

28 December 2022

INITIAL HIGH-GRADE, INDEPENDENT RESOURCE OVER 3KM AT YIN – MANGAROON (100%)

HIGHLIGHTS

- Initial Independent JORC 2012 Mineral Resource (“Resource”) over 3kms of the Yin REE Ironstone Complex delivers significant high-grade foundation for substantial Resource growth. The initial Resource of 14.36Mt @ 1.13% TREO is based on 2.5 months of RC drilling (117 holes | 11,907m) between June-August 2022.
- The robust nature of the initial Yin Inferred Resource is demonstrated by significant contained $\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ (“Nd+Pr”) at various cut-off grades with the lowest (0.20% TREO) approximating the cut-off used at the close-by and advanced-stage Yangibana Project:

Mt	TREO (%)	$\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ (%)	NdPr:TREO (%)	Contained TREO (t)	Contained $\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ (t)	Cut-Off (%TREO)
14.36	1.13	0.34	30%	162,291	48,529	0.20
8.67	1.65	0.50	31%	142,973	43,646	0.60
4.59	2.17	0.67	31%	99,625	30,989	1.50

Table 1: Yin Inferred Resource of 14.36Mt @ 1.13% TREO as adjusted for different cut-off grades.

- Initial Resource only covers ~10% of the Yin Ironstone Complex which currently consists of ~30kms strike. Importantly this Resource does not include the Sabre or Y8 ironstone discoveries nor any of the C1-C7 carbonatites.
- RC and diamond drilling will recommence in February/March 2023 along the ~30km of strike at Yin as well as the C1-C7 carbonatites. Additional Resource updates will be announced during 2023.

Dreadnought Resources Limited (“Dreadnought”) is pleased to announce the initial Resource covering only 3kms of the ~30km long Yin Ironstone Complex at the 100% owned Mangaroon, located in the Gascoyne Region of Western Australia.

Dreadnought’s Managing Director, Dean Tuck, commented: *Since drilling commenced in June 2022, Dreadnought has delivered a substantial initial Resource over just 3kms of Yin paving the way for significant Resource growth drilling in*



2023. The initial independent Resource confirms Yin as a high-grade and high Resource intensity deposit. Both material factors in a project’s economics. Yin also has some of the highest NdPr:TREO ratios in the world. We are proud of how much has been achieved in such a short space of time. We are also looking forward to building on our success in 2023.”

Figure 1: Photo of Dreadnought’s Luke Blais, Frank Murphy, Matt Crowe and Sam Busetti with the YINRC001 discovery hole in June 2022.



SNAPSHOT - MANGAROON RARE EARTHS

100% Owned by Dreadnought

- Mangaroon REE-Nb-Ti-P is 100% owned by Dreadnought.

Genuine Scale Potential Already at Yin Ironstone Complex

- Initial independent Yin Resource of 14.36Mt @ 1.13% TREO covers only 3km of 30km of strike and is based on only 2.5 months of RC drilling (11,907m). Yin remains open over an additional 27km of strike and at depth.
- At a cut-off grade of 0.20% TREO the Resource amounts to 14.36Mt @ 1.13% TREO. Over the 3km of the 30km long strike of the Yin Ironstone Complex, this equates to a Resource intensity of ~4.8Mt/km and strong potential for Mangaroon to become a large-scale, globally significant REE project.
- First tranche of long-term incentives now triggered with balance on track to be triggered at JORC Resource of at least 30Mt @ >1% TREO by 31 December 2024.

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

- C1-C7 carbonatites may be the regional source of REE – initial drill program expands C1-C5 to ~6.5kms in strike length x 1km wide.
- 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, Multi-Metal Potential Including Neodymium, Praseodymium, Niobium, Titanium & Phosphorus

- Yin, like the Yangibana REE project controlled by the ~\$460M Hastings Technology Metals Ltd (ASX.HAS), (“Hastings”) is globally unique due to the high proportion of NdPr in the total rare earth oxides (“NdPr:TREO” ratio).
- Six coherent zones of REE-Nb-Ti-P successfully identified within C1-C5 carbonatites.

Potentially Attractive Mining Proposition

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

Positive Metallurgy Results

- Initial metallurgical test work from Yin performed well, achieving a recovery of 92.8% at a concentrate grade of 12.3% Nd₂O₃ and an average 40% TREO.
- REE at Yin is predominantly hosted in monazite which is amenable to commercial processing.
- Significant metallurgical study from 16 diamond holes drilled at Yin underway – results expected April/May 2023.

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

- Yangibana is located only 25km to the northeast of Yin and currently has a Resource* of 29.93Mt @ 0.93% TREO with 0.32% Nd₂O₃+Pr₆O₁₁ (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.

**HAS.ASX: 11 Oct 2022 Drilling along 8km long Bald Hill-Fraser’s trend increases indicated resources by 50%”; 15 Dec 2022 Potential identified to significantly expand Yangibana Resource Base*

Discussion

Outcropping REE mineralisation was first observed at Mangaroon in July 2021. Since then, ~30kms of REE bearing ironstones and 7 carbonatite intrusions have been identified.

To date, 257 RC holes and 23 diamond holes have been drilled along the Yin REE Ironstone Complex and C1-C5 Carbonatites. The first drill holes ever drilled into this newly discovered complex commenced in June 2022. The first six months of drilling has delivered 3 REE ironstones discoveries (Yin, Sabre and Y8), including an independent Resource at Yin and defined significant REE-Nb-Ti-P mineralisation at the C1-C5 carbonatites.

The initial independent Resource at Yin covers only 3kms of the Yin Ironstone Complex and has delivered a significant high-grade foundation for substantial Resource growth. The Initial inferred Resource is based on 2.5 months of RC drilling (117 holes | 11,907m) between June-August 2022.

The robust nature of the initial Yin Resource is demonstrated by significant contained Nd+Pr at various cut-off grades with the lowest (0.20% TREO) approximating the cut-off used at the Yangibana Project belonging to Hastings Technology:

The Resource does not include drilling at:

- the Yin south-east, Sabre and Y8 ironstones;
- the 9 extensional RC holes which extended the Yin ironstone mineralisation at depth and which remains open at depth and along strike; and
- the C1-C7 carbonatites.

The Resource is expected to grow substantially as drilling advances on these fronts in 2023.

All approvals are now in place to continue drilling along strike from Yin and Sabre which will commence in February / March 2023. This drilling is expected to deliver additional Resources and Resource upgrades along the 30km long Yin Ironstone Complex.



All approvals at C1-C6 are also in place with drilling to commence in March 2023.

Assays from initial drilling at Sabre, Y8 and the C1-C5 carbonatites are expected in January/February 2023.

Figure 2: Photo of the RC rig drilling at Yin with outcropping ironstone in the foreground.



Material Information Summary – Resource Estimation

Pursuant to ASX listing rule 5.8.1 and complementing JORC Table 1 (attached), Dreadnought advises that the Resource was estimated by independent consultants from Widenbar and Associates Pty Ltd (“**Widenbar**”). Widenbar worked in conjunction with Dreadnought’s geologists and Payne Geological Services Pty Ltd. Commentary on the relevant input parameters for the Resource process is contained at the end of this announcement.

Location

Mangaroon is located ~250kms south-east of Exmouth, in the Gascoyne Region of Western Australia. This announcement only covers 3km of the Yin and Yin South REE deposits, part of the 30km long Yin Ironstone Complex.

Dreadnought’s 100% owned areas contain outcropping high-grade REE ironstones, similar to those under development at Yangibana. In addition, the C1-C7 carbonatites also owned 100% by Dreadnought, may be the source of the regional REE mineralisation.

Geological Interpretation and Wireframing

Mangaroon occurs within the Gascoyne Province of the Capricorn Orogen, situated between the Archean Pilbara and Yilgarn cratons. The Gascoyne Province consists of a basement suite of Neoarchean to Palaeoproterozoic granite gneisses that are overlain by various Proterozoic rocks. These Proterozoic rocks include:

- the 1830–1780 Ma Moorarie Supersuite consisting of granitic rocks;
- the Durlacher Supersuite, a unit comprising granitic and minor gabbroic intrusions that are heavily deformed and believed to be largely synchronous with the 1680-1620 Ma Mangaroon Orogeny; and
- the c. 1680 Ma Pooranoo Metamorphics comprising of pelitic gneiss and metamorphosed feldspathic sandstones.

REE-bearing ironstones and carbonatites form components of the ~1370 Ma Gifford Creek Carbonatite Complex (“**GCCC**”). GCCC is an area surrounding the Lyons River Fault, which is the major crustal structure formed during the suturing of the Neoarchean Glenburgh Terrane with the Archean Pilbara Craton during the 2215-2145 Ma Ophthalmian Orogeny.

The rocks of the GCCC include calcite carbonatite, dolomite carbonatite, ankerite-siderite carbonatite, magnetite-biotite dykes, fenites, glimmerites and REE-bearing ironstones and carbonatite plugs. The previously defined boundary of the GCCC has been significantly expanded due to discoveries by Dreadnought. The newly defined extent is estimated in Figure 3 below. A series of central carbonatite plugs (C1-C7) form the central intrusions in the region while the highly fractionated ferrocarbonatite dykes form cone sheets around the intrusions and the radial/ring dykes splay off the intrusions.

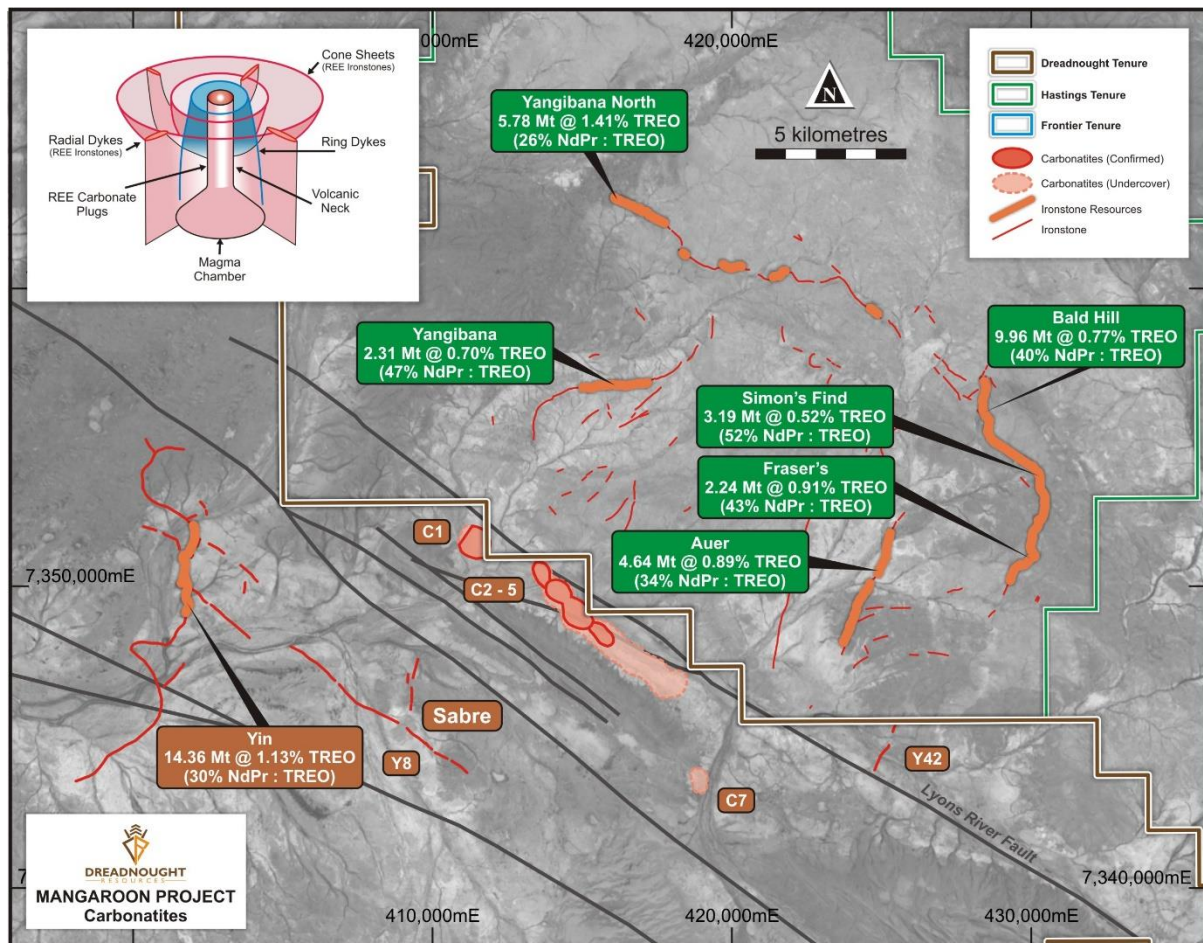
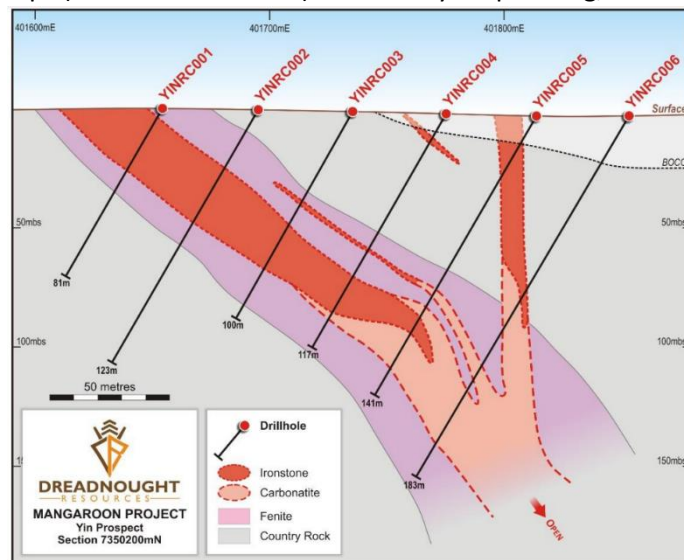


Figure 3: Local geological relationships between central carbonatite plugs C1-C7 (C6 off image) and the known ironstones across projects held by Dreadnought and Hastings. Ironstones that contain Resources are highlighted by a boldened line and call out of the Resources.

Mineralisation is controlled by REE-bearing ferrocarbonatite and magnetite dykes that weather to iron oxide-rich assemblages termed “ironstones” near the surface, with a transitional boundary typically between 60-130m vertical depth. Mineralised zones at Yin exhibit variable widths (1 to >50m) and dips (~30° to sub-vertical) with the dykes pinching, swelling and bifurcating along strike and down dip.



Mineralogy in the oxidised portions primarily consists of goethite, hematite and monazite while the fresh carbonatite consists of siderite, ankerite, monazite and bastnaesite. A zone of fenitised (altered) country rock rich in alkali-bearing minerals surrounds the main deposit and appears mineralised by veins and subordinate dykes of ironstone and ferrocarbonatite that branch off the main deposit.

Figure 4: Typical geological/mineralisation cross-section

Dreadnought supplied a detailed Digital Elevation Model for the whole of Mangaroon. This was subset into a smaller version to cover the Yin and Yin South deposits.

Dreadnought's drill hole database identified the Base of Complete Oxidation ("**BOCO Depth**") and the Top of Fresh material ("**TOFR Depth**"). The material between these two down hole depths is considered transitional.

The BOCO Depth is generally quite shallow, typically from 0 to 5m, whereas the TOFR Depth can typically be between 50-80m below surface. The position of these depths is used in conjunction with weathering logging in the lithology data to generate BOCO Depth and TOFR Depth. In turn, this data is used in conjunction with lithology logging in assigning density and also in differentiating between fresh and partially oxidised carbonatite (i.e. ironstone when not fresh).

Dreadnought geologists simplified and re-coded the lithology and digitised/wireframed a new interpretation.

This was provided in DXF format as two files containing the interpreted dykes and the fenite bodies.

The TOFR Depth was then used to split the single dyke into ironstone (above) and carbonatite (below). In addition, the dyke and fenite wireframes were split into individually connected wireframes for Resource domaining.

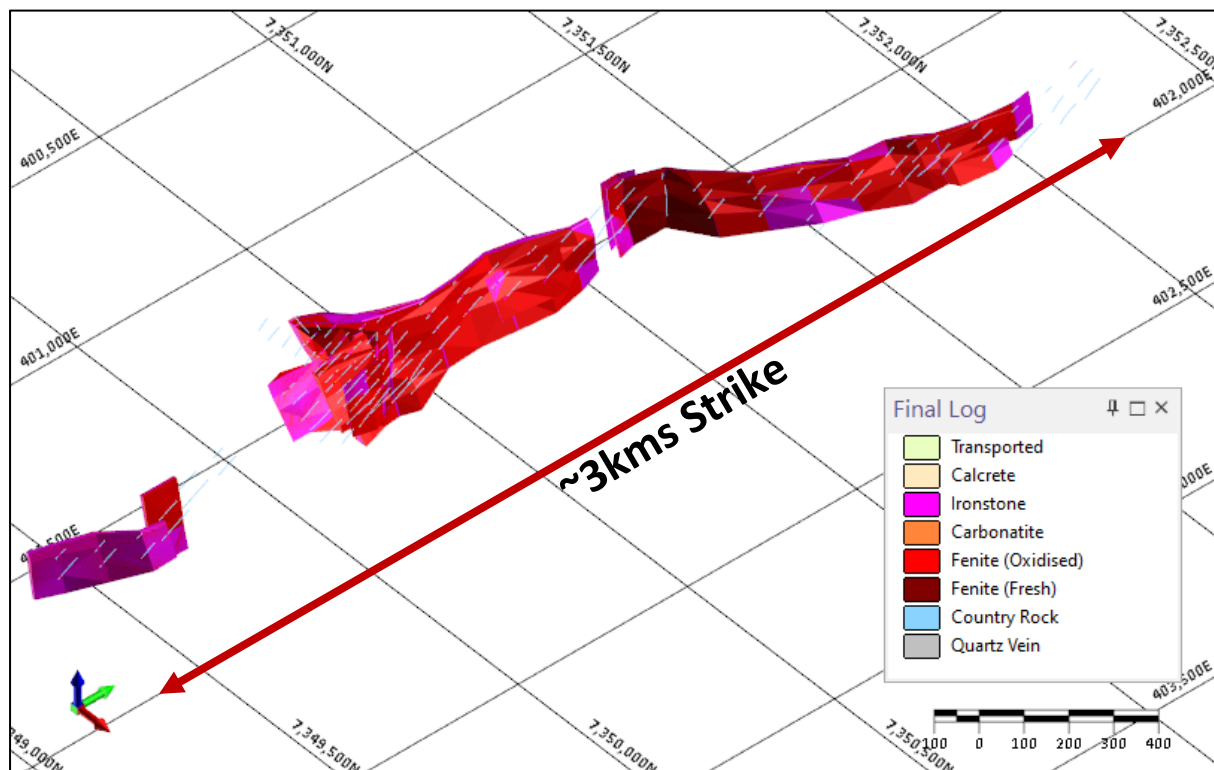


Figure 5: Geological wireframes highlighting ironstone, carbonatite and fenite over ~3kms strike.



Drilling Techniques

Dreadnought's drilling at Yin was conducted by Ausdrill using Reverse Circulation ("RC") drilling and by Hagstrom using diamond ("DD") drilling techniques. In total, 117 RC holes have been drilled, sampled and assayed to estimate the Resource. In addition, 21 DD holes were drilled and sampled to produce samples for density measurements and future (ongoing) metallurgical testing and additional QAQC analysis. The results of the DD holes will be factored into future Resource upgrades.

All holes used in the Resource estimation have been previously reported to the ASX with the necessary additional collar and assay details provided. These details are also located in Tables 10 and 11 of this report.

RC holes were drilled with a 5¾-inch bit and face sampling hammer. RC holes are drilled with some water injection at the bit for dust suppression and with the use of booster/auxiliary air when, or if, ground water was encountered. A total of 126 RC holes were drilled for a total of 13,272m. The initial Resource is based on the first 2.5 months of RC drilling (117 holes | 11,907m) between June-August 2022.

DD holes were drilled as orientated HQ and NQ size with no RC pre-collars. A total of 21 DD holes were drilled for 1,832m during the period between August-November 2022.

The Resource does not include drilling at:

- the Yin south-east, Sabre and Y8 ironstones;
- the 9 extensional RC holes which extended the Yin ironstone mineralisation at depth and which remains open at depth and along strike; and
- the C1-C7 carbonatites.

Collar positions were 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 each drill hole were 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.

Sampling and Subsampling Techniques

RC samples were collected using two techniques, 1m splits directly from the rig sampling system and 3m composite sampling from spoil piles.

From every 1m drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter. All remaining spoil from the sampling system was collected in buckets and 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.

The rig geologist used preliminary pXRF analysis of pulverised and partially homogenised reject RC sample piles to define mineralised zones which were subsequently sampled in detail (the 1m splits) and the unmineralised zones sampled by 3m composite.



All samples were then sent for full laboratory analysis at ALS laboratories in Perth and Brisbane. Only assays received from the laboratory were used for this Resource, no pXRF results have been used.

Industry standard QAQC measures were employed involving insertion of:

- appropriate CRM standards at regular intervals;
- field duplicates collected for both 1m splits and 3m composites at regular intervals;
- additional field duplicates and blanks collected in mineralised intervals.

All samples were dried and pulverised at the laboratory prior to analysis.

Orientated DD core samples were collected with a diamond drill rig drilling HQ and NQ core. After geological logging and processing, the core was marked up for sampling at a typical minimal interval of 0.3m to ensure adequate sample weight and to a typical maximum interval of 1.0m. The selected sample intervals of drill core were cut in half or quartered along the length of the drill core. Specific Gravity, or density measurements were taken for each geological domain within the Resource from the half and quarter core by the laboratory.

Sample sizes for both RC and DD are considered appropriate for the style of mineralisation.

Assaying and QAQC

Samples were submitted to ALS laboratories in Perth for preparation and analysis by ME-MS61. Pulverised samples were then transported to ALS laboratories in Brisbane for analysis by ME-XRF30.

The 2-3kg samples were submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.25g charge for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61). The pulverised sample was then sent to ALS Laboratories (Brisbane) where a 0.66g charge was used for determination of TREO by Lithium Borate Fusion XRF (ALS Method ME-XRF30).

QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the mineralised zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after. All QAQC returned satisfactory results.

Standard laboratory QAQC is undertaken and monitored.

Further information regarding exploration results can be found in previous announcements:

DRE Announcement 28 July 2022 Assays Confirm Yin as a High-Grade Rare Earth Discovery

DRE Announcement 5 September 2022: Further Assays Confirm Yin as A Significant REE Discovery

DRE Announcement 12 October 2022: Broad, High-Grade Assays at Yin REE Discovery – Mangaroon

DRE Announcement 24 October 2022: Broad, High-Grade Assays at Yin REE Discovery – Mangaroon

DRE Announcement 21 November 2022: Broad, High-Grade Assays at Yin REE Discovery – Mangaroon



Estimation Methodology

Widenbar were retained by Dreadnought to produce a Resource estimate for 3km of the Yin REE Ironstone. Validated drillhole data and geological interpretations were supplied by Dreadnought, and Widenbar produced the Resource using standard processes and procedures including data selection, compositing, variography and estimation by Ordinary Kriging prior to model validation.

Estimates were made and are reported for TREO, Nd_2O_3 , Pr_6O_{11} and $\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ as well as bulk density.

Statistical Analysis and Variography

The original assays are a mixture of 1m and 3m samples, with mineralised intervals being identified using preliminary pXRF analysis and being re-assayed at 1m intervals by an independent laboratory.

For data analysis and Resource processes, the assay data has been composited to 1m intervals.

The wireframe solids and the weathering surfaces were used to apply lithological and weathering codes to the composite data. Summary statistics have been calculated for the major elements within each domain. There was a total of 13,272 composites available for use in Resource estimation.

Probability plots and histograms were used to confirm domaining produced consistent data sets.

There are 278 density measurements from DD core in the final data set. These have been coded with the lithology wireframes and the weathering surfaces and histograms and statistics have been collated.

The mean, median and the histogram distributions for fresh and oxidised versions of each major lithology have been reviewed and a single value determined for each weathering/lithology combination.

Final Density		
LITH	WEATH	Density
Ironstone	OX/TR	2.85
Carbonatite	FR	3.45
Fenite	OX/TR	2.60
Fenite	FR	2.80
Country Rock	OX/TR	2.55
Country Rock	FR	2.65
Calcrete	OX	2.43

Table 2: Final density values used in converting volumes to tonnes

Variograms have been calculated for the combined ironstone/carbonatite domain for Nd_2O_3 , Pr_6O_{11} and $\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ and used to control the Ordinary Kriging estimation process, which was carried out in Micromine 2023 software.

Block Model and Resource Estimation

An “empty” rock model was created using the topographic and weathering surfaces and the geological wireframe solids as constraints.

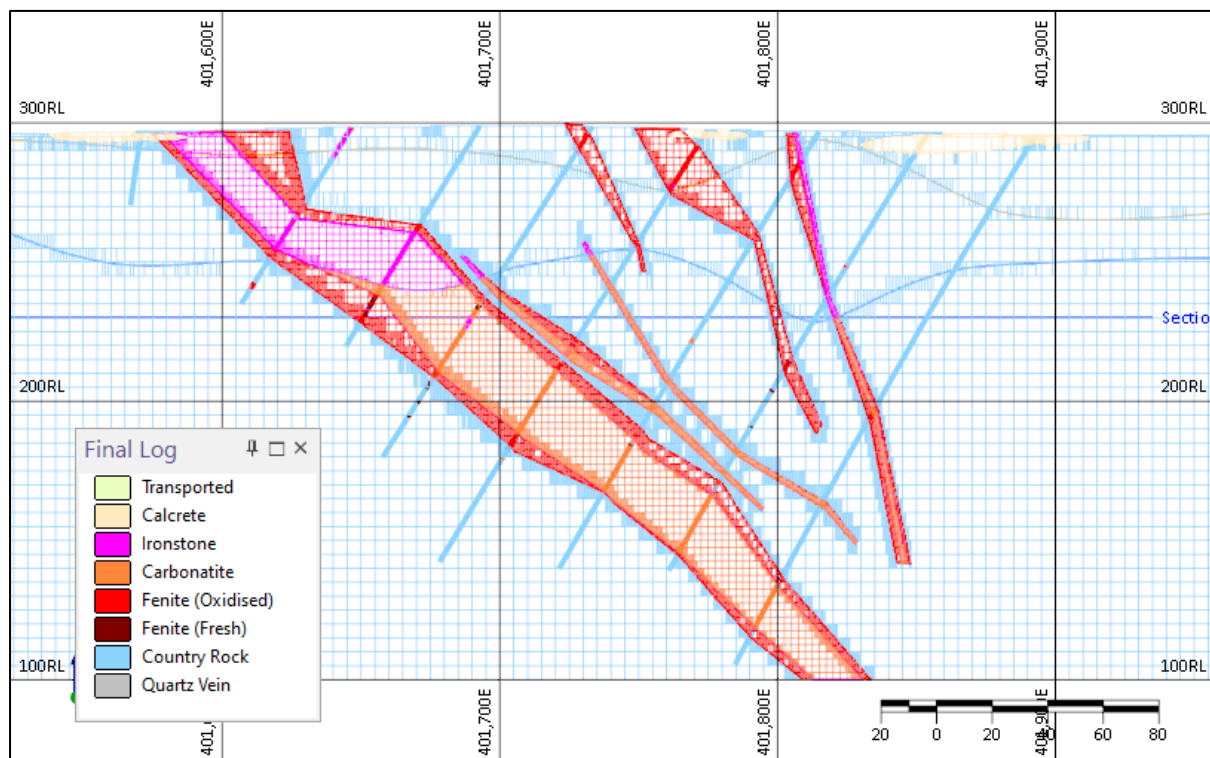


Figure 6: Rock model lithology highlighting ironstone, carbonatite and fenite

A process of “unfolding” is applied to the block model and the composite data to avoid issues related to the variable dip and strike of various parts of the mineralised domains. This effectively makes a dynamic search ellipse and all searches become oriented in a simple north-south and vertical direction.

Interpolation is carried out using the Ordinary Kriging process in Micromine 2023. A two-pass search strategy was used, with the following parameters.

Search	Samples		Holes			Search		
Pass	Min	Max	Min	Min /Hole	Max/Hole	Along Strike	Down Dip	Across Dip
1	8	16	2	2	4	120	60	5
2	2	16	1	1	4	200	100	10

Table 3: Search parameters used in Ordinary Kriging

Block model validation has been carried out as shown below and all methods produced good comparisons:

- Drill hole section comparison;
- Comparison of means for model vs data; and
- Swathe plots of model vs data.

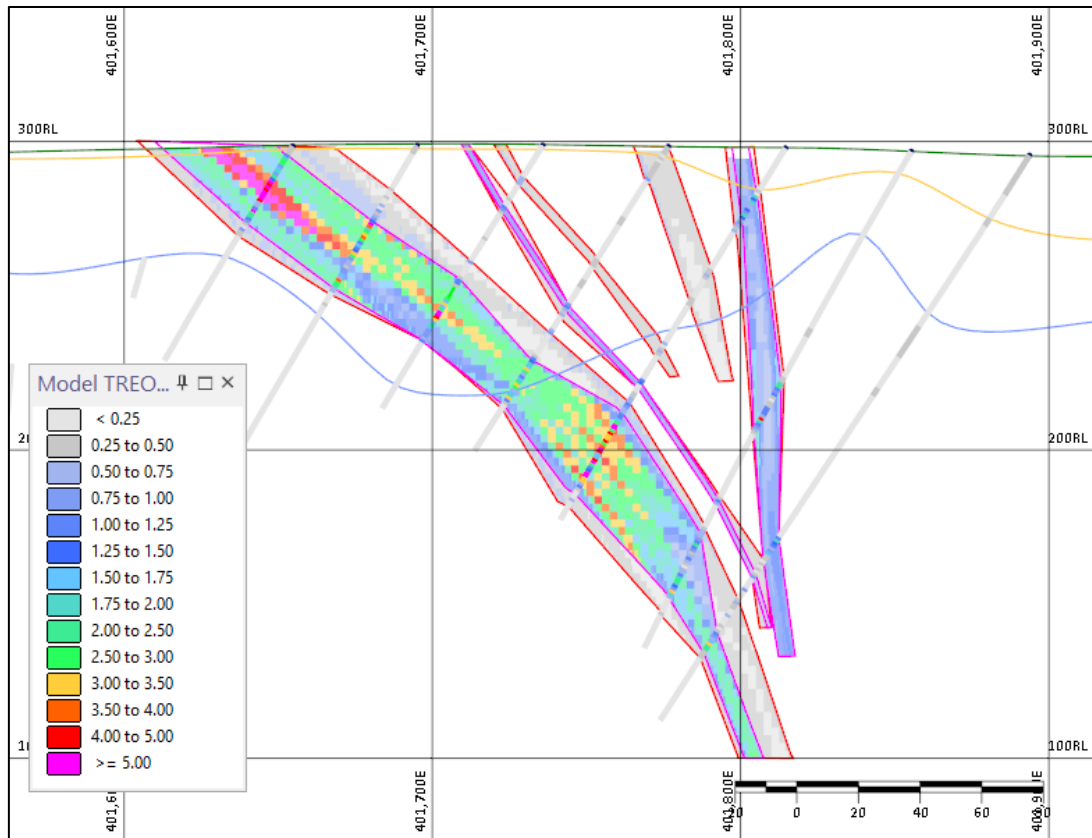


Figure 7: Section 7350200N showing the grade distribution within the Resource model

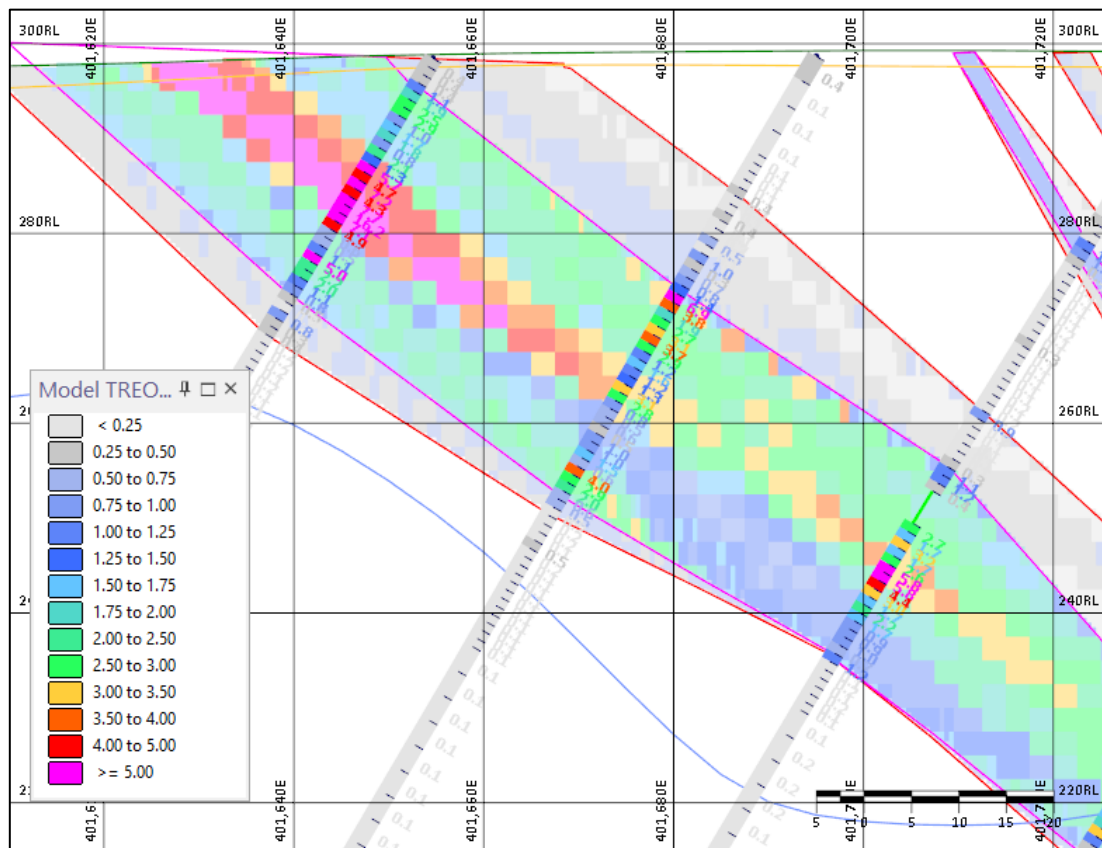


Figure 8: Detail of part of 7350200N showing high-grades at surface.

Cut-off Grade

A series of TREO% cut-offs has been included in this announcement, with the lowest (0.20% TREO) used by or approximating the cut-off applied at the close-by and advanced-stage Yangibana REE Project. A TREO grade of 0.20% represents the transition between consistently mineralised and unmineralized material.

Resource Classification

The Resource has been classified as 100% in the Inferred category, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including:

- Geological continuity;
- Data quality;
- Drill hole spacing;
- Modelling technique; and
- Estimation properties including search strategy, number of informing data and average distance of data from blocks.

The Resource classification methodology incorporated a number of parameters derived from the Kriging algorithms in combination with drill hole spacing and continuity and size of mineralised domains.

Geological Continuity

Geological continuity is understood with reasonable confidence. The classification reflects this level of confidence.

Data Quality

Resource classification is based on information and data provided from the Dreadnought's database. Descriptions of drilling techniques, survey, sampling/sample preparation, analytical techniques and database management/validation provided by Dreadnought indicate that data collection and management is well within industry standards. Widenbar considers that the database represents an accurate record of the drilling undertaken.

Drilling Spacing

Drill hole location plots have been used to ensure that local drill spacing conforms to the minimum expected for Resource classification. Most sections are drilled at 100m (North) by 25 to 50m (Down Dip) with a small infill area of 50m spaced northings in the southern, thicker part of the main Yin deposit.

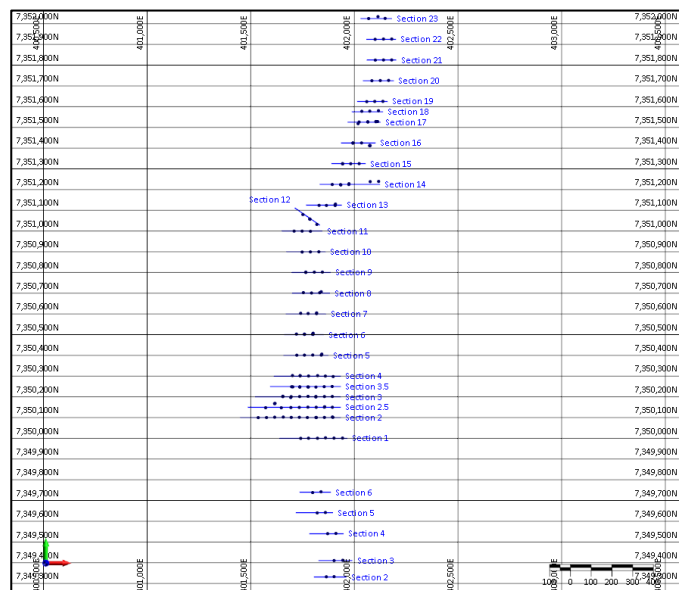


Figure 9: Plan view image showing the drill hole spacing at Yin.

Resource Estimate

A summary of the current Resources of 14.36Mt @ 1.13% TREO is shown below. A series of TREO% cut-offs has been used, with the lowest (0.20% TREO) used by or approximating the cut-off applied at the close-by and advanced-stage Yangibana REE Project. Numbers may not add up due to rounding.

Geology	Cut-Off (%TREO)	Tonnes (Mt)	TREO	Nd ₂ O ₃ +Pr ₆ O ₁₁	NdPr:TREO Ratio	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Ironstone	0.20	4.80	1.67%	0.51%	31%	80,160kt	24,677kt
Carbonatite	0.20	4.09	1.54%	0.47%	31%	63,017kt	19,286kt
Fenite	0.20	5.47	0.36%	0.08%	23%	19,692kt	4,567kt
TOTAL	0.20	14.36	1.13%	0.34%	30%	162,291kt	48,529kt

Table 4: Summary of Yin Resource of 14.36Mt @ 1.13% TREO at 0.20% TREO Cut-off.

Geology	Cut-Off (%TREO)	Tonnes (Mt)	TREO	Nd ₂ O ₃ +Pr ₆ O ₁₁	NdPr:TREO Ratio	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Ironstone	0.60	4.62	1.72%	0.53%	31%	79,464kt	24,412kt
Carbonatite	0.60	3.85	1.61%	0.49%	31%	61,969kt	18,976kt
Fenite	0.60	0.20	0.73%	0.13%	18%	1,431kt	258kt
TOTAL	0.60	8.67	1.65%	0.50%	31%	142,973kt	43,646kt

Table 5: Summary of Main REE at 0.60% TREO% Cut-off.

Geology	Cut-Off (%TREO)	Tonnes (Mt)	TREO	Nd ₂ O ₃ +Pr ₆ O ₁₁	NdPr:TREO Ratio	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Ironstone	1.0	3.77	1.92%	0.59%	31%	72,326kt	22,384kt
Carbonatite	1.0	3.13	1.79%	0.55%	31%	56,099kt	17,309kt
Fenite	1.0	0.01	1.12%	0.32%	29%	67kt	19kt
TOTAL	1.0	6.91	1.86%	0.57%	31%	128,470kt	39,708kt

Table 6: Summary of Main REE at 1.00% TREO% Cut-off.

Geology	Cut-Off (%TREO)	Tonnes (Mt)	TREO	Nd ₂ O ₃ +Pr ₆ O ₁₁	NdPr:TREO Ratio	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Ironstone	1.5	2.61	2.21%	0.69%	31%	57,637kt	17,909kt
Carbonatite	1.5	1.98	2.11%	0.66%	31%	41,862kt	13,090kt
Fenite	1.5	-	-	-	-	-	-
TOTAL	1.5	4.59	2.17%	0.68%	31%	99,625kt	30,989kt

Table 7: Summary of Main REE at 1.50% TREO% Cut-off.

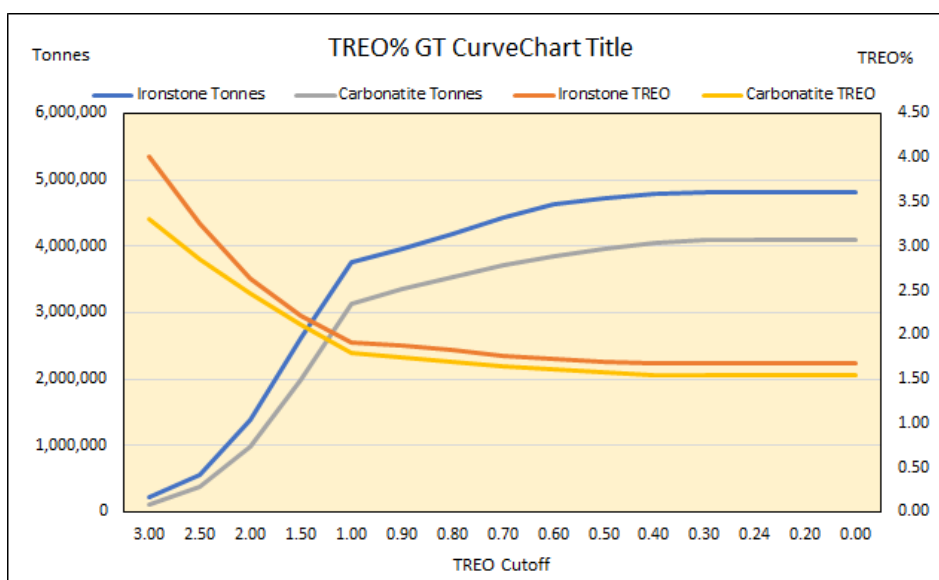


Figure 10: TREO% grade tonnage curve for ironstone and carbonatite

Metallurgy

No metallurgical test work has been completed on any drill hole samples to date. Sixteen (16) diamond drill holes have been drilled to support a metallurgical program conducted by Independent Metallurgical Operations (IMO) with the results expected in March/April 2023.

Whilst metallurgical studies are ongoing, there is no data to indicate that the metallurgical performance of the nearby Yangibana deposits will not be replicated for the Yin REE ironstones.

In July 2021, flotation test work was conducted on a 30kg bulk surface sample from Yin and produced a high-grade monazite concentrate with a 92.8% recovery into 3.55% of the original mass. The approximate concentrate grade was 12.3% Nd₂O₃ and ~38% TREO. See ASX Announcement 1 September 2021 “Encouraging Mineralogical and Metallurgical Results for Rare Earths at Yin.”



Figure 11: Successful froth flotation test on the Yin bulk sample.

Future Work

Subject to the outcome of ongoing metallurgical work, the Resource will form the basis of studies to investigate the potential to mine Yin. In parallel, there will be ongoing in-fill and extensional RC and diamond drilling programmes. The results of diamond drilling completed in 2022 and additional RC and diamond drilling in 2023 will form the basis for ongoing Resource upgrades and updates.



Figure 12: Merry Christmas and happy holidays from the Dreadnought team. Wishing everyone a safe Happy New Years, see you in 2023.



Impact on Long Term Incentives

The following table outlines the Company's Long-Term Incentive ("LTI") plan with the Class A performance shares now triggered with the balance on track to be triggered at an Inferred JORC Resource of at least 30Mt @ >1% TREO by 31 December 2024. The capital structure following issue of the first tranche of LTI performance shares is also outlined below.

Performance Rights	Quantity	Vesting Condition	Vested
Class A	10,183,335	The Company announcing an Inferred JORC Resource of 10Mt @ >1% TREO by 31 December 2022.	Yes
Class B	10,183,335	The Company announcing an Inferred JORC Resource of 20Mt @ >1% TREO by 31 December 2023.	No
Class C	10,183,330	T The Company announcing an Inferred JORC Resource of 30Mt @ >1% TREO by 31 December 2024.	No

Table 8: LTI Plan summary

Capital Structure (Upon issue of vested Class A Performance Rights)

Quoted Securities	
Fully Paid Ordinary Shares	3,089,728,220
Unquoted Securities	
Options @ \$0.006 expiring 25/05/2023	20,000,000
Options @ \$0.005 expiring 09/04/2024	30,000,000
Options @ \$0.005 expiring 30/06/2024	3,500,000
Options @ \$0.04 expiring 02/07/2024	14,100,000
Options @ \$0.06 expiring 11/08/2024	2,000,000
Options @ \$0.06 expiring 26/11/2024	2,000,000
Options @ \$0.065 expiring 14/07/2025	8,500,000
Options @ \$0.1575 expiring 16/12/2025	853,098
Class B Performance Rights	10,183,335
Class C Performance Rights	10,183,330

Table 9: Capital structure following issue of Class A Performance Rights

Further information regarding the LTI plan can be found in previous announcements:

DRE Announcement 31 October 2022: Annual General Meeting – Notice and Proxy Form

DRE Announcement 17 August 2022: Long-Term Incentives on Delivery of Significant REE Resources

**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 >5,300sq kms of the Mangaroon Zone in the Gascoyne Region of Western Australia. Part of the project is targeting Ni-Cu-PGE and is subject to an earn in with First Quantum Minerals Ltd (earning up to 70%) – Figure 13. The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high NdPr:TREO ratio 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.

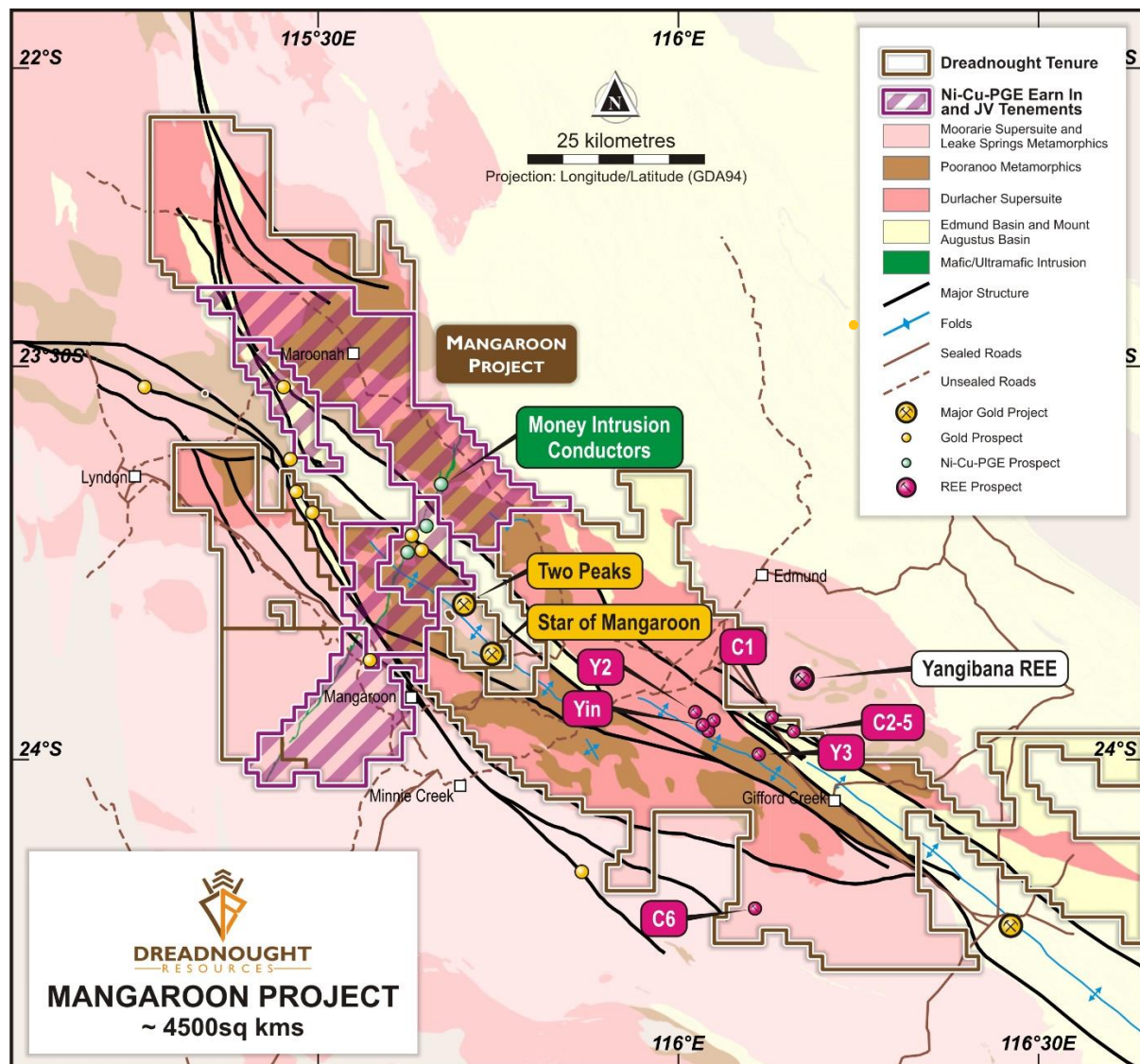


Figure 13: Plan view map of Mangaroon showing the location of the FQM Earn-in and 100% DRE ground in relation to major structures, geology and roads.



For further information please refer to previous ASX announcements:

- 11 June 2021 *High-Grade REE Ironstones Outcropping at Mangaroon*
- 19 July 2021 *High-Grade REE Ironstones Confirmed Over 2.5kms at Mangaroon*
- 24 September 2021 *Airborne Magnetic-Radiometric Survey Commenced at Mangaroon*
- 2 February 2022 *Rare Earths, Phosphate, Niobium & Zirconium Results from Mangaroon*
- 16 June 2022 *First Drilling at Yin Intersects High-Grade Rare Earths*
- 25 July 2022 *Rare Earth Ironstones Confirmed over 3km Strike at Yin*
- 28 July 2022 *Assays Confirm Yin as a High-Grade Rare Earth Discovery*
- 22 August 2022 *Yin Drilling Complete, Significant Growth Potential*
- 5 September 2022 *Further Assays Confirm Yin as A Significant REE Discovery*
- 5 September 2022 *Thick Rare Earth Ironstones Confirmed at Sabre (Y3) Discovery*
- 12 October 2022 *Broad, High-Grade Assays at Yin REE Discovery – Mangaroon*
- 17 October 2022 *Mineralised Carbonatites Discovered at C3 and C4 – Mangaroon*
- 24 October 2022 *Broad, High-Grade Assays at Yin REE Discovery – Mangaroon*
- 21 November 2022 *Broad, High-Grade Assays at Yin REE Discovery – Mangaroon*
- 23 November 2022 *Multiple, Large Scale REE-Nb-Ti-P Carbonatites*
- 13 December 2022 *Thick Mineralisation Continues at C3, 2022 Drilling Complete*

UPCOMING NEWSFLOW

January-March: Further updates on and assays from REE drilling at Yin Ironstone Complex (Mangaroon 100%)

January: Initial JORC Resource for Metzke's Find Au (Central Yilgarn 100%)

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

January-March: Further updates on and assays from REE drilling at C1-C5 Carbonatites (Mangaroon 100%)

January: Results of FLEM survey at the Money Intrusion (FQM JV/Earn-in)

January: Results from Wombarella Heli-EM survey (Tarraji-Yampi 100%)

January: Quarterly Activities and Cashflow Report

14-16 February 2023: Presenting at the RIU Explorers Conference

February/March: Recommencement of RC and diamond drilling at Mangaroon REE (Mangaroon 100%)

March/April: Metallurgical results from Yin Ironstone Complex (Mangaroon 100%)

March: Financial statements 31 Dec 2022

June quarter: Updated Yin JORC Resources (Mangaroon 100%)

~Ends~

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



Cautionary Statement

This announcement and information, opinions or conclusions expressed in the course of this announcement contains forecasts and forward-looking information. Such forecasts, projections and information are not a guarantee of future performance, involve unknown risks and uncertainties. Actual results and developments will almost certainly differ materially from those expressed or implied. There are a number of risks, both specific to Dreadnought, and of a general nature which may affect the future operating and financial performance of Dreadnought, and the value of an investment in Dreadnought including and not limited to title risk, renewal risk, economic conditions, stock market fluctuations, commodity demand and price movements, timing of access to infrastructure, timing of environmental approvals, regulatory risks, operational risks, reliance on key personnel, reserve estimations, native title risks, cultural heritage risks, foreign currency fluctuations, and mining development, construction and commissioning risk.

Competent Person's Statement – Mineral Resources

The information in this announcement that relates to Mineral Resources is based on information compiled by Mr Lynn Widenbar, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Widenbar is a full-time employee of Widenbar and Associates Pty Ltd. Mr Widenbar has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Widenbar consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

Competent Person's Statement – Exploration Results

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 announcement of the matters based on the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

INVESTMENT HIGHLIGHTS

Kimberley Ni-Cu-Au Projects

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

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

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

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

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

Dreadnought has delivered an initial JORC Resource over just 3kms Yin REE Ironstone Complex delivering 14.36Mt @ 1.13% TREO (30% NdPr:TREO Ratio) with an additional 27 strike kilometres to be tested in 2023.

Bresnahan HREE and Au Project

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

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

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

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

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



Table 10: Significant Intersections >0.2% TREO with >2% TREO highlighted.

Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (%)	NdPr:TREO (%)	Prospect
YINRC001	0	34	34	2.59	0.80	31	Yin
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	
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.	70	77	7	2.04	0.63	31	
And	81	82	1	0.63	0.11	17	
And	89	90	1	0.57	0.13	23	
YINRC011	106	123	17	1.14	0.35	31	
Incl.	110	120	10	1.54	0.49	32	
YINRC012	151	159	8	1.44	0.44	31	
Incl.	154	157	3	2.28	0.69	30	
YINRC014	0	8	8	1.39	0.44	32	
And	23	25	2	0.72	0.18	25	
YINRC018	0	5	5	0.28	0.02	7	
And	12	15	3	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	



DREADNOUGHT RESOURCES

Table 10 continued: Significant Intersections >0.2% TREO with >2% TREO highlighted.

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



DREADNOUGHT RESOURCES

Table 10 continued: Significant Intersections >0.2% TREO with >2% TREO highlighted.

Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (%)	NdPr:TREO (%)	Prospect
YINRC038	13	15	2	1.47	0.58	39	Yin
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	
YINRC053	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	
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	45	54	9	0.89	0.29	33	
YINRC058	29	31	2	0.72	0.28	39	
and	62	93	31	1.64	0.50	30	
incl	83	89	6	6.73	2.08	31	
YINRC059	58	66	8	0.39	0.13	33	
and	68	69	1	0.22	0.06	27	
and	92	141	49	0.81	0.26	32	
incl	107	113	6	2.83	0.94	33	
YINRC060	3	14	11	1.12	0.39	35	
YINRC061	42	61	19	0.40	0.14	35	
YINRC062	113	121	8	0.35	0.12	34	
and	125	126	1	0.24	0.07	29	
YINRC063	6	10	4	0.40	0.12	30	
and	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	0.10	32	
and	180	183	3	0.73	0.21	29	



DREADNOUGHT RESOURCES

Table 10 continued: Significant Intersections >0.2% TREO with >2% TREO highlighted.

Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (%)	NdPr:TREO (%)	Prospect
YINRC066 incl	26	43	17	1.59	0.42	26	Yin
	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 and	52	53	1	2.07	0.62	30	
	86	87	1	0.59	0.17	29	
YINRC070 and	23	26	3	0.27	0.06	22	
	33	34	1	1.67	0.42	25	
YINRC066 incl	26	43	17	1.59	0.42	26	
	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 and	52	53	1	2.07	0.62	30	
	86	87	1	0.59	0.17	29	
YINRC070 and	23	26	3	0.27	0.06	22	
	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 incl	31	39	8	1.70	0.59	35	
	34	39	5	2.54	0.88	35	
YINRC075 incl and	54	59	5	2.73	0.91	33	
	55	58	3	4.14	1.39	34	
	61	62	1	0.2	0.05	25	
YINRC076 incl	82	94	12	1.65	0.56	34	
	96	97	1	0.25	0.07	28	
YINRC077 and	10	11	1	0.33	0.10	30	
	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 and and	59	60	1	0.33	0.10	30	
	65	66	1	0.21	0.06	29	
	67	84	17	0.61	0.20	33	
YINRC082 and incl Incl	5	6	1	1.03	0.38	37	
	94	118	24	1.17	0.43	37	
	95	99	4	4.11	1.59	39	
	115	117	2	3.68	1.37	37	
YINRC083 incl	0	24	24	2.57	0.73	28	
	8	19	11	4.50	1.27	28	
YINRC085 incl and	0	30	30	1.82	0.55	30	
	8	25	17	2.87	0.88	31	
	39	42	3	0.24	0.07	29	
YINRC086 incl and	6	49	43	0.93	0.26	28	
	33	46	13	2.11	0.64	30	
	52	54	2	0.65	0.22	34	
YINRC087 and and incl	0	6	6	0.58	0.20	34	
	30	31	1	0.73	0.19	26	
	48	86	38	1.84	0.57	31	
	57	80	23	2.70	0.83	31	

Table 10 continued: Significant Intersections >0.2% TREO with >2% TREO highlighted.

Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (%)	NdPr:TREO (%)	Prospect
YINRC088 and and and and incl	64	68	4	0.72	0.14	19	Yin
	70	71	1	0.38	0.10	26	
	76	77	1	0.40	0.10	25	
	92	120	28	1.00	0.28	28	
	104	111	7	2.09	0.59	28	
YINRC086MET incl	24	79	54	2.07	0.62	30	
	41	58	17	4.10	1.22	30	
YINRC089 and	114	115	1	0.21	0.04	19	
	119	146	27	1.15	0.30	26	
YINRC090 and	184	193	9	2.22	0.66	30	
	194	195	1	0.22	0.07	32	
YINRC091 incl	148	195	47	0.61	0.17	28	
	188	192	4	2.27	0.70	31	
YINRC092 and incl incl	0	13	13	0.43	0.14	33	
	39	57	18	1.33	0.32	24	
	40	50	10	2.15	0.51	24	
	45	49	4	3.07	0.71	23	
YINRC093 incl	45	83	38	0.81	0.24	30	
	47	60	13	1.40	0.42	30	
YINRC094 and incl and	3	10	7	0.56	0.10	18	
	76	112	36	1.02	0.28	27	
	92	94	2	2.6	0.79	30	
	106	109	3	2.65	0.55	21	
YINRC095 and incl	8	25	17	0.75	0.08	11	
	93	135	42	1.00	0.26	26	
	117	124	7	1.97	0.51	26	
	12	14	2	0.66	0.08	12	
YINRC096 and and and incl	87	89	2	1.02	0.22	22	
	105	107	2	0.75	0.21	28	
	132	152	20	1.53	0.45	29	
	142	146	4	2.64	0.73	28	
YINRC097 and and and and incl incl	70	71	1	0.41	0.10	24	
	99	101	2	0.53	0.14	26	
	133	135	2	0.59	0.16	27	
	142	143	1	0.55	0.12	22	
	152	177	25	1.32	0.39	30	
	155	166	11	2.02	0.58	29	
YINRC098	155	158	3	3.45	0.99	29	
	179	193	14	2.15	0.67	31	
	184	190	6	3.31	1.05	32	
YINRC099	114	117	3	0.53	0.16	30	
YINRC100	31	38	7	0.37	0.06	16	
YINRC101 incl	55	63	8	1.52	0.50	33	
	57	61	4	2.00	0.68	34	
YINRC102 and	52	53	1	1.59	0.57	36	
	96	98	2	1.13	0.34	30	
YINRC103 and	114	120	6	0.60	0.16	27	
	153	154	1	0.53	0.13	25	
and incl	187	204	17	1.23	0.38	31	
	193	195	2	2.07	0.7	34	

Table 10 continued: Significant Intersections >0.2% TREO with >2% TREO highlighted.

Hole ID	From (m)	To (m)	Interval (m)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (%)	NdPr:TREO (%)	Prospect
YINRC104 incl	37	50	13	1.58	0.48	30	Yin
	39	45	6	2.38	0.74	31	
YINRC105	77	88	11	1.13	0.29	26	
YINRC106 and and and and	29	30	1	0.40	0.14	35	
	80	82	2	0.38	0.11	29	
	88	98	10	0.66	0.21	32	
	91	93	2	1.48	0.46	31	
	108	110	2	0.47	0.14	30	
YINRC108	144	154	10	0.42	0.14	33	
YINRC109 and	124	126	2	0.57	0.2	35	
	163	166	3	0.86	0.26	30	
YINRC113	53	55	2	0.29	0.1	34	
YINRC114	69	72	3	2.64	0.91	34	
YINRC115	21	23	2	0.32	0.11	34	
YINRC116	78	81	3	1.04	0.42	40	
YINRC117	151	153	2	0.21	0.07	33	
YINRC118 incl and	9	24	15	0.50	0.08	16	
	12	15	3	1.50	0.23	15	
	36	42	6	0.39	0.08	21	



Figure 14: Photo of fresh ferrocarnatite from Yin hole YINDD007 ~100m to ~107m showing iron-magnesium carbonates (white), magnetite (black) and coarse monazite crystals (red).



DREADNOUGHT RESOURCES

Table 11: 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	



DREADNOUGHT RESOURCES

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	
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	
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	
YINRC086MET	401754	7350253	302	-90	0	80	RC	
YINRC087	401777	7350248	301	-60	270	93	RC	
YINRC088	401815	7350250	301	-60	270	129	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	7350149	300	-60	270	75	RC	
YINRC093	401694	7350149	300	-60	270	93	RC	
YINRC094	401735	7350152	300	-60	270	141	RC	
YINRC095	401777	7350151	300	-60	270	183	RC	
YINRC096	401814	7350151	300	-60	270	183	RC	
YINRC097	401853	7350153	300	-60	270	183	RC	
YINRC098	401895	7350301	300	-60	270	207	RC	
YINRC099	401841	7350406	300	-60	270	135	RC	
YINRC100	401742	7350002	300	-60	270	75	RC	
YINRC101	401781	7350004	300	-60	270	81	RC	
YINRC102	401824	7350003	300	-60	270	117	RC	

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
YINRC103	401889	7350150	300	-60	270	219	RC	Yin
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	
YINRC112	402060	7351624	304	-60	270	39	RC	
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	
YINRC121	401843	7350406	297	-75	278	165	RC	
YINRC122	401801	7350507	298	-77	272	141	RC	
YINRC123	401818	7350605	315	-76	273	153	RC	
YINRC124	401840	7350707	337	-75	268	177	RC	
YINRC125	401909	7351130	287	-82	278	135	RC	
YINRC126	401974	7351228	312	-76	274	147	RC	
YINRC127	402018	7351518	298	-79	271	129	RC	
YINRC128	402076	7351412	304	-73	279	153	RC	
YINRC129	402112	7351528	334	-76	271	165	RC	
YINDD001	401615	7350168	298	-57	327	36	DDH	
YINDD002	401655	7350203	299	-58	266	45	DDH	
YINDD003	401993	7351424	299	-57	277	26.7	DDH	
YINDD004	401738	7350302	299	-57	272	46.7	DDH	
YINDD005	401765	7350800	304	-57	273	21	DDH	
YINDD007	402074	7351411	298	-57	270	120	DDH	
YINDD008	402104	7351527	300	-58	271	124.7	DDH	
YINDD009	402065	7351526	300	-59	272	93	DDH	
YINDD010	401943	7351324	300	-59	274	30	DDH	
YINDD011	401935	7351222	300	-59	269	75	DDH	
YINDD012	401907	7351124	300	-59	270	105	DDH	
YINDD013	401786	7351057	310	-60	313	74.4	DDH	
YINDD014	401703	7350248	298	-57	114	65.9	DDH	
YINDD016	401759	7350503	301	-58	272	81	DDH	
YINDD017	401857	7350152	290	-58	270	180.6	DDH	
YINDD018	401778	7350247	292	-57	268	96.3	DDH	
YINDD019	401817	7350100	290	-58	269	65.9	DDH	
YINDD020	401896	7350101	288	-59	265	147	DDH	
YINDD021	401693	7350197	299	-59	89	150.6	DDH	

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Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Reverse Circulation (RC) drilling was undertaken to produce samples for assaying. Laboratory Analysis Two sampling techniques were utilised for this program, 1m metre splits directly from the rig sampling system for each metre and 3m composite sampling from spoil piles. Samples submitted to the laboratory were determined by the site geologist. 1m Splits From every metre drilled a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter from each metre of drilling. 3m Composites All remaining spoil from the sampling system was collected in buckets from the sampling system and neatly deposited in rows adjacent to the rig. An aluminium scoop was used to then sub-sample each spoil pile to create a 2-3kg 3m composite sample in a calico bag. A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples have 3m composites collected. All samples are submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30). All 1m 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 5¼".
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	RC Drilling Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery

Criteria	JORC Code explanation	Commentary
	- 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.	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.
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. - Whether sample sizes are appropriate to the grain size of the material being sampled.	RC Drilling From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter. QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the ore zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after. 2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75µm to produce a 0.66g charge for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30) and to produce a 0.25g charge for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61). 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,	Laboratory Analysis Lithium borate fusion is considered a total digest and Method ME-XRF30 is appropriate for REE

Criteria	JORC Code explanation	Commentary
	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.	determination. Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receipt.
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	Logging and Sampling Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database. Significant intersections are inspected by senior company personnel. 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 table 11 for hole positions and sampling information. Data spacing and distribution is sufficient to establish the degree of geological and grade continuity for a Mineral Resource estimation procedure at the inferred classification.
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

Criteria	JORC Code explanation	Commentary
		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 20 granted Exploration License (E08/3178, E08/3274, E08/3275, E08/3439, E09/2290, E09/2359, E09/2370, E09/2384, E09/2405, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467, E09/2473, E09/2478, E09/2531, E09/2535, E09/2616, E09/2620) and 4 granted Mining Licenses (M09/146, M09/147, M09/174, M09/175). - 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. - E09/2290, M09/146 and M09/147 are subject to a 1% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry.2 - M09/174 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson. - M09/175 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry. - 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 Jiarli (WAD464/2016). - The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, and Towera Stations.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX

Criteria	JORC Code explanation	Commentary
		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	• <i>Deposit type, geological setting and style of mineralisation.</i>	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	• <i>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:</i> ◦ <i>easting and northing of the drill hole collar</i> ◦ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ◦ <i>dip and azimuth of the hole</i> ◦ <i>down hole length and interception depth</i> ◦ <i>hole length.</i> • <i>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.</i>	An overview of the drilling program is given within the text and tables 10 and 11 within this document.
Data aggregation methods	• <i>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.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No new Exploration Results are not being reported. Exploration Results have previously been reporting all results greater than 0.2% TREO. Significant intercepts are length weight averaged for all samples with TREO values >0.2% TREO with up to 3m of internal dilution (<0.2% TREO). No metal equivalents are reported.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	- 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.
<i>Diagrams</i>	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.
<i>Balanced reporting</i>	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.	No new Exploration Results are being reported.
<i>Other substantive exploration data</i>	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.	No new Exploration Results are being reported.
<i>Further work</i>	- The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Additional RC drilling Diamond Drilling Metallurgical test work Additional Resource Modelling

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	- Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. - Data validation procedures used.	Raw data is entered into Excel spreadsheets and uploaded weekly into a Datashed database. A Microsoft Access database export is provided as required. The Microsoft Access database tables were imported into Micromine 2023 for validation and processing. No errors were found.
<i>Site visits</i>	Comment on any site visits undertaken by the Competent Person and the outcome of	The Competent Person made a site visit on 12 th and 13 th September 2022 and viewed RC and DD

Criteria	JORC Code explanation	Commentary
	those visits. If no site visits have been undertaken indicate why this is the case.	logging activities and drilling. The CP also reviewed diamond drill core and RC chips on site.
Geological interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	There is reasonable confidence in the geological logging and interpretation. Two major lithologies (ironstone/carbonatite and fenite) have been geologically modelled and are used to control the data used in estimation and the orientation of search ellipses. The geological interpretation is consistent. There has been an alternative interpretation generated via automated geological modelling processes in Micromine 2023 software. It produced similar shapes to the DRE manual interpretation, but because of wide drill spacing in places did not provide adequate continuity between sections. It did however provide very similar interpretations directly on drill sections.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The main Yin mineralisation extends approximately 2.1 km in length, is from 1m to 30m thick and extends from surface (approximately 300m RL) to a maximum depth of 200m. Yin South is 550m long and typically 10m thick.
Estimation and modelling techniques	- The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. - The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. - The assumptions made regarding recovery of by-products. - Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). - In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. - Any assumptions behind modelling of selective mining units. - Any assumptions about correlation between variables. - Description of how the geological interpretation was used to control the resource estimates. - Discussion of basis for using or not using grade cutting or capping. - The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The model has been domained using the interpreted ironstone, carbonatite and fenite geological wireframes. Only data within each domain are used to estimate blocks in that domain. Statistical analysis of the distribution of key variables has been carried out; no top cuts (capping) have been applied. Variography has been carried out on Nd2O3 and Pr6O11 to define the parameters required for Ordinary Kriging. Ordinary Kriging using the functions within Micromine 2023 have been used to interpolate block values. A parent block size of 5m x 10m x 5m is used with subcells to 0.5m to follow geological and weathering boundaries. Search orientations are dynamically variable using unfolding surfaces to control search ellipses and simplify the major variations in strike along the mineralisation. First pass search ellipse is 120m along strike, 60m down dip and 5m across dip. Second pass search ellipse is 200m along strike, 120m down dip and 10m across dip. No assumptions have been made regarding selective mining units. Validation has been carried out using the following methods: Visual comparison of drill hole and block

Criteria	JORC Code explanation	Commentary
		grades in section, plan and 3D. Comparison of declustered mean drill holes against block model grades. Generation of swathe plots. All validation methods produced acceptable results.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A series of TREO% cutoffs has been used for this report, with the lowest (0.20% TREO) approximating the cutoff used at the close-by and advanced-stage Yangibana Project belonging to Hastings Technology.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Mining is expected to be by conventional open pit methods. No assumptions have been made at this stage regarding the scale of mining or selective mining unit; no dilution has been applied to the resource model.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	No metallurgical testwork has been completed on any drill hole samples to date. Sixteen (16) diamond drill holes have been designed and drilled to support a metallurgical program conducted by Independent Metallurgical Operations (IMO) with the results expected in March/April 2023. In July 2021 flotation testwork was conducted on a 30kg bulk surface sample and produced a high-grade monazite concentrate with a 92.8% recovery into 3.55% of the original mass. The approximate head grade was 12.3% Nd₂O₃ and ~38% TREO.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	No assumptions have been made regarding environmental factors.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	There are 278 density measurements taken on DD core from throughout the deposit. Density has been assigned on the basis of a combination of weathering and lithology domains,

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	- The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. - Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	as summarised below: <table border="1"> <thead> <tr> <th colspan="3">Final Density</th></tr> <tr> <th>LITH</th><th>WEATH</th><th>Density</th></tr> </thead> <tbody> <tr> <td>Ironstone</td><td>OX/TR</td><td>2.85</td></tr> <tr> <td>Carbonatite</td><td>FR</td><td>3.45</td></tr> <tr> <td>Fenite</td><td>OX/TR</td><td>2.60</td></tr> <tr> <td>Fenite</td><td>FR</td><td>2.80</td></tr> <tr> <td>Country Rock</td><td>OX/TR</td><td>2.55</td></tr> <tr> <td>Country Rock</td><td>FR</td><td>2.65</td></tr> <tr> <td>Calcrete</td><td>OX</td><td>2.43</td></tr> </tbody> </table>	Final Density			LITH	WEATH	Density	Ironstone	OX/TR	2.85	Carbonatite	FR	3.45	Fenite	OX/TR	2.60	Fenite	FR	2.80	Country Rock	OX/TR	2.55	Country Rock	FR	2.65	Calcrete	OX	2.43
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Classification	- The basis for the classification of the Mineral Resources into varying confidence categories. - Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). - Whether the result appropriately reflects the Competent Person's view of the deposit.	The Yin and Yin South Mineral Resource has been classified in the Inferred category. A number of factors have been considered in arriving at this classification, including: Geological continuity; Data quality; Drill hole spacing; Modelling technique; and Estimation properties including search strategy, number of informing data and average distance of data from blocks. The classification reflects the CP's view of the deposit.																											
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	There have been no reviews or audits of the Mineral Resource Estimate.																											
Discussion of relative accuracy/ confidence	- Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. - The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. - These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The relative accuracy is reflected in the JORC resource categories. Inferred resources are considered global in nature. No production data is available as the deposit has not yet been mined.																											