

8 May 2023

## ADDITIONAL IRONSTONES AND CARBONATITES EXPANDED - MANGAROOON (100%)

### HIGHLIGHTS

- The Yin Ironstone Complex is comprised of 43kms of REE mineralised ironstones which includes:
  - 3kms containing a JORC Mineral Resource (“Resource”) of 14.36Mt @ 1.13% TREO (ASX 28 Dec 2022); and
  - 40kms containing a JORC Exploration Target (“Exploration Target”) of 50-100Mt at 0.9-1.3% TREO and a grade range of 1.13% TREO +/- 20% (ASX 13 Feb 2023).
- RC drilling is focussing on first pass drilling over ~16km of the Exploration Target and over the C1-C6 carbonatites, and has confirmed:
  - A thick and shallowly dipping mineralised ironstone at Y2 and over ~3kms of mineralisation along strike of the Yin Resource.
  - Mineralised carbonatites continue >800m beyond the original C1-C5 interpretation at the C5 extension.
  - Thick mineralisation continues from follow-up drilling at the C3 carbonatite.
  - A complex mafic-ultramafic intrusive suite at C6 with potential similarities to the Palabora Ultramafic-Carbonatite Complex (South Africa), or alternatively, could be related to the Money Intrusion and has potential for magmatic Ni-Cu-PGE style mineralisation. First pass drilling is to continue.
- First pass drilling will finish as planned in June 2023, following which infill drilling will commence on Y2 and other mineralised ironstones and mineralised carbonatites targeting Resource growth.
- Results from the 2023 drilling are expected to start flowing from late May 2023.

Dreadnought Resources Limited (“Dreadnought”) is pleased to provide an update on drilling at the Yin Ironstone Complex and the C1-C6 carbonatites, part of the 100% owned Mangaroon project, located in the Gascoyne Region of Western Australia.

Wide spaced, first pass, RC drilling is testing the Yin Exploration Target. Drilling to date (122 holes for 14,766m) has confirmed shallow dipping ironstone mineralisation at Y2 in addition to the ~3kms of mineralisation along strike of the Yin Resource. Mineralisation has been confirmed by portable XRF (“pXRF”) with assays expected in the June 2023 quarter. Resource upgrades will be made in June 2023 and in the December 2023 quarter.



With three rigs turning, two rigs are doing first pass drilling over the Yin Exploration Target and on the carbonatites and the diamond rig producing samples for metallurgical test work and QAQC analysis. This drilling will be completed in June 2023 and will be followed by Resource drilling.

Dreadnought’s Managing Director, Dean Tuck, commented: “Drilling continues across multiple fronts targeting Resource growth south of Yin, discovery drilling at Y2 and confirming the >800m extension to the C5 carbonatite. In addition, encouraging observations from the C6 carbonatite support either a Palabora style opportunity, or perhaps Ni-Cu-PGEs with drilling ongoing. With first pass drilling expected to be completed in June 2023, we remain on track for multiple Resource updates this year.”

**Figure 1: Dreadnought’s Nick Chapman inspecting diamond core for metallurgical test work from the Yin Resource (YINDD023).**



## **SNAPSHOT - MANGAROON RARE EARTHS**

### **Mangaroon is 100% Owned by Dreadnought**

#### **Genuine Scale Potential Already at Yin Ironstone Complex**

- Initial independent Yin Inferred Resource of 14.36Mt @ 1.13% TREO (ASX 28 Dec 2022) covers only 3km of 43km of strike and is based on only 2.5 months of RC drilling (12,255m).
- 40km long Exploration Target of 50-100Mt at 0.9-1.3% TREO estimated for the top 150m of the Yin Ironstone Complex (ASX 13 Feb 2023).
- First tranche of long-term incentives now triggered with balance on track to be triggered at JORC Resource of at least 30Mt @ >1% TREO by 31 December 2024.
- Resource extension and first pass wide spaced drilling currently underway.

#### **Significant, Step-Change, Growth Potential Beyond Yin Ironstone Complex**

- C1-C7 carbonatites are shaping up as the regional source of REE – initial drill program expands C1-C5 to ~6.5kms in strike length x 1km wide.
- C6 located ~25kms south of C1-5 and C7 is situated over a crustal scale structural splay off the Lyons River Fault, is associated with an outcropping pyroxenite intrusion, and has a geophysical similarity to other globally significant carbonatites such as Mt Weld, Araxa, Palabora and Ngualla.
- First pass, wide spaced discovery focused drilling has recommenced at C1-7.

#### **High-grade, Multi-Metal Potential Including REE (Neodymium, Praseodymium), Phosphorus, Niobium, Titanium & Scandium (REE-P<sub>2</sub>O<sub>5</sub>-Nb<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub>-Sc)**

- The mineralisation at the Yin Ironstone Complex contains significantly higher NdPr as a fraction of the rare earth oxides (“NdPr:TREO” ratio) than most other REE deposits globally, over 50% higher than the global average.
- Partially completed, first pass, wide spaced drilling over the C1-C7 carbonatites has identified significant critical metal potential with REE, P<sub>2</sub>O<sub>5</sub>, Nb<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, and Sc within the C1-C5 carbonatites.
- A ~600m x 550m zone of REE-P<sub>2</sub>O<sub>5</sub>-Nb<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub>-Sc mineralisation now confirmed at the C3 discovery.

#### **Potentially Attractive Mining Proposition**

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

#### **Positive Metallurgy Results**

- Initial metallurgical test work from Yin performed well, achieving a recovery of 92.8% at a concentrate grade of 12.3% Nd<sub>2</sub>O<sub>3</sub> and an average 40% TREO.
- REE at Yin is predominantly hosted in monazite which is amenable to commercial processing.
- Significant metallurgical study from 16 diamond holes drilled at Yin underway – results expected May 2023.

#### **Global Strategic Imperative Driving Rare Earth Growth & Prices**

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.
- Dreadnought is receiving increasing levels of interest from mid/downstream industry participants. While the current focus is on upstream options (mining, milling, and concentrating), opportunities for mid/downstream industry participants to add value to Dreadnought shareholders will be assessed.

## RC Drill Program Yin Ironstone Complex (YINRC130-YINRC213)

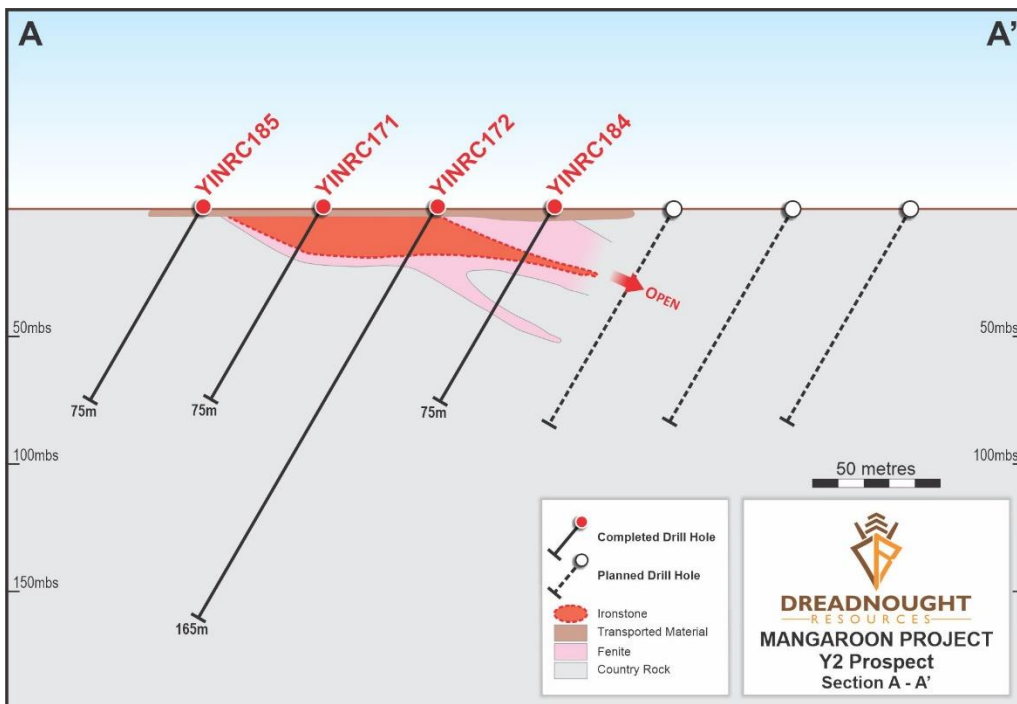
To date, 84 holes for 10,371m have been drilled in testing portions of the 40km long ironstone Exploration Target and extending the Yin Resource to the south. As a result of the success of this program, infill RC drilling is planned in order to grow Resources at Y2 and ~3km along strike of the current Yin Resource.

The current program is over areas that are largely devoid of outcrop and has relied on geophysical interpretations of the ironstone trends undercover. The program has been successful in confirming mineralisation undercover. Mineralisation at Yin has been extended to the south by ~1km and for ~2kms to the north of the current Resource where three new ironstone lodes have been confirmed in areas where NdPr ratios increase. Additionally, the recently confirmed shallowly dipping Y2 ironstone is expected to grow Resources.

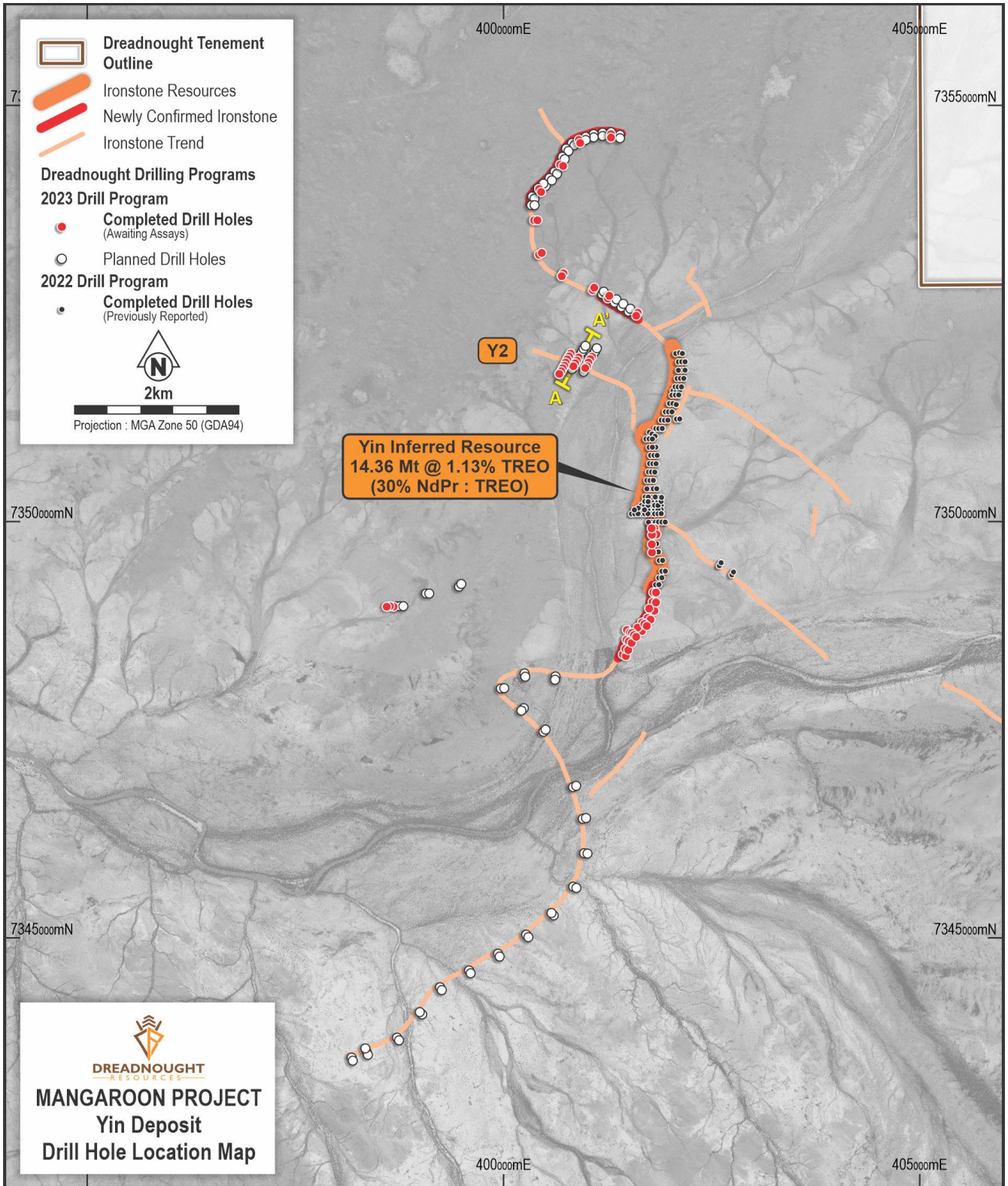
Drilling of the ironstones continues to show that the main lode pinches, swells and changes dip and orientation along strike and ranges in thickness from 1-54m. In addition, parallel lodes have been intersected above and below the main lode and often exhibit a similar orientation as the main lode with thicknesses ranging from 1-10m.

The mineralised ironstones consist of goethite and hematite dominated oxide zones near the surface (top ~80m) transitioning into a fresh ferrocyanatite dyke (fresh REE ironstone), comprised of ankerite and siderite below the base of oxidation. The ironstones are surrounded by a variable zone of fenitised country rock. Both the ironstone and the fenite immediately surrounding the ironstone are mineralised with each ironstone and ferrocyanatite containing at least one central interval of higher-grade mineralisation. Oxidised mineralisation contains REE bearing phosphate monazite and variable amounts of the hydrated REE phosphate rhabdophane. Fresh ferrocyanatite mineralisation contains monazite and variable amounts of REE fluoro-carbonates such as bastnaesite.

First pass, 400m x 40m wide spaced drilling along 16kms of the Yin Exploration Target will be completed in June 2023 at which time infill Resource drilling will commence.



**Figure 2: Exploration Target cross section A-A' (Figure 3) showing the 5-16m thick Y2 lode horizon. The lode at Y2 is likely dipping shallowly to the ENE (oblique to the initial drilling orientation). Follow up drilling will change orientation to test perpendicular to dip and strike.**



**Figure 3: Plan view of Yin over an orthoimage showing the location of holes over the current Resource covering 3km (black dots). The location of extensional holes within the Exploration Target (red dots) and planned holes (white dots).**

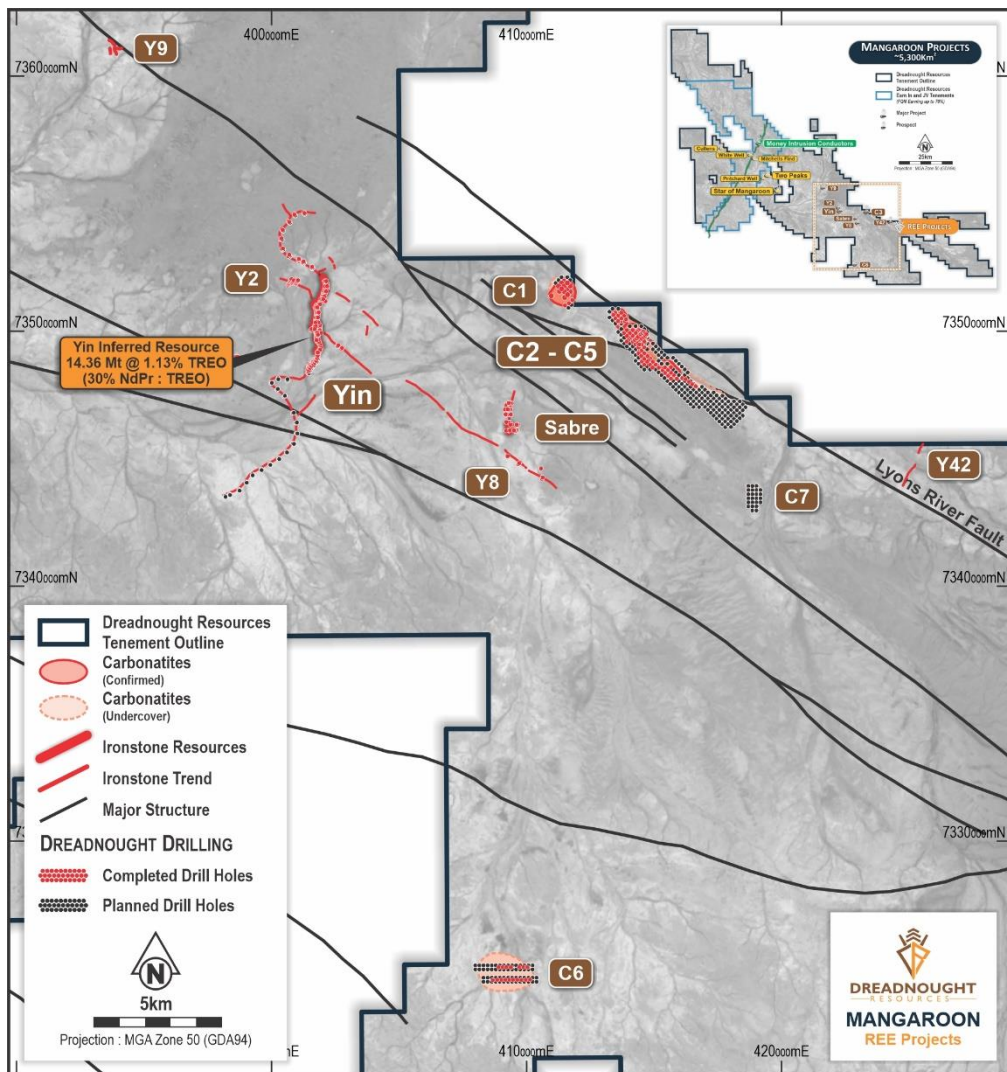
**RC Drill Program REE-P-Nb-Ti-Sc Carbonatites (CRBRC090-CRBRC127)**

Carbonatite intrusions are known globally to host several different commodities including rare earths, niobium, titanium, phosphate and scandium often as different mineralised bodies within the same intrusion. Great examples of this include Mt Weld in Australia, Ngualla in Tanzania, Bayan Obo in China, Palabora in South Africa and Araxa in Brazil. We also know that a world class deposit like Mountain Pass in California can fit into a relatively small footprint (700m x 150m).

Since the C1-C7 carbonatites have minimal outcrop, a first-pass RC drilling program (~280 RC holes for ~20,000m) has been designed, of which 87 holes for 8,332m have been drilled, on a ~160m x 160m grid to drill through cover and into fresh rock. The objective of this program is to confirm the extent and complexity of the interpreted carbonatite intrusions, define zones of mineralisation and to better understand the cover regolith and depth of weathering.

Drilling to date has confirmed the C1-5 carbonatites are larger than initially interpreted from magnetic data with preparations for additional systematic wide spaced drill testing underway. The C5 extensional drilling has intersected thin cover and thick saprolite development with residual supergene enrichment overlying magnesio to ferrocarbonatite intrusives, similar to that previously seen at C1-C5. Drilling has already confirmed the C5 carbonatite extends >800m past the original interpretation and remains open to the southeast where further drilling is planned.

Additionally, follow up drilling at C3 continues to intersect thick mineralisation.



First pass drilling at C6 to date consists of two wide spaced drill lines across the 4km x 3km anomaly (17 holes for 1,443m). This drilling has confirmed a multiphase mafic-ultramafic intrusive complex, eg Palabora Ultramafic-Carbonatite Complex (South Africa), or alternatively, could be related to the Money Intrusion and has potential for magmatic Ni-Cu-PGE style mineralisation. Drilling at C6 will be ongoing.

**Figure 4: Plan view over Mangaroon showing location of the 43kms of REE ironstones and the C1-C7 carbonatites.**

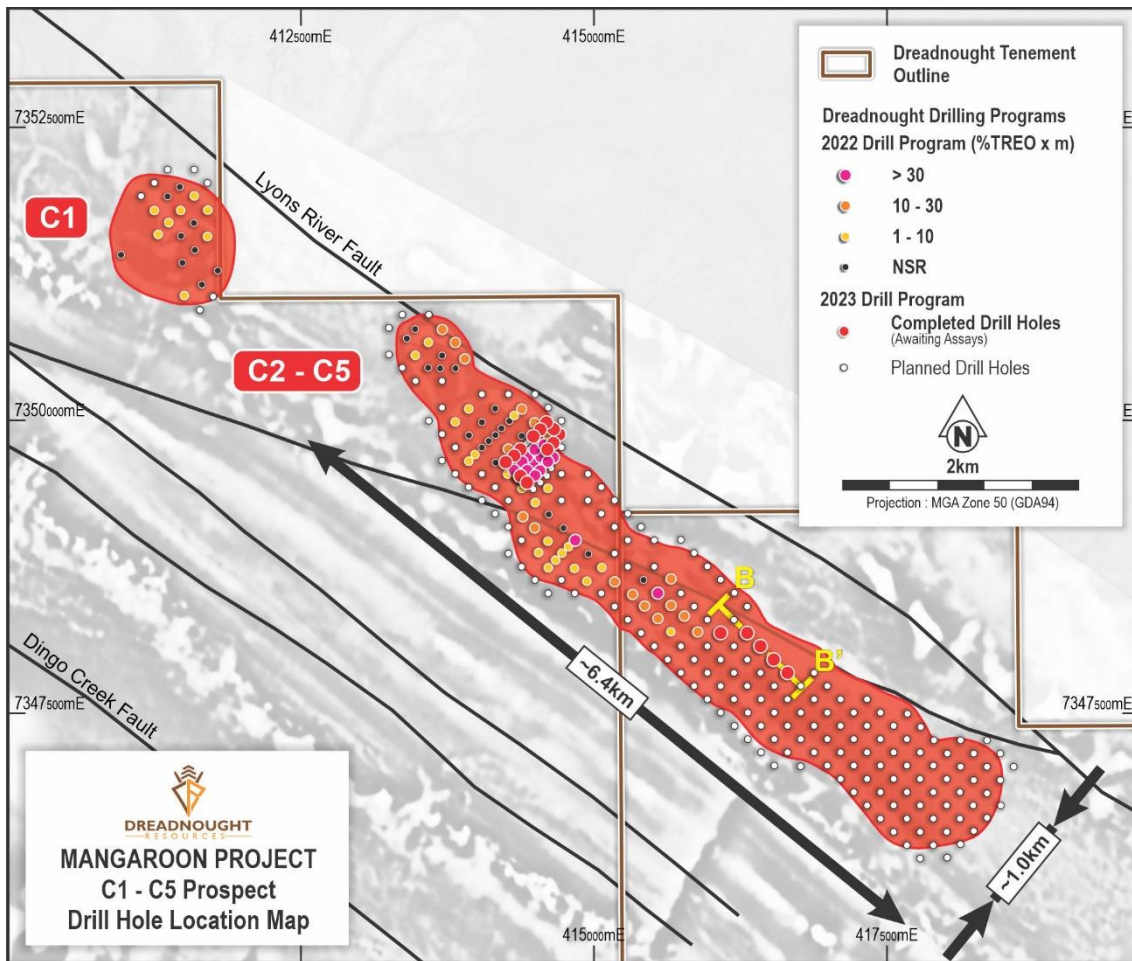


Figure 5: Plan view of the C1-C5 carbonatites over a greyscale magnetic image (RTP 1VD) showing the location of planned drilling (white dots) in relation to previous drilling (red dots) and significant results.

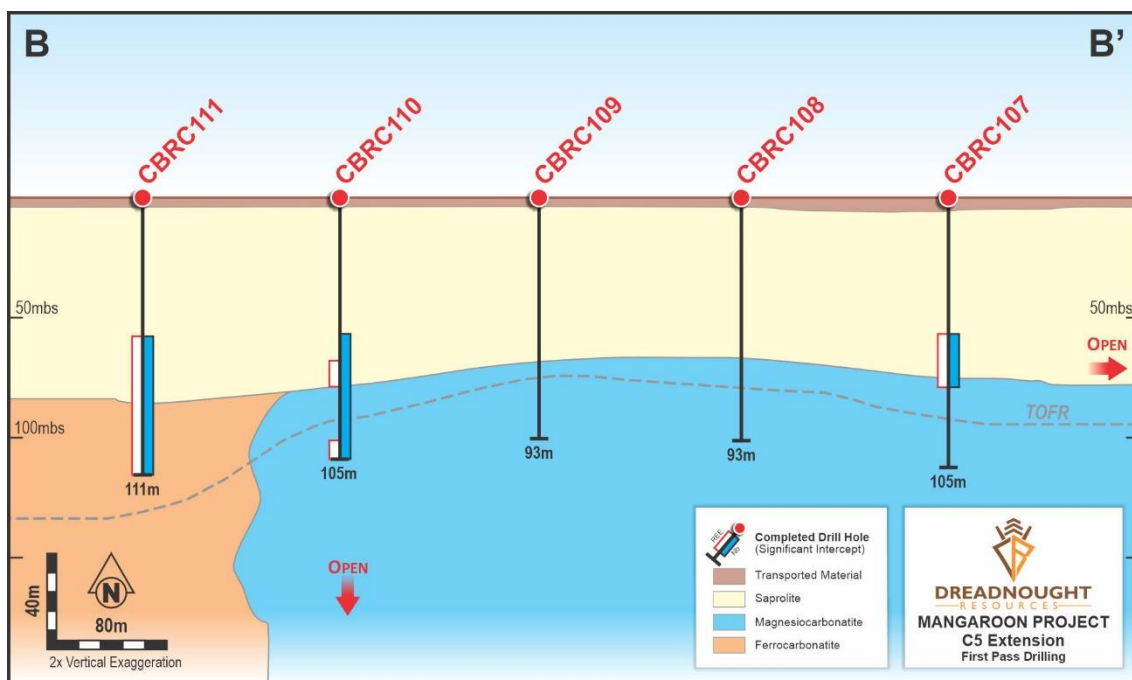


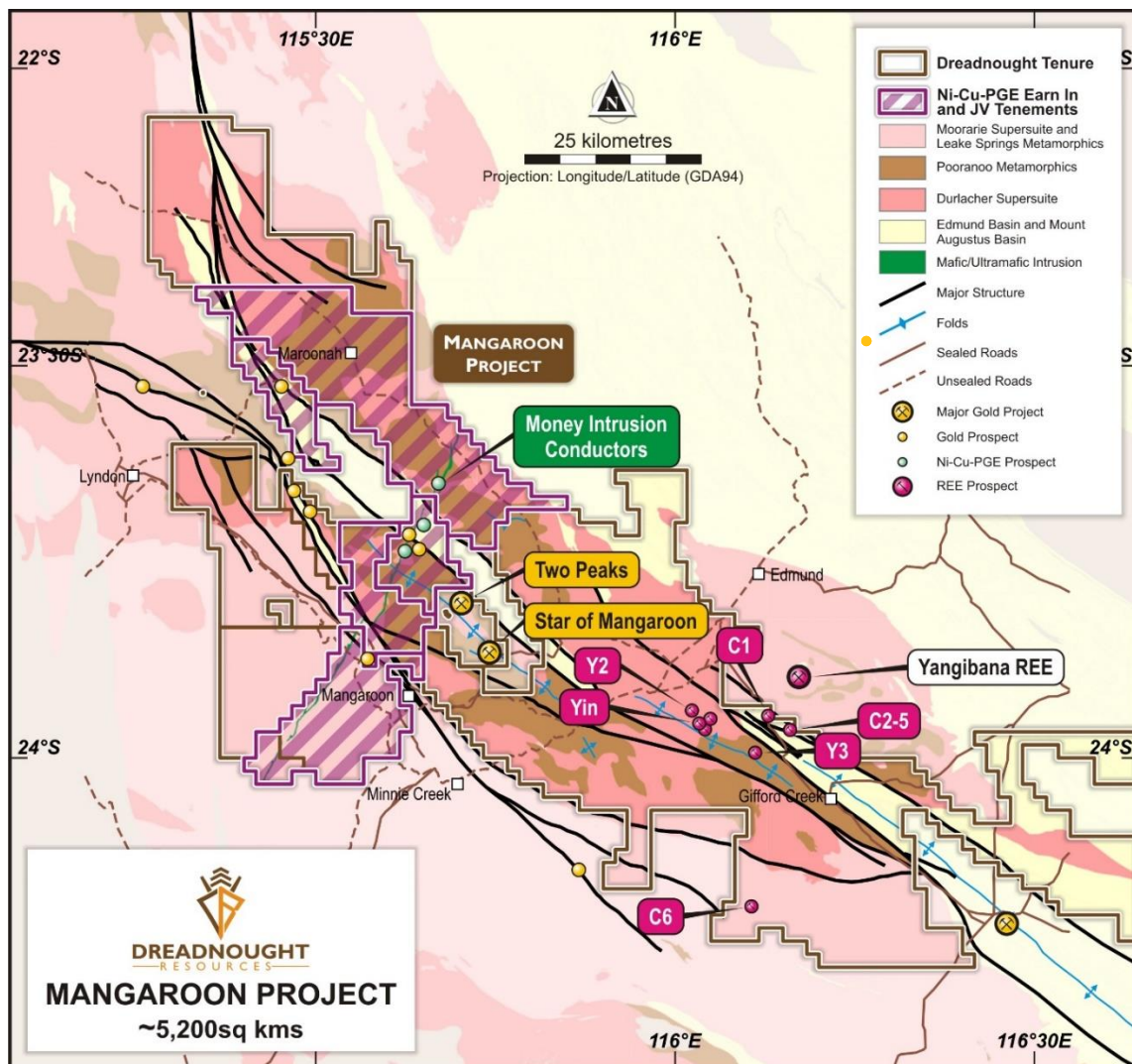
Figure 6: Cross section of the C5 carbonatite extensional drilling showing the depth of weathering over ferro and magnesiocarbonatites remaining open to the southeast and observed REE and niobium enrichment.

**Background on Mangaroon (E8/3178, E08/3274, E09/2384, E09/2433, E09/2473: FQM Earn-in) (E08/3275, E08/3439, E09/2290, E09/2359, E09/2405, E09/2370, E09/2448, E09/2449, E09/2450, E09/2467, E09/2478, E09/2531, E09/2535, E09/2616, E09/2620, M09/146, M09/147, M09/174, M09/175: DRE 100%)**

Mangaroon covers >5,300sq kms of the Mangaroon Zone in the Gascoyne Region of Western Australia. Part of the project is targeting Ni-Cu-PGE and is subject to an earn in with First Quantum Minerals Ltd (“FQM”) (earning up to 70%) – Figure 7. The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high NdPr:TREO ratio Yin and Yangibana REE deposits.

Dreadnought has located outcropping high-grade gold bearing quartz veins along the Edmund and Minga Bar Faults, high-grade REE ironstones, similar to those under development at Yangibana, REE-P<sub>2</sub>O<sub>5</sub>-Nb<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub>+Sc mineralised carbonatites and outcropping high tenor Ni-Cu-PGE blebby sulphides at the Money Intrusion.

In December 2022, Dreadnought delivered an initial independent Inferred Resource of 14.36Mt @ 1.13% TREO (ASX 28 Dec 2022) covering only 3kms of the 43kms of strike within the Yin Ironstone Complex.



**Figure 7: Plan view map of Mangaroon showing the location of the FQM Earn-in and 100% DRE ground in relation to major structures, geology and roads.**



For further information please refer to previous ASX announcements:

- 11 June 2021 *High-Grade REE Ironstones Outcropping at Mangaroon*
- 19 July 2021 *High-Grade REE Ironstones Confirmed Over 2.5kms at Mangaroon*
- 24 September 2021 *Airborne Magnetic-Radiometric Survey Commenced at Mangaroon*
- 2 February 2022 *Rare Earths, Phosphate, Niobium & Zirconium Results from Mangaroon*
- 5 September 2022 *Thick Rare Earth Ironstones Confirmed at Sabre (Y3) Discovery*
- 17 October 2022 *Mineralised Carbonatites Discovered at C3 and C4*
- 23 November 2022 *Multiple, Large Scale REE-Nb-Ti-P Carbonatites*
- 13 December 2022 *Thick Mineralisation Continues at C3, 2022 Drilling Complete*
- 28 December 2022 *Initial High-Grade, Independent Resource Over 3kms at Yin*
- 27 January 2023 *Mineralised REE Ironstones increased by 13kms to 43kms*
- 13 February 2023 *REE Ironstone Exploration Target Defined*
- 13 March 2023 *Successful Yin Extensional Drill Results*
- 29 March 2023 *Yin Resource to Grow, Carbonatite Drilling Commenced*
- 3 April 2023 *Carbonatites Deliver Thick, Near Surface REE Results*

#### UPCOMING NEWSFLOW

**May-December:** Ongoing drilling results from Mangaroon REE (100%)

**May:** Results from Kimberley auger sampling (Tarraji-Yampi 80% and 100%)

**May:** Results of nickel review with Newexco (Central Yilgarn 100%)

**May:** Metallurgical results from Yin REE Ironstone Complex (Mangaroon 100%)

**June:** REE Resource upgrade (Mangaroon 100%)

**June:** Results of high-grade gold review (Mangaroon 100%)

**21-22 June:** Gold Coast Investment Showcase

**July:** Commencement of RC drilling at the Money Intrusion (Mangaroon First Quantum Earn-in)

**July:** Quarterly Activities and Cashflow Report

**19-21 July:** Noosa Mining Investor Conference

August D&D?? DT's birthday?

**August / September:** Commencement of drilling at Tarraji-Yampi (80% and 100%)

**December 2023 quarter:** REE Resource upgrade (Mangaroon 100%)

~Ends~

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



## INVESTMENT HIGHLIGHTS

### Kimberley Ni-Cu-Au Projects

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

Tarraji-Yampi presents a rare first mover opportunity with known outcropping mineralisation and historic workings from the early 1900's which have seen no modern exploration.

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

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

Mangaroon is a first mover opportunity covering ~5,300 kms located 250kms south-east of Exmouth in the vastly underexplored Gascoyne Region of WA. Part of the project is targeting Ni-Cu-PGE and is subject to a joint venture with First Quantum Minerals (earning up to 70%). The joint venture area contains outcropping high tenor Ni-Cu-PGE blebby sulphides at the Money Intrusion. Dreadnought's 100% owned areas contain outcropping high-grade gold bearing quartz veins including the historic Star of Mangaroon and Diamond's gold mines, along the Edmund and Minga Bar Faults and outcropping high-grade REE ironstones and seven carbonatite intrusions which may be the source of the regions rare earth mineralisation.

Dreadnought's 100% owned areas contain outcropping high-grade gold bearing quartz veins including the historic Star of Mangaroon and Diamond's gold mines, along the Edmund and Minga Bar Faults and outcropping high-grade REE ironstones and seven carbonatite intrusions which may be the source of the regions rare earth mineralisation.

Dreadnought has delivered an initial JORC Inferred Resource over just 3kms Yin REE Ironstone Complex delivering 14.36Mt @ 1.13% TREO (30% NdPr:TREO Ratio) (ASX 28 Dec 2022) with an additional 40 strike kilometres still to be tested.

### Bresnahan HREE and Au Project

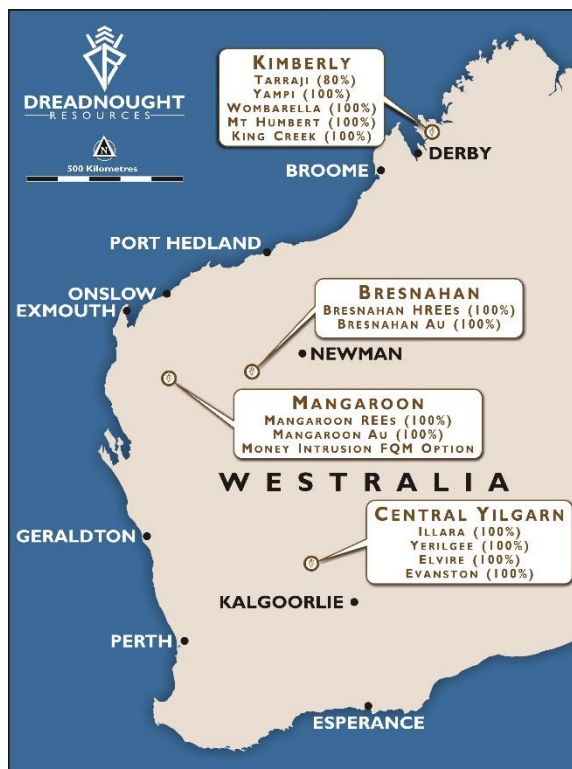
Bresnahan is located ~125km southwest of Newman in the Ashburton Basin. The project comprises ~3,700 sq kms covering over 200kms strike along the Bresnahan Basin / Wyloo Group unconformity. Bresnahan is prospective for unconformity related heavy rare earth ("HREE") deposits similar to Browns Range HREE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

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

### Central Yilgarn Gold, Base Metals, Critical Minerals & Iron Ore Project

Central Yilgarn is located ~190km northwest of Kalgoorlie in the Yilgarn Craton. The project comprises ~1,600 sq kms covering ~150km of strike along the majority of the Illaara, Yerilgee and Evanston greenstone belts. Central Yilgarn is prospective for typical Archean mesothermal lode gold deposits, VMS base metals, komatiite hosted nickel sulphides and critical metals including Lithium-Caesium-Tantalum.

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





## **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 – Exploration Results**

*The information in this announcement that relates to geology, Exploration Results 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 form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.*

## **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.*

**Table 1: Mineralised intervals as confirmed by an infield preliminary pXRF analysis with >2m @ >0.2% TREO.**

Hole ID	From (m)	To (m)	Interval (m)	Lithology	Prospect
YINRC131	20	22	2	Fenite alteration	Yin
	30	32	2	Oxide ironstone and fenite alteration	
	36	43	7	Oxide ironstone and fenite alteration	
	54	68	14	Oxide ironstone and fenite alteration	
YINRC132	107	119	12	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC133	151	153	2	Oxide ironstone and fenite alteration	
YINRC134	20	28	8	Oxide ironstone and fenite alteration	
	31	34	3	Oxide ironstone	
	39	44	5	Oxide ironstone and fenite alteration	
	50	57	7	Oxide ironstone and fenite alteration	
YINRC135	61	64	3	Oxide ironstone and fenite alteration	
YINRC136	39	42	3	Oxide ironstone and fenite alteration	
YINRC137	37	43	6	Oxide ironstone and fenite alteration	
YINRC138	80	84	4	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC139	18	22	4	Oxide ironstone and fenite alteration	
	29	31	2	Oxide ironstone and fenite alteration	
YINRC140	94	105	11	Oxide and fresh ferrocarnatite ironstone with fenite	
	127	129	2	Oxide ironstone and fenite alteration	
YINRC141	68	90	22	Oxide ironstone and fenite alteration	
YINRC142	124	131	7	Oxide ironstone and fenite alteration	
YINRC144	129	132	3	Oxide ironstone and fenite alteration	
YINRC147	181	183	2	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC152	23	37	14	Oxide ironstone and fenite alteration	
	59	63	4	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC153	27	29	2	Oxide ironstone and fenite alteration	
YINRC154	17	19	2	Oxide ironstone and fenite alteration	
YINRC159	56	59	3	Oxide ironstone and fenite alteration	
YINRC162	54	57	3	Oxide ironstone and fenite alteration	
	67	74	7	Oxide ironstone and fenite alteration	
YINRC163	121	124	3	Fenite alteration	
YINRC164	46	48	2	Fenite alteration	
YINRC165	96	98	2	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC166	53	56	3	Oxide ironstone and fenite alteration	
YINRC167	81	85	4	Fresh ferrocarnatite ironstone and fenite alteration	
	109	111	2	Fresh ferrocarnatite ironstone and fenite alteration	
	124	126	2	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC168	86	94	8	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC169	146	148	2	Fresh ferrocarnatite ironstone and fenite alteration	
YINRC170	36	39	3	Oxide ironstone and fenite alteration	
	63	78	15	Oxide ironstone and fenite alteration	
YINRC171	4	14	10	Oxide ironstone and fenite alteration	
YINRC172	4	21	17	Oxide ironstone and fenite alteration	
YINRC173	45	54	9	Oxide ironstone and fenite alteration	
	62	76	14	Oxide ironstone and fenite alteration	
YINRC174	44	47	3	Oxide ironstone and fenite alteration	
	51	56	5	Oxide ironstone and fenite alteration	
YINRC175	103	105	2	Oxide ironstone and fenite alteration	
	133	136	3	Fenite alteration	
	161	182	21	Oxide ironstone and fenite alteration	
	194	202	8	Fenite alteration	
	211	216	5	Fenite alteration	



**DREADNOUGHT**  
RESOURCES

Hole ID	From (m)	To (m)	Interval (m)	Lithology	Prospect
YINRC176	88	91	3	Fenite alteration	
	106	108	2	Fresh ferrocyanatite ironstone and fenite alteration	
YINRC177	82	84	2	Fenite alteration	
	88	91	3	Fenite alteration	
YINRC178	64	82	18	Oxide ironstone and fenite alteration	
	86	92	6	Oxide ironstone and fenite alteration	
	101	113	12	Oxide ironstone and fenite alteration	
YINRC179	61	63	2	Fenite alteration	
	119	129	10	Oxide and fresh ferrocyanatite ironstone with fenite	
	133	137	4	Fresh ferrocyanatite ironstone and fenite alteration	
	140	159	19	Fresh ferrocyanatite ironstone and fenite alteration	
YINRC180	67	69	2	Fenite alteration	
	82	90	8	Fenite alteration	
YINRC182	114	123	9	Oxide and fresh ferrocyanatite ironstone with fenite	
	129	133	4	Fresh ferrocyanatite ironstone and fenite alteration	
YINRC184	18	20	2	Oxide ironstone and fenite alteration	
YINRC189	9	11	2	Fenite alteration	
YINRC194	86	89	3	Fresh ferrocyanatite ironstone and fenite alteration	
	93	101	8	Oxide and fresh ferrocyanatite ironstone with fenite	
YINRC195	117	120	3	Fenite alteration	
YINRC196	57	64	7	Fenite alteration	
	74	81	7	Oxide ironstone and fenite alteration	
YINRC198	43	46	3	Oxide ironstone and fenite alteration	
	49	52	3	Fenite alteration	
YINRC199	36	38	2	Fenite alteration	
YINRC201	57	67	10	Oxide ironstone and fenite alteration	
	80	86	6	Oxide ironstone and fenite alteration	
YINRC202	35	44	9	Oxide ironstone and fenite alteration	
YINRC213	129	133	4	Oxide and fresh ferrocyanatite ironstone with fenite	
CBRC096	37	39	2	Saprolite	C6
CBRC097	13	15	2	Saprolite	
CBRC099	6	8	2	Saprolite	
CBRC102	15	17	2	Saprolite	
CBRC107	53	70	17	Saprolite	C5
CBRC110	65	105	40	Saprolite and fresh carbonatite	
CBRC111	57	111	54	Saprolite	
CBRC113	33	56	23	Saprolite	C3
CBRC114	6	20	14	Saprolite	
CBRC115	3	105	102	Saprolite and fresh carbonatite	
CBRC116	1	160	159	Saprolite and fresh carbonatite	
CBRC117	25	165	140	Fresh carbonatite	
CBRC118	129	138	9	Fresh carbonatite	
CBRC120	31	57	26	Saprolite	
CBRC121	7	55	48	Saprolite	
CBRC122	77	119	42	Fresh carbonatite	
CBRC123	86	118	32	Fresh carbonatite	
CBRC124	10	48	38	Saprolite	
CBRC125	7	124	117	Saprolite	
CBRC126	6	14	8	Saprolite	
CBRC127	25	136	111	Saprolite and fresh carbonatite	



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**Table 2: Drill Collar Data (GDA94 MGAz50)**

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
YINRC130	401789	7349042	300	-60	275	117	RC	Yin
YINRC131	401773	7348946	300	-60	283	93	RC	
YINRC132	401812	7348937	300	-60	286	153	RC	
YINRC133	401830	7349038	300	-60	275	183	RC	
YINRC134	401778	7349927	313	-60	270	81	RC	
YINRC135	401812	7349929	306	-60	270	138	RC	
YINRC136	401783	7349639	307	-60	270	141	RC	
YINRC137	401798	7349159	301	-60	278	81	RC	
YINRC138	401830	7349156	308	-60	276	123	RC	
YINRC139	401730	7348851	304	-60	302	93	RC	
YINRC140	401765	7348831	315	-60	302	165	RC	
YINRC141	401630	7348717	301	-60	305	123	RC	
YINRC142	401662	7348694	302	-60	300	195	RC	
YINRC143	401432	7348413	303	-60	300	177	RC	
YINRC144	401469	7348394	300	-60	300	165	RC	
YINRC145	401810	7349850	293	-60	272	153	RC	
YINRC146	401837	7349854	297	-60	273	117	RC	
YINRC147	401782	7349850	297	-60	271	189	RC	
YINRC148	406219	7352555	319	-90	0	90	WB	
YINRC149	406067	7352656	315	-90	0	90	WB	
YINRC150	401593	7352480	305	-60	210	117	RC	
YINRC151	401611	7352516	304	-60	212	183	RC	
YINRC152	401252	7352688	309	-60	215	93	RC	
YINRC153	401270	7352720	305	-60	216	153	RC	
YINRC154	401072	7352787	301	-60	209	123	RC	
YINRC155	401089	7352818	296	-60	208	189	RC	
YINRC156	400719	7352990	307	-60	215	183	RC	
YINRC157	400668	7352934	316	-60	213	183	RC	
YINRC158	400464	7353248	308	-60	245	183	RC	
YINRC159	400459	7353234	315	-60	245	96	RC	
YINRC160	400367	7353626	322	-60	271	183	RC	
YINRC161	400407	7353626	314	-60	268	153	RC	
YINRC162	400427	7354002	313	-60	306	153	RC	
YINRC163	400452	7353963	320	-60	304	138	RC	
YINRC164	400681	7354298	314	-60	296	135	RC	
YINRC165	400720	7354273	322	-60	297	165	RC	
YINRC166	400908	7354593	309	-60	339	123	RC	
YINRC167	400922	7354557	305	-60	340	159	RC	
YINRC168	401290	7354655	315	-60	2	135	RC	
YINRC169	406195	7352701	315	-60	0	183	RC	
YINRC170	400995	7351877	306	-59	212	111	RC	Y2
YINRC171	400853	7351912	308	-60	211	75	RC	
YINRC172	400876	7351944	307	-60	212	162	RC	
YINRC173	401011	7351920	311	-59	209	117	RC	Yin
YINRC174	401685	7348782	304	-61	305	183	RC	
YINRC175	401713	7348755	365	-61	300	225	RC	
YINRC176	401456	7348484	315	-61	300	119	RC	
YINRC177	401492	7348468	311	-61	300	153	RC	
YINRC178	401559	7348648	303	-61	303	159	RC	
YINRC179	401586	7348627	306	-61	302	189	RC	
YINRC180	401497	7348572	305	-61	301	141	RC	
YINRC181	401532	7348554	307	-59	302	153	RC	



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Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
YINRC182	401057	7351989	317	-60	209	153	RC	Y2
YINRC183	400973	7351853	302	-59	208	111	RC	
YINRC184	400894	7351981	302	-60	212	75	RC	
YINRC185	400831	7351876	306	-59	208	75	RC	
YINRC186	400739	7351920	300	-60	209	81	RC	
YINRC187	400759	7351960	302	-60	212	88	RC	
YINRC188	400780	7351995	304	-60	211	81	RC	
YINRC189	400798	7352030	305	-59	213	87	RC	
YINRC190	400663	7351784	307	-60	216	81	RC	
YINRC191	400684	7351815	310	-59	207	81	RC	
YINRC192	400702	7351850	311	-58	210	81	RC	
YINRC193	400721	7351884	308	-60	210	75	RC	
YINRC194	401035	7351961	310	-59	204	132	RC	
YINRC195	401468	7348590	303	-59	301	135	RC	
YINRC196	401534	7348672	301	-60	299	111	RC	
YINRC197	401602	7348737	302	-59	302	87	RC	
YINRC198	401657	7348797	303	-60	301	93	RC	
YINRC199	401743	7348964	305	-60	284	69	RC	
YINRC200	401773	7349738	300	-59	271	81	RC	
YINRC201	401510	7348681	312	-60	303	105	RC	
YINRC202	401474	7348708	297	-60	301	81	RC	
YINRC203	398591	7348987	300	-60	271	81	RC	
YINRC204	398627	7348990	302	-60	271	81	RC	
YINRC205	398671	7348987	303	-60	274	81	RC	
YINRC206	398709	7348989	303	-61	267	81	RC	
YINRC207	398751	7348985	301	-60	270	81	RC	
YINRC208	398791	7348990	300	-60	270	81	RC	
YINRC209	399062	7349143	303	-60	270	81	RC	
YINRC210	399105	7349146	303	-60	270	81	RC	
YINRC211	399458	7349225	306	-60	225	81	RC	
YINRC212	399484	7349258	308	-60	225	81	RC	
YINRC213	400480	7347487	298	-60	224	165	RC	
CBRC090	410043	7325078	358	-90	0	63	RC	C6
CBRC091	409725	7325084	349	-90	0	57	RC	
CBRC092	409223	7325080	355	-90	0	81	RC	
CBRC093	408919	7325078	355	-90	0	81	RC	
CBRC094	410154	7324593	355	-90	0	81	RC	
CBRC095	409810	7324580	351	-90	0	99	RC	
CBRC096	409491	7324585	350	-90	0	93	RC	
CBRC097	409189	7324587	354	-90	0	87	RC	
CBRC098	408867	7324584	358	-90	0	87	RC	
CBRC099	408689	7324570	350	-90	0	87	RC	
CBRC100	409028	7324588	352	-90	0	105	RC	
CBRC101	409344	7324583	361	-90	0	87	RC	
CBRC102	409656	7324586	361	-90	0	105	RC	
CBRC103	409988	7324587	300	-90	0	81	RC	
CBRC104	409079	7325081	300	-90	0	81	RC	
CBRC105	409401	7325074	300	-90	0	87	RC	
CBRC106	409885	7325080	300	-90	0	81	RC	
CBRC107	416640	7347831	311	-90	0	105	RC	
CBRC108	416506	7347918	319	-90	0	93	RC	
CBRC109	416381	7348007	317	-90	0	93	RC	
CBRC110	416245	7348108	312	-90	0	105	RC	



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Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
CBRC111	416113	7348148	315	-90	0	111	RC	C5
CBRC112	414598	7349985	306	-59	46	95	RC	C3
CBRC113	414544	7349929	308	-59	43	153	RC	
CBRC114	414486	7349873	311	-58	43	165	RC	
CBRC115	414374	7349761	311	-57	47	105	RC	
CBRC116	414322	7349702	309	-57	44	160	RC	
CBRC117	414250	7349646	316	-59	40	165	RC	
CBRC118	414661	7349928	307	-58	45	165	RC	
CBRC119	414707	7349883	314	-59	47	129	RC	
CBRC120	414656	7349809	313	-59	43	165	RC	
CBRC121	414605	7349754	326	-59	48	165	RC	
CBRC122	414374	7349526	300	-59	43	165	RC	
CBRC123	414429	7349476	300	-58	42	165	RC	
CBRC124	414644	7349596	300	-60	45	165	RC	
CBRC125	414605	7349520	300	-60	45	165	RC	
CBRC126	414438	7349825	313	-60	45	165	RC	
CBRC127	414542	7349472	306	-60	45	153	RC	
CBDD003	414548	7349703	306	-60	36	92.1	DD	C3
CBDD004	414485	7349646	306	-58	45	90.6	DD	
CBDD005	414430	7349592	307	-60	45	90.6	DD	
CBDD006	414603	7349671	307	-60	315	201.6	DD	
YINDD022	401998	7351428	318	-73	116	120	DD	Yin
YINDD023	401889	7351228	315	-66	90	100	DD	
YINDD024	401589	7348627	314	-60	305	171	DD	

# 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	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p>Reverse Circulation (RC) drilling was undertaken to produce samples for assaying.</p> <p><b>Laboratory Analysis</b></p> <p>A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples are not sampled. Samples submitted to the laboratory were determined by the site geologist with the assistance of the pXRF.</p> <p><b>1m Splits</b></p> <p>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.</p> <p>All samples are submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides and additional elements by Lithium Borate Fusion XRF (ALS Method ME-XRF30).</p> <p>Some samples are also submitted for 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61) to assist with lithological interpretation and waste rock characterisation.</p>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<p><b>RC Drilling</b></p> <p>Ausdrill undertook the program utilising a Drill Rigs Australia truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5¾".</p>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<p><b>RC Drilling</b></p> <p>Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones.</p> <p>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.</p> <p>At this stage, no known bias occurs between sample recovery and grade.</p>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative</li> </ul>	<p>RC chips were logged by a qualified geologist 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</p>





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Criteria	JORC Code explanation	Commentary
	<p><i>in nature. Core (or costean, channel, etc.) photography.</i></p> <ul style="list-style-type: none"> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>utilised within a Mineral Resource Estimation.</p> <p>Lithology, mineralisation, alteration, veining, weathering and texture were all recorded digitally.</p> <p>Chips were washed each metre and stored in chip trays for preservation and future reference.</p> <p>RC pulp material is also analysed on the rig by pXRF and magnetic susceptibility meter to assist with logging and the identification of mineralisation.</p> <p>Logging is qualitative, quantitative or semi-quantitative in nature.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p><b>RC Drilling</b></p> <p>From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter.</p> <p>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.</p> <p>2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75µm 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).</p> <p>Standard laboratory QAQC is undertaken and monitored.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<p><b>Laboratory Analysis</b></p> <p>Lithium borate fusion is considered a total digest and Method ME-XRF30 is appropriate for REE determination.</p> <p>Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receipt.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<p><b>Logging and Sampling</b></p> <p>Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database.</p> <p>Significant intersections are inspected by senior company personnel.</p> <p>No twinned holes have been reported at this time.</p> <p>No adjustments to any assay data have been</p>

Criteria	JORC Code explanation	Commentary
		undertaken.
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p>Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z).</p> <p>GDA94 Z50s is the grid format for all xyz data reported.</p> <p>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 30<sup>th</sup> metre with an accuracy of +/- 1° azimuth and +/-0.3° dip.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>See tables for hole positions and sampling information.</p> <p>Data spacing and distribution is sufficient to establish the degree of geological and grade continuity for a Mineral Resource estimation procedure at the inferred classification.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<p>Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the ironstone outcrops and modelled magnetic data.</p> <p>No sample bias is known at this time.</p>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Exmouth Haulage in Exmouth or Jarrahbar Contracting in Carnarvon.</p> <p>Samples were delivered directly to ALS Laboratories Perth by Exmouth Haulage out of Exmouth or Jarrahbar Contracting out of Carnarvon.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>The program is continuously reviewed by senior company personnel.</p>

## 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Mangaroon Project consists of 20 granted Exploration License (E08/3178, E08/3274, E08/3275, E08/3439, E09/2290, E09/2359, E09/2370, E09/2384, E09/2405, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467, E09/2473, E09/2478, E09/2531, E09/2535, E09/2616, E09/2620) and 4 granted Mining Licenses (M09/146, M09/147, M09/174, M09/175).</li> <li>All tenements are 100% owned by Dreadnought Resources.</li> </ul>



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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>E08/3178, E08/3274, E09/2384, E09/2433, E09/2473 are subject to an option agreement with First Quantum Minerals over the base metal rights.</li> <li>E08/3178, E09/2370, E09/2384 and E09/2433 are subject to a 2% Gross Revenue Royalty held by Beau Resources.</li> <li>E08/3274, E08/3275, E09/2433, E09/2448, E09/2449, E09/2450 are subject to a 1% Gross Revenue Royalty held by Beau Resources.</li> <li>E09/2359 is subject to a 1% Gross Revenue Royalty held by Prager Pty Ltd.</li> <li>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.</li> <li>M09/174 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson.</li> <li>M09/175 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry.</li> <li>The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016).</li> <li>The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, Edmund and Towera Stations.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>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:</p> <p>Regional Resources 1986-1988s: WAMEX Reports A23715, 23713</p> <p>Peter Cullen 1986: WAMEX Report A36494</p> <p>Carpentaria Exploration Company 1980: WAMEX Report A9332</p> <p>Newmont 1991: WAMEX Report A32886</p> <p>Hallmark Gold 1996: WAMEX Report A49576</p> <p>Rodney Drage 2011: WAMEX Report A94155</p> <p>Sandfire Resources 2005-2012: WAMEX Report 94826</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province.</p> <p>The Mangaroon Project is prospective for orogenic gold, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted REEs.</p>
Drill hole information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill</li> </ul>	<p>An overview of the drilling program is given within the text and tables 1 and 2 within this document.</p>



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Criteria	JORC Code explanation	Commentary
	<p>holes:</p> <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</li> </ul> <ul style="list-style-type: none"> <li>• 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.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>Mineralised intervals as confirmed by an infield preliminary pXRF analysis with &gt;2m @ &gt;0.2% TREO have been reported. Significant intercepts are length weight averaged for all samples with TREO values &gt;0.2% TREO with up to 3m of internal dilution (&lt;0.2% TREO).</p> <p>No metal equivalents are reported.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<p>Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation.</p>
Diagrams	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>Refer to figures within this report.</p>
Balanced reporting	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>The accompanying document is a balanced report with a suitable cautionary note.</p>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk</li> </ul>	<p>Suitable commentary of the geology encountered are given within the text of this document.</p>



**DREADNOUGHT**  
RESOURCES

Criteria	JORC Code explanation	Commentary
	<i>samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	
<i>Further work</i>	<ul style="list-style-type: none"><li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li><li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li></ul>	Additional RC drilling Diamond drilling Metallurgical test work Additional Resource Modelling