16 June 2022

FIRST DRILLING AT YIN INTERSECTS SHALLOW, THICK, HIGH-GRADE RARE EARTHS

HIGHLIGHTS

- **RC drilling has commenced at the Rare Earth Element ("REE") bearing ironstones and carbonatites prospects at the 100% owned Mangaroon Project.**
- **Initial drilling of the >2.5km long, outcropping, Yin ironstone (66 holes, ~5,600m) has intersected thick, high-grade REE mineralisation in all six of the first drill holes. Significant preliminary pXRF* results from the first line of drilling at Yin include:**
    - **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.**
- **Drilling is expected to take 3 months to complete with regular updates throughout July to October 2022.**
- **Samples from these first holes have been dispatched for rush analysis.**

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

Drilling is underway at the Yin REE ironstone where 66 holes for ~5,600m will be drilled. Drilling has intersected multiple ironstones from surface with upwards of 50m of combined mineralisation to a depth of 180m, with mineralisation remaining open at depth and along strike. All samples have been analysed in the field by a handheld pXRF unit indicating the tenor of the REE mineralisation. Samples have been dispatched for rush analysis. Further updates from Yin will be announced as additional drill lines are completed.

Dreadnought's Managing Director, Dean Tuck, commented: *"Drilling of the rare earth ironstones at Mangaroon is off to a fantastic start with every hole of the first drill line intersecting significant thicknesses of mineralised ironstone. The intercepts have exceeded expectations and puts Yin on the path to be a significant REE discovery. Samples have been rushed for assay and as drilling progresses, we will provide additional updates. To achieve this result nearly one year to the day of our first rock chips results at Yin is a significant accomplishment and a testament to the hard-working Dreadnought team and our positive working relationships with all stakeholders involved."*

Figure 1: Dreadnought's Luke Blais, Frank Murphy, Matt Crowe and Sam Busetti holding the YINRC001 chip trays containing 34m of mineralised ironstone from 1m depth.

The measurement of Rare Earth Elements using a pXRF is a method that has been used at Mangaroon and other REE projects in Australia. Performance to OREAS standards demonstrates a strong correlation between pXRF data and certified values. However, pXRF is only a preliminary indication of the expected order of magnitude for final REE analysis. The samples that are the subject of this report will be submitted for laboratory assay and some variation from the pXRF results presented herein should be expected.

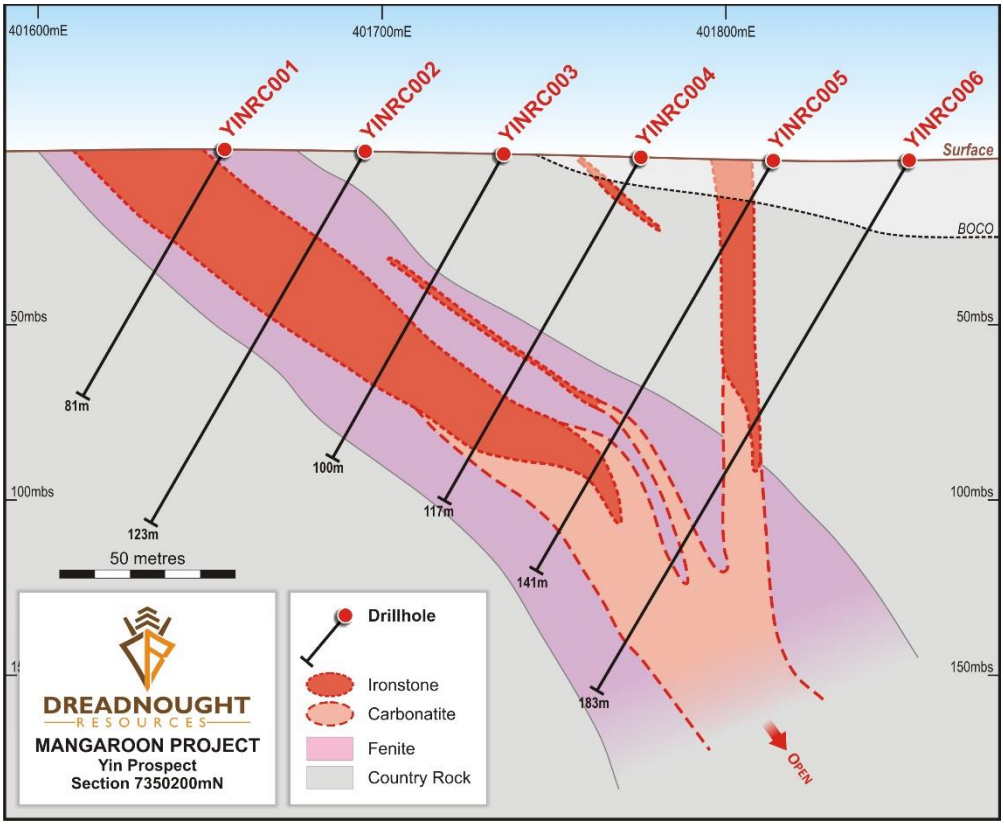


Figure 2: Cross section through Line 7350200 shows drilling has intersected a shallowly-dipping 20-40m wide western, and a 10m-wide steeply dipping eastern ferroan-carbonatite that is weathered to an ironstone in the top 80 vertical metres.

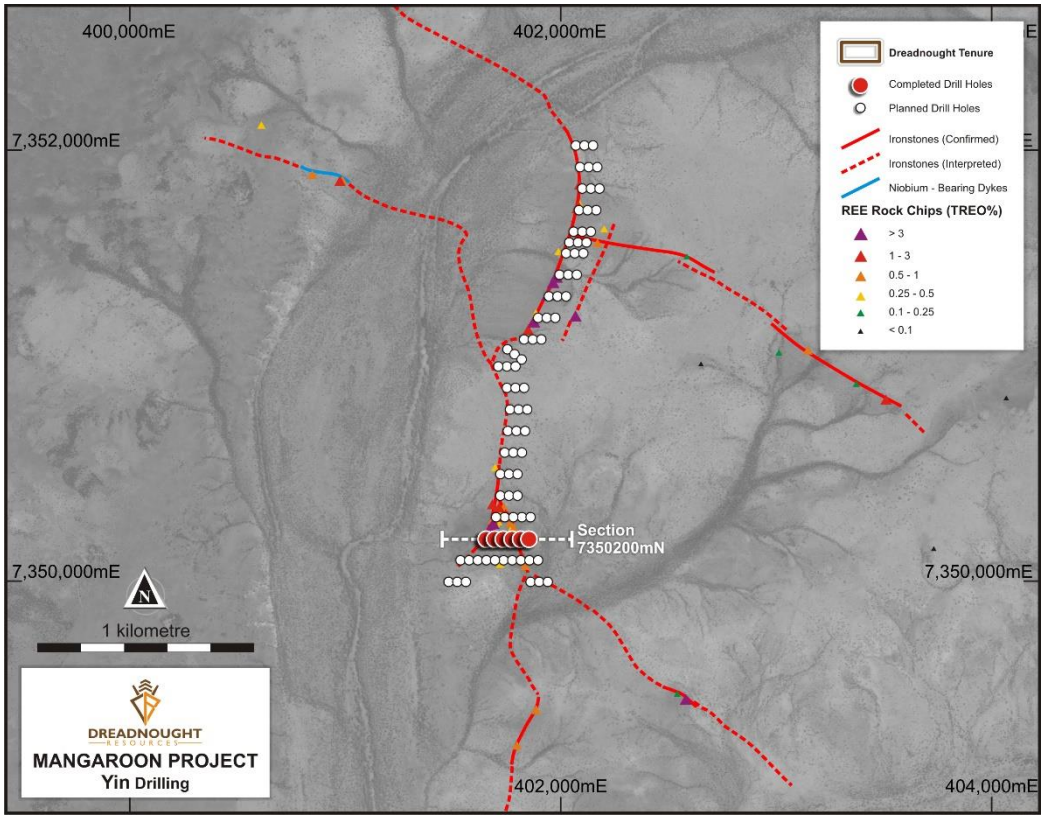


Figure 3: Plan view image showing the location of the recently drilled line (red dots) and planned drilling (white dots) in relation to the >2.5km long Yin outcropping ironstone over an orthoimage.

Technical Discussion: YINRC001-YINRC006

Yin is a >2.5km long, outcropping, REE bearing ironstone with possible extensions under cover. Yin shows evidence for parallel or stacked ironstone horizons (see figure 2). Rock chips collected in 2021 showed consistent mineralisation over the >2.5km of outcrop 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.

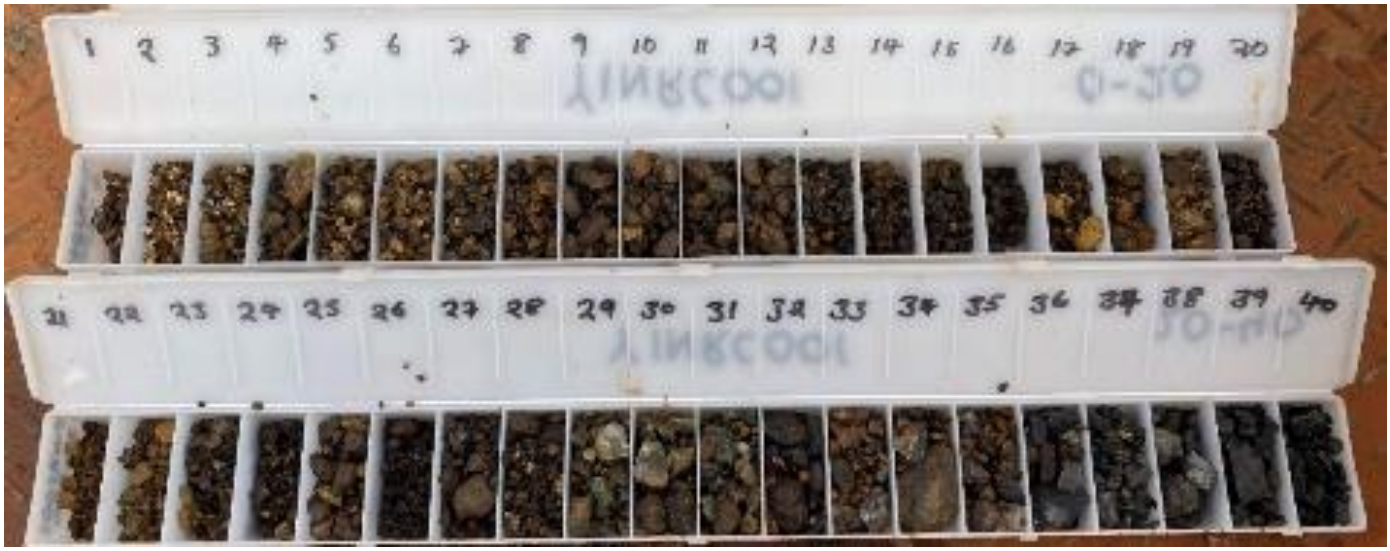


Figure 4: Chip tray from YINRC001 showing mineralised ironstone from 1-34m containing 2.5% TREO.

The first line of drilling (at YINRC001-006) intersected a 20-30m wide ironstone dyke consisting of goethite and hematite near surface (top ~80m) grading into a fresh ferroan-carbonatite dyke, comprised of ankerite and siderite below the base of oxidation. The ironstones are surrounded by a zone of fenitised country rock. Both the ironstone and the fenite immediately surrounding the ironstone are mineralised with each ironstone and ferroan-carbonatite containing a central interval of higher-grade mineralisation.

The drilling so far shows two trends of ironstones – a 20-30m-wide high-grade western dyke that dips at about 40 degrees to the east, and an eastern 10m wide, steeply dipping dyke of moderate grade. Line 7350200 shows the dykes appearing to converge towards each other at depth, and may represent splays from a larger, singular parent dyke (Figure 2). A similar observation can be seen in plan view, as a singular north-trending ironstone is interpreted 200m north of the current drilling, that appears to split into a western and eastern portion to the south (Figure 3).

Table 1: Significant (>0.5% TREO) preliminary pXRF results from 1m RC sample piles. Intervals with >2% TREO highlighted.

Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Prospect		Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Prospect
YINRC001	**1**	**34**	**33**	**2.5**	Yin		YINRC004	60	63	3	0.6	Yin
Incl.	**11**	**21**	**10**	**6.3**			and	81	98	17	1.3	
YINRC002	23	25	2	0.9			**Incl.**	**90**	**93**	**3**	**2.9**	
and	24	55	31	1.2			YINRC005	18	29	11	0.8	
Incl.	**29**	**31**	**2**	**4.5**			and	88	90	2	1.3	
YINRC003	23	25	2	0.9			**and**	**95**	**129**	**34**	**2.9**	
and	**58**	**75**	**17**	**2.2**			**Incl.**	**104**	**124**	**20**	**4.2**	
Incl.	**58**	**67**	**9**	**3.3**			YINRC006	85	104	19	0.9	
YINRC004	3	6	3	0.6			and	139	165	26	1.4	
and	12	13	1	1.5			**Incl.**	**157**	**164**	**7**	**3.0**	

REE ironstones and niobium-bearing veins Mangaroon (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 (Figure 10). 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.

However, 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.

Mapping and interpretation of the recently flown magnetic and radiometric survey has highlighted Yin, Y2, Y3 and significant clusters of REE and niobium ironstones. Surface sampling undertaken at the end of 2021, utilising the recent survey, has resulted in the highest-grade rock chip to date (**MNRK0529: 39.7% TREO (6.30% $Nd_2O_3+Pr_6O_{11}$)**) from Y3 and the identification and confirmation of high-grade niobium ("**Nb_2O_5**") veins at both Y2 and Y3 with significant results including:

- **MNRK0528: 15.2% Nb_2O_5, 21.5% ZrO_2**
- **MNRK0526: 12.9% Nb_2O_5 and 0.67% TREO**

Yin, Y2 and Y3 will be RC drill tested in June-August 2022 with an aim to deliver an initial JORC 2012 Resource.

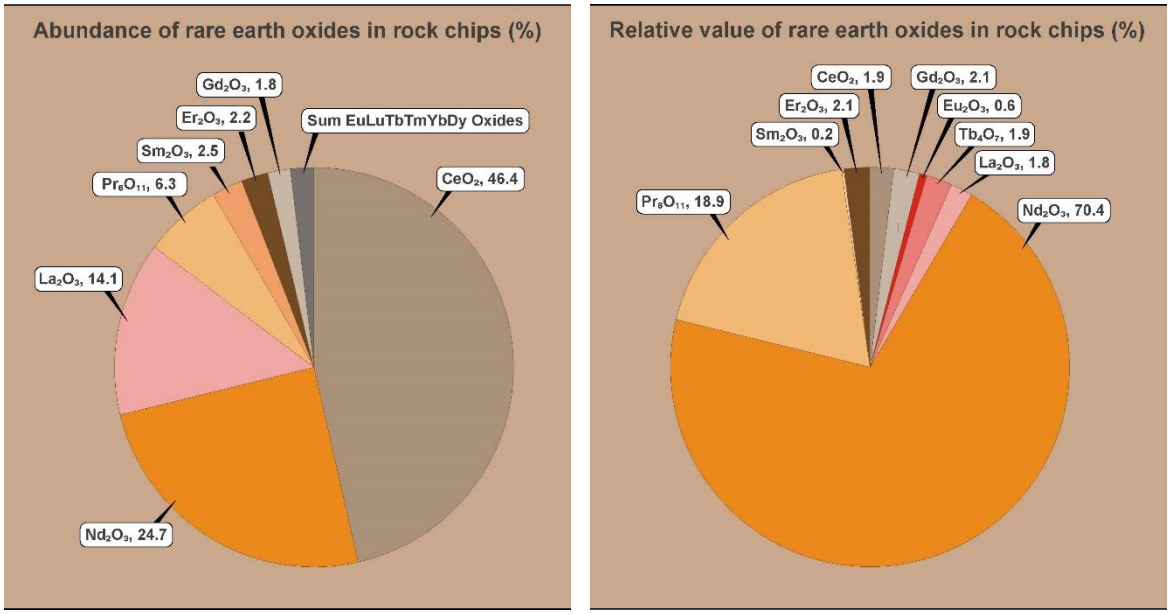
**HAS.ASX: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%"*

Figure 5: Dreadnought's Luke Blais, Dean Tuck and Nick Chapman (L to R) mapping and sampling an outcropping REE ironstone at Yin immediately after it was first identified just over a year ago – June 2021.

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

Mineralogy:

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 6 and 7: 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.

Metallurgy:

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.

[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: 100% DRE)

Dreadnought's recently flown airborne magnetic and radiometric survey highlighted five ovoid features (Figure 9) 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 fenite 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. Recent 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 June-August 2022. This program will identify areas of mineralisation under cover and help improve the understanding of this obscured and newly discovered system.

Figure 8: Dreadnought's Luke Blais collecting rock chip MNRK0545: 2.52% TREO from a weathered portion of the C4 Carbonatite.

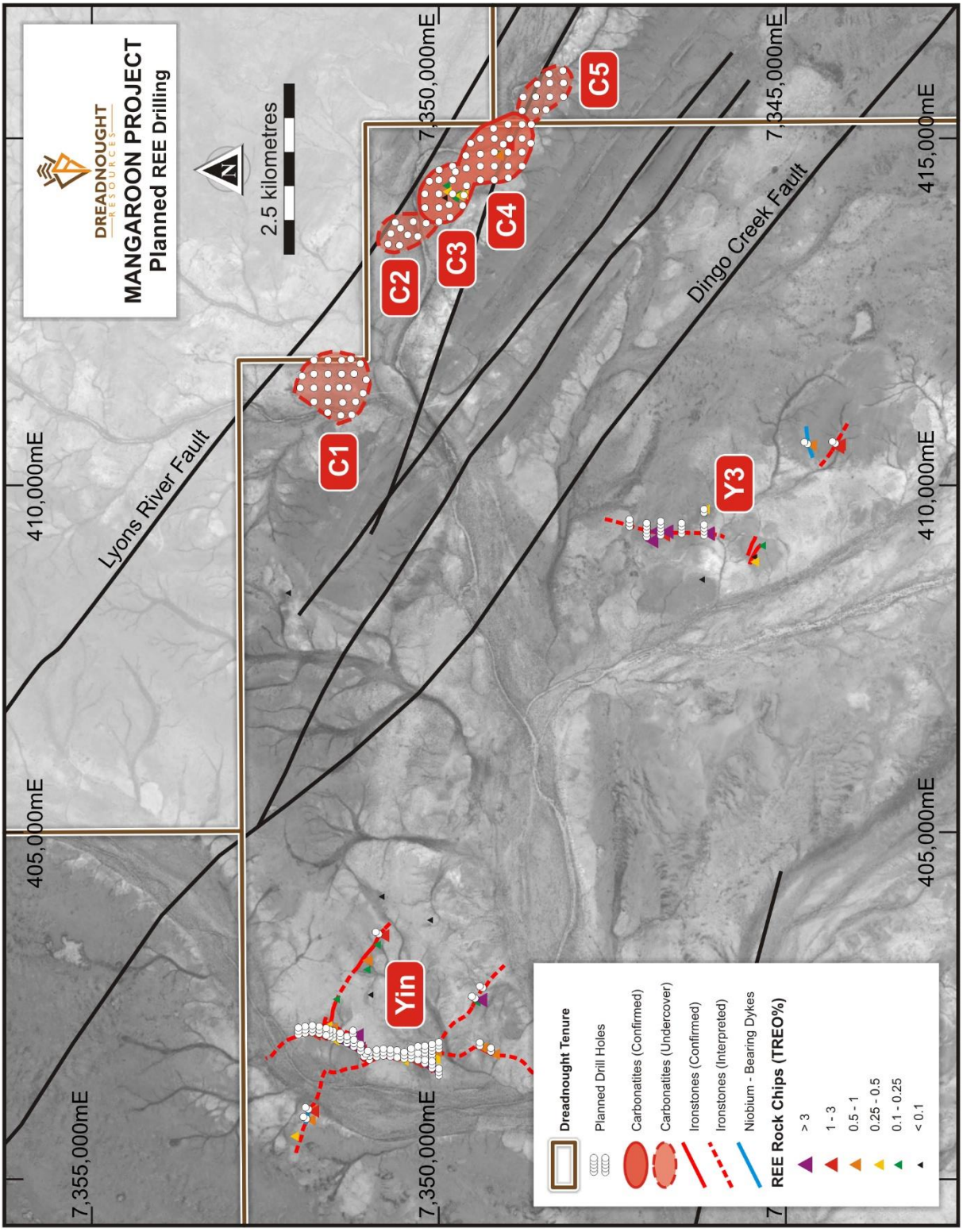


Figure 9: Plan view image showing the location of planned drilling (white dots) in relation to the REE ironstones (Yin, Y3) and REE carbonatites (C1-C5) over an orthoimage.

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 10. 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.

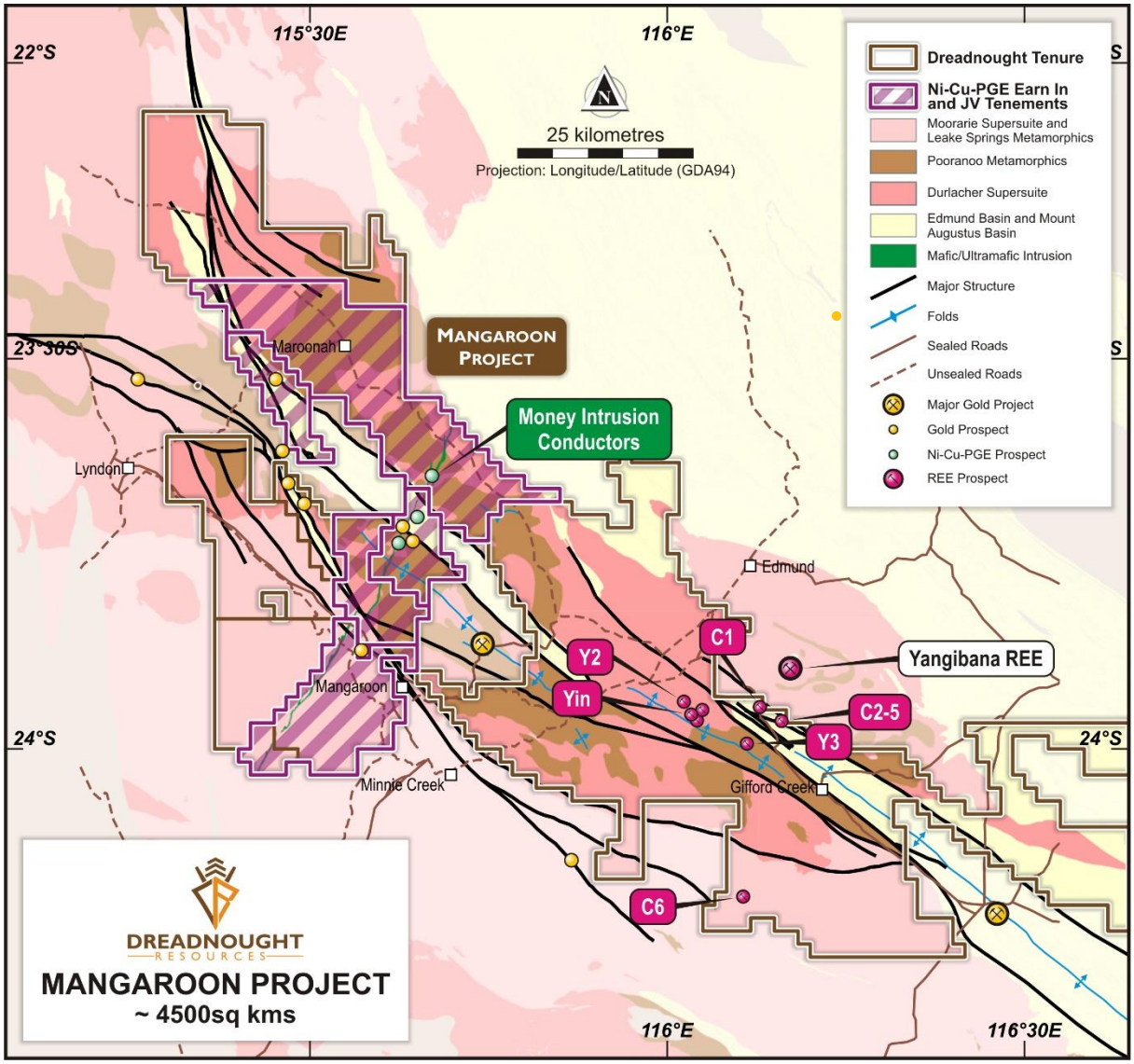


Figure 10: Plan view map of Mangaroon showing the location of the FQM JV and 100% DRE ground in relation to major structures, geology and roads.

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*

UPCOMING NEWSFLOW

June: Assays from Peggy Sue pegmatite sampling (Illaara)

June: Assays from RC drilling at Nelson and Trafalgar (Illaara)

June: Results from Central Komatiite Belt nickel sulphide target generation work (Illaara)

June: Assays from RC drilling at Metzke's Find, Kings, Spitfire (Illaara)

June: Drilling update, Yin REE ironstone (Mangaroon)

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

June/July: Results from auger sampling program at Tarraji-Yampi

22-23 June: Presenting at the Gold Coast Investment Showcase

July/August: Rare earth assays from RC drilling ironstones / carbonatites (Mangaroon)

July/August: Initial JORC Resource for Metzke's Find Au (Illaara)

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.

Illaara Gold, Base Metals, Critical Minerals & Iron Ore Project

Illaara is located 190km northwest of Kalgoorlie in the Yilgarn Craton and covers 75kms of strike along the Illaara Greenstone Belt. Illaara is prospective for typical Archean mesothermal lode gold deposits, VMS base metals and critical metals including Lithium-Caesium-Tantalum.

Dreadnought has consolidated the Illaara Greenstone Belt mainly through an acquisition from Newmont. Prior to Newmont, the Illaara Greenstone Belt was predominantly held by iron ore explorers and remains highly prospective for iron ore.

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	

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.)

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 meter sample. The pXRF instrument is calibrated and serviced annually or more frequently as required with daily instrument calibration completed. Additionally, 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. Portable (pXRF), especially 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 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

Criteria	JORC Code explanation	Commentary
		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. A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, unmineralised samples have 3m composites collected and submitted to ALS laboratories in Perth. 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.* • *The total length and percentage of the relevant intersections logged.*	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. 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.

Criteria	JORC Code explanation	Commentary
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 of the pXRF is undertaken daily 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. 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*	**Preliminary pXRF analysis** Analytical data was collected directly by the Olympus Vanta M Series pXRF analyser and downloaded by digital transfer to an exvel sheet with inbuilt QAQC. All data was checked by the

Criteria	JORC Code explanation	Commentary
	(physical and electronic) protocols. • *Discuss any adjustment to assay data.*	responsible geologist and filed away. **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.
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 7 granted Exploration License (E08/3178, E09/2359, E09/2370, E09/2384, E09/2433, E09/2473, E09/2478) and 11 pending Exploration Licenses (E08/3274, E08/3275, E08/3439, E09/2448, E09/2449, E09/2450, E09/2467, E09/2531, E09/2535, 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 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 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

Criteria	JORC Code explanation	Commentary
		orogenic gold, magmatic Ni-Cu-PGE mineralisation and Ferrocarbonatite 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 0.5% TREO have been reported. Significant intercepts are length weight averaged for all samples with a preliminary pXRF value >0.2% TREO with up to 2m 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 discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to figures within this report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be*	The accompanying document is a balanced report with a suitable cautionary note.

Criteria	JORC Code explanation	Commentary
	practiced to avoid misleading reporting of Exploration Results.	
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