

**ASX ANNOUNCEMENT** 7 March 2024

## **SIGNIFICANT UNTESTED URANIUM TARGETS - BRESNAHAN (100%)**

### **HIGHLIGHTS**

- **Dreadnought's ongoing review of the ~4,000 kms<sup>2</sup>, 100% owned, Bresnahan Uranium, Heavy Rare Earths and Gold-Silver-Antimony ("U, HREE, Au-Ag-Sb") Project ("Bresnahan") has highlighted a dozen significant untested unconformity and paleochannel uranium targets from extensive geophysical data acquired by Cameco and Vale in the early 2000s.**
- **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 U, HREE, Au-Ag-Sb mineralisation. The U targets are analogous to Alligator River or Yeelirrie, the HREE to Browns Range and the Au-Ag-Sb to Paulsens/Mt Clement.**
- **Discussions are underway regarding partnerships or commercialisation of Bresnahan.**
- **Surface sampling over U, HREE, Au-Ag-Sb targets will commence in April 2024.**

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

Dreadnought's Managing Director, Dean Tuck, commented: "Bresnahan is a known uranium province containing over a dozen quality targets identified by a significant amount of work undertaken by the likes of Pancontinental, Cameco, Vale and Dreadnought. These targets were never followed up due to a lull in uranium prices. We have also confirmed high-grade heavy rare earths and gold/silver/antimony. Our focus is on gold and base metals and commercialisation opportunities including joint venture, divestment or demerger are being sought for Bresnahan with discussions underway with various parties."



Figure 1: Photo of Dreadnought's Matt Crowe taking scintillometer readings at the historical Monster uranium target.

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

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

- ~4,000 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 fractured historical exploration. Dreadnought is the first explorer to consolidate the region and to undertake modern geochemical techniques for the exploration and discovery of multiple commodities.

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

- Historical exploration by major international uranium companies 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. Extensive geophysical data acquired by Cameco and Vale in the early 2000s (estimated cost today of ~\$7m) has identified >12 significant untested unconformity and paleochannel uranium targets.
- Outcropping mineralisation at Bresnahan includes (ASX: 26 October 2023):

**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>**

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

- The Bresnahan Basin is a conceptual unconformity HREE 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 recognized 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: 26 October 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, Mt Clement and Mt Olympus gold deposits.
- Rock chips from the Monster Au-Ag-Sb prospect include (ASX: 4 October 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**

### **Global Energy Decarbonisation Driving HREE (Dy, Tb) and U 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 U 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).

**Unconformity U Potential (E52/3412, E 52/3462, E52/3936, E52/3937, E08/3356, E52/4083, E52/4142, E52/4143, E52/4145 and E52/4228: 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 (Alligator River: Jabiluka, Ranger).*

*Unconformity-type uranium deposits are developed along the contact between younger sandstone cover and underlying 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 known U province with geological similarities to the globally significant Alligator River uranium field (“**Alligator River**”). These similarities encouraged historical exploration at Bresnahan by international uranium mining companies including CRA, Pancontinental and Uranerz in the 1970s through early 1990s. Exploration was focused on testing Bresnahan 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 Alligator River uranium field, 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... 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.

There are over a dozen significant untested unconformity and paleochannel uranium targets based on extensive geophysical data acquired (estimated cost today of ~\$7m) by Cameco and Vale in the early 2000s. The most advanced of these targets, Xanadu, Mordor, Shengdu, Isla and Kunderdong are summarised below.

## URANIUM

### Xanadu Unconformity Uranium Target (E52/3936: DRE 100%)

Xanadu is an unconformity uranium target that was first identified by Pancontinental in the 1980s as a result of airborne radiometric surveys. The radiometric anomalies were due to outcropping mineralised hematite breccias within Edmund Group Sediments in close proximity to the regional unconformity with the Bresnahan Basin. This lithostructural setting is similar to the Angelo River deposit which was discovered and drilled out by Pancontinental.

Pancontinental drilled 9 shallow percussion holes into the outcrops in 1984 but were unable to intersect the structural unconformity which is actually located ~1km north of the outcrops.

In the 2000s, Cameco and U3O8 completed detailed magnetic, radiometric and Tempest Surveys over Xanadu identifying a ~5-6km long conductive unit along the structural unconformity plus additional radiometric anomalies associated with secondary cross-cutting structures.

Recent follow up work has confirmed outcropping mineralised hematite breccias with grades up to 0.25% U<sub>3</sub>O<sub>8</sub> and that a significant component of the target area is under shallow cover potentially masking mineralisation.

Given the proven mineralisation associated with untested conductive horizons and structural complexity, Xanadu is a high priority target requiring minimal additional work to define drill targets.

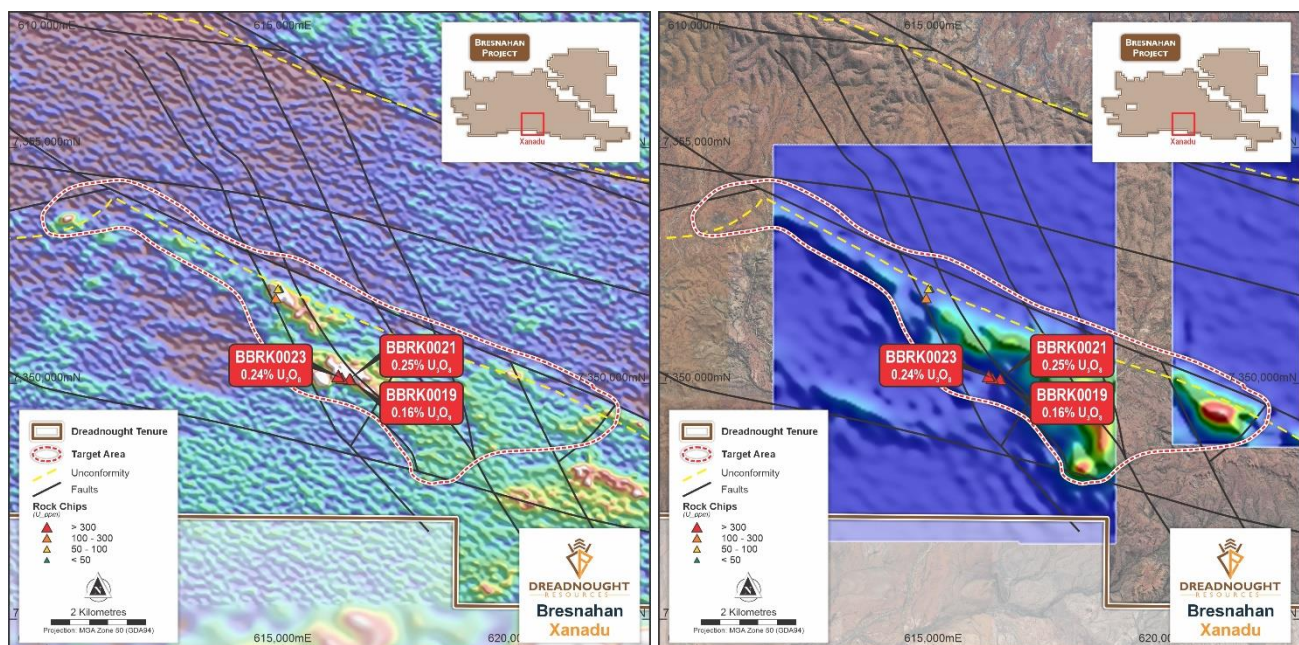


Figure 2: Two plan view images of Xanadu showing known mineralisation and radiometric anomalies in relation to major structures (L) and the same field of view showing known mineralisation and Tempest EM anomalies in relation to major structures (R).

### Mordor Unconformity Uranium Target (E52/4142: DRE 100%)

Mordor is an unconformity target that was first identified by Pancontinental in the 1980s as a result of airborne radiometric surveys. The radiometric anomalies were due to outcropping mineralised siliceous breccias within the basement Wyloo Group in close proximity to the structural unconformity with the Bresnahan Basin.

Pancontinental drilled 2 shallow percussion holes into the outcrops without intersecting the structural unconformity. While Pancontinental geologists recommended testing the mineralised structures underneath the Bresnahan unconformity, this program was never completed.

In the 2000s, Cameco and U3O8 completed detailed magnetic, radiometric and Tempest Surveys over Mordor identifying a ~2-3km long conductive unit along the structural unconformity and along the cross-cutting structures under the Bresnahan Basin.

Recent follow up work has confirmed outcropping mineralised siliceous breccias with grades up to 620ppm  $U_3O_8$ .

Given the proven mineralisation associated with untested conductive horizons and structural complexity, Mordor is a high priority target requiring minimal additional work to define drill targets.

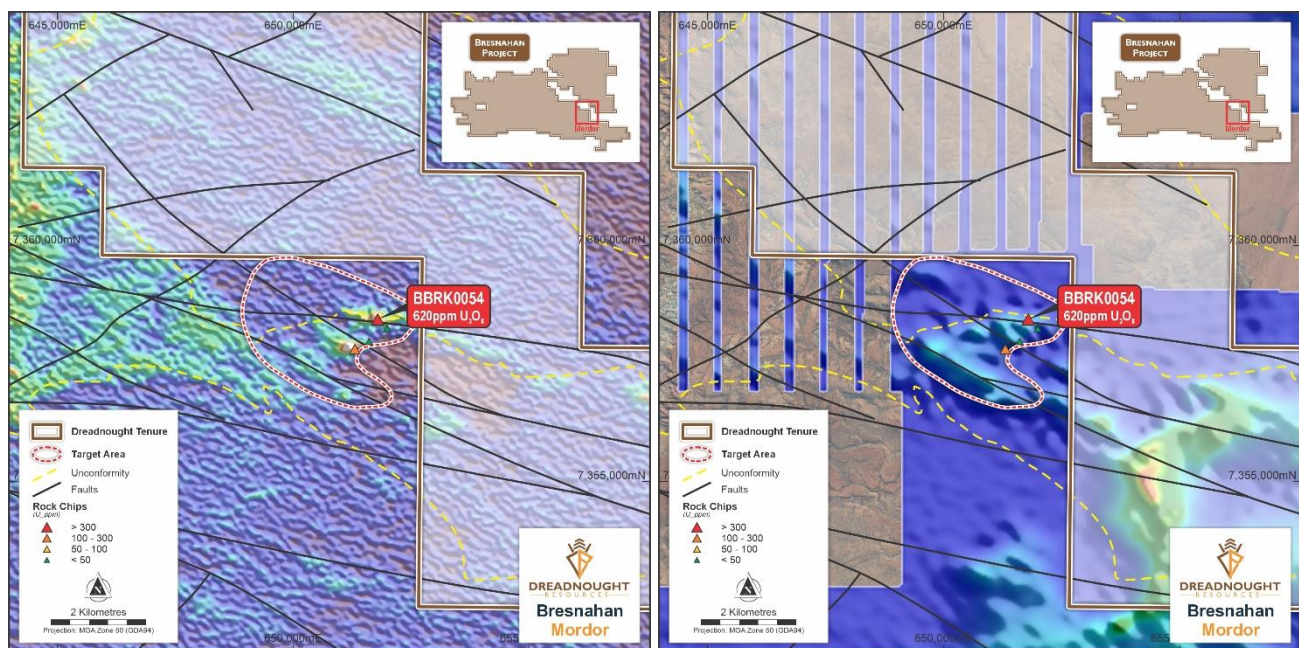


Figure 3: Two plan view images of Mordor showing known mineralisation and radiometric anomalies in relation to major structures (L) and the same field of view showing known mineralisation and Tempest EM anomalies in relation to major structures (R).

### Shengdu Unconformity Uranium Target (E52/4142: DRE 100%)

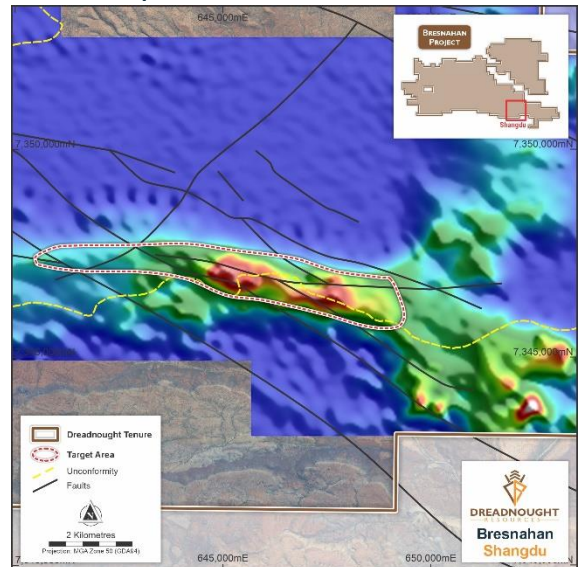
Shengdu is an unconformity uranium target located ~30 kms east of Xanadu. Shengdu is defined by a ~8km long conductive horizon along and under the structural unconformity contact between Edmund Basin sediments and the Bresnahan Basin.

There is no outcropping mineralisation or radiometric anomalies at Shengdu where the target has been identified by Tempest Surveys flown by Cameco and U3O8 in the early to mid-2000s.

There has been no follow up work undertaken at Shengdu.

Given the untested conductive horizons and lithostructural similarities to Xanadu and Angelo River, Shengdu is a high priority target requiring minimal additional work to define drill targets.

Figure 4: Plan view images of Shengdu Tempest EM anomalies in relation to major structures.



### Isla Target (E52/4143: DRE 100%)

Isla is a ~500m long intense magnetic anomaly identified in 2023 from detailed airborne magnetic survey flown by Dreadnought. The magnetic anomaly is situated over cross-cutting structures near the unconformable contact between the basement Wyloo Group and Bresnahan Basin. The magnetic anomaly is also coincident with a destruction of conductive signature, possibly the result of alteration and or mineralisation. Magnetic alteration and anomalism is not a common result of unconformity uranium mineralisation; however, the size, discrete nature and lithostructural setting of the anomaly warrants follow up.

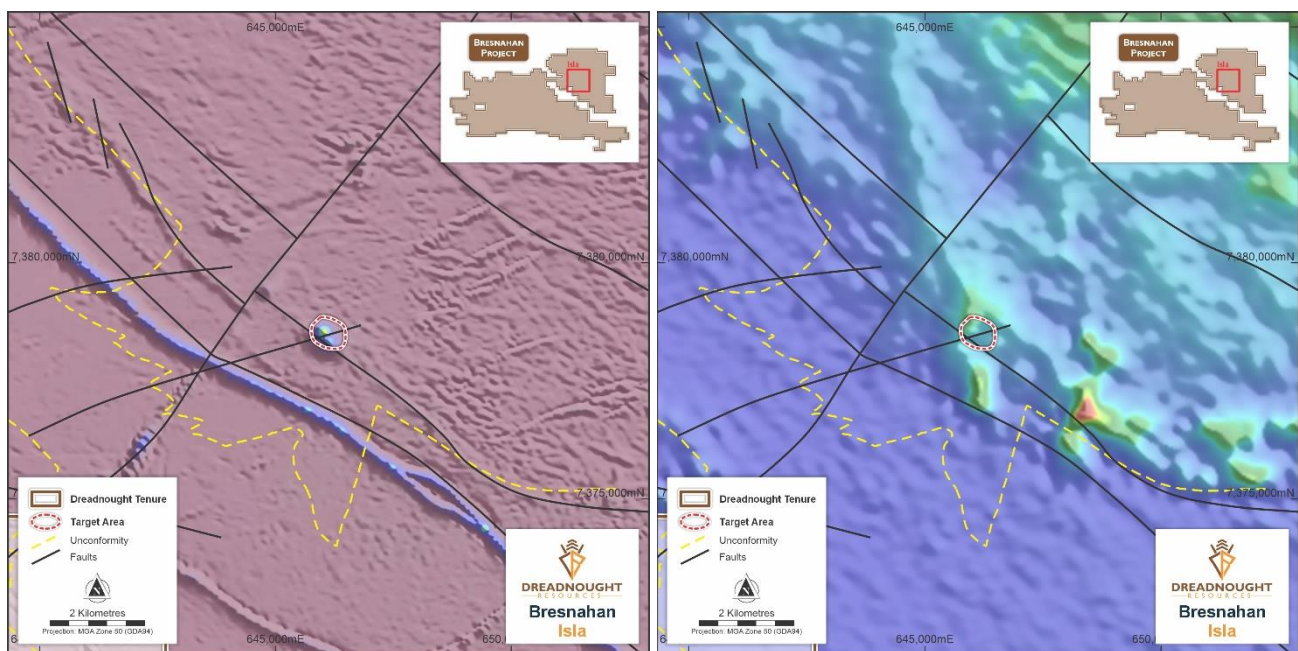


Figure 5: Two plan view images of Isla showing the location of the ~500m long magnetic anomaly in relation to structures (L) and in relation to conductive horizons from Tempest EM data (R).

### Kunderong Paleochannel Uranium Target (E52/4141: DRE 100%)

Kunderong is a ~30km long paleochannel target that was first identified by Vale in 2005 as a result of detailed airborne radiometric surveys. Radiometric anomalies are associated with outcropping calcretes along the modern Angelo River which drains the Bresnahan Basin and structural unconformity with the Hamersley Basin.

An aircore and RC program was designed and approved by Vale, but not undertaken due to a change in the uranium market in 2011. The Kunderong paleochannel has never been drilled.

Given the radiometric anomalism associated with an untested calcrete and buried paleochannel Kunderong is a high priority target requiring minimal additional work to define drill targets.

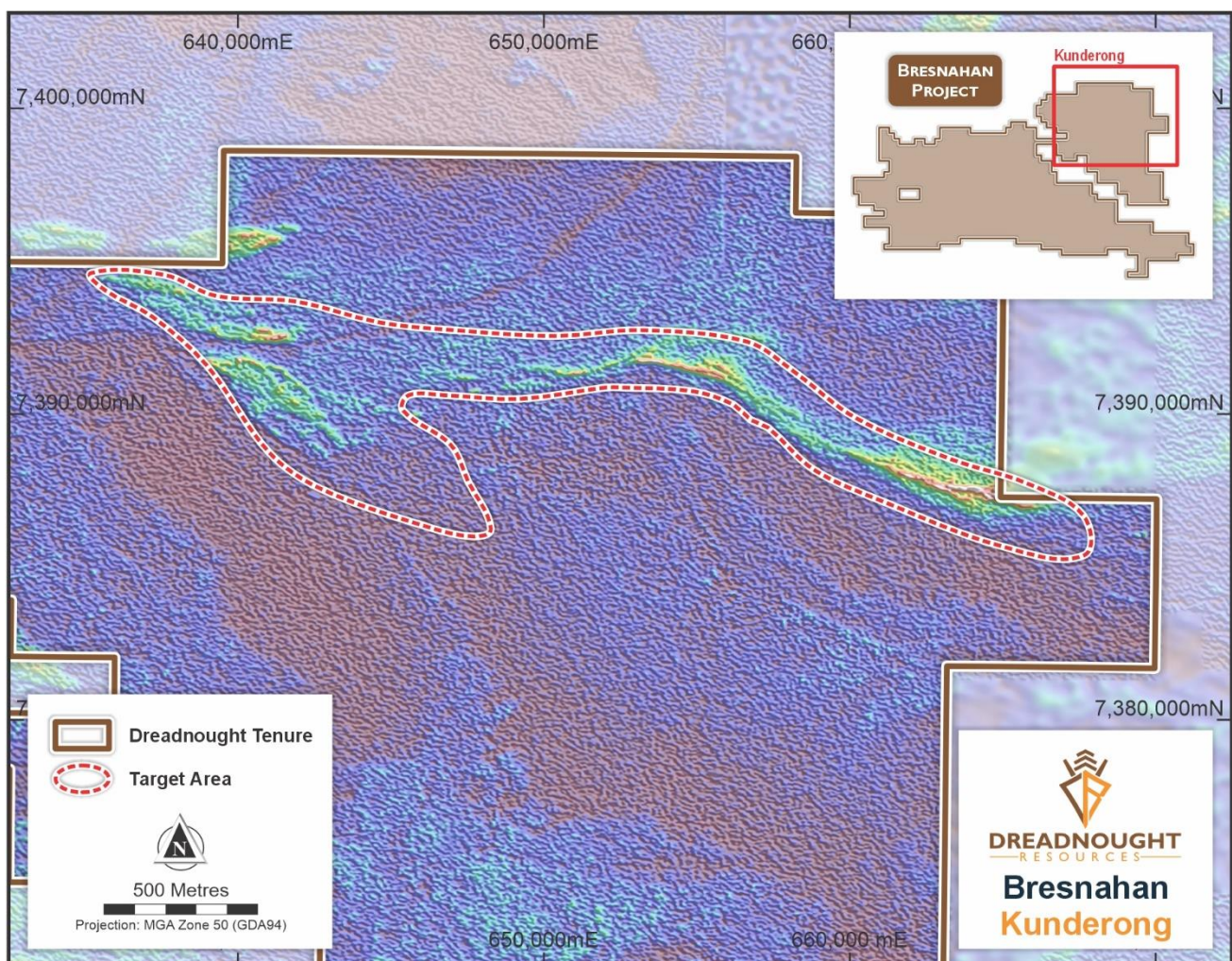


Figure 6: Plan view image of Kunderong showing radiometric anomalies, associated with outcropping and interpreted paleochannel.

## Heavy Rare Earths

The Bresnahan Basin is a conceptual unconformity HREE 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 recognized 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: 26 October 2023):

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

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## Au-Ag-Sb

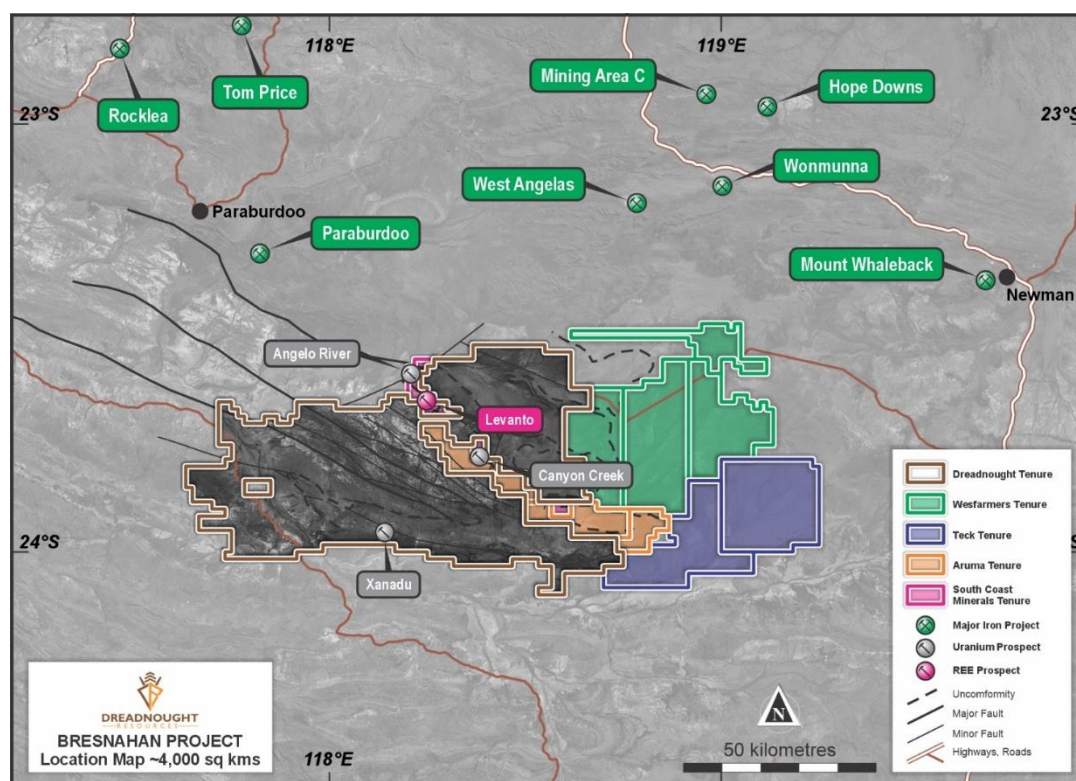
Similar lithostructural setting to the Paulsens, Mt Clement and Mt Olympus gold deposits.

Rock chips from the Monster Au-Ag-Sb prospect include (ASX: 4 October 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**

**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 ~4,000 kms<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/Mt Clement 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 and Au-Ag-Sb. In addition, this is a major consolidation of a significant proven uranium province having been targeted for exploration by global uranium mining companies including Cameco, CRA, Pancontinental and Vale.

**Figure 7: 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
- 26 October 2023 Significant HREE, Gold & Uranium Potential

## UPCOMING NEWSFLOW

March: Update on Ni-Cu-Co-PGE drilling and IP survey at Mangaroon (Earn-in)

March: Results of camp scale stream sediment gold sampling program at Mangaroon (100%)

March: Assays from RC and diamond drilling at Tarraji-Yampi (80%, 100%)

March/April: Commencement of RC drilling at Central Yilgarn Au (100%)

April: Quarterly Activities and Cashflow Report

April/May: Commencement of target generation and definition work at Mangaroon Au (100%)

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

May: 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 forma 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 a 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 ~4,000kms<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 and channel-hosted 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 ~1,400kms<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 (>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	0.15%	Xanadu
BBRK0020	DRE	616419	7350136	0.13%	Xanadu
BBRK0022	DRE	616185	7350210	0.12%	Xanadu
BBRK0017	DRE	616439	7350129	0.10%	Xanadu
784	U308	7369729	640880	1.03%	Canyon Creek
782	U308	7369729	640880	0.52%	Canyon Creek
783	U308	7369737	640858	0.60%	Canyon Creek
779	U308	7369738	640925	0.15%	Canyon Creek
1851	U308	7350134	616265	0.29%	Xanadu

**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> 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. 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. 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> <p><b>Airborne EM</b> A Tempest EM survey was undertaken by Fugro Airborne Surveys with generally 250m line spacing and 110-120m sensor height. ~14,600kms of Tempest EM surveys have been undertaken across the project area.  All Tempest EM data is publicly available on the GSWA MAGIX system.</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</li> </ul>	No drilling undertaken



Criteria	JORC Code explanation	Commentary
	<p>and metallurgical studies.</p> <ul style="list-style-type: none"> <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>	
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> 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 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>Rock Chips</b> 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 pulverised to &gt;85% passing 75 micron. 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) Lithium borate fusion is considered a total digest and Method ME-MS81 is appropriate for REE and uranium determination. 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> Rock chip and geological information is written in field books and coordinates and track data saved from handheld GPSs used in the field. Dreadnought geologists have inspected and logged all rock chips. 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. 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.  Flight line spacing of 250m is appropriate for the level of exploration undertaken.</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.  The Tempest EM survey was generally flown N-S as appropriate for the local geology.</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. Samples were delivered directly to ALS Laboratories Perth</p>

Criteria	JORC Code explanation	Commentary
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>by Exmouth Haulage out of Exmouth.</p> <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 10 granted Exploration License (E08/3356, E52/3412, E52/3462, E52/3936, E52/3937, E52/4083, E52/4142, E52/4143, E52/41457, E52/4228) and 4 pending Exploration Licenses (E52/4139, E52/4141, E52/4144, E52/4296).</li> <li>All tenements are 100% owned by Dreadnought Resources.</li> <li>E52/4083 is subject to a 1% Gross Revenue Royalty held by Mineral Fields Pty Ltd.</li> <li>E52/3356, E52/3936, E52/3937 are subject to a 1% Gross Revenue Royalty held by Odette Geoscience Pty Ltd.</li> <li>E52/3412 and E52/3462 are subject to a 1% Gross Revenue Royalty held by Hurricane Prospecting Pty Ltd.</li> <li>The Mangaroon 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, 88005, 88669, 91344, 92103, 92460, 92966, 95846, 100303, 103798, 103797</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>Uranerz 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>

Criteria	JORC Code explanation	Commentary
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% U<sub>3</sub>O<sub>8</sub> have been reported.</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>	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>

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