

**ASX ANNOUNCEMENT** 26 October 2023

## SIGNIFICANT HREE, GOLD & URANIUM POTENTIAL - BRESNAHAN (100%)

### HIGHLIGHTS

- Dreadnought has completed a review of historical exploration, recently acquired geophysical data and plans for first pass work over the ~4,700 kms<sup>2</sup>, 100% owned, Bresnahan HREE, Au-Ag-Sb, U Project (“Bresnahan”).
- Bresnahan was acquired in August 2022 as a prospective region for unconformity heavy rare earths (“HREE”), unconformity uranium and gold.
- The Bresnahan Basin is one of Western Australia’s known uranium provinces containing the Angelo River deposit and having been previously explored by Cameco, U3O8 and Vale from ~2005-2012 and CRA, Pancontinental and Uranerz from ~1978-1990.
- Dreadnought has now consolidated the largest landholding in this region with known HREE, uranium and gold/silver/antimony (“Au-Ag-Sb”) mineralisation. Bresnahan contains significant undrilled historical targets defined by previous uranium explorers.
- In addition to the previously disclosed HREE and Au-Ag-Sb results (ASX 8 February 2023):

**BBRK0046: 1.33% TREO (31% NdPr:TREO and 25% HREE:TREO)**

**BBRK0050: 1.21% TREO (30% NdPr:TREO and 19% HREE:TREO)**

**BBRK0012: 11.8 g/t Au, 650 g/t Ag, 2.9% Sb**

**BBRK0013: 11.9 g/t Au, 710 g/t Ag, 0.5% Sb**

There are significant uranium results from recently acquired and historical surface sampling, including:

**BBRK0021: 0.24% U<sub>3</sub>O<sub>8</sub>**

**BBRK0023: 0.24% U<sub>3</sub>O<sub>8</sub>**

**BBRK0019: 0.19% U<sub>3</sub>O<sub>8</sub>**

**1851: 0.29% U<sub>3</sub>O<sub>8</sub>**

**BBRK0020: 0.13% U<sub>3</sub>O<sub>8</sub>**

**BBRK0022: 0.12% U<sub>3</sub>O<sub>8</sub>**

- Surface sampling over HREE-Au-U targets, plus a project wide ultrafine stream sediment survey will commence in November 2023 with results expected in the March 2024 quarter. Given the significant uranium results and targets, uranium will now form part of our core focus.

**Dreadnought Resources Limited (“Dreadnought”) is pleased to announce an update on exploration activities within Dreadnought’s 100% owned Bresnahan HREE, Au-Ag-Sb, U project located in the Ashburton Region of Western Australia.**



Dreadnought’s Managing Director, Dean Tuck, commented: “Dreadnought moved on the Bresnahan Basin because it was a known unconformity uranium province as the uranium system is well understood and shares a mineral system with the recently published hard rock heavy rare earth systems like those seen in the Athabasca Basin and Browns Range. The exploration for uranium is a natural addition to the assessment of the consolidated project area as we look to unlock the region’s potential.”

Figure 1: Photo of a major structural corridor at Bresnahan with the development of ladder veins standing out prominently within highly altered sediments of the Wyloo Group.

## **SNAPSHOT – Bresnahan HREE, Au-Ag-Sb and Uranium**

### **Large Scale Project, Next Door to Pilbara Infrastructure - World's Top Investment Jurisdiction**

- ~4,700 kms<sup>2</sup> of tenure, 100% owned, located in the underexplored Ashburton Region of Western Australia on the doorstep of Pilbara iron ore infrastructure.
- Critical minerals, in the world's top investment jurisdiction, Western Australia, based on the Investment Attractiveness Index published in the Fraser Institute's Annual Survey of Mining Companies.
- Limited and fragmented historical exploration. Dreadnought is the first explorer to consolidate the region and to undertake detailed geophysical and cutting edge modern geochemical techniques for the exploration and discovery of multiple commodities.

### **New Search Space for HREE – Major Discovery Potential**

- The Bresnahan Basin is a conceptual unconformity heavy rare earth province with a similar geological setting to the Athabasca Basin in Canada and Browns Range in Western Australia. These settings are home to the few known hard rock HREE (including high value dysprosium and terbium “**Dy-Tb**”) deposits.
- HREE mineralisation was first identified in the region in 2008. However, the significance of the mineralisation was not recognised until the publication of the unconformity HREE model by Northern Minerals Ltd (ASX:NTU) and The Australian National University (“**ANU**”).
- HREE mineralisation, alteration and pathfinder geochemistry, similar to Browns Range, has been confirmed at Bresnahan with significant results including (ASX 8 February 2023):

**BBRK0046: 1.33% TREO (25% HREE:TREO)      BBRK0050: 1.21% TREO (19% HREE:TREO)**

- The opening of new search spaces is one of the greatest lead indicators of major discoveries.

### **High-Grade Au-Ag-Sb**

- Similar lithostructural setting to the Paulsens and Mt Olympus gold deposits.
- Rock chips from the Monster Au-Ag-Sb prospect include (ASX 8 February 2023):

**BBRK0012: 11.8 g/t Au, 650 g/t Ag, 2.9% Sb      BBRK0013: 11.9 g/t Au, 710 g/t Ag, 0.5% Sb**

### **Proven Uranium Province with Untested Targets Defined by Major Companies**

- Historical exploration by major uranium miners including CRA, Pancontinental and Uranerz started in the 1970s through early 1990s and resulted in the discovery of outcropping mineralisation at the Bresnahan unconformity including the Angelo River deposit.
- Second wave of uranium exploration led by Cameco, Vale and U3O8 deployed airborne EM for the first time to identify targets under the shallow dipping Bresnahan Basin – all high quality and never drilled due to low uranium prices.
- Outcropping mineralisation at Bresnahan is high-grade and includes:

**BBRK0021: 0.24% U<sub>3</sub>O<sub>8</sub>      BBRK0023: 0.24% U<sub>3</sub>O<sub>8</sub>      I851: 0.29% U<sub>3</sub>O<sub>8</sub>**

### **Global Energy Decarbonisation Driving HREE (Dy, Tb) and Uranium Fundamentals**

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.
- The World Nuclear Association forecasts that global demand for uranium could double by 2040, from 65k tonnes to 130k tonnes as the world looks to replace high carbon intensity electrical generation with low carbon nuclear power generation. (WNA Nuclear Fuel Report: Global Scenarios 2023-2040, September 2023).



## Exploration Plan – Target Generation and Definition HREEs, Au-Ag-Sb, U

The planned exploration program at Bresnahan is multi-faceted with three key initial objectives:

1. Define HREE geochemical targets along key mineralised structures within the Wyloo and Bresnahan Basin sediments through surface sampling and geological mapping;
2. Define uranium geochemical targets associated with radiometric anomalies and spectral defined iron and clay alteration through surface sampling, ground radiometric surveys and geological mapping; and
3. Generate HREE, Au-Ag-Sb, U geochemical anomalies through project wide ultrafine fraction stream sediment sampling.

The program will commence in November 2023 and will run for several months on a campaign basis with results expected commencing in the March 2024 quarter.

The program has been designed around the significant geophysical datasets acquired and interpreted by Dreadnought with input from historical and reconnaissance exploration work. Systematic soil sampling, rock chipping and geological mapping is expected to identify outcropping mineralisation and define soil anomalies associated with prospective geological alteration and structural deformation. This work should result in drill targets during 2024.

In addition, to ensure that no significant outcropping or near surface mineralisation is missed, a project wide ultrafine fraction stream sediment sampling program will be undertaken.

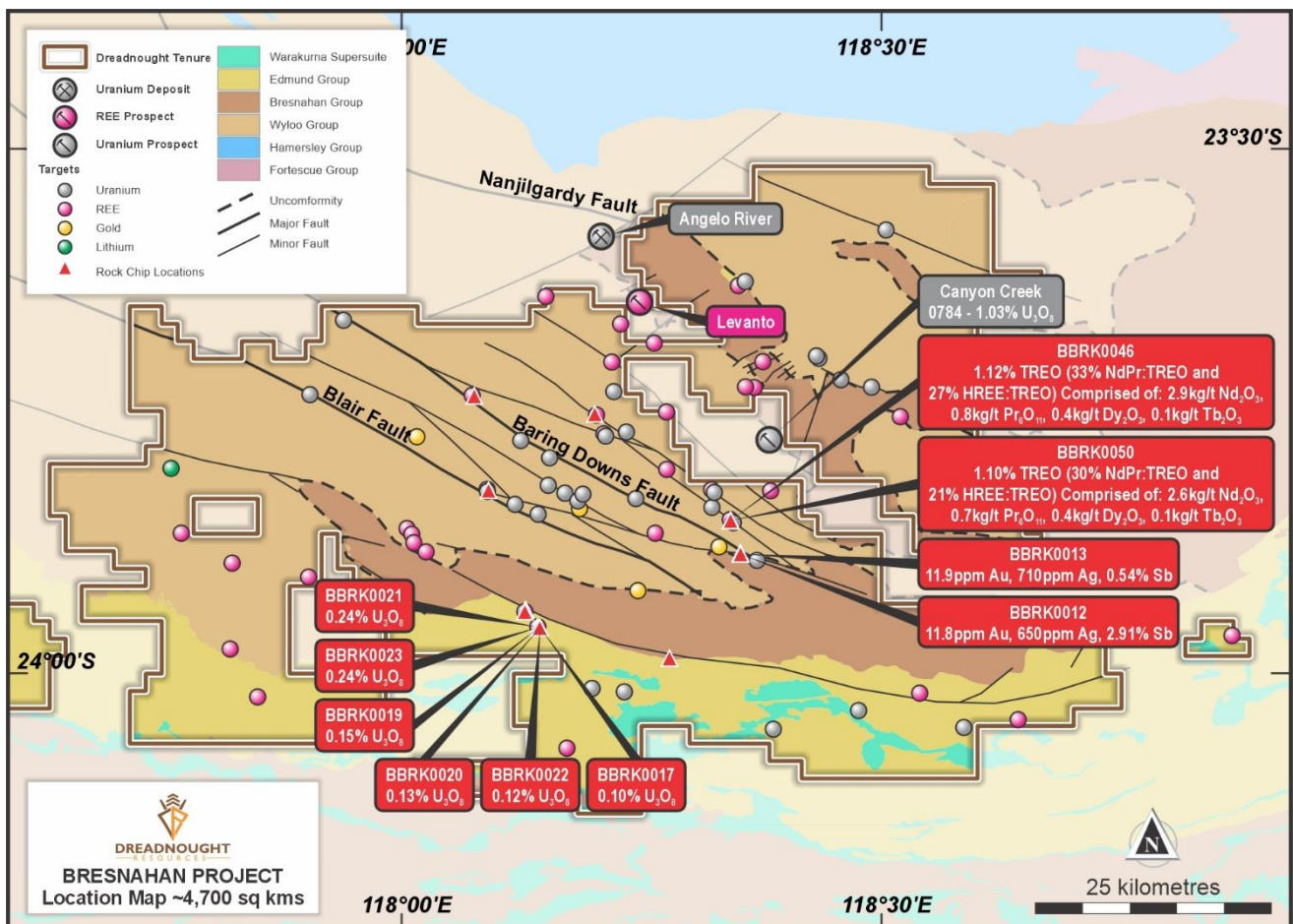


Figure 2: Plan view map of Bresnahan showing the location of mineralised rock chips and prospects in relation to the major structures and the Bresnahan-Wyloo unconformity.

**Unconformity HREE (Dy and Tb) Potential (E52/3356, E52/3936, E52/3937, E52/4083, E52/4139, E52/4141, E52/4142, E52/4143, E52/4144, E52/4147, E52/4228, E52/3412 and E52/3462: DRE 100%)**

Bresnahan is a conceptual unconformity HREE project focused around the Bresnahan Basin. The unconformable contact between the Bresnahan Basin sediments and the underlying Wyloo Group sediments is interpreted to be a similar geological setting to that seen at the Athabasca Basin in Canada and Browns Range in Western Australia. These settings form the basis of the unconformity HREE model, originally published in 2018 in collaboration with Northern Minerals Ltd. HREEs were identified within the Bresnahan Basin as early as 2008; however, their significance was not recognised due to the lack of a coherent geological model.

The unconformity HREE model contains many system analogies with the unconformity uranium model. However, the precipitation mechanisms between HREEs (fluid mixing) and U (reduction) are significantly different. Accordingly, while these two styles of mineralisation are related, the HREEs are often not directly associated with the uranium mineralisation.

In November 2022, a two-day reconnaissance program was undertaken to collect surface samples along significant structural trends and geophysical anomalies to confirm HREE mineralisation and associated pathfinders. In total, 17 locations were visited along the unconformity and basement structures. This program confirmed significant alteration, veining, brecciation and related hematite and manganese alteration associated with prospective structures. In 2023, large airborne magnetic and radiometric surveys were flown over the project and merged with historical surveys to assist with targeting.

In addition to HREEs, assays confirmed widespread pathfinder association along all major structures. Given the reconnaissance nature of the program, this is a resounding success and confirmation that Bresnahan has significant potential to host unconformity HREEs.

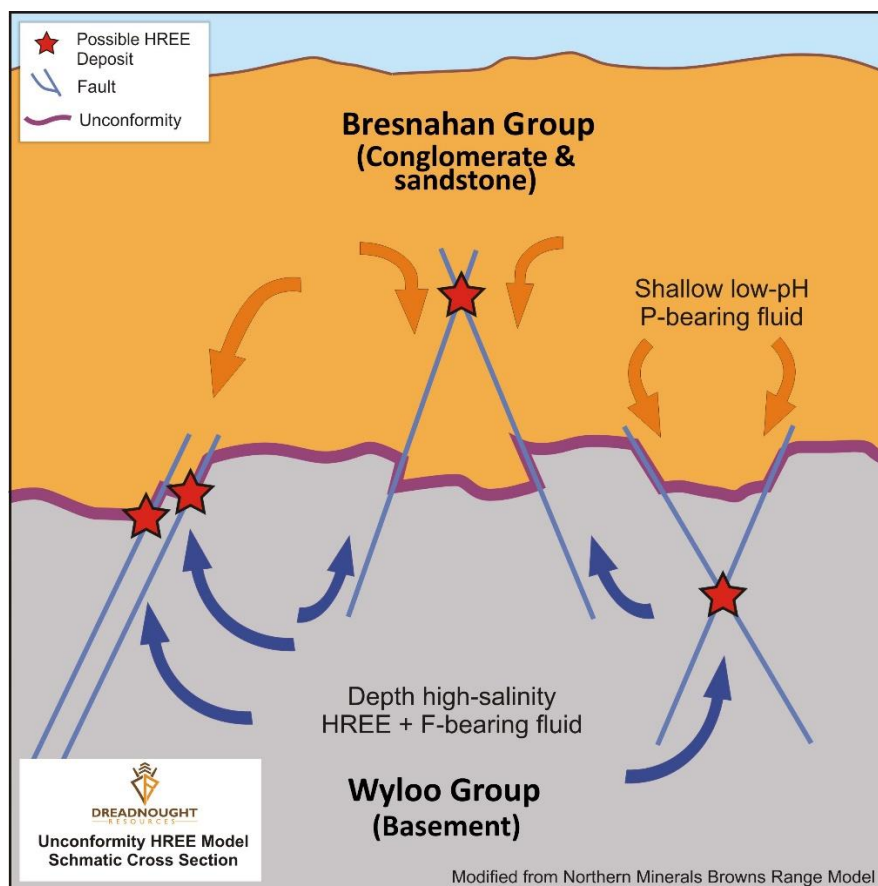


Figure 3: Schematic cross section of the unconformity HREE model, modified from the Browns Range model, showing the possible locations of HREE mineralisation in relation to host lithologies and major structures.



**Unconformity Uranium Potential (E52/3356, E52/3936, E52/3937, E52/4083, E52/4139, E52/4141, E52/4142, E52/4143, E52/4144, E52/4147, E52/4228, E52/3412 and E52/3462: DRE 100%)**

The majority of Australia's uranium occurs in four types of deposit styles:

- iron oxide breccia complexes (Olympic Dam);
- sandstone deposits (Beverley, Honeymoon);
- palaeochannel/calcrete deposits (Yeelirrie, Lake Way); and
- unconformity-related deposits (Jabiluka, Ranger).

Unconformity-type uranium deposits are developed along the contact between younger sandstone cover and underlying crystalline basement rocks. Mineralisation may extend up to 400m into the underlying basement rocks.

The distribution of the grades and sizes of unconformity-related deposits is related to their setting with respect to the unconformity and type of host rocks. In Australia, unconformity-related deposits are relatively large and high-grade with the Jabiluka and Ranger orebodies grading between 0.20% to 0.39% U<sub>3</sub>O<sub>8</sub>. (*Australia's Uranium Resources, Geology, and Development of Deposits. Geoscience Australia Mineral Resource Report 1 (2001)*)

Bresnahan is a major consolidation of a proven uranium province with geological similarities to the globally significant Alligator River Uranium Field (“**ARUF**”) which hosts Jabiluka and Ranger.

This similarity encouraged historical exploration at Bresnahan by uranium miners including CRA, Pancontinental and Uranerz in the 1970s through early 1990s. Exploration was focused on testing for sandstone hosted mineralisation (CRA) and unconformity hosted mineralisation (Pancontinental). This work resulted in the discovery of outcropping mineralisation at the Bresnahan unconformity including the Angelo River deposit.

A second wave of uranium exploration led by Cameco, Vale and U3O8 deployed airborne EM for the first time to identify targets under the shallow dipping Bresnahan Basin - all largely focused on the unconformity model. In 2007 Cameco justified its involvement in the region by stating:

*“Previous exploration in the area has recognised the analogies with the ARUF, and unconformity related mineralisation has been the main model used. The exploration has focused on the Bresnahan/basement unconformity, with traditional exploration, particularly by Pancontinental and Uranerz, based on using systematic airborne or ground radiometrics to locate uranium anomalies. There is very limited scope for further discoveries using this approach, or for extending resources at the known prospects, particularly Angelo River, which has been thoroughly drilled. However, the Bresnahan sandstone covered areas have received very little attention and there is good potential for further uranium mineralisation beneath sandstone cover.”*

The surveys conducted by Cameco, Vale and U3O8 successfully identified reactive trap sites in close proximity to the Bresnahan unconformity and other structures. Several priority targets were defined but never drilled due to low uranium prices.

In addition, recently defined radiometric anomalies within the highly altered and deformed Wyloo Group Sediments hosted within the main Bresnahan Dome and cut by the crustal scale Baring Downs and Blair Faults, represent near drill ready targets.

**Background on Bresnahan (E52/3356, E52/3936, E52/3937, E52/4083, E52/4139, E52/4141, E52/4142, E52/4143, E52/4144, E52/4147, E52/4228, E52/3412 and E52/3462: DRE 100%)**

Bresnahan is located ~125km southwest of Newman in the Ashburton Basin. The project comprises ~4,700kms<sup>2</sup> covering >200kms strike along the Bresnahan Basin/Wyloo Group unconformity. Bresnahan is prospective for hard rock HREE (Dy and Tb) deposits similar to Browns Range, mesothermal lode gold similar to the Paulsens Au-Ag-Sb deposits along strike and high-grade unconformity uranium mineralisation near the lower contact of the Bresnahan Basin and underlying reducing sediments.

Bresnahan is a significant first mover opportunity to explore for unconformity HREE, Au-Ag-Sb and U. In addition, this is a major consolidation of a significant proven uranium province having been targeted for exploration by global uranium miners including Cameco, CRA, Pancontinental and Vale.

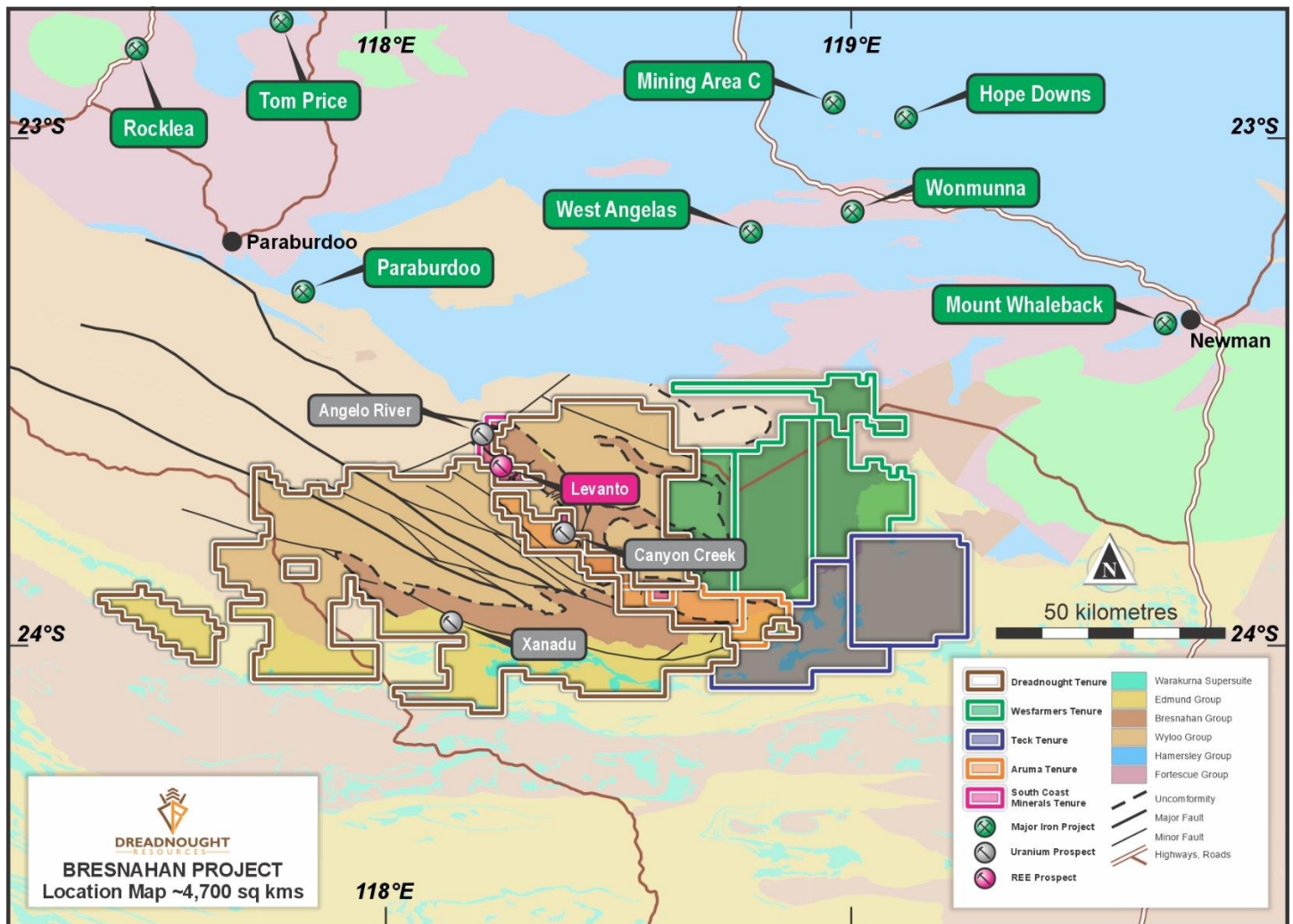


Figure 4: Plan view regional map of Bresnahan showing the location in relation to major towns, infrastructure and mines.

For further information please refer to previous ASX announcements:

- 26 October 2022                      *Tenement Acquisitions*
- 8 February 2023                    *Bresnahan Emerging as a Light & Heavy Rare Earth Province*
- 4 October 2023                    *Bresnahan Acquisition & Consolidation*

## **UPCOMING NEWSFLOW**

October: DHEM and further assay results from the Money Intrusion (Mangaroon Ni-Cu-PGE Earn-in)

October: Drilling results from completed drilling at Mangaroon REE (100%)

October: Quarterly Activities and Cashflow Report

November: RC drilling at Mangaroon Au (100%)

November: REE Resource upgrade (Mangaroon 100%)

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

November: Results from target generation and definition work at Bresnahan (100%)

23 November: Annual General Meeting

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

December-February 2024: Assay results from Ni-Cu-PGE and Au drilling at Mangaroon.

March 2024: Commencement of RC and Diamond Drilling at Mangaroon Ni-Cu-PGE (Earin-in)

March/April 2024: Commencement of RC drilling at Mangaroon Rare Earths (100%)

~Ends~

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



**Table 1: Significant (>0.1% U<sub>3</sub>O<sub>8</sub>) Uranium Rock Chip Results**

Sample ID	Company	Easting	Northing	U <sub>3</sub> O <sub>8</sub> (%)	Prospect
BBRK0021	DRE	616253	7350154	0.24%	Xanadu
BBRK0023	DRE	616169	7350196	0.24%	Xanadu
BBRK0019	DRE	616419	7350135	0.19%	Xanadu
BBRK0020	DRE	616419	7350136	0.13%	Xanadu
BBRK0022	DRE	616185	7350210	0.12%	Xanadu
BBRK0017	DRE	616439	7350129	0.10%	Xanadu
784	U308	640880	7369729	1.03%	Canyon Creek
782	U308	640880	7369729	0.52%	Canyon Creek
783	U308	640858	7369737	0.60%	Canyon Creek
779	U308	640925	7369738	0.15%	Canyon Creek
1851	U308	616265	7350134	0.29%	Xanadu

### 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.

\*The Exploration Target listed within the Investment Highlights 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.

### Disclaimer

References in this announcement may have been made to certain previous ASX announcements, which in turn may have included Exploration Results, Exploration Targets, Mineral Resources, Ore Reserves and the results of Pre-Feasibility Studies. For full details, please refer to the said announcement on the said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and mentioned announcements, the Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcement(s), and in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.

### 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-PGE JV & Au/REE 100% Project

Mangaroon covers ~5,200kms 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 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\* 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 Gifford Creek Carbonatite totaling >17kms x ~1km (ASX 7 Aug 2023).
- A large, independent initial Resource of 10.84Mt @ 1.00% TREO, containing a range of critical minerals including rare earths, niobium, phosphate, titanium and scandium (ASX 28 Aug 2023).

### Bresnahan HREE, Au-Ag-Sb and 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 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 and U.

### 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 Illara, Yerilgee and Evanston greenstone belts. Central Yilgarn is prospective for typical Archean mesothermal lode gold deposits, VMS base metals, komatiite hosted nickel sulphides and critical metals including Lithium-Caesium-Tantalum.

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



**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><b>Rock Chips</b></p> <p>Rock Chips were collected by Dreadnought staff and submitted for analysis. Rock chips are random, subject to bias and often unrepresentative for the typical widths required for economic consideration. They are by nature difficult to duplicate with any acceptable form of precision or accuracy.</p> <p>Rock chips have been collected by Dreadnought to assist in characterising different lithologies, alterations and expressions of mineralisation. In many instances, several rock chips were collected from a single location to assist with characterising and understanding the different lithologies, alterations and expressions of mineralisation present at the locality.</p> <p>Rock chips were submitted to ALS Laboratories in Perth for determination of Rare Earth Oxides by lithium borate fusion and ICP-MS (ALS Method ME-MS81) and other 48 other elements by four acid digest and ICP-MS (ALS Method ME-MS61).</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>	No drilling undertaken
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>	No drilling undertaken
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>	No drilling undertaken
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>Rock Chips</b></p> <p>Entire rock chips were submitted to the lab for sample prep and analysis.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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</li> </ul>	<p><b>Rock Chips</b></p> <p>All samples were submitted to ALS Laboratories in Perth where 1-3kg rock chips samples were crushed so that &gt;70% of material passes through -6mm, the sample is then</p>



Criteria	JORC Code explanation	Commentary
	<p>instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</p> <ul style="list-style-type: none"> <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>pulverised to &gt;85% passing 75 micron.</p> <p>A prepared sample (0.100 g) is added to lithium metaborate/lithium tetraborate flux, mixed well and fused in a furnace at 1025°C. The resulting melt is then cooled and dissolved in an acid mixture containing nitric, hydrochloric and hydrofluoric acids. This solution is then analyzed by inductively coupled plasma - mass spectrometry (ALS Method ME-MS81).</p> <p>Lithium borate fusion is considered a total digest and Method ME-MS81 is appropriate for REE and uranium determination.</p> <p>No standards, duplicates or blanks submitted with rock chips.</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>Rock Chips</b></p> <p>Rock chip and geological information is written in field books and coordinates and track data saved from handheld GPSs used in the field.</p> <p>Dreadnought geologists have inspected and logged all rock chips.</p> <p>Field data is entered into excel spreadsheets to be loaded into a database.</p>
Location of data points	<ul style="list-style-type: none"> <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>All sample locations were recorded with a Garmin handheld GPS which has an accuracy of +/- 5m.</p> <p>GDA94 MGAz50.</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>Sample spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for a Mineral Resource.</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>At this early stage of exploration, mineralisation thickness's, orientation and dips are not known.</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 delivered to Exmouth Haulage in Exmouth.</p> <p>Samples were delivered directly to ALS Laboratories Perth by Exmouth Haulage out of Exmouth.</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>

## 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>	<ul style="list-style-type: none"> <li>The Bresnahan Project consists of 14 granted Exploration License (E08/3356, E52/3412, E52/3462, E52/3936, E52/3937, E52/4083, E52/4142, E52/4143, E52/4145, E52/4147, E52/4228, E52/4256, E52/4257, E52/4258) and 6 pending Exploration Licenses (E08/3616, E52/4139, E52/4141, E52/4144, E52/4293, E52/4296).</li> <li>All tenements are 100% owned by Dreadnought Resources.</li> <li>E52/4083 is subject to a 1% Gross Revenue Royalty</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>held by Mineral Fields Pty Ltd.</p> <ul style="list-style-type: none"> <li>E52/3356, E52/3936, E52/3937 are subject to a 1% Gross Revenue Royalty held by Odette Geoscience Pty Ltd.</li> <li>The Bresnahan Project covers 2 Native Title Determinations including the Nharnuwangga Wajarri and Ngarlawangga (WAD72/1998), Yinhawangka (WAD216/2010),</li> </ul> <p>The Bresnahan Project is located over Turee Creek, Pingandy, Mount Vernon and Tangadee 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>Vale 2009-2012: WAMEX Reports 82193, 86595, 86639, 93173</p> <p>Cameco 2007-2008: WAMEX Reports 74901, 77916, 77917, 77918</p> <p>U3O8 Ltd 2007-2012: WAMEX Reports 85268, 88669, 92103, 92460, 92966</p> <p>Northern Star 2014-2015: WAMEX Report 104915</p> <p>Sandfire Resources 2005-2007: WAMEX Reports 71800, 74419</p> <p>Pancontinental 1980-1987: WAMEX Reports 9302, 9643, 9825, 10690, 10745, 16044, 16265, 17248, 17641</p> <p>Uranex 1984: WAMEX Reports 13146</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The Bresnahan Project is located over Wyloo Group metasediments and the Bresnahan Group in the Ashburton Basin.</p> <p>The Bresnahan Project is prospective for orogenic gold, uranium, and unconformity related REEs.</p>
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>	<p>No drilling reported.</p>
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>No drilling results reported.</p> <p>All results greater than 0.1% TREO and 0.1% U3O8 have been reported.</p> <p>No metal equivalents are reported.</p>



Criteria	JORC Code explanation	Commentary
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>	No drilling reported.
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>Reprocessing airborne electromagnetic data</p> <p>Geological mapping</p> <p>Surface sampling</p>