24 September 2021

AIRBORNE MAGNETIC-RADIOMETRIC SURVEY COMMENCED AT MANGAROON

HIGHLIGHTS

- **A 43,000 line-kilometre airborne magnetic–radiometric survey has commenced at Mangaroon over the rare earth elements ("REE") at Yin and structurally hosted gold at Cullen.**
- **The survey over Yin includes the Yin and Y2-Y6 outcropping REE ironstones along with several other outcropping anomalies. The survey will also seek to trace the main source of the REE and to highlight ironstones under shallow cover.**
- **The Cullen survey covers the Minga Bar Fault which is prospective for structurally hosted gold mineralisation as seen at the historic Cullen's Find.**
- **The survey should take six weeks to complete with the survey results expected in December 2021.**

Dreadnought Resources Limited ("**Dreadnought**") is pleased to announce that a significant airborne magnetic-radiometric survey has commenced at Mangaroon located in the Gascoyne region of Western Australia.

The detailed survey will be flown with 50m line spacing at a low altitude and will be a significant improvement on the existing public data flown at 500m line spacing in the 1990s. The survey data is expected to highlight additional REE anomalies and to allow for mapping under shallow cover to trace the ironstones. In addition, structural gold targets are also expected to be identified. This work will assist in designing drill programs to commence in the March 2022 quarter.

Dreadnought's Managing Director, Dean Tuck, commented: "*The detailed airborne magnetic-radiometric survey will be the first major project scale survey over Mangaroon since the widely-spaced surveys in the 1990s. When a similar survey was flown over the nearby Yangibana REE project in 2016, not only were the ironstones better defined but new discoveries were made. We are excited for the results of the survey to assist in further target generation ahead of REE resource and discovery drilling in the March 2022 quarter. Structural gold targets around the high-grade Cullen's Find are also expected to emerge.*

In the interim, the upcoming Kimberley program remains on schedule with field crews on site and the drill rig arriving later September 2022."

Figure 1: Dreadnought's Luke Blais and Nick Chapman (L to R) mapping and sampling an outcropping REE ironstone at Yin.

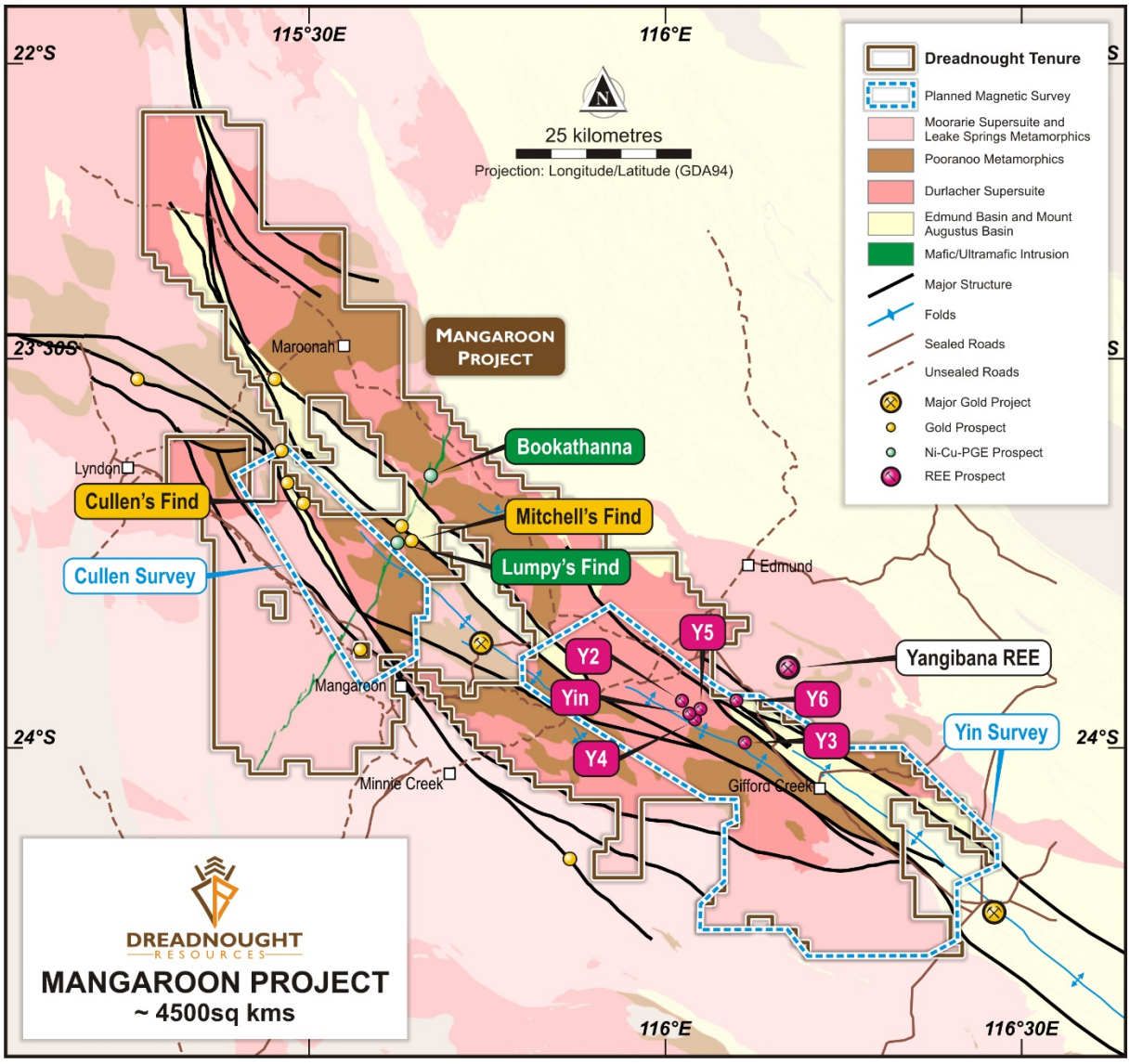


Figure 2: Map showing the location of airborne magnetic surveys over the prospective Rare Earth Ironstone extensions around Yin and along the Cullen's Trend.

Ongoing and Upcoming Work Programs at Mangaroon:

Ongoing: Mapping and rock chipping along the Money Intrusion for Ni-Cu-PGE target generation

Commenced: Project wide multi-element stream sediment sampling

Commenced: Petrological and mineralogical analysis of rocks from Yin

Commenced: Detailed airborne magnetic-radiometric survey over REE ironstones

October: Fixed Loop EM Surveys along the Money Intrusion for Ni-Cu-PGE target definition

Cullen's Find (E09/2370: Au 100%)

In 1986, a prospector named Peter Cullen drilled 7 RC holes for 352m into an outcropping vein swarm along the crustal scale Minga Bar Fault. Peter sent off 126m of drilling for gold analysis by fire assay returning a best intercept of **3m @ 6.5 g/t Au from 26m including 1m @ 16.2 g/t Au from 28m**. While his report included assay certificates, there was no further information aside from a hand drawn map in a local grid. Accordingly, no other gold exploration work has taken place at Cullen's Find or along strike.

Peter Cullen drilled a rare outcrop along the Minga Bar Fault with the majority of the structure under shallow cover. The detailed magnetic – radiometric survey will assist with defining drill targets ahead of drilling in 2022.

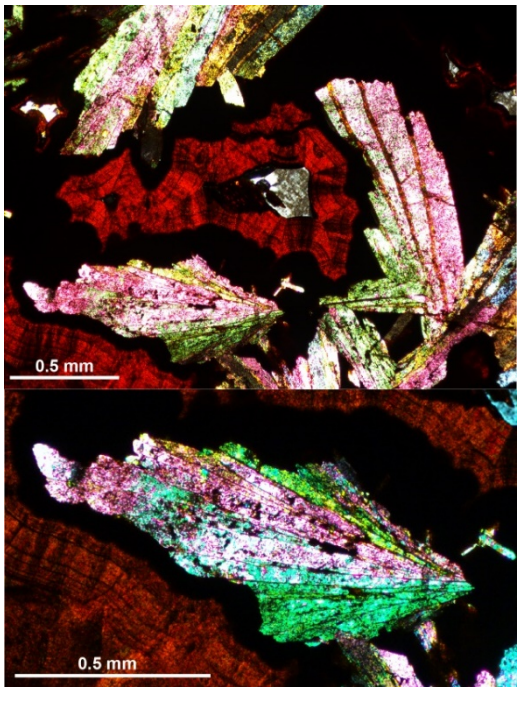
Rare Earth Elements at Mangaroon (E09/2448, E09/2450, E09/2535: DRE 100%)

The Yangibana ironstones are readily accessible and located 5-20kms from the Cobra-Gifford Creek Road. The ironstones were first explored in 1972 for base metals. The REE potential of the ironstones was first assessed in 1985 and has seen substantial work by Hastings Technology Metals on the Yangibana ironstones north of the Lyons River Fault since 2011 (Figure 3).

Yangibana currently has a JORC 2012 Mineral Resource* of 27.42Mt @ 0.97% TREO with 0.33% Nd_2O_3+Pr_6O_{11} and is under construction and development. The high proportion of Nd_2O_3+Pr_6O_{11} (used for electric vehicle magnets and renewable power generation) are an important component of the project's economics.

However, prior to Dreadnought, no significant REE exploration was undertaken south of the Lyons River Fault, which until now was considered to be the southern extent of the Yangibana REE ironstones.

Recent TREO and Nd_2O_3+Pr_6O_{11} results from Yin, exhibit similar characteristics to Yangibana and, to confirm this similarity, bulk samples were collected from outcrop for flotation test work and mineralogical analysis. The metallurgical assessment is an important first step in determining the potential for the TREO to be upgraded into a saleable intermediate product in the form of a concentrate. The mineralogical assessment is also important in that the beneficiation of monazite containing minerals to produce monazite concentrates is a demonstrated commercial scale process.



Significantly, six outcropping REE ironstones have now been identified, with detailed airborne magnetic-radiometric surveys to refine existing and additional targets. These surveys are to be conducted ahead of a drill program planned for Yin (initial JORC 2012 Resource definition) and any additional prospects (discovery).

**HAS.ASX: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%"*

Figure 3: Thin section photo showing coarse tabular monazite with overgrowth of botryoidal mixed Fe-oxide/hydroxides from rock chip sample MNRK0293.

Background on Mangaroon (E08/3274, E8/3178, E09/2384, E09/2433, E09/2473: Option with FQM) (E08/3275, E09/2370, E09/2448, E09/2449, E09/2450, E09/2467, E09/2478: 100%)

Mangaroon covers >4,500 sq. kms of the Mangaroon Zone in the Gascoyne Region of Western Australia. The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high-grade Yangibana REE deposits. During most of the region's early history, there was no government support for prospecting and or exploration resulting in a vastly underexplored region in Western Australia.

Dreadnought has located outcropping high-grade gold bearing quartz veins along the Edmund and Minga Bar Faults, outcropping high tenor Ni-Cu-PGE blebby sulphides in the recently defined Money Intrusion and outcropping high-grade REE ironstones, similar to those under development at Yangibana.

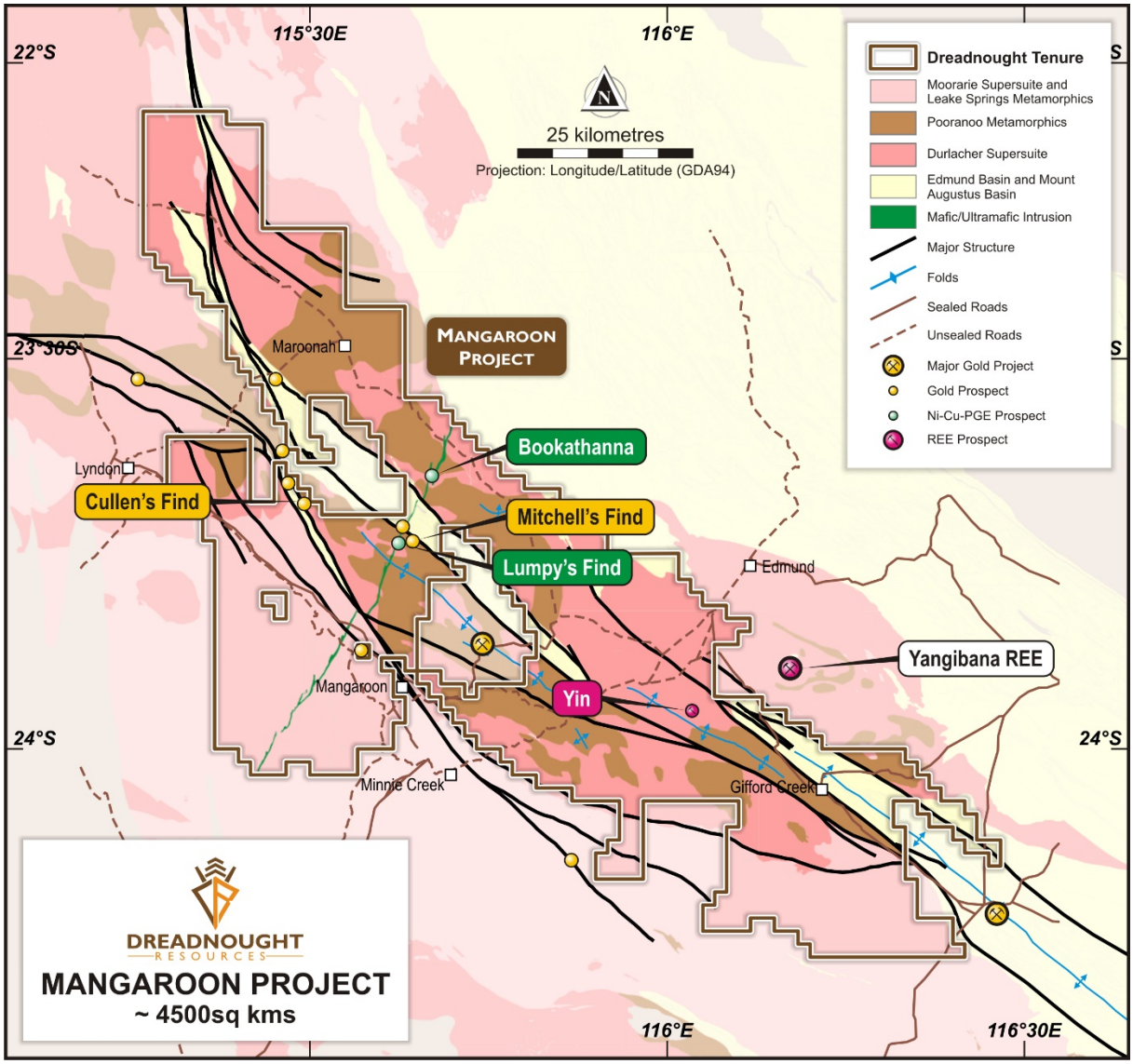


Figure 4: Plan view map of Mangaroon showing the location of current prospects and new tenement application in relation to major structures, geology, roads and the Yangibana REE Project.

About Rare Earths

REEs are comprised of fifteen elements that are “rare” in terms of the limited number of concentrated deposits.

Neodymium and praseodymium (Nd_2O_3 and Pr_6O_{11}) are classified as light rare earths and are used in steelmaking to remove impurities, as well as in the production of specialty alloys (including steel, chromium, magnesium, molybdenum, tungsten, vanadium and zirconium).

The use of REEs in magnets is rapidly increasing with neodymium-iron-boron magnets being the strongest known magnets and are used in applications such as electric motors for hybrid cars, wind turbines, high-tech military components and battery alloys.

China accounts for >90% of global REE supply and applies restrictions to this supply. Accordingly, REEs are critical metals because of the specialised use in modern technology combined with China’s near monopoly on supply. The political and economic issues surrounding global supply have highlighted the strategic importance of REEs.

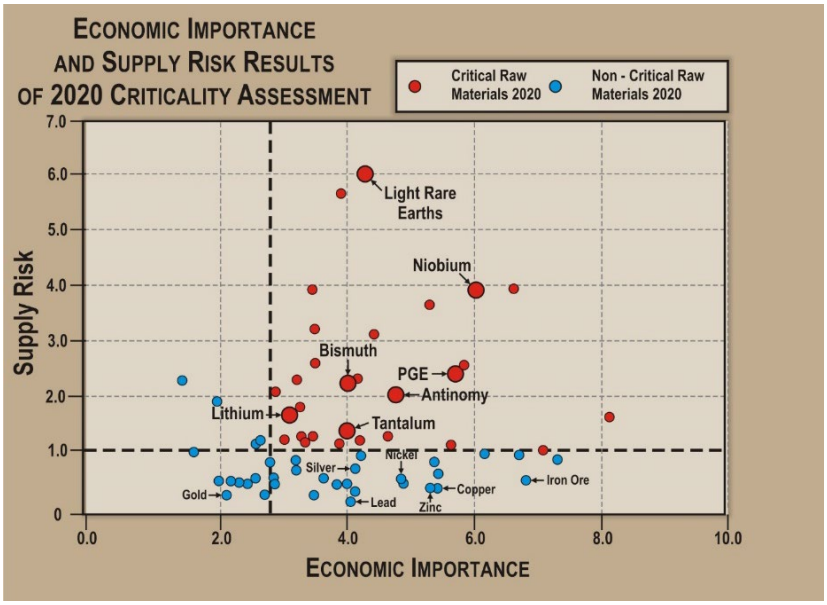
Critical Minerals

Critical minerals are considered vital for the economic well-being of the world's economies, yet whose supply may be at risk due to geological, geopolitical or other factors. These minerals are used in the manufacture of mobile phones, flat screen monitors, wind turbines, electric cars, solar panels and many other high-tech applications.

The minerals ranked as most critical by the USA, Japan, South Korea, the UK and the European Union are as follows: rare-earth elements (REE), gallium (Ga), indium (In), tungsten (W), platinum-group elements (PGE), cobalt (Co), niobium (Nb), magnesium (Mg), molybdenum (Mo), antimony (Sb), lithium (Li), vanadium (V), nickel (Ni), tantalum (Ta), tellurium (Te), chromium (Cr), manganese (Mn) and bismuth (Bi).

Dreadnought’s critical minerals prospects include the following:

- Illaara: Peggy Sue tantalum, niobium and lithium prospect
- Mangaroon: Yin light rare earths and Lumpy’s Ni-Cu-PGE prospects
- Tarraji-Yampi: Rough Triangle Cu-Sb-Bi-Ag, Texas and Orion Ni-Cu-PGE prospects



Sources:
Study on the review of the list of Critical Raw Materials, European Commission, 2017.
Critical Minerals in Australia: A Review of Opportunities and Research Needs, Geoscience Australia, 2018.

For further information please refer to previous ASX announcements:

- *15 March 2021* *Exploration Commences at Mangaroon Ni-Cu-PGE & Au Project*
- *11 June 2021* *High-Grade REE Ironstones Outcropping at Mangaroon*
- *19 July 2021* *High-Grade REE Ironstones Confirmed Over 2.5kms at Mangaroon*
- *1 September 2021* *Encouraging Results for Rare Earths at Yin*
- *9 September 2021* *Four New REE Ironstones Discovered at Mangaroon*

UPCOMING NEWSFLOW

September: Recommencement of RC drilling at Orion, Grant's Find and Fuso – Tarraji-Yampi

30 September: Audited Financials

October: Commencement of ground EM survey along the Money Intrusion at Mangaroon

October: Results of DHEM surveys from Texas and Chianti

October: Remaining assays from drilling at Tarraji-Yampi (Texas, Orion Ni-Cu-PGE, Grant's Find, Fuso and Paul's Find Cu-Au and Chianti-Rufina VMS targets)

October: Quarterly Activities and Cashflow Reports

October/November: Results of drilling at Tarraji-Yampi (Orion, Grant's Find and Fuso)

November: Results of ground EM surveys along the Money Intrusion at Mangaroon

11 November: Annual General Meeting

December: Results of airborne magnetic surveys for REE ironstones at Mangaroon

~Ends~

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

Competent Person's Statement

The information in this announcement that relates to geology and exploration results and planning was compiled by Mr. Dean Tuck, who is a Member of the AIG, Managing Director, and shareholder of the Company. Mr. Tuck has sufficient experience which 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. Tuck consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the forma and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

INVESTMENT HIGHLIGHTS

Kimberley Ni-Cu-Au Projects

Dreadnought controls the second largest land holding in the highly prospective West Kimberley region of WA. The main project area, Tarraji-Yampi, is located only 85kms from Derby and has been locked up as a Defence Reserve since 1978.

Tarraji-Yampi presents a rare first mover opportunity with known outcropping mineralisation and historic workings from the early 1900's 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 in Queensland and Tennant Creek in the Northern Territory.

Mangaroon Ni-Cu-PGE, REE & Au Project

Mangaroon is a first mover opportunity covering ~4,500sq kms of tenure located 250kms south-east of Exmouth in the Gascoyne Region of WA. During the region's early history, there was limited government support for exploration resulting in the region being vastly underexplored.

Since acquiring the project in late 2020, Dreadnought has located: outcropping high-grade gold bearing quartz veins along the Edmund and Minga Bar Faults; outcropping high tenor Ni-Cu-PGE blebby sulphides in the recently defined Money Intrusion; and outcropping high-grade REE ironstones, similar to those under development at the Yangibana REE Project.

Illaara Gold, Base Metals, Critical Minerals & Iron Ore Project

Illaara is located 190km northwest of Kalgoorlie in the Yilgarn Craton and covers 75kms of strike along the Illaara Greenstone Belt. Illaara is prospective for typical Archean mesothermal lode gold deposits, VMS base metals and critical metals including Lithium-Caesium-Tantalum.

Dreadnought has consolidated the Illaara Greenstone Belt mainly through an acquisition from Newmont. Prior to Newmont, the Illaara Greenstone Belt was predominantly held by iron ore explorers and remains highly prospective for iron ore.