

8 July 2021

## RC DRILLING COMMENCED AT TARRAJI-YAMPI PROJECT

### HIGHLIGHTS

- RC drilling has commenced at Tarraji-Yampi with a total of 19 holes for ~4,010m planned.
- Drilling will commence at Chianti-Rufina (7 holes) followed by Fuso (6 holes), Paul's Find (3 holes) and Orion (3 holes).
- Additional Fixed Loop EM (FLEM) surveys will be undertaken to define further drill targets at Orion prior to drilling. The survey will commence mid-July 2021.
- Second diamond hole (~180m) at the Texas Ni-Cu-PGE target ("Texas") to commence 10 July 2021.
- Drilling updates and assay results are expected throughout July and August 2021.

Dreadnought Resources Limited ("Dreadnought") is pleased to announce that RC drilling has commenced at Chianti-Rufina, part of the Tarraji-Yampi Project in the West Kimberley region of Western Australia.

Drilling at Chianti-Rufina should take a week after which the drill rig will move to Fuso and Paul's Find Cu-Au. FLEM surveys at Orion Ni-Cu-PGE will be underway at the same time. Once drilling is complete at Fuso and Paul's Find, the rig will move to Orion Ni-Cu-PGE to drill the known EM plates and any additional plates identified by the FLEM surveys. This program is expected to be completed by the end of July 2021.

Since reopening of the Yampi Sound Defence Training Area to mineral exploration, the Tarraji-Yampi project has seen the first ever application of modern geophysical and geochemical methods. So far, this work has defined over a dozen large scale geophysical and geochemical anomalies which have never been tested. This will be the first drilling program since outcropping mineralisation was tested by Western Mining Corporation at Grants and Wilson in 1958 and by Australian Consolidated Minerals at Chianti in 1972.

Dreadnought's Managing Director, Dean Tuck, commented: *"We are embarking on a 21-hole diamond and RC drill program that will test targets over five high quality prospects. To say that we are excited about the potential of this program is an understatement."*



**Figure 1: Photo of the drill rig arriving at Chianti.**

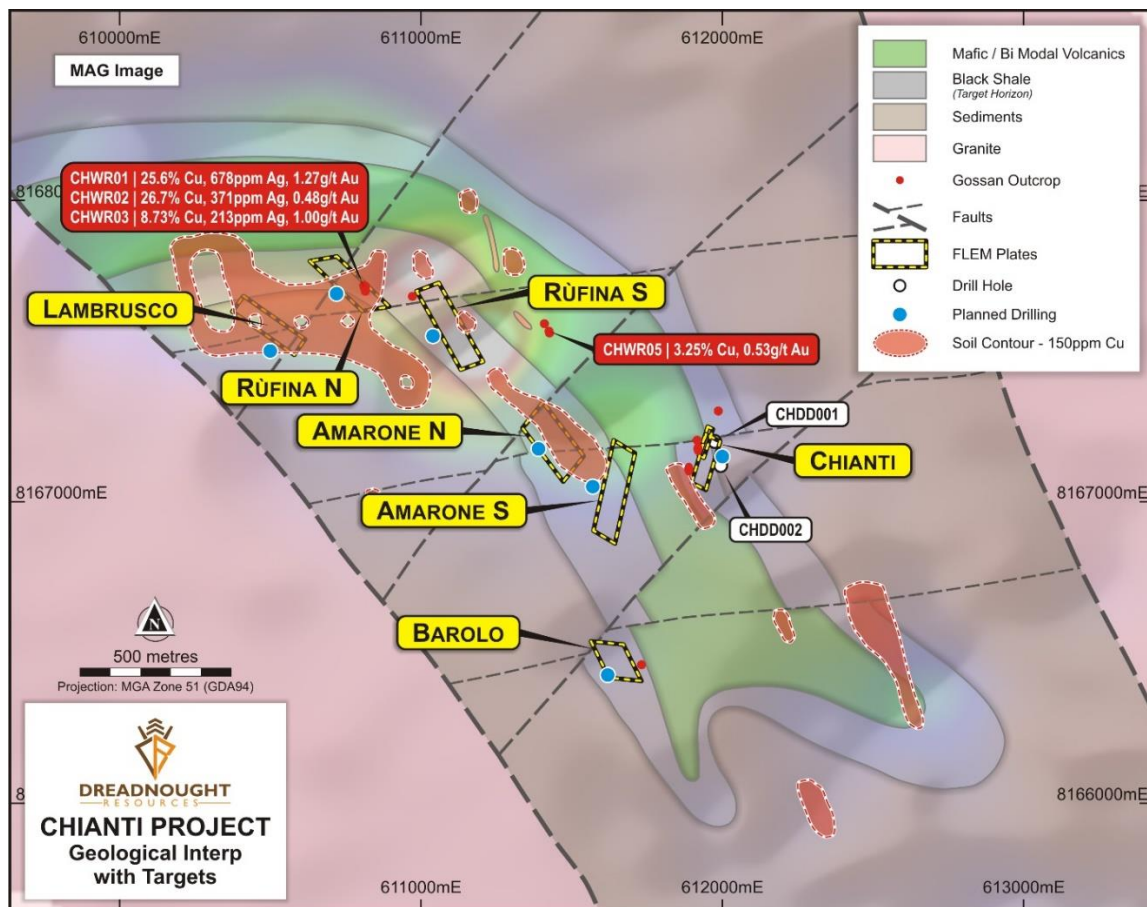
**Program at Chianti-Rufina Cu-Zn-Ag (E04/2508: 100%)**

Chianti was originally defined and drilled by Australian Consolidated Minerals in 1972. An airborne VTEM survey flown in 2015 highlighted a conductor beneath the 1972 drilling. Since acquiring the project in 2019, Dreadnought has carried out a FLEM survey covering a portion of the VTEM conductor which contained outcropping gossans and historical drilling. The FLEM survey identified two strong EM plates which were then drilled in late 2019 and successfully intersected highly magnetic massive sulphide mineralisation (refer ASX 2 December 2019).



**Figure 2: Diamond core of massive sulphide drilled at Chianti in 2019 (CHDD002 116.4-120m @ 1.0% Cu, 4.9g/t Ag).**

Dreadnought has now defined seven FLEM plates with associated outcropping gossans, magnetic anomalies and/or soil anomalies within the interpreted prospective VMS horizon (Figure 3). Seven RC holes for 1,260m will test each of the FLEM plates.



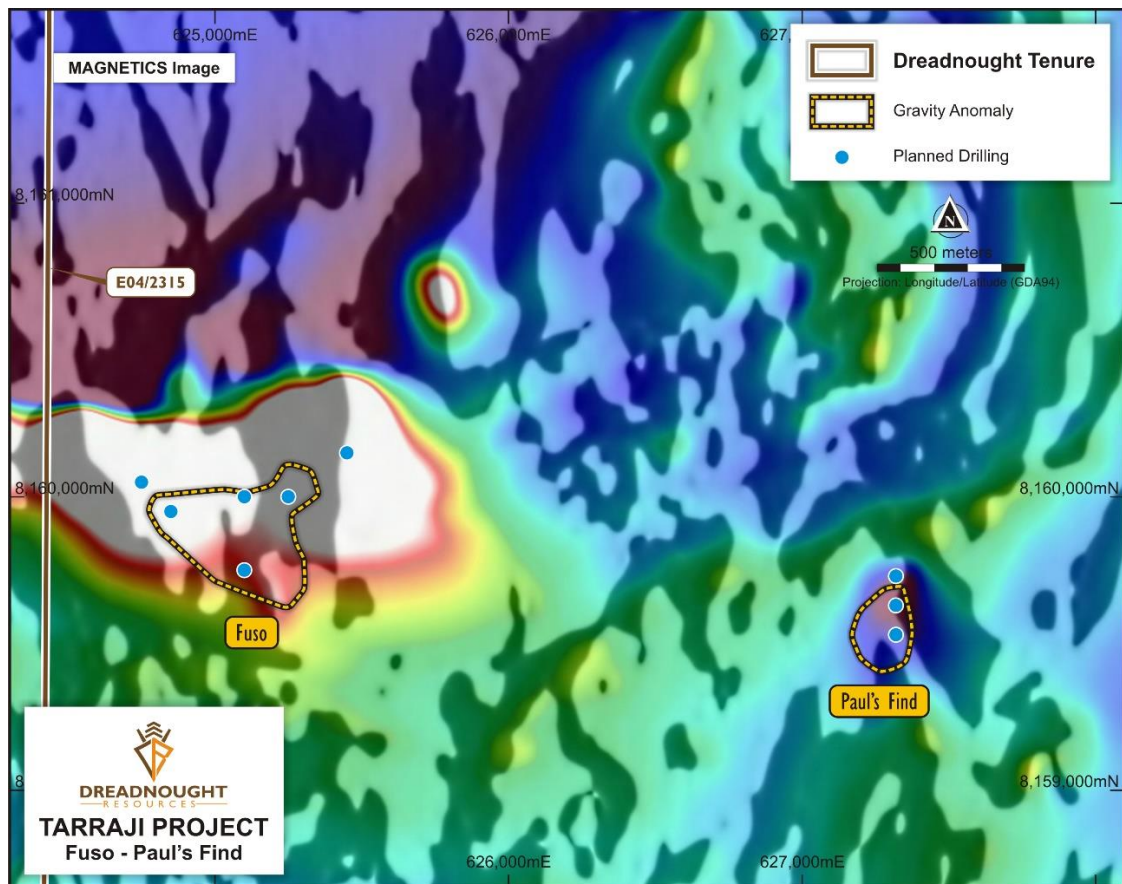
**Figure 3: Plan view of Chianti-Rufina showing the location of planned RC drill holes in relation to EM plates, soil anomalies and rock chip values from outcropping gossans, over geology and magnetics.**

**Program at Fuso and Paul's Find Cu-Au (E04/2315: 80%)**

Fuso and Paul's Find are Proterozoic Cu-Au targets defined from airborne magnetics and ground gravity surveys undertaken in 2019. This work was motivated by the comparisons of the lithostructural and geochemical signature of outcropping mineralised veins at Tarraji-Yampi to other Proterozoic Cu-Au terranes such as the Tennant Creek Inlier (Gecko, Peko) and Mt Isa (Brumby, Ernest Henry). In these terranes, Proterozoic Cu-Au deposits occur as coincident magnetic-gravity anomalies regionally associated with Proterozoic high-K intrusions.

Fuso is defined by an intense magnetic high surrounding the northern extent of a strong density anomaly. The ~500m x 400m ovoid gravity feature is cupped on the northern side of the ~1,700m x 700m magnetic anomaly (Figure 4). The magnetic anomaly is interpreted to be related to intense iron-rich alteration, either as magnetite or pyrrhotite and the gravity signature conceptually represents the mineralised breccia. Six RC holes for 1,500m will be drilled to test the magnetic and gravity anomalies and the overlap between the magnetic and gravity anomalies.

Paul's Find is defined by an intense, isolated, reversely/remanently magnetised anomaly with a coincident density anomaly. Inversion modelling suggests that the isolated feature is located near surface with dimensions of ~300m x 200m (Figure 4). The magnetic low is interpreted to be remnant magnetisation associated with a mineralised body. Three holes for 750m will be drilled across the coincident magnetic and gravity anomaly.



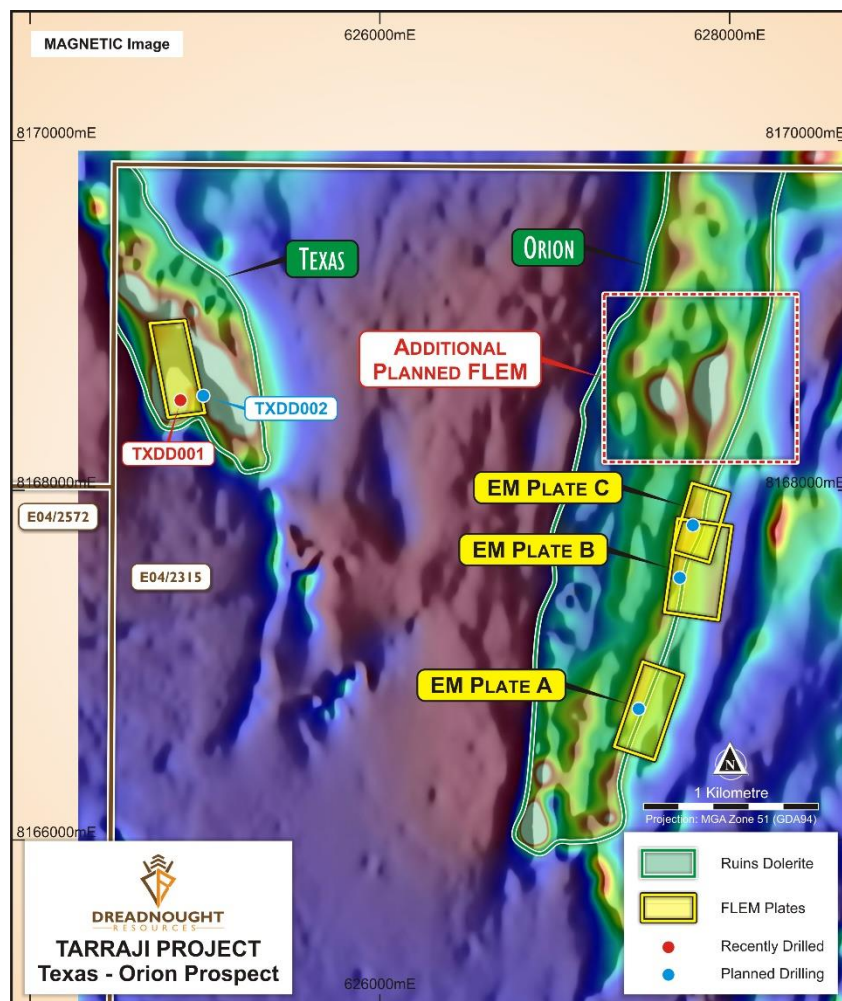
**Figure 4: Location of planned RC drill holes over magnetics image with the outline of coincident gravity anomalies outlined.**

**Program at Texas and Orion Ni-Cu-PGE (E04/2315: 80%)**

Texas and Orion are magmatic Ni-Cu-PGE targets hosted within the Ruins Dolerite. In 2015, an airborne VTEM survey was flown resulting in the identification of Texas and Orion as multiple EM anomalies +/- coincident magnetic anomalies hosted within a thick Ruins Dolerite sequence.

Subsequently, Dreadnought has conducted a detailed airborne magnetics survey and FLEM surveys at Texas and Orion identifying multiple strong conductors within the Ruins Dolerite. Additionally, mapping at Orion identified outcropping disseminated and blebby sulphides in sub-cropping Ruins Dolerite close to the VTEM anomalies. This indicates sulphur saturation within the Ruins Dolerite and means the VTEM anomalies may be associated with massive sulphide accumulations.

Following the recent intersection of sulphides within the Ruins Dolerite in TXDD001 (ASX 1 July 2021), a second diamond hole will be drilled at Texas for ~180m to test the coincident magnetic and EM anomaly (Figure 5). In addition, three RC holes (500m) are planned to test EM plates A, B and C in the southern portion of Orion (Figure 5). Further holes may be drilled pending the results of an additional FLEM survey to be undertaken over the northern portion of Orion. Down hole EM surveys will be undertaken post-drilling as deemed necessary.



**Figure 5: Image showing the location of planned holes in relation to the FLEM plates at Texas and Orion Ni-Cu-PGE targets over a magnetics image.**

**Ongoing and Upcoming Work Programs at Tarraji-Yampi:**

**Commenced:** Diamond drilling at Texas.

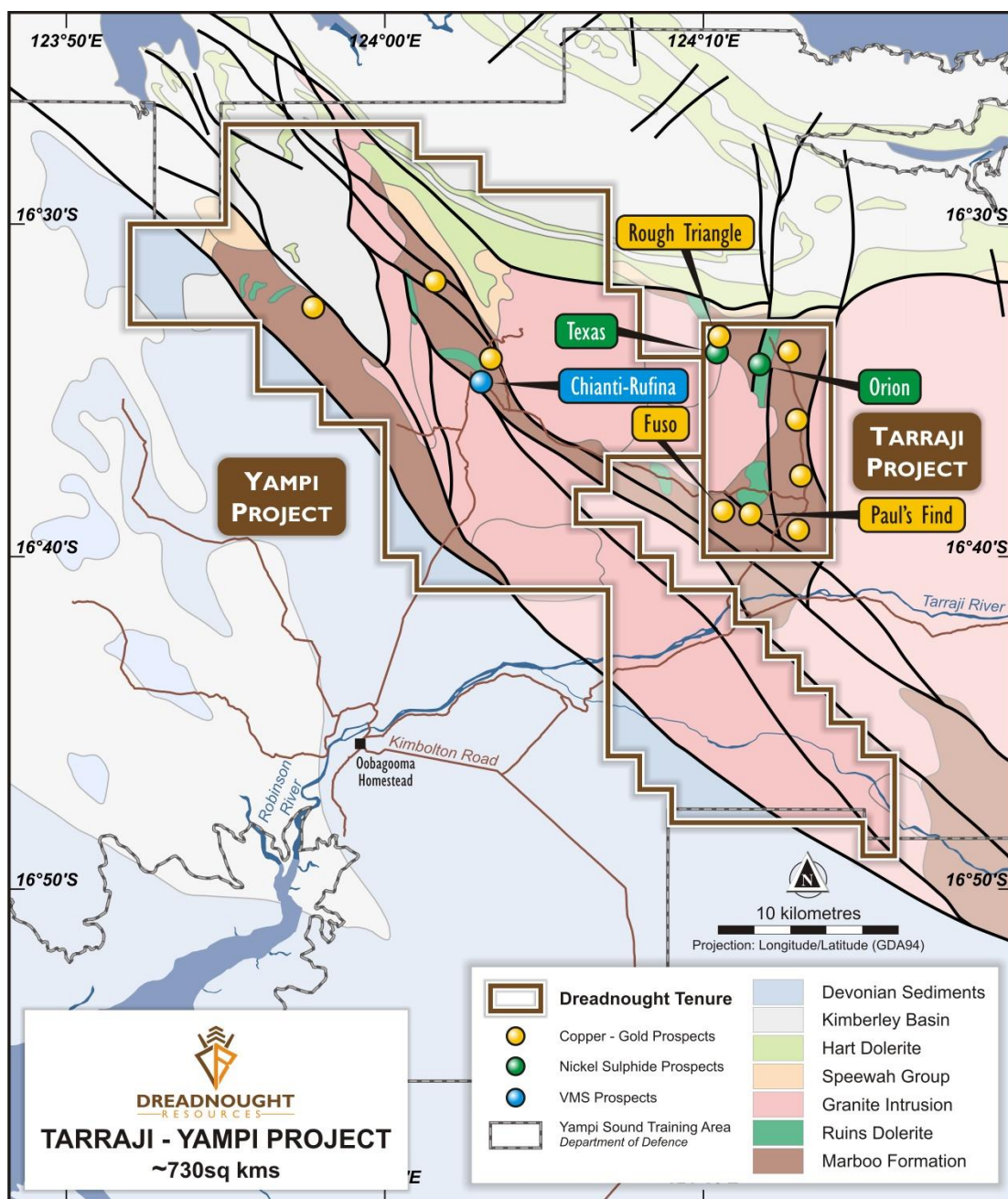
**Commenced:** Target definition work across Tarraji and Yampi.

**Commenced:** RC Drilling at Fuso, Paul's Find, Orion and Chianti-Rufina.

**Commenced:** Environmental surveys across new targets, including Rough Triangle, for the 2022 field season.

**July:** Additional FLEM surveys at northern portion of Orion followed by down hole EM surveys.

**July:** Detailed airborne magnetic survey over Yampi and Wombarella.



**Figure 6: Plan view of Tarraji-Yampi showing the location of prospects in relation to solid geology.**

## **Background on Tarraji-Yampi**

Tarraji-Yampi is located entirely within the Yampi Sound Training Area (“YSTA”), a commonwealth owned defence reserve in the West Kimberley, ~80kms from the port of Derby. The YSTA is the second largest defence reserve in Australia after Womera in South Australia and has been off limits to mineral exploration from 1978 to 2013.

Copper was discovered and mined in the early 1900s with the only significant exploration since undertaken by Western Mining Corporation in 1958 and Australian Consolidated Minerals in 1972 with both parties exploring for copper. Since opening for exploration in 2013, Dreadnought has secured the largest ground holding within the YSTA and developed strong working relationships with both the Department of Defence and the Dambimangari People. Dreadnought has completed successful drilling programs at the Chianti-Rufina VMS and Grants Cu-Au targets. In addition, geophysical and geochemical surveys have resulted in the definition of >12 drill targets.



***Figure 7: Image of Dreadnought’s Drew Money standing in front of an outcropping Cu-Au lode at the Grants prospect at Tarraji-Yampi.***



### **Acknowledgements:**

Dreadnought would like to acknowledge the continued support of the Dambimangari People, Department of Defence, Frontier Helicopters, Hagstrom Drilling, Ausdrill and Derby Stock Supplies which have made this program possible.

For further information please refer to previous ASX announcements:

- 25 October 2019 *Emerging VMS Camp around the Chianti VMS Prospect*
- 2 December 2019 *Assays and EM survey confirm Massive Sulphide System at Chianti*
- 23 December 2019 *Grants Cu-Au Assays and Coincident Magnetic/Gravity Targets*
- 28 January 2020 *Soils and High-Grade Rock Chips Further Validate Chianti-Rufina EM*
- 24 August 2020 *High Priority Copper Gold Targets at Fuso and Paul's Find*
- 11 May 2021 *Multiple Conductors Identified at Orion Ni-Cu-PGE*

### **UPCOMING NEWSFLOW**

**July:** Results from target definition and generation work at Mangaroon

**July:** Commencement of additional FLEM surveys on the northern portion of Orion Ni-Cu-PGE

**July:** Commencement of detailed airborne magnetic survey over Yampi and Wombarella

**July:** Additional rock chip results from REE targets at Mangaroon

**July:** Quarterly Activities and Cash Flow Report

**July/August:** Results of drilling at Tarraji-Yampi (Texas and Fuso and Paul's Find Cu-Au, Orion Ni-Cu-PGE and Chianti-Rufina VMS targets).

**July/August:** Results from additional target definition and generation work at Tarraji-Yampi

**August:** Results of further mapping and systematic sampling of Rough Triangle Cu-Ag-Sb-Bi

~Ends~

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

### **Competent Person's Statement**

*The information in this announcement that relates to geology and exploration results and planning 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 report 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 Projects

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

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

Three styles of mineralisation occur at Tarraji-Yampi including: volcanogenic massive sulphide (“VMS”); Proterozoic Cu-Au (“IOCG”); and magmatic sulphide Ni-Cu-PGE. Numerous high priority nickel, copper and gold drill targets have been identified from recent VTEM surveys, historical drilling and surface sampling of outcropping mineralisation.



### Illaara Gold, VMS & Iron Ore Project

Illaara is located 190km northwest of Kalgoorlie in the Yilgarn Craton and covers 75kms of strike along the Illaara Greenstone Belt. Illaara is prospective for typical Archean mesothermal lode gold deposits and base metals VMS mineralisation.

Dreadnought has consolidated the Illaara Greenstone Belt mainly through an acquisition from Newmont. Newmont defined several camp-scale targets which were undrilled due to a change in corporate focus. Prior to Newmont, the Illaara Greenstone Belt was predominantly held by iron ore explorers and has seen minimal gold and base metal exploration since the 1990s.

### Mangaroon Ni-Cu-PGE, REE & Au Project

Mangaroon is a first mover opportunity covering ~4,500sq kms of tenure located 250kms south-east of Exmouth in the Gascoyne Region of Western Australia. During most of the regions early history, it did not receive government support for prospecting and or exploration resulting in a vastly underexplored region in Western Australia.

Since acquiring the project in late 2020, Dreadnought has located outcropping high-grade gold bearing quartz veins along the Edmund and Minga Bar Faults, outcropping high tenor Ni-Cu-PGE blebby sulphides in the recently defined Money Intrusion and outcropping high-grade REE ironstones, similar to those under development at the Yangibana REE Project. Mangaroon is still in the early stages with limited modern exploration.