DREADNOUGHT RESOURCES

ASX:DRE

+61 (08) 9473 8345
info@dreres.com.au
Unit 1, 4 Burgay Court
Osborne Park WA 6017

ABN 40 119 031 864

ASX ANNOUNCEMENT 13 August 2024

Gifford Creek Niobium Drilling Update – Mangaroon (100%)

Amended Release

Dreadnought Resources Limited ("Dreadnought") provides an amendment to the ASX release dated 12 August 2024 titled Gifford Creek Niobium Drilling Update with the inclusion of the Resources Summary tables at the rear of the announcement (see page 7) in accordance with JORC clause 26.

Dreadnought confirms there have been no other changes made to the original release.

~Ends~

For further information please contact:

Dean Tuck
Managing Director
Dreadnought Resources Limited
E: dtuck@dreres.com.au

Jessamyn Lyons
Company Secretary
Dreadnought Resources Limited
E: jlyons@dreres.com.au

ASX:DRE
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info@dreres.com.au
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ASX ANNOUNCEMENT 13 August 2024

Gifford Creek Niobium Drilling Update – Mangaroon (100%)

***Updated from 12 August 2024 ASX release with same title with the inclusion of the Resources Summary Tables on page 7**

HIGHLIGHTS

- **A total of 19 RC holes (1,795m) have been completed at the newly named Stinger and Rocky Road niobium targets, part of the Gifford Creek Carbonatite (Figure 3).**
- **Initial assay results are expected in August 2024, with planned follow-up drilling once assays are received.**
- **Reconnaissance drilling has extended the Gifford Creek Carbonatite by 5km to the south. An aircore drill program is being planned for testing for oxide niobium enrichment within the extension (Figure 3).**
- **RC drilling of the Tiger Cu-Au-Zn-Ag target has commenced. Drilling of other Mangaroon gold targets is to follow.**

Dreadnought Resources Limited ("Dreadnought") is pleased to announce that RC drilling has been completed at the Gifford Creek Carbonatite, part of the Mangaroon project, located in the Gascoyne Region of Western Australia.

Dreadnought's Managing Director, Dean Tuck, commented: "*The Gifford Creek Carbonatite has produced some of WA's best niobium intercepts outside the Arunta Province. With strong niobium identified across multiple zones, we see the potential for Mangaroon to evolve as a multi-commodity critical metals hub within proximity to existing infrastructure with mutual benefit to pastoralists, existing ports and neighboring projects. We look forward to receiving the assays from this program and designing follow up programs after our gold and base metal drilling, which is currently underway.*"

Figure 1: Photo of the Topdrill RC rig drilling at the Stinger niobium target.

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SNAPSHOT – MANGAROON CRITICAL MINERALS

Mangaroon is 100% Owned

- 100% owned Mangaroon confirmed as a globally significant critical minerals complex with proven potential for rare earths (REE), niobium (Nb), scandium (Sc), titanium (Ti) and phosphorous (P).

Genuine Scale Potential Already at the Yin Ironstones

- Independent Yin Resource of 29.98Mt @ 1.04% TREO *(ASX 30 Nov 2023)* covers only ~4.6km of ~43km of strike - 87% Measured and Indicated.
- Yin contains a higher NdPr to total rare earth oxides ("**NdPr:TREO**") ratio than most REE deposits and >50% higher than the global average.

Significant, Growth and Multiple Critical Minerals Potential at the Gifford Creek Carbonatite

- The Gifford Creek Carbonatite and associated Ironstones is one of the largest carbonatite complexes in the world.
- Wide spaced drilling over <25% of the ~17km long Gifford Creek Carbonatite has already identified 4 zones of mineralisation containing rare earths, niobium, scandium, phosphorous and titanium. This makes for a potential multi-critical mineral mix of co-products with significant intercepts including:

CBRC115: 102m @ 1.1% TREO from 3m, including **29m @ 2.1% TREO** from 76m

CBRC085: 48m @ 0.8% Nb_2O_5 from 30m, including **36m @ 1.0% Nb_2O_5** from 39m

CBRC148: 43m @ 11.9% P_2O_5 from 87m, including **24m @ 14.5% P_2O_5** from 105m to EOH

CBRC138: 12m @ 319ppm Sc from 48m and **CBRC125: 10m @ 270ppm Sc** from 18m

CBRC086: 72m @ 8.6% TiO_2 from 12m, including **6m @ 12.8% TiO_2** from 66m

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% Nd_2O_3+Pr_6O_{11}.
- REE at Yin is predominantly hosted in monazite which is amenable to commercial processing.
- ANSTO, a world-leader in the processing of critical and strategic metals, has demonstrated that the Yin monazite concentrate has excellent metallurgical recoveries using a conventional low-temperature acid bake/leach process and produces a high quality MREC containing 60.7% TREO (16.3% Nd_2O_3 and 4.4% Pr_6O_{11}) with ~94% recovery of Nd and Pr.
- Recent mineralogical work at the Gifford Creek Carbonatite has confirmed that the dominant niobium mineral is pyrochlore, which is a high niobium mineral (>50%) from which ~95% of global niobium is produced.

Global Strategic Imperative Driving Critical Minerals Growth

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.
- Niobium is a critical mineral whose primary use is in HSLA (high strength, low alloy) steel with major applications in renewables, infrastructure and vehicles. The addition of a small amount of niobium increases the strength of steel whilst decreasing the weight required by almost 30%.
- In addition to traditional applications in the steel industry, niobium-based technology breakthroughs are being experienced in the battery sector, where the adoption of niobium-based materials is reducing electric vehicle charge times to a mere 5 minutes.

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Overview of Drilling Program: Nb-REE Gifford Creek Carbonatite

The Gifford Creek Carbonatite and the Yin Ironstones together form one of the largest alkali-carbonatite complexes in the world (Figure 2). Carbonatite intrusions are known globally to host several different commodities including rare earths, niobium, phosphate, titanium and scandium, often as separate deposits within the same intrusion. Examples of this include Mt Weld in Australia, Ngualla in Tanzania, Araxa in Brazil and Bayan Obo in China.

Since the initial discovery of the Yin Ironstones and the Gifford Creek Carbonatite in 2021, Dreadnought's focus has been on rare earths. To date only ~25% of the Gifford Creek Carbonatite has been tested with wide spaced first pass drilling. Importantly, 3 zones of mineralisation have been confirmed (C3, Stinger and Rocky Road) with significant niobium intercepts including:

CBRC085: 48m @ 0.8% Nb_2O_5 from 30m, including **36m @ 1.0% Nb_2O_5** from 39m

CBRC111: 48m @ 0.7% Nb_2O_5 from 63m, including **9m @ 1.4% Nb_2O_5** from 72m

CBRC125: 59m @ 0.6% Nb_2O_5 from 63m, including **19m @ 1.0% Nb_2O_5** from 99m

CBRC110: 39m @ 0.6% Nb_2O_5 from 66m, including **3m @ 1.1% Nb_2O_5** from 81m

CBRC138: 57m @ 0.6% Nb_2O_5 from 45m, including **3m @ 1.4% Nb_2O_5** from 90m

Recent mineralogical work has confirmed the presence of coarse grained (>0.30mm) pyrochlore from both weathered and fresh magnesio-carbonatite.

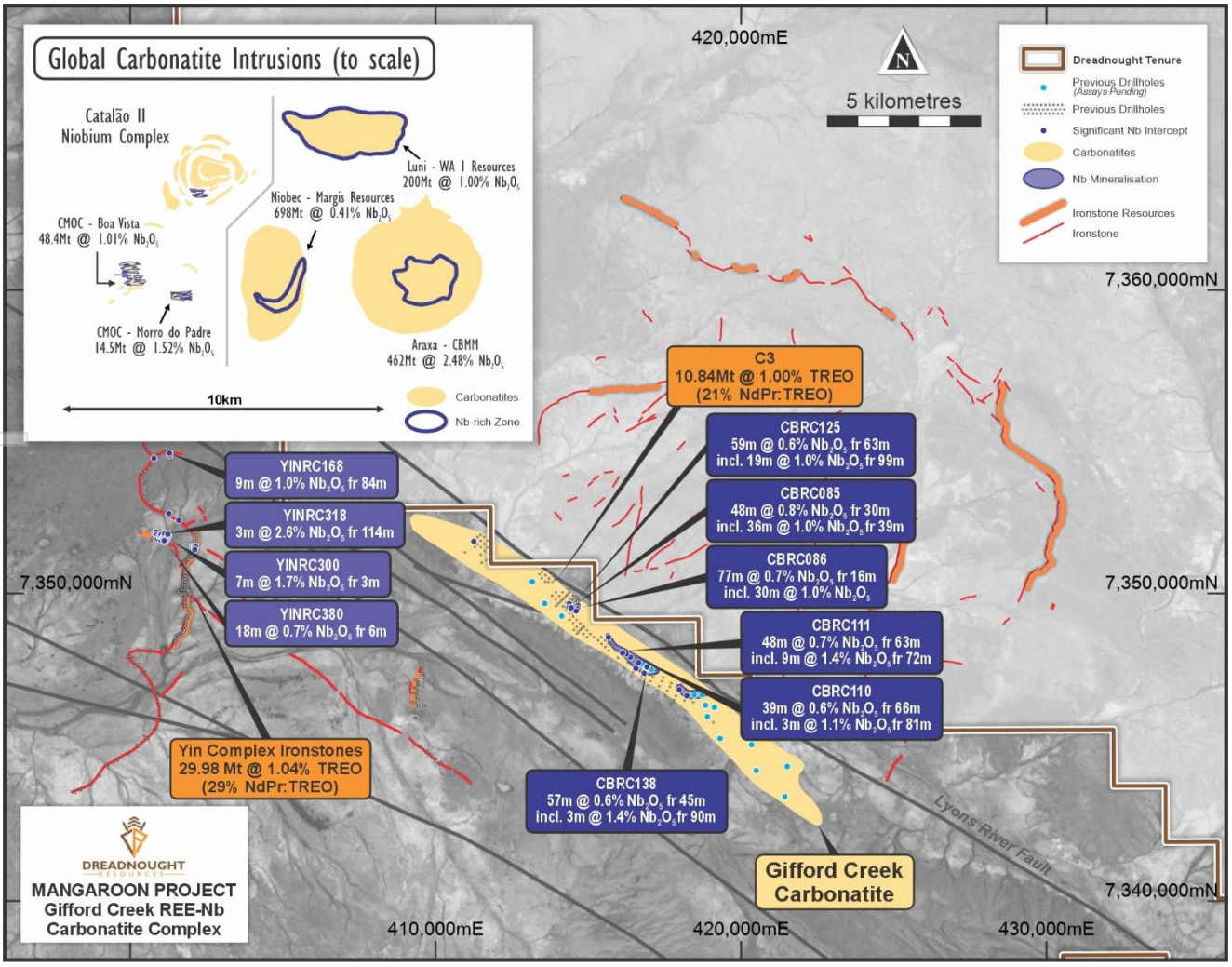

Figure 2: Location of significant niobium mineralisation within the limited extent of current drilling at the Gifford Creek Carbonatite. Inset image shows globally significant carbonatite complexes at Niobec, Araxa, Catalao II and Luni at similar scale highlighting the footprints of niobium mineralisation.

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The recent RC drilling program was niobium focused and designed to:

- Test regional geophysical targets believed to be zones of deeper weathering or different phases of carbonatite;
- Test for extensions of the Stinger target which contains thick intervals of pyrochlore Nb mineralisation; and
- Provide further material for mineralogical and metallurgical characterisation.

A total of 19 RC holes (1,795m) have been drilled confirming and extending enriched carbonatite at the newly named Stinger and Rocky Road niobium targets. Stinger and Rocky Road are both defined by niobium enrichment in saprolite and fresh carbonatite over areas of ~2,000m x 350m (Stinger) and ~1,000 x 200m (Rocky Road). Fresh niobium mineralisation is interpreted to be hosted in a dyke like geometry with a southwest dip within the Gifford Creek Carbonatite, similar to Catalao II Complex in Brasil. Subject to assays, follow up drilling at these targets will consist of fence line drilling to test for oxide mineralisation and the source of the fresh mineralisation.

Initial assays are expected in August 2024. In addition, samples will be sent for mineralogical work.

This drill program is supported by a co-funded drilling grant of up to $180,000 under the Geological Survey of Western Australia's merit-based Exploration Incentive Scheme ("EIS") and a drill-for-equity agreement with Topdrill.

Reconnaissance drilling of geophysical targets has extended the Gifford Creek Carbonatite by 5km to the south. An aircore drill program is being planned to test for oxide niobium enrichment within the extension.

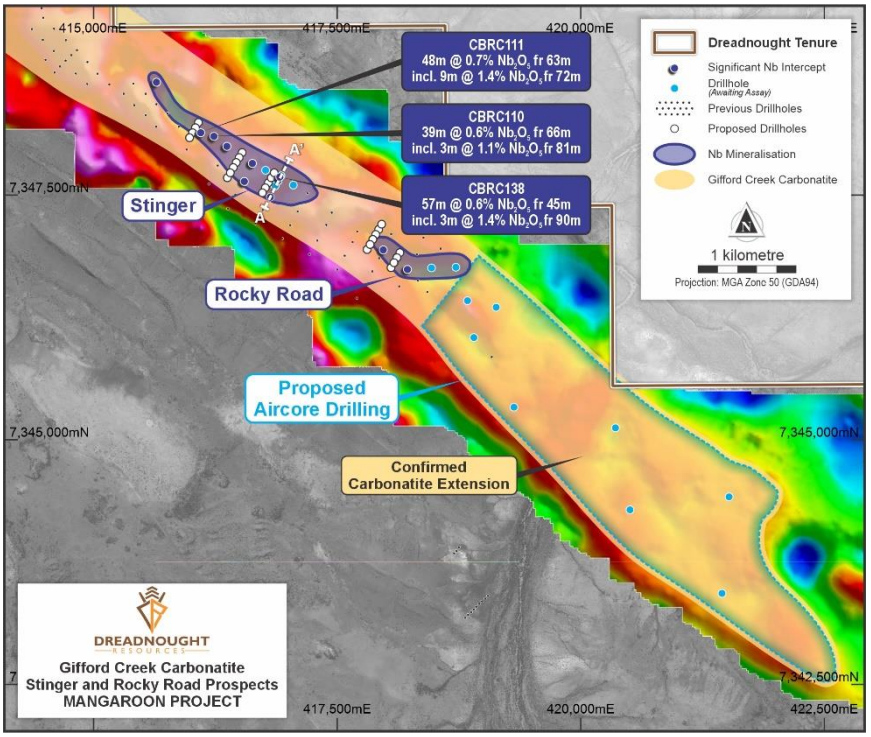

Figure 3 (above): Plan view of the Gifford Creek Carbonatite over gravity and colored gravity images showing the Stinger and Rocky Road niobium targets in relation to previous drilling and proposed niobium focused drilling (once assays are received) as well as ~5km x 1km exploration space.

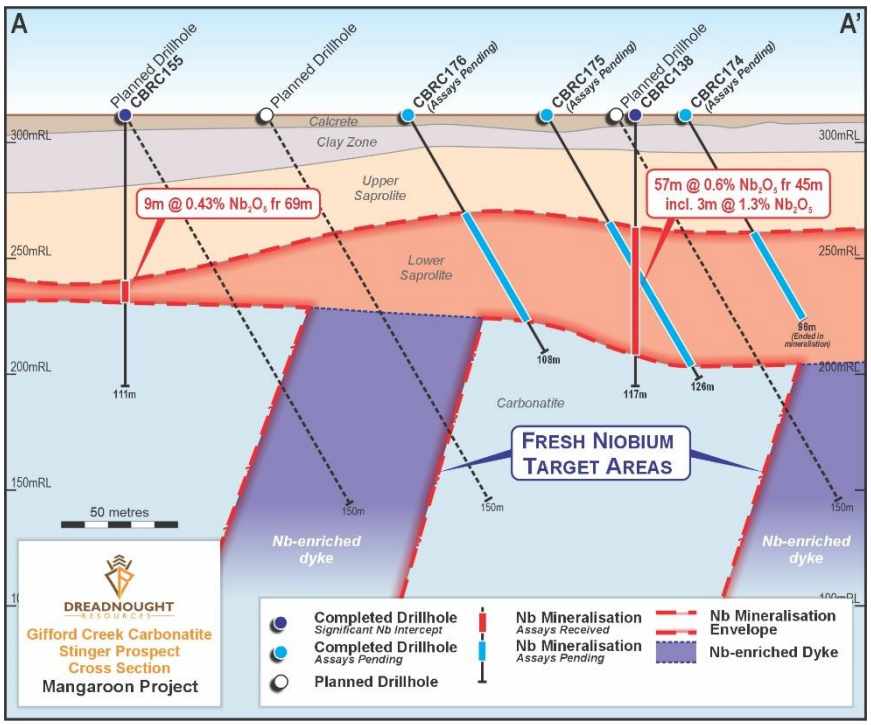

Figure 4 (right): Cross section through the Stinger niobium target showing the location of previous mineralised intercepts. Also shown is recent RC drilling in relation to the saprolite hosted mineralisation and conceptual fresh niobium enriched carbonatite dykes.

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Tiger Cu-Au-Zn-Ag Prospect (100%)

Tiger is defined by a ~500m long subcropping gossanous horizon within a coincident ~900m x 300m Cu-Au-Zn-Ag and pathfinder-in-soil anomaly. Tiger contains some of the strongest Cu-Au-Zn-Ag rock chips and pathfinder anomalism defined to date at Mangaroon. The Cu-Au-Zn-Ag gossans appear to have formed after massive sulphides and given the strong pathfinder association, are considered to be related to VMS style mineralisation.

RC drilling (8 holes) has been designed to test the ~500m strike of subcropping mineralisation including 5 shallow holes and three deeper holes, which will also provide a platform for down hole EM ("DHEM") surveys.

Drilling has commenced and is expected to be completed in August 2024. DHEM surveys will commence following the program. This drilling program is supported by an EIS grant of up to $150,000.

Results of this drilling and geophysical program are expected in September/October 2024.

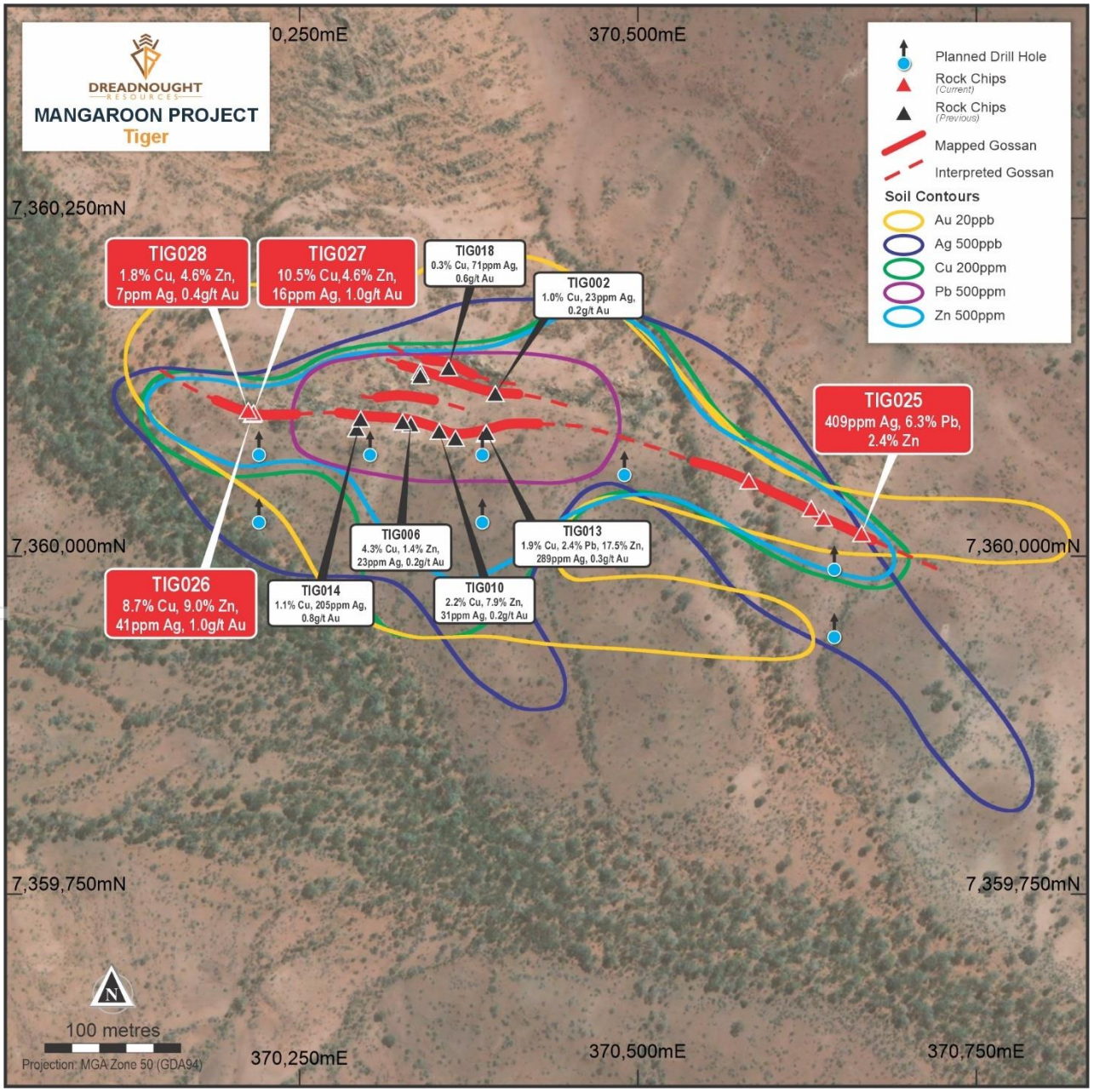

Figure 5: Plan view *image of Tiger showing the location of planned drilling in relation to rock chip assays along the ~500m of mapped gossanous horizons in relation to the strong Cu-Au-Zn-Ag soil anomalism which indicate the horizons extend along strike for >500m.*

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For further information please refer to previous ASX announcements:

- *12 September 2022* *Star of Mangaroon Acquisition & Consolidation*
- *17 October 2022* *Mineralised Carbonatites Discovered at C3 and C4*
- *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*
- *3 April 2023* *Carbonatites Deliver Thick, Near Surface REE Results*
- *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*
- *28 August 2023* *Initial, Independent REE-Nb-P-Ti-Sc Resource at C3*
- *2 October 2023* *Mangaroon Carbonatite now >17km – Higher Grade Zones Fingerprinted*
- *6 December 2023* *Gifford Creek REE-Nb-P-Ti-Sc Carbonatite Drilling Update*
- *11 December 2023* *Thick, High-Grade Gold Including 7m @ 23.0g/t Au*
- *6 June 2024* *Gifford Creek REE-Nb Carbonatite Update*
- *27 May 2024* *High Grade Cu-Zn-Ag-Au Gossans at Tiger*
- *18 June 2024* *Tiger Cu-Au-Zn-Ag Gossan Confirmed Over ~500m*

UPCOMING NEWSFLOW

August: Commencement of RC drilling at Mangaroon Au (100%)

August: Results of further target generation and definition work at Mangaroon Au (100%)

August: Results from Nb-REE at the Gifford Creek Carbonatite (Mangaroon 100%)

August: Presenting at the Australian Gold Conference 2024 in Sydney

August/September: Results from EIS co-funded IP surveys at Tarraji-Yampi (80%/100%)

August/September: Results from drilling at Tarraji-Yampi (80/100%)

September: Results from Nb-REE at the Gifford Creek Carbonatite (Mangaroon 100%)

September: Annual Financial Report

September/October: Results from Au and Cu-Au-Zn-Ag drilling at Mangaroon (100%)

October: Quarterly Activities and Cashflow Report

October/November: Results from Nb-REE at the Gifford Creek Carbonatite (Mangaroon 100%)

November: Annual General Meeting to be held on 28 November 2024

~Ends~

For further information please contact:

Dean Tuck
Managing Director
Dreadnought Resources Limited
E: dtuck@dreres.com.au

Jessamyn Lyons
Company Secretary
Dreadnought Resources Limited
E: jlyons@dreres.com.au

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

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Cautionary Statement

This announcement and information, opinions or conclusions expressed in the course of this announcement contains forecasts and forward-looking 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 Mineral Resources is based on information compiled by Mr. Lynn Widenbar, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Widenbar is a full-time employee of Widenbar and Associates Pty Ltd. Mr. Widenbar 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. Widenbar 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 Exploration 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 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.

RESOURCES SUMMARY

Yin Ironstone Complex – Yin, Yin South, Y2, Sabre Measured, Indicated and Inferred Resources

Table 1: Summary of Yin Resources at 0.20% TREO Cut-off.

Resource Classification	Geology	Resource (Mt)	TREO (%)	$Nd_2O_3+Pr_6O_{11}$ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO (t)	Contained $Nd_2O_3+Pr_6O_{11}$ (t)
Measured	Oxide	2.47	1.61	4.6	29	39,700	11,400
Measured	Fresh	2.70	1.09	3.0	27	29,500	8,100
Measured	**Subtotal**	**5.17**	**1.34**	**3.8**	**28**	**69,300**	**19,500**
Indicated	Oxide	13.46	1.06	3.1	29	142,600	41,000
Indicated	Fresh	7.67	0.95	2.8	29	72,800	21,300
Indicated	**Subtotal**	**21.13**	**1.02**	**3.0**	**29**	**215,400**	**62,300**
Inferred	Oxide	1.51	0.75	1.9	25	11,200	2,800
Inferred	Fresh	2.17	0.75	2.1	28	16,300	4,500
Inferred	**Subtotal**	**3.68**	**0.75**	**2.0**	**27**	**27,600**	**7,300**
Total	Oxide	17.44	1.11	3.2	29	193,600	55,300
Total	Fresh	12.54	0.95	2.7	29	118,700	33,900
TOTAL		**29.98**	**1.04**	**2.9**	**29**	**312,300**	**89,300**

Gifford Creek Carbonatite – Inferred Resource

Table 2: Summary of the Gifford Creek Carbonatite Inferred Resource at various % TREO Cut-offs.

Cut-Off (%TREO)	Resource (Mt)	TREO (%)	NdPr:TREO (%)	Nb_2O_5 (%)	P_2O_5 (%)	TiO_2 (%)	Sc (ppm)	Contained TREO (t)	Contained Nb_2O_5 (t)
0.90	5.73	1.18	21	0.25	3.8	5.4	92	67,500	14,500
0.70	**10.84**	**1.00**	**21**	**0.22**	**3.5**	**4.9**	**85**	**108,000**	**23,700**
0.50	20.55	0.80	21	0.15	3.0	3.9	68	164,600	31,100
0.30	45.87	0.58	21	0.10	2.7	3.0	52	265,300	44,800

***This release has been updated from 12 August 2024 ASX release with same title with the only change being the inclusion of the Resources Summary Tables above**

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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 historical workings which have seen no modern exploration.

Results to date indicate that there may be a related, large scale, Proterozoic Cu-Au VMS system at Tarraji-Yampi, similar to DeGrussa and Monty in the Bryah Basin.

Mangaroon Ni-Cu-Co-3PGE, Au & REE Project (100%)

Mangaroon covers ~5,300kms^2 and is located 250kms south-east of Exmouth in the Gascoyne Region of WA. At the Money Intrusion, Ni-Cu-Co-3PGE has been identified. Dreadnought also has areas of outcropping high-grade gold including the historic Star of Mangaroon and Diamond gold mines. In addition, Mangaroon has emerged as a globally significant, rapidly growing, potential source of critical minerals. Highlights include:

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

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

Central Yilgarn is located ~190km northwest of Kalgoorlie in the Yilgarn Craton. The project comprises ~1,400kms^2 covering ~150km of strike along the majority of the Illaara, Yerilgee, South Elvire and Evanston greenstone belts. Central Yilgarn is prospective for typical Archean mesothermal lode gold deposits, VMS base metals, komatiite-hosted nickel sulphides and critical metals including Lithium-Cesium-Tantalum.
Prior to consolidation by Dreadnought, the Central Yilgarn was predominantly held by iron ore explorers and remains highly prospective for iron ore.

Bresnahan HREE-Au-U Project (100%)

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

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

ASX:DRE
+61 (08) 9473 8345
info@dreres.com.au
Unit 1, 4 Burgay Court
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Table 1: Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
CBRC174	416930	7347706	311	-60	31	96	RC	
CBRC175	416902	7347650	309	-60	32	126	RC	
CBRC176	416874	7347602	308	-60	29	108	RC	
CBRC177	416774	7347762	311	-90	0	72	RC	
CBRC178	417058	7347614	313	-90	0	55	RC	
CBRC179	418475	7346758	315	-90	0	120	RC	
CBRC180	420351	7345128	300	-90	0	108	RC	
CBRC181	421512	7344421	300	-90	0	96	RC	
CBRC182	420500	7344289	300	-90	0	108	RC	
CBRC183	421442	7343434	300	-90	0	90	RC	GCC
CBRC184	419313	7345338	300	-90	0	90	RC	
CBRC185	418723	7346770	310	-90	0	102	RC	
CBRC186	418842	7346427	314	-90	0	66	RC	
CBRC187	419133	7346357	314	-90	0	90	RC	
CBRC188	418903	7346052	315	-90	0	114	RC	
CBRC189	417057	7347608	314	-90	0	108	RC	
CBRC190	414130	7349350	309	-90	0	72	RC	
CBRC191	413569	7349755	311	-90	0	72	RC	
CBRC192	413164	7350471	307	-90	0	102	RC	

JORC Code, 2012 Edition – Table 1 Report Template

Section 1 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 measurement tools appropriate to the minerals under 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 measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 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. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Reverse Circulation (RC) drilling was undertaken to produce samples for assaying. **Laboratory Analysis** Two sampling techniques were utilised for this program, 1m 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. **1m Splits** 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. **3m Composites** 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. A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples have 3m composites collected. All samples are submitted to either ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30) or Intertek Minerals in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (Intertek Method FB6/OM45). All 1m samples are also submitted for 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61 or Intertek Code 4A/MS48) to assist with lithological interpretation. **Diamond Core** Core is orientated for structural and geotechnical logging where possible. In orientated core, half core is submitted to the lab for analysis in intervals ranging from 20cm to 1m

ASX:DRE
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info@dreres.com.au
Unit 1, 4 Burgay Court
Osborne Park WA 6017
ABN 40 119 031 864

Criteria	JORC Code explanation	Commentary
		depending on the geological context. If core is orientated, then the half core is cut so as to preserve the orientation line with the same side of the core submitted down the hole. All samples are submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method MEXRF30). Select samples are also submitted for 48 multielements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61) to assist with lithological interpretation. QAQC samples consisting of duplicates, blanks and CRM's (OREAS Standards) were inserted through the program at a rate of 1:50 samples. Duplicate samples are submitted as quarter core or as a B-bag from the Metzke's cone splitter.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, 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.).*	**RC Drilling** Topdrill undertook the program utilising a truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5¾". **Diamond Drilling** Diamond drilling was undertaken by Hagstrom Drilling with a truck-mounted low impact diamond drill rig. Drilling is either HQ to end of hole or initially HQ and dropping to NQ once the hole is cased off for deeper drill holes. Core is orientated using a Reflex Sprint gyro and True Core Orientation Tool.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	**RC Drilling** Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones. 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. **Diamond Drilling** HQ and NQ drilling has been undertaken. All core recoveries are measured and recorded by the drill crew for each run and remeasured and checked by Dreadnought personnel. Core recovery to date has been very high. At this stage, no known bias occurs between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically 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.* • *The total length and percentage of the relevant intersections logged.*	**RC Drilling** 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. 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, scintillometer and magnetic susceptibility meter to assist with logging and the identification of mineralisation. Logging is qualitative, quantitative or semi-quantitative in nature. **Diamond Drilling** Diamond core is logged under supervision of a Senior Geologist with sufficient experience in this geological terrane and relevant styles of mineralisation using an industry standard logging system which could eventually be utilised

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		within a Mineral Resource Estimation. Lithology, mineralisation, alteration, veining, weathering and structure are recorded digitally. DD Logging is qualitative, quantitative or semi-quantitative in nature.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. 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 stages to maximise representivity of samples.* • *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.*	**RC Drilling** From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter. 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. 2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.66g charge for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30) and to produce a 0.25g charge for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61). Standard laboratory QAQC is undertaken and monitored. **Diamond Drilling** 20cm – 1m quarter core samples are sawn and submitted to the lab for analysis. If core is orientated, then the core is cut so as to preserve the orientation line with the same side of the core submitted down the hole. For the purposes of metallurgical testing, half core was submitted where possible to make the required bulk composite mass required for ongoing testwork. In some instances, this required full core to be used. QAQC in the form of duplicates, blanks and CRM's (OREAS Standards) are inserted through the mineralised zones at a rate of 1:50 samples. Additionally, within each mineralised zone, a duplicate sample is taken and a blank inserted directly after. Samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.66g charge for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30) and to produce a 0.25g charge for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61). Standard laboratory QAQC is undertaken and monitored.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	**Laboratory Analysis** Lithium borate fusion is considered a total digest and Method ME-XRF30 and FB6/OM45 are appropriate for REE, P2O5, TiO2 determination. ME-MS61 and 4A/MS48 are considered a near total digest and is appropriate for Sc determination. Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receival.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	**Logging and Sampling** Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database. Significant intersections are inspected by senior company personnel. 10 pairs of twinned RC and DD holes have been drilled at this time 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 position was recorded using a Emlid Reach RS2 RTK

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	(collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	GPS system (+/- 0.2m x/y, +/-0.5m z). 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 a Reflex Sprint IQ Gyro. A reading was undertaken every 30th metre with an accuracy of +/- 1° azimuth and +/-0.3° dip.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to 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.*	See table 1 hole positions and information.
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.* • *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.*	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 truth thickness. 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	• *The measures taken to ensure sample security.*	All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Exmouth Haulage in Exmouth. 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
Mineral tenement and land tenure status	• *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.*	The Mangaroon Project consists of 21 granted Exploration License (E08/3178, E08/3229, E08/3274, E08/3275, E08/3439, 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, E09/2531, E09/2535, E09/2616), 1 pending Exploration License (E08/3539) and 5 granted Mining Licenses (M09/91, M09/146, M09/147, M09/174, M09/175). All tenements are 100% owned by Dreadnought Resources. E08/3178, E09/2370, E09/2384 and E09/2433 are subject to a 2% Gross Revenue Royalty held by Beau Resources. 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. 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. The Mangaroon Project covers 4 Native Title

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		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.
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.

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:*
	  ○ *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.*
		An overview of the drilling program is given within the text and tables within this document.

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.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No drilling results reported in this announcement. No metal equivalents are reported.
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.

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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; potential 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).* • *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 RC drilling Diamond Drilling Metallurgical test work Additional Resource Modelling