25 July 2022

THICK RARE EARTH IRONSTONES CONFIRMED OVER 3KM OF STRIKE AT YIN – MANGAROON 100%

HIGHLIGHTS

- **RC drilling at the Yin Rare Earth Element ("REE") prospect has confirmed the genuine scale potential of the REEs with mineralised ironstones identified over 3kms of strike and remaining open in all directions and at depth.**
- **67 RC holes (6,415m) have been completed to date confirming thick, mineralised, REE ironstones including further evidence of parallel lodes along strike. Encouragingly, 87% of holes drilled to date have intersected mineralisation as confirmed by pXRF in the field.**
- **Initial assay results have experienced delay in the lab and are now expected in late July 2022, with further assays expected to follow regularly thereafter.**
- **Infill drilling at Yin has commenced with an initial JORC Mineral Resource expected in the December 2022 quarter. Extensional drilling is ongoing, and a diamond rig commences in late July 2022.**
- **Drilling at Y3 (rock chips up to 39.7% TREO (6.30% Nd_2O_3+Pr_6O_{11})) and at five carbonatite targets (C1-C5) will commence in August 2022. Importantly, the carbonatites could be the source REE intrusions for the region.**
- **66 additional REE targets identified from magnetic/radiometric surveys are undergoing assessment.**

Dreadnought Resources Limited ("**Dreadnought**") is pleased to announce that RC drilling has continued to intersect thick, mineralised, REE ironstones at Yin, within its 100% owned Mangaroon Project in the Gascoyne Region of Western Australia.

Drilling is ongoing at the Yin REE ironstone where 67 RC holes for ~6,415m have been drilled to date. Drilling has now confirmed mineralisation over ~3km of strike, with the ironstones remaining open in all directions and at depth. Infill drilling at Yin is underway with an initial JORC Mineral Resource estimate expected in the December 2022 quarter**.** Extensional drilling will also continue in order to extend the mineralisation beyond 3kms of strike. All REE mineralisation has been confirmed in the field by a handheld pXRF unit. Over 4,000 samples have been rushed for analysis with the first assays delayed in the lab and now expected in late July 2022.

Given the outstanding success of the RC program, a diamond drill rig is currently mobilising to site and will commence diamond drilling in late July 2022.

Dreadnought's Managing Director, Dean Tuck, commented: *"Drilling at Yin continues to exceed expectations. With a second rig mobilising to site, we are confident that Yin will produce a substantial initial rare earth Mineral Resource by the end of the year. Once drilling at Yin is complete, the rigs will move to Y3 and C1-C5 to test additional REE targets. We are seeing genuine scale here with runs already on the board and 66 further anomalies recently identified. We also expect to confirm high-grade potential with first assays due back in late July 2022."*

Figure 1: RC rig drilling at Yin with an outcrop of mineralised REE ironstone in the foreground.

SNAPSHOT - MANGAROON RARE EARTHS (DRE:100%)

Genuine scale potential: 3km mineralised strike confirmed by drilling at Yin remaining open along strike and depth

- Y2 and Y3 REE ironstones confirmed by radiometric data and modern ortho-imagery - ***drilling to commence in August 2022***
- Potential source of regional REE identified by magnetic-radiometric survey with five carbonatite targets (C1-C5) – ***drilling to commence in August 2022***
- ***66 additional anomalies prospective for REE identified*** by detailed magnetic-radiometric survey – currently under assessment

High-Grade TREO potential

- Initial pXRF results from Yin indicate high REE grades (ASX 16 June 2022) – ***lab assays to confirm by the end of July 2022***
- ***Rock Chips up to 39.7% TREO (6.30% Nd_2O_3+Pr_6O_{11}) from Y3***

Short term initial JORC Mineral Resources

- Infill drilling at Yin has commenced with an ***initial JORC Mineral Resource estimate expected in the December 2022 quarter***

High Nd2O3+Pr6O11/TREO ratio Potential

- Yin, like Yangibana, is unique to REE deposits globally due to the high proportion of neodymium and praseodymium in the total rare earth oxides, with rock chips from ***Yin containing up to a 48% Nd2O3+Pr6O11 ratio (Nd2O3+Pr6O11 content of the TREO).***

Positive Metallurgy Results

- Initial flotation circuit using bulk surface samples from Yin performed well, achieving a ***recovery of 92.8% at a concentrate grade of 12.3% Nd2O3 and an average 40% TREO***.
- Powder X-ray diffraction confirmed the type of minerals hosting the REE at Yin to be predominantly ***monazite***, well-known to be amenable to commercial processing.

Analogous to a Commercially Viable Development 20kms Away

- The ~$450m Hastings Technology Metals Ltd (ASX.HAS) controls the Yangibana Ironstone Project and is Dreadnought's immediate neighbour located only 25km to the northeast of Yin.
- Yangibana currently has a JORC Resource* of 27.42Mt @ 0.97% TREO with 0.33% Nd2O3+Pr6O11.
- 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.

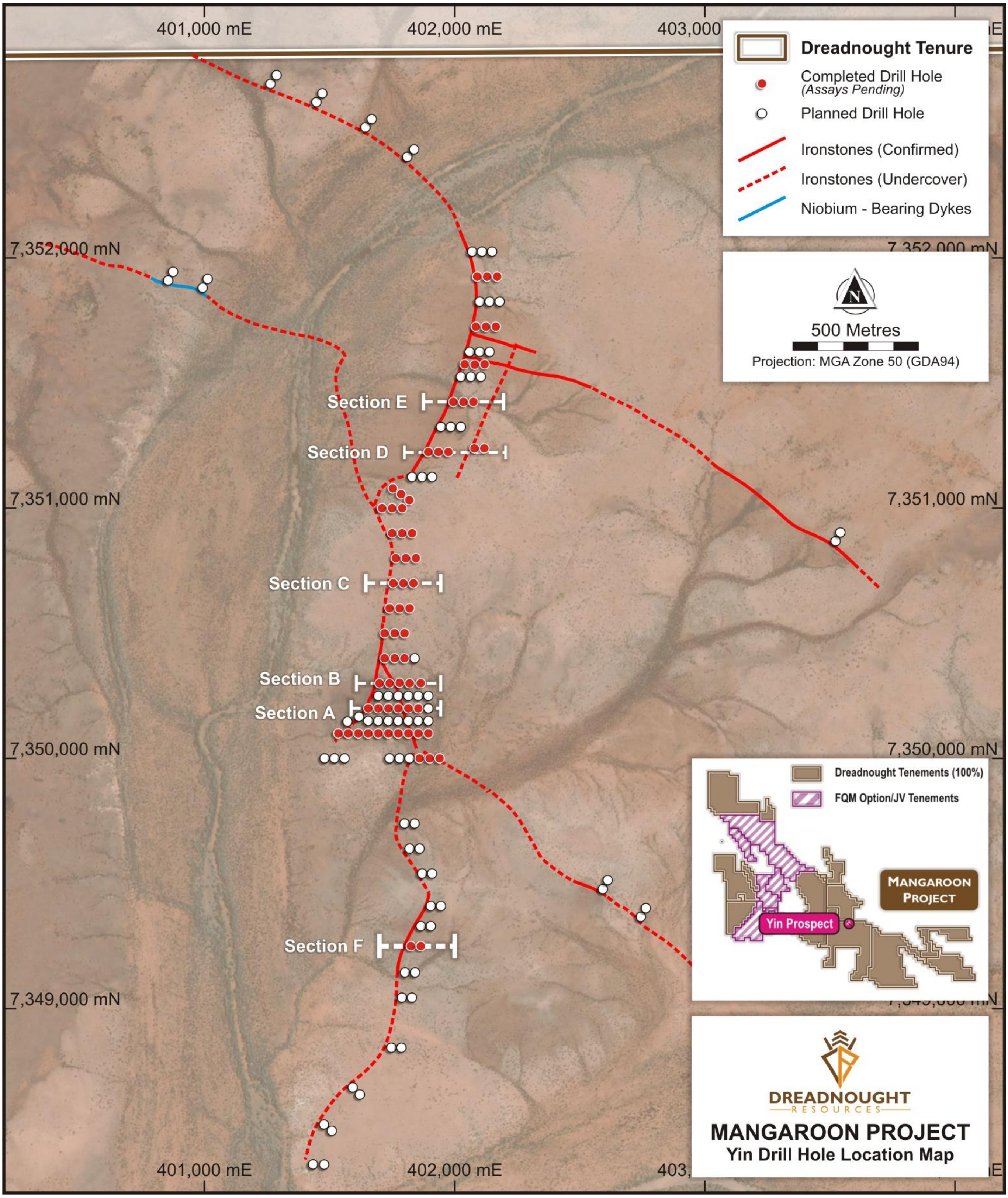


Figure 2: Plan view over an orthoimage showing the location of the recently drilled holes (red dots) successfully identifying REE over 3km. Planned infill and extensional holes (white dots) are also shown.

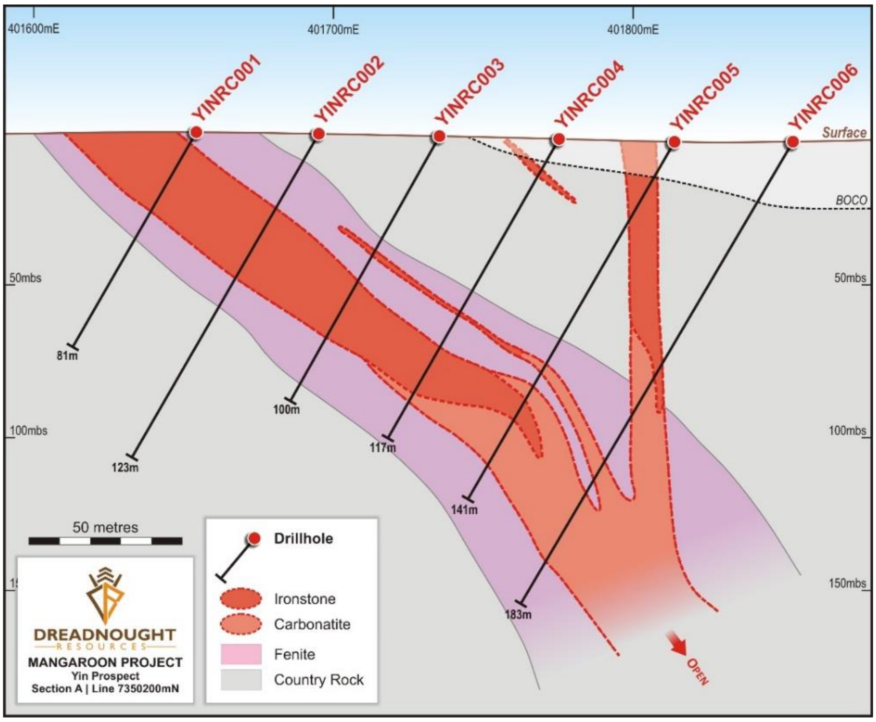
RC Drill Program (YINRC001-YINRC067)

To date the RC program has comprised 67 holes for ~6,415m (red dots on Figure 2).

The program commenced on Section A (Figure 3) in June 2022 and successfully intersected REE ironstones. Results were confirmed in the field by a handheld pXRF unit (ASX: 16 June 2022). With significant results including:

- **YINRC001: 33m @ 2.5% TREO from 1m, including 10m @ 6.3% TREO from 11m**
- **YINRC003: 17m @ 2.2% TREO from 58m, including 9m @ 3.3% TREO from 58m**
- **YINRC005: 34m @ 2.9% TREO from 95m, including 20m @ 4.20% TREO from 104m.**

Despite being rushed, lab delays see these results now being available in late July 2022.



Subsequent lines were drilled to the north for 2km at ~200m spacings and generally drilled outcropping ironstones. Sections B to E below show representative cross sections from the northern lines which indicate some pinching and swelling of the mineralisation along with a strong consistency of mineralisation over the 2km of outcropping ironstones.

Figure 3: Cross section A shows drilling has intersected 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.

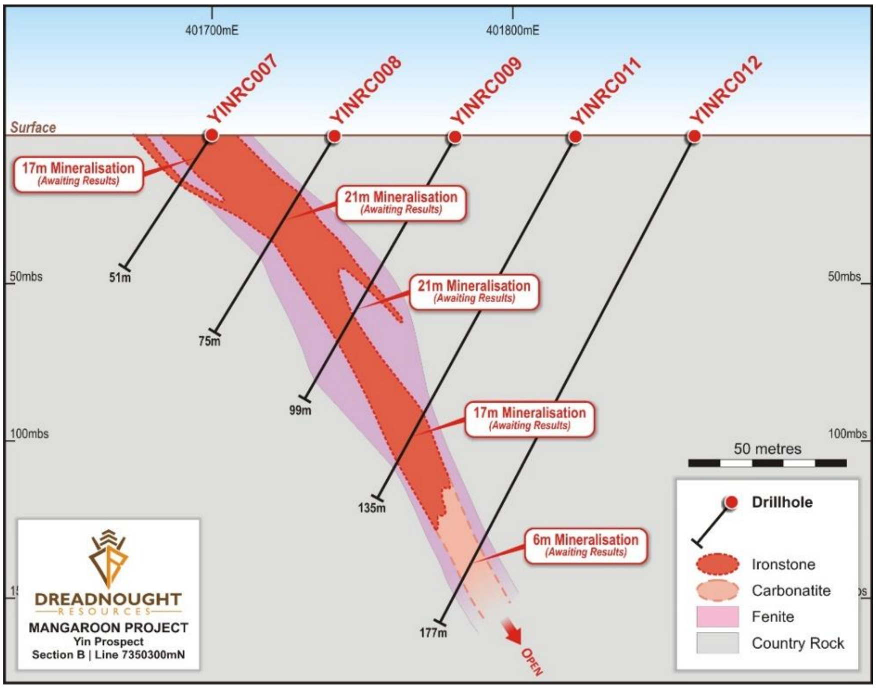


Figure 4: Cross section B shows drilling has intersected a moderately dipping ~20m wide oxide ironstone transitioning into a fresh ferrocarbonatite dyke at depth (fresh ironstone).

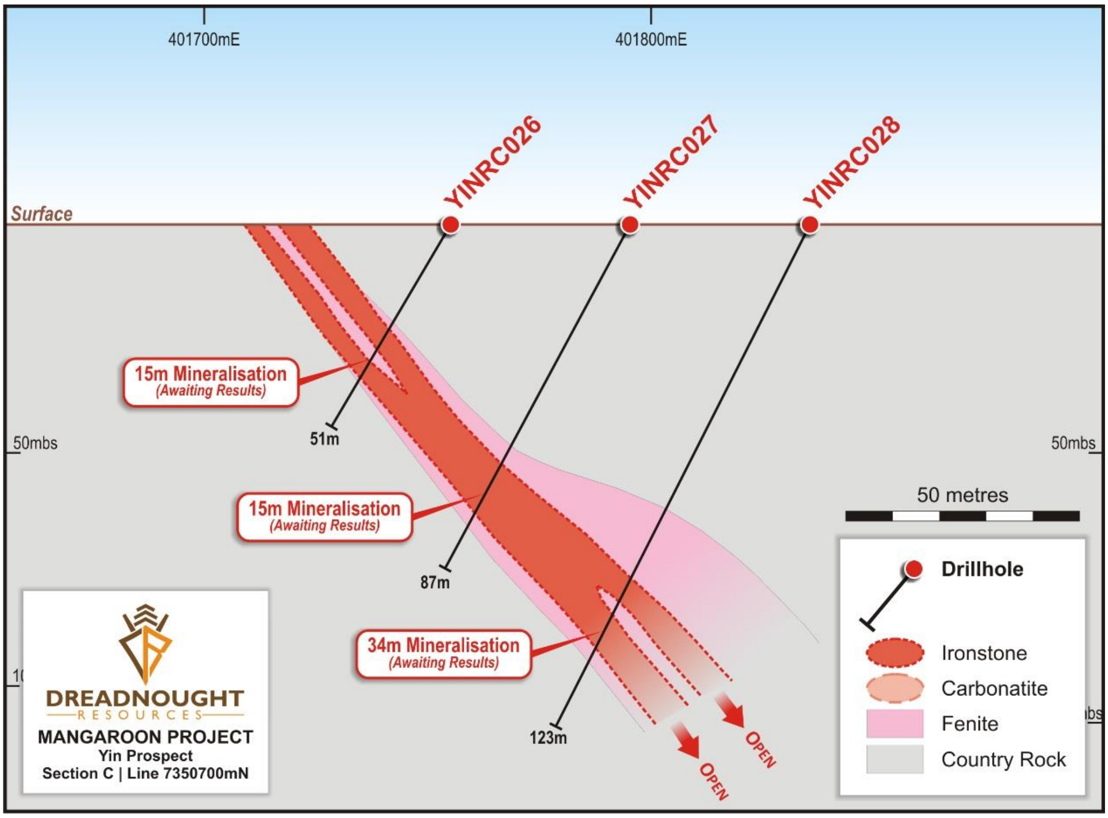


Figure 5: Cross section C shows drilling has intersected a moderately-dipping ~15-30m wide oxide ironstone getting thicker with depth associated with a broadening of the fenitic alteration.

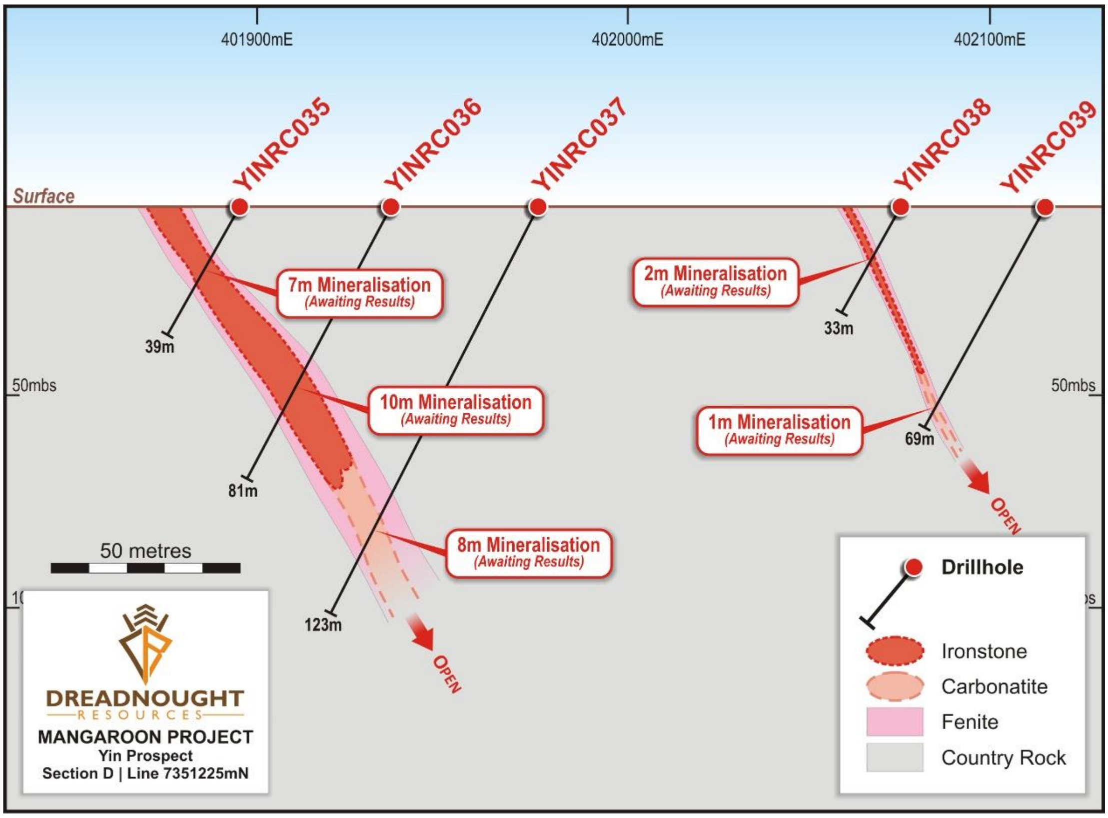


Figure 6: Cross section D is the only section drilled to date targeting a mapped parallel lode off the main trend which will be targeted further in future drilling.

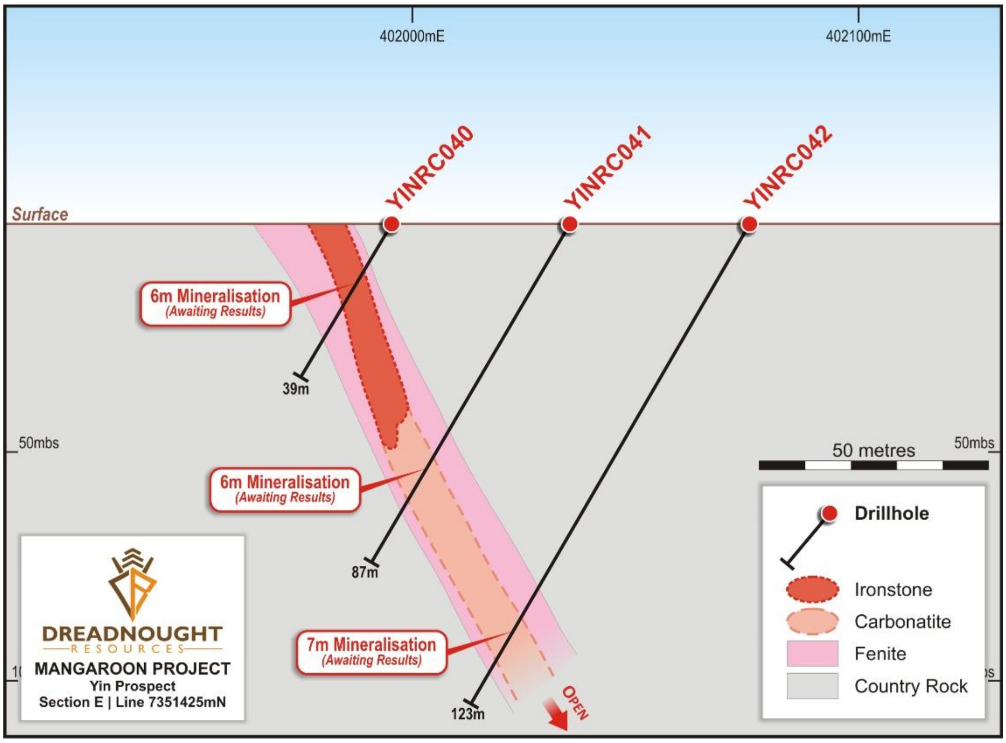


Figure 7: Cross section E showing the main lode horizon steepening to the north and with shallower oxidation of the REE ironstone.

Section F was drilled ~1km south of Section A and targeted undercover extensions of Yin identified in recent magnetic surveys. This has been an important outcome and confirms magnetic surveys as an effective targeting tool for undercover mineralisation.

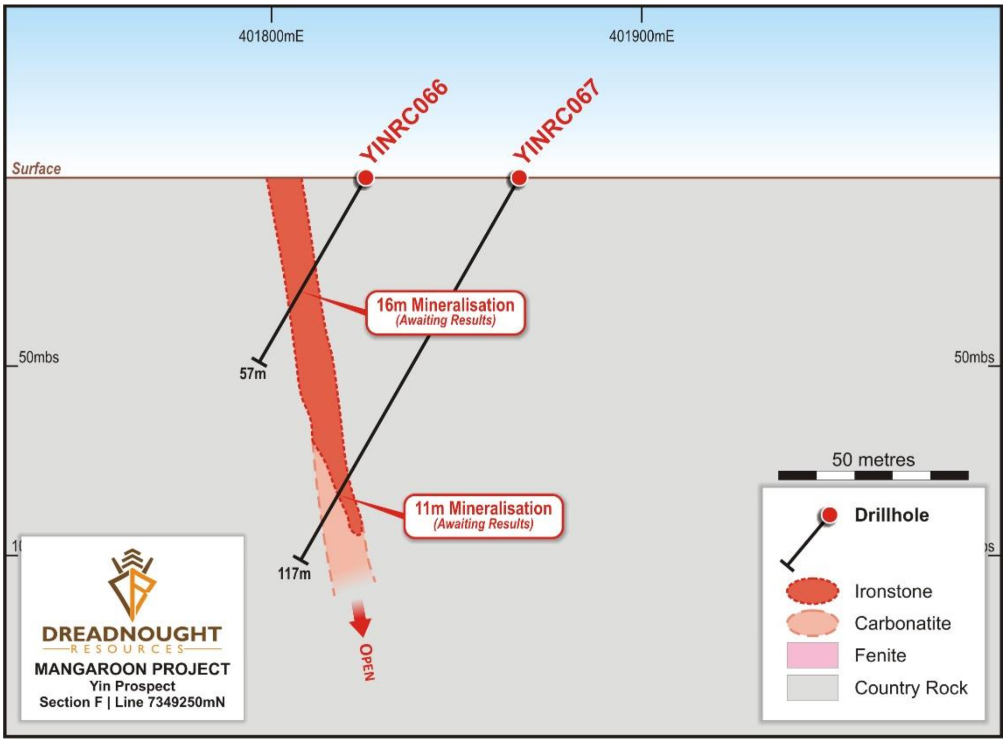


Figure 8: **Cross section F, drilled ~1km south of the initial Yin drill line (cross section A) showing thick ironstone mineralisation extending to the south, with significantly less fenite alteration.**

Technical Discussion on the RC Drill Program (YINRC001-YINRC067)

Yin is a >3km long REE bearing ironstone swarm that both outcrops and extends under shallow cover. Yin shows evidence for parallel or stacked ironstone horizons (see Figures 2, 3 and 6). 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 neodymium and praseodymium to TREO ratio (“Nd_2O_3+Pr_6O_{11}:TREO”) increasing to the north.

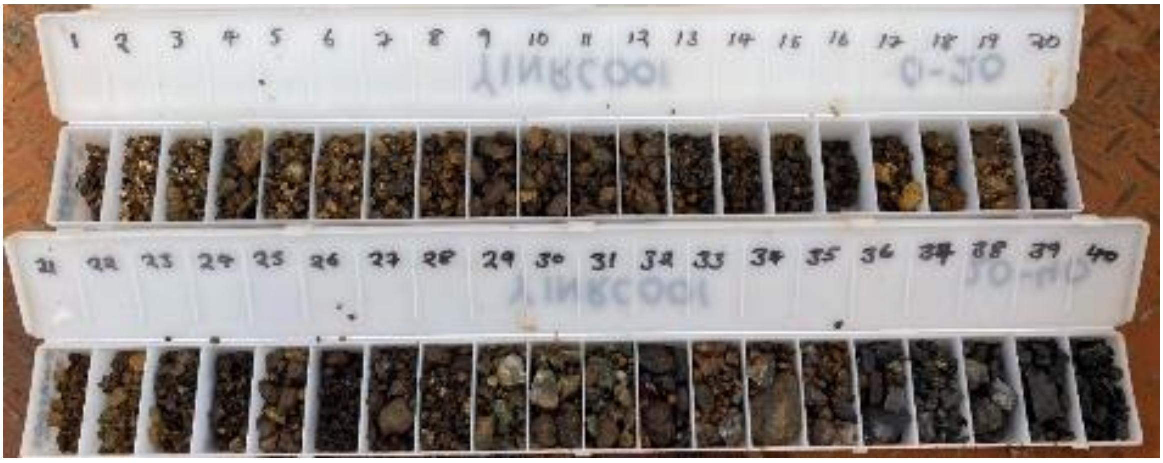


Figure 9: Chip tray from YINRC001 showing mineralised oxidized ironstone from 1-34m and grading into dark fenitic alteration.

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 ranging in thickness from 1-34m. 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 a central interval of higher-grade mineralisation.

Figure 10: 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 Technology Metals Ltd ("**Hastings**") since 2011. The ~$450m Hastings (ASX.HAS) controls the Yangibana Ironstone Project and is Dreadnought's immediate neighbour being to the north of the Lyons River Fault.

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

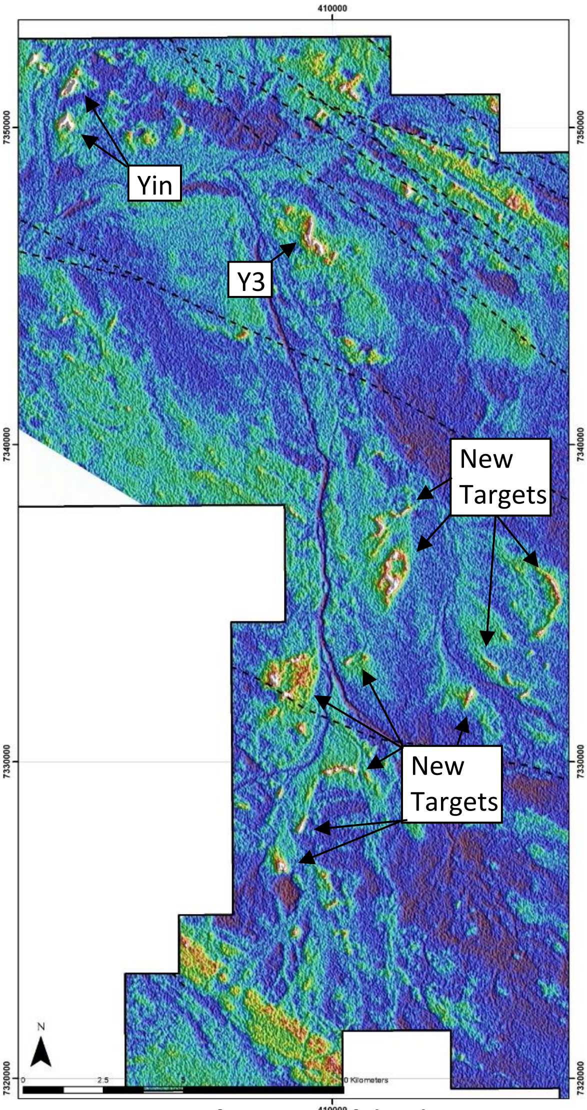


Figure 11: Image of a portion of the Thorium radiometric image showing the location of Yin, Y3 and some of the new targets to be assessed.

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 Y3 REE ironstones using wide spaced 1990s government radiometric data and modern ortho-imagery. From September to November 2021, Dreadnought undertook a ~43,000-line kilometre magnetic-radiometric survey resulting in the identification of five carbonatite targets (C1-C5).

Dreadnought has recently completed a project wide targeting exercise of the substantial and detailed magnetic-radiometric survey which has resulted in the identification of 85 anomalies prospective for REE mineralisation. To date, only 19 of these anomalies have been mapped and sampled resulting in the confirmation of outcropping REE mineralisation at 13 targets with an additional 3 targets determined to be prospective but undercover and 3 targets considered un-prospective. Most of these targets make up and are located around Yin, Y2, Y3 and C1-C5. There remain 66 targets to be mapped and sampled located within a 40km radius of Yin, Y2, Y3 and C1-C5.

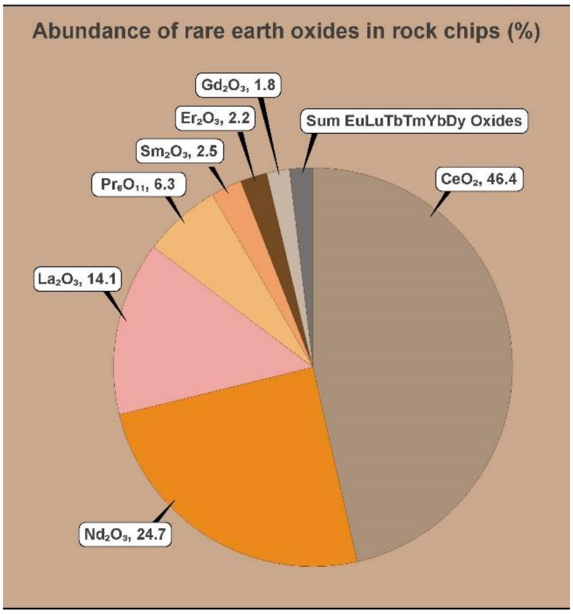
Mapping and sampling of the remaining 66 targets has commenced with results expected from August through October 2022.

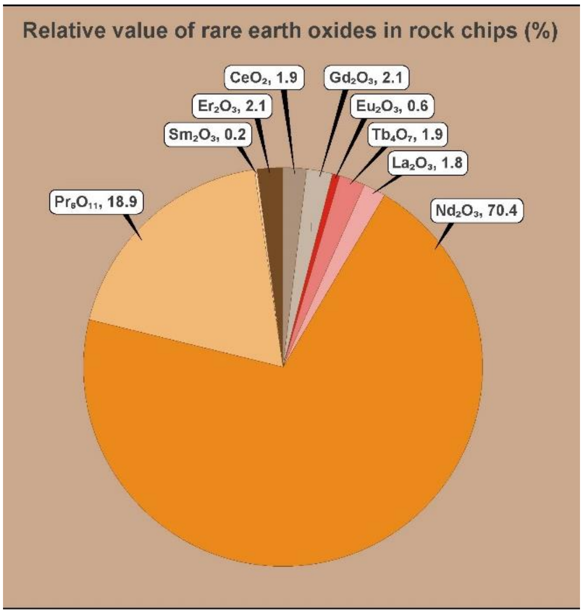
**HAS.ASX: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%"*

Current Knowledge on REE at Yin (E09/2448, E09/2450, E09/2535: DRE 100%)

<u>Mineralogy:</u>

Yin, like Yangibana, is unique to REE deposits globally due to the high proportion of neodymium and praseodymium in the total rare earth oxides, with rock chips from Yin containing up to a 48% Nd_2O_3+Pr_6O_{11} ratio (Nd_2O_3+Pr_6O_{11} content of the TREO). As shown in the charts below, Nd_2O_3 and Pr_6O_{11} account for ~90% of the relative value of the REE despite comprising ~31% of the TREO inventory. These charts have been based on the average of all REE ironstone rock chips collected to date across the Yin Camp.





Figures 12 and 13: Two figures showing the average abundance of each REE in all rock chips collected to date (L) and the relative value of each element (R) highlighting Nd_2O_3+Pr_6O_{11} as the dominate elements of economic importance.

<u>Metallurgy:</u>

One of the key matters to determine with REE projects is the ability to create a commercial product with economically recoverable REE. Dreadnought undertook early metallurgical test work to determine the amenability of the Yin ironstones to produce a commercially treatable monazite concentrate. No test work has yet been undertaken on the recently discovered carbonatite intrusions.

An initial flotation circuit using bulk surface samples from Yin performed well, achieving a recovery of 92.8% at a concentrate grade of 12.3% Nd_2O_3 and an average 40% TREO.

In addition, powder X-ray diffraction confirmed the type of minerals hosting the REE at Yin to be predominantly monazite. Monazite is well-known to be amendable to commercial processing and as a source of REE at commercial scales.

Figures 14: Image showing the floating test work from Yin.

[1]Yin values are based on the average of all rock chips containing >0.1% TREO and may not reflect eventual Resource grades.

Mangaroon Carbonatites C1-C5 (E09/2448, E09/2450: 100% DRE)

Dreadnought's recently flown airborne magnetic and radiometric survey highlighted five ovoid features (Figure 16) interpreted as igneous carbonatite intrusions (C1-C5 targets). The intrusions range in size from 1,000m x 1,000m to 800m x 500m in dimension with internal ringing and a magnetic, possibly fenitic alteration, halo around the perimeter of the intrusions. Over 95% of the interpreted carbonatite intrusions are obscured by a calcrete and alluvial plain with rare outcrop.

Rock chip samples collected from the few outcrops within C3 and C4 confirmed REE and phosphate ("**P_2O_5**") mineralised carbonatites. Significant results include:

- **MNRK0545: 2.52% TREO (0.65% Nd_2O_3+Pr_6O_{11})**
- **MNRK0547: 1.98% TREO (0.59% Nd_2O_3+Pr_6O_{11})**
- **MNRK0542: 15.5% P_2O_5 and 0.72% TREO**

XRD analysis has also identified dolomite, microcline, and clinopyroxene, likely aegirine, confirming dolomitic carbonatites.

The intrusions are central to all known REE and niobium bearing ironstone dykes, fitting the classical carbonatite intrusion model. Ground truthing has confirmed the presence of intrusive carbonatite within these features.

Outcrops sampled consisted of both fresh and weathered carbonatites with both rock types returning REE and phosphate mineralisation with higher grades coming from weathered carbonatites. This is similar to the mineralisation at Mt Weld in Western Australia and Araxa in Brazil.

The carbonatites remain largely obscured under calcrete cover. Systematic RC drilling will be undertaken at the C1-C5 targets in August-September 2022. This program will identify areas of mineralisation under cover and improve the understanding of this obscured and newly discovered system.

Figure 15: Dreadnought's Luke Blais collecting rock chip MNRK0545: 2.52% TREO from a weathered portion of the C4 Carbonatite.

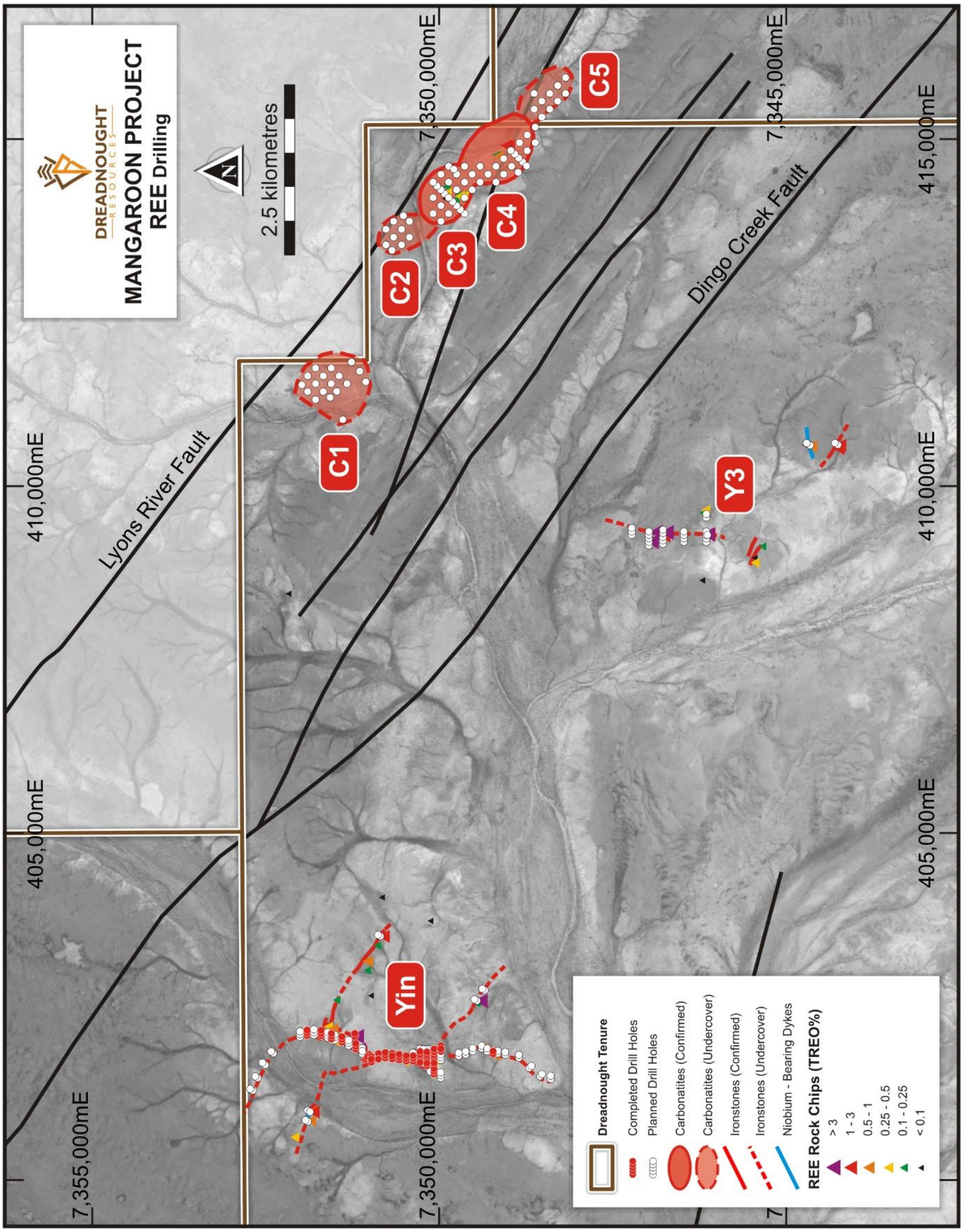


Figure 16: Plan view image showing the location of recent drilling (red dots) and planned drilling (white dots) in relation to the REE ironstones (Yin, Y3) and REE carbonatites (C1-C5) over an orthoimage.

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

Mangaroon covers >4,500 sq kms of the Mangaroon Zone in the Gascoyne Region of Western Australia. Part of the project is targeting Ni-Cu-PGE and is subject to a joint venture with First Quantum Minerals (earning up to 70%) – Figure 17 The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high-grade Yangibana REE deposits.

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.

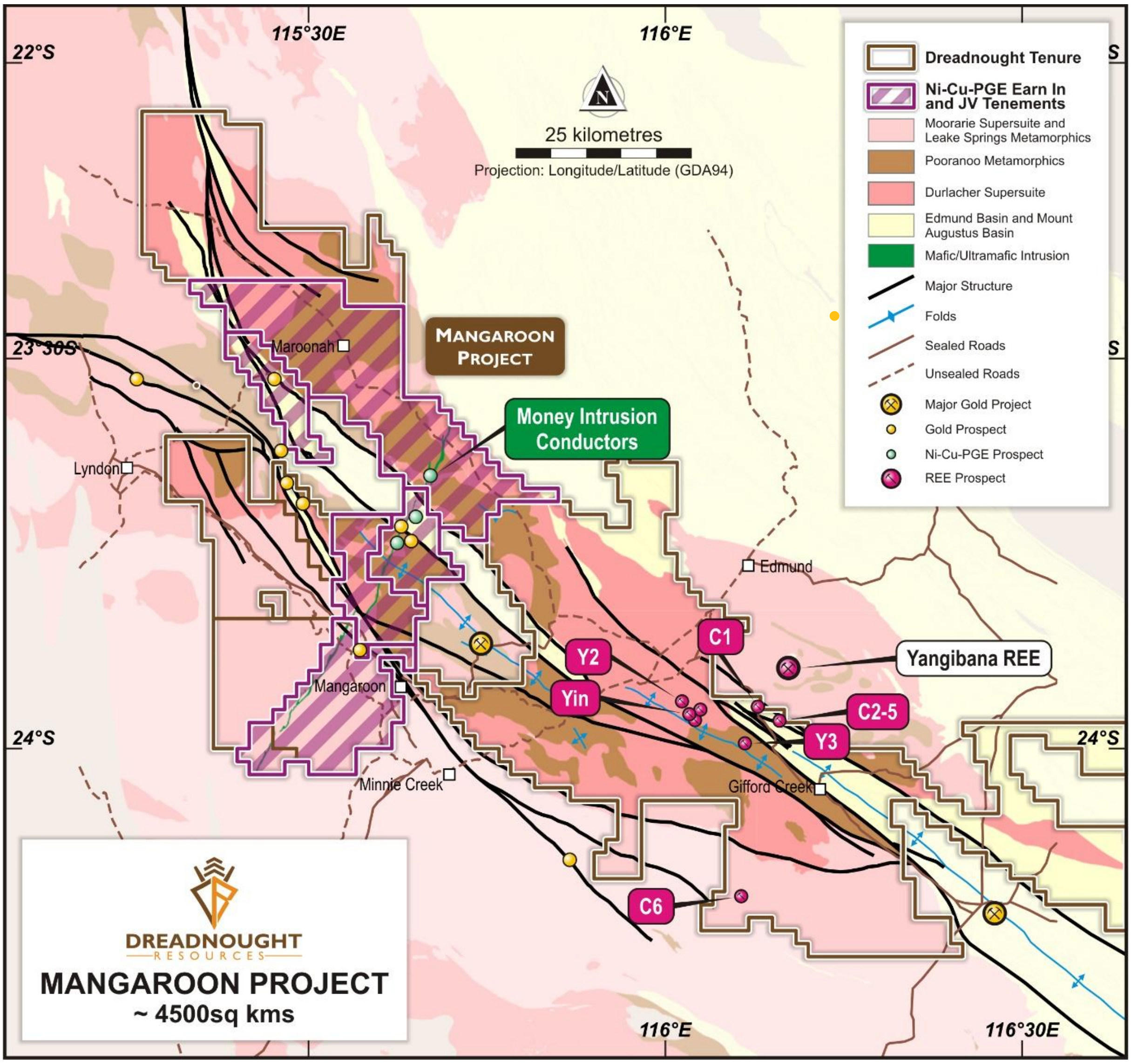


Figure 17: Plan view map of Mangaroon showing the location of the FQM JV and 100% DRE ground in relation to major structures, geology and roads.

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*
- *1 September 2021* *Encouraging Results for Rare Earths at Yin*
- *9 September 2021* *Four New REE Ironstones Discovered 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*

UPCOMING NEWSFLOW

July: Completion of the acquisition from Arrow – Central Yilgarn

July: Quarterly Activities and Cashflow Report

July: Initial REE assays from Yin ironstone (Mangaroon)

August: Further update on REE drilling at Yin and Y3 ironstones (Mangaroon)

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

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

August: Results from Central Komatiite Belt nickel sulphide target generation work (Central Yilgarn)

August: Remaining results from auger sampling program at Tarraji-Yampi

August: Assays from RC drilling at the Money Intrusion (FQM JV)

August/September: REE assays from RC drilling ironstones / carbonatites (Mangaroon)

August/September: Initial JORC Resource for Metzke's Find Au (Central Yilgarn)

August/September: Commencement of RC and diamond drilling at Tarraji-Yampi (Orion, Grant's, regional targets)

~Ends~

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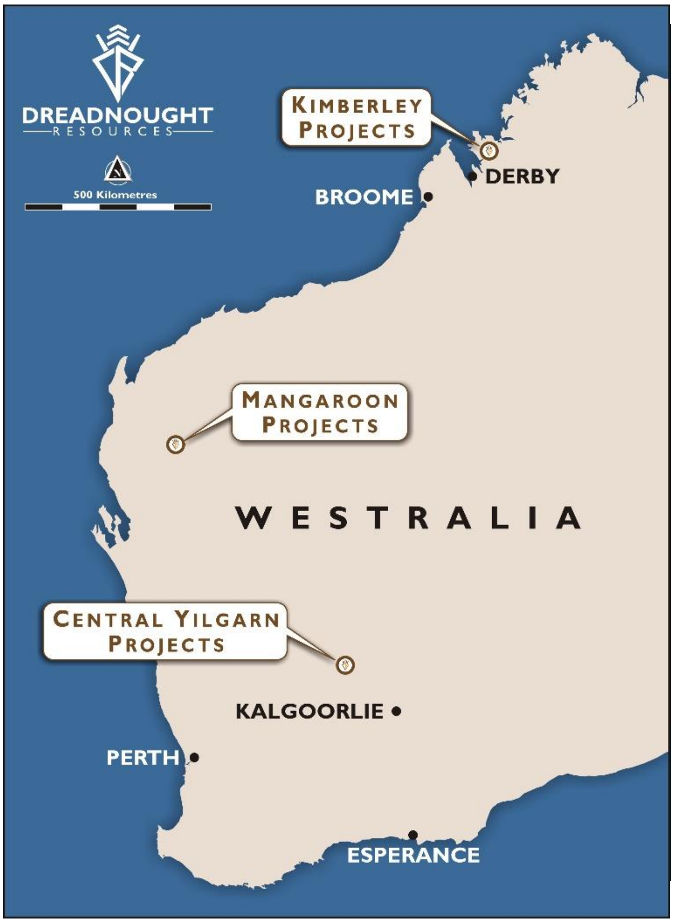
This announcement is authorised for release to the ASX by the Board of Dreadnought.

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 ~4,500sq 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: Mineralised intervals as confirmed by an infield preliminary pXRF analysis >0.2% TREO.

Hole ID	From (m)	To (m)	Interval (m)	Lithology	Prospect
YINRC001	1	34	33	Oxide ironstone and fenite alteration	Yin
YINRC002	16	17	2	Fenite alteration	
and	24	55	31	Oxide ironstone and fenite alteration	
YINRC003	23	25	2	Fenite alteration	
and	58	75	17	Oxide ironstone	
YINRC004	3	6	3	Heavily weathered iron rich saprolite	
and	12	13	1	Oxide ironstone	
and	60	63	3	Fenite alteration	
and	81	98	17	Oxide ironstone and fresh ferrocarbonatite ironstone	
YINRC005	18	29	11	Fenite alteration	
and	88	90	2	Fresh ferrocarbonatite ironstone	
and	95	129	34	Oxide ironstone and fresh ferrocarbonatite ironstone	
YINRC006	85	104	19	Oxide ironstone and fresh ferrocarbonatite ironstone	
and	139	165	26	Fresh ferrocarbonatite ironstone	
YINRC007	0	14	17	Oxide ironstone	
	17	18	1	Oxide ironstone	
YINRC008	19	40	21	Oxide ironstone and fenite alteration	
	47	48	1	Fenite alteration	
YINRC009	5	7	2	Oxide ironstone and fenite alteration	
	56	62	6	Oxide ironstone and fenite alteration	
	68	83	15	Oxide ironstone and fenite alteration	
YINRC011	106	123	17	Oxide ironstone and fresh ferrocarbonatite ironstone	
YINRC012	152	158	6	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC014	0	8	8	Oxide ironstone	
	20	25	5	Oxide ironstone	
YINRC018	1	4	4	Oxide ironstone	
YINRC019	13	32	19	Oxide ironstone	
	36	40	4	Oxide ironstone and fenite alteration	
	58	60	2	Glimmerite	
YINRC020	18	26	8	Oxide ironstone and fenite alteration	
	38	39	1	Oxide ironstone	
	50	54	4	Oxide ironstone	
YINRC021	20	22	2	Oxide ironstone	
	51	52	1	Oxide ironstone	
	77	90	15	Fenite alteration	
YINRC022	97	113	16	Fresh ferrocarbonatite ironstone and fenite alteration	
	133	137	4	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC023	3	19	16	Oxide ironstone and fenite alteration	
YINRC024	44	58	14	Oxide ironstone and fenite alteration	
	67	70	3	Oxide ironstone	
YINRC025	62	64	2	Fenite alteration	
	84	100	16	Oxide ironstone and fenite alteration	
	111	117	6	Fenite alteration	
YINRC026	25	40	15	Oxide ironstone and fenite alteration	
YINRC027	32	34	2	Fenite alteration	
	39	40	1	Fenite alteration	
	55	70	15	Oxide ironstone and fenite alteration	
YINRC028	61	63	2	Fenite alteration	
	77	111	34	Oxide ironstone and fenite alteration	
	117	123	7	Metasediments	

Hole ID	From (m)	To (m)	Interval (m)	Lithology	Prospect
YINRC029	49	51	2	Oxide ironstone	Yin
YINRC030	104	108	4	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC031	155	156	1	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC032	27	30	3	Oxide ironstone	
YINRC033	58	67	9	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC034	111	117	6	Fresh ferrocarbonatite ironstone	
YINRC035	14	21	7	Oxide ironstone and fenite alteration	
YINRC036	50	60	10	Oxide ironstone and fenite alteration	
YINRC037	93	101	8	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC038	13	15	2	Oxide ironstone	
YINRC039	62	63	1	Fenite alteration	
YINRC040	12	18	6	Oxide ironstone	
YINRC041	61	67	6	Fresh ferrocarbonatite ironstone	
YINRC042	102	109	7	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC043	12	15	3	Fenite alteration	
YINRC044	49	51	2	Fenite alteration	
and	56	59	3	Fenite alteration	
YINRC045	5	7	2	Oxide ironstone and fenite alteration	
	80	82	2	Fenite alteration	
	95	97	2	Oxide ironstone	
YINRC046	3	4	1	High Nb fenite alteration	
	9	12	3	Fenite alteration	
	29	30	1	Fenite alteration	
YINRC047	53	59	6	Fenite alteration	
YINRC048	41	42	1	Fenite alteration	
	59	60	1	Fenite alteration	
	82	83	1	High Nb fenite alteration	
YINRC052	98	99	1	Fresh ferrocarbonatite ironstone	
	106	107	1	Fresh ferrocarbonatite ironstone	
YINRC053	35	36	1	Fenite alteration	
YINRC055	27	42	15	Oxide ironstone and fenite alteration	
YINRC056	67	75	7	Oxide ironstone	
YINRC057	19	20	1	Oxide ironstone	
	46	51	5	Oxide ironstone	
YINRC058	29	31	2	Oxide ironstone	
	64	66	2	Fenite alteration	
	71	75	4	Oxide ironstone	
	83	91	8	Oxide ironstone and fenite alteration	
YINRC059	59	66	7	Oxide ironstone and fenite alteration	
	92	129	37	Oxide ironstone and fenite alteration	
YINRC060	3	12	9	Glimmerite	
YINRC061	42	45	3	Oxide ironstone and fenite alteration	
	52	56	4	Fenite alteration	
	59	61	2	Fenite alteration	
YINRC062	113	121	8	Oxide ironstone and fenite alteration	
YINRC063	8	10	2	Fenite alteration	
YINRC064	84	87	3	Oxide ironstone and fenite alteration	
	96	100	4	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC065	135	145	10	Fresh ferrocarbonatite ironstone and fenite alteration	
YINRC066	26	42	16	Oxide ironstone	
YINRC067	93	104	11	Fresh ferrocarbonatite ironstone	

Table 2: Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
YINRC001	401657	7350202	302	-60	270	81	RC	Yin
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	
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	

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
YINRC052	401863	7349988	296	-60	270	123	RC	Yin
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	

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Section 1 Sampling Techniques and Data

JORC TABLE 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Reverse Circulation (RC) drilling was undertaken to produce samples for assaying. **Preliminary pXRF analysis** 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. One 3 beam, 30 second measurement was completed for each drill metre sample. 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. 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. **Laboratory Analysis** Two sampling techniques were utilised for this program, 1m metre splits directly from the rig

Criteria	JORC Code explanation	Commentary
		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 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	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	**RC Drilling** 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".
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**RC Drilling** Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones. Best practice sampling procedure included: suitable usage of dust suppression, suitable shroud, lifting off bottom between each metre, cleaning of sampling equipment, ensuring a dry sample and suitable supervision by the supervising geologist to ensure good sample quality. At this stage, no known bias occurs between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*	RC chips were logged by a qualified geologist with sufficient experience in this geological terrane and relevant styles of mineralisation using an industry standard logging system which could eventually be utilised within a Mineral Resource Estimation. Lithology, mineralisation, alteration, veining, weathering and structure were all recorded digitally.

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	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 techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Preliminary pXRF analysis** pXRF analysis of pulverised and partially homogenised reject RC sample piles is fit for purpose as a preliminary exploration technique. 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. **RC Drilling** From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter. QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the ore zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after. 2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.66g charge for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30) and to produce a 0.25g charge for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61). Standard laboratory QAQC is undertaken and monitored.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	**Preliminary pXRF analysis** Olympus Vanta M Series pXRF analyser is used to provide preliminary quantitative measurement of mineralisation. A 3-beam, 30 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. Calibration checks of the pXRF are undertaken daily, a silica blank and certified REE standard OREAS 461 is routinely analysed to monitor pXRF performance. **Laboratory Analysis** Lithium borate fusion is considered a total digest and Method ME-XRF30 is appropriate for REE determination.

Criteria	JORC Code explanation	Commentary
		Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receival.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	**Preliminary pXRF analysis** 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 surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z). GDA94 Z50s is the grid format for all xyz data reported. Azimuth and dip of the drill hole was recorded after the completion of the hole using a Reflex Sprint IQ Gyro. A reading was undertaken every 30th metre with an accuracy of +/- 1° azimuth and +/-0.3° dip.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	See drill table for hole positions. Data spacing at this stage is not suitable for Mineral Resource Estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the ironstone outcrops and modelled magnetic data. No sample bias is known at this time.
Sample security	• *The measures taken to ensure sample security.*	All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Exmouth Haulage in Exmouth. Samples were delivered directly to ALS Laboratories Perth by Exmouth Haulage out of Exmouth.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The program is continuously reviewed by senior company personnel.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Mangaroon Project consists of 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, E09/2535) and 3 pending Exploration Licenses (E08/3275, E09/2616, E09/2620) • All tenements are 100% owned by Dreadnought Resources. • 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. • E08/3178, E09/2370, E09/2384 and E09/2433 are subject to a 2% Gross Revenue Royalty held by Beau Resources. • E08/3274, E08/3275, E09/2433, E09/2448, E09/2449, E09/2450 are subject to a 1% Gross Revenue Royalty held by Beau Resources. • E09/2359 is subject to a 1% Gross Revenue Royalty held by Prager Pty Ltd. • The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016) • The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, Towera and Uaroo Stations
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX announcement including: Regional Resources 1986-1988s: WAMEX Reports A23715, 23713 Peter Cullen 1986: WAMEX Report A36494 Carpentaria Exploration Company 1980: WAMEX Report A9332 Newmont 1991: WAMEX Report A32886

Criteria	JORC Code explanation	Commentary
		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	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	An overview of the drilling program is given within the text and tables within this document.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	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	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation. The true thickness of the mineralisation intersected in drill holes cannot currently be calculated.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant*	Refer to figures within this report.

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