

ASX ANNOUNCEMENT 5 JULY 2023

40% Increase in Resource Tonnage at Yin – Mangaroon (100%)

HIGHLIGHTS

- Independent JORC Code 2012 Mineral Resource (“Resource”) over ~4kms of the Yin REE Ironstone Complex delivers a significant increase in the Inferred + Indicated Resource to 20.06Mt @ 1.03% TREO. The Resource update has been delivered in 12 months since the initial discovery and is based on 160 RC drill holes (17,787m) and 28 diamond drill holes (2,791.4m).
- The robust nature of the upgraded Yin Inferred + Indicated 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:

Table 1: Yin Inferred + Indicated Resource of 20.06Mt @ 1.03% TREO as adjusted for different cut-off grades.

Cut-Off (%TREO)	Resource (Mt)	TREO (%)	$\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ (kg/t)	NdPr:TREO (%)	Contained TREO (t)	Contained $\text{Nd}_2\text{O}_3+\text{Pr}_6\text{O}_{11}$ (t)
0.20	20.06	1.03	2.9	28%	205,900	58,400
0.40	12.49	1.41	4.3	29%	182,800	53,300
1.00	8.38	1.88	5.6	30%	157,700	47,000
1.50	5.66	2.18	6.5	30%	123,400	37,000

- The Resource only covers ~10% of the Yin REE Ironstone Complex which currently consists of ~43kms strike. Importantly, this Resource is yet to include the Y2, Yin North, Sabre or Y8 ironstone discoveries nor any of the C1-C7 carbonatites.
- An initial Indicated Resource of 5.52Mt @ 1.23% TREO has been defined over just 250m strike where thick, high-grade mineralisation occurs at surface (see Figures 5-7 and Tables 4-7).
- With first pass RC drilling along ~16kms of the Yin REE Ironstone Complex nearly complete, it is anticipated that the ironstone Resource update in the December 2023 quarter will also include the higher NdPr:TREO discoveries at Y2 and Yin North and an increased Indicated component to support plans for an initial Scoping Study.
- An initial Resource for C3 remains on track for August 2023 with further assays expected in July 2023.

Dreadnought Resources Limited (“Dreadnought”) is pleased to announce a Resource update covering only ~4kms of the ~43km long Yin REE Ironstone Complex at the 100% owned Mangaroon project, located in the Gascoyne Region of WA.

Dreadnought’s Managing Director, Dean Tuck, commented: “Since drilling commenced in June 2022, Dreadnought



has delivered a substantial increase in the initial Resource over just 4kms of Yin paving the way for further Resource growth later in 2023. The upgraded independent Resource confirms Yin as a high-grade and high Resource intensity deposit. Both material factors in a project’s economics. Yin continues to demonstrate one 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 and are looking forward to continuing to build on this later in 2023.”

Figure 1: Photo of Dreadnought’s Nick Chapman processing diamond core from Yin.

SNAPSHOT – MANGAROON RARE EARTHS

Mangaroon is 100% Owned by Dreadnought

Genuine Scale Potential Already at Yin REE Ironstone Complex

- Independent Yin Inferred Resource of 20.06Mt @ 1.03% TREO (ASX 4 Jul 2023) covers only ~4km of ~43km of strike with the initial Indicated Resource of 5.52Mt @ 1.23% TREO covering only ~250m of strike.
- Exploration Target* of 50-100Mt at 0.9-1.3% TREO estimated for the top 150m of the Yin REE Ironstone Complex (ASX 13 Feb 2023).
*Cautionary Statement: The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The potential quality and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Resource for all target areas reported. It is uncertain if further exploration will result in the estimation of a Resource.
- Resource extension and first pass wide spaced drilling ongoing.

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

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

High-grade, Multi-Metal Potential Including REE (Neodymium, Praseodymium), Phosphate, Niobium, Titanium & Scandium (REE-P₂O₅-Nb₂O₅-TiO₂-Sc)

- The mineralisation at the Yin REE Ironstone Complex contains significantly higher NdPr as a fraction of the rare earth oxides (“NdPr:TREO” ratio) than most other REE deposits globally, over 50% higher than the global average.
- Partially completed, first pass, wide spaced drilling over the C1-C7 carbonatites has identified significant critical metal potential with REE, P₂O₅, Nb₂O₅, TiO₂ and Sc within the C1-C5 carbonatites.
- A ~600m x 550m zone of REE-P₂O₅-Nb₂O₅-TiO₂-Sc mineralisation has been confirmed at C3 where an initial Resource for C3 is on track for August 2023.

Potentially Attractive Mining Proposition

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

Positive Metallurgy Results

- Metallurgical test work from Yin has performed well, achieving recoveries ranging from 85.9% to 92.8% at a concentrate grade of 10.76% to 15.31% Nd₂O₃+Pr₆O₁₁.
- REE at Yin is predominantly hosted in monazite which is amenable to commercial processing.
- Significant metallurgical studies ongoing – results expected throughout 2023.

Global Strategic Imperative Driving Rare Earth Growth & Prices

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.
- Dreadnought is receiving increasing levels of interest from midstream and downstream industry participants in Mangaroon. While the current focus is on upstream options (mining, milling and concentrating) opportunities to collaborate with midstream and downstream industry participants may represent an additional upside value opportunity for Dreadnought’s shareholders in the future.

Discussion

Outcropping REE mineralisation was first observed at Mangaroon in July 2021. Since then, ~43kms of REE bearing ironstones and 7 carbonatite intrusions have been identified. The first ever drill holes in the Yin REE Ironstone Complex commenced in June 2022 with an initial Inferred Resource of 14.36Mt @ 1.13% TREO announced within 6 months of discovery in December 2022 (ASX 28 Dec 2022). In February 2023, an Exploration Target of 50-100Mt at 0.9-1.3% TREO estimated for the top 150m of the ~43km long Yin REE Ironstone Complex was announced (ASX 13 Feb 2023).

To date, 530 RC holes and 41 diamond holes have been drilled along the Yin REE Ironstone Complex and C1-C7 Carbonatites. The first year of drilling has delivered 9 ironstones discoveries, including a large-scale independent Resource and significant REE-Nb-Ti-P-Sc mineralisation at the C1-C5 carbonatites.

This Resource update of 20.06Mt @ 1.03% TREO covers ~4kms of the Yin REE Ironstone Complex (an addition of 1 km of strike) and is based on 160 RC drill holes (17,787m) and 28 diamond drill holes (2,791.4m) drilled between June 2022 and April 2023.

Importantly the Resource is yet to include drilling at Y2, Yin North, Sabre and Y8 ironstones nor the C1-C7 carbonatites.

The robust nature of this 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 nearby Yangibana Project. Importantly, this update includes an initial Indicated Resource of 5.52Mt @ 1.23% TREO (NdPr:TREO of 28%) over just ~250m of strike.

The Resource contains a slightly lower NdPr:TREO ratio than that shown previously due to the inclusion of mineralisation south of the initial Yin Resource. The NdPr:TREO Ratio appears to be increasing from south to north as evidenced by the recent discoveries at Y2 and Yin North. Accordingly, the Resource update targeted for the December 2023 quarter is expected to include a higher NdPr:TREO ratio.

The Resource is expected to grow as infill drilling advances at Y2, Yin North and Sabre and is expected to include an increased Indicated Resource to underpin plans for an initial Scoping Study. Additional Resource growth is also expected from ongoing drilling at the C1-C7 carbonatites.

Assays from drilling along the Yin REE Ironstone Complex and the C1-C7 carbonatites will be ongoing throughout 2023.



Figure 2: Photo of Dreadnought's Claudia Tomkins and Sam Busetti inspecting pXRF results from RC drill chips.

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 an independent consultant 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 and Region

Mangaroon contains the Yin REE Ironstone Complex and is located ~250kms south-east of Exmouth, in the Gascoyne Region of Western Australia. The Yangibana Ironstone Project is Dreadnought’s immediate neighbour and is located to the north of Yin on the other side of the Lyons River Fault.

Rare earths at the Yangibana ironstones were first identified in 1981 and have similar metallurgical properties as the Yin ironstones to the south of the Lyons River Fault. However, rare earths to the south of the Lyons River Fault also vary significantly to those in the north including:

- a high Resource intensity of ~4.8Mt/km, making for potentially low-cost Resource growth and a likely attractive mining proposition;
- the likely regional source of the rare earths in the C1-C7 carbonatites with C1-C5 already at ~6.5kms x 1km;
- a large Exploration Target of 50-100Mt at 0.9-1.3% TREO (top 150m of the Yin REE Ironstone Complex only); and
- a suite of critical minerals including light and heavy rare earths, phosphate, niobium, titanium and scandium.

The updated Resource of 20.06Mt @ 1.03% TREO only covers ~4km of the Yin and Yin South REE deposits, part of the ~43km long Yin REE Ironstone Complex.

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 Ophthalmanian 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 (Figure 3). A large series of 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).

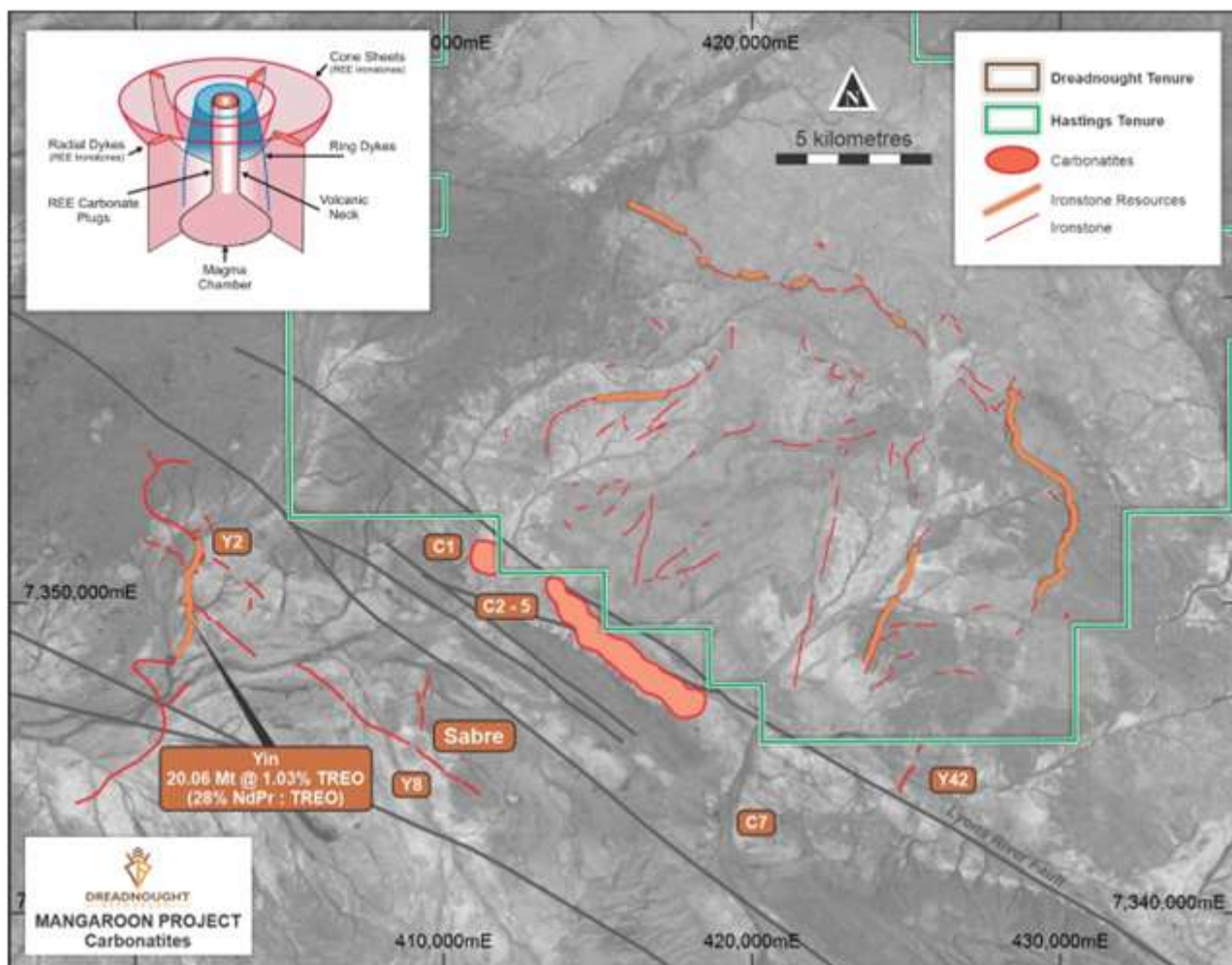


Figure 3: Local geological relationships between central carbonatite plugs C1-C7 (C6 off image) and the known ironstones across the Yin and the nearby Yangibana Projects. The ~4km long Yin ironstone Resource is highlighted. The ironstone discoveries at Y2, Yin North and Sabre which are to be included in the December 2023 quarter Resource upgrade are also shown.

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 oxide. Based on increased experience, this Resource update includes a significant relogging and interpretation of the BOCO Depth and TOFR Depth which has resulted in adjusted oxide and fresh domaining.

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 oxidised carbonatite (i.e. ironstone when not fresh).

In addition, the lithology has been simplified and re-coded, and a new geological model digitised and wireframed.

This model was provided to Widenbar 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 oxide (above) and fresh (below). In addition, the dyke and fenite wireframes were split into individually connected wireframes for Resource domaining.

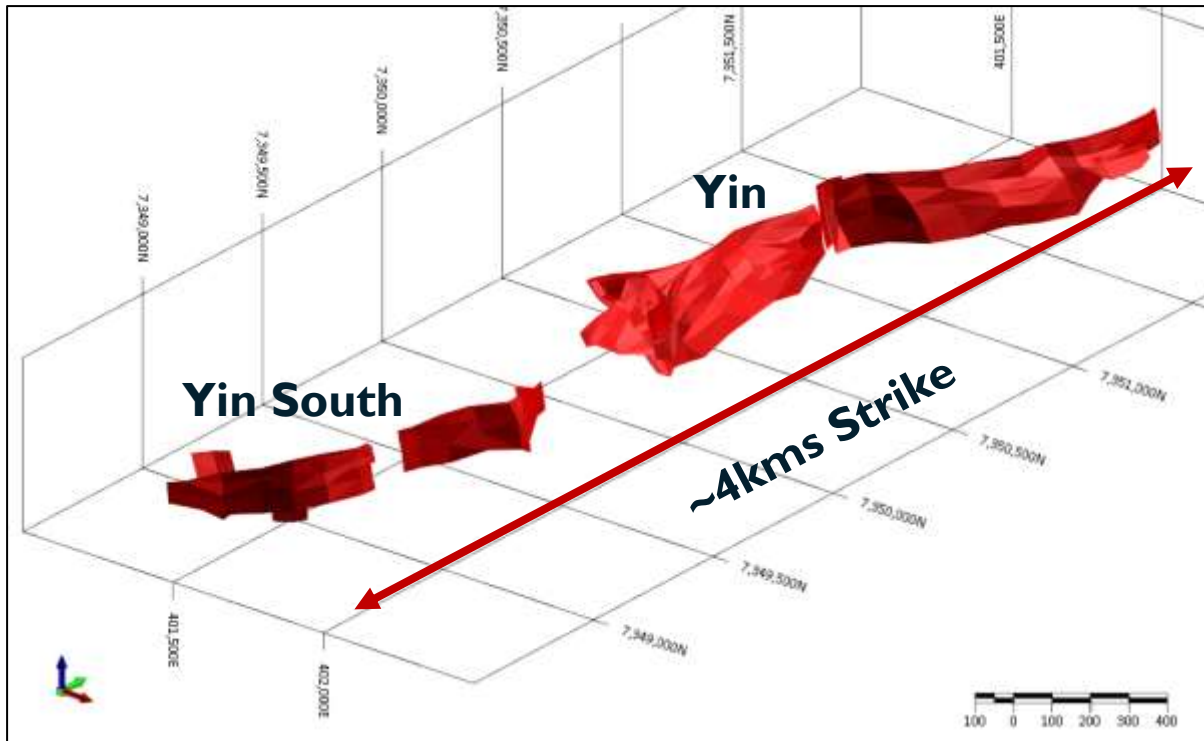


Figure 4: Geological wireframes for the Yin ironstone dyke (oxide and fresh) over ~4kms of strike.

Drilling Techniques

Dreadnought's drilling at Yin was conducted by Ausdrill Limited using reverse circulation ("RC") drilling and by Hagstrom using diamond ("DD") drilling techniques. In total, 160 RC holes have been drilled, sampled and assayed to estimate the Resource. In addition, 28 DD holes were drilled and sampled to produce samples for density measurements, ongoing metallurgical testing and additional QAQC analysis. The results of a twinned hole study between RC and DD holes found that all statistics and graphic logs support a reasonable correlation. The DD holes generally confirm the grade distribution and tenor in the RC holes and hence that the RC holes are suitable for further use in Resource estimation and classification.

All holes used in the Resource estimation have been previously announced with the necessary additional collar and assay details provided. These holes are also shown in Tables 12 and 13.

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 if ground water is encountered. A total of 530 RC holes (61,189m) have been drilled to date. The updated Resource is based on 160 RC drill holes (17,787m) drilled between June 2022 and April 2023.

DD holes were drilled as orientated HQ and NQ size with no RC pre-collars. A total of 41 Diamond holes (4,425.56m) have been drilled to date. The updated Resource includes the results of 28 diamond drill holes (2,791.4m) drilled between June 2022 and May 2023.

The Resource does not include drilling at:

- the Y2, Yin north, Sabre and Y8 ironstones; 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). Prior to February 2023, unmineralised zones were sampled by 3m composite, post February 2023 unmineralised material is not sampled.

All samples were then sent for full 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; and
- 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 by Dreadnought geologists and the laboratory for QAQC.

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

Assaying and QAQC

Samples were submitted to the Perth laboratory for preparation and analysis by ME-MS61. Pulverised samples were then transported to the Brisbane laboratory for analysis by Lithium Borate Fusion XRF (ALS Method “ME-XRF30”).

The 2-3kg samples were submitted to the Perth laboratory, 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 the Brisbane laboratory where a 0.66g charge was used for the determination of TREO by ME-XRF30 analysis.

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

DRE Announcement 13 March 2023: Successful Yin Extensional Drilling Results – Mangaroon

DRE Announcement 29 March 2023: Yin Resource to Grow, Carbonatite Drilling Commenced

DRE Announcement 13 June 2023: Yin Extended by ~1km & ~2.5km of High-Grade NdPr Discoveries

Estimation Methodology

Widenbar was retained to produce a Resource estimate for ~4km of the Yin Ironstone. Validated drillhole data and geological interpretations were supplied by Dreadnought. Widenbar produced the Resource using standard processes and procedures including data selection, composting, 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 RC 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. Diamond drilling sample intervals are variable, corresponding to breaks in lithology and weathering.

For data analysis and Resource estimation processes, all 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 14,388 composites available for use in Resource estimation.

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

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

LITH	WEATHERING	DENSITY
Ironstone	OX/TR	2.80
Fenite	OX/TR	2.65
Country Rock	OX/TR	2.60
Calcrete	OX/TR	2.41
Ironstone	FR	3.20
Fenite	FR	2.80
Country Rock	FR	2.75

There are 457 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.

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.

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 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.

Table 3: Search parameters used in Ordinary Kriging.

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

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.

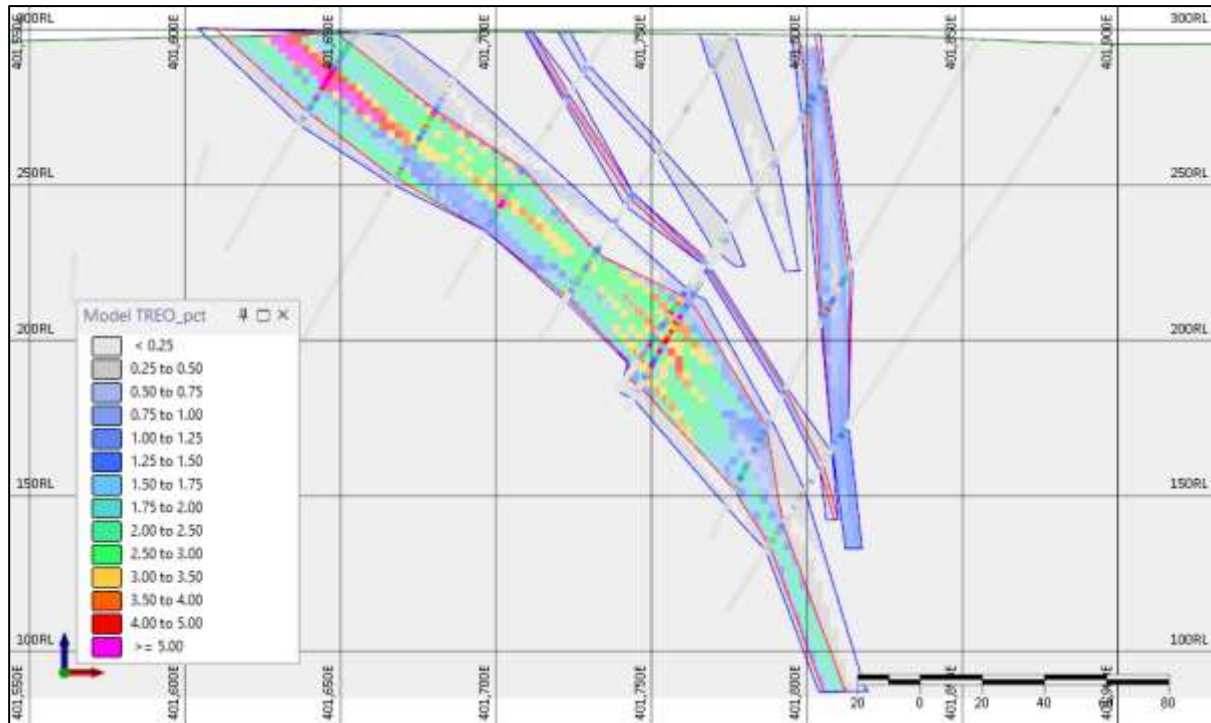


Figure 5: Section 7350200N showing the grade distribution within the Resource model.

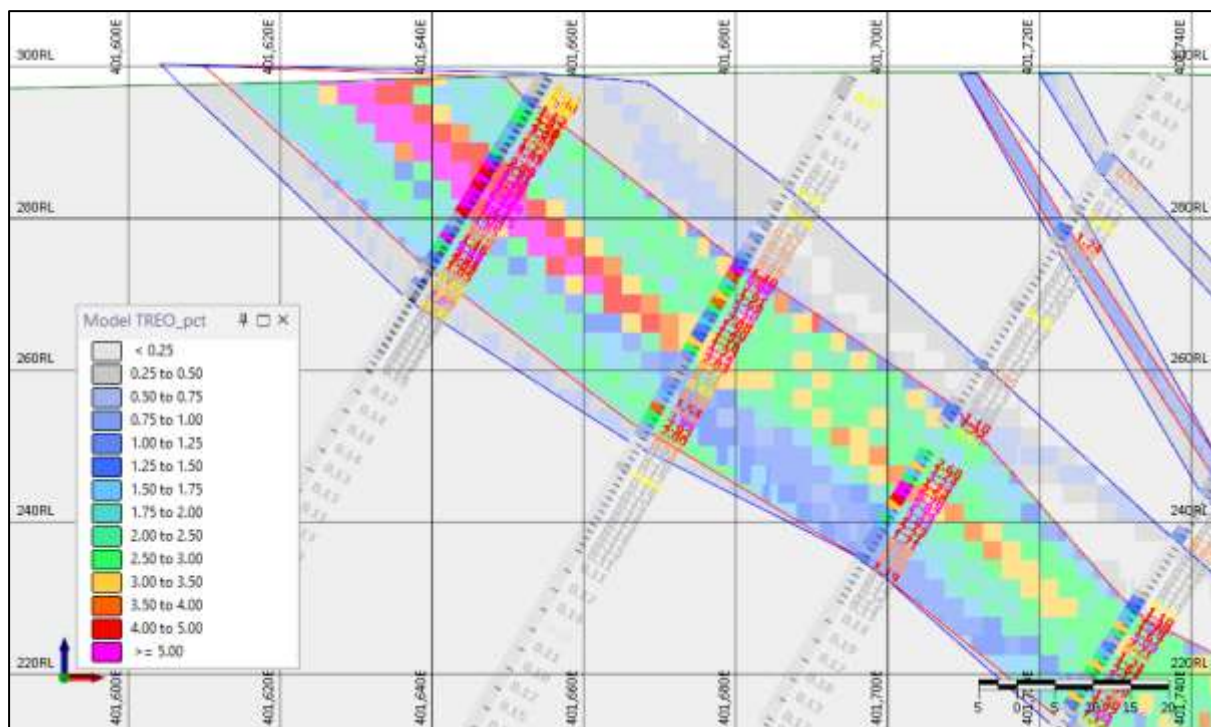


Figure 6: Detail of part of 7350200N showing high grades at surface.

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 unmineralised material.

Resource Classification

The Resource has been classified in the Indicated and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (2012 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 Ordinary 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 Dreadnought's database. Descriptions of drilling techniques, survey, sampling/sample preparation, analytical techniques and database management/validation 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 an infill area of 50m spaced northings in the thicker part of the main deposit. This area also contains several pairs of twinned DD and RC holes and is classified as Indicated.

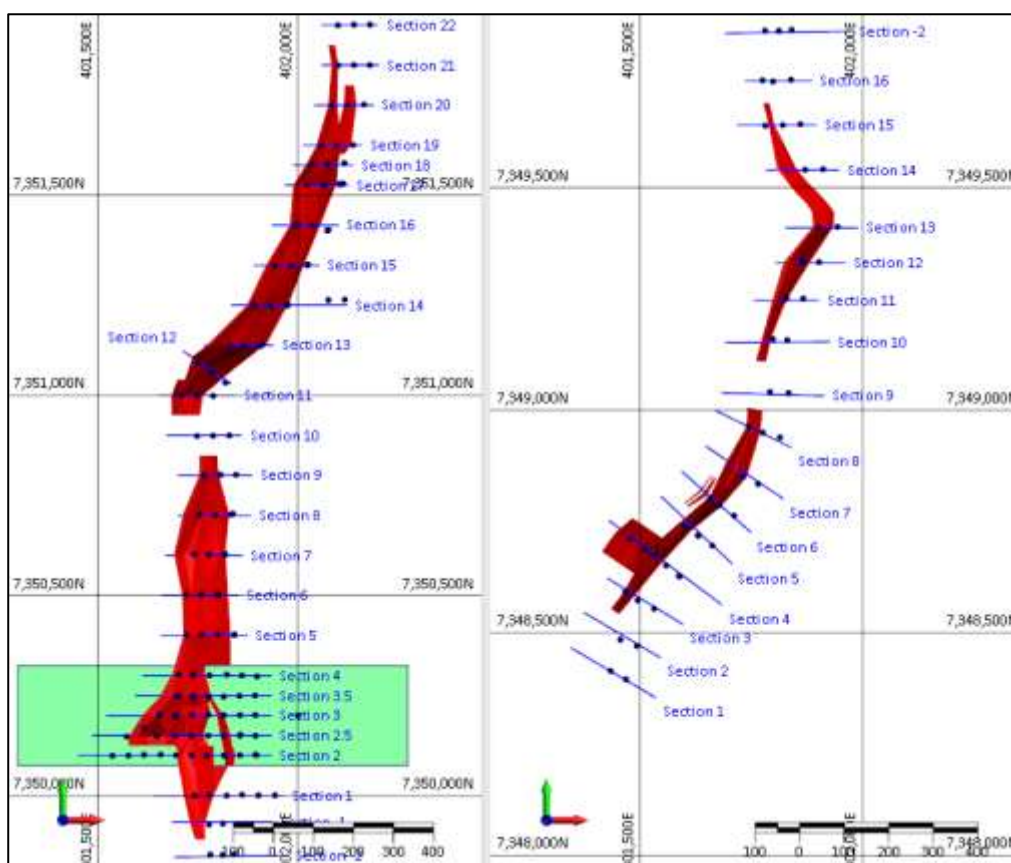


Figure 7: Plan view image showing the drill hole spacing at Yin (left) and Yin South (right) – Indicated classification highlighted in green.

Resource Estimate

A summary of the current Resources of 20.06Mt @ 1.03% 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 Project. Numbers may not add up due to rounding.

Table 4: Summary of Yin Resources at 0.20% TREO Cut-off.

Resource Classification	Geology	Tonnes (Mt)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Indicated	Oxide	3.01	1.25	3.5	28	37,700 t	10,400 t
Indicated	Fresh	2.52	1.21	3.4	28	30,400 t	8,400 t
Indicated	Subtotal	5.52	1.23	3.4	28	68,100 t	18,800 t
Inferred	Oxide	11.35	0.91	2.5	28	102,900 t	28,900 t
Inferred	Fresh	3.18	1.09	3.3	31	34,900 t	10,600 t
Inferred	Subtotal	14.56	0.95	2.7	29	137,800 t	39,500 t
Total	Oxide	14.36	0.98	2.7	28	140,600 t	39,300 t
Total	Fresh	5.70	1.14	3.3	29	65,300 t	19,100 t
TOTAL		20.06	1.03	2.9	28	205,900 t	58,400 t

Table 5: Summary of Yin Resources at 0.40% TREO% Cut-off.

Resource Classification	Geology	Tonnes (Mt)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Indicated	Oxide	2.19	1.61	4.5	28	35,100 t	9,900 t
Indicated	Fresh	1.87	1.53	4.3	28	28,500 t	8,000 t
Indicated	Subtotal	4.05	1.57	4.4	28	63,600 t	17,900 t
Inferred	Oxide	6.35	1.38	4.0	29	87,400 t	25,500 t
Inferred	Fresh	2.09	1.52	4.7	31	31,800 t	9,900 t
Inferred	Subtotal	8.44	1.41	4.2	30	119,200 t	35,400 t
Total	Oxide	8.53	1.44	4.1	29	122,500 t	35,400 t
Total	Fresh	3.96	1.52	4.5	30	60,300 t	17,900 t
TOTAL		12.49	1.46	4.3	29	182,800 t	53,300 t

Table 6: Summary of Yin Resources at 1.00% TREO% Cut-off.

Resource Classification	Geology	Tonnes (Mt)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Indicated	Oxide	1.44	2.13	6.2	29	30,700 t	8,900 t
Indicated	Fresh	1.46	1.75	5.0	29	25,500 t	7,300 t
Indicated	Subtotal	2.90	1.94	5.6	29	56,200 t	16,200 t
Inferred	Oxide	3.96	1.85	5.5	30	73,300 t	21,900 t
Inferred	Fresh	1.52	1.86	5.9	32	28,200 t	8,900 t
Inferred	Subtotal	5.48	1.85	5.6	30	101,500 t	30,800 t
Total	Oxide	5.41	1.92	5.7	30	104,00 t	30,800 t
Total	Fresh	2.97	1.81	5.4	30	53,700 t	16,200 t
TOTAL		8.38	1.88	5.6	30	157,700 t	47,000 t

Table 7: Summary of Yin Resources at 1.50% TREO% Cut-off.

Resource Classification	Geology	Tonnes (Mt)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Indicated	Oxide	1.08	2.41	7.1	29	26,100 t	7,600 t
Indicated	Fresh	0.86	2.10	6.0	29	18,000 t	5,200 t
Indicated	Subtotal	1.94	2.27	6.6	29	44,100 t	12,800 t
Inferred	Oxide	2.60	2.16	6.4	30	56,200 t	16,700 t
Inferred	Fresh	1.12	2.07	6.7	32	23,100 t	7,500 t
Inferred	Subtotal	3.72	2.13	6.5	30	79,300 t	24,200 t
Total	Oxide	3.69	2.23	6.6	30	82,300 t	24,400 t
Total	Fresh	1.97	2.08	6.4	31	41,100 t	12,600 t
TOTAL		5.66	2.18	6.5	30	123,400 t	37,000 t

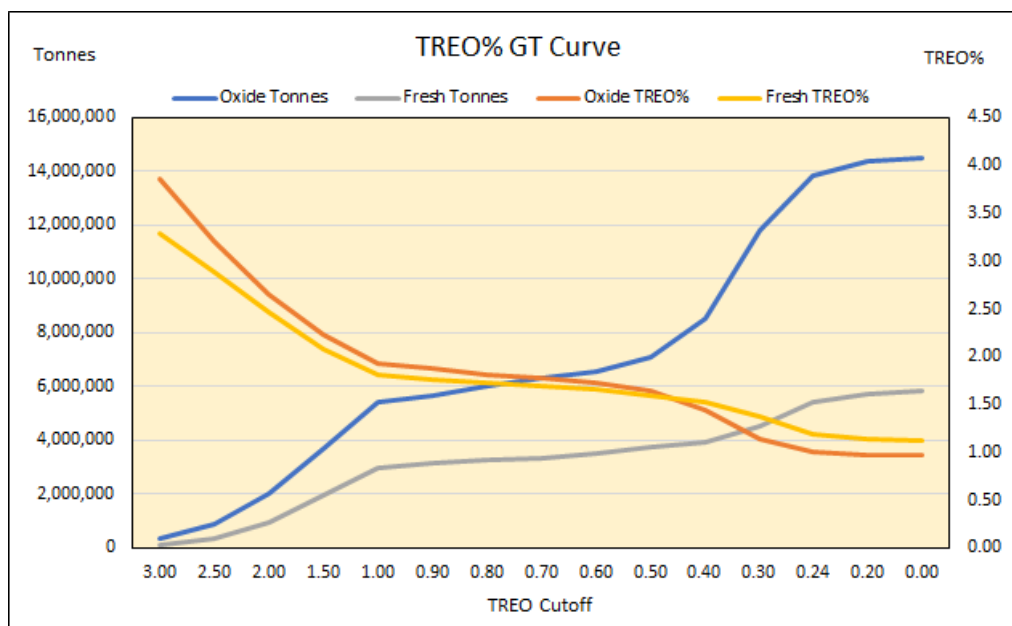


Figure 8: TREO% grade tonnage curve for oxide and fresh mineralisation.

Comparison with Previous Resource Estimate

Widenbar produced an initial Resource estimate for Yin in December 2022 as summarised below in comparison to the current Resource.

Overall, there has been an increase from 14.4 million tonnes to 20 million tonnes, with a slight decrease in grade from 1.13% TREO to 1.03% TREO. This is due partly to an increase in the depth of the main part of the Yin deposit and the inclusion of a Resource at Yin South.

Significantly, there has been an allocation of 5.5 million tonnes to the Indicated category.

Table 8: Summary of December 2022 Yin Resources at 0.20% TREO Cut-off.

Resource Classification	Geology	Tonnes (Mt)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Inferred	Ironstone	4.80	1.67	5.1	31	80,100 t	24,500 t
Inferred	Carbonatite	4.09	1.54	4.7	31	63,000 t	19,300 t
Inferred	Fenite	5.47	0.36	0.8	23	19,700 t	4,400 t
TOTAL		14.36	1.13	3.4	30	162,800 t	48,200 t

Table 9: Summary of July 2023 Yin Resources at 0.20% TREO% Cut-off.

Resource Classification	Geology	Tonnes (Mt)	TREO (%)	Nd ₂ O ₃ +Pr ₆ O ₁₁ (kg/t)	NdPr:TREO Ratio (%)	Contained TREO	Contained Nd ₂ O ₃ +Pr ₆ O ₁₁
Indicated	Oxide	3.01	1.25	3.5	28	37,700 t	10,400 t
Indicated	Fresh	2.52	1.21	3.4	28	30,400 t	8,400 t
Indicated	Subtotal	5.52	1.23	3.4	28	68,100 t	18,800 t
Inferred	Oxide	11.35	0.91	2.5	28	102,900 t	28,900 t
Inferred	Fresh	3.18	1.09	3.3	31	34,900 t	10,600 t
Inferred	Subtotal	14.56	0.95	2.7	29	137,800 t	39,500 t
Total	Oxide	14.36	0.98	2.7	28	140,600 t	39,300 t
Total	Fresh	5.7	1.14	3.3	29	65,300 t	19,100 t
TOTAL		20.06	1.03	2.9	28	205,900 t	58,400 t

Metallurgy

Metallurgical test work has been undertaken independently at ALS Metallurgy and IMO Metallurgy. Oversight on the test work was conducted on behalf of Dreadnought by experienced consulting metallurgist, Damien Krebs from Primero Group.

Two rounds of metallurgical testing have been completed on the Yin ironstones and have resulted in the production of concentrates ranging from 31.22-41.70% TREO and 10.76%-15.31% $\text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11}$ with TREO recoveries ranging from 85.9%-92.8% using material with head grades ranging from 1.60% - 2.36% TREO. This work indicates that a high-value monazite concentrate can be produced from the Yin ironstones using a standard flowsheet.

In July 2021, flotation test work conducted on a 30kg bulk surface sample from Yin produced a high-grade monazite concentrate with 92.8% recovery into 3.55% of the original mass. The concentrate grade was 15.31% $\text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11}$ and 41.70% TREO.

In May 2023, flotation test work conducted on a bulk composite of diamond drill samples from Yin produced a high-grade concentrate with 85.9% TREO recovery into 6.7% of the original mass. The concentrate grade was 10.76% $\text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11}$ and 31.22% TREO.



Figure 9: Successful froth flotation test on the Yin bulk sample.

Metallurgical testing is now advancing as follows:

- Increased intensity of testing of all Yin ironstones that are expected to become Resources across a range of head grades.
- Acid bake performance analysis by ANSTO of bulk concentrates for producing a mixed rare earth carbonate to optimise midstream processing options for the concentrate.
- Ongoing concentrate flowsheet optimisation.

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

DRE Announcement 29 May 2023: Metallurgical Test Work Supports High-Value Concentrate

Reasonable Potential of Eventual Economic Extraction

The prospects for eventual economic extraction of Rare Earth oxides from the Yin and Yin South deposits has been considered by running preliminary pit optimisations. Mining and processing costs, metal prices and metallurgical recoveries are uncertain at this stage of the project, but assumptions have been made based on publicly available information published on the advanced-stage, nearby Yangibana Rare Earths Project. Depending on the assumptions, a theoretical breakeven cutoff grade is indicated between 0.18% and 0.25% TREO (Total Rare Earth Oxides). A majority of the Mineral Resource lies within the optimal pits generated using these assumptions and, on this basis, and given the uncertainties at this early stage of development of the project, the Competent Person considers that it is reasonable to include all of the material that has been classified in the Indicated and Inferred categories.

Future Work

Subject to the outcome of ongoing metallurgical work, the Resource will form the basis of a planned Scoping Study regarding the potential to mine Yin. In parallel, there are ongoing in-fill and extensional RC and diamond drilling programs which will form the basis for ongoing Resource updates.

Impact on Long Term Incentive Plan

The following table outlines the Company's Long-Term Incentive ("LTI") plan with the Class A and B performance shares now vested. The Class C performance shares are now considered likely to be vested at an Inferred Resource of at least 30Mt @ >1% TREO. The capital structure following issue of the LTI performance shares is also outlined below.

Table 10: LTI Plan summary.

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. All Class A Performance Rights have been exercised.	Yes
Class B	13,800,001	The Company announcing an Inferred JORC Resource of 20Mt @ >1% TREO by 31 December 2023.	Yes
Class C	13,799,996	The Company announcing an Inferred JORC Resource of 30Mt @ >1% TREO by 31 December 2024.	No

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

Table 11: Capital structure following issue of Class A and B performance shares.

Quoted Securities	
Fully Paid Ordinary Shares	3,341,528,221
Unquoted Securities	
Options @ \$0.005 expiring 09/04/2024	30,000,000
Options @ \$0.005 expiring 30/06/2024	1,500,000
Options @ \$0.04 expiring 02/07/2024	12,100,000
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
Options @ \$0.12 expiring 02/03/2026	1,223,151
Options @ \$0.075 expiring 14/06/2026	2,000,000
Class C Performance Shares	13,799,996

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 (E8/3178, E08/3274, E09/2384, E09/2433, E09/2473: FQM Earn-in) (E08/3275, E08/3439, E09/2290, E09/2359, E09/2405, E09/2370, E09/2448, E09/2449, E09/2450, E09/2467, E09/2478, E09/2531, E09/2535, E09/2616, E09/2620, M09/91, M09/146, M09/147, M09/174, M09/175: DRE 100%)

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

Dreadnought has located outcropping high-grade gold bearing quartz veins along the Star of Mangaroon Shear, Edmund and Minga Bar Faults, high-grade REE ironstones, REE-P₂O₅-Nb₂O₅-TiO₂-Sc mineralised carbonatites and outcropping high tenor Ni-Cu-PGE blebby sulphides at the Money Intrusion.

Dreadnought has already successfully delivered:

- an initial independent JORC Inferred Resource of 20.06Mt @ 1.03% TREO and an initial Indicated Resource of 5.52Mt @ 1.23% TREO covering only 4kms of the 43kms of strike within the Yin REE Ironstone Complex; and
- an Exploration Target of 50-100Mt at 0.9-1.3% TREO (ASX 13 Feb 2023) estimated over 40 kms of strike within the Yin REE Ironstone Complex.

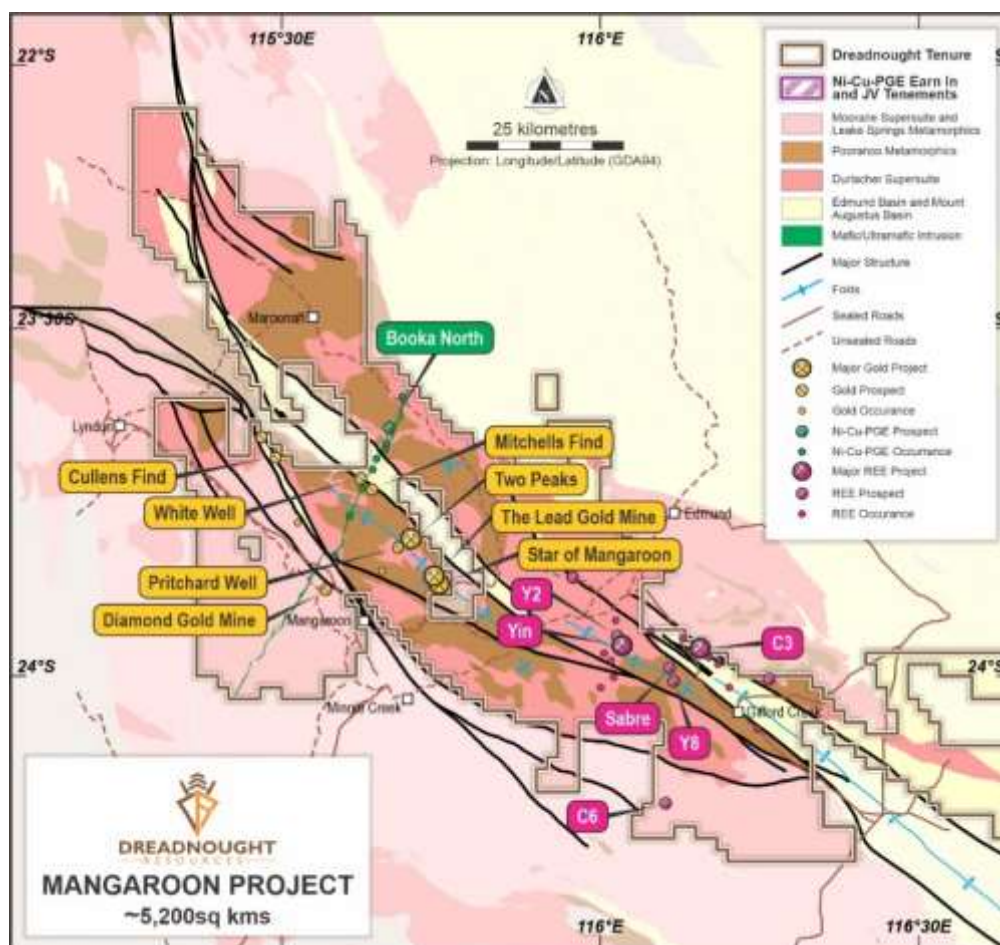


Figure 10: Plan view map of Mangaroon showing the location of gold, nickel and REE prospects in relation to major structures, geology and roads.

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
- 1 February 2022 Rare Earths, Phosphate, Niobium & Zirconium Results from Mangaroon
- 5 September 2022 Thick Rare Earth Ironstones Confirmed at Sabre (Y3) Discovery
- 17 October 2022 Mineralised Carbonatites Discovered at C3 and C4
- 23 November 2022 Multiple, Large Scale REE-Nb-Ti-P Carbonatites
- 13 December 2022 Thick Mineralisation Continues at C3, 2022 Drilling Complete
- 28 December 2022 Initial High-Grade, Independent Resource Over 3kms at Yin
- 27 January 2023 Mineralised REE Ironstones increased by 13kms to 43kms
- 13 February 2023 REE Ironstone Exploration Target Defined
- 13 March 2023 Successful Yin Extensional Drilling Results – Mangaroon
- 29 March 2023 Yin Resource to Grow, Carbonatite Drilling Commenced
- 3 April 2023 Carbonatites Deliver Thick, Near Surface REE Results
- 29 May 2023 Metallurgical Test Work Supports High-Value Concentrate
- 13 June 2023 Yin Extended by ~1km & ~2.5km of High-Grade NdPr Discoveries

UPCOMING NEWSFLOW

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

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

July: Quarterly Activities and Cashflow Report

19-21 July: Noosa Mining Investor Conference

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

August: Results of geophysical and geochemical surveys at Central Yilgarn (100%)

August: Commencement of RC drilling at Mangaroon Au (100%)

August: Initial C3 Resource (Mangaroon 100%)

7-9 August: Diggers and Dealers Conference

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

October: Drilling and DHEM results from Money Intrusion (Mangaroon First Quantum Earn-in)

November: Follow-up RC drilling at Mangaroon Au (100%)

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

~Ends~

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

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, exploration results and planning, and exploration targets was compiled by Mr. Dean Tuck, who is a Member of the AIG, Managing Director, and shareholder of the Company. Mr. Tuck has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Tuck consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

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

INVESTMENT HIGHLIGHTS

Kimberley Ni-Cu-Au Projects

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

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

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

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

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

Dreadnought has delivered an initial JORC Inferred Resource over just ~4kms Yin REE Ironstone Complex delivering 20.06Mt @ 1.03% TREO (28% NdPr:TREO Ratio) (ASX 5 July 2022) with an additional ~39kms of strike still to be tested.

Bresnahan HREE and Au Project

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

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

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

Central Yilgarn is located ~190km northwest of Kalgoorlie in the Yilgarn Craton. The project comprises ~1,600 sq kms covering ~150km of strike along the majority of the Illara, 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 12: 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 incl	0	34	34	2.59	0.80	31	Yin
	11	21	10	6.05	1.89	31	
YINRC002 incl	24	55	31	1.73	0.49	28	
	29	36	7	3.47	1.06	31	
YINRC003 and and incl	23	25	2	0.99	0.25	25	
	44	45	1	0.82	0.19	23	
	50	75	21	2.01	0.62	31	
	58	69	11	3.11	0.97	31	
YINRC004 and and incl	60	65	5	0.55	0.12	22	
	70	72	2	0.62	0.13	21	
	80	99	19	1.57	0.46	29	
	85	93	8	2.01	0.60	30	
YINRC005 and and incl	18	32	14	0.91	0.24	26	
	88	90	2	1.12	0.31	28	
	94	129	35	2.75	0.80	29	
	105	120	15	4.08	1.21	30	
YINRC006 and and incl	85	104	19	1.00	0.30	30	
	128	131	3	0.55	0.13	24	
	139	165	26	1.00	0.25	25	
	157	164	7	1.91	0.45	24	
YINRC007 incl and and	0	20	20	0.75	0.22	29	
	2	11	9	1.25	0.36	29	
	33	39	6	0.25	0.07	28	
	43	44	1	0.23	0.04	17	
YINRC008 and incl and	0	6	6	0.28	0.09	32	
	16	41	26	1.31	0.38	29	
	28	36	8	2.55	0.76	30	
	47	48	1	0.47	0.14	30	
YINRC009 and and incl and and	5	7	2	0.34	0.02	6	
	48	51	3	0.44	0.13	30	
	55	79	24	0.83	0.24	29	
	70	77	7	2.04	0.63	31	
	81	82	1	0.63	0.11	17	
	89	90	1	0.57	0.13	23	
YINRC011 incl	106	123	17	1.14	0.35	31	
	110	120	10	1.54	0.49	32	
YINRC012 incl	151	159	8	1.44	0.44	31	
	154	157	3	2.28	0.69	30	
YINRC014 and	0	8	8	1.39	0.44	32	
	23	25	2	0.72	0.18	25	
YINRC018 and and	0	5	5	0.28	0.02	7	
	12	15	3	0.24	0.06	25	
	36	37	1	0.22	0.07	32	
YINRC019 incl and incl and	13	33	20	0.81	0.09	11	
	29	31	2	2.59	0.58	22	
	36	37	1	0.38	0.09	24	
	39	40	1	0.41	0.12	29	
	59	60	1	1.53	0.50	33	

Table 12 (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	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	
YINRC023 incl	133	134	1	1.92	0.48	25	
	0	17	17	0.75	0.24	32	
YINRC024 and and incl incl and	8	11	3	2.24	0.75	33	
	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	
YINRC025 and incl and	67	70	3	0.37	0.10	27	
	59	69	10	0.30	0.08	27	
	83	102	19	1.00	0.33	33	
	90	92	2	3.15	1.06	34	
YINRC026 incl	111	120	9	0.31	0.08	26	
	25	39	14	1.05	0.34	32	
YINRC027 and and incl	26	30	4	2.11	0.73	35	
	24	27	3	0.20	0.04	20	
	32	34	2	0.37	0.13	35	
	52	71	19	1.15	0.40	35	
YINRC028 and incl	61	69	8	2.33	0.83	36	
	59	63	4	0.34	0.10	29	
	72	122	50	0.72	0.23	32	
YINRC029	98	103	5	2.81	0.85	30	
	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	

Table 12 (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	

Table 12 (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 12 (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 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	2.60	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	
YINRC096 and and and incl	12	14	2	0.66	0.08	12	
	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	
	155	158	3	3.45	0.99	29	
YINRC098 incl	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 and incl	114	120	6	0.60	0.16	27	
	153	154	1	0.53	0.13	25	
	187	204	17	1.23	0.38	31	
	193	195	2	2.07	0.7	34	

Table 12 (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	
YINRC121 incl and	136	148	12	1.25	0.37	30	
	139	144	5	2.03	0.62	31	
	155	158	3	1.26	0.29	23	
YINRC122 and Incl. Incl.	69	74	5	0.41	0.12	30	
	99	109	10	1.74	0.58	33	
	100	106	6	2.52	0.85	34	
	103	106	3	3.48	1.20	34	
YINRC123 and incl incl	69	77	8	0.90	0.30	33	
	115	138	23	1.28	0.40	31	
	120	131	11	2.28	0.73	32	
	121	126	5	3.54	1.14	32	
YINRC124 incl	126	173	47	0.70	0.22	31	
	126	142	16	1.19	0.39	33	
YINRC125 and	115	121	6	2.78	0.86	31	
	116	120	4	3.42	1.06	31	
YINRC126 incl	120	127	7	1.43	0.50	35	
	121	124	3	2.11	0.75	36	
YINRC127 incl	108	113	5	1.61	0.53	33	
	108	110	2	2.04	0.76	37	
YINRC128 incl	122	129	7	2.43	0.88	36	
	125	129	4	3.92	1.43	36	
YINRC129 and incl	23	24	1	0.48	0.19	40	
	141	146	5	1.31	0.46	35	
	142	144	2	2.15	0.77	36	

Table 12 (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
YINRC131	30	43	13	0.58	0.155	27	Yin
incl	30	32	2	1.53	0.4575	30	
and	38	39	1	1.05	0.3	28	
and	54	71	17	1.32	0.309	23	
incl	62	66	4	3.72	0.94	25	
YINRC132	107	118	11	1.16	0.292	25	
incl	108	110	2	2.11	0.57	27	
YINRC133	151	158	7	0.35	0.061	18	
YINRC134	19	57	38	0.48	0.12	25	
incl	44	45	1	1.13	0.29	26	
and	50	53	3	1.17	0.31	27	
YINRC135	68	73	5	0.35	0.10	28	
YINRC136	39	42	3	0.34	0.08	25	
YINRC137	36	45	9	2.15	0.57	26	
incl	37	40	3	5.80	1.56	27	
YINRC138	79	85	6	0.67	0.16	23	
incl	82	83	1	1.46	0.37	25	
YINRC139	17	24	7	0.35	0.03	7	
and	26	34	8	0.64	0.14	21	
incl	29	33	4	1.00	0.24	24	
YINRC140	97	105	8	1.07	0.24	22	
incl	99	103	4	1.63	0.39	24	
YINRC141	67	87	20	2.15	0.49	23	
incl	68	76	8	4.85	1.15	24	
YINRC142	124	132	8	0.55	0.12	22	
incl	128	129	1	1.76	0.46	26	
YINRC143	109	112	3	0.35	0.08	24	
YINRC144	129	135	6	0.53	0.14	25	
YINRC147	181	182	1	0.66	0.23	35	
YINRC174	44	57	13	0.60	0.13	21	
incl	44	47	3	1.30	0.29	23	
YINRC175	103	108	5	1.06	0.26	24	
incl	103	104	1	4.10	1.06	26	
and	129	219	90	0.56	0.14	24	
incl	162	182	20	1.10	0.29	27	
and	195	202	7	0.92	0.24	26	
YINRC176	82	93	11	0.42	0.08	20	
YINRC177	80	95	15	0.50	0.10	20	
incl	88	89	1	1.41	0.34	24	
and	117	118	1	1.30	0.36	28	
and	134	138	4	0.26	0.05	19	
YINRC178	74	105	31	1.01	0.17	17	
incl	73	78	5	2.47	0.30	12	
incl	74	76	2	5.25	0.65	12	
and	87	90	3	1.79	0.40	22	
and	103	105	2	2.34	0.47	20	

Table 12 (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
YINRC179 incl and incl and	119	129	10	1.33	0.32	24	Yin
	120	124	4	2.15	0.52	24	
	140	166	26	1.22	0.27	22	
	140	148	8	2.10	0.47	23	
	183	184	1	1.31	0.29	22	
YINRC180 incl and	52	72	20	0.6	0.13	22	
	67	69	2	2.01	0.55	27	
	82	90	8	0.44	0.10	23	
YINRC195	119	124	5	0.27	0.04	15	
YINRC196 incl and	55	84	29	0.71	0.12	17	
	76	80	4	3.16	0.58	18	
	102	104	2	0.38	0.07	18	
YINRC197	19	21	2	0.36	0.07	19	
YINRC198 and and	22	25	3	0.24	0.03	13	
	31	35	4	0.24	0.03	13	
	43	45	2	0.77	0.17	22	
YINRC201 incl and	57	68	11	0.96	0.18	19	
	62	66	4	1.88	0.36	17	
	82	86	4	0.24	0.04	17	
YINRC202	29	48	19	0.44	0.06	14	



Starry night over Mangaroon, photo courtesy of Trevor Collens.

Table 13: 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	300	-60	270	123	RC	
YINRC026	401754	7350705	303	-60	270	51	RC	
YINRC027	401794	7350703	302	-60	270	87	RC	
YINRC028	401832	7350703	301	-60	270	123	RC	
YINRC029	401750	7350900	304	-60	270	81	RC	
YINRC030	401790	7350901	303	-60	270	129	RC	
YINRC031	401829	7350900	303	-60	270	177	RC	
YINRC032	401751	7351082	299	-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	

Table 13 (continued): Drill Collar Data (GDA94 MGAz50)

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	

Table 13 (continued): Drill Collar Data (GDA94 MGAz50)

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	401842	7350403	298	-75	278	165	RC	
YINRC122	401800	7350504	301	-77	272	141	RC	
YINRC123	401818	7350605	301	-76	273	153	RC	
YINRC124	401840	7350707	301	-75	268	177	RC	
YINRC125	401911	7351127	295	-82	278	135	RC	
YINRC126	401974	7351228	300	-76	274	147	RC	
YINRC127	402025	7351325	300	-79	271	129	RC	
YINRC128	402077	7351414	292	-73	279	153	RC	
YINRC129	402112	7351528	300	-76	271	165	RC	
YINRC130	401789	7349042	294	-60	275	117	RC	
YINRC131	401773	7348946	295	-60	283	93	RC	
YINRC132	401812	7348937	294	-60	286	153	RC	
YINRC133	401830	7349038	294	-60	275	183	RC	
YINRC134	401778	7349927	295	-60	270	81	RC	
YINRC135	401812	7349929	295	-60	270	138	RC	
YINRC136	401783	7349639	296	-60	270	141	RC	
YINRC137	401798	7349159	294	-60	278	81	RC	
YINRC138	401830	7349156	294	-60	276	123	RC	
YINRC139	401730	7348851	296	-60	302	93	RC	
YINRC140	401765	7348831	296	-60	302	165	RC	
YINRC141	401630	7348717	297	-60	305	123	RC	
YINRC142	401662	7348694	297	-60	300	195	RC	
YINRC143	401432	7348413	296	-60	300	177	RC	
YINRC144	401469	7348394	296	-60	300	165	RC	
YINRC145	401810	7349850	294	-60	272	153	RC	
YINRC146	401837	7349854	294	-60	273	117	RC	
YINRC147	401782	7349850	294	-60	271	189	RC	
YINRC174	401685	7348782	296	-61	305	183	RC	
YINRC175	401713	7348755	297	-61	300	225	RC	
YINRC176	401456	7348484	297	-61	300	119	RC	
YINRC177	401492	7348468	297	-61	300	153	RC	
YINRC178	401559	7348648	297	-61	303	159	RC	
YINRC179	401586	7348627	298	-61	302	189	RC	

Table 13 (continued): Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	Prospect
YINRC180	401497	7348572	298	-61	301	141	RC	Yin
YINRC181	401532	7348554	298	-59	302	153	RC	
YINRC195	401468	7348590	298	-59	301	135	RC	
YINRC196	401534	7348672	296	-60	299	111	RC	
YINRC197	401602	7348737	296	-59	302	87	RC	
YINRC198	401657	7348797	296	-60	301	93	RC	
YINRC199	401743	7348964	294	-60	284	69	RC	
YINRC200	401773	7349738	294	-59	271	81	RC	
YINRC201	401510	7348681	296	-60	303	105	RC	
YINRC202	401474	7348708	295	-60	301	81	RC	
YINDD001	401615	7350168	298	-57	329	36	DD	
YINDD002	401655	7350203	299	-58	267	45	DD	
YINDD003	401993	7351424	299	-57	278	26.7	DD	
YINDD004	401738	7350302	299	-57	273	46.7	DD	
YINDD005	401765	7350800	304	-57	274	21	DD	
YINDD006	401814	7350200	298	-58	274	137.4	DD	
YINDD007	402074	7351411	298	-57	273	120.0	DD	
YINDD008	402104	7351527	300	-58	272	124.7	DD	
YINDD009	402065	7351526	300	-59	273	93	DD	
YINDD010	401943	7351324	300	-59	275	30	DD	
YINDD011	401935	7351222	300	-59	271	75	DD	
YINDD012	401907	7351124	300	-59	271	105	DD	
YINDD013	401786	7351057	300	-60	314	74.4	DD	
YINDD014	401703	7350248	300	-57	115	65.9	DD	
YINDD015	401800	7350501	300	-58	272	110	DD	
YINDD016	401759	7350503	301	-58	273	81	DD	
YINDD017	401857	7350152	296	-58	271	180.6	DD	
YINDD018	401778	7350247	299	-57	269	96.3	DD	
YINDD019	401817	7350100	297	-58	270	65.9	DD	
YINDD020	401896	7350101	295	-59	266	147	DD	
YINDD021	401693	7350197	299	-59	90	150.6	DD	
YINDD024	401589	7348627	298	-57	301	171.5	DD	
YINDD025	401631	7348718	297	-59	304	99.5	DD	
YINDD027	401829	7349253	298	-60	260	57	DD	
YINDD028	401865	7349336	307	-60	271	60.6	DD	

JORC Code, 2012 Edition – Table I report template

Section I Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>Reverse Circulation (RC) and Diamond (DD) drilling was undertaken to produce samples for assaying.</p> <p>Preliminary pXRF analysis</p> <p>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.</p> <p>One 3 beam, 35 second measurement was completed for each drill metre sample.</p> <p>The pXRF instrument is calibrated and serviced annually or more frequently as required with daily instrument calibration checks completed. Additionally, silica blanks and OREAS standards, appropriate to the style of mineralisation are routinely analysed to confirm performance. This procedure is in line with normal industry practice and deemed fit for purpose for preliminary analysis in first pass exploration drilling.</p> <p>This report relates to exploration results of a preliminary nature. pXRF analysis is a preliminary technique which will be superseded by laboratory analysis when it becomes available.</p> <p>Laboratory Analysis</p> <p>Two sampling techniques were utilised for the RC 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.</p> <p>1m Splits</p> <p>From every metre drilled a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter from each metre of drilling.</p> <p>3m Composites</p> <p>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.</p> <p>A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples have 3m composites collected.</p> <p>All samples are submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30).</p> <p>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.</p> <p>Core is orientated for structural and geotechnical logging where possible. In orientated core, half core is submitted to the lab for analysis in intervals ranging from 20cm to 1m depending on the geological context. If core is orientated, then the half core is cut so as to preserve the orientation line with the same side of the core submitted down the hole.</p> <p>QAQC samples consisting of duplicates, blanks and CRM's (OREAS Standards) will be inserted through the program at a rate of 1:50 samples. Duplicate samples are submitted as quarter core.</p> <p>All samples are submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method MEXRF30). Select samples are also submitted for 48 multielements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61) to assist with lithological</p>

Criteria	JORC Code explanation	Commentary
		<p>interpretation.</p> <p>Rock Chips</p> <p>Rock Chips were collected by Dreadnought staff and submitted for analysis. Rock chips are random, subject to bias and often unrepresentative for the typical widths required for economic consideration. They are by nature difficult to duplicate with any acceptable form of precision or accuracy.</p> <p>Rock chips have been collected by Dreadnought to assist in characterising different lithologies, alterations and expressions of mineralisation. In many instances, several rock chips were collected from a single location to assist with characterising and understanding the different lithologies, alterations and expressions of mineralisation present at the locality.</p> <p>Rock chips were submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30).</p>
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<p>RC Drilling</p> <p>Ausdrill undertook the program utilising a Drill Rigs Australia truck mounted Schramm T685VWS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5¾”.</p> <p>Diamond Drilling</p> <p>Diamond drilling was undertaken by Hagstrom Drilling with a truck-mounted low impact diamond drill rig. Drilling is either HQ to end of hole or initially HQ and dropping to NQ once the hole is cased off for deeper drill holes.</p> <p>Core is orientated using a Reflex Sprint gyro and True Core Orientation Tool.</p>
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>RC Drilling</p> <p>Drilling was undertaken using a ‘best practice’ approach to achieve maximum sample recovery and quality through the mineralised zones.</p> <p>Best practice sampling procedure included: suitable usage of dust suppression, suitable shroud, lifting off bottom between each metre, cleaning of sampling equipment, ensuring a dry sample and suitable supervision by the supervising geologist to ensure good sample quality.</p> <p>Diamond Drilling</p> <p>HQ and NQ drilling has been undertaken. All core recoveries are measured and recorded by the drill crew for each run and remeasured and checked by Dreadnought personnel.</p> <p>Core recovery to date has been very high.</p> <p>At this stage, no known bias occurs between sample recovery and grade.</p>
Logging	<ul style="list-style-type: none"> 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. 	<p>RC Drilling</p> <p>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.</p> <p>Lithology, mineralisation, alteration, veining, weathering and structure were all recorded digitally.</p> <p>Chips were washed each metre and stored in chip trays for preservation and future reference.</p> <p>RC pulp material is also analysed on the rig by pXRF, scintillometer and magnetic susceptibility meter to assist with logging and the identification of mineralisation.</p> <p>Logging is qualitative, quantitative or semi-quantitative in nature.</p>

Criteria	JORC Code explanation	Commentary
		<p>Diamond Drilling</p> <p>Diamond core is logged under supervision of a Senior Geologist with sufficient experience in this geological terrane and relevant styles of mineralisation using an industry standard logging system which could eventually be utilised within a Mineral Resource Estimation.</p> <p>Lithology, mineralisation, alteration, veining, weathering and structure are recorded digitally.</p> <p>DD Logging is qualitative, quantitative or semi-quantitative in nature.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<p>Preliminary pXRF analysis</p> <p>pXRF analysis of pulverised and partially homogenised reject RC sample piles is fit for purpose as a preliminary exploration technique.</p> <p>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.</p> <p>RC Drilling</p> <p>From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter.</p> <p>QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the ore zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after.</p> <p>2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 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).</p> <p>Standard laboratory QAQC is undertaken and monitored.</p> <p>Diamond Drilling</p> <p>20cm – 1m quarter core samples are sawn and submitted to the lab for analysis. If core is orientated, then the core is cut so as to preserve the orientation line with the same side of the core submitted down the hole.</p> <p>For the purposes of metallurgical testing, half core was submitted where possible to make the required bulk composite mass required for ongoing testwork. In some instances, this required full core to be used.</p> <p>QAQC in the form of duplicates, blanks and CRM's (OREAS Standards) are inserted through the mineralised zones at a rate of 1:50 samples. Additionally, within each mineralised zone, a duplicate sample is taken and a blank inserted directly after.</p> <p>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).</p> <p>Standard laboratory QAQC is undertaken and monitored.</p> <p>Rock Chips</p> <p>Entire rock chips were submitted to the lab for sample prep and analysis.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<p>Preliminary pXRF analysis</p> <p>Olympus Vanta M Series pXRF analyser is used to provide preliminary quantitative measurement of mineralisation. A 3-</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<p>beam, 35 second reading time was used with a single reading on unprepared raw RC chip sample piles. High grade samples were repeated to confirm repeatability of grade.</p> <p>Calibration checks of the pXRF are undertaken daily, a silica blank and certified REE standard OREAS 461 is routinely analysed to monitor pXRF performance.</p> <p>Laboratory Analysis</p> <p>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 receipt.</p> <p>Rock Chips</p> <p>All samples were submitted to ALS Laboratories in Perth where 1-3kg rock chips samples were crushed so that >70% of material passes through -6mm, the sample is then pulverised to >85% passing 75 micron.</p> <p>A 66-gram aliquot of pulverised sample is fused with 12:22 lithium borate flux containing an oxidizing agent, and poured to form a fused disk. The resultant disk is then analysed by XRF spectrometry specifically for Rare Earths (ALS Method ME-XRF30).</p> <p>Lithium borate fusion is considered a total digest and Method ME-XRF30 is appropriate for REE determination. No standards, duplicates or blanks submitted with rock chips.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<p>Preliminary pXRF analysis</p> <p>Analytical data was collected directly by the Olympus Vanta M Series pXRF analyser and downloaded by digital transfer to an excel spreadsheet with inbuilt QAQC. All data was checked by the responsible geologist and filed on the company server.</p> <p>Logging and Sampling</p> <p>Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database.</p> <p>Significant intersections are inspected by senior company personnel.</p> <p>19 pairs of twinned RC and DD holes have been drilled at this time and compared to validate the RC drilling.</p> <p>No adjustments to any assay data have been undertaken.</p> <p>Rock Chips</p> <p>Rock chip and geological information is written in field books and coordinates and track data saved from hand held GPSs used in the field.</p> <p>Dreadnought geologists have inspected and logged all rock chips.</p> <p>Field data is entered into excel spreadsheets to be loaded into a database.</p>
Location of data points	<ul style="list-style-type: none"> 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. 	<p>Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z).</p> <p>GDA94 Z50s is the grid format for all xyz data reported.</p> <p>Azimuth and dip of the drill hole was recorded after the completion of the hole using a Reflex Sprint IQ Gyro. A reading was undertaken every 30th metre with an accuracy of +/- 1° azimuth and +/-0.3° dip.</p>
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<p>Drill hole location plots have been used to ensure that local drill spacing conforms to the minimum expected for the resource classification. Most sections are drilled at 100m (North) by 25 to 50m (Down Dip) with an infill drilling area of five 50m spaced northing sections in the southern, thicker part of the main Yin deposit</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<p>Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the ironstone outcrops and modelled magnetic data.</p> <p>No sample bias is known at this time.</p>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered directly to ALS Laboratories Perth by Jarrahbah Contracting.
Audits or reviews	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 5 granted Mining Licenses (M09/91, 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. 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. M09/91 is subject to a 1% Gross Royalty held by DOREY, Robert Lionel. The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016). The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, and Towera Stations.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX announcement including:</p> <p>Regional Resources 1986-1988s: WAMEX Reports A23715, 23713</p>

Criteria	JORC Code explanation	Commentary
		<p>Peter Cullen 1986: WAMEX Report A36494</p> <p>Carpentaria Exploration Company 1980: WAMEX Report A9332</p> <p>Newmont 1991: WAMEX Report A32886</p> <p>Hallmark Gold 1996: WAMEX Report A49576</p> <p>Rodney Drage 2011: WAMEX Report A94155</p> <p>Sandfire Resources 2005-2012: WAMEX Report 94826</p>
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province.</p> <p>The Mangaroon Project is prospective for orogenic gold, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted REEs.</p>
Drill hole information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> 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. 	<p>An overview of the drilling program is given within the text and tables within this document.</p>
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<p>Exploration Results have previously been reporting all results greater than 0.2% TREO.</p> <p>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).</p> <p>No metal equivalents are reported.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<p>Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation.</p>
Diagrams	<ul style="list-style-type: none"> 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. 	<p>Refer to figures within this report.</p>
Balanced reporting	<ul style="list-style-type: none"> 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. 	<p>Refer to figures and tables within this report.</p>
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical 	<p>No other substantive exploration data are being reported.</p>

Criteria	JORC Code explanation	Commentary
	survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	<ul style="list-style-type: none"> 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 Scoping Study

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. 	Mangaroon Project has historically been entered into Microsoft Excel logging sheets and transferred to a Datashed database weekly. More recently due to an ongoing transition between database service providers from MRG to Plexer, logging through Plexer software on tablets began around April 2023. Data exports for the most recent resource model were conducted via the Plexer database. Data in the form of CSV files were imported into Micromine 2023 for validation and processing. No errors were found.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	The Competent Person made a site visit on 12 th and 13 th September 2022 and viewed RC and DD logging activities and drilling. The CP also reviewed diamond drill core and RC chips on site.
Geological interpretation	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 1.2km long and typically 10m thick.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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). 	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 Nd ₂ O ₃ and Pr ₆ O ₁₁ to define the parameters required for Ordinary Kriging. Ordinary Kriging using the functions within Micromine 2023.5 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

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<p>variations in strike along the mineralisation.</p> <p>First pass search ellipse is 120m along strike, 60m down dip and 5m across dip.</p> <p>Second pass search ellipse is 200m along strike, 120m down dip and 10m across dip.</p> <p>No assumptions have been made regarding selective mining units.</p> <p>Validation has been carried out using the following methods:</p> <p>Visual comparison of drill hole and block grades in section, plan and 3D.</p> <p>Comparison of declustered mean drill holes against block model grades.</p> <p>Generation of swathe plots.</p> <p>All validation methods produced acceptable results.</p>
Moisture	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	A cutoff 0.2% TREO has been adopted for summary reports; this corresponds to the cutoff used at the close-by and advance-stage Yangibana Project. Other higher-grade cutoffs are also reported to understand the nature of the higher grade parts of the deposit.
Mining factors or assumptions	<ul style="list-style-type: none"> 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. 	<p>Mining is expected to be by conventional open pit methods.</p> <p>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.</p> <p>Conventional ore loss and dilution were taken into account during pit optimisation to assess whether there are "Reasonable prospects of eventual economic extraction" for the Mineral Resource. More rigorous modifying factors for pit optimisation, mine planning work and Reserve estimation will be completed during future studies.</p>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<p>Metallurgical test work has been conducted on a composite of drill samples from three diamond holes drilled at Yin, and produced a concentrate containing 31.22% TREO and 10.76 % Nd₂O₃+Pr₆O₁₁ (NdPr:TREO ratio of 35%) at an 85.9% TREO recovery (ASX announcement 29 May 2023). Further metallurgical work is ongoing.</p> <p>In July 2021 flotation test work 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.</p> <p>These and other metallurgical factors have been considered against the significant work completed at the more advanced Yangibana Project next door which has similar geology and mineralogy to the Yin Ironstones.</p>
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<p>Environmental studies have been carried out on site with Level 1 and Level 2 Flora and Fauna surveys completed. No declared rare species or threatened ecological communities have been identified.</p> <p>Subterranean fauna studies have commenced as part of assessing any impact on the Gifford Creek Calcrete PEC.</p> <p>These and other environmental factors have been considered against the more advanced Yangibana Project next door which has received full state and federal government approvals.</p>
Bulk density	<ul style="list-style-type: none"> 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, 	There are 457 density measurements taken on DD core from throughout the deposit

Criteria	JORC Code explanation	Commentary																											
	<p>the nature, size and representativeness of the samples.</p> <ul style="list-style-type: none"> 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. 	<p>Density has been assigned on the basis of a combination of weathering and lithology domains, as summarised below.</p> <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>2.80</td> </tr> <tr> <td>Fenite</td><td>OX/TR</td><td>2.65</td> </tr> <tr> <td>Country Rock</td><td>OX/TR</td><td>2.60</td> </tr> <tr> <td>Calcrete</td><td>OX/TR</td><td>2.41</td> </tr> <tr> <td>Ironstone</td><td>FR</td><td>3.20</td> </tr> <tr> <td>Fenite</td><td>FR</td><td>2.80</td> </tr> <tr> <td>Country Rock</td><td>FR</td><td>2.75</td> </tr> </tbody> </table>	Final Density			LITH	WEATH	Density	Ironstone	OX/TR	2.80	Fenite	OX/TR	2.65	Country Rock	OX/TR	2.60	Calcrete	OX/TR	2.41	Ironstone	FR	3.20	Fenite	FR	2.80	Country Rock	FR	2.75
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Classification	<ul style="list-style-type: none"> 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. 	<p>The Yin and Yin South Mineral Resource has been classified in the Indicated and Inferred categories.</p> <p>A number of factors have been considered in arriving at this classification, including:</p> <ul style="list-style-type: none"> Geological continuity; Data quality; Drill hole spacing; Modelling technique; <p>Estimation properties including search strategy, number of informing data and average distance of data from blocks.</p> <p>Indicated material lies in the area of approximately 50m x 25 to 30m drill spacing. Inferred material generally has 100m spaced sections with 25 to 50m spaced holes on each section.</p> <p>The classification reflects the CP's view of the deposit.</p>																											
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<p>There have been no reviews or audits of the Mineral Resource Estimate.</p>																											
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> 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. 	<p>The relative accuracy is reflected in the JORC resource categories.</p> <p>Indicated resources are considered local in nature, Inferred resources are considered global in nature.</p> <p>No production data is available as the deposit has not yet been mined.</p>																											