

ASX ANNOUNCEMENT 13 FEBRUARY 2024

## \$2.1M R&D Tax Incentive Underscores Mangaroon Rare Earths

### HIGHLIGHTS

- The 100% owned Mangaroon project is a globally significant critical minerals complex with a combined Resource at Yin and the Gifford Creek Carbonatite of **40.82Mt @ 1.03% TREO**. The Yin Resource of **29.98Mt @ 1.04% TREO** (ASX 30 Nov 2023) is **87% Measured and Indicated**.
- All this points to Mangaroon as a **long-life, strategically important, Tier I critical minerals project in the world's top investment jurisdiction** as per the Investment Attractiveness Index published in the Fraser Institute's Annual Survey of Mining Companies - Western Australia.
- Dreadnought is undertaking extensive metallurgical research and development studies to optimise on concentrates from Yin and the Gifford Creek Carbonatites. These studies also optimise how rare earths will be extracted into an intermediate product for further midstream refining (Figure 1). **Understanding the optimal extraction route into intermediate products is a key in commercialising Mangaroon.**
- Based on these key studies an application for a Federal Government Research & Development ("R&D") Tax Incentive in respect of the year ended 30 June 2023 was lodged. **An amount of ~\$2.1M has now been received. This emphasises the vital work being undertaken at Mangaroon.**
- At Mangaroon, **Dreadnought is driving to achieve the objectives outlined in the Federal Government's Critical Minerals Strategy 2023–2030:**
  - create a diverse, resilient and sustainable supply chain through strong and secure international partnerships;
  - build sovereign capability in critical minerals processing;
  - use critical minerals to help Australia become a renewable energy superpower; and
  - extract more value from resources onshore, to create jobs and economic opportunities, including for regional and First Nations communities.

**Dreadnought Resources Limited ("Dreadnought") is pleased to advise that a ~\$2.1M R&D tax incentive has been received in respect of the year ended 30 June 2023. As well as emphasising the vital work being undertaken at Mangaroon, the incentive significantly advances Mangaroon as a long-life, strategically important, Tier I critical minerals project in the world's top investment jurisdiction.**

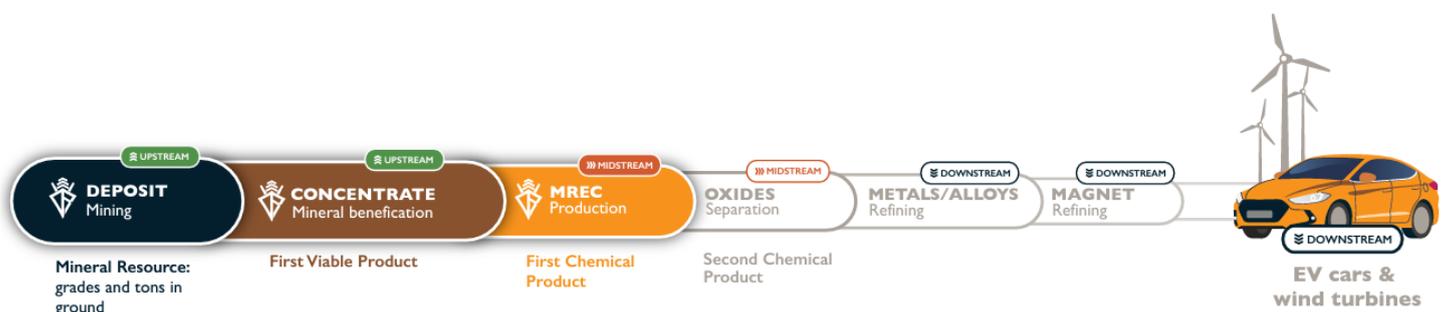


Figure 1: Rare earth supply chain highlighting the focus areas for Dreadnought's research studies.

Dreadnought acknowledges the Federal Government in supporting R&D activities in critical metals. Further acknowledgement also goes to our partners at the Australia National University, ANSTO, RSC, IMO, Primero and Strategic Metallurgy.

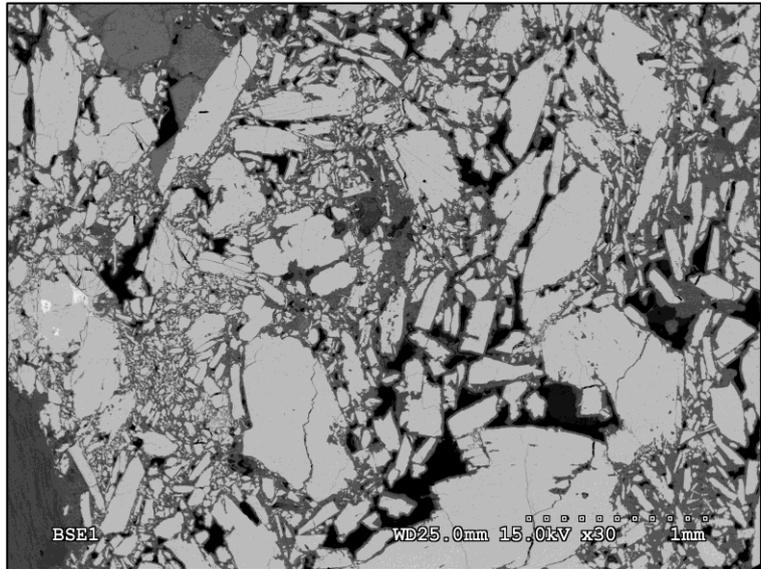


Figure 2: Image on the left of a floatation test from ALS Metallurgy which produced a concentrate with 41.7% TREO with TREO recovery of 92.8% into 3.55% of the original mass. Image on the right is an SEM image produced from ANU researchers showing a mass of coarse-grained brecciated monazite (light silver grey) encapsulated in iron oxides (darker grey) with some biotite (dark grey bottom left hand side) from the Yin ironstones (YINRC040).



Figure 3: Image of Dreadnought's Luke Blais with ANU's Marissa Higgins and John Mavrogenes at Mangaroon.  
~Ends~

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*This announcement is authorised for release to the ASX by the Board of Dreadnought.*

## INVESTMENT HIGHLIGHTS

### Kimberley Ni-Cu-Au Project (80/100%)

The project is located only 85kms from Derby in the West Kimberley region of WA and was locked up as a Defence Reserve since 1978.

The project has outcropping mineralisation and historic workings which have seen no modern exploration.

Results to date indicate that there may be a related, large scale, Proterozoic Cu-Au-Ag-Bi-Sb-Co system at Tarraji-Yampi, similar to Cloncurry/Mt Isa and Tennant Creek.

### Mangaroon Ni-Cu-Co-3PGE JV & Au/REE 100% Project

Mangaroon covers ~5,000kms<sup>2</sup> and is located 250kms south-east of Exmouth in the Gascoyne Region of WA. At the Money Ni-Cu-Co-3PGE has been identified and is subject to an earn-in by First Quantum Minerals (up to 70%). Dreadnought also has areas of outcropping high-grade gold including the historic Star of Mangaroon and Diamonds gold mines. In addition, Mangaroon has emerged as a globally significant, rapidly growing, potential source of critical minerals. Highlights include:

- An Exploration Target estimated for the top 150m of ~40km of the Yin REE Ironstone Complex (ASX 13 Feb 2023).
- An independent Resource for Yin Ironstones Complex of 29.98Mt @ 1.04% TREO over only ~4.6kms – including a Measured and Indicated Resource of 26.3Mt @ 1.04% TREO (ASX 30 Nov 2023).
- Regional source of rare earths at the Gifford Creek Carbonatite totaling ~17kms x ~1km (ASX 7 Aug 2023).
- A large, independent initial Resource of 10.84Mt @ 1.00% TREO at the Gifford Creek Carbonatites, containing a range of critical minerals including rare earths, niobium, phosphate, titanium and scandium (ASX 28 Aug 2023).

### Bresnahan HREE-Au-U Project (100%)

Bresnahan is located ~125km southwest of Newman in the Ashburton Basin. The project comprises ~3,700kms<sup>2</sup> covering over 200kms strike along the Bresnahan Basin / Wyloo Group unconformity. Bresnahan is prospective for unconformity related heavy rare earth (“**HREE**”) deposits similar to Browns Range HREE deposits, unconformity uranium (“**U**”) deposits and mesothermal lode gold similar to Paulsens Au-Ag-Sb deposits along strike.

Prior to consolidation by Dreadnought, the Bresnahan Basin had been successfully explored for unconformity uranium with limited exploration for mesothermal gold. Bresnahan is a first mover opportunity to explore for unconformity HREE.

### Central Yilgarn Gold, Base Metals, Critical Minerals & Iron Ore Project (100%)

Central Yilgarn is located ~190km northwest of Kalgoorlie in the Yilgarn Craton. The project comprises ~1,400kms<sup>2</sup> covering ~150km of strike along the majority of the Illaara, Yerilgee, South Elvire and Evanston greenstone belts. Central Yilgarn is prospective for typical Archean mesothermal lode gold deposits, VMS base metals, komatiite hosted nickel sulphides and critical metals including Lithium-Cesium-Tantalum.

Prior to consolidation by Dreadnought, the Central Yilgarn was predominantly held by iron ore explorers and remains highly prospective for iron ore.

