

**ASX ANNOUNCEMENT** 22 January 2024

## Star of Mangaroon Extended – Mangaroon (100%)

### HIGHLIGHTS

- Assays from shallow RC (18 holes, 1,725m) and diamond (2 holes, (137.9m) drilling programs around the historic Star of Mangaroon gold mine include high-grade intercepts of:
  - SOMDD001: 1.4m @ 87.9g/t Au from 16.0m
  - SOMDD002: 2.5m @ 3.3 g/t Au from 68.2m
  - SOMRC008: 2.0m @ 4.8 g/t Au from 68m
  - SOMRC007: 1.0 @ 4.0 g/t from 19m (and a 2m mining void immediately above)
- These are in addition to previously reported results from the first 10 holes of the RC program (ASX: 11 Dec 2023) including:
  - SOMRC004: 9m @ 13.4 g/t Au from 9m including 2m @ 59.4g/t Au from 16m
  - SOMRC005: 7m @ 23.0 g/t Au from 53m including 3m @ 48.9g/t Au from 54m
  - SOMRC006: 8m @ 15.5 g/t Au from 89m including 3m @ 30.4g/t Au from 90m
- Encouragingly, SOMRC018 (23m @ 0.4 from 10m) confirmed historical thick, oxide mineralisation to the north of the Star of Mangaroon. This may represent a halo around another high-grade lode and requires follow-up.
- SOMRC015 (3m @ 2.9g/t Au from surface) indicates potential for additional lodes to the south heading towards the historical working at Popeye. This area hosts rock chips of 121.2 g/t Au, 179 g/t Ag (SM7) and 30.1 g/t Au, 552 g/t Ag (RNLYD048).
- The Star of Mangaroon is one of several historical mines within the >10km long Mangaroon Shear Zone which has seen drilling along only ~200m of strike. Seven new prospects have already been identified in an area with camp scale potential which has never seen systematic exploration due to fractured, small scale ownership. There will be a strong focus on gold along the Mangaroon Shear Zone in 2024.

**Dreadnought Resources Limited (“Dreadnought”) is pleased to announce further results from first pass drilling at the Star of Mangaroon, part of the 100% owned Mangaroon Project, located in the Gascoyne Region of Western Australia.**



Dreadnought’s Managing Director, Dean Tuck, commented: “These results have confirmed the high-grade gold potential around the Star of Mangaroon and along the >10km Mangaroon Shear Zone. This comes from the now consolidated project being systematically explored using modern techniques for the first time. We are continuing to integrate this and other information into our geological models along the Shear Zone. The diamond holes in particular have provided valuable structural insights. This and other ongoing work will establish our drill priorities for what I am sure will be an exciting drill program commencing in March 2024.”

Figure 1: Image of visible gold SOMDD001 (~17.0-17.1m) where the hole assayed 1.4m @ 87.9 g/t Au from 16m. Field of view is ~8cm.

## **SNAPSHOT – MANGAROON GOLD (100%)**

### **Mangaroon Gold is 100% Owned by Dreadnought**

- Over 5,000km<sup>2</sup> of highly prospective ground.
- Initial focus area is a ~40km x ~20km area around the >10km long Mangaroon Shear Zone - a linkage structure between the crustal scale Minga Bar and Edmund Faults.
- Numerous historical workings along the Shear Zone which has remarkably only seen limited shallow drilling along ~200m of strike at the Star of Mangaroon.

### **Consolidation Provides for First Ever Modern Exploration**

- All historical workings and gold occurrences were discovered by pastoralists and prospectors over outcropping mineralisation. There has been minimal historical and modern exploration due to fractured, small scale ownership. Large scale modern exploration is now being undertaken for the first time under Dreadnought's consolidated ownership.

### **Genuine Camp Scale Potential**

- Five historical mines developed on outcropping mineralisation and dozens of gold occurrences along highly prospective structural corridors.
- Majority of historical workings are contained within an ~800km<sup>2</sup> area of Dreadnought's consolidated land holding.

### **Significant, Step-change, Growth Potential**

- Dreadnought is deploying modern geochemical and geophysical techniques to explore for mineralisation under shallow cover.
- Initial geochemical and geophysical surveys have generated new prospects with stronger and larger signatures than the historical mines, including the region's largest high-grade producer at the Star of Mangaroon.

### **Shallow, High-grade, Au-Ag Potential**

- The Star of Mangaroon contains significant shallow high grade gold hits including: (ASX: 6 June 2023, 4 September 2023, 11 December 2023):

MA10: 4m @ 26.0 g/t Au from 9m

MA17: 7m @ 14.3 g/t Au from 21m

MA23: 2m @ 29.8 g/t Au from 19m

MA43: 1m @ 53.0 g/t Au from 18m

SOMRC004: 9m @ 13.4 g/t Au from 9m

SOMRC005: 7m @ 23.0 g/t Au from 53m

SOMRC006: 8m @ 15.5 g/t Au from 89m

SOMDD001: 1.4m @ 87.9 g/t Au from 16m

- Rock chip results from regional prospects and historical workings include:

MNRK0515: 74.8 g/t Au (Diamond)

TPRK05: 41.7 g/t Au (Two Peaks)

SM7: 121.2 g/t Au, 179 g/t Ag (Popeye)

RNLYD048: 30.1 g/t Au, 552 g/t Ag (Popeye)

### **Gold is a Long-term, Strategic, Global Asset During Uncertain Times**

- Gold is a long-term, strategic, global asset that provides a store of value in uncertain times. With banking sector uncertainty, geopolitical tensions and a challenging economic environment, gold's role as a safe haven has come to the fore.
- Demand for gold ETFs is strong as is central bank buying of physical gold.

### Star of Mangaroon & Lead Gold Mines Drill Program

The Star of Mangaroon was discovered in 1956 and, until recently, has been the largest gold producer in the Gascoyne. Between 1960 and 1983 the mine produced 7,464 oz at an average grade of 34.8g/t Au<sup>1</sup>. Most of the gold production came from underground with the lowest extraction level ~90m below surface.

The Star of Mangaroon has received little exploration despite drilling undertaken in the 1990s which produced significant results including (ASX: 6 June 2023, 4 September 2023):

- **MA10: 4m @ 26.0 g/t Au from 9m**
- **MA17: 7m @ 14.3 g/t Au from 21m**
- **MA23: 2m @ 29.8 g/t Au from 19m**
- **MA43: 1m @ 53.0 g/t Au from 18m**
- **SMC07: 4m @ 18.7 g/t Au from 18m**
- **SMC09: 4m @ 16.4 g/t Au from 14m**

The majority of historical drilling is within 50m of surface. Only one hole has been drilled >100m which returned 4m @ 3.76 g/t Au from 176m (STMRC005) and highlights the potential at depth.

A program of 18 RC holes (1,725m) and 2 diamond holes (137.9m) was recently drilled to confirm and extend existing mineralisation along strike and at depth. Significant results from the program include:

- SOMRC004: 9m @ 13.4 g/t Au from 9m including 2m @ 59.4g/t Au from 16m**
- SOMRC005: 7m @ 23.0 g/t Au from 53m including 3m @ 48.9g/t Au from 54m**
- SOMRC006: 8m @ 15.5 g/t Au from 89m including 3m @ 30.4g/t Au from 90m**

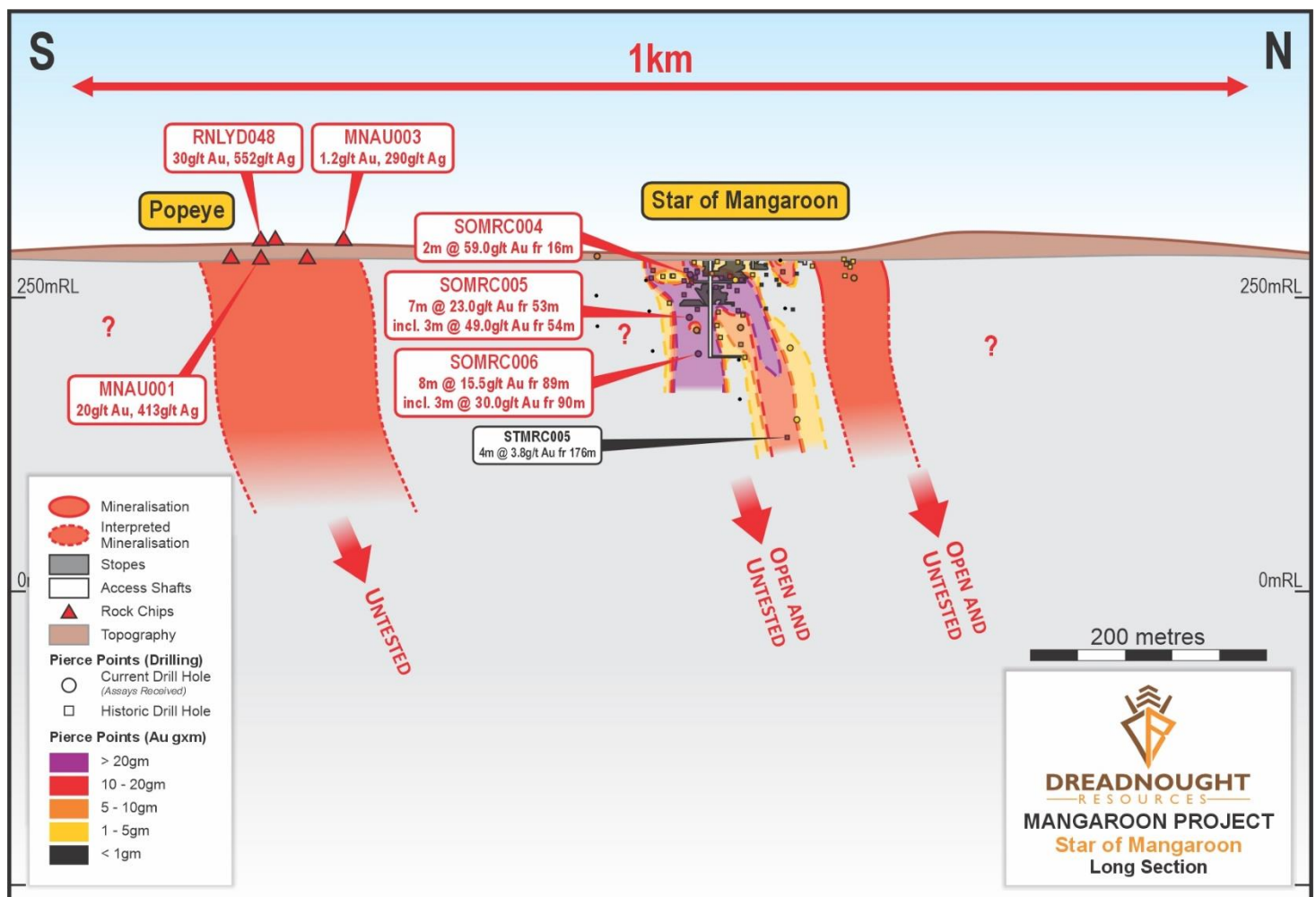


Figure 2: Long section along ~1km of the Star of Mangaroon Shear Zone showing the location of recently drilled holes in relation to previous drilling and the interpreted lodes remaining open and untested at depth. 1. Prime Minerals Annual Report 2008, WAMEX Report A79994

The recent drilling intersected the 1-9m wide lode along a rheological contact between a hanging wall paragneiss and footwall orthogneiss. The high-grade lode dips ~50-60° to the east and has been confirmed over ~200m strike and to a depth of ~150m. Drilling to date indicates a steep northerly plunge to mineralisation which requires additional drilling in 2024.

Mineralisation at the Star of Mangaroon is finely disseminated free gold within foliation parallel quartz veins, occasionally associated with trace pyrrhotite, chalcopyrite and arsenopyrite.

Step-out, fence-line drilling to the south of the main workings has confirmed mineralisation at surface (SOMRC015: 3m @ 2.9g/t Au) that is interpreted to be part of a new lode along strike that also requires further drilling. If the lode does swing west as indicated by this intercept, then holes SOMRC016 and SOMRC017 would have failed to test the lode horizon, leaving the new lode open and untested at depth.

Step-out, fence-line drilling to the north of the main workings has confirmed thick oxide mineralisation (SOMRC018: 23m @ 0.4g/t Au from 10m). This mineralisation may be part of a proximal halo around high-grade lodes that requires detailed mapping and sampling.

The Star of Mangaroon remains open at depth and along strike and may contain multiple high-grade lodes. Further drilling in 2024 will involve systematic target testing along the >10km long Mangaroon Shear Zone.

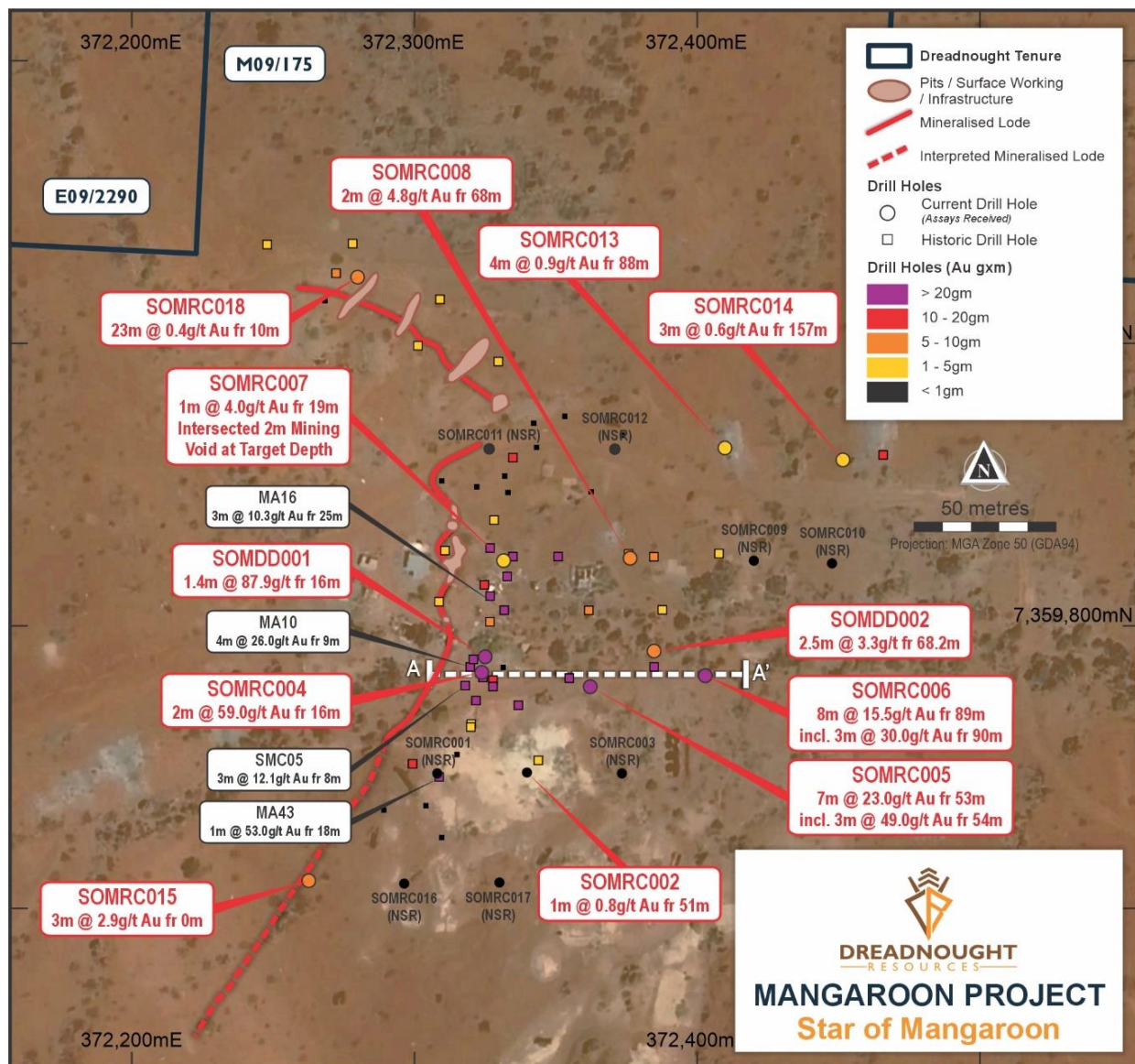


Figure 3: Plan view image showing the location of recently drilled holes in relation to previous drilling over an ortho image. The surface projection of the Star of Mangaroon lode is in red.

### Background Mangaroon Gold (100%)

Dreadnought began the consolidation of the Mangaroon region in late 2020, to pursue the nickel and high-grade gold potential which had been identified by the Mangaroon Station pastoralist, Allan McDonald.

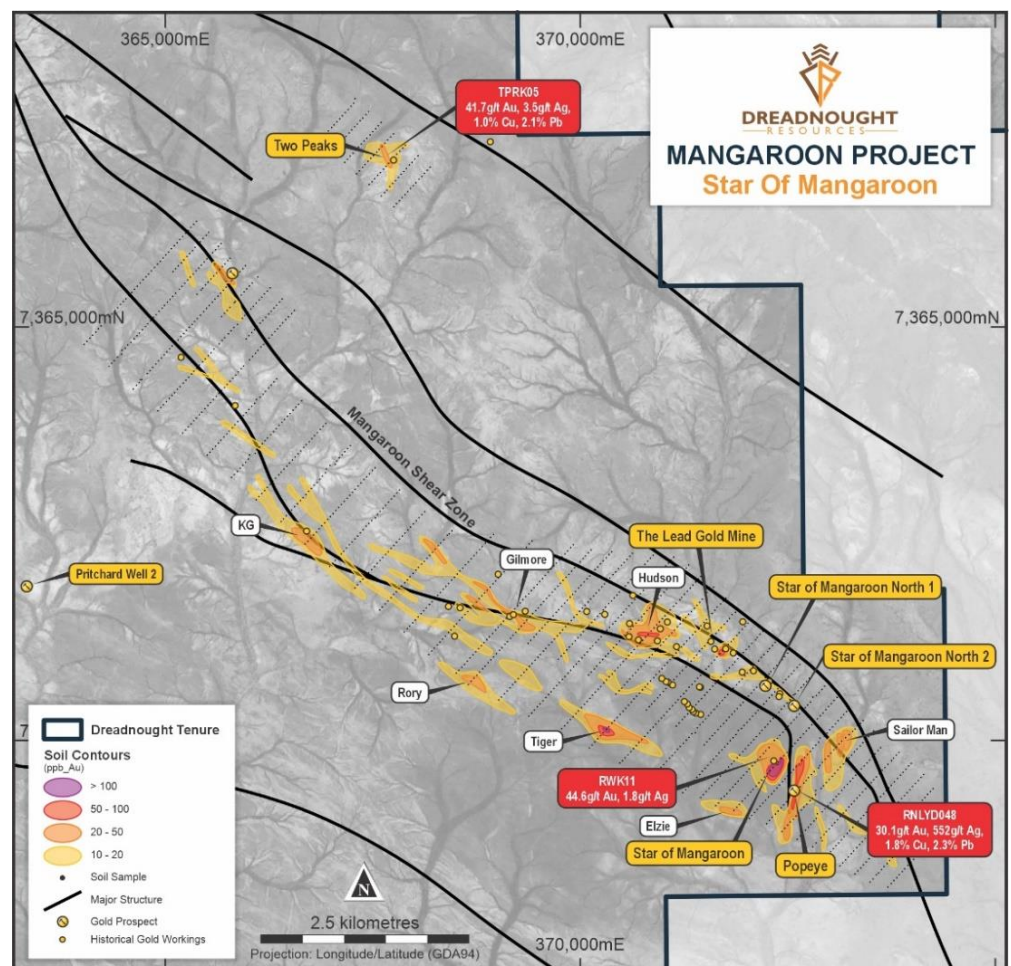
Dreadnought's consolidated ownership has for the first time allowed for a comprehensive review of the high-grade gold potential in the region.

This is the first-time information on the historical workings and gold occurrences from such a wide range of sources has been compiled. Pleasingly, this has highlighted the significant scale of gold mineralisation along the >10km long Mangaroon Shear Zone - a significant splay structure linking the Minga Bar and Edmund Faults. Due to previous fractured small-scale ownership, no modern exploration has been undertaken and remarkably drilling of only ~200m of strike has occurred along the Shear Zone.

Comprehensive reviews by Dreadnought have included: collating unpublished records; rock chipping and mapping of historical workings; a first ever detailed airborne magnetics survey; and an ultrafine fraction ("UFF") soil survey. This work is ongoing and has already confirmed anomalism along the entire ~10km strike and generated 7 new prospects under shallow cover.

Features from the work to date include (Figure 4):

- Generation of 7 new targets (Tiger, Rory, KG, Gilmore, Hudson, Elzie and Sailor Man). Tiger stands out for having a stronger gold (317ppb Au) and pathfinder anomaly than the Star of Mangaroon itself which is the main historical mine in the region.
- Extension of anomalism at Popeye to >500m under shallow cover. Popeye contains a small shaft and rock chips to 121.2 g/t Au, 179 g/t Ag (SM7) and 30.1 g/t Au, 552 g/t Ag (RNLYD048).
- Definition of drill targets at the undrilled Diamond Gold Mine, rock chips to 74.8 g/t Au (MNRK0515).
- Definition of drill targets at the undrilled Mitchell's Find, rock chips to 16.4 g/t Au, 126 g/t Ag (RNLYD029).
- Definition of gold-in-soil anomalies with As-Bi-Sb-Te+/-Ag-Cu-Pb pathfinder associations over the main historical mines (Star of Mangaroon, Two Peaks, Pritchard's, Lead Gold).
- Infill and extensional UFF soil surveys are ongoing to define existing anomalies and generate new anomalies.



**Figure 4: Image of the >10km long Mangaroon Shear Zone highlighting historical mines/workings, and highly prospective results.**

**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 >5,000km<sup>2</sup> of the Mangaroon Zone in the Gascoyne Region of Western Australia, the world's top investment jurisdiction as per the Investment Attractiveness Index published in the Fraser Institute's Annual Survey of Mining Companies. 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. Finally, there are the high NdPr:TREO ratio ironstone REE deposits at Yin and Yangibana which have the Gifford Creek Carbonatite as their source.

Dreadnought has already successfully delivered:

- An independent Resource of 29.98Mt @ 1.04% TREO (83% Measured & Indicated) within the 43km long Yin REE Ironstone Complex (ASX 30 Nov 2023).
- An initial independent Inferred Resource of 10.84Mt @ 1.00% TREO (ASX 28 Aug 2023) within the >17km long REE-Nb-Ti-P-Sc Gifford Creek Carbonatite.
- Definition of over a dozen gold prospects within the >10km long Mangaroon Au Shear Zone (100%) where fractured, small-scale ownership has limited previous gold exploration, with only ~200m of the >10km having been drilled, notwithstanding the high-grade, camp scale potential.
- Discovery of massive Ni-Cu-Co-PGE sulphides along the ~45km long Money Intrusion (First Quantum Minerals earn-in) which contains high tenor magmatic mineralisation.

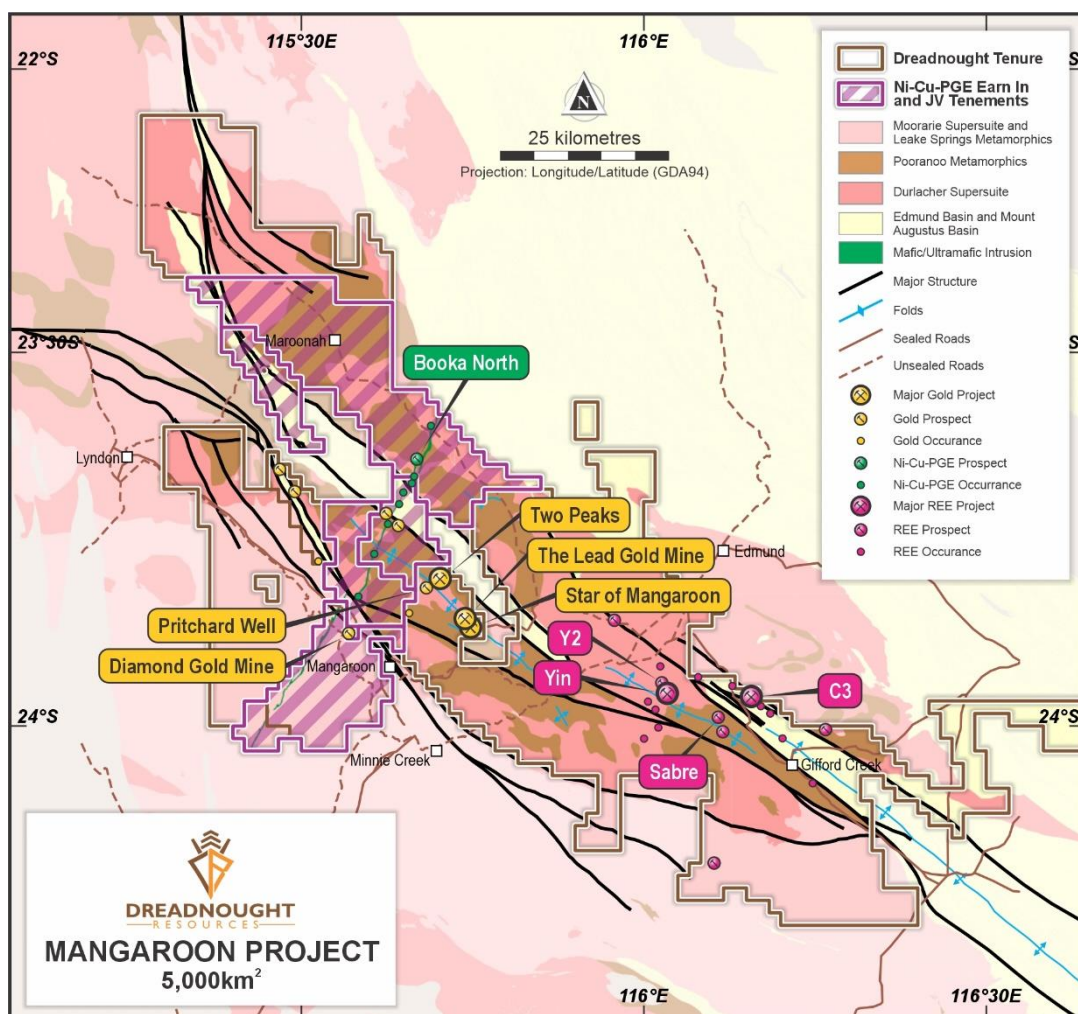


Figure 5: Plan view map of Mangaroon showing the location of Au, Ni-Cu-Co-PGE and REE prospects in relation to major structures, geology and roads.

For further information please refer to previous ASX announcements:

- 25 November 2020 *Mangaroon Ni-Cu-PGE & Au Project*
- 15 March 2021 *Exploration Commences at Mangaroon Ni-Cu-PGE & Au Project*
- 7 April 2021 *Option/JV Agreement Signed with Global Base Metal Miner*
- 17 May 2021 *Update on Mangaroon Ni-Cu-PGE & Au Project*
- 12 September 2022 *Star of Mangaroon Acquisition & Consolidation*
- 7 June 2023 *Mangaroon Gold Review and Further Consolidation*
- 4 September 2023 *Outstanding Gold Opportunities Along >10km Mangaroon Shear Zone*
- 1 November 2023 *Gold Drilling Commenced at Star of Mangaroon*
- 11 December 2023 *Thick, High-Grade Gold Including 7m @ 23.0g/t Au*

#### **UPCOMING NEWSFLOW**

January: Results of Central Yilgarn Project Review (100%)

January: Update on Ni-Cu-Co-PGE Drilling at Mangaroon (Earn-in)

January: Quarterly Report

January/February: Update on Ni-Cu-Co-PGE IP Survey at Mangaroon (Earn-in)

February: Assays from RC drilling at Tarraji-Yampi (80%, 100%)

February: Results from target generation and definition work at Bresnahan HREE-Au-U (100%)

13-15 February 2024: RIU Explorers Conference

March: Half Year Financial Report

February: Results from surface sampling & mapping of LCT targets at Mangaroon & Central Yilgarn (100%)

March: Commencement of RC & diamond drilling at Mangaroon Ni-Cu-Co-PGE (Earn-in)

March/April: Commencement of RC drilling at Mangaroon Au (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 – 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 Project (80/100%)

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-Co-3PGE JV & Au/REE 100% Project

Mangaroon covers ~5,000kms<sup>2</sup> and is located 250kms south-east of Exmouth in the Gascoyne Region of WA. At the Money Ni-Cu-Co-3PGE has been identified and is subject to an earn-in by First Quantum Minerals (up to 70%). Dreadnought also has areas of outcropping high-grade 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 estimated for the top 150m of ~40km of the Yin REE Ironstone Complex (ASX 13 Feb 2023).
- An independent Resource for Yin Ironstones Complex of 29.98Mt @ 1.04% TREO over only ~4.6kms – including an Measured and Indicated Resource of 26.3Mt @ 1.04% TREO (ASX 30 Nov 2023).
- Regional source of rare earths at the Gifford Creek Carbonatite totaling ~17kms x ~1km (ASX 7 Aug 2023).
- A large, independent initial Resource of 10.84Mt @ 1.00% TREO at the Gifford Creek Carbonatites, containing a range of critical minerals including rare earths, niobium, phosphate, titanium and scandium (ASX 28 Aug 2023).

### Bresnahan HREE-Au-U Project (100%)

Bresnahan is located ~125km southwest of Newman in the Ashburton Basin. The project comprises ~3,700kms<sup>2</sup> 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, unconformity uranium (“**U**”) deposits and mesothermal lode gold similar to Paulsens Au-Ag-Sb deposits along strike.

Prior to consolidation by Dreadnought, the Bresnahan Basin had been successfully 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 ~1,400 kms<sup>2</sup> covering ~150km of strike along the majority of the Illaara, Yerilgee, South Elvire 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-Cesium-Tantalum.

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



**Table 1: Significant Intersections >0.3g/t Au with >10g/t Au highlighted.**

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Prospect
SOMRC002	51	52	1	0.8	Star of Mangaroon
SOMRC004	9	18	9	13.4	
incl	16	18	2	59.4	
SOMRC005	53	60	7	23.0	
incl	54	57	3	48.9	
SOMRC006	89	97	8	15.5	
incl	90	93	3	30.4	
SOMRC007	19	20	1	4.0	
SOMRC008	68	70	2	4.8	
SOMRC013	88	92	4	0.9	
and	102	105	3	0.6	
SOMRC014	157	160	3	0.6	
SOMRC015	0	3	3	2.9	
SOMRC018	10	33	23	0.4	
incl	30	33	3	1.2	
SOMDD001	16.0	17.4	1.4	87.9	
SOMDD002	68.2	70.7	2.5	3.3	

**Table 2: Drill Collar Data (GDA94 MGAz50)**

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Type	
SOMRC001	372308.1	7359748	284.524	-60	274	33	RC	Star of Mangaroon
SOMRC002	372339.8	7359748	284.561	-60	270	75	RC	
SOMRC003	372373.4	7359748	284.037	-60	274	123	RC	
SOMRC004	372323.8	7359784	283.839	-60	274	36	RC	
SOMRC005	372362.1	7359779	283.476	-61	274	84	RC	
SOMRC006	372402.8	7359783	282.597	-61	272	114	RC	
SOMRC007	372331.5	7359823	284.297	-59	272	42	RC	
SOMRC008	372376.3	7359824	283.571	-58	273	90	RC	
SOMRC009	372420.1	7359823	283.01	-56	271	126	RC	
SOMRC010	372447.8	7359822	282.785	-61	270	180	RC	
SOMRC011	372326.4	7359863	285.235	-58	277	42	RC	
SOMRC012	372370.9	7359863	284.776	-60	274	84	RC	
SOMRC013	372409.8	7359863	284.097	-61	274	138	RC	
SOMRC014	372451.6	7359859	283.949	-61	277	204	RC	
SOMRC015	372262.6	7359710	285.631	-58	267	84	RC	
SOMRC016	372296.4	7359709	286.316	-60	267	84	RC	
SOMRC017	372330.2	7359709	285.893	-61	265	84	RC	
SOMRC018	372279.9	7359924	287.664	-60	30	102	RC	
SOMDD001	372325	7359789	283.815	-57	271	41.2	DDH	
SOMDD002	372384.7	7359791	282.868	-59	254	96.7	DDH	

**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"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p>Reverse Circulation (RC) and Diamond (DD) drilling was undertaken to produce samples for assaying.</p> <p><b>RC Drilling</b></p> <p>Two sampling techniques were utilised for the RC drilling, 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><b>1m Splits</b></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><b>3m Composites</b></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 help determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples have 3m composites collected.</p> <p><b>Diamond Core</b></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>All samples are submitted to ALS Laboratories in Perth for determination of gold by PhotonAssay from crushed sample (ALS Method Au-PA01).</p> <p>Select 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>QAQC samples consisting of duplicates, blanks and CRM's (OREAS Standards) are inserted through the program at a rate of 1:50 samples.</p>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<p><b>RC Drilling</b></p> <p>The first 3 drill holes were completed by Ausdrill utilising a Drill Rigs Australia truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5¾".</p> <p>The remaining drill holes were completed by Top Drill utilising a Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5½".</p> <p><b>Diamond Drilling</b></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>



Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<p><b>RC Drilling</b></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><b>Diamond Drilling</b></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"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p><b>RC Drilling</b></p> <p>RC chips were logged under the 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 texture 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, and magnetic susceptibility meter to assist with logging and the identification of mineralisation.</p> <p>RC logging is qualitative, quantitative or semi-quantitative in nature.</p> <p><b>Diamond Drilling</b></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"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p><b>RC Drilling</b></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 crushed to &gt;90% passing 3mm to produce a 500g charge for determination of gold PhotonAssay from crushed sample (ALS Method Au-PA01).</p> <p>Additional material is then 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).</p> <p>Standard laboratory QAQC is undertaken and monitored.</p> <p><b>Diamond Drilling</b></p> <p>20cm – 1m half or 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>

Criteria	JORC Code explanation	Commentary
		<p>2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and crushed to &gt;90% passing 3mm to produce a 500g charge for determination of gold PhotonAssay from crushed sample (ALS Method Au-PA01).</p> <p>Additional material is then 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).</p> <p>Standard laboratory QAQC is undertaken and monitored.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<p><b>Laboratory Analysis</b></p> <p>PhotonAssay is considered a total analysis and Method Au-PA01 is appropriate for Au determination. ME-MS61 is considered a near total digest and is appropriate for pathfinder determination.</p> <p>Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receipt.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p><b>Logging and Sampling</b></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>2 historical RC holes have been diamond twinned and 1 RC twinned to compare and validate historical RC drilling.</p> <p>No adjustments to any assay data have been undertaken.</p>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<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 30<sup>th</sup> metre with an accuracy of +/- 1° azimuth and +/-0.3° dip.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>See table 1 and 2 for hole positions and sampling information.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<p>Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the mineralised lode.</p> <p>No sample bias is known at this time.</p>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>All geochemical samples were collected, bagged, and sealed by Dreadnought staff and were delivered directly to ALS Laboratories Perth by Jarrahbar Contracting out of Carnarvon.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>The program is continuously reviewed by senior company personnel.</p> <p>Diamond core has been reviewed and logged by Gerard Tripp of Gerard Tripp PhD Consulting Geologist Pty Ltd.</p>

## 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"> <li>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.</li> <li>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.</li> </ul>	<p>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).</p> <p>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.</p> <p>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).</p> <p>The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, Edmund, Williambury and Towera Stations.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<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> <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"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<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>

Criteria	JORC Code explanation	Commentary
Drill hole information	<ul style="list-style-type: none"> <li>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"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	An overview of the drilling program is given within the text and tables within this document.
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>All results greater than 0.3g/t Au have been reported. Significant intercepts are length weight averaged for all samples with Au values &gt;0.3g/t Au with up to 3m of internal dilution (&lt;0.3g/t Au).</p> <p>No metal equivalents are reported.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation.
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	Refer to figures within this report.
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	The accompanying document is a balanced report with a suitable cautionary note.
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	Suitable commentary of the geology encountered are given within the text of this document.
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<p>RC drilling</p> <p>Diamond drilling</p> <p>Metallurgical test work</p> <p>Mapping</p>