

ASX ANNOUNCEMENT 25 October 2023

\$180,000 DRILLING GRANT FOR MANGAROON REEs (100%)

HIGHLIGHTS

- **Dreadnought is pleased to advise that it has been awarded a co-funded drilling grant under the Geological Survey of Western Australia’s merit-based Exploration Incentive Scheme (“EIS”) for the Gifford Creek REE Carbonatite at Mangaroon (100%).**
- **EIS grant of \$180,000 for RC drilling to target gravity anomalies within the ~17km long Gifford Creek Carbonatite and test for REE, niobium, titanium, phosphate and scandium mineralisation.**
- **Dreadnought has received three EIS grants in 2023 totaling \$620,000 to support drilling at the Yin ironstones, the Gifford Creek Carbonatite (both at Mangaroon) and at Orion (Tarraji-Yampi).**
- **The EIS grant for RC drilling at the Gifford Creek Carbonatite commences in December 2023, therefore drill testing of the gravity anomalies will commence in 2024.**
- **Results of the recently completed gravity survey over the Gifford Creek Carbonatite are expected in November 2023. Drilling of the gravity anomalies will commence in March 2024.**

Dreadnought Resources Limited (“Dreadnought”) is pleased to announce that it has been awarded an EIS co-funded drilling grant at the 100% owned Mangaroon REE-Nb-P-Ti-Sc project located in the Gascoyne Region of Western Australia.

EIS funding is managed by the Geological Survey of Western Australia (“**GSWA**”) to stimulate exploration leading to mineral discoveries. These grants are based on the technical merit of the drill target and Dreadnought was 1 of 36 successful applicants.

Dreadnought’s Managing Director, Dean Tuck, commented: “Dreadnought is very pleased to continue to receive support from the EIS co-funded drilling program. The program is highly competitive, and the awarding of this grant further recognises the technical merits and potential of the Gifford Creek Carbonatite to host significant rare earths and other critical metals. A previous EIS grant funded the first holes into what has become the ~17km long Gifford Creek Carbonatite, the potential

source intrusions for the Yin and Yangibana ironstones. A lot has been learned since those first drill holes, and we look forward to delivering this program with support of the Geological Survey and the State of Western Australia.”



Figure 1: Photo of Dreadnought’s Claudia Tomkins and Sam Busetti reviewing the pXRF while drilling at the Gifford Creek Carbonatite

SNAPSHOT – MANGAROON RARE EARTHS

Mangaroon is 100% Owned by Dreadnought

Genuine Scale Potential Already at Yin REE Ironstone Complex

- Independent Yin Inferred Resource of 20.06Mt @ 1.03% TREO (ASX 5 Jul 2023) covers only ~4km of ~43km of strike with the initial Indicated Resource of 5.52Mt @ 1.23% TREO covering only ~250m of strike.
- Exploration Target* of 50-100Mt at 0.9-1.3% TREO estimated for the top 150m of the Yin REE Ironstone Complex (ASX 13 Feb 2023).

**Cautionary Statement: The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The potential quality and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Resource for all target areas reported. It is uncertain if further exploration will result in the estimation of a Resource.*

Significant, Critical Minerals Potential at the Gifford Creek Carbonatite

- Gifford Creek Carbonatite is considered to be the regional source of REE.
- In less than 12 months since the discovery of Gifford Creek Carbonatite, a large, independent Resource of 10.84Mt @ 1.00% TREO has been delivered. The Resource contains a range of critical minerals including rare earths, niobium, phosphate, titanium and scandium.
- The initial Resource covers an area of only ~600m x 550m. With the Gifford Creek Carbonatite now expanding to ~17kms x 1km under wide-spaced, first pass drilling, it is expected that the Resource will grow substantially with future drilling.

High-grade, Multi-Metal Potential Including REE (Neodymium, Praseodymium), Phosphate, Niobium, Titanium & Scandium

- The mineralisation at the Yin REE Ironstone Complex contains significantly higher NdPr as a fraction of the rare earth oxides (“NdPr:TREO” ratio) than most other REE deposits globally, over 50% higher than the global average.
- Partially completed, first pass, wide spaced drilling over the Gifford Creek Carbonatite has identified significant critical metal potential with REE, P, Nb, Ti and Sc.

Potentially Attractive Mining Proposition

- At Yin, broad zones of flat to moderate dipping mineralisation with parallel lodes and Resource intensity of ~4.8Mt/km make for a potentially attractive mining proposition.

Positive Metallurgy Results

- Metallurgical test work from Yin has performed well, achieving recoveries ranging from 85.9% to 92.8% at a concentrate grade of 10.76% to 15.31% Nd₂O₃+Pr₆O₁₁.
- REE at Yin is predominantly hosted in monazite which is amenable to commercial processing.
- Significant metallurgical studies ongoing – results expected throughout 2023.

Global Strategic Imperative Driving Rare Earth Growth & Prices

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.
- Dreadnought is receiving increasing levels of interest from midstream and downstream industry participants in Mangaroon. While the current focus is on upstream options (mining, milling and concentrating) opportunities to collaborate with midstream and downstream industry participants may represent an opportunity.

Background on Mangaroon (E08/3274, E8/3178, E09/2384, E09/2433, E09/2473: First Quantum Minerals Earn-in) (E08/3275, E08/3439, E09/2290, E09/2359, E09/2370, E09/2405, E09/2448, E09/2449, E09/2450, E09/2467, E09/2478, E09/2531, E09/2535, E09/2616, M09/91, M09/146, M09/147, M09/174, M09/175: 100%)

Mangaroon (Figure 2) covers >5,200sq kms of the Mangaroon Zone in the Gascoyne Region of Western Australia and is comprised of:

- the ~45km long Money Intrusion (First Quantum Minerals earn-in) which contains high tenor magmatic Ni-Cu-PGE mineralisation;
- the >10km long Mangaroon Au Shear Zone (100%) where fractured, small scale ownership has limited previous gold exploration with only ~200m of the >10km having been drilled notwithstanding the high-grade, camp scale potential;
- the ~43km long Yin REE Ironstone Complex (100%) which already contains: an independent total Resource of 20.06Mt @ 1.03% TREO (ASX 5 Jul 2023) over only ~4km of the ~43km of ironstones including an initial Indicated Resource of 5.52Mt @ 1.23% TREO over only ~250m of strike (ASX 5 Jul 2023); and an Exploration Target of 50-100Mt at 0.9-1.3% TREO (ASX 13 Feb 2023) over 40 kms of strike.
- the ~17km long REE-Nb-Ti-P-Sc Gifford Creek Carbonatite which contain an initial independent Inferred Resource of 10.84Mt @ 1.00% TREO (ASX 28 Aug 2023).

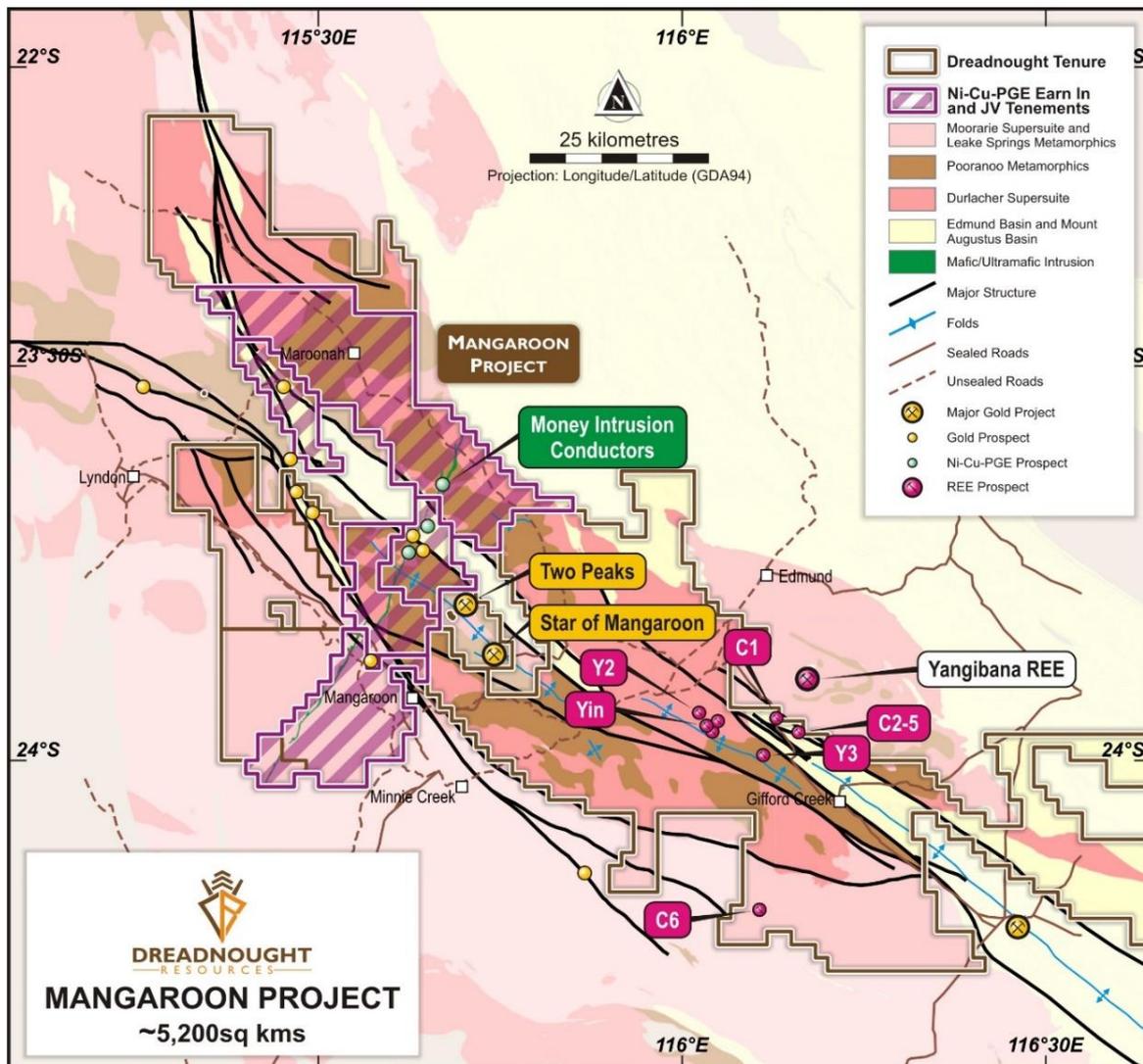


Figure 2: Plan view map of Mangaroon showing the location of the First Quantum Minerals Earn-in and 100% Dreadnought ground (Mangaroon Au Shear Zone, Yin REE Ironstone Complex and REE-Nb-Ti-P-Sc Gifford Creek Carbonatite) in relation to major structures, geology and roads.

For further information please refer to previous ASX announcements:

- 17 October 2022 *Mineralised Carbonatites Discovered at C3 and C4*
- 24 October 2022 *Broad, High-Grade Assays at Yin REE Discovery*
- 21 November 2022 *Broad, High-Grade Assays At Yin REE Discovery*
- 23 November 2022 *Multiple, Large Scale, REE-Nb-Ti-P Carbonatites*
- 28 December 2022 *Initial High-Grade, Independent Resource over 3kms at Yin*
- 24 January 2023 *Carbonatite Discovery Shaping up as Regional Rare Earth Source*
- 29 March 2023 *Yin Resource to Grow, Carbonatite Drilling Commenced*
- 3 April 2023 *Carbonatites Deliver Thick, Near Surface REE Results*
- 29 May 2023 *Metallurgical Test Work Supports High-Value Concentrate*
- 13 June 2023 *Yin Extended by 1km & 2.5km of High-Grade NdPr Discoveries*
- 5 July 2023 *40% Increase in Resource Tonnage at Yin*
- 10 July 2023 *High Grade Rare Earth & Niobium Zones at C3 & C5*
- 17 July 2023 *High Grade Rare Earth & Niobium Zones at C3 & C5*
- 7 August 2023 *Rare Earth Ironstone and Carbonatite Drilling Update*
- 17 August 2023 *Thick, High-Grade Rare Earths Continue at Yin*
- 28 August 2023 *Initial, Independent REE-Nb-P-Ti-Sc Resource at C3*
- 13 September 2023 *Highest Grades to date from Yin Infill Drilling*
- 2 October 2023 *Mangaroon Carbonatite now >17km – Higher Grade Zones Fingerprinted*

UPCOMING NEWSFLOW

October: Drilling results from completed drilling at Mangaroon REE (100%)

October: DHEM and further assay results from the Money Intrusion (Mangaroon Ni-Cu-PGE Earn-in)

October: Quarterly Activities and Cashflow Report

October/November: Further RC drilling at Mangaroon Ni-Cu-PGE (Earn-in) and Au, REEs (100%)

November: REE Resource upgrade (Mangaroon 100%)

November: Results of geophysical and geochemical surveys at Central Yilgarn (100%)

November: Results from target generation and definition work at Bresnahan (100%)

November: Assays from drilling at Tarraji-Yampi (80%, 100%)

23 November: Annual General Meeting

November/December: Assay results from additional Au, Ni-Cu-PGE and REE drilling 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-PGE JV & Au/REE 100% Project

Mangaroon covers ~5,200 kms and is located 250kms south-east of Exmouth in the Gascoyne Region of WA. At the Money Ni-Cu-PGE 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 of 50-100Mt at 0.9-1.3% TREO estimated for the top 150m of the ~43km long Yin REE Ironstone Complex (ASX 13 Feb 2023).
- An independent Resource for Yin Ironstones Complex of 20.06Mt @ 1.03% TREO over only ~4kms – including an Indicated Resource of 5.52Mt @ 1.23% TREO over just 250m strike (ASX 5 Jul 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, containing a range of critical minerals including rare earths, niobium, phosphate, titanium and scandium (ASX 28 Aug 2023).

Bresnahan HREE and Au Project (100%)

Bresnahan is located ~125km southwest of Newman in the Ashburton Basin. The project comprises ~3,700 sq kms 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 and mesothermal lode gold similar to Paulsen’s Au-Ag-Sb deposits along strike.

Prior to consolidation by Dreadnought, the Bresnahan Basin had only been 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 ~1,600 sq kms covering ~150km of strike along the majority of the Illara, Yerilgee 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-Caesium-Tantalum.

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

