

#### 12 October 2022

BROAD, HIGH-GRADE ASSAYS AT YIN REE DISCOVERY – MANGAROON 100% DRE HIGHLIGHTS

- Assays received for an additional 43 RC holes (84 out of 120 RC holes reported to date) continue to confirm thick, high-grade, rare-earth element (REE) mineralisation at the Yin ironstone discovery. Significant intercepts include:
  - YINRC083: 24m @ 2.57% TREO from surface, including 11m @ 4.50% TREO (28% NdPr:TREO) from 8m
  - YINRC058: 31m @ 1.64% TREO from 62m, including 6m @ 6.73% TREO (31% NdPr:TREO) from 83m
  - YINRC059: 49m @ 0.81% TREO from 92m, including 6m @ 2.83% TREO (33% NdPr:TREO) from 107m
  - YINRC082: 24m @ 1.17% TREO from 94m, including 4m @ 4.11% TREO (39% NdPr:TREO) from 95m
  - YINRC055: 23m @ 1.15% TREO from 21m, including 8m @ 2.52% TREO (33% NdPr:TREO) from 29m
  - YINRC066: 17m @ 1.59% TREO from 26m, <u>including 8m @ 2.59% TREO (27% NdPr:TREO) from 32m</u> on the most southerly line of drilling.
- These results follow the initial results for 6 holes announced on 28 July 2022, including:
  - YINRC005: 35m @ 2.75% TREO from 94m, including 15m @ 4.08% TREO (30% NdPr:TREO) from 105m
  - YINRC001: 34m @ 2.59% TREO from surface, including 10m @ 6.05% TREO (31% NdPr:TREO) from 11m
  - YINRC002: 31m @ 1.73% TREO from 24m, including 7m @ 3.47% TREO (31% NdPr:TREO) from 29m
  - YINRC003: 21m @ 2.01% TREO from 50m, including 11m @ 3.11% TREO (31% NdPr:TREO) from 58m
- The NdPr:TREO ratio is increasing to the north with values up to ~46%, over double the global average.
- Initial JORC Resource for only ~3 strike kms of the ~16km long Yin trend in December 2022 quarter.



Dreadnought Resources Limited ("**Dreadnought**") is pleased to announce that assays have continued to confirm thick, high-grade REE mineralisation at Yin, within its 100% owned Mangaroon Project in the Gascoyne Region of Western Australia.

Assay results from 84 holes of 120 RC holes drilled along the first ~3kms of Yin have now been reported. The RC rig has moved on to the C1-C5 carbonatites where first-pass, pattern drilling is ongoing. The diamond rig continues to drill twin holes at Yin in preparation for an initial JORC Resource due in the December 2022 quarter.

Dreadnought's Managing Director, Dean Tuck, commented: "Yin continues to deliver exceptional REE results. With 84 of 120 holes reported, we remain on schedule to deliver our initial JORC resource at Yin in the December 2022 quarter. Importantly this initial JORC Resource will only cover ~3km of the interpreted ~16km of strike of Yin. Drilling of C1-C5 carbonatites is progressing well with updates expected shortly."

Figure 1: Ausdrill RC Rig 14 drilling at Yin.

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#### **SNAPSHOT - MANGAROON RARE EARTHS**

#### 100% Controlled by Dreadnought

• Mangaroon REE are 100% owned and controlled by Dreadnought.

# Genuine Scale Potential Already at Yin Ironstone Complex

- Yin discovery contains 3km of confirmed mineralised strike and remains open along 16kms of strike JORC Resource in December 2022 quarter, extensional drilling over 13km of strike planned.
- Sabre and Y8 discoveries contain a combined ~3km of confirmed mineralised strike and both remain open along strike JORC Resource in June 2023 quarter, extensional and infill drilling planned.
- Long term incentives fully triggered at JORC Resource of at least 30Mt @ >1% TREO, 31 December 2024.

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

- Seven carbonatite targets (C1-C7) may be the regional source of REE drilling underway.
- Confirmed mineralisation at 22 outcropping targets with another 10 prospective targets requiring further work drilling planned.
- 100 additional targets prospective for REE identified under assessment.

# High-Grade TREO Potential

• Numerous thick, high-grade assays already announced from first two drill programs at Yin.

# High-grade Neodymium and Praseodymium Concentrate Potential

• Yin, like the Yangibana REE project controlled by the ~\$400M Hastings Technology Metals Ltd (ASX.HAS), ("Hastings") is a globally unique REE deposit due to the high proportion of neodymium and praseodymium in the total rare earth oxide (NdPr ratio). NdPr values up to ~46%, nearly double the global average have been intersected at Yin.

# Positive Metallurgy Results

- Initial metallurgical test work from Yin performed well, achieving a recovery of 92.8% at a concentrate grade of 12.3% Nd2O3 and an average 40% TREO.
- Yin is predominantly hosted in monazite which is amenable to commercial processing.

# Analogous to a Globally Unique, Commercially Viable Development 25kms Away

- Yangibana is Dreadnought's immediate neighbour located only 25km to the northeast of Yin and currently has a JORC Resource\* of 29.93Mt @ 0.93% TREO with 0.32% Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub> (34% NdPr:TREO).
- Yangibana is under construction and development with first production planned for 2024.

# Global Strategic Imperative Driving Rare Earth Growth & Prices

• Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension pushing supply away from China.

\*HAS.ASX: 11 October 2022 "Drilling along 8km long Bald Hill-Fraser's trend increases indicated resources by 50%"



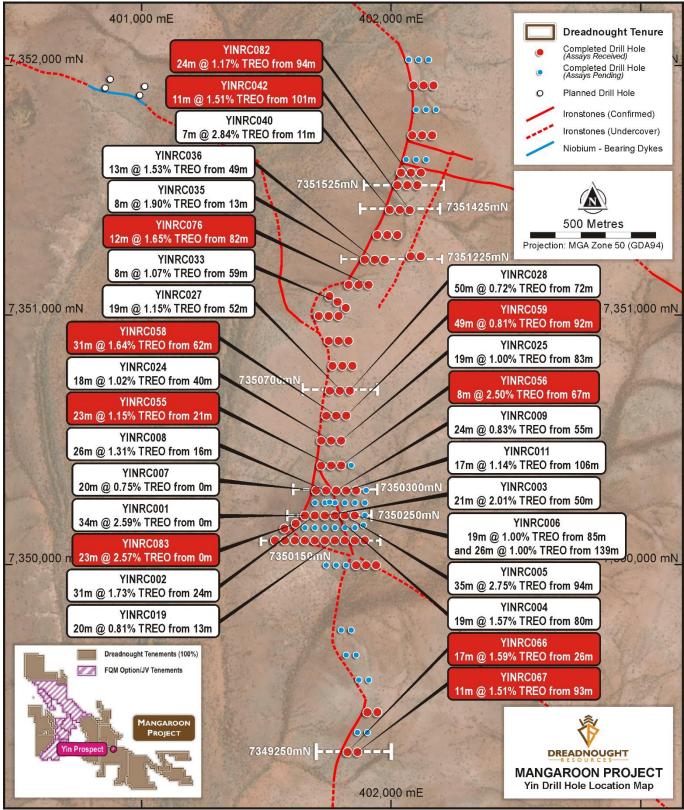


Figure 2: Plan view over an orthoimage showing the location of the announced holes (red dots) and holes awaiting assay (blue dots) successfully identifying REE over 3km. Planned extensional holes (white dots) are also shown. The cross-sections in Figures 3 to 11 are also shown (white dashed lines).



# RC Assay Results (YINRC001-YINRC084)

The first RC program at Yin has comprised 120 RC holes for ~12,255m (red and blue dots on Figure 2) of which assay results for 84 holes have been received (red dots on Figure 2).

The program commenced on Section 7350200mN in June 2022 and successfully intersected REE ironstones. Results were confirmed in the field by a handheld pXRF unit (ASX: 16 June 2022) and confirmed by assays on 28 July 2022.

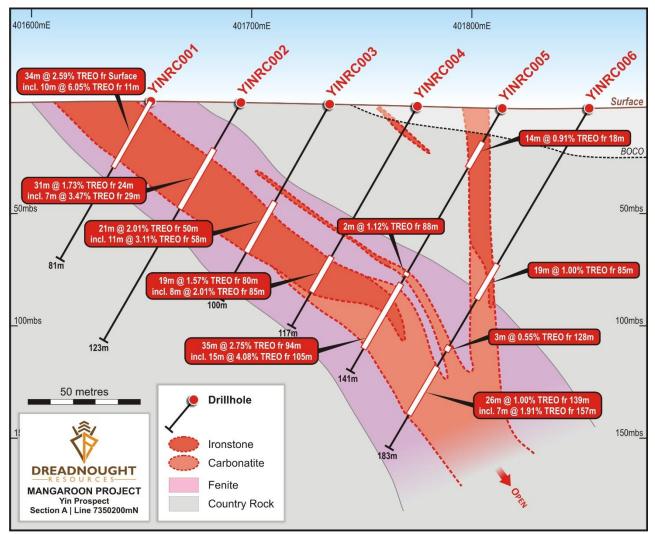


Figure 3: Cross section 7350200mN shows a shallowly-dipping 20-40m wide western and a 10m-wide steeply dipping eastern ferrocarbonatite that is weathered to an oxide ironstone in the top 80 vertical metres.

Subsequent lines were drilled to the north and south covering ~3km at ~100-200m spacings and have been infilled to 50-100m spacings in preparation for an initial JORC Resource in the December 2022 quarter. Figures 3-11 show representative cross sections from the northern and southern lines which indicate some pinching and swelling of the mineralisation along with a strong consistency of mineralisation over the 3km of outcropping ironstones.

Subsequent analysis of the Yin trend indicates over ~16kms of strike potential of which only ~3kms has been drilled to date.

Mineralised intercepts are generally thicker than originally announced as the pXRF used in the field continues to under-report TREO.

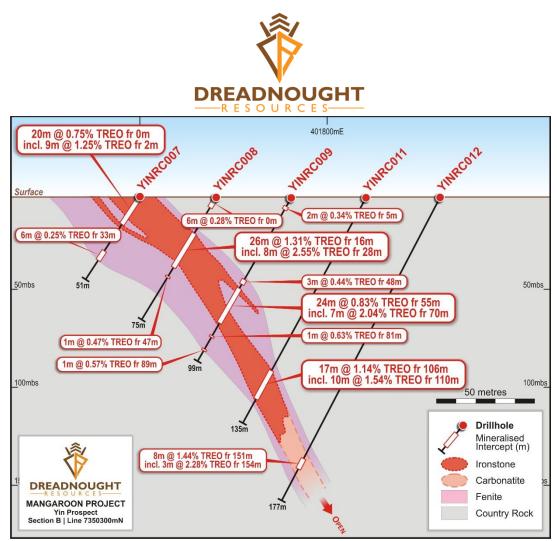


Figure 4: Cross section 7350300mN shows a moderately dipping ~20m wide oxide ironstone transitioning into a fresh ferrocarbonatite dyke at depth (fresh ironstone).

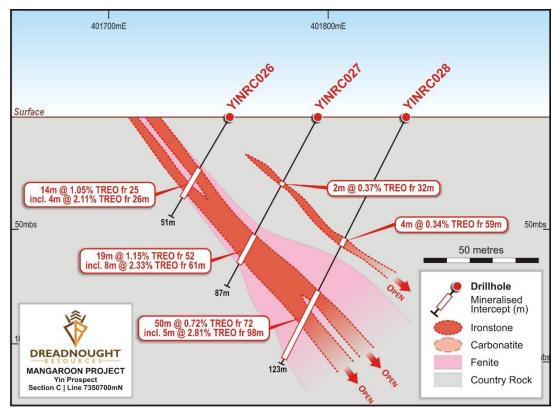


Figure 5: Cross section 7350700mN shows a moderately-dipping ~15-30m wide oxide ironstone getting thicker with depth associated with a broadening of the fenitic alteration.



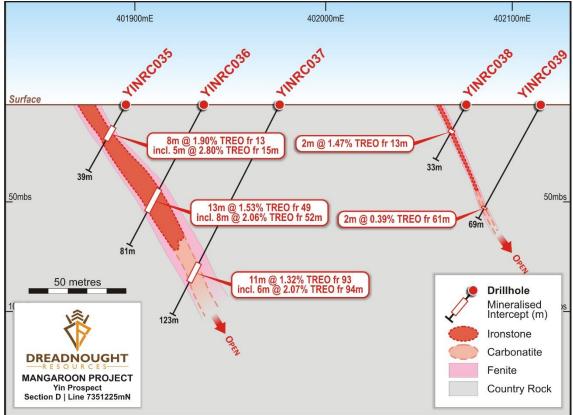


Figure 6: Cross section 7351225mN is the only section drilled to date targeting a mapped parallel lode off the main trend and which will be targeted further in future drilling.

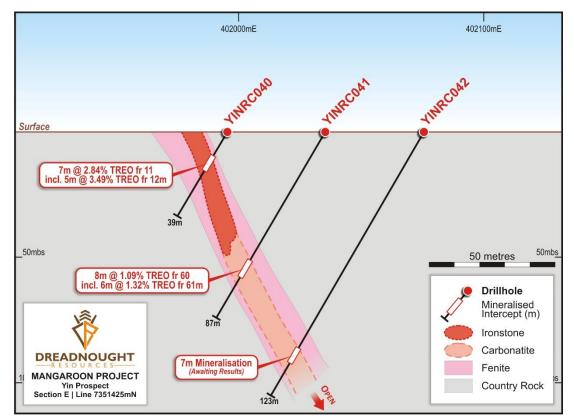


Figure 7: Cross section 7351425mN showing the main lode horizon steepening to the north and remaining open to the north and at depth.



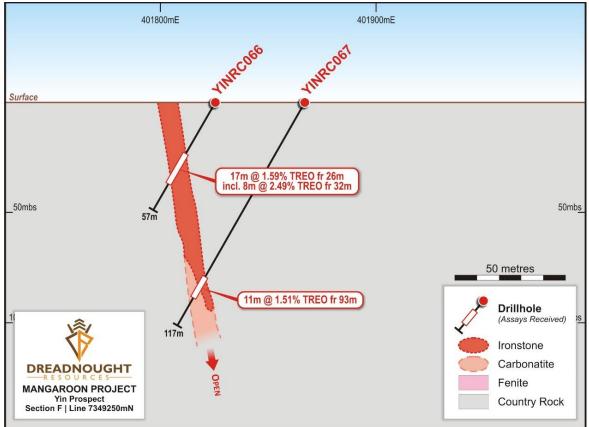
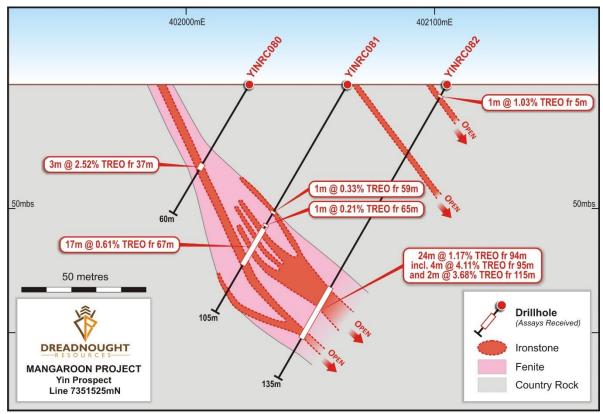


Figure 8: Cross section 7349250mN, the most southern drill line to date, showing the main lode horizon steepening to the south and remaining open to the south and at depth.







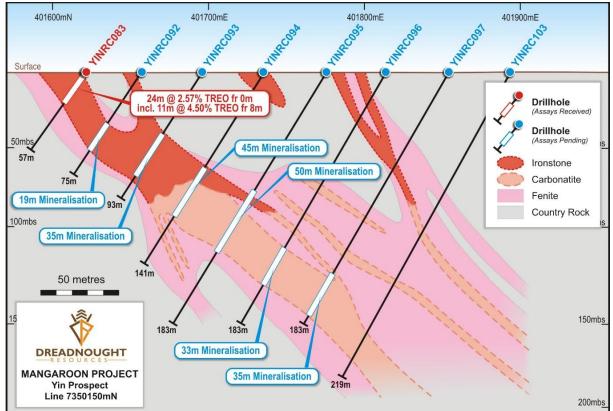


Figure 10: Cross section 7350150mN, infill drill line with hole YINRC083 assays reported showing multiple parallel lodes, all other holes pending assays.

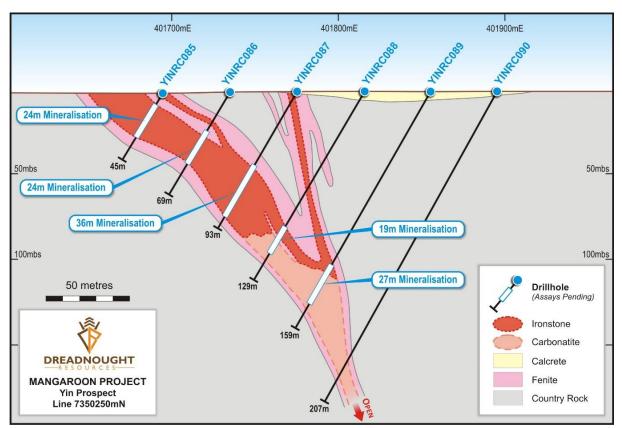


Figure 11: Cross section 7350250mN, infill drill line with assays pending.



# Technical Discussion on the RC Drill Program (YINRC001-YINRC120)

Yin is interpreted to be a >16km long REE bearing ironstone swarm that both outcrops and extends under shallow cover. Yin shows evidence for parallel or stacked ironstone horizons (see Figures 3, 5, 6, 9 10 and 11). Rock chips collected in 2021 showed consistent mineralisation over ~2.5km of outcropping ironstone with values up to 13.0% TREO and a general trend of the NdPr:TREO ratio increasing to the north.



Figure 12: Chip tray from YINRC001 showing mineralised oxidized ironstone from 1-34m and grading into dark fenitic alteration.

Drilling to date has confirmed the presence of the main REE bearing lode horizon along ~3km of strike often with multiple parallel lodes intersected down hole. The main lode horizon pinches, swells and changes dip and orientation along strike and ranges in thickness from 1-50m. The parallel lodes have been intersected above and below the main lode and often exhibit a similar orientation as the main lode with thickness ranging from 1-10m.

The REE bearing ironstones consist of goethite and hematite dominated oxide zones near the surface (top ~80m) transitioning into a fresh ferrocarbonatite 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 ferrocarbonatite containing at least one central interval of higher-grade mineralisation.



Figure 13: Chip tray from YINRC006 showing dark fenitic alteration grading into two mineralised fresh ironstones (ferrocarbonatite) from 127-131m and 139m-160m.

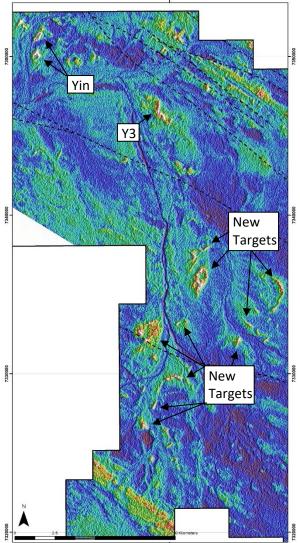


# Yangibana REE ironstones (E09/2448, E09/2450, E09/2535: DRE 100%)

The Yangibana ironstones are readily accessible and located 5-20kms from the Cobra-Gifford Creek Road. The ironstones were first explored in 1972 for base metals. The REE potential of the ironstones was first assessed in 1985 and has seen substantial work by Hastings since 2011. The ~\$400M Hastings controls the Yangibana REE Project and is Dreadnought's immediate neighbour being to the north of the Lyons River Fault.

Yangibana currently has a JORC 2012 Mineral Resource<sup>\*</sup> of 29.93Mt @ 0.93% TREO with 0.32%  $Nd_2O_3+Pr_6O_{11}$  (34% NdPr:TREO) and is under construction and development. The high NdPr ratio (used for electric vehicle magnets and renewable power generation) is an important component of Yangibana's economics.

Prior to Dreadnought, no significant REE exploration was undertaken south of the Lyons River Fault being the point at which the Yangibana REE ironstones were considered to terminate.



#### Mangaroon REE ironstones (E09/2448, E09/2450, E09/2535: DRE 100%)

The outcropping Yangibana REE ironstones have a distinctive radiometric anomaly and appear as gossanous iron rich outcrops visible in ortho-imagery. From June to September 2021, Dreadnought announced the identification of the Yin, Y2 and Sabre REE ironstones using wide spaced 1990s government radiometric data and modern ortho-imagery. Subsequently, Dreadnought undertook a ~43,000-line kilometre magnetic-radiometric survey resulting in the identification of seven carbonatite targets to date (C1-C7).

Dreadnought has recently completed a project wide targeting exercise of the substantial and detailed magnetic-radiometric survey which has resulted in the identification of 140 anomalies prospective for REE mineralisation. To date, only 40 of these anomalies have been mapped and sampled resulting in the confirmation of outcropping REE mineralisation at 22 targets with an additional 10 targets determined to be prospective but requiring further work and 8 targets considered un-prospective. Most of these targets make up and are located around Yin, Y2, Y3 and C1-C5. There remain 100 targets to be mapped and sampled and are all located within the 40km radius of the Yin Ironstone Complex.

Mapping and sampling of the remaining 100 targets is ongoing with further results throughout 2022.

\* HAS.ASX: 11 October 2022 "Drilling along 8km long Bald Hill-Fraser's trend increases indicated resources by 50%"

Figure 14: Image of a portion of the thorium radiometric image showing the location of Yin, Sabre (Y3) and some of the new targets to be assessed.



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

Mangaroon covers >4,900 sq 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 (earning up to 70%) – Figure 15. The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high NdPr Yangibana REE deposits.

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

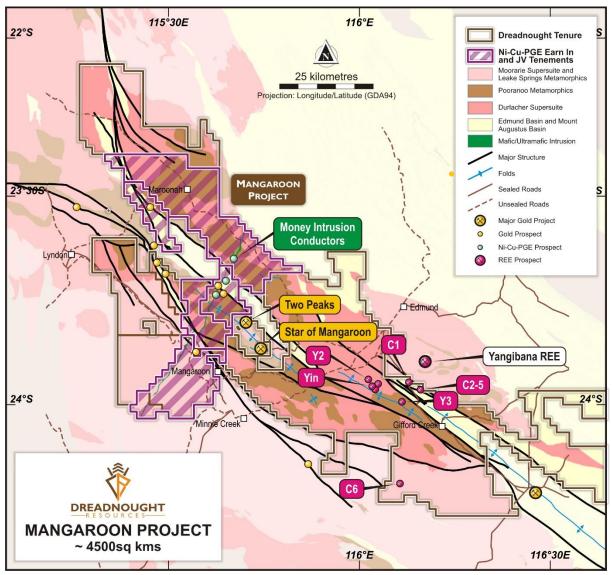


Figure 15: Plan view map of Mangaroon showing the location of the First Quantum Earn-In and 100% DRE ground in relation to major structures, geology and roads.



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
- 16 June 2022 First Drilling at Yin Intersects High-Grade Rare Earths
- 5 September 2022 Further Assays Confirm Yin as A Significant REE Discovery
- 5 September 2022 Thick Rare Earth Ironstones Confirmed at Sabre (Y3) Discovery

#### UPCOMING NEWSFLOW

**October-December:** Further updates on and assays from REE drilling at Yin Ironstone Complex and C1-C5 Carbonatites (Mangaroon 100%)

October: Commencement of Heli-EM survey over Wombarella (Tarraji-Yampi)

October: Assays from Peggy Sue pegmatite sampling (Central Yilgarn)

October: Assays from RC drilling at Nelson, Trafalgar, Metzke's Find, Spitfire (Central Yilgarn)

October: Results from Central Komatiite Belt target generation work (Central Yilgarn)

October: Assays for Ni-Cu sulphides at the Money Intrusion (Mangaroon First Quantum Earn-in)

October: Quarterly Activities and Cashflow Report

19-21 October: Southwest Connect ASX Showcase Conference

October/November: Initial JORC Resource for Metzke's Find Au (Central Yilgarn)

30 November: Annual General Meeting

For further information please contact:

9-11 November: Noosa Mining Investor Conference

December Quarter: Initial Yin JORC Resource (Mangaroon 100%)

~Ends~

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

#### **Competent Person's Statement**

The information in this announcement that relates to geology and exploration results and planning was compiled by Mr. Dean Tuck, who is a Member of the AIG, Managing Director, and shareholder of the Company. Mr. Tuck has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Tuck consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the forma and context in which the Competent Person's findings are presented have not been materially modified from the original reports.



#### **INVESTMENT HIGHLIGHTS**

#### **Kimberley Ni-Cu-Au Projects**

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

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

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



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

Mangaroon is a first mover opportunity covering ~4,900sq 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 in the recently defined Money Intrusion. Dreadnought's 100% owned areas contain outcropping high-grade gold bearing quartz veins along the Edmund and Minga Bar Faults and outcropping high-grade REE ironstones, similar to those under development at the Yangibana REE Project. Recently six potentially REE bearing carbonatite intrusions have been identified which may also be the source of the regional rare earths.

#### 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.



Table 1: Significant Intersections >0.2% TREO with >2% TREO highlighted.							
Hole ID	From	То	Interval	TREO	$Nd_2O_3 + Pr_6O_{11}$	NdPr:TREO	Prospect
	(m)	(m)	(m)	(%)	(%)	(%)	riospect
YINRC001	0	34	34	2.59	0.80	31	
Incl.	11	21	10	6.05	1.89	31	
YINRC002	24	55	31	1.73	0.49	28	
Incl.	29	36	7	3.47	1.06	31	
YINRC003	23	25	2	0.99	0.25	25	
And	44	45	1	0.82	0.19	23	
And	50	75	21	2.01	0.62	31	
Incl.	58	69	11	3.11	0.97	31	
YINRC004	60	65	5	0.55	0.12	22	
And	70	72	2	0.62	0.13	21	
And	80	99	19	1.57	0.46	29	
Incl.	85	93	8	2.01	0.60	30	
YINRC005	18	32	14	0.91	0.24	26	
And	88	90	2	1.12	0.31	28	
And	94	129	35	2.75	0.80	29	
Incl.	105	120	15	4.08	1.21	30	
YINRC006	85	104	19	1.00	0.30	30	
And	128	131	3	0.55	0.13	24	
And	139	165	26	1.00	0.25	25	
Incl.	157	164	7	1.91	0.45	24	
YINRC007	0	20	20	0.75	0.22	29	
Incl.	2	11	9	1.25	0.36	29	
And	33	39	6	0.25	0.07	28	
And	43	44	1	0.23	0.04	17	
YINRC008	0	6	6	0.28	0.09	32	Yin
And	16	41	26	1.31	0.38	29	
Incl.	28	36	8	2.55	0.76	30	
And	47	48	1	0.47	0.14	30	
YINRC009	5	7	2	0.34	0.02	6	
And	48	51	3	0.44	0.13	30	
And	55	79	24	0.83	0.24	29	
Incl.	<b>70</b>	77	7	<b>2.04</b>	0.63	31	
And	81	82	1	0.63	0.11	17	
And	89	90	1	0.05	0.13	23	
YINRC011	106	123	17	1.14	0.35	31	
Incl.	110	123	10	1.54	0.49	31	
YINRC012	151	159	8	1.44	0.49	32	
	<b>151</b>	159 157	3	2.28	0.44	30	
		-	8				
YINRC014	0 23	8 25	2	1.39 0.72	0.44 0.18	32 25	
And			5			25 7	
YINRC018	0	5 15	3	0.28	0.02		
And And	12	15		0.24	0.06	25	
And	36	37	1	0.22	0.07	32	
YINRC019	13	33	20	0.81	0.09	11	
Incl.	29	31	2	2.59	0.58	22	
And	36	37	1	0.38	0.09	24	
Incl.	39	40	1	0.41	0.12	29	
And	59	60	1	1.53	0.50	33	



1 a.	Table 1: Significant Intersections >0.2% TREO with >2% TREO highlighted.						
Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Nd <sub>2</sub> O <sub>3</sub> +Pr <sub>6</sub> O <sub>11</sub> (%)	NdPr:TREO (%)	Prospect
YINRC020	18	24	6	0.49	0.07	14	
and	38	39	1	0.66	0.19	29	
and	50	53	3	0.44	0.12	27	
and	70	75	2	1.02	0.33	32	
YINRC021	21	22	1	0.29	0.01	3	
and	51	54	3	0.32	0.10	31	
and	77	78	3	0.31	0.08	26	
and	82	83	1	0.45	0.13	29	
and	85	89	4	0.35	0.09	26	
YINRC022	98	103	5	0.75	0.21	28	
incl	100	101	1	2.02	0.59	29	
and	107	111	4	1.03	0.30	29	
and	118	120	2	0.27	0.06	22	
and	132	140	8	0.52	0.11	21	
incl	133	134	1	1.92	0.48	25	
YINRC023	0	17	17	0.75	0.24	32	
incl	8	11	3	2.24	0.75	33	
YINRC024	28	29	1	0.44	0.12	27	
and	32	33	1	0.20	0.04	20	
and	40	58	18	1.02	0.32	31	
incl	48	56	8	1.87	0.62	33	
incl	51	55	4	2.26	0.75	33	
and	67	70	3	0.37	0.10	27	
YINRC025	59	69	10	0.30	0.08	27	
and	83	102	19	1.00	0.33	33	
incl	90	92	2	3.15	1.06	34	Yin
and	111	120	9	0.31	0.08	26	
YINRC026	25	39	14	1.05	0.34	32	
incl	26	30	4	2.11	0.73	35	
YINRC027	24	27	3	0.20	0.04	20	
and	32	34	2	0.37	0.13	35	
and	52	71	19	1.15	0.40	35	
incl	61	69	8	2.33	0.83	36	
YINRC028	59	63	4	0.34	0.10	29	
and	72	122	50	0.72	0.23	32	
incl	98	103	5	2.81	0.85	30	
YINRC029	49	51	2	0.31	0.09	29	
YINRC030	107	108	1	0.25	0.07	28	
YINRC031	155	156	1	0.34	0.09	26	
YINRC032	27	30	3	0.63	0.20	32	
YINRC033	59	67	8	1.07	0.36	34	
incl	61	65	4	1.58	0.54	34	
YINRC034	110	116	6	1.37	0.43	31	
incl	111	115	4	1.88	0.60	32	
YINRC035	13	21	8	1.90	0.67	35	
incl	15	20	5	2.80	0.99	35	
YINRC036	49	62	13	1.53	0.50	33	
incl	52	60	8	2.06	0.67	33	
YINRC037	93	104	11	1.32	0.44	33	
incl	94	100	6	2.07	0.69	33	



Та	ble 1: Sig	nificant	Intersectio	ns >0.2%	TREO with >2% T	REO highlight	ed.
Hole ID	From	То	Interval	TREO	$Nd_2O_3 + Pr_6O_{11}$	NdPr:TREO	Prospect
Hole ID	(m)	(m)	(m)	(%)	(%)	(%)	Prospect
YINRC038	13	15	2	1.47	0.58	39	
YINRC039	61	63	2	0.39	0.13	33	
YINRC040	11	18	7	2.84	1.01	36	
Incl.	12	18	8	3.24	1.15	35	
YINRC041	60	68	8	1.09	0.40	37	
Incl.	61	67	6	1.32	0.49	37	
YINRC042	101	112	11	1.51	0.56	37	
incl	102	108	6	2.43	0.92	38	
YINRC043	6	27	21	0.22	0.05	23	
YINRC044	43	44	1	0.26	0.06	23	
and	45	46	1	0.38	0.11	29	
and	48	61	13	0.38	0.12	32	
YINRC045	5	7	2	1.00	0.40	40	
and	9	12	3	0.20	0.05	25	
and	78	81	3	1.10	0.33	30	
and	95	97	2	0.35	0.10	29	
YINRC046	2	12	10	0.52	0.18	35	
YINRC047	53	62	9	0.40	0.13	33	
YINRC048	41	42	1	0.43	0.15	35	
and	59	60	1	0.66	0.27	41	
and	82	83	1	1.25	0.57	46	
YINRC052	98	99	1	0.68	0.22	32	
YINRC052	35	37	2	0.30	0.10	33	
YINRC055	21	44	23	1.15	0.36	31	
incl	29	37	8	2.52	0.83	33	
and	52	53	1	0.82	0.20	24	Yin
YINRC056	67	76	8	2.50	0.85	34	
incl	69	75	6	3.19	1.10	34	
YINRC057	19	20	1	0.36	0.09	25	
and	42	43	1	0.29	0.09	31	
and	42	54	9	0.29	0.29	33	
YINRC058	29	31	2	0.89	0.29	39	
and	62	93	31	1.64	0.50	30	
incl	83	89	6	6.73	2.08	30 31	
YINRC059	58	66	8	0.39	0.13	33	
and	68	69	1	0.33	0.06	27	
	92	141	49	0.22	0.00	32	
and incl	107	113	49 6	<b>2.83</b>	0.20	32	
YINRC060	3	113	11	1.12	0.39	35	
YINRC000	42	61	11		0.14	35	
				0.40 0.35			
YINRC062	113	121	8		0.12	34	
and	125	126		0.24	0.07	29	
YINRC063	6	10	4	0.40	0.12	30	
	36	39	3	0.32	0.11	34	
YINRC064	82	87	5	1.13	0.34	30	
and	96	110	14	0.52	0.16	31	
YINRC065	135	146	11	0.70	0.23	33	
and	156	158	2	0.25	0.07	28	
and	165	170	5	0.31	0.1	32	
and	180	183	3	0.73	0.21	29	



10	Die 1. Sig				TREO with >2% 1		eu.
Hole ID	From	То	Interval	TREO	$Nd_2O_3 + Pr_6O_{11}$	NdPr:TREO	Prospect
Hole IB	(m)	(m)	(m)	(%)	(%)	(%)	Hospeet
YINRC066	26	43	17	1.59	0.42	26	
incl	32	40	8	2.49	0.66	27	
YINRC067	93	104	11	1.51	0.42	28	
YINRC068	9	15	6	0.42	0.12	29	
YINRC069	52	53	1	2.07	0.62	30	
and	86	87	1	0.59	0.17	29	
YINRC070	23	26	3	0.27	0.06	22	
and	33	34	1	1.67	0.42	25	
YINRC066	26	43	17	1.59	0.42	26	
incl	32	40	8	2.49	0.66	27	
YINRC067	93	104	11	1.51	0.42	28	
YINRC068	9	15	6	0.42	0.12	29	
YINRC069	52	53	1	2.07	0.62	30	
and	86	87	1	0.59	0.17	29	
YINRC070	23	26	3	0.27	0.06	22	
and	33	34	1	1.67	0.42	25	
YINRC072	19	38	19	0.46	0.08	17	
YINRC073	87	89	2	1.01	0.33	33	
YINRC074	31	39	8	1.7	0.59	35	
incl	34	39	5	2.54	0.88	35	Yin
YINRC075	54	59	5	2.73	0.91	33	
incl	55	58	3	4.14	1.39	34	
and	61	62	1	0.2	0.05	25	
YINRC076	82	94	12	1.65	0.56	34	
incl	96	97	1	0.25	0.07	28	
YINRC077	10	11	1	0.33	0.1	30	
and	14	22	8	1.09	0.39	36	
YINRC078	51	55	4	1.07	0.36	34	
YINRC079	84	87	3	3.47	1.26	36	
YINRC080	37	40	3	2.52	0.84	33	
YINRC081	59	60	1	0.33	0.1	30	
and	65	66	1	0.21	0.06	29	
and	67	84	17	0.61	0.2	33	
YINRC082	5	6	1	1.03	0.38	37	
and	94	118	24	1.17	0.43	37	
incl	95	99	4	4.11	1.59	39	
Incl	115	117	2	3.68	1.37	37	
YINRC083	0	24	24	2.57	0.73	28	
incl	8	19	11	4.5	1.27	28	



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

Table 2: Drill Col	•	,		- •			_	_
Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Туре	Prospect
YINRC001	401657	7350202	302	-60	270	81	RC	
YINRC002	401696	7350203	303	-60	270	123	RC	
YINRC003	401735	7350204	302	-60	270	100	RC	
YINRC004	701779	7350202	301	-60	270	117	RC	
YINRC005	401816	7350202	301	-60	270	141	RC	
YINRC006	401856	7350202	300	-60	270	183	RC	
YINRC007	401704	7350304	303	-60	270	51	RC	
YINRC008	401742	7350305	302	-60	270	75	RC	
YINRC009	401782	7350302	301	-60	270	99	RC	
YINRC010	401538	7350102	300	-60	270	81	RC	
YINRC011	401825	7350304	300	-60	270	135	RC	
YINRC012	401861	7350301	304	-60	270	177	RC	
YINRC013	401577	7350105	299	-60	270	81	RC	
YINRC014	401720	7350403	310	-60	270	33	RC	
YINRC015	401617	7350104	300	-60	270	81	RC	
YINRC016	401658	7350104	300	-60	270	81	RC	
YINRC017	401697	7350103	300	-60	270	81	RC	
YINRC018	401737	7350104	300	-60	270	81	RC	
YINRC019	401774	7350104	300	-60	270	84	RC	
YINRC020	401816	7350102	300	-60	270	81	RC	
YINRC021	401855	7350103	298	-60	270	111	RC	
YINRC022	401895	7350108	298	-60	270	153	RC	
YINRC023	401720	7350507	301	-60	270	39	RC	
YINRC024	401759	7350505	300	-60	270	87	RC	
YINRC025	401802	7350498	308	-60	270	123	RC	
YINRC026	401754	7350705	311	-60	270	51	RC	Yin
YINRC027	401794	7350703	311	-60	270	87	RC	
YINRC028	401832	7350703	308	-60	270	123	RC	
YINRC029	401750	7350900	312	-60	270	81	RC	
YINRC030	401790	7350901	312	-60	270	129	RC	
YINRC031	401829	7350900	312	-60	270	177	RC	
YINRC032	401751	7351082	305	-60	310	45	RC	
YINRC033	401786	7351058	305	-60	310	87	RC	
YINRC034	401820	7351035	306	-60	310	129	RC	
YINRC035	401895	7351225	302	-60	270	39	RC	
YINRC036	401935	7351224	303	-60	270	81	RC	
YINRC037	401976	7351225	303	-60	270	123	RC	
YINRC038	402077	7351238	305	-60	270	33	RC	
YINRC039	402120	7351240	305	-60	270	69	RC	
YINRC040	401995	7351425	303	-60	270	39	RC	
YINRC041	402036	7351426	303	-60	270	87	RC	
YINRC042	402074	7351414	302	-60	270	123	RC	
YINRC043	402038	7351578	304	-60	270	45	RC	
YINRC044	402076	7351579	304	-60	270	87	RC	
YINRC045	402116	7351582	303	-60	270	123	RC	
YINRC046	402086	7351727	304	-60	270	45	RC	
YINRC047	402127	7351725	304	-60	270	81	RC	
YINRC048	402166	7351733	305	-60	270	129	RC	
YINRC049	402101	7351926	304	-60	270	39	RC	
YINRC050	402143	7351926	304	-60	270	87	RC	
YINRC051	402182	7351929	304	-60	270	129	RC	



		R	LESOL	JKC	E 3			
Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Туре	Prospect
YINRC052	401863	7349988	296	-60	270	123	RC	
YINRC053	401903	7350002	299	-60	270	153	RC	
YINRC054	401944	7350001	298	-60	270	93	RC	
YINRC055	401757	7350401	298	-60	270	63	RC	
YINRC056	401796	7350404	298	-60	270	93	RC	
YINRC057	401745	7350602	298	-60	270	69	RC	
YINRC058	401779	7350601	298	-60	270	105	RC	
YINRC059	401818	7350602	298	-60	270	141	RC	
YINRC060	401764	7350803	298	-60	270	81	RC	
YINRC061	401806	7350803	298	-60	270	75	RC	
YINRC062	401846	7350803	298	-60	270	135	RC	
YINRC063	401710	7351001	298	-60	270	57	RC	
YINRC064	401747	7351001	298	-60	270	117	RC	
YINRC065	401792	7351003	298	-60	270	189	RC	
YINRC066	401825	7349254	298	-60	270	57	RC	
YINRC067	401866	7349252	298	-60	270	117	RC	
YINRC068	401902	7349412	298	-60	270	33	RC	
YINRC069	401943	7349414	298	-60	270	93	RC	
YINRC070	402590	7349481	298	-60	210	51	RC	
YINRC071	402612	7349517	298	-60	210	129	RC	
YINRC072	402741	7349370	298	-60	210	69	RC	
YINRC073	402765	7349402	298	-60	210	99	RC	
YINRC074	401830	7351125	298	-60	270	51	RC	
YINRC075	401865	7351126	307	-60	270	81	RC	
YINRC076	401905	7351131	302	-60	270	105	RC	
YINRC077	401944	7351326	306	-60	270	33	RC	
YINRC078	401984	7351329	299	-60	270	87	RC	Yin
YINRC079	402023	7351326	294	-60	270	105	RC	
YINRC080	402023	7351526	303	-60	270	60	RC	
YINRC081	402067	7351525	303	-60	270	105	RC	
YINRC082	402105	7351529	303	-60	270	135	RC	
YINRC083	401618	7350169	302	-60	330	57	RC	
YINRC084	401574	7350148	300	-60	340	99	RC	
YINRC085	401700	7350249	303	-60	270	45	RC	
YINRC086	401737	7350248	302	-60	270	69	RC	
YINRC087	401777	7350248	301	-60	270	93	RC	
YINRC088	401815	7350250	301	-60	270	129	RC	
YINRCWB1	401754	7350253	302	-90	0	80	RC	
YINRC089	401855	7350250	300	-60	270	159	RC	
YINRC090	401894	7350252	300	-60	270	207	RC	
YINRC091	401895	7350203	300	-60	270	219	RC	
YINRC092	401648	7350205	300	-60	270	75	RC	
YINRC093	401694	7350149	300	-60	270	93	RC	
YINRC094	401735	7350145	300	-60	270	141	RC	
YINRC095	401777	7350152	300	-60	270	183	RC	
YINRC096	401814	7350151	300	-60	270	183	RC	
YINRC097	401853	7350151	300	-60	270	183	RC	
YINRC097	401855	7350155	300	-60	270	207	RC	
YINRC098	401895	7350301	300	-60	270	135	RC	
YINRC100	401841	7350408	300	-60	270	75	RC	
-					270			
YINRC101	401781	7350004	300	-60		81	RC	
YINRC102	401824	7350003	300	-60	270	117	RC	



			ESUL					
Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Туре	Prospect
YINRC103	401889	7350150	300	-60	270	219	RC	
YINRC104	401863	7349334	300	-60	270	63	RC	
YINRC105	401901	7349332	300	-60	270	105	RC	
YINRC106	401873	7349541	300	-60	270	117	RC	
YINRC107	401823	7349641	300	-60	270	111	RC	
YINRC108	401912	7349541	301	-60	270	183	RC	
YINRC109	401861	7349644	299	-60	270	177	RC	
YINRC110	401800	7349738	297	-60	270	63	RC	
YINRC111	401842	7349744	297	-60	270	117	RC	Yin
YINRC112	402060	7351624	304	-60	270	39	RC	YIN
YINRC113	402099	7351626	304	-60	270	81	RC	
YINRC114	402139	7351623	302	-60	270	123	RC	
YINRC115	402105	7351832	304	-60	270	39	RC	
YINRC116	402139	7351827	304	-60	270	93	RC	
YINRC117	402180	7351825	304	-60	270	165	RC	
YINRC118	402071	7352024	304	-60	270	45	RC	
YINRC119	402113	7352037	304	-60	270	99	RC	
YINRC120	402151	7352029	304	-60	270	129	RC	

# JORC Code, 2012 Edition – Table 1 report template

# Section 1 Sampling Techniques and Data

# JORC TABLE 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

<ul> <li>techniques</li> <li>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</li> </ul>	Criteria	JORC Code explanation	Commentary
coarse gold that has inherent sampling preliminary nature. pXRF analysis is a preliminary	, .	<ul> <li>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</li> </ul>	<ul> <li>Preliminary pXRF analysis</li> <li>Preliminary assays were obtained using an Olympus Vanta M Series pXRF analyser. The pXRF was placed on the reject sample piles from the rigs Metzke cone splitter.</li> <li>One 3 beam, 35 second measurement was completed for each drill metre sample.</li> <li>The pXRF instrument is calibrated and serviced annually or more frequently as required with daily instrument calibration checks completed. Additionally, silica blanks and OREAS standards, appropriate to the style of mineralisation are routinely analysed to confirm performance. This procedure is in line with normal industry practice and deemed fit for purpose for preliminary analysis in first pass exploration drilling.</li> <li>This report relates to exploration results of a preliminary nature. pXRF analysis is a preliminary technique which will be superseded by laboratory analysis when it becomes available.</li> </ul>

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Criteria	JORC Code explanation	Commentary
	information.	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 ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME- XRF30).
		All mineralised 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.
Drilling techniques	<ul> <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>	<b>RC Drilling</b> 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 5 <sup>3</sup> / <sub>4</sub> ".
Drill sample recovery	<ul> <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>	<b>RC Drilling</b> 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.
Logging	<ul> <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>	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,



Criteria	RESOURCE JORC Code explanation	S Commentary
	in nature. Core (or costean, channel, etc.)	weathering and structure were all recorded digitally.
	<ul><li>photography.</li><li>The total length and percentage of the relevant intersections logged.</li></ul>	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.
Sub-sampling	• If core, whether cut or sawn and whether	Preliminary pXRF analysis
techniques and sample preparation	<ul> <li>quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	pXRF analysis of pulverised and partially homogenised reject RC sample piles is fit for purpose as a preliminary exploration technique.
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling the sampling term of the sampling term of the sampling term.</li> </ul>	pXRF is a spot reading on raw (unprocessed) RC sample piles with variable grain sizes and states of homogenisation. High grade results were repeated at multiple locations to confirm repeatability. The competent person considers this acceptable within the context of reporting preliminary exploration results.
	is representative of the in-situ material collected, including for instance results for	RC Drilling
	<ul> <li><i>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>	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.
Quality of assay	The nature, quality and appropriateness of the appropriate and laboratory proceedures	Preliminary pXRF analysis
data and laboratory tests	<ul> <li>the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model,</li> </ul>	Olympus Vanta M Series pXRF analyser is used to provide preliminary quantitative measurement of mineralisation. A 3-beam, 35 second reading time was used with a single reading on unprepared raw RC chip sample piles. High grade samples were repeated to confirm repeatability of grade.
	<ul> <li>reading times, calibrations factors applie and their derivation, etc.</li> <li>Nature of quality control procedures adopte (e.g. standards, blanks, duplicates, externa laboratory checks) and whether acceptabl</li> </ul>	Calibration checks of the pXRF are undertaken daily, a silica blank and certified REE standard OREAS 461 is routinely analysed to monitor pXRF performance.
	levels of accuracy (i.e. lack of bias) and	Laboratory Analysis
	precision have been established.	Lithium borate fusion is considered a total digest and Method ME-XRF30 is appropriate for REE



Criteria	JORC Code explanation	Commentary
		determination.
		Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receival.
Verification of	The verification of significant intersections by	Preliminary pXRF analysis
sampling and assaying	<ul> <li>either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Analytical data was collected directly by the Olympus Vanta M Series pXRF analyser and downloaded by digital transfer to an excel spreadsheet with inbuilt QAQC. All data was checked by the responsible geologist and filed on the company server.
		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.
		No twinned holes have been drilled at this time.
		No adjustments to any assay data have been undertaken.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z).
	surveys), trenches, mine workings and other locations used in Mineral Resource	GDA94 Z50s is the grid format for all xyz data reported.
	<ul> <li>estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	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.
Data spacing and	• Data spacing for reporting of Exploration	See drill table for hole positions.
distribution	<ul> <li>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>	Data spacing at this stage is not suitable for Mineral Resource Estimation.
Orientation of data in relation to geological structure	<ul> <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> </ul>	Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the ironstone outcrops and modelled magnetic data.
	<ul> <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>	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



Criteria	JORC Code explanation	Commentary
		Exmouth.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	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	<ul> <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> <li>The Mangaroon Project consists of 16 granted Exploration License (E08/3178, E08/3274, E08/3439, E09/2359, E09/2370, E09/2384, E09/2405, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467E09/2473, E09/2478, E09/2531, E09/2635) and 3 pending Exploration Licenses (E08/3275, E09/2616, E09/2620).</li> <li>All tenements are 100% owned by Dreadnought Resources.</li> <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 Prager Pty Ltd.</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, Towera and Uaroo Stations.</li> </ul>
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



Criteria	JORC Code explanation	Commentary
		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, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted REEs.
Drill hole information	<ul> <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 holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <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>	An overview of the drilling program is given within the text and tables within this document.
Data aggregation methods Relationship	<ul> <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 stated.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	All results with a preliminary pXRF value over 0.2% TREO have been reported. Significant intercepts are length weight averaged for all samples with a preliminary pXRF value >0.2% TREO with up to 3m of internal dilution (<0.2% TREO). No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	<ul> <li>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</li> </ul>	The true thickness of the mineralisation. The true thickness of the mineralisation intersected in drill holes cannot currently be calculated.
	hole length, true width not known').	



Criteria	JORC Code explanation	Commentary
	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.	
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	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Preliminary pXRF results to be confirmed by laboratory analysis as soon as possible. Additional RC drilling Diamond Drilling Metallurgical test work Resource Modelling