

## New REE Carbonatite Targets Outlined at Lyons River Project

### Highlights

**27 Rare Earth Elements (REE) and carbonatite targets corresponding to a range of magnetic, radiometric (thorium) and ASTER imagery response outlined at Dalaroo Metals Lyons River Project.**

**Lyons River Project contains the Durlacher Super Suite and Halfway Gneiss covering an area of over 700 km<sup>2</sup> which host nearby Hastings' Yangibana and Dreadnought's REE deposits to the north and Kingfisher Mining's Mick Well REE discovery to the south.**

**Systematic geochemical sampling programs are well underway at Marloo River/View Hill REE prospects and have begun at the newly identified REE carbonatite target areas.**

**Lithium potential pegmatite swarms of the Thirty Three Supersuite at Lyons River with high LCT fertility extending across a 9km x 6km zone are being targeted in the current next phase of exploration. Highly anomalous values of 114ppm lithium (Li), 1638ppm rubidium (Rb), 329ppm niobium (Nb), 116ppm tantalum (Ta), 182ppm tin (Sn) across a number of lithium targets at Lyons River.**

Dalaroo Metals Ltd (ASX: DAL, "Dalaroo" or "Company") is pleased to announce that a detailed review by consultant geophysicist of a range of datasets held and acquired, including detailed magnetics, radiometrics (thorium) and ASTER, have outlined 27 targets with potential for Rare Earth Elements (REE) and carbonatites in its Lyons River Project in the Gascoyne Province of Western Australia (Figures 1 and 5). Dalaroo has commenced its exploration field work for the 2023 field season and the planned field work is anticipated to define drill targets and expected to be completed during the September 2023 quarter. It will comprise:

- Geological reconnaissance and rock chip sampling of REE/carbonatite targets
- Systematic soil geochemical program of target areas
- Geophysical surveys

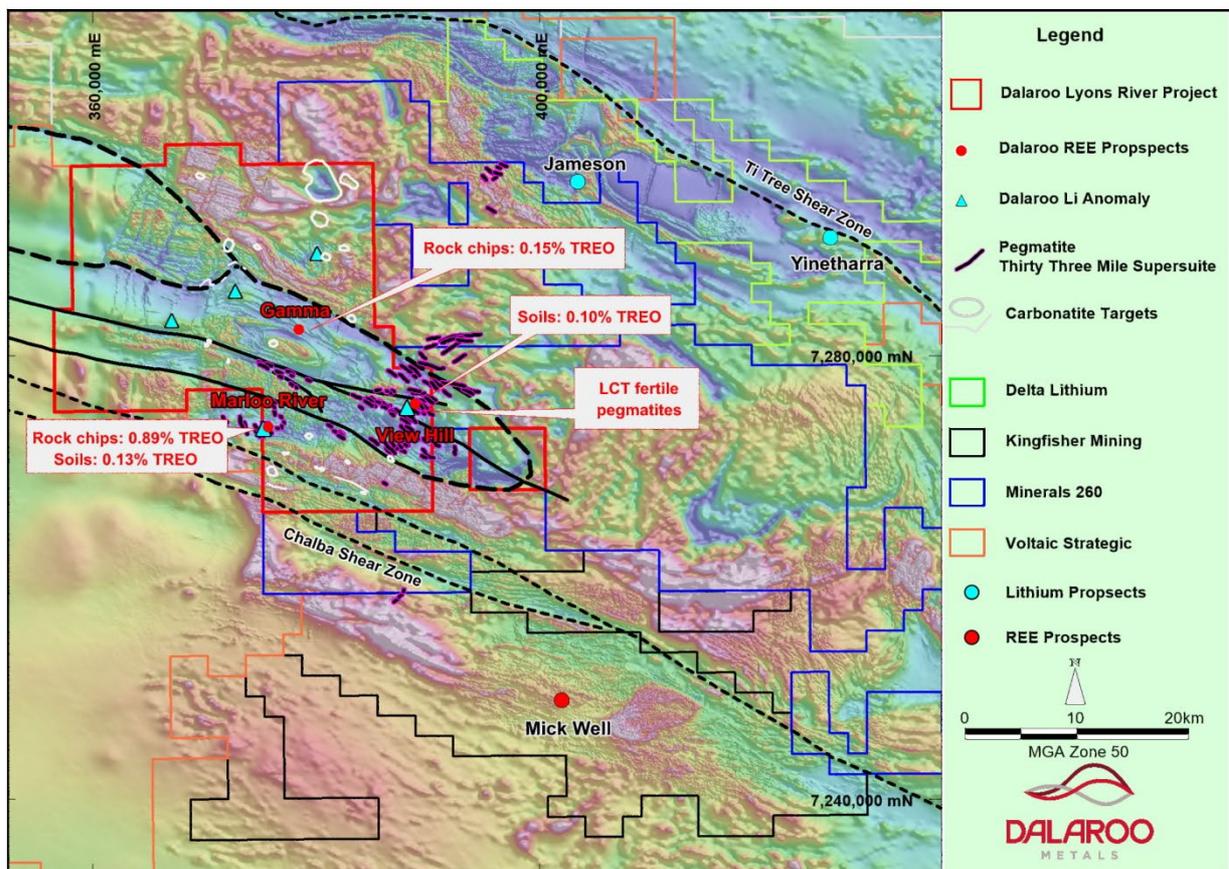
### **Dalaroo's Managing Director, Harjinder Kehal, commented:**

*"We are excited to have delineated such a large number of new REE carbonatite targets over the eastern-half side of our Lyons River Project and looking forward to completing geological reconnaissance and sampling of these high-quality integrated targets for subsequent drill-test follow-up" Mr Kehal said.*

## Technical Commentary

A detailed review has been completed by merging available high resolution magnetic and radiometric data over the Lyons River Project and the greater Gascoyne Province in order to generate an updated set of imagery to assist in the characterisation of known carbonatites along with a review of Geological Survey Western Australia ASTER imagery.

A total of 27 target areas have been identified for their geophysical characteristics that are compatible with carbonatite associated geology. These targets have been strongly recommended for ground-truthing and rock chip sampling to investigate REE mineralization potential (Figure 1).



**Figure 1:** Lyons River Project – New REE carbonatite targets, Marlo River, Gamma and View Hill REE prospects defined in 2022. LCT fertile pegmatite swarm covering 9km by 6km in the south-eastern part of the project and lithium anomalies outlined by Dalaroo.

Dalaroo's Lyons River Project stratigraphy comprises approximately 700 km<sup>2</sup> of the Durlacher Super Suite and Halfway Gneiss, transected by major NW-trending shear zones including the Chalba Shear. This same stratigraphy and comparable structural setting hosts significant REE deposits nearby to the north, at the Hastings Technology Metals Yangibana and Dreadnought Resources Mangaroon projects, and to the south at Kingfisher Mining's Mick Well project (Figure 2).

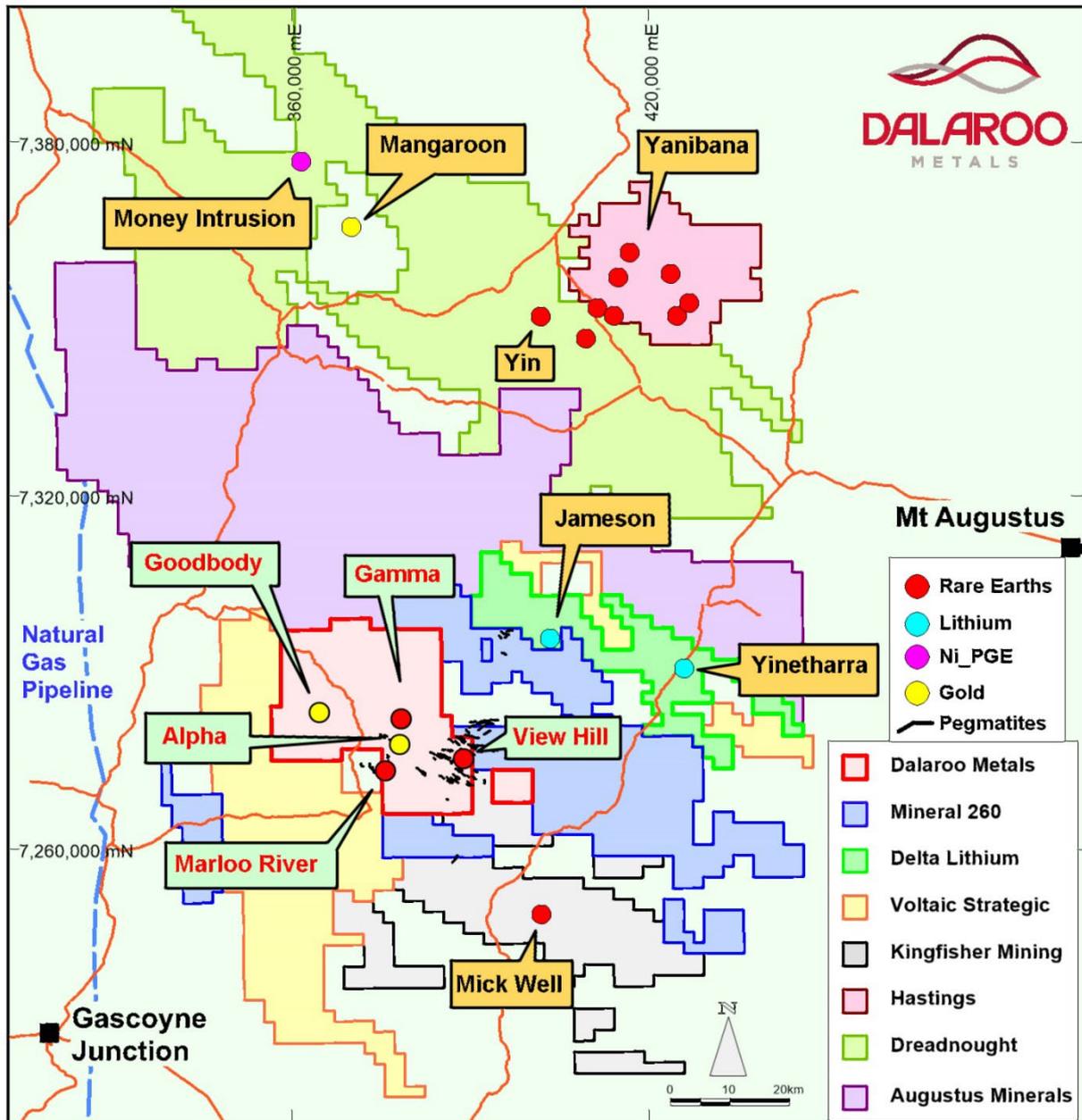


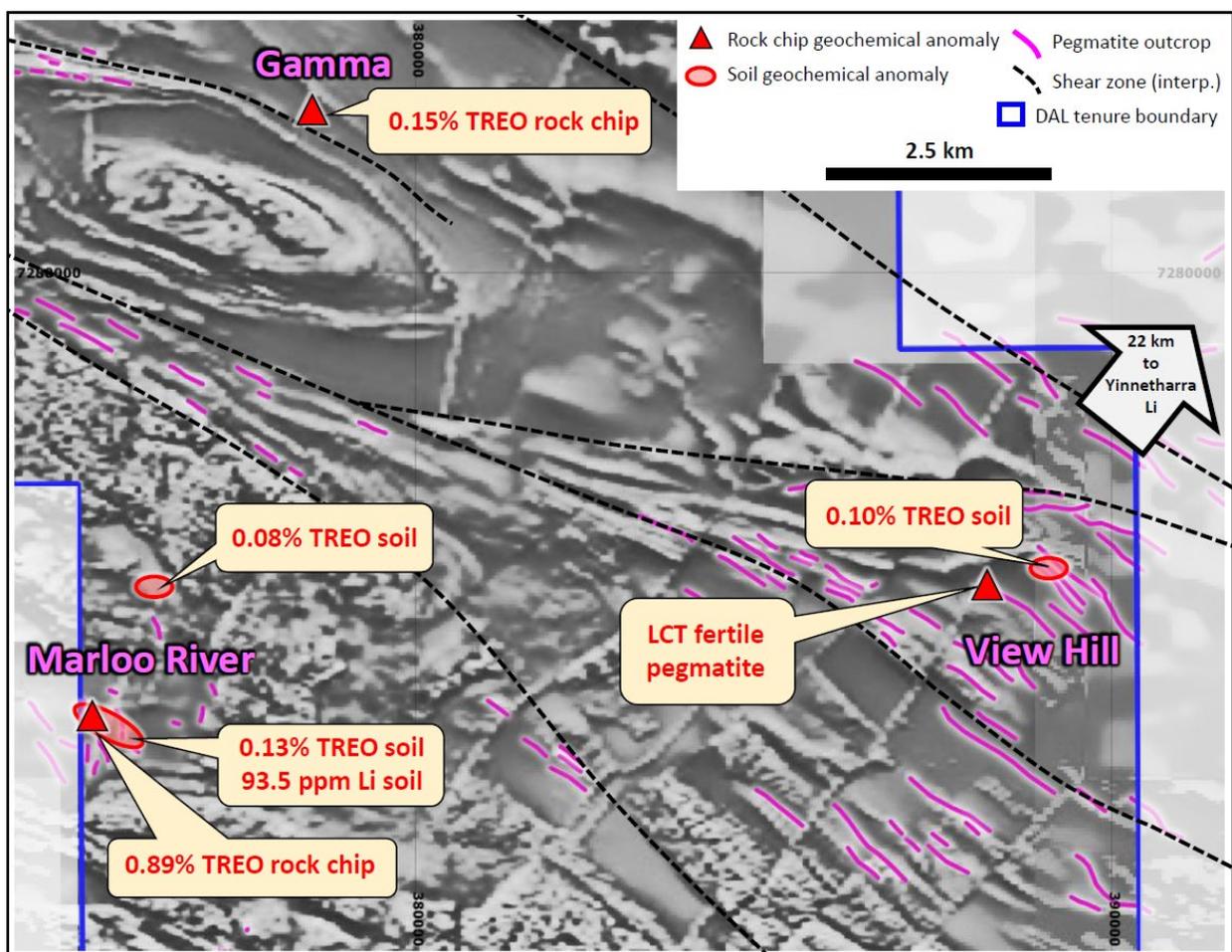
Figure 2: Gascoyne Province REE and lithium companies and prospects

## Next Steps

Dalaroo's 2023 Lyons River Project field work season has commenced, with geological reconnaissance mapping of newly-defined carbonatite-targets currently underway.

### REE Potential

Systematic geochemical sampling programs to begin at the newly identified REE carbonatite target areas. Exploration programs planned for the 2023 field season will also include completion of the systematic soil geochemical programs at View Hill and extension soil geochemical programs at Marloo River prospect where a zone of REE soil/rock anomalism covering an area of 1.5km by 0.5km has been delineated with peak value of 0.89% TREO (Figure 3). Positive outcomes of these programs will guide first-pass drill testing of Marloo River targets during the second half of 2023. (ASX:DAL – See ASX Announcement from 4 April 2023).



**Figure 3:** Lyons River Project – Marloo River and location of anomalous TREO geochemical results, and View Hill with location of samples indicating fertile pegmatite and granite areas.

### ***Lithium Potential***

In the **View Hill** pegmatite zone, regional scale north-south oriented 100m-spaced soil sampling transects are assessing geochemical trends in LCT fertility and rare metal/Li prospectivity across the large 9 km x 6 km area. Constraining potential geochemical zonation across the pegmatite swarm can aid in vectoring towards rare metal mineralized pegmatite domains.

Pegmatites in the adjacent Yinnetharra district form part of the intrusive Thirty Three Supersuite (“TTS”), which comprises granite, granitic pegmatites (microcline-muscovite-tourmaline), and rare-metal pegmatites in high-grade amphibolite facies metamorphic domains. Recent field mapping during the second half of 2022 confirmed that the granites and pegmatites of the TTS have also intruded the host stratigraphy of the Lyons River Project tenements (Figures 1 and 3).

Dalaroo’s lithium anomalous rock chip results targets are located approximately 21km south-west of Delta Lithium’s Yinnetharra Lithium Project (Figure 3). The Yinnetharra Lithium Project has returned significant drill intersections that included 20m @ 1.28% Li<sub>2</sub>O, 15m @ 1.28% Li<sub>2</sub>O and 55.6m @ 1.12% Li<sub>2</sub>O (ASX: DLI -See ASX: Announcements from 3 April 2023 and 8 May 2023).

Selective reconnaissance rock chip sampling completed at View Hill of the pegmatites has demonstrated whole rock geochemistry that is considered highly fertile for LCT-type pegmatites associated with Li mineralization (Figure 3). Assays from the pegmatite swarm that extends across a 9km X 6km area have returned highly anomalous values of 114ppm Li, 1638ppm Rb, 187ppm Nb and 182ppm Sn. Rock chip sampling of pegmatites in other targeted pegmatite swarm areas, west of View Hill, has returned significant Ta and Nb values of 116ppm and 329ppm respectively with anomalous Rb of 904ppm (ASX:DAL – See ASX Announcement from 1 December 2022).

### **ENDS**

#### **For more Information:**

Please visit our website for more information: [www.dalaroometals.com.au](http://www.dalaroometals.com.au)

Harjinder Kehal, Managing Director on +61 400 044 890

Authorised for release to the ASX by the Board of Dalaroo Metals Ltd.

## **COMPETENT PERSON**

The information in this report that relates to Exploration results is based on information compiled by Dalaroo Metals Ltd and reviewed by Mr Harjinder Kehal who is the Managing Director of the Company and is a Registered Practicing Geologist and Member of the AusIMM and AIG. Mr Kehal has sufficient experience that is relevant to the style of mineralisation, the type of deposit under consideration and to the activities 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 Kehal consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

## **FORWARD-LOOKING INFORMATION**

This report may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the planned exploration program and other statements that are not historical facts. When used in this report, the words "could", "plan", "estimate", "expect", "intend", "should" and similar expressions are forward-looking statements. Although Dalaroo believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

## **CAUTIONARY NOTE**

The statements and information contained in this report are not investment or financial product advice and are not intended to be used by persons in deciding to make an investment decision. In releasing this report, Dalaroo has not considered the objectives, financial position or requirements of any particular recipient. Accordingly, potential investors should obtain financial advice from a qualified financial advisor prior to making an investment decision.

### About the Lyons River Project

Lyons River is located approximately 1,100km north of Perth and approximately 220km to the north-east of the coastal town of Carnarvon, Western Australia. The Lyons River Project lies within the Mutherbukin Zone of the Gascoyne Province, which is the deformed and high-grade metamorphic core zone of the early Proterozoic Capricorn Orogen (Figure 4).

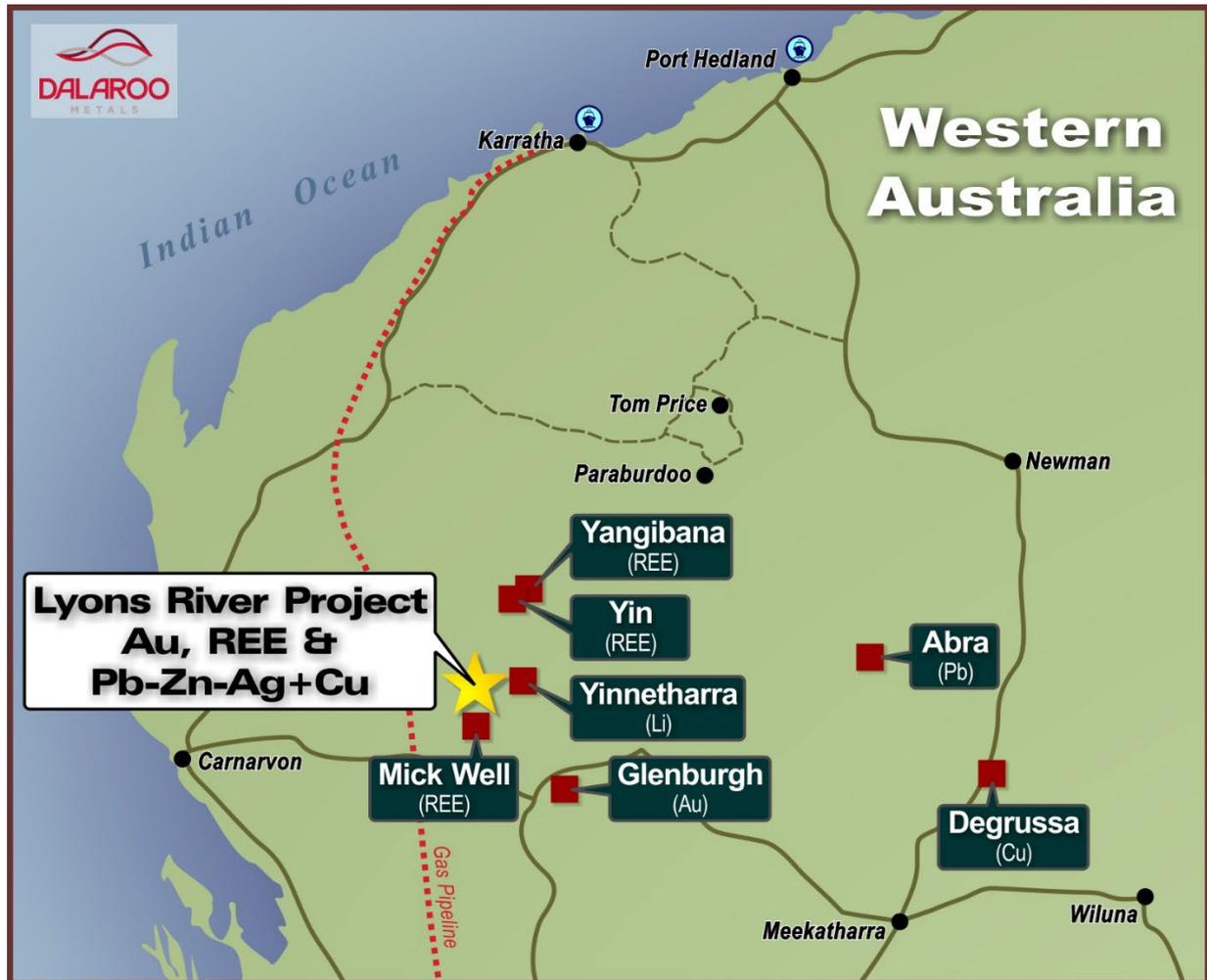


Figure 4: Lyons River Project location diagram