatites, with only some representing LCT spodumene-bearing pegmatites.

The pegmatites are strongly controlled by major shear zones with syn-shearing pegmatite melt emplacement resulting in the anomalous zonal geometry of Li, K, and Na zones in the dilating sinistral shear zone.

Economic LCT pegmatites, in Western Australia and globally, are dominated by spodumene mineralogy, have similar Li_2O grades (~1.0 to 1.5% Li_2O on average), are hosted in upper greenschist to amphibolite-facies domains, and normally occur as gently dipping to sub-horizontal planar bodies.

Within Western Australia, pegmatites are dominantly located in Archean greenstone belts where they tend to represent swarms of normally subparallel gently dipping sill-like bodies. These gently dipping planar bodies can extend to greater depths and offer favourable geometries for economic mining in open pits.

Red Dirt's (ASX:RDT) Mt Ida lithium deposit is located 100 km northwest of Menzies, in the Eastern Goldfields of the Yilgarn Craton. Pegmatites are hosted in mafic and ultramafic sequences, which are intruded by late-stage granites within the Mt Ida/Ularring greenstone belt.

Mulwarrie Work Program

- Field mapping program with detailed rock chip sampling wherever there is outcropping pegmatite with the aim of building up the geochemical features of each phase of felsic intrusions and intrusion relationship among them.
- The Company is aware that the nearby Mt Ida lithium project is hosted in the pegmatite bodies that pre-date the Copperfield granite. Accordingly, the Company's immediate focus will be placed on early-stage pegmatite dykes or sills once the geological context is understood through the mapping program.
- Exploration areas which are obscured by dense vegetation and/or thick regolith plus residual soils, may be covered by soil mapping and soil geochemistry where geological mapping is impossible. Soil mapping and geochemistry can indicate strike extensions and repeats of pegmatite bodies.

References

Bradley DC, McCauley AD, Stillings LS. 2010. Mineral-deposit model for lithium-cesium-tantalum pegmatites. USGS Scientific Investigations Report 2010-5070-0

Duuring P. 2020. Rare-element pegmatites; a mineral system analysis. Geological Survey of Western Australia Record 2020/7; p. 1-6.

The announcement is authorised by the Board of Olympio Metals.

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Competent Person's Statement

The information in this announcement that relates to exploration results is based on information compiled by Mr. Neal Leggo, a Competent Person who is a Member of the Australian Institute of Geoscientists and a consultant to Olympio Metals Limited. Mr. Leggo has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Leggo consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

ISSUED CAPITAL

Ordinary Shares: 53.7M

BOARD OF DIRECTORS

Sean Delaney, Managing Director

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