

ASX ANNOUNCEMENT 7 July 2025

Critical Metals Update – Gifford Creek Carbonatites

HIGHLIGHTS (All amounts in A\$ unless otherwise stated)

- Dreadnought has received increasing inbound commercial interest in the 100% owned Gifford Creek Carbonatites at Mangaroon ("Gifford Creek"). Gifford Creek contains proven rare earths, niobium, scandium, titanium, phosphorus and zirconium mineralisation.
- As part of the inbound commercial interest, third parties have requested material for test work. Accordingly, a 4 hole, diamond drill program will be conducted to source metallurgical samples. In addition, these samples will also be used for internal Resource and metallurgy work.
- The program will not distract from Dreadnought's focus on delivering its More Gold, Faster Strategy. Furthermore, this program will strongly support Dreadnought's commitment to commercialise the critical metals.
- In addition, \$180,000 of this program is funded by the Geological Society of Western Australia's competitive Exploration Incentive Program ("EIS") (ASX 25 Oct 2024). Drilling will take place in July 2025.
- Given the background of the parties who have approached Dreadnought, we have set out details of the various critical minerals at Gifford Creek, including Rare Earths, Niobium, Titanium, Scandium, Zirconium and Phosphate. For completeness we have also included the opportunities at the nearby Yin Ironstones ("Yin").

Dreadnought Resources Ltd ("Dreadnought") is pleased to provide an update on the 100% owned Mangaroon Critical Metal Project ("Mangaroon"), in the Gascoyne region of WA.

Dreadnought's Managing Director, Dean Tuck, commented: "The Gifford Creek Carbonatite Complex is one of the largest carbonatite complexes globally and already contains multiple critical minerals including niobium, rare earths, titanium, scandium and phosphorus. Due to geopolitical activities there is a rebounding market sentiment for critical metals and we have been receiving an increasing amount of third-party commercial interest. Finding a commercial outcome for the Gifford Creek Carbonatite Complex is a key pillar of our More Gold, Faster Strategy and we look forward to continuing discussions on this front."



Dreadnought Resources Ltd |

Figure 1: Map showing the locations of significant critical metals (REE-Nb) projects in Western Australia in relation to existing infrastructure.



Overview of Gifford Creek and Yin

Located ~250kms northeast of Carnarvon in the Gascoyne Region of Western Australia, the Gifford Creek Carbonatite and the Yin Ironstones together form one of the largest alkali-carbonatite complexes in the world (Figure 10). Carbonatite intrusions are known globally to host several different commodities including critical minerals.

Gifford Creek has genuine scale potential for rare earth elements ("REE") and Nb, containing the following Resources and Exploration Target:

Yin Resource at 0.20% TREO Cutoff - 88% Measured and Indicated (ASX 30 Nov 2023) over only ~10% of Yin

Tune			Total	
гуре	Tonnes (Mt)	TREO (%)	TREO (t)	NdPr:TREO Ratio (%)
Oxide and Fresh Ironstone	29.98	1.04	312.3	29

Yin Resource at 1.00% TREO Cutoff - 94% Measured and Indicated (ASX 30 Nov 2023) over only ~10% of Yin

Turne			Total	
гуре	Tonnes (Mt)	TREO (%)	TREO (t)	NdPr:TREO Ratio (%)
Oxide and Fresh Ironstone	11.63	1.93	224.3	29

Gifford Creek C3 Resource at 0.70% TREO Cutoff - 100% Inferred (ASX 28 Aug 2023)

Resource (Mt)	TREO (%)	NdPr:TREO Ratio (%)	Nb ₂ O ₅ (%)	Contained TREO (t)	Contained Nb ₂ O ₅ (t)
10.84	1.00	21	0.22	108,000	23,700

Gifford Creek Nb Exploration Target – Stinger Only (ASX 3 Mar 2025)

Tonnage Range (Mt)	Grade Range (% Nb ₂ O ₅)	Contained Nb ₂ O ₅ Range (t)
l 5 - 60Mt	0.5% – 1.0%	150,000 – 300,000t

*Note that the potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Resource, and it is uncertain if further exploration will result in the estimation of a Resource. There has been no material change since the Exploration Target was first announced on 3 March 2025. The Exploration Target has been prepared in accordance with JORC 2012. The Exploration Target has been estimated for Stinger only over an area of ~1,700m x 500m and to a depth of ~120m based on wide spaced drilling to date and excludes: fresh rock depth extensions including drill holes ending in mineralisation; mineralised extensions to Stinger: Discoveries within the region; and Other associated critical minerals including rare earths, titanium, scandium, zirconium and phosphate.

In addition, Gifford Creek contains significant potential for additional critical metals with drill intercepts including:

- CBRC115: 102m @ 1.1% TREO from 3m, including 29m
- CBRC195: 130m @ 0.7% Nb₂O₅ from 71m, in
- CBRC148: **43m** @ **11.9% P**₂**O**₅ from 87m,
- CBRC138: **45m @ 181ppm Sc** from 48m,
- CBRC086: 72m @ 8.6% TiO₂ from 12m,
- CBRC201: 74m @ 0.6% ZrO₂ from 78m,
- CBRC125: 10m @ 270ppm Sc from 18m

- including 29m @ 2.1% TREO from 76m
- including **39m @ 1.3% Nb₂O₅** from 84m
- including **24m @ 14.5% P**₂**O**₅ from 105m to EOH
- including 12m @ 319ppm Sc from 48m
- including 6m @ 12.8% TiO₂ from 66m
- including 14m @ 1.2% ZrO₂ from 113m

As part of the inbound commercial interest, third parties have requested material for test work. Accordingly, a 4 hole, diamond drill program will be conducted to source metallurgical samples. In addition, these samples will also be used for internal Resource and metallurgy work.



Gifford Creek - Niobium

Gifford Creek was identified in November 2021, has limited outcrop and extends to \sim 17kms long x \sim 1km wide. To date 147 RC holes and 8 diamond holes have been drilled over \sim 25% of Gifford Creek. Five zones of mineralisation have been confirmed to date with significant niobium intercepts including:

CBRC195: 130m @ 0.7% Nb₂O₅ from 71m, including 39m @ 1.3% Nb₂O₅ from 84m CBRC200: 95m @ 0.9% Nb₂O₅ from 48m, including 20m @ 1.4% Nb₂O₅ from 102m CBRC194: 122m @ 0.6% Nb₂O₅ from 64m, including 26m @ 1.1% Nb₂O₅ from 99m CBRC201: 98m @ 0.7% Nb₂O₅ from 54m, including 41m @ 1.1% Nb₂O₅ from 85m CBRC085: 48m @ 0.8% Nb₂O₅ from 30m, including 36m @ 1.0% Nb₂O₅ from 39m CBRC086: 77m @ 0.7% Nb₂O₅ from 16m, including 30m @ 1.0% Nb₂O₅ from 39m

High grade mineralisation at Gifford Creek typically occurs in the weathered zones of the carbonatite where it is often associated with iron oxides and apatite. Drilling has mainly tested the oxide zone. Limited holes have gone into the fresh carbonatite where niobium mineralisation is associated with magnesio-carbonatite and apatite.

Mineralogical work has confirmed the presence of coarse grained (>0.30mm) pyrochlore from both weathered and fresh magnesio-carbonatite. In addition to pyrochlore, niobium is present as ilmenorutile, and rippite.

An Exploration Target has been estimated for Stinger zone only and is based on an area of \sim 1,700m x 500m to a depth of \sim 120m. This is based on wide spaced drilling and excludes: fresh rock and depth extensions; mineralised extensions to Stinger and other mineralised areas within Gifford Creek.

Gifford Creek Nb Exploration Target – Stinger Only (ASX 3 Mar 2025)

	Tonnage Range (Mt)	Grade Range (% Nb ₂ O ₅)	Contained Nb ₂ O ₅ Range (t)
	15 - 60Mt	0.5% – 1.0%	150,000 – 300,000t
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*Note that the potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Resource, and it is uncertain if further exploration will result in the estimation of a Resource. The Exploration Target has been prepared in accordance with JORC 2012.



Figure 2: Map showing the locations of significant niobium intercepts within Gifford Creek.

Gifford Creek - Rare Earths

Rare earths were identified in outcrop in November of 2021. A \sim 600m x 550m area of high-grade mineralisation was intersected during early drilling and subsequently converted to a Resource (C3).

The C3 Resource is near-surface and has a supergene component with significant niobium, titanium, phosphate and scandium. Importantly, the C3 Resource is the first within Gifford Creek which remains only partially explored.

Gifford Creek C3 Resource at 0.70% TREO Cutoff – 100% Inferred (ASX 28 Aug 2023)

Resource (Mt)	TREO (%)	NdPr:TREO Ratio (%)	Nb ₂ O ₅ (%)	Contained TREO (t)	Contained Nb ₂ O ₅ (t)
10.84	1.00	21	0.22	108,000	23,700

Recent drilling has subsequently intersected high-grade mineralisation with significant intercepts including:

CBRC200: 90m @ 1.1% TREO from 48m, including 8m @ 3.1% TREO from 72m

CBRC193: 59m @ 1.1% TREO from 49m, including 7m @ 3.0% TREO from 72m

CBRC195: 97m @ 0.9% TREO from 57m, including 23m @ 1.6% TREO from 71m

Rare earths are hosted in both weathered and fresh carbonatite with higher-grades in the weathered profile. Oxidised mineralisation contains phosphate monazite, crandallite group minerals and variable amounts of the hydrated phosphate rhabdophane. Fresh carbonatite mineralisation contains monazite, burbankite, bastnaesite and variable amounts of apatite.



Figure 3: Map showing the locations of significant rare earth intercepts within Gifford Creek.



Gifford Creek - Titanium

Titanium is a critical metal that is indispensable in aerospace, defense and medical industries due to its high strengthto-weight ratio and corrosion resistance. Ilmenite, rutile and anatase are the principal titanium minerals mined globally, being sourced from magmatic deposits (like Gifford Creek) or from mineral sands. The concentration of titanium dioxide (TiO_2) can vary significantly within magmatic deposits with current hard rock producers ranging from ~8.6% TiO₂ (Damiao) to 32% TiO₂ (Lac Tio).

Thick, high-grade titanium mineralisation has been identified at Gifford Creek with significant results including:

CBRC175: 68m @ 8.9% TiO₂ from 51m, including 3m @ 13.2% TiO₂ from 55m CBRC176: 49m @ 9.7% TiO₂ from 49m, including 12m @ 15.6% TiO₂ from 54m CBRC125: 107m @ 7.7% TiO₂ from 16m, including 17m @ 11.1% TiO₂ from 81m CBRC085: 72m @ 8.6% TiO₂ from 6m, including 21m @ 11.7% TiO₂ from 45m CBRC200: 89m @ 8.9% TiO₂ from 48m, including 8m @ 22.2% TiO₂ from 72m

Titanium mineralisation is hosted in both weathered and fresh carbonatite with higher-grades in the weathered oxidised profile. This is similar to deposits such as Catalao, Salitre and Tapira in Brasil. Mineralogical work undertaken shows that the weathered mineralisation is dominated by rutile and ilmenite with minor anatase. Fresh carbonatite mineralisation has been observed in both siderite-rutile+ilmenite veins and as disseminations of rutile, ilmenite and minor anatase within magnesio-carbonatite.



Figure 4: Map showing the locations of significant titanium intercepts within the Gifford Creek Carbonatite.

Huleatt, M.B., 2019. Australian Resource Reviews: Rare Earth Elements 2019. Geoscience Australia, Canberra. Cameron Perks, Gavin Mudd, 2019. Titanium, zirconium resources and production: A state of the art literature review, Ore Geology Reviews, Volume 107. Are Korneliussen, et al. 2000. An Overview of titanium deposits in Norway. Norges geologiske utidersekelse Bulletin 436. Li-Xing Li et al. 2024. Characterizing a new type of nelsonite recognized in the Damiao anorthosite complex, North China Craton, with implications for the genesis of giant magmatic Fe-Ti oxide deposits. American Mineralogist Volume 109, Number 1.



Gifford Creek - Scandium

Scandium is a critical metal used in the production of alloys for the aerospace industry and for solid oxide fuel cells. Scandium is mainly produced as a by-product with the largest global producer being the Bayan Obo carbonatite deposit in China. Scandium occurs in relatively higher concentrations within ultramafic and carbonatite rocks and becomes mineralised through a secondary process like weathering and laterisation where it can reach 100-400ppm Sc. At Bayan Obo, scandium occurs within the weathered carbonatite at a concentration of ~100ppm Sc.

Due to a change in assay techniques, scandium assays are not available for all holes. However, thick, high-grade scandium has been identified with significant results including:

CBRC125: 110m @ 136ppm Sc from 12m, including 10m @ 270ppm Sc from 18m

CBRC086: 79m @ 141ppm Sc from 14m, including 12m @ 236ppm Sc from 54m

CBRC138: 45m @ 181ppm Sc from 48m, including 12m @ 319ppm Sc from 48m

Scandium is restricted to the weathered and more iron rich laterite zones within the regolith. While the host mineral within the regolith has not yet been confirmed, the scandium is believed to be sourced from the breakdown of pyroxenites such as aegirine and arfvedsonite.



Figure 5: Map showing the locations of significant scandium intercepts within the Gifford Creek Carbonatite.

Zhenchao Wang, et al. 2021. Scandium: Ore deposits, the pivotal role of magmatic enrichment and future exploration, Ore Geology Reviews, Volume 128. Zhi-Shuang Yang, et al. 2025. Distribution and enrichment of scandium in minerals of the Bayan Obo REE-Nb-Fe deposit, Inner Mongolia, north China, Journal of Asian Earth Sciences, Volume 291.

Huleatt, M.B., 2019. Australian Resource Reviews: Rare Earth Elements 2019. Geoscience Australia, Canberra.

Shuang-Liang Liu, et al. 2025. Scandium distribution in the Bayan Obo REE-Nb-Fe deposit, China: A multi-scale geochemical perspective, Ore Geology Reviews, Volume 177.

Verbaan, N. et al. 2018. A Process Flowsheet for the Extraction of Niobium, Titanium, and Scandium from Niocorp's Elk Creek Deposit.



Gifford Creek - Zirconium

Zirconium is a critical metal used in the chemical and nuclear-reactor industries due to its corrosion resistance, structural stability at high temperatures, alloying properties and neutron-absorption characteristics. Zircon and Baddeleyite are the principal zirconium minerals mined globally dominantly from mineral sand deposits, but also carbonatites and alkaline complexes such as the Kovdor deposit in Russia where zirconium is produced as a by-product of phosphate and iron ore mining with an average concentration of 0.15% ZrO₂.

Thick, high-grade, zirconium mineralisation has been identified within several zones with the most significant results being from the Stinger niobium zone including:

CBRC200: 66m @ 1.0% ZrO₂ from 72m, including 19m @ 1.4% ZrO₂ from 104m

CBRC193: 36m @ **1.0% ZrO**₂ from 72m, including **10m** @ **1.4% ZrO**₂ from 98m

CBRC201: 44m @ 0.8% ZrO₂ from 83m, including 14m @ 1.2% ZrO₂ from 113m

Zirconium mineralisation is hosted in both weathered and fresh carbonatite and internal syenites. All zones are dominated by the mineral zircon.



Figure 6: Map showing the locations of significant zirconium intercepts within the Gifford Creek Carbonatite.

Fedoseev S. et al. 2017. Development potential of Russian zirconium industry on world markets. Journal of Business and Retail Management Research Vol 12. G.Yu. Ivanyuk, et al. 2016. Economic minerals of the Kovdor baddeleyite-apatite-magnetite deposit, Russia: mineralogy, spatial distribution and ore processing optimization, Ore Geology Reviews, Volume 77.

Cameron Perks, Gavin Mudd, 2019. Titanium, zirconium resources and production: A state of the art literature review, Ore Geology Reviews, Volume 107.



Gifford Creek - Phosphate

Phosphate plays a major role in Australian agriculture and is often produced from carbonatites (Mt Weld) or as a byproduct of niobium or rare earths (Arafura, Araxa, Catalao). The primary economic phosphate mineral produced from mining carbonatites is apatite from both sedimentary and igneous (carbonatite) deposits. While sedimentary (phosphate rock) deposits tend to be higher grade (12-35% P_2O_5) igneous (carbonatite) deposits tend to be coarser grained and produce higher grade and lower impurity phosphate concentrates. These concentrates are critical for the production of phosphoric acid used in the production of lithium iron phosphate batteries which range from 4- $17\% P_2O_5$.

At Gifford Creek, phosphate rich rocks are associated with niobium and occasionally rare earths. Thick and highgrade, phosphate mineralisation has been identified within several zones with results including:

CBRC148: 43m @ 11.9% P2O5 from 87m (to EOH)	
CBRC194: 116m @ 10.5% P ₂ O ₅ from 70m,	incl. 20m @ 21.9% P ₂ O ₅ from 138m
CBRC195: 126m @ 7.2% P ₂ O ₅ from 71m,	incl. 24m @ 15.9% P ₂ O ₅ from 133m
CBRC115: 74m @ 6.8% P2O5 from 22m,	incl. 28m @ 10.5% P2O5 from 48m
CBRCIII: 42m @ 8.3% P₂O₅ from 69m (to EOH),	incl. I 2m @ I 4.0% P₂O₅ from 99m (to EOH)
CBRC142: 66m @ 7.1% P₂O₅ from 75m (to EOH),	incl. 18m @ 13.6% P2O5 from 108m

Phosphate mineralisation is hosted in both weathered and fresh carbonatite and is dominated by apatite in both zones.



Figure 7: Map showing the locations of significant phosphate intercepts within the Gifford Creek Carbonatite.

Sandeep Banerjee, et al. 2024. Igneous Rock Phosphate: ore grades, concentrates and mining operations around the world. Research Note for First Phosphate Corporation. Queens University Sandeep Banerjee. 2024. Phosphate ore grades and concentrates from igneous and sedimentary phosphate rocks and their associated mining operations. Research Note for First Phosphate Corporation. Queens University



For completeness Yin Ironstones are also discussed:

Yin - Rare Earths

Outcropping REE mineralisation was first observed at Yin in July 2021. Since then, ~43kms of REE bearing ironstones have been identified, ~20kms have been tested by drilling and detailed resource drilling undertaken over just ~5kms.

Yin consists of goethite and hematite dominated oxide zones near the surface (top \sim 60-120m) transitioning into a fresh ferrocarbonatite dyke, comprised of ankerite and siderite below the base of oxidation. The ironstones are surrounded by a variable zone of fenitised country rock with the fenitised zone often including thin ironstone veins.

Both the ironstone and the fenite surrounding the ironstone are mineralised with each ironstone and ferrocarbonatite containing at least one central interval of higher-grade mineralisation. Oxidised mineralisation contains REE bearing phosphate monazite-Ce and monazite-Nd, variable amounts of the hydrated REE phosphate rhabdophane and trace amounts of apatite which occasionally carries small amounts of REE. Fresh ferrocarbonatite mineralisation contains monazite and variable amounts of apatite and REE fluoro-carbonates such as bastnaesite.

The ironstones range in thickness from 1-54m. In addition, parallel lodes have been intersected above and below the main lodes and often exhibit a similar orientation as the main lodes with thicknesses ranging from 1-10m. Ironstone lodes are known to pinch, swell, change dip, change orientation along strike and potentially plunge.

To date, 512 RC holes and 32 diamond holes have been drilled delivering a Resource at Yin of 29.98Mt @ 1.04% TREO over ~5kms - 87% Measured & Indicated (ASX 30 Nov 2023). The Resource only covers ~5kms of Yin and is based on 345 RC drill holes (38,904m) and 32 diamond drill holes (3,358.72m). Importantly, the Resource includes an initial Measured Resource of 5.17Mt @ 1.34% TREO and Indicated Resource of 21.13Mt @ 1.02% TREO (NdPr:TREO of 29%) (ASX 30 Nov 2023).

Metallurgical test work completed on Yin has:

- resulted in monazite concentrates ranging from 31.2-41.7% TREO and 10.7%-15.3% Nd₂O₃+Pr₆O₁₁ with TREO recoveries ranging from 85.9%-92.8% using material with head grades ranging from 1.6%-2.3% TREO. This work indicates that a high-value monazite concentrate can be produced from Yin using a standard flowsheet (ASX 29 May 2023).
- resulted in the production of a high quality mixed rare earth carbonate ("MREC") containing 60.7% TREO and 20.7% Nd₂O₃+Pr₆O₁₁ with TREO recoveries of ~94% from the monazite and apatite rich concentrates. This work indicates that a high-value MREC can be produced from Yin using a conventional, low-temperature, acid bake/leach (ASX 6 May 2024).



Figure 8: Cross section through the Yin Deposit. (ASX 30 November 2023 Large, High Confidence Yin Ironstone Resource)



Yin - Niobium

The presence of niobium at Yin was only identified from drilling. Niobium is localized within the ironstones and is primarily located in the northern sections.

Niobium appears associated within the ironstones and within the fenite altered country rock adjacent to the ironstones. Mineralogical work has identified coarse grained (>0.30mm) pyrochlore, columbite and baotite from both weathered and fresh ironstones.

Significant niobium drill intercepts include:

YINRC300: 7m @ 1.7% Nb₂O₅ from 3m, including 3m @ 3.2% Nb₂O₅ from 3m

YINRC380: 18m @ 0.7% Nb2O5 from 6m, including 4m @ 1.4% Nb2O5 from 16m

YINRC194: 13m @ 0.7% Nb₂O₅ from 85m, including 4m @ 1.5% Nb₂O₅ from 3m

Niobium has also been identified in outcropping alkali dykes such as seen in rock chip sample MNRK0528 which returned 15.2% Nb₂O₅ and 21.2% ZrO₂.





Figure 9: SEM images from Yin showing pyrochlore (light grey) in fresh ironstones (L) from YINRC436 and coarse baotite (labeled "bao") in weathered ironstone (R) from YINRC292.



Figure 10: Location of niobium within the limited extent of current drilling at Gifford Creek. Inset image shows globally significant carbonatite complexes at Mt Weld, Ngualla and Luni at similar scale highlighting the footprints of niobium.



For further information please refer to previous ASX announcements:

25 November 2020 Mangaroon Ni-Cu-PGE & Au Project 15 March 2021 Exploration Commences at Mangaroon Ni-Cu-PGE & Au Project 17 May 2021 Update on Mangaroon Ni-Cu-PGE & Au Project 17 October 2022 Mineralised Carbonatites Discovered at C3 and C4 23 November 2022 Multiple, Large Scale, REE-Nb-Ti-P Carbonatites Initial High-Grade. Independent Resource over 3kms at Yin 28 December 2022 Carbonatite Discovery Shaping up as Regional Rare Earth Source 24 January 2023 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 5 July 2023 40% Increase in Resource Tonnage at Yin 10 July 2023 High Grade Rare Earth & Niobium Zones at C3 & C5 High Grade Rare Earth & Niobium Zones at C3 & C5 17 July 2023 Rare Earth Ironstone and Carbonatite Drilling Update 7 August 2023 28 August 2023 Initial, Independent REE-Nb-P-Ti-Sc Resource at C3 2 October 2023 Mangaroon Carbonatite now >17km – Higher Grade Zones Fingerprinted 30 November 2023 Large, High Confidence Yin Ironstone Resource Gifford Creek REE-Nb-P-Ti-Sc Carbonatite Drilling Update 6 December 2023 Gifford Creek REE-Nb Carbonatite Update 6 June 2024 12 August 2024 Gifford Creek Niobium Drilling Update 19 August 2024 Thick High-Grade Niobium Intercepts from Gifford Creek Carbonatite 9 October 2024 Exceptional Niobium Intercepts at the Stinger Discovery 3 March 2025 Stinger Niobium Exploration Target

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



Cautionary Statement

This announcement and information, opinions or conclusions expressed in the course of this announcement contains forecasts and forwardlooking information. Such forecasts, projections and information are not a guarantee of future performance, involve unknown risks and uncertainties. Actual results and developments will almost certainly differ materially from those expressed or implied. There are a number of risks, both specific to Dreadnought, and of a general nature which may affect the future operating and financial performance of Dreadnought, and the value of an investment in Dreadnought including and not limited to title risk, renewal risk, economic conditions, stock market fluctuations, commodity demand and price movements, timing of access to infrastructure, timing of environmental approvals, regulatory risks, operational risks, reliance on key personnel, reserve estimations, native title risks, cultural heritage risks, foreign currency fluctuations, and mining development, construction and commissioning risk.

Competent Person's Statement – Mineral Resources

The information in this announcement that relates to the Star of Mangaroon Mineral Resource is based on information compiled by Mr. Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Payne is a full-time employee of Payne Geological Services Pty Ltd and is a shareholder of Dreadnought Resources Limited. Mr. Payne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr. Payne consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

Competent Person's Statement – Exploration Results and Targets

The information in this announcement that relates to geology, exploration results and planning, and exploration targets 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 announcement 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 further new information or data that materially affects the information included in the original market announcements by Dreadnought Resources Limited referenced in this report and in the case of Mineral Resources, Exploration and Production Targets, forecast financial information and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. To the extent disclosed above, the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

RESOURCES SUMMARY

Yin Ironstones Complex Measured, Indicated and Inferred Resources (ASX 30 November 2023)

Table 1: St	ummary of 1	in Resourc	es at 0.20	% TREU Cut	о∏.								
	1	1easured		I	ndicated		Inferred			Total			
Туре	Tonnes	TREO	TREO	Tonnes	TREO	TREO	Tonnes	TREO	TREO	Tonnes	TREO	TREO	NdPr:TREO
	(Mt)	(%)	(kt)	(Mt)	(%)	(t)	(Mt)	(%)	(t)	(Mt)	(%)	(t)	Ratio (%)
Oxide	2.47	1.61	39.7	13.46	1.06	142.6	1.51	0.75	11.2	17.44	1.11	193.6	29
Fresh	2.70	1.09	29.5	7.67	0.95	72.8	2.17	0.75	16.3	12.54	0.95	118.7	29
Total	5.17	1.34	69.3	21.13	1.02	215.4	3.68	0.75	27.6	29.98	1.04	312.3	29
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Table 2: Summary of Yin Resources at 1.00% TREO Cut off.

	Measured			Indicated				Inferred		Total			
Туре	Tonnes	TREO	TREO	Tonnes	TREO	TREO	Tonnes	TREO	TREO	Tonnes	TREO	TREO	NdPr:TREO
	(Mt)	(%)	(kt)	(Mt)	(%)	(t)	(Mt)	(%)	(t)	(Mt)	(%)	(t)	Ratio (%)
Oxide	1.60	2.22	35.6	5.34	1.99	106.4	0.26	1.67	4.3	7.20	2.03	146.3	30
Fresh	1.36	1.68	22.8	2.65	1.81	47.9	0.42	1.72	7.3	4.43	1.76	78.0	29
Total	2.96	1.97	58.4	7.99	1.93	154.3	0.68	1.70	11.6	11.63	1.93	224.3	29

Gifford Creek Carbonatite – Inferred Resource (ASX 28 August 2023)

Table 3: Summary of the Gifford Creek Carbonatite Inferred Resource at various % TREO Cut offs.

	Cut-Off (%TREO)	Resource (Mt)	TREO (%)	NdPr:TREO (%)	Nb2O5 (%)	P2O5 (%)	TiO2 (%)	Sc (ppm)	Contained TREO (t)	Contained Nb2O5 (t)
1	0.90	5.73	1.18	21	0.25	3.8	5.4	92	67,500	14,500
I	0.70	10.84	1.00	21	0.22	3.5	4.9	85	108,000	23,700
1	0.50	20.55	0.80	21	0.15	3.0	3.9	68	I 64,600	31,100
ĺ	0.30	45.87	0.58	21	0.10	2.7	3.0	52	265,300	44,800



Table 4: Gifford Creek Niobium Intersections based on a minimum length of 3m and a lower cut off grade of 0.3% Nb₂O₅, Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azi	ЕОН	Туре	From (m)	To (m)	Interval (m)	Nb₂O₅ (%)
CBRC032	414598	7349652	301	-90	0	81	RC	20	28	8	03
CBRC033	414497	7349541	304	-90	0	105	RC	75	84	9	0.3
CBRC053	415658	7348657	296	-90	0	93	RC	45	54	9	0.3
CBRC084	414484	7349644	302	-58	46	201	RC	21	30	9	0.3
CBRC085	414430	7349587	303	-59	45	123	RC	30	78	48	0.8
Incl.								39	54	15	1.2
CBRC086	414542	7349584	303	-59	47	117	RC	16	93	77	0.7
And								39	69	30	1.0
CBRC089	414657	7349697	302	-59	46	159	RC	34	46	12	0.3
CBRC107	416640	/34/831	309	-90	0	105	RC	54	66	12	0.5
CBRC109	4163/9	7348006	307	-90	0	93	RC	63	66	3	0.3
	410240	/ 340107	306	-90	0	105	RC	81	84	37	0.6
CBRC111	416112	7348147	305	-90	0	111	RC	63	111	48	0.7
Incl.	110112	/ 5 101 1/	505	70	•		Re	72	81	9	1.4
CBRC115	414374	7349758	303	-57	47	165	RC	45	54	9	0.4
CBRC124	414639	7349596	302	-59	43	165	RC	18	37	17	0.6
Incl.								30	33	3	1.0
CBRC125	414598	7349528	303	-59	45	165	RC	63	122	59	0.6
Incl.								99	118	19	1.0
CBRC138	416919	7347687	310	-90	0	117	RC	45	102	57	0.6
Incl.	417077	7246040	212	00	0	141	D.C.	90	93	3	1.4
CBRC142	41/9//	7346948	312	-90	0	141	RC	108	126	18	0.5
CBRC143	418225	7346/4/	313	-90	0	135	RC	114	120	6 24	0.8
CBRC155	416823	7347488	308	-90	0	127	RC	69	78	9	0.4
CBRC174	416930	7347706	310	-60	31	96	RC	58	96	38	0.4
Incl.	110750	1011100	510					60	66	6	1.2
CBRC175	416902	7347650	309	-60	32	126	RC	52	118	66	0.4
CBRC176	416874	7347602	308	-60	29	108	RC	49	99	50	0.9
Incl.								53	95	42	1.0
Incl.								56	76	20	1.3
CBRC178	417058	7347614	310	0	0	55	RC	39	55	16	0.5
CBRC179	418475	7346758	312	0	0	120	RC	60	69	9	0.3
CBRC185	418/23	/346//0	309	0	0	102	RC	69	/5	6	0.2
CBRC189	41/05/	/34/608	310	0	0	108	RC	39	63	24	0.6
Inci.								40 79	24 04	0 4	0.3
And								90	96	6	0.3
CBRC193	416848	7347538	299	-60	31	108	RC	51	108	57	0.9
Incl.								72	82	10	1.2
Incl.								94	108	14	1.4
CBRC194	415993	7348105	303	-61	33	186	RC	64	186	122	0.6
Incl.								99	125	26	1.1
CBRC195	416019	7348150	303	-60	31	210	RC	71	201	130	0.7
Incl.								84	123	39	1.3
Incl.	417171	7240104	205		22	1/2	DC.	86	90	4	2.0
CBRC196	4161/1	/ 348104	305	-61	32	168	ĸĊ	81	105	24	0.7
CBRC197	416154	7348043	303	_61	22	168	RC	64	94	0 28	0.8
Incl	TITI	7 3 - 0003	303	-01		100	NC	71	85	14	1.0
CBRC198	416295	7348031	305	-61	38	68	RC.	78	88	10	0.5
CBRC199	416271	7347990	303	-61	33	162	RC	76	95	19	0.5
And			-					106	112	6	0.5
And								128	130	2	0.7
CBRC200	416850	7347541	306	-60	36	186	RC	48	143	95	0.9
Incl.								72	80	8	1.7
Incl.								102	122	20	1.4
And	414024	73 /7 /00	200		22	1.50		168	171	3	0.6
CBRC201	416824	/34/489	308	-61	32	152	RC	54	152	98	0.7
Incl.								85	126	41	1.1



Table 5: Gifford Creek TREO Intersections based on a minimum length of 3m and a lower cut off grade of 0.3% TREO, Drill Collar Data (GDA94 MGAz50)

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Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	TREO (%)
CBRC001	414382	7350108	302	-58	46	105	RC	17	94	77	0.35
CBRC005	413995	7349718	301	-58	42	165	RC	21	24	3	0.50
CBRC006	413930	7349660	302	-59	43	165	RC	30	48	18	0.30
CBRC007	414324	7350050	302	-58	52	165	RC	15	26		0.31
CBRC010	414844	7348984	295	-59	45	249	RC	93	145	52	0.63
Incl.								116	121	5	1.01
CBRC011	414671	7348816	298	-58	45	165	RC	39	54	15	0.37
CBRC012	414614	7348756	297	-58	47	165	RC	57	66	9	0.31
CBRC013	414786	7348933	293	-59	46	171	RC	165	168	3	0.54
CBRC014	414728	7348876	296	-59	44	165	RC	12	15	3	0.38
CBRC015	414608	7349428	305	-90	0	45	RC	18	27	9	0.31
CBRC016	414497	7349315	304	-90	0	57	RC	9	12	3	0.34
	414384	7349200	293	-90	0	8/		30	60 24	30	0.34
CBRC010	413010	7347775	303	-90	0	75		10	30 42	7 24	0.34
CBRC023	414494	7349994	301	-70	0	93	RC	9	42	27	0.58
CBRC025	414270	7349769	304	-90	0	45	RC	0	45	45	0.30
CBRC027	414571	7349806	302	-90	0	75	RC	6	48	42	0.83
Incl.								9	30	21	1.25
CBRC028	414610	7349878	302	-90	0	99	RC	15	57	42	0.63
Incl.								24	36	12	1.00
CBRC029	414493	7349764	302	-90	0	75	RC	3	75	72	0.69
Incl.								6	37	31	1.26
CBRC030	414382	7349658	302	-90	0	99	RC	3	99	96	0.70
Incl.								4	37	33	1.12
CBRC031	414270	7349542	303	-90	0	75	RC	12	24	12	0.52
CBRC032	414598	7349652	301	-90	0	81	RC	9	81	72	0.60
Incl.								22	34	12	1.02
CBRC033	414497	7349541	304	-90	0	105	RC	6	105	99	0.64
Incl.	41.420.4	72 (0 (20	20.4		•	01		13	57	44	1.00
CBRC034	414386	/349428	304	-90	0	81	RC	15	33	18	0.33
CBRC036	414495	7349089	292	-90	0	99	RC	18	5/	39	0.30
CBRC038	414610	/3489/5	293	-90	0	57	RC	9	15	6	0.36
CBRC039	414524	7348883	275	-90	0	99 02		39	57	18	0.30
CBRC041	414033	7340743	277	-90	0	75		21	27	12	0.52
CBRC043	414949	7348638	300	-70	0	99	RC	39	69	30	0.33
CBRC044	415176	7348632	297	-90	0	87	RC	27	66	39	0.50
Incl.					•	•••		40	54	14	0.92
CBRC045	415321	7348537	295	-90	0	93	RC	30	63	33	0.42
CBRC046	415430	7348421	295	-90	0	87	RC	33	66	33	0.38
CBRC047	415545	7348319	295	-90	0	93	RC	24	66	42	0.34
CBRC048	415655	7348203	297	-90	0	99	RC	33	54	21	0.37
CBRC049	415884	7348202	295	-90	0	99	RC	36	96	60	0.47
CBRC050	415770	7348340	296	-90	0	123	RC	27	54	27	0.54
CBRC051	415657	7348430	295	-90	0	63	RC	21	52	31	0.57
CBRC052	415547	7348536	298	-90	0	93	RC	36	93	57	0.63
CBRC053	415658	7348657	296	-90	0	93	RC	30	69	39	0.64
CBRC056	413900	7350533	301	-90	0		RC	36	90	54	0.32
CBRC058	413818	7350673	301	-90	0	147	RC	48	105	57	0.34
CBRC060	413590	/350677	301	-90	0	93	RC	39	57	18	0.31
CBRC061	4134/8	/350564	301	-90	0	69	RC	18	45	2/	0.33
	413/06	7350/85	301	-90	0		KC BC	18	42	24	0.40
	411505	73510//	277	-70	0	67 00	RC PC	30	4 8 ე⊿	۱۵ ۵	0.33
	411704	7351602	302	-70	0	77	RC PC	30	24 45	7	0.30
CBRC075	411500	7351974	302	_90	0	122	RC	42	54	13	0.30
CBRC079	4 1478	7351800	302	_90	0	93	RC	18	27	9	0.37
CBRC080	411252	7351800	301	-90	0	165	RC	45	58	13	0.48
And			201		~			84	105	21	0.34
CBRC081	411367	7351688	302	-90	0	93	RC	30	45	15	0.37
CBRC082	411283	7351594	301	-90	0	75	RC	36	54	18	0.33

Hole ID	Easting	Northing	RL	Dip	Azi	ЕОН	Туре	From (m)	To (m)	Interval (m)	TREO (%)
CBRC083	414546	7349699	302	-59	37	153	RC	8	136	128	0.74
CBRC084	414484	7349644	302	-58	46	201	RC	6	201	195	0.57
Incl.								16	40	24	1.26
CBRC085	414430	7349587	303	-59	45	123	RC	9	123	114	0.56
Incl.								37	47	10	0.92
CBRC086	414542	7349584	303	-59	47	117	RC	9	117	108	0.69
Incl.					10			15	21	6	1.76
CBRC087	414430	/34969/	302	-58	49	201	RC	6	201	195	0.55
Incl.	414214	7240507	202	50	4.4	101	D.C.	6	39	55	1.10
CBRC088	414316	/34958/	303	-57	44	181	RC	6	181	1/5	0.54
	414657	7240407	202	F0	16	150	PC	0	55	41 92	0.93
CBRC089	414657	/ 34969/	302	-37	40	159	RC	8 20	40	92	0.71
CBRC107	416640	7347931	309	90	0	105	PC	50	69	10	0.53
CBRCIIO	416246	7348109	306	-90	0	105	RC	66	105	39	0.32
CBRCIII	416112	7348147	305	-90	0	105	RC	54	105	57	0.20
Incl	110112	7510117	505	-70			inc.	72	81	9	1.2
CBRC113	414544	7349928	302	-59	43	153	RC	21	66	45	0.58
CBRC114	414486	7349872	302	-58	43	165	RC	6	27	21	0.60
CBRC115	414374	7349758	303	-57	47	165	RC	3	105	102	1.14
Incl.								76	104	29	2.05
Incl.								77	86	9	3.88
CBRC116	414320	7349700	302	-57	44	160	RC	I	115	114	0.68
Incl.								62	87	25	1.03
CBRC117	414252	7349645	302	-59	40	165	RC	68	165	97	0.64
CBRC118	414660	7349927	302	-58	45	165	RC	69	81	12	0.38
And								117	147	30	0.45
CBRC120	414655	7349811	301	-59	43	165	RC	30	78	48	0.56
Incl.								50	54	4	1.20
CBRC121	414602	7349753	302	-59	48	153	RC	7	69	62	1.68
Incl.								33	58	25	2.86
Incl.								34	49	15	3.26
CBRC122	414371	7349528	304	-59	43	165	RC	12	165	153	0.52
CBRC123	414429	/3494/4	304	-58	42	165	RC	86	158	/2	0.41
CBRC124	414639	/349596	302	-59	43	165	RC	9	165	158	0.40
Incl.								10	45	35	0.85
And		-						15	20	5	1.03
CRPC125	414508	72/0528	202	- 50	45	145	PC	20	120	/	1.04
Incl	117370	7347320	303	-37	73	105	nc –	50	54	4	2 59
And								59	68	9	2.37
CBRC126	414439	7349824	302	-59	47	165	RC.	6	24	18	0.54
Incl.	111137	7517021	502	37	17	105	- NO	9		3	1.02
CBRC127	414543	7349471	304	-58	42	153	RC	24	153	129	0.47
Incl.								93	102	9	1.06
CBRC128	414484	7349415	304	-57	42	165	RC	99	165	66	0.36
CBRC138	416919	7347687	310	-90	0	117	RC	45	99	54	0.64
CBRC139	417204	7347519	311	-90	0	81	RC	30	57	27	0.87
Incl.								36	48	12	1.14
CBRC140	417449	7347323	310	-90	0	81	RC	60	63	3	0.35
CBRC142	<u>4179</u> 77	7346948	312	-90	0	141	RC	108	126	18	0.66
CBRC143	418225	7346747	313	-90	0	135	RC	114	135	21	0.34
CBRC144	418428	7346510	313	-90	0		RC	96	99	3	0.38
CBRC147	416282	7347804	305	-90	0	93	RC	75	87	12	0.43
CBRC148	416556	7347642	306	-90	0	129	RC	51	129	78	0.55
Incl.				-				54	66	12	1.09
CBRC153	416669	7347210	312	-90	0	4	RC	90	93	3	0.55
CBRC155	416823	7347488	308	-90	0		RC	48	105	57	0.80
Incl.	4100-1				-			60	84	24	1.24
CBRC168	418056	/34/103	312	-90	0	93	RC	63	66	3	0.32
CBRC170	418388	/34/068	306	-90	0	99	RC	54	96	42	0.50
	418564	/ 346753	307	-90	U 1	73	KC DC	5/	78	21	0.44
	416930	/ 54/ / 06	310	-60	ا ڈ	76	RC RC	54	76	42	0.66
CBKC1/4	416730	/ 34//06	310	-60	51	76	ĸĊ	54	76	42	U.66

Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	TREO (%)
Incl.								58	68	10	1.10
CBRC175	416902	7347650	309	-60	32	126	RC	49	119	70	0.58
CBRC176	416874	7347602	308	-60	29	108	RC	45	101	56	0.96
Incl.								54	78	24	1.27
And								86	93	7	1.02
CBRC178	417058	7347614	310	0	0	55	RC	27	55	28	0.57
CBRC179	418475	7346758	312	0	0	120	RC	51	105	54	0.52
Incl.								57	72	15	1.00
CBRC185	418723	7346770	309	0	0	102	RC	63	84	21	0.36
CBRC189	417057	7347608	310	0	0	108	RC	30	66	36	0.58
CBRC190	414130	7349350	305	0	0	72	RC	42	48	6	0.35
CBRC191	413569	7349755	301	0	0	72	RC	51	60	9	0.37
CBRC193	416848	7347538	299	-60	31	108	RC	49	108	59	1.10
Incl.								72	79	7	3.00
CBRC194	415993	7348105	303	-61	33	186	RC	57	166	109	0.73
Incl.								64	90	26	1.20
CBRC195	416019	7348150	303	-60	31	210	RC	57	154	97	0.89
Incl.								71	94	23	1.59
CBRC195	416019	7348150	303	-60	31	210	RC	81	98	17	0.51
CBRC197	416154	7348063	303	-61	33	168	RC	65	92	27	0.59
CBRC198	416295	734803 I	305	-61	38	168	RC	78	86	8	0.35
CBRC199	416271	7347990	303	-61	33	162	RC	78	89		0.50
And								109	116	7	0.84
CBRC200	416850	7347541	306	-60	36	186	RC	48	138	90	1.06
Incl.								72	80	8	3.05
CBRC201	416824	7347489	308	-61	32	152	RC	54	133	79	0.77
Incl.								61	78	17	1.41

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Table 6: Gifford Creek TiO₂ Intersections based on a minimum length of 3m and a lower cut off grade of 5.0% TiO₂, Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From	То	Interval	TiO ₂ (%)
	Ŭ	, s					<i>.</i>	(m)	(m)	(m)	- ()
CBRC011	414671	7348816	298	-58	45	165	RC	51	54	3	5.3
CBRC028	414610	7349878	302	-90	0	99	RC	54	57	3	5.1
CBRC029	414493	7349764	302	-90	0	75	RC	14	30	16	5.7
CBRC030	414382	7349658	302	-90	0	99	RC	16	27		5.8
CBRC032	414598	7349652	301	-90	0	81	RC	9	32	23	6.7
CBRC033	414497	7349541	304	-90	0	105	RC	13	16	20	5
And								42	46	4	6.2
CBRC044	415176	7348632	297	-90	0	87	RC	43	53	10	5.5
CBRC049	415884	7348202	295	-90	0	99	RC	42	51	9	5.2
CBRC053	415658	7348657	296	-90	0	93	RC	36	66	30	6.3
CBRC058	413818	7350673	301	-90	0	147	RC	63	66	3	6
CBRC080	411252	7351800	301	-90	0	165	RC	57	69	12	6.3
CBRC083	414546	7349699	302	-59	37	153	RC	23	42	19	6.7
CBRC084	414484	7349644	302	-58	46	201	RC	9	45	36	7.9
Incl.								25	39	14	12.3
CBRC085	414430	7349587	303	-59	45	123	RC	6	85	79	7.4
Incl.								45	66	21	11.7
CBRC086	414542	7349584	303	-59	47	117	RC	12	84	72	8.6
Incl.								30	36	6	12.3
And								45	63	18	10
CBRC087	414430	7349697	302	-58	49	201	RC	10	33	23	6.2
CBRC089	414657	7349697	302	-59	46	159	RC	12	69	57	6.4
Incl.								34	42	8	11.3
And									123	12	7.5
Incl.								117	120	3	10.1
CBRC107	416640	7347831	309	-90	0	105	RC	51	66	15	7.1
Incl.								54	60	6	11.5
CBRCIII	416112	7348147	305	-90	0		RC	54	84	30	7.9
Incl.								66	72	6	12.8
CBRC112	414600	7349985	301	-59	46	95	RC	66	75	9	6.1
And								90	93	3	6.4
CBRC113	414544	7349928	302	-59	43	153	RC	30	108	78	5.7
Incl.								48	57	9	11.5
CBRC114	414486	7349872	302	-58	43	165	RC	75	78	3	5.6

Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	TiO ₂ (%)
CBRC115	414374	7349758	303	-57	47	165	RC	7	96	89	5.8
Incl.								47	50	3	10
CBRC117	414252	7349645	302	-59	40	165	RC	12	15	3	6.1
CBRCI18	414660	/34992/	302	-58	45	165	RC	66	14/	81	6
CBRC119	414698	7349866	302	_59	47	129	RC	63	129	66	5.9
CBRC120	414655	7349811	301	-59	43	165	RC	45	78	33	6.1
And								105	111	6	5.4
CBRC121	414602	7349753	302	-59	48	153	RC	15	44	33	5.1
And								117	120	3	5.4
CBRC122	414371	7349528	304	-59	43	165	RC	51	54	3	5.3
CBRC125	414598	7349528	303	-59	45	165	RC	16	123	107	7.7
Incl.								5/	59	17	11.2
CBRC127	414543	7349471	304	59	42	153	RC	135	70	10	5.7
CBRC138	416919	7347687	310	-90	0	133	RC	45	102	57	8.8
Incl.	110717	1011001	510	70				72	90	18	11.4
CBRC139	417204	7347519	311	-90	0	81	RC	42	54	12	5.8
CBRC141	417710	7347128	310	-90	0	105	RC	69	81	12	6.1
CBRC142	417977	7346948	312	-90	0	141	RC	75	90	15	5.7
CBRC145	415967	7347968	304	-90	0	93	RC	42	81	39	5.1
CBRC146	416194	7347616	306	-90	0	93	RC	42	81	39	6.4
CBRC148	416556	7347642	306	-90	0	129	RC	99	129	30	5.7
CBRC150	416388	7347365	310	-90	0	171	RC	117	147	30	5.5
CBRC151	416947	7347057	312	-90	0	93	RC	54	75	21	5
CBRC153	416669	7347210	312	-90	0	141	RC	51	66	15	5.9
And								90	93	3	9
CBRC157	417103	7347334	309	-90	0	87	RC	51	63	12	5.3
CBRC158	417223	7346895	312	-90	0		RC	57	75	18	5.1
CBRC159	417394	7347197	309	-90	0	93	RC	69	75	6	6.3
CBRC169	418321	7346895	312	-90	0	93	RC	66	75	9	5.5
CBRC170	418388	7347068	306	-90	0	99	RC	54	75	21	6.5
Incl.								57	60	3	10.2
CBRC171	418564	7346953	307	-90	0	93	RC	57	78	21	5.6
CBRC174	416930	7347706	310	-60	31	96	RC	57	96	39	8.5
Incl.								60	66	6	19.2
CBRC175	416902	7347650	309	-60	32	126	RC	51	119	68	8.9
Incl.								55	58	3	13.2
And								79	82	3	11.9
And								100	108	8	10.4
CBRC176	416874	7347602	308	-60	29	108	RC	49	98	49	9.7
Incl.								54	66	12	15.6
CBRC178	417058	7347614	310	0	0	55	RC	33	55	22	5.1
CBRC179	418475	7346758	312	0	0	120	RC	57	78	21	5.1
CBRC185	418723	7346770	309	0	0	102	RC	63	84	21	8.1
CBRC189	417057	7347608	310	0	0	108	RC	36	60	24	5.6
CBRC193	416848	7347538	299	-60	31	108	RC	50	108	58	7.5
Incl.								72	79	7	16.7
CBRC194	415993	7348105	303	-61	33	186	RC	60	128	68	8.6
Incl.								86	105	19	11.3
CBRC195	416019	7348150	303	-60	31	210	RC	63	123	60	8.8
Incl.								73	99	26	11.7
CBRC197	416154	7348063	303	-61	33	168	RC	74	78	4	7
CBRC200	416850	7347541	306	-60	36	186	RC	48	137	89	8.9
Incl.								72	80	8	22.2
CBRC201	416824	7347489	308	-61	32	152	RC	55	127	72	7.5



Table 7: Gifford Creek Sc Intersections based on a minimum length of 3m and a lower cut off grade of 100ppm Sc, Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	Sc (ppm)
CBRC001	414382	7350108	302	-58	46	105	RC	65	71	6	113
CBRC005	413995	7349718	301	-58	42	165	RC	21	23	2	120
CBRC006	413930	7349660	302	-59	43	165	RC	36	48	12	111
CBRC011	414671	7348816	298	-58	45	165	RC	45	51	6	108
CBRC017	414384	7349200	293	-90	0	87	RC	51	54	3	107
CBRC018	413818	7349995	303	-90	0	75	RC	30	36	5	105
CBRC019	413932	7350109	302	-90	0	75	RC	30	39	9	106
CBRC023	414494	7349994	301	-90	0	93	RC	24	39	15	
CBRC024	414385	7349878	303	-90	0	45	RC	27	30	3	107
CBRC027	414571	7349806	302	-90	0	75	RC	13	42	29	118
Incl.					-			25	27	2	204
CBRC028	414610	7349878	302	-90	0	99	RC	25	57	27	109
CBRC030	414382	7349658	302	-90	0	99	RC	16	27	11	107
CBRC032	414598	7349652	301	-90	0	81	RC		32	21	111
CBRC033	414497	7349541	304	-90	0	105	RC	13	57	44	104
CBRC034	414386	7349428	304	-90	0	81	RC	27	33	6	117
CBRC036	414495	7349089	292	-90	0	99	RC	33	48	15	116
CBRC041	414833	7348745	297	-90	0	93	RC	45	51	6	111
CBRC044	415176	7348632	297	-90	0	87	RC	39	54	15	103
CBRC045	415321	7348537	295	-90	0	93	RC	39	57	18	105
CBRC046	415430	7348421	295	-90	0	87	RC	39	54	15	111
CBRC047	415545	7348319	295	-90	0	93	RC	36	54	18	117
CBRC048	415655	7348203	297	-90	0	99	RC	42	51	9	119
CBRC053	415658	7348657	296	-90	0	93	RC	39	57	18	110
CBRC056	413900	7350533	301	-90	0		RC	42	60	18	105
CBRC063	413706	7350785	301	-90	0		RC	27	30	3	100
CBRC081	411367	7351688	302	-90	0	93	RC	45	48	3	104
CBRC083	414546	7349699	302	-59	37	153	RC	23	30	7	103
CBRC084	414484	7349644	302	-58	46	201	RC	19	39	20	102
CBRC085	414430	7349587	303	-59	45	123	RC	21	72	51	107
CBRC086	414542	7349584	303	-59	47	117	RC	14	93	79	141
Incl.								54	66	12	236
CBRC087	414430	7349697	302	-58	49	201	RC	30	33	3	102
And								182	186	4	128
CBRC088	414316	7349587	303	-59	44	181	RC	37	47	10	106
CBRC089	414657	7349697	302	-59	46	159	RC	29	44	15	105
CBRCIII	416112	7348147	305	-90	0		RC	66	81	15	133
CBRC113	414544	7349928	302	-59	43	153	RC	30	66	36	133
Incl.								48	54	6	227
CBRC114	414486	7349872	302	-58	43	165	RC	39	42	3	100
CBRC118	414660	7349927	302	-58	45	165	RC	69	75	6	104
CBRC120	414655	7349811	301	-59	43	165	RC	49	54	5	109
And								63	75	12	116
CBRC121	414602	7349753	302	-59	48	153	RC	42	45	3	107
CBRC122	414371	7349528	304	-59	43	165	RC	54	57	3	104
CBRC124	414639	7349596	302	-59	43	165	RC	14	45	31	118
CBRC125	414598	7349528	303	-59	45	165	RC	12	122	110	136
Incl.								18	28	10	270
And	41/010	70 47 407	210		<u>^</u>			40	45	5	215
CBRC138	416919	/34/687	310	-90	0	117	RC DC	48	93	45	181
Incl.	416919	/34/687	310	-90	0		RC	48	60	12	319
CBRC139	41/204	/34/519	311	-90	0	81	RC RC	30	48	18	105
CBRC170	410568	734/068	306	-70	0	77	RC DC	54	72	18	110
CRKC1/1	418564	/ 346953	307	-90	U	73	KC	63	/5	12	106



Table 8: Gifford Creek P2O5 Intersections based on a minimum length of 3m and a lower cut off grade of 5.0% P2O5, Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	₽₂O₅ (%)
CBRC006	413930	7349660	302	-59	43	165	RC	154	207	53	5.2
CBRC010	414844	7348984	295	-59	45	249	RC	109	113	4	5.1
And								154	207	53	5.2
Incl.	41.4471	72 (00) (200	50	45	145	56	172	175	3	15.6
CBRCUIT	414671	/348816	298	-58	45	165	RC	60	66	6	6.4 F.O
	414614	7349754	297	50	47	145	PC	162	165	3	5.9 7.0
CBRC017	414384	7349200	293	-90	0	87	RC	57	66	9	6.5
CBRC019	413932	7350109	302	-90	0	75	RC	42	45	3	5.4
CBRC027	414571	7349806	302	-90	0	75	RC	23	25	2	7.0
And								63	66	3	5.1
CBRC030	414382	7349658	302	-90	0	99	RC	17	29	12	6.0
CBRC032	414598	7349652	301	-90	0	81	RC	23	45	22	6.2
Incl.	41.4407	72 (05 ()	20.4			105		31	36	5	13.0
CBRC033	414497	7349541	304	-90	0	105	RC	17	56	39	6.3
CBRC042	415057	7348/43	298	-90	0	75	RC	39	45	6	6.0
CBRC049	415004	7340202	275	-90	0	123	RC	40	67 48	21	5.1
CBRC051	415657	7348430	295	-90	0	63	RC	50	52	2	76
And	110007	7010100	275			00		60	63	3	5.3
CBRC053	415658	7348657	296	-90	0	93	RC	48	63	15	5.9
CBRC058	413818	7350673	301	-90	0	147	RC	42	45	3	6.2
And								54	57	3	5.2
And								90	93	3	6.0
And								99	102	3	5.6
CBRC060	413590	7350677	301	-90	0	93	RC	45	57	12	6.2
CBRC061	413478	7350564	301	-90	0	69	RC	45	48	3	5.1
CBRC062	41358/	/350453	301	-90	0	/5	RC	51	54	3	5.5
CBRC075	411588	7351924	302	-90	27	123	RC	8/	93	6	6.0 7.5
	0+6+1+	7347077	302	-37	37	155	RC	46	47	10	103
CBRC084	414484	7349644	302	-58	46	201	RC	26	41	15	5.0
And								119	121	3	7.4
CBRC085	414430	7349587	303	-59	45	123	RC	30	85	55	6.6
CBRC086	414542	7349584	303	-59	47	117	RC	54	105	51	5.4
Incl.								84	87	3	10.6
CBRC087	414430	7349697	302	-58	49	201	RC	36	44	8	6.4
CBRC088								35	55	20	5.4
Incl.								35	37	3	10.1
And	414457	7240/07	202	50	11	150	P.C.	40	4/		10.7
CBRC107	414657	734707/	302	-37	46	105	RC	46	62	9	5.1
CBRC109	416379	7348006	307	-90	0	93	RC	63	66	3	60
CBRCIIO	416246	7348109	306	-90	0	105	RC	69	72	3	5.3
And					~			102	105	3	7.2
CBRCIII	416112	7348147	305	-90	0	111	RC	69		42	8.3
Incl.								99		12	14.0
CBRC112	414600	7349985	301	-59	46	95	RC	90	95	5	5.4
CBRC115	414374	7349758	303	-57	47	165	RC	22	96	74	6.8
Incl.								48	76	28	10.5
And	41.44.10	72 (0007	202	50	4.5	1.45		89	91	2	12.0
CBRC130	414660	734992/	302	-58	45	165	RC	11/	144	27	6.0
CBRC120	414655	7347011	301	-57	43 ∕10	165	RC PC	77 45	54	1 Z Q	5.4 5.2
CBRC121	4 437	7349528	304	-57	43	165	RC	72	78	6	6.5
And		, 5 17 5 20	507	57	15	105	ne -	135	150	15	5.3
Incl								135	138	3	10.2
CBRC123	414429	7349474	304	-58	42	165	RC	24	30	6	7.8
And				-		_		157	158	I	17.4
CBRC124	414639	7349596	302	-59	43	165	RC	34	43	9	5.0
CBRC125	414598	7349528	303	-59	45	165	RC	17	21	4	7.1
And								38	45	7	5.6



Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	P₂O₅ (%)
And								100	122	22	5.7
Incl.								118	120	2	10.3
CBRC127	414543	7349471	304	-58	42	153	RC	97	105	8	6.6
And								129	153	24	7.8
Incl.								150	153	3	10.5
CBRC138	416919	7347687	310	-90	0	117	RC	63	102	39	6.6
Incl.								93	102	9	11.9
CBRC139	417204	7347519	311	-90	0	81	RC	39	57	18	5.5
CBRC142	417977	7346948	312	-90	0	141	RC	75	141	66	7.1
Incl.								108	126	18	13.6
CBRC143	418225	7346747	313	-90	0	135	RC	114	132	18	8.5
Incl.								114	120	6	18.4
CBRC146	416194	7347616	306	-90	0	93	RC	63	81	18	5.1
CBRC148	416556	7347642	306	-90	0	129	RC	87	129	43	11.9
CBRC153	416669	7347210	312	-90	0	141	RC	90	120	30	6.1
CBRC175	416902	7347650	309	-60	32	126	RC	71	119	48	8.8
Incl.								103	119	16	14.8
CBRC176	416874	7347602	308	-60	29	108	RC	88	102	14	8.0
Incl.								94	98	4	11.2
CBRC189	417057	7347608	310	0	0	108	RC	54	99	45	6.6
Incl.								93	96	3	17.1
CBRC191	413569	7349755	301	0	0	72	RC	51	60	9	7.4
CBRC193	416848	7347538	299	-60	31	108	RC	73	81	8	5.5
CBRC194	415993	7348105	303	-61	33	186	RC	70	186	116	10.5
Incl.								125	166	41	18.8
Incl.								138	158	20	21.9
CBRC195	416019	7348150	303	-60	31	210	RC	71	197	126	7.2
Incl.								133	157	24	15.9
Incl.								146	150	4	24.6
CBRC196	416171	7348104	305	-61	32	168	RC	81	102	21	10.2
Incl.								83	90	7	18.7
CBRC197	416154	7348063	303	-61	33	168	RC	74	102	28	9.1
Incl.								78	86	8	15.0
CBRC198	416295	7348031	305	-61	38	168	RC	78	91	13	6.8
Incl.								79	83	4	11.8
CBRC199	416271	7347990	303	-61	33	162	RC	76	90	14	11.0
And								103	117	14	8.5
Incl.								108	111	3	21.0
CBRC200	416850	7347541	306	-60	36	186	RC	71	138	67	6.1
Incl.								123	132	9	11.7
CBRC201	416824	7347489	308	-61	32	152	RC	82	126	44	6.1
Incl.								107	113	6	11.5

DREADNOUGHT

FSOUR

CE

Table 9. Cit	ford Creek ZrO-	Intersections based on a min	imum length of 3m	and a lower cut off an	rade of 0.3% 7RO ₂	Drill Collar Data	(CDA94 MCA-50)
TUDIE 7. GI			inum lengur of Sin	und a lower cut off gr	uue v v v.5 / 2 L V 2,	Dilli Collai Dala (GDA74 MIGAZJU

DREADNOUGHT O

CE

Hole ID	Easting	Northing	RL	Dip	Azi	EOH	Туре	From (m)	To (m)	Interval (m)	ZrO2 (%)
CBRC005	413995	7349718	301	-58	42	165	RC	21	23	2	0.6
CBRC006	413930	7349660	302	-59	43	165	RC	27	63	36	0.3
CBRC010	414844	7348984	295	-59	45	249	RC	66	69	3	0.7
CBRC021	414044	7349992	303	-90	0	63	RC	36	39	3	0.7
CBRC024	414385	7349878	303	-90	0	45	RC	27	30	3	0.5
CBRC027	414571	7349806	302	-90	0	75	RC	25	27	2	0.7
And								33	42	9	0.3
CBRC028	414610	7349878	302	-90	0	99	RC	45	48	3	0.5
CBRC042	415057	7348743	298	-90	0	75	RC	69	72	3	0.5
CBRC047	415545	7348319	295	-90	0	93	RC	39	45	6	0.5
CBRC080	411252	7351800	301	-90	0	165	RC	59	63	4	0.5
And								66	69	3	0.5
CBRC086	414542	7349584	303	-59	47	117	RC	39	42	3	0.5
And								57	66	9	0.5
CBRC107	416640	7347831	309	-90	0	105	RC	57	60	3	0.5
CBRCIII	416112	7348147	305	-90	0	111	RC	108	111	3	0.5
CBRC124	414639	7349596	302	-59	43	165	RC	31	35	4	0.5
CBRC125	414598	7349528	303	-59	45	165	RC	18	27	9	0.6
Incl.								19	21	2	1.1
And								72	77	5	0.5
And								93	106	13	0.5
CBRC126	414439	7349824	302	-59	47	165	RC	30	33	3	0.5
CBRC176	416874	7347602	308	-60	29	108	RC	56	89	33	0.5
CBRC185	418723	7346770	309	0	0	102	RC	69	72	3	0.5
CBRC193	416848	7347538	299	-60	31	108	RC	72	108	36	Ι
Incl.								9 8	108	10	1.4
CBRC194	415993	7348105	303	-61	33	186	RC	146	150	4	0.6
CBRC200	416850	7347541	306	-60	36	186	RC	72	138	66	I
Incl.								104	123	19	1.4
CBRC201	416824	7347489	308	-61	32	152	RC	83	127	44	0.8
Incl.								113	127	14	1.2

JORC Code, 2012 Edition – Table I Report Template Section I Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard 	Reverse Circulation (RC) drilling was undertaken to produce samples for assaying.
	measurement tools appropriate to the minerals under	Laboratory Analysis
	 investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any 	Two sampling techniques were utilised for this program, Im metre splits directly from the rig sampling system for each metre and 3m composite sampling from spoil piles. Samples submitted to the laboratory were determined by the site geologist.
	measurement tools or systems used.	im splits
	Aspects of the determination of mineralisation that are Material to the Public Report.	From every metre drilled a 2-3kg sample (split) was sub- sampled into a calico bag via a Metzke cone splitter from each metre of drilling.
	• In cases where industry standard work has been done this would be relatively simple (e.g. 'reverse circulation drilling	3m Composites
	was used to obtain I m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems.	All remaining spoil from the sampling system was collected in buckets from the sampling system and neatly deposited in rows adjacent to the rig. An aluminium scoop was used to then sub-sample each spoil pile to create a 2-3kg 3m composite sample in a calico bag.
	Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	A pXRF is used on site to determine mineralised samples. Mineralised intervals have the Im split collected, while unmineralised samples have 3m composites collected.
		All samples are submitted to ALS Laboratories in Perth for determination of Niobium, Rare Earth Oxides, Titanium, Zirconium, Phosphate by Lithium Borate Fusion and ICP-MS and ICP-AES (ALS Method ME-MS81h and ME-ICP06h).



Criteria	JORC Code explanation	Commentary
		Scandium was determined by four acid digest and ICP-MS (ALS Method ME-MS61).
		QAQC samples consisting of duplicates, blanks and CRM's (OREAS Standards) were inserted through the program at a rate of 1:50 samples. I m duplicate samples are submitted as a B-bag from the Metzke's cone splitter. 3m composite duplicates are submitted as a second 2-3kg composite scoop sample.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer,	RC Drilling
	rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Topdrill undertook the program utilising a truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5 $\frac{1}{2}$ ".
Drill sample recovery	• Method of recording and assessing core and chip sample	RC Drilling
	 recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Witheless a subtractive print between enable measurements. 	Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones.
	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	Best practice sampling procedure included: suitable usage of dust suppression, suitable shroud, lifting off bottom between each metre, cleaning of sampling equipment, ensuring a dry sample and suitable supervision by the supervising geologist to ensure good sample quality.
		At this stage, no known bias occurs between sample recovery and grade.
Logging	• Whether core and chip samples have been geologically	RC Drilling
°00 0	 and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. 	RC chips were logged by a qualified geologist with sufficient experience in this geological terrane and relevant styles of mineralisation using an industry standard logging system which could eventually be utilised within a Mineral Resource Estimation.
	 The total length and percentage of the relevant intersections logged. 	Lithology, mineralisation, alteration, veining, weathering and texture were all recorded digitally.
		Chips were washed each metre and stored in chip trays for preservation and future reference.
		RC pulp material is also analysed on the rig by pXRF and magnetic susceptibility meter to assist with logging and the identification of mineralisation.
		Logging is qualitative, quantitative or semi-quantitative in nature.
Sub-sampling	• If core, whether cut or sawn and whether quarter, half or	RC Drilling
techniques and sample preparation	all core taken. If non-core, whether riffled, tube sampled, rotary split, etc.	From every metre drilled, a 2-3kg sample (split) was sub- sampled into a calico bag via a Metzke cone splitter.
	 and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling 	QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the ore zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after.
	stages to maximise representivity of samples.	2-3kg samples are submitted to ALS laboratories (Perth),
	 Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.1g charge for determination of Niobium and Rare Earth Oxides, Titanium, Phosphate and Zirconium by Lithium Borate Fusion and ICP-MS and ICP-AES (ALS Method ME- MS81h and ME-ICP06h). Scandium was determined by four acid digest and ICP-MS (ALS Method ME-MS61).
		Standard laboratory QAQC is undertaken and monitored.
Quality of assay data	• The nature, quality and appropriateness of the assaying	Laboratory Analysis
and laboratory tests	and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF	Lithium borate fusion is considered a total digest and Methods ME-MS81h and ME-ICP06h are appropriate for Nb2O5, REE, P2O5, TiO2 ZrO2 determination.
	instruments, etc., the parameters used in determining the analysis including instrument make and model reading	Four acid digest is considered a near total digest and method ME-MS61 is appropriate for Sc determination
	times, calibrations factors applied and their derivation, etc.	Standard laboratory QAQC is undertaken and monitored by
	 Nature of quality control procedures adopted (e.g. standards blanks dublicates external laboratory checks) 	the laboratory and by the company upon assay result receival.
	and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established	
Verification of	• The verification of significant intersections by either	Logging and Sampling
sampling and assaying	independent or alternative company personnel.	Logging and sampling were recorded directly into a digital

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Criteria	JORC Code explanation	Commentary
	 The use of twinned holes. Documentation of primary data, data entry procedures, 	logging system, verified and eventually stored in an offsite database.
	data verification, data storage (physical and electronic) protocols.Discuss any adjustment to assay data.	Significant intersections are inspected by senior company personnel.
		27 pairs of twinned RC and DD holes have been drilled at Yin and C3 and compared to validate the RC drilling.
		No adjustments to any assay data have been undertaken.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings 	Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.3m x/y, +/-0.5m z).
	 and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	GDA94 Z50s is the grid format for all xyz data reported.
		Azimuth and dip of the drill hole was recorded after the completion of the hole using an Axis Champ North-seeking Gyro. A reading was undertaken every 10^{th} metre with an accuracy of +/- 0.75° azimuth and +/-0.15° dip.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to 	See tables in the announcement for hole positions and information.
	establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	Where drill spacing is suitable for a mineral resource (Yin, C3) a Resource has been estimated. All other drill spacing is to wide spaced for determination of a Resource.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	Orientation of residual mineralisation is interpreted to be flat lying near the base of weathering for which vertical drill holes are generally perpendicular and represent true thickness.
	 If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	Fresh mineralisation is interpreted to have a dyke like geometry with a southerly dip, based off the resource drilling at C3. Angled drill holes are interpreted to be generally perpendicular to this mineralisation.
		No sample bias is known at this time.
Sample security	Ihe measures taken to ensure sample security.	All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Exmouth Haulage in Exmouth or Jarrahbar Contracting out of Carnarvon.
		Samples were delivered directly to ALS Laboratories Perth by Exmouth Haulage out of Exmouth and Jarrahbar Contracting out of Carnarvon.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	The program is continuously reviewed by senior company personnel.



Section 2 Reporting of Exploration Results				
(Criteria in this section apply	to all succeeding sections.)			

Criteria	JORC Code explanation	Commentary
Criteria Mineral tenement and land tenure status	 JORC Code explanation Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	Commentary Mangaroon Project consists of 22 granted Exploration License (E08/3178, E08/3229, E08/3274, E08/3275, E08/3439, E09/2195, E09/2290, E09/2359, E09/2370, E09/2384, E09/2405, E09/2422, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467, E09/2473, E09/2478, E09/2479, E09/2535, E09/2616), I pending Exploration License (E08/3539) and 6 granted Mining Licenses (M09/63, M09/91, M09/146, M09/147, M09/177, M09/175). All tenements are 100% owned by Dreadnought Resources. E08/3178, E09/2370, E09/2484, E09/2433, E08/3274, E08/3275, E09/2433, E09/2448, E09/2449, E09/2450 are subject to a 1% Gross Revenue Royalty held by Beau Resources. E09/2359 is subject to a 1% Gross Revenue Royalty held by Prager Pty Ltd. E09/2422, E08/*3229 and E08/3539 are subject to a 1% Gross Revenue Royalty held by Redscope Enterprises Pty Ltd. E09/2290, M09/146 and M09/147 are subject to a 1% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry. E09/2497 is subject to a 1% net smelter royalty held by Nina Minerals Pty Ltd. M09/174 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson. M09/175 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry. M09/91 is subject to a 1% Gross Royalty held by DOREY, Robert Lionel. M09/63 and E09/2195 are subject to a 1% Net Smelter Royalry held by James Arthur Millar The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016). The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, Edmund, Williambury and Towera Stations.
		Williambury and Towera Stations.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX announcement including: Regional Resources 1986-1988s: WAMEX Reports A23715, 23713 Peter Cullen 1986: WAMEX Report A36494 Carpentaria Exploration Company 1980: WAMEX Report A9332 Newmont 1991: WAMEX Report A32886 Hallmark Gold 1996: WAMEX Report A49576 Rodney Drage 2011: WAMEX Report A94155 Sandfire Resources 2005-2012: WAMEX Report 94826
Geology	Deposit type, geological setting and style of mineralisation.	The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province. The Mangaroon Project is prospective for orogenic gold, VMS base metals, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted Nb-REEs.



Criteria	JORC Code explanation	Commentary
Drill hole information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	An overview of the drilling program is given within the text and tables within this document.
	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length 	
	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 	All results greater than 3m at 0.3% Nb ₂ O ₅ , 0.3% TREO, 03% ZrO ₂ ,5.0% P ₂ O ₅ , 5.0% TiO ₂ and greater than 1m at 1.0% Nb ₂ O ₅ , 1.0% TREO, 1.0% ZrO ₂ , 10.0% P ₂ O ₅ , 10.0% TiO ₂ have been reported.
	 Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, 	Significant intercepts are length weight averaged for all samples with up to 3m of internal dilution.
	the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No metal equivalents are reported.
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e g 'down hole length true width not known') 	Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Refer to figures within this report.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	The accompanying document is a balanced report with a suitable cautionary note.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; botential deleterious or contaminating substances. 	Suitable commentary of the geology encountered are given within the text of this document.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). 	Additional RC drilling Diamond Drilling Metallurgical test work
	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Additional Resource Modelling



Appendix I: Exploration Target – Stinger Niobium

The Exploration Target for Stinger is estimated to contain potential mineralisation ranging from 15-60Mt @ 0.5-1.0% Nb₂O_{5.} The Exploration Target is shown in Table 10 below:

Table 10: Estimated Stinger Niobium Exploration Target				
Tonnage Range (Mt)	Grade Range (% Nb ₂ O ₅)	Contained Nb ₂ O ₅ Range (t)		
l 5 – 60Mt	0.5% – 1.0%	150,000 - 300,000t		

*Note that the potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Resource, and it is uncertain if further exploration will result in the estimation of a Resource.

The Exploration Target is based on the data that has been collated as of the date of this announcement, which includes:

- 24 RC drill holes for 3,060m;
- I,540 drill hole assays;
- 266 density measurements used in the C3 Resource, which is hosted in similar rocks;
- drill logging;
- geophysical data including detailed airborne magnetic, radiometric and Falcon gravity surveys as well as ground gravity; and
- wireframing and 3D modelling of the Stinger mineralisation at a 0.1% Nb₂O₅ and 0.7% Nb₂O₅ cutoff.

The Exploration Target incorporates the wireframed size of the Stinger mineralisation as defined by drilling as well as the potential mineralisation between drilling.

The Exploration Target excludes:

- Fresh rock depth extensions to Stinger including drill holes ending in mineralisation;
- Mineralised extensions to Stinger and discoveries within the region; and
- Other associated critical minerals including titanium, scandium, rare earths and phosphate.



Figure 11: Plan view image showing the wireframed outline of Stinger (~1,700m x 500m) at a 0.1% Nb₂O₅ cut off in relation to drill holes and significant intercepts. (ASX 3 March 2025 Stinger Niobium Exploration Target)