

ASX ANNOUNCEMENT 31 August 2023

Massive & Disseminated Ni-Cu Sulphides Intersected – Mangaroon (Earn-in)

HIGHLIGHTS

- RC drilling recently commenced at the Bookathanna North prospect along the 45km Money Intrusion, part of the Mangaroon Ni-Cu-PGE Project (First Quantum Minerals Earn-in). A total of 5 holes was planned for ~1,000m followed by down hole EM ("DHEM").
- The first hole (REYRC013, for 153m) was targeting a 37,000S conductor plate and has intersected ~14m of Ni-Cu sulphide mineralisation from 37m. The intersection includes 2m of massive sulphides and 12m of disseminated sulphides. The massive sulphides appear to be high tenor, comprised of 40-50% combined pentlandite and chalcopyrite in equal proportions.
- REYRC013 was the first of 2 holes to be drilled at Bookathanna North where two highly conductive plates have been modelled over a ~100m strike. Based on these results, additional holes will be drilled and DHEM crews are mobilising to Bookathanna North. After Bookthanna North, the rig will move to High Range to test 3 further conductors.
- Samples for REYRC013 are being rushed with assays expected in September 2023. Drilling is currently expected to take 1-2 weeks with assays and DHEM results expected in October 2023.
- This program is fully funded by First Quantum Minerals.

Dreadnought Resources Limited ("Dreadnought") is pleased to announce that RC drilling



) is pleased to announce that RC drilling has intersected significant visual Ni-Cu massive sulphides at the Bookathanna North prospect along the 45km long Money Intrusion part of the Mangaroon Ni-Cu-PGE Project, located in the Gascoyne Region of Western Australia.

Dreadnought's Managing Director, Dean Tuck, commented: "Completion of our rare earths drilling programs has turned our attention to discovery focused drilling across our other projects and commodities. The intersection of shallow, high tenor massive sulphides in the first hole of this program is truly exciting and a great way to set the tone for the remainder of 2023. We are excited to return to the highly prospective Ni-Cu-PGE targets defined at Bookathanna North and High Range with our partners at First Quantum Minerals."

Figure 1: Claudia Tomkins (R) and Andrew Lesley (L) with massive sulphide RC chips from the first drill hole at the Bookathanna North prospect.

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SNAPSHOT – MANGAROON Ni-Cu-PGE

Major Miner, First Quantum Minerals, Earning-in

- The potential of the Money Intrusion is underscored by an Earn-In with First Quantum Minerals Ltd (TSE:FM), a ~A\$20B TSX listed company (ASX 7 Apr 2021, ASX 30 Aug 2022).
- First Quantum Minerals can earn an initial 51% interest by funding \$12M of expenditure by 1 March 2026. First Quantum Minerals may withdraw at any time during the earn-in phase with 0% interest.
- Upon satisfying the earn-in requirements, a Joint Venture will be formed where First Quantum Minerals may elect to increase its interest to 70% by sole funding expenditure up until a Decision to Mine.
- Once a Decision to Mine has been made, Dreadnought can elect to either:
 - Maintain its 30% by co-contributing.
 - Dilute to 20% and be loan carried by First Quantum Minerals, repaid through revenue.
 - Divest its 30% interest to First Quantum Minerals at fair market value.
- Dreadnought retains gold rights across the earn-in tenements.

Fertile Ni-Cu-PGE System Confirmed

- Fertile Ni-Cu-PGE sulphide systems are rare and the Money Intrusion has already been proven to contain high tenor magmatic Ni-Cu-PGE mineralisation.
- The Money Intrusion is confirmed to be ~800Ma, a fertile time for Ni-Cu-PGE systems globally. Highly prospective keel geometries which are suitable for forming trap sites for magmatic sulphide accumulations have been identified.
- First pass drilling in 2022 at the Bookathanna and High Range prospects intersected magmatic sulphide mineralisation including (ASX: 10 Nov 2022):

REYRC002: 13m @ 0.19% Ni, 0.17% Cu, 0.01% Co and 0.08g/t 3PGE from 70m

Including: Im @ 0.85% Ni, 0.77% Cu, 0.46% Co and 0.17g/t 3PGE from 80m

REYRC009: 9m @ 0.11% Ni, 0.14% Cu, 0.01% Co and 0.10g/t 3PGE from 30m

Including: Im @ 0.33% Ni, 0.44% Cu, 0.02% Co and 0.41g/t 3PGE from 31m

No Modern Exploration

- Outcropping Ni sulphides were identified by Alan McDonald, the Pastoralist at Mangaroon in the early 1960s. However, no detailed geophysical, geochemical or mapping programs were ever undertaken.
- The first-ever detailed airborne magnetics, surface geochemical, ground EM and mapping surveys have now confirmed the potential of the 45km long Money Intrusion.

Genuine Camp Scale Potential

- Outcropping blebby sulphides have been confirmed over significant portions of the ~45km long Money Intrusion.
- Multiple plumbing centres have been interpreted, each with the potential for trap sites within the magma pathways.
- Mineralisation already confirmed by drilling at two prospects within the Money Intrusion: Bookathanna North and High Range.

Nickel and Copper are Critical to the Low Carbon Energy Transition

- Nickel is essential to clean energy technologies including being a major cathode material in lithium-ion batteries.
 Furthermore, nickel sulphide deposits have a much lower carbon footprint when being converted to Class I nickel for battery grade applications.
- Copper is essential for electricity-related technologies with renewable energy systems requiring up to 12x more copper compared to traditional energy systems.





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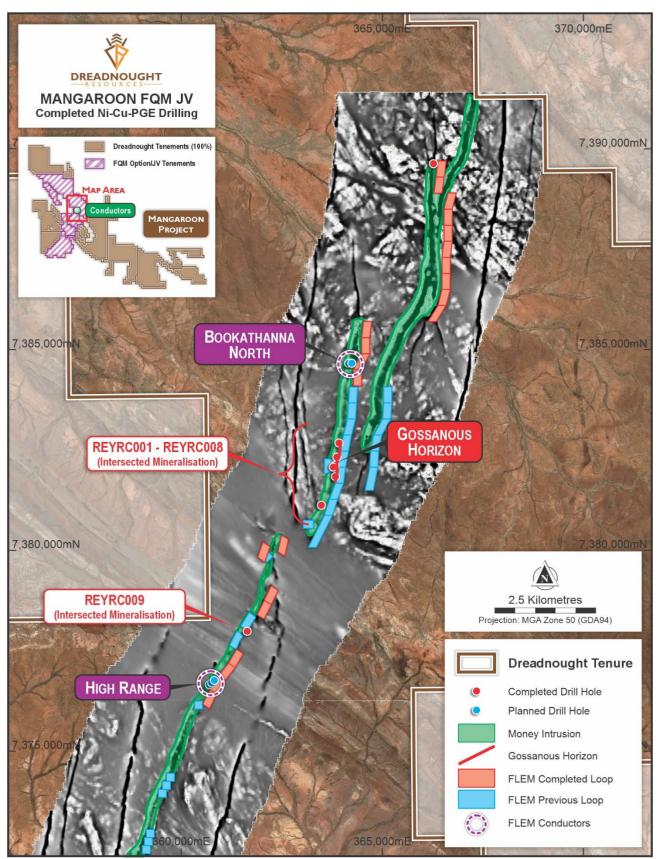


Figure 2: Plan view image showing the location of the current drill program (blue dots) in relation to previous drilling and fixed loop EM surveys over a magnetics (RTP IVD) and ortho image. The Money Intrusion is outlined in green.





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Technical Discussion of Ni-Cu-PGE RC Drilling (REYRC013)

RC drill hole REYRC013 (153m) was drilled to test a 37,000S plate at the Bookathanna North prospect within the 45km long Money Intrusion and to provide DHEM geophysical conductors.

Drill holes were collared into the gabbroic core of the Money Intrusion before passing into the footwall olivine dolerite at 25m depth and finishing in gneissic country rock from 65m to 153m (EOH).

Drilling intersected disseminated Ni-Cu sulphides within the footwall olivine dolerite increasing in intensity to a 2m thick massive sulphide lens underlain by net-textured to brecciated sulfides. Logging details are shown in Table I below.

All sulphide mineralisation consists of pentlandite (Fe,Ni)₉S₈, chalcopyrite (CuFeS₂) and pyrrhotite (Fe(1-x)S) with pentlandite and chalcopyrite making up ~40-50% of the sulphide mix with the remainder being pyrrhotite. In addition to the observed mineralisation, the presence of Ni and Cu was confirmed by handheld XRF.

An additional drillhole has been planned to test for down plunge mineralisation between the 37,000S plate and the 2,200S plate located \sim 100m along strike (Figure 5).



Figure 3: Photo of massive sulphide RC chips from 45-46m comprised of 40-50% pentlandite and chalcopyrite.

Hole ID	From (m)	To (m)	Interval (m)	Mineralisation Style	Sulphide Type	Sulphide %	Prospect
	37	45	8	Disseminated / Blebby	Pyrrhotite,	1-5	
REYRC013	45	47	2	Massive	Pentlandite,	80-100	Bookathanna Noth
	47	51	4	Net Textured / Breccia	Chalcopyrite	5-10	

Table 1: Significant Sulphide Intervals – Visual Estimates



Figure 4: Drill rig producing the iconic "black smoke" from the massive sulphide interval in REYRC013.



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Technical Discussion of Ni-Cu-PGE Drilling Program (E08/3274, E09/2384: First Quantum Minerals Earn-in, up to 70%)

The confirmation of a fertile magmatic Ni-Cu-PGE system within the 45km long Money Intrusion highlights the potential for multiple deposits and/or deposit styles. The Money Intrusion has been dated to ~0.8 Ga, similar in age and tectonic setting to the linchuan Ni-Cu-PGE deposit in China (>500 Mt @ 1.2% Ni, 0.7% Cu, ~0.4 g/t PGE, Lightfoot 2007).

In 2022, 9 out of 12 RC holes intersected disseminated mineralisation along significant strike showing increasing width and intensity near subtle changes in the walls of the intrusion. These results highlighted the potential for massive sulphide mineralisation to concentrate and form at favourable "trap sites" along the intrusion. This is similar to Eagle and Eagle East (~5Mt @ 3.5% Ni, 2.9% Cu, 1.6g/t PGE, 0.1% Co, Lundin 2013) located in North America.

There remains significant potential for this system to host high tenor Ni-Cu-PGE massive sulphides. In 2022, a fixed loop EM survey was undertaken along strike from previous drill intercepts at Bookathanna and High Range where significant intercepts included (ASX: 10 Nov 2022):

REYRC002: 13m @ 0.19% Ni, 0.17% Cu, 0.01% Co and 0.08g/t 3PGE from 70m

Including: Im @ 0.85% Ni, 0.77% Cu, 0.46% Co and 0.17g/t 3PGE from 80m

REYRC009: 9m @ 0.11% Ni, 0.14% Cu, 0.01% Co and 0.10g/t 3PGE from 30m

Including: Im @ 0.33% Ni, 0.44% Cu, 0.02% Co and 0.41g/t 3PGE from 31m

Bookathanna North was targeted, as it was interpreted as a shallow keel position of the Money Intrusion, resulting in the identification of two conductors to the north being: one $\sim 20 \times 10$ m with a strong conductance of 37,000S, and another immediately adjacent, being $\sim 40 \times 10^{10}$ with a high conductance of 2,200S (ASX: 24 Mar 2023).

High Range is located where the Money Intrusion crosses into a basin of Edmund Group Sediments. As expected, 3 lithological conductors perpendicular to the Money Intrusion were identified - each being \sim 50-100m x 50-70m with a high conductance of 750-900S (ASX: 24 Mar 2023). Each of these conductors is significantly stronger than the original Bookathanna conductor (~180S) which produced the net textured to brecciated sulphide intercepts in 2022.

Each of the 5 conductors was to be drilled by a single hole designed to test the centre of the modelled plates followed by DHEM surveys. However, based on the REYRC013 results, additional holes will be drilled and DHEM crews are mobilising to Bookathanna North. After Bookthanna North, the rig will move to High Range to test 3 further conductors.

This work is expected to take 1-2 weeks.

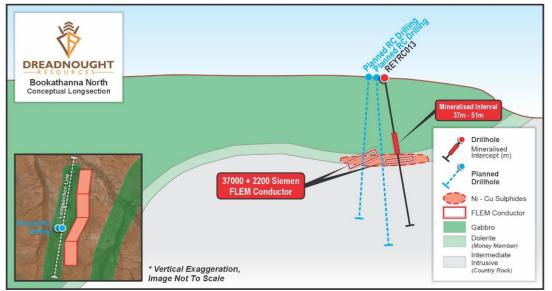
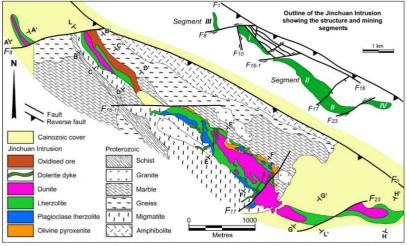


Figure 5: Conceptual long section of Bookathanna North showing planned drilling in relation to conductive targets at the shallow keel of the Money Intrusion.

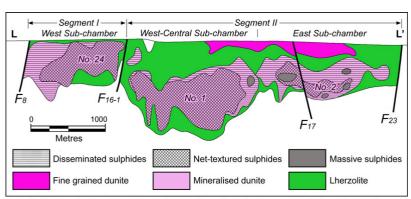


The Money Intrusion (E08/3178, E08/3274, E09/2384, E09/2433, E09/2473: (First Quantum Minerals Earn In))

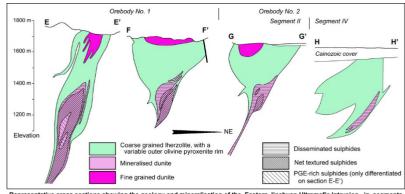
The confirmation of a fertile magmatic Ni-Cu-PGE system within the 45km long Money Intrusion highlights the potential for multiple deposits and/or deposit styles. The Money Intrusion has been dated to ~0.8 Ga, similar in age and tectonic setting to the Jinchuan Ni-Cu-PGE deposit in China (>500 Mt @ 1.2% Ni, 0.7% Cu, ~0.4 g/t PGE,



Geology and structure of the Jinchuan ultramafic intrusion and enclosing wall rocks (after Song et al., 2012)



Longitudinal projection along the Jinchuan ultramafic intrusion segments I and II, showing ore types, ore deposits and lithologies (after Song et al., 2012)



Representative cross sections showing the geology and mineralisation of the Eastern Jinchuan Ultramafic Intrusion, in segment II and IV (sections E-E' and G-G' after Song et al., 2006; F-F' and H-H' after Song et al., 2012). See the geological map for section lines. Lightfoot 2007).

Jinchuan contains three main mineralised bodies over ~6.5kms of strike, each situated within a sub-chamber of the overall intrusion. Mineralisation is dominated by net-textured and disseminated sulphides with minor massive sulphide accumulations. Importantly, the disseminated sulphides form an envelope around the higher-grade, net-textured and massive sulphides. Furthermore, only one of the mineralised bodies is outcropping, with the other two deposits blind at surface (Figure 4).

The implications of the analogous Jinchuan deposits to the Money Intrusion are significant for both the current and future drilling. The first holes intersected disseminated mineralisation along significant strike showing increasing width and intensity towards the middle and at depth. There remains significant potential for this system to improve with depth and within the ~4.5km of strike already defined.

Furthermore, given the ~45kms of strike over the Money Intrusion shows evidence of pinching, swelling, multiple feeder channels and mapped disseminated sulphides, there could be significant mineralisation that does not outcrop.

Further drilling and geophysics along the intrusion will assist with better understanding the system and in identifying further mineralisation.

Figure 6: Plan view (top) and long section (middle) and cross section (bottom) of Jinchuan, highlighting that most of the mineralisation does not outcrop at surface (as appears to be the case with the Money Intrusion).



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

Mangaroon covers >5,200sq 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 earning up to 70% (Figure 5). The region is also host to high-grade gold mineralisation at the Mangaroon Shear Zone and the high NdPr:TREO ratio Yin and 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-Sc Carbonatites and outcropping high tenor Ni-Cu-PGE blebby sulphides in the recently defined Money Intrusion.

The Yin REE Ironstone Complex contains an independent total Resource of 20.06Mt @ 1.03% TREO (ASX 5 Jul 2023) over only ~4km of ~43km of ironstones including an initial Indicated Resource of 5.52Mt @ 1.23% TREO over only ~250m of strike (ASX 5 Jul 2023). There is also 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. Exploration of the CI-C5 carbonatites is ongoing with an initial independent Inferred Resource of 10.84Mt @ 1.00% TREO at C3 (ASX 29 Aug 2023).

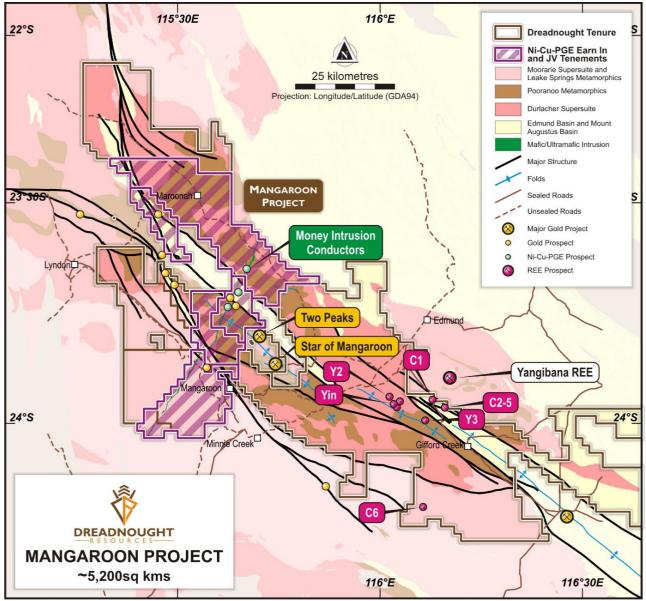


Figure 7: Plan view map of Mangaroon showing the location of the First Quantum Minerals Earn-in and 100% Dreadnought ground.



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For further information please refer to previous ASX announcements:

- 25 November 2020
- 7 April 202 l
- 14 February 2022
- 10 June 2022
- 30 August 2022
- 10 November 2022 24 March 2023
- Mangaroon Ni-Cu-PGE Project advances to \$12M Earn-In Exploration Update Mangaroon Ni-Cu-PGE (FQM Earn-In)

Option/IV Agreement Signed with Global Base Metal Miner

Drilling Successfully Completed at Mangaroon Ni-Cu-PGE

Five Strong EM Conductors at Mangaroon Ni-Cu-PGE Project

Conductors Defined Along the Money Intrusion

Mangaroon Ni-Cu-PGE & Au Project

- 30 August 2023
- Drilling Commenced at Money Intrusion Ni-Cu-PGE

UPCOMING NEWSFLOW

August-December: Ongoing drilling results from completed drilling at Mangaroon REE (100%) September: Results of extensive, gold review at Mangaroon (100%) September: Results of geophysical surveys at Mangaroon (100%) September: Commencement of drilling at Tarraji-Yampi (80% and 100%) September: Results of geophysical and geochemical surveys at Central Yilgarn (100%) 12 (Melbourne) & 14 (Sydney) September: New World Metals Conference September: 2023 Annual Report October/November: Commencement of RC drilling at Mangaroon Au (100%) October/November: Results from target generation and definition work at Bresnahan (100%) October: Quarterly Activities and Cashflow Report 23 November: Annual General Meeting 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.



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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.

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

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 forma and context in which the Competent Person's findings are presented have not been materially modified from the original reports.



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INVESTMENT HIGHLIGHTS

Kimberley Ni-Cu-Au Project (80/100%)

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The project is located only 85kms from Derby in the West Kimberley region of WA and was locked up as a Defence Reserve since 1978.

The project has outcropping mineralisation and historic workings 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 and Tennant Creek.

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

Mangaroon covers ~5,200 kms and is located 250kms south-east of Exmouth in the Gascoyne Region of WA. At the Money Ni-Cu-PGE has been identified and is subject to an earn-in by First Quantum Minerals (up to 70%). Dreadnought also has areas of outcropping highgrade gold including the historic Star of Mangaroon and Diamonds gold mines. In addition, Mangaroon has emerged as a globally significant, rapidly growing, potential source of critical minerals. Highlights include:

- 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 (ASX 13 Feb 2023).



- An independent Resource for Yin Ironstones Complex of 20.06Mt @ 1.03% TREO over only ~4kms including an Indicated Resource of 5.52Mt @ 1.23% TREO over just 250m strike (ASX 5 Jul 2023).
- Regional source of rare earths at the CI-C5 carbonatites totaling ~9kms x ~1km (ASX 7 Aug 2023).
- A large, independent initial Resource of 10.84Mt @ 1.00% TREO at C3, containing a range of critical minerals including rare earths, niobium, phosphate, titanium and scandium (ASX 28 Aug 2023).

Bresnahan HREE and Au Project (100%)

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 (100%)

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.



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Table 2: Drill Collar Data (GDA94 MGAz50)

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Туре	Prospect
REYRC013	364221	7384666	280	-70	045	153	RC	Bookathanna North

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	Nature and quality of sampling (e.g. cut channels, random	RC Drilling
	chips, or specific specialised industry standard measurement tools appropriate to the minerals under	Reverse Circulation (RC) drilling was undertaken to produce samples for assaying.
	 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 	Two sampling techniques were utilised for this program, Im metre splits directly from the rig sampling system each metre and 2m composite sampling from spoil piles. Samples submitted to the laboratory were determined by the site geologist.
	measurement tools or systems used.	Im Splits
	Aspects of the determination of mineralisation that are Material to the Public Report.	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.
	 In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling 	2m Composites
	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	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 2m composite sample in a calico.
	problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	For gold and PGEs, all samples are submitted to the laboratory and pulverised to produce a 50g charge for Fire Assay (ALS Code PGM-ICP24).
		Base Metal and lithological samples are analysed for 48 multi- elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61)
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer,	RC Drilling
	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.).	Ausdrill undertook the program utilising a Drill Rigs Australia truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5¾".
Drill sample recovery	• Method of recording and assessing core and chip sample	RC Drilling
	 recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 	Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones.
	• 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.	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.
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. 	RC Drilling RC chips were logged under the supervision of 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.
	Core (or costean, channel, etc.) photography. • The total length and percentage of the relevant	Lithology, mineralisation, alteration, veining, weathering and structure were all recorded digitally.
	intersections logged.	Chips were washed each metre and stored in chip trays for preservation and future reference.
		RC pulp material is also analysed on the rig by pXRF and magnetic susceptibility meter to assist with logging and the identification of mineralisation.
		Logging is qualitative, quantitative or semi-quantitative in



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Criteria	JORC Code explanation	Commentary
		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 	 Preliminary pXRF analysis pXRF analysis of pulverised and partially homogenised reject RC sample piles is fit for purpose as a preliminary exploration technique. pXRF is a spot reading on raw (unprocessed) RC sample piles with variable grain sizes and states of homogenisation. High grade results were repeated at multiple locations to confirm repeatability. The competent person considers this acceptable within the context of reporting preliminary exploration results. RC Drilling From every metre drilled, a 2-3kg sample (split) was subsampled into a calico bag via a Metzke cone splitter or taken
	the material being sampled.	as a grab sample from the bulk reject in more clay-rich material. 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 will be submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 50g charge for Fire Assay with ICP-AES finish to determine Au and PGEs (PGM-ICP24) and 0.25g aliquot for four acid digest to determine 48 elements (ME-MS61) with overranges as required. Standard laboratory QAQC is undertaken and monitored.
Quality of assay data	The nature quality and appropriateness of the geometry	Preliminary pXRF analysis
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	Olympus Vanta M Series pXRF analyser is used to provide preliminary quantitative measurement of mineralisation. A 3- 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. Calibration checks of the pXRF are undertaken daily, a silica
	 Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) 	blank and certified standard are routinely analysed to monitor pXRF performance.
	and whether acceptable levels of accuracy (i.e. lack of bias)	Laboratory Analysis
	and precision have been established.	Assay technique is Fire Assay which is a 'Total Technique' for Au and PGEs. Four acid digest is considered a 'near total' technique for the 48 elements received under ME-MS61.
		Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receival.
Verification of sampling	• The verification of significant intersections by either	Preliminary pXRF analysis
and assaying	 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. 	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.
	 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 completed 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. 	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.
	 Specification of the grid system used. Quality and adequacy of topographic control. 	Azimuth and dip of the drill hole was recorded after the completion of the hole using a Reflex Sprint IQ Gyro. A
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Criteria	JORC Code explanation	Commentary
		reading was undertaken every 30^{th} 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 	See drill table for hole positions. The drill spacing is not suitable for resource estimation.
	 appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	
Orientation of data in relation to geological	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this	At this early stage of exploration, mineralisation thickness's, orientation and dips are not known.
structure	is known, considering the deposit type.If the relationship between the drilling orientation and the	Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the modelled FLEM plates.
	orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	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 directly to ALS Laboratories Perth by Jarrahbar Contracting out of Carnarvon and Exmouth Haulage out of Exmouth.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	The program is continuously reviewed by senior company personnel.

Section 2 Reporting of Exploration Results

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

	(Criteria 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 	The Mangaroon Project consists of 19 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) and 5 granted Mining Licenses (M09/91, M09/146, M09/147, M09/174, M09/175).
	along with any known impediments to obtaining a licence to operate in the area.	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, Edmund, Williambury and Towera Stations.





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Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX announcement including:
		Regional Resources 1986-1988s: WAMEX Reports A23715, 23713
		Peter Cullen 1986: WAMEX Report A36494
		Carpentaria Exploration Company 1980: WAMEX Report A9332
		Newmont 1991: WAMEX Report A32886
		Hallmark Gold 1996: WAMEX Report A49576
		Rodney Drage 2011: WAMEX Report A94155
		Sandfire Resources 2005-2012: WAMEX Report 94826
Geology	• Deposit type, geological setting and style of mineralisation.	The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province.
		The Mangaroon Project is prospective for orogenic gold, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted REEs.
Drill hole information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	An overview of the drilling program is given within the text and tables within this document.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, 	Exploration Results are not being reported.
	 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. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	Drilling is undertaken close to perpendicular to the dip and strike of the modelled EM plates. At this early stage, the relation between mineralisation and drill intercepts is unknown.
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.



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Criteria	JORC Code explanation	Commentary
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. 	Refer to figures within this report.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	Suitable commentary of the geology encountered is given within the text of this document.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Down hole EM Additional RC drilling

