13 February 2023

REE IRONSTONE EXPLORATION TARGET DEFINED– MANGAROON (100%)

HIGHLIGHTS

- **The substantial amount of geological knowledge derived from exploration and Resource work at the Yin and Yangibana (ASX:HAS) ironstone complexes allows for robust interpretation of rare earth element ("REE") ironstone potential.**
- **The Yin Ironstone Complex is comprised of 43kms of REE mineralised ironstones which include:**
  - **3kms containing a JORC 2012 Mineral Resource ("Resource") of 14.36Mt @ 1.13% TREO with a Resource intensity of 4.8Mt/km (ASX 28 Dec 2022); and**
  - **40kms containing a JORC 2012 Exploration Target ("Exploration Target") of 50-100Mt at 0.9-1.3% TREO with a Resource intensity of 1.25-2.5Mt/km and a grade range of 1.13% TREO +/- 20%.**
- **The Exploration Target excludes potential ironstone mineralisation at >150m depth and mineralisation at the C1-C7 carbonatites.**
- **Mobilisation for the 2023 drilling campaign is underway with drilling expected to commence in February 2023.**

Dreadnought Resources Limited ("**Dreadnought**") is pleased to announce an Exploration Target for the ~40kms strike of the Yin Ironstone Complex at the 100% owned Mangaroon project, located in the Gascoyne Region of Western Australia.

The recent expansion of the Yin Ironstone Complex to 43kms of strike, combined with extensive geological knowledge of the REE ironstones in the region has provided the foundation for the Exploration Target. The Exploration Target covers over 40kms of the near surface ironstones at Yin and importantly, excludes the current Yin Resource, any mineralisation at depth (underground potential) and the C1-C7 carbonatites.

Systematic drilling to test the Yin Ironstone Complex has the potential to add significantly to the existing Resource. Mobilisation for drilling at Yin and the C1-7 carbonatites is underway with drilling to commence in February 2023.

Dreadnought's Managing Director, Dean Tuck, commented: "*The Exploration Target for the Yin Ironstone Complex is a fantastic outcome reflecting the outstanding work undertaken by the Dreadnought team over the past 18 months at Mangaroon. When taken in the context that this estimation excludes the current Resource at Yin and the mineralisation at the C1-C7 carbonatites the opportunity for Mangaroon to become a globally significant REE project cannot be underestimated.*"

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.

Figure 1: Photo of Dreadnought sponsored honours student, Marissa Higgins, while mapping and sampling the Y8 ironstone, part of the Yin Ironstone Complex.

SNAPSHOT - MANGAROON RARE EARTHS

Mangaroon is 100% Owned by Dreadnought

Genuine Scale Potential Already at Yin Ironstone Complex

- Initial independent Yin Inferred Resource of 14.36Mt @ 1.13% TREO (ASX 28 Dec 2022) covers only 3km of 43km of strike and is based on only 2.5 months of RC drilling (11,907m).
- Exploration Target of 50-100Mt at 0.9-1.3% TREO estimated for the top 150m of the Yin Ironstone Complex.
- First tranche of long-term incentives now triggered with balance on track to be triggered at JORC Resource of at least 30Mt @ >1% TREO by 31 December 2024.

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

- C1-C7 carbonatites are shaping up as the regional source of REE – initial drill program expands C1-C5 to ~6.5kms in strike length x 1km wide.
- C6 Carbonatite located ~25kms south of C1-5 and C7 is situated over a crustal scale structural splay of the Lyons River Fault and has a geophysical similarity to other globally significant carbonatite intrusions such as Mt Weld, Araxa and Ngualla

High-grade, Multi-Metal Potential Including REE (Neodymium, Praseodymium), Phosphorus, Niobium, Titanium & Scandium (REE-P_2O_5-Nb_2O_5-TiO_2-Sc)

- Yin, like the Yangibana REE project controlled by the ~$450M Hastings Technology Metals Ltd (ASX.HAS), ("**Hastings**") is globally unique due to the high proportion of NdPr as a total of the rare earth oxides ("**NdPr:TREO**" ratio).
- Six coherent zones of REE-P_2O_5-Nb_2O_5-TiO_2-Sc successfully identified within the C1-C5 carbonatites with a ~600m x 550m zone of REE-P_2O_5-Nb_2O_5-TiO_2-Sc mineralisation now confirmed at the C3 discovery.

Potentially Attractive Mining Proposition

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

Positive Metallurgy Results

- Initial metallurgical test work from Yin performed well, achieving a recovery of 92.8% at a concentrate grade of 12.3% Nd_2O_3 and an average 40% TREO.
- REE at Yin is predominantly hosted in monazite which is amenable to commercial processing.
- Significant metallurgical study from 16 diamond holes drilled at Yin underway – results expected April/May 2023.

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

- Yangibana is located only 25kms to the northeast of Yin and currently has a Resource* of 29.93Mt @ 0.93% TREO with 0.32% Nd_2O_3+Pr_6O_{11} (34% NdPr:TREO).
- Yangibana is under construction and development with first production planned for 2024.

Global Strategic Imperative Driving Rare Earth Growth & Prices

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.

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

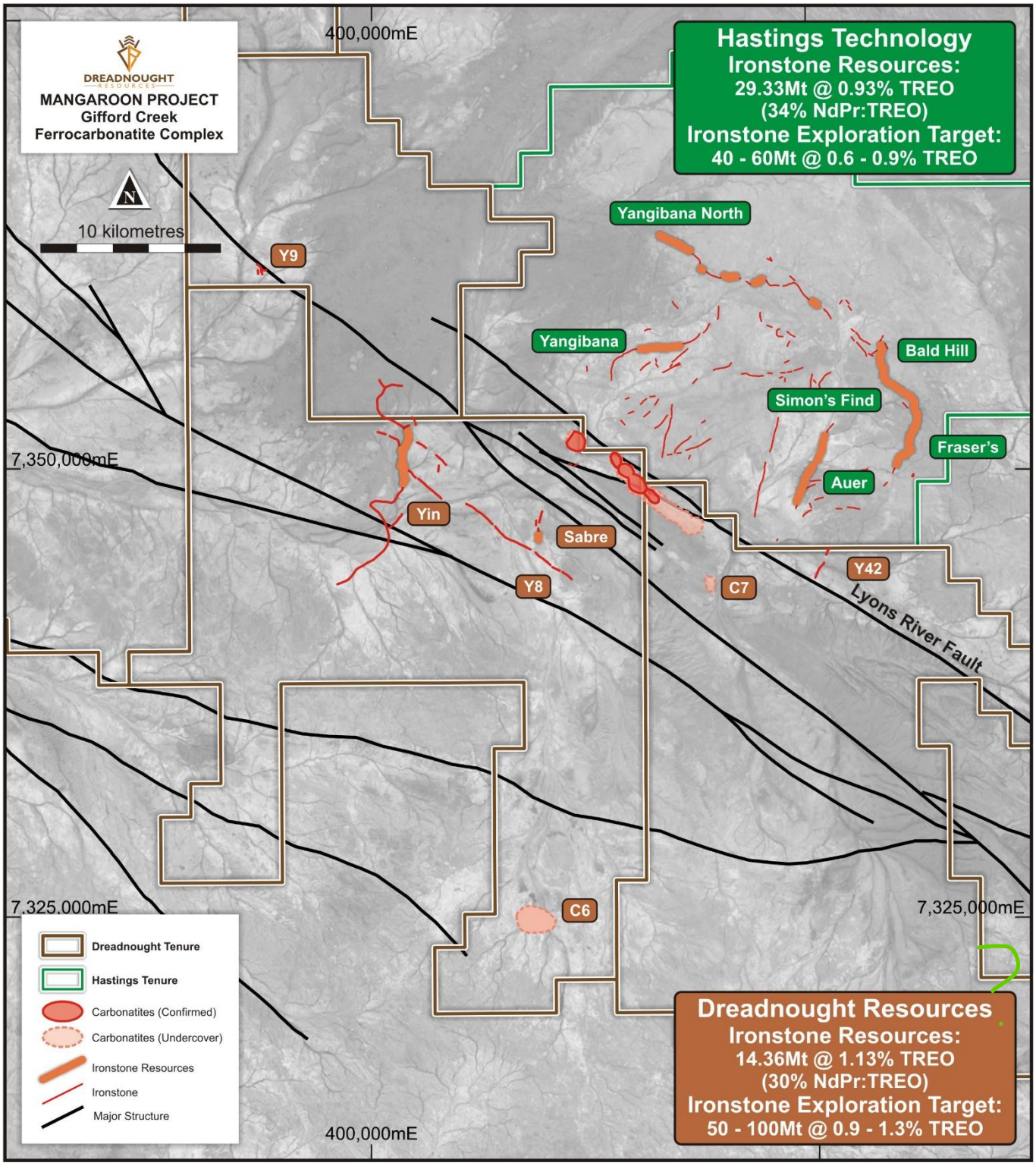


Figure 2: Plan view of the 43km long Yin Ironstone Complex over an orthoimage highlighting currently defined Resources over the full extents of the Gifford Creek Ferrocarbonatite Complex (ie including Yangibana).

Mangaroon REE Ironstones Exploration Target (E09/2448, E09/2450, E09/2535: DRE 100%)

The Yangibana ironstones were first explored in 1972 for base metals. The REE potential of the ironstones was first assessed in 1985 and has seen substantial work by Hastings since 2011. The ~$450M Hastings controls the Yangibana Ironstone Project and is Dreadnought's immediate neighbour being to the north of the Lyons River Fault.

Yangibana (under construction) currently has a Resource of 29.93Mt @ 0.93% TREO (ASX:HAS 11 Oct 2022) and an Exploration Target of 40-60Mt @ 0.7-1.0% TREO (ASX:HAS 15 Dec 2022). The Yangibana Resource is based off detailed drilling covering 24kms of the identified 66kms (36%) of potential ironstones providing a Resource intensity of 1.25Mt/km. The Yangibana Exploration Target uses a Resource intensity of 0.6-0.9Mt/km to account for potentially unmineralised portions and a grade range of +/- 20% to account for grade variation.

Over the past 18 months, Dreadnought has been exploring south of the Lyons River Fault resulting in the discovery of the Yin Ironstone Complex and the C1-C7 carbonatites, the source intrusions for the region. A Resource of 14.36Mt @ 1.13% TREO (ASX:DRE 28 Dec 2022) has been defined based on detailed drilling over only 3kms of 43kms (7%) of mineralised ironstones providing a Resource intensity of 4.8Mt/km, including unmineralised portions.

For the purposes of the Yin Exploration Target, geological information has been used from both Yangibana and Yin to improve the robustness of the estimation whilst also reflecting the uniqueness of Yin in regards to its size and grade.

The Exploration Target is based on a number of key assumptions including:

- Tonnage of 50-100Mt: a Resource intensity of 1.25-2.5Mt/km reflecting the average of the wider Gifford Creek Ferrocarbonatite Complex (1.25Mt/km – 40km x 1.25Mt = 50Mt) and the approximate midpoint between the lower Yangibana Resource intensity of 0.6Mt/km and the current Yin Resource of 4.8Mt/km (2.5Mt/km – 40km x 2.5Mt = 100Mt). This range is considered to be conservative given the extensive work in the region and the significant Resource intensity already seen at Yin.
- Grade of 0.9-1.3% TREO: the grade range was estimated using the existing Yin Resource grade of 1.13% +/- 20%.

The Exploration Target will be further refined through ongoing RC and diamond drilling commencing in February 2023.

The above Exploration Target process only considers the top 150m of the Yin Ironstone Complex. Given the thickness and grades of Yin, internal assessment of the underground potential will be considered which may lead to deeper drilling at Yin. Importantly, the Exploration Target excludes the C1-C7 carbonatites, the source intrusions for the region.

Figure 3: Photo of Dreadnought's Ross Chandler collecting samples and readings over the original Yin outcrop, June 2021.

Background on Mangaroon (E08/3274, E8/3178, E09/2384, E09/2433, E09/2473: FQM Earn-in) (E08/3275, E09/2370, E09/2448, E09/2449, E09/2450, E09/2467, E09/2478: 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 an earn in with First Quantum Minerals Ltd (**"FQM"**) (earning up to 70%) – Figure 4. The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high NdPr:TREO ratio Yangibana REE deposits.

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

In December 2022, Dreadnought delivered an initial independent Yin Resource of 14.36Mt @ 1.13% TREO covering only 3kms of the 43kms of strike within the Yin REE Ironstone Complex.

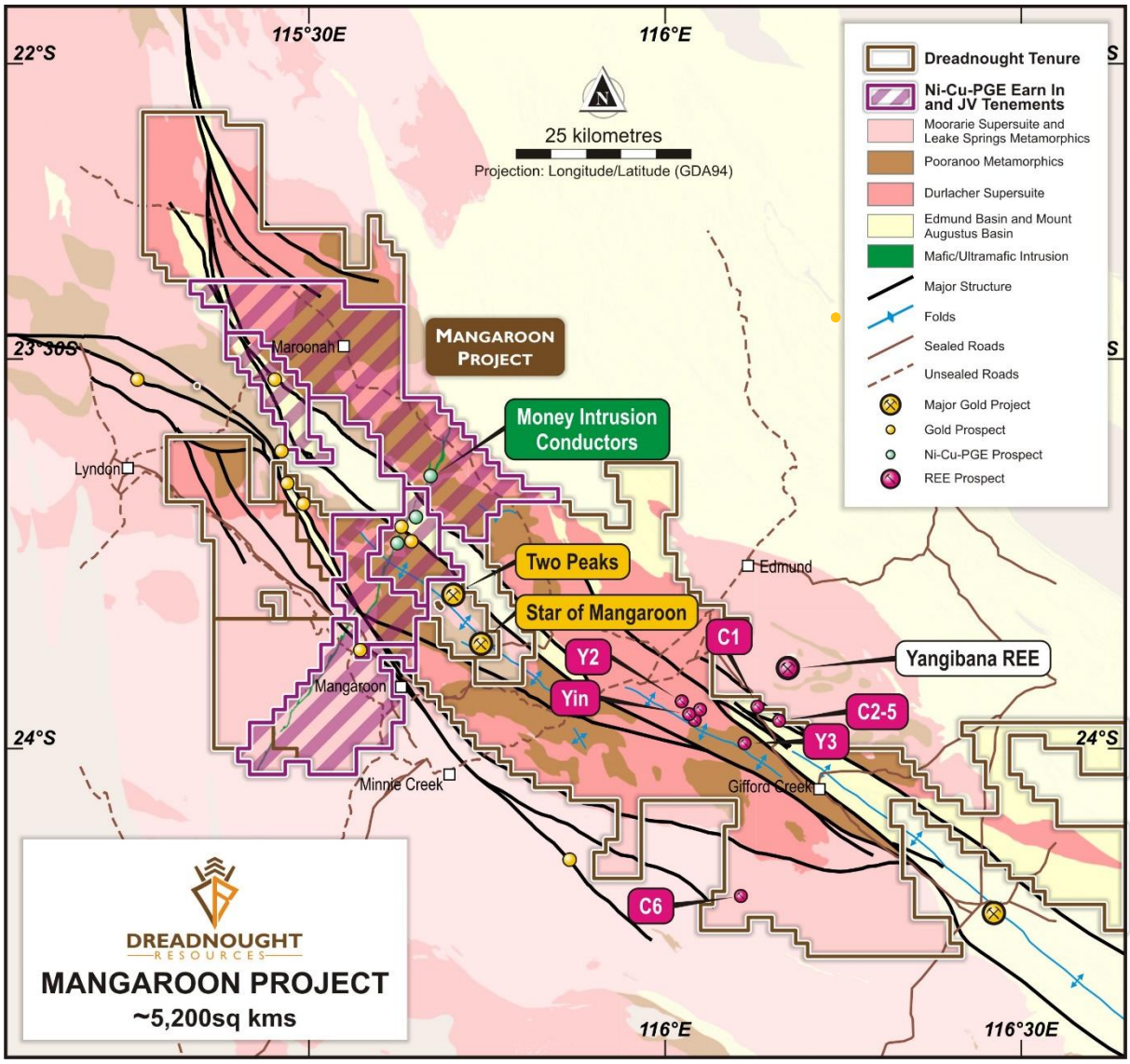


Figure 4: Plan view map of Mangaroon showing the location of the FQM Earn-in and 100% DRE ground in relation to major structures, geology and roads.

For further information please refer to previous ASX announcements:

- *11 June 2021* *High-Grade REE Ironstones Outcropping at Mangaroon*
- *19 July 2021* *High-Grade REE Ironstones Confirmed Over 2.5kms at Mangaroon*
- *24 September 2021* *Airborne Magnetic-Radiometric Survey Commenced at Mangaroon*
- *2 February 2022* *Rare Earths, Phosphate, Niobium & Zirconium Results from Mangaroon*
- *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*

UPCOMING NEWSFLOW

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

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

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

February-March: Updates and assays from REE drilling at C1-C5 Carbonatites (Mangaroon 100%)

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

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

14-16 February: Presenting at the RIU Explorers Conference (Fremantle, WA)

March: Financial statements 31 Dec 2022

March: Extraordinary General Meeting

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

4-6 April: Presenting at Future Facing Commodities (Singapore)

April: Quarterly Activities and Cashflow Report

May: REE Resource upgrades for Mangaroon 100%

~Ends~

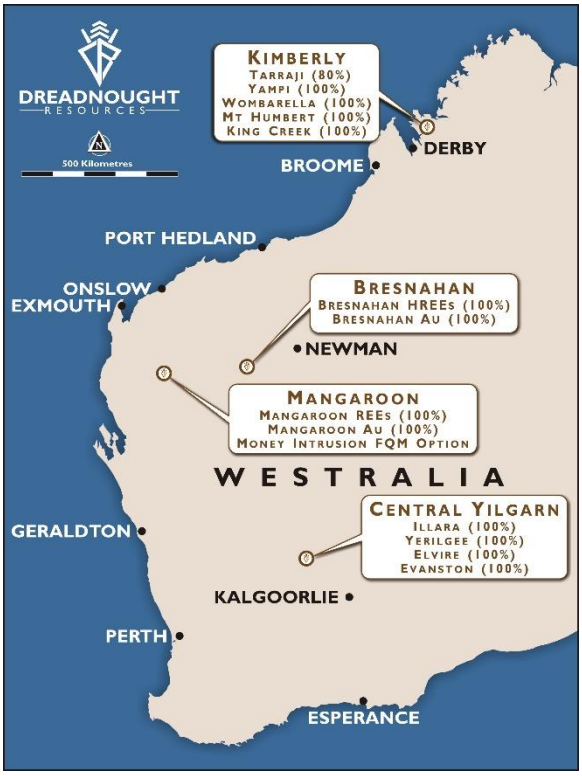
For further information please contact:

Dean Tuck
Managing Director
Dreadnought Resources Limited
E:dtuck@dreadnoughtresources.com.au

Jessamyn Lyons
Company Secretary
Dreadnought Resources Limited
E:jlyons@dreadnoughtresources.com.au

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

INVESTMENT HIGHLIGHTS



Kimberley Ni-Cu-Au Projects

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

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

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

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

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

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

Bresnahan HREE and Au Project

Bresnahan is located ~125km southwest of 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 Illaara, Yerilgee and Evanston greenstone belts. Central Yilgarn is prospective for typical Archean mesothermal lode gold deposits, VMS base metals, komatiite hosted nickel sulphides and critical metals including Lithium-Caesium-Tantalum.

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

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 – Exploration Results

The information in this announcement that relates to geology, Exploration Results 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 forma and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

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.

Table 1: Exploration Target

Geological Target	Exploration Target Range (Mt)		Projected Grade Range (TREO %)	
REE Ironstones <150m depth	**50**	**100**	**0.9**	**1.3**
REE Ironstones >150m depth	Not yet estimated			
REE Carbonatites	Not yet estimated			

JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE

SECTION 1 SAMPLING TECHNIQUES AND DATA

(CRITERIA IN THIS SECTION APPLY TO ALL SUCCEEDING SECTIONS.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Reverse Circulation (RC) drilling was undertaken to produce samples for assaying. **Laboratory Analysis** Two sampling techniques were utilised for this program, 1m metre splits directly from the rig sampling system for each metre and 3m composite sampling from spoil piles. Samples submitted to the laboratory were determined by the site geologist. **1m Splits** From every metre drilled a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter from each metre of drilling. **3m Composites** All remaining spoil from the sampling system was collected in buckets from the sampling system and neatly deposited in rows adjacent to the rig. An aluminium scoop was used to then sub-sample each spoil pile to create a 2-3kg 3m composite sample in a calico bag. A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples have 3m composites collected. All samples are submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30). All 1m samples are also submitted for 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61) to assist with lithological interpretation.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of*	**RC Drilling** Ausdrill undertook the program utilising a Drill Rigs Australia truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor

Criteria	JORC Code explanation	Commentary
	diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	and booster. Bit size was 5¾".
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**RC Drilling** Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones. Best practice sampling procedure included: suitable usage of dust suppression, suitable shroud, lifting off bottom between each metre, cleaning of sampling equipment, ensuring a dry sample and suitable supervision by the supervising geologist to ensure good sample quality. At this stage, no known bias occurs between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	RC chips were logged by a qualified geologist with sufficient experience in this geological terrane and relevant styles of mineralisation using an industry standard logging system which could eventually be utilised within a Mineral Resource Estimation. Lithology, mineralisation, alteration, veining, weathering and structure were all recorded digitally. Chips were washed each metre and stored in chip trays for preservation and future reference. RC pulp material is also analysed on the rig by pXRF, scintillometer and magnetic susceptibility meter to assist with logging and the identification of mineralisation. Logging is qualitative, quantitative or semi-quantitative in nature.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**RC Drilling** From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter. QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the ore zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after. 2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.66g charge for determination of Rare Earth Oxides by Lithium Borate Fusion XRF (ALS Method ME-XRF30) and to produce a 0.25g charge for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61). Standard laboratory QAQC is undertaken and monitored.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	**Laboratory Analysis** Lithium borate fusion is considered a total digest and Method ME-XRF30 is appropriate for REE

Criteria	JORC Code explanation	Commentary
	• *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.*	determination. Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receival.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	**Logging and Sampling** Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database. Significant intersections are inspected by senior company personnel. No twinned holes have been drilled at this time. No adjustments to any assay data have been undertaken.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z). GDA94 Z50s is the grid format for all xyz data reported. Azimuth and dip of the drill hole was recorded after the completion of the hole using a Reflex Sprint IQ Gyro. A reading was undertaken every 30th metre with an accuracy of +/- 1° azimuth and +/-0.3° dip.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	See table 11 and 12 for hole positions and sampling information. Data spacing and distribution is sufficient to establish the degree of geological and grade continuity for a Mineral Resource estimation procedure at the inferred classification.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the ironstone outcrops and modelled magnetic data. No sample bias is known at this time.
Sample security	• *The measures taken to ensure sample security.*	All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Exmouth Haulage in Exmouth. Samples were delivered directly to ALS Laboratories Perth by Exmouth Haulage out of Exmouth.

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

SECTION 2 REPORTING OF EXPLORATION RESULTS

(CRITERIA IN THIS SECTION APPLY TO ALL SUCCEEDING SECTIONS.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Mangaroon Project consists of 20 granted Exploration License (E08/3178, E08/3274, E08/3275, E08/3439, E09/2290, E09/2359, E09/2370, E09/2384, E09/2405, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467, E09/2473, E09/2478, E09/2531, E09/2535, E09/2616, E09/2620) and 4 granted Mining Licenses (M09/146, M09/147, M09/174, M09/175). • All tenements are 100% owned by Dreadnought Resources. • E08/3178, E08/3274, E09/2384, E09/2433, E09/2473 are subject to an option agreement with First Quantum Minerals over the base metal rights. • E08/3178, E09/2370, E09/2384 and E09/2433 are subject to a 2% Gross Revenue Royalty held by Beau Resources. • E08/3274, E08/3275, E09/2433, E09/2448, E09/2449, E09/2450 are subject to a 1% Gross Revenue Royalty held by Beau Resources. • E09/2359 is subject to a 1% Gross Revenue Royalty held by Prager Pty Ltd. • E09/2290, M09/146 and M09/147 are subject to a 1% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry.2 • M09/174 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson. • M09/175 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry. • The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016). • The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, and Towera Stations.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX announcement including: Regional Resources 1986-1988s: WAMEX Reports A23715, 23713 Peter Cullen 1986: WAMEX Report A36494

Criteria	JORC Code explanation	Commentary
		Carpentaria Exploration Company 1980: WAMEX Report A9332 Newmont 1991: WAMEX Report A32886 Hallmark Gold 1996: WAMEX Report A49576 Rodney Drage 2011: WAMEX Report A94155 Sandfire Resources 2005-2012: WAMEX Report 94826
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province. The Mangaroon Project is prospective for orogenic gold, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted REEs.

Drill hole information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		No new drilling presented.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No new Exploration Results are being reported. Exploration Results have previously been reporting all results greater than 0.2% TREO. Significant intercepts are length weight averaged for all samples with TREO values >0.2% TREO with up to 3m of internal dilution (<0.2% TREO). No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down*	Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation.

Criteria	JORC Code explanation	Commentary
	hole length, true width not known').	
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to figures within this report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	No new Exploration Results are being reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No new Exploration Results are being reported. .
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Additional RC drilling Diamond Drilling Metallurgical test work Additional Resource Modelling

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	Raw data is entered into Excel spreadsheets and uploaded weekly into a Datashed database. A Microsoft Access database export is provided as required. The Microsoft Access database tables were imported into Micromine 2023 for validation and processing. No errors were found.
Site visits	• *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 12th and 13th 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	• *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.*	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.

Criteria	JORC Code explanation	Commentary
	• *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	The geological interpretation is consistent. There has been an alternative interpretation generated via automated geological modelling processes in Micromine 2023 software. It produced similar shapes to the DRE manual interpretation, but because of wide drill spacing in places did not provide adequate continuity between sections. It did however provide very similar interpretations directly on drill sections.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The main Yin mineralisation extends approximately 2.1 km in length, is from 1m to 30m thick and extends from surface (approximately 300m RL) to a maximum depth of 200m. Yin South is 550m long and typically 10m thick.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	The model has been domained using the interpreted ironstone, carbonatite and fenite geological wireframes. Only data within each domain are used to estimate blocks in that domain. Statistical analysis of the distribution of key variables has been carried out; no top cuts (capping) have been applied. Variography has been carried out on Nd2O3 and Pr6O11 to define the parameters required for Ordinary Kriging. Ordinary Kriging using the functions within Micromine 2023 have been used to interpolate block values. A parent block size of 5m x 10m x 5m is used with subcells to 0.5m to follow geological and weathering boundaries. Search orientations are dynamically variable using unfolding surfaces to control search ellipses and simplify the major variations in strike along the mineralisation. First pass search ellipse is 120m along strike, 60m down dip and 5m across dip. Second pass search ellipse is 200m along strike, 120m down dip and 10m across dip. No assumptions have been made regarding selective mining units. Validation has been carried out using the following methods: Visual comparison of drill hole and block grades in section, plan and 3D. Comparison of declustered mean drill holes against block model grades. Generation of swathe plots. All validation methods produced acceptable results.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A series of TREO% cutoffs has been used for this report, with the lowest (0.20% TREO) approximating the cutoff used at the close-by and advanced-stage Yangibana Project belonging to Hastings Technology.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	Mining is expected to be by conventional open pit methods. No assumptions have been made at this stage regarding the scale of mining or selective mining unit; no dilution has been applied to the resource model.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	No metallurgical testwork has been completed on any drill hole samples to date. Sixteen (16) diamond drill holes have been designed and drilled to support a metallurgical program conducted by Independent Metallurgical Operations (IMO) with the results expected in March/April 2023. In July 2021 flotation testwork was conducted on a 30kg bulk surface sample and produced a high-grade monazite concentrate with a 92.8% recovery into 3.55% of the original mass. The approximate head grade was 12.3% Nd_2O_3 and ~38% TREO.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	No assumptions have been made regarding environmental factors.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *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.*	There are 278 density measurements taken on DD core from throughout the deposit. Density has been assigned on the basis of a combination of weathering and lithology domains, as summarised below: Final Density LITH / WEATH / Density Ironstone / OX/TR / 2.85 Carbonatite / FR / 3.45 Fenite / OX/TR / 2.60 Fenite / FR / 2.80 Country Rock / OX/TR / 2.55 Country Rock / FR / 2.65 Calcrete / OX / 2.43
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in*	The Yin and Yin South Mineral Resource has been classified in the Inferred category. A number of factors have been considered in arriving at this classification, including: Geological continuity;

Criteria	JORC Code explanation	Commentary
	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.*	Data quality; Drill hole spacing; Modelling technique; and Estimation properties including search strategy, number of informing data and average distance of data from blocks. The classification reflects the CP's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	There have been no reviews or audits of the Mineral Resource Estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The relative accuracy is reflected in the JORC resource categories. Inferred resources are considered global in nature. No production data is available as the deposit has not yet been mined.