

**ASX:DRE** 

ABN 40 1 19 03 1 864

## ASX ANNOUNCEMENT 7 October 2024

## Strong Drilling Results from Tarraji-Yampi (80%, 100%)

#### HIGHLIGHTS

Assays from a diamond drilling program (6 holes, 1,524.8m) at Tarraji-Yampi have been received. These holes were designed to test 6 Cu-Au volcanogenic massive sulphide ("VMS") targets around the Orion deposit and to identify potential off-hole conductors.

Significant results were returned from the Orion, Orion Repeat, Orion Offset and ORI targets:

Orion and Orion Repeat: KMDD001: 3m @ 4.5% Cu, 2.2g/t Au, 46.0 g/t Ag, 0.15% Co from 58.3m

KMDD004: 5m @ 0.4% Cu, 0.5 g/t Ag from 11m

And: **I6m @ 0.7% Zn, 0.7% Pb, I2.7g/t Ag, 0.1g/t Au** from I62m

Including: 2m @ 2.6% Zn, I.1% Pb, 26.8g/t Ag, 0.1g/t Au from 173m

**Orion Offset:** 

And: Im @ 1.3% Zn, 0.7% Pb, 32.2g/t Ag, 0.1g/t Au from 23m

And a 50,000S conductor spanning ~150m x 150m, located ~100m down dip

And: 2m @ 0.9% Zn, 0.2% Pb, 3.8g/t Ag from 106m

And a 15,000S conductor spanning ~90m x 140m located ~80m down dip

ORI:

**KMDD006: 6m @ 1.2% Cu, 0.08% Co** from 27m Including: **2m @ 2.0% Cu, 0.19% Co** from 28m

And a 24,300S conductor spanning ~80m x 200m, located ~180m down dip

Additionally, a strong 14,500S off hole conductor spanning ~335m x 350m was defined at OR2.

Results from the regional IP survey are expected in October 2024.

Dreadnought Resources Limited ("Dreadnought") is pleased to announce results from a diamond drilling program and down hole EM ("DHEM") surveys at Tarraji-Yampi, located in the Kimberley Region of Western Australia.

Dreadnought's Managing Director, Dean Tuck, commented: "This drilling program was designed to identify new zones of mineralisation within and around the same feeder structures as Orion to better understand the Cu-Au VMS system. This program has delivered 6 new zones of mineralisation and four off-hole conductors that warrant follow up drilling. This is a successful outcome for the program and validation of the VMS model of mineralisation. As part of this program, an EIS co-funded IP



survey was undertaken to test the effectiveness of IP at identifying Grant's Find style Epithermal / Mesothermal Cu-Au mineralisation. The significant intersection of this style of mineralisation at ORI underscores the importance of this work and we expect the results of that survey in October 2024."

Figure 1: Photo of the Topdrill diamond rig at Orion Repeat.



ASX:DRE +61 (08) 9473 8345

info@dreres.com.au Unit I, 4 Burgay Court Osborne Park WA 6017

ABN 40 1 19 03 1 864

#### **Technical Discussion of Diamond Drilling**

In the Phase I drill program (6 holes, 1,640m), 5 of the 6 targets were located along the same interpreted feeder structure as the Orion deposit and were defined by highly conductive, magnetic anomalies associated with elevated pathfinder geochemistry. These targets include the depth extension of Orion. The 6-hole Phase I drill program targets are discussed and summarised below.

<u>Orion Repeat</u> was defined by a 3,500S FLEM conductor and coincident VMS pathfinder geochemistry that sits beneath previous drilling at Orion. KMDD001 was drilled through the main Orion lode and into the centre of the FLEM plate intersecting 3m of massive to semi-massive sulphides at the Orion lode with significant intercept of:

#### KMDD001: 3m @ 4.5% Cu, 2.2g/t Au, 46.0 g/t Ag, 0.15% Co from 58.3m

and 16m of mineralisation at the target Orion Repeat horizon including:

#### KMDD001:16m @ 0.7% Zn, 0.7% Pb, 12.7g/t Ag, 0.1g/t Au from 162m

#### Including: 2m @ 2.6% Zn, I.1% Pb, 26.8g/t Ag, 0.1g/t Au from 173m

DHEM produced an on-hole response, indicating the FLEM target was tested. The DHEM plate measured ~13,000S with dimensions of ~150m x 140m. The centre of the plate is located below and to the south of the KMDD001. Pb-Zn mineralisation is indicative of the lower temperature edges of a massive sulphide system. This target warrants additional drilling.



Figure 2: Cross Section view showing the results of KMDD001 testing the Orion Repeat target located below the main Orion Lode.



ABN 40 1 19 03 1 864

Orion Offset was defined by a 3,800S FLEM conductor with coincident VMS pathfinder geochemistry. KMDD004 was drilled into the centre of the modelled FLEM plate and intersected a ~3.2m wide copper-stained mineralised gossan, shallower than the target conductor with significant results including:

#### KMDD004: 5m @ 0.4% Cu, 0.5 g/t Ag from 11m

A second mineralised horizon was intersected just below the gossanous horizon with significant results including:

#### KMDD004: Im @ 1.3% Zn, 0.7% Pb, 32.2g/t Ag, 0.1g/t Au from 23m

DHEM produced an off-hole response down dip of the mineralised intervals. The DHEM plate measured ~50,000S with dimensions of  $\sim$ 150m x 150m located  $\sim$ 100m down dip of the mineralised intercepts and is interpreted to be the offset of the main Orion lode. This target warrants additional drilling.

A third mineralised horizon was intersected at target depth returning a significant result of:

#### KMDD004: 2m @ 0.7% Zn, 0.2% Pb, 3.8g/t Ag from 106m

DHEM produced an off-hole response associated with this target interval measuring ~15,000S with dimensions of ~90m x 150m located ~80m down dip and to the north of the drill hole. This off-hole conductor warrants additional drilling.



Figure 3: Cross Section view showing the results of KMDD004 testing the Orion Offset target and intersecting two mineralised zones with strong off hole conductors.



**ORI** was the only target drilled off the interpreted Orion feeder structure, targeting a strong "edge hit" 16,700S DHEM conductor defined from KMRC060 (**2m @ 0.4% Pb and 16.6g/t Ag** from 106m) along a prospective peperite contact coincident with the DHEM conductor. KMDD006 was drilled to test the modelled plate produced no significant assay results, however, the DHEM confirms that the target was not tested. An off-hole conductor of 24,300S, consistent with a massive sulphide source, was identified which sits further down dip of the mineralised horizons intersected in KMRC060 and KMDD006. This ORI target is ~82m x 200m in size and remains a priority target for follow up drilling.

KMDD006 also intersected a ~6m wide stockwork or Grant's Find style Cu-Co mineralisation returning:

## KMDD006: 6m @ 1.2% Cu, 0.08% Co from 27m

#### Including: 2m @ 2.0% Cu, 0.19% Co from 28m

Both the off-hole conductor and Grant's Find style mineralisation warrant follow up drilling.



Figure 4: Cross Section view showing the results of KMDD006 testing the ORI target and intersecting two mineralised zones with strong off hole conductor at depth.



ASX:DRE

+61 (08) 9473 8345 info@dreres.com.au Unit I, 4 Burgay Court Osborne Park WA 6017

ABN 40 1 19 03 1 864

**OR2** was a 7,200S off hole conductor located beneath the strongest Cu auger geochemical anomaly (stronger than Orion) with VMS pathfinder geochemistry. KMRC062, which is the hole from where the DHEM conductor originated, contained elevated Ag-Bi-Mo-Sb-Se at the prospective peperite contact. KMDD005 was drilled into the centre of the modelled plate which was explained by a sulphidic shale. DHEM confirmed that the target plate was tested at the target depth. DHEM also identified a strong 14,500S off-hole conductor, consistent with a massive sulphide source, located further down dip and between KMDD005 and KMRC062 on the same prospective mineralised horizon. This OR2 DHEM target is ~335m x 350m in size and remains a priority drill target.

Orion Extension was defined by a large and strong magnetic anomaly at depth of the main Orion lode. KMDD002 was drilled to test the centre of this magnetic anomaly and a hanging wall lode that was intersected in KMRD056 (1.35m @ 1.0% Cu). Drilling intersected six variably mineralised peperite horizons with no significant mineralisation. The magnetic anomaly is thick explained by pyrrhotite accumulations between 420m and 440m. DHEM confirms that the target horizon was tested with a ~47,000S plate centred around 420m depth associated with ~5-10% sulphides dominated by pyrrhotite and pyrite with only trace chalcopyrite, sphalerite, galena and arsenopyrite.

This target is considered effectively tested and explained.

**Orion Splay** was defined by multiple DHEM conductors up to 28,000S that have an orientation sub-parallel to the interpreted feeder structure that might also be offsetting the main Orion deposit. Adjacent drill holes are elevated in VMS pathfinder geochemistry. KMDD003 was drilled to test multiple DHEM plates. The most significant mineralisation was Im @ 0.4% Zn, 0.2% Pb and 0.4g/t Au from 81m.

DHEM confirms that all plates were effectively tested and explained.

Figure 5: Plan view image showing the location of previously drilled (black dots) and recently drilled holes (blue dots) at Orion in relation to prospects, geochemical contours, and FLEM/DHEM plates.





ABN 40 1 19 03 1 864

#### **Target Summary**

Phase I of the 2024 drilling program at Tarraji-Yampi tested and DHEM surveyed 6 priority targets. Targeting was prioritised based on a ranking system summarised in Table 2 below.

Additional field activities were undertaken including EIS co-funded IP surveys and mapping of other advanced and early-stage targets to determine next steps.

A summary of currently defined Cu-Au VMS targets and their status is below. The summary does not include Cu-Au epithermal targets which will be ranked following the EIS co-funded IP surveys which was partially completed as part of this program with results expected in October 2024.

JD)	Tal	ble I: Desc	ription of the curr	ent Cu-Au VI	<b>1S</b> target and ca	amps (GDA	94 MGA z51).	
Target	Planned Hole	Planned Depth (m)	Auger Geochemistry	Plate Dimension (m)	Conductance (S)	Magnetic Anomaly	Down hole Geochemistry	Target Status
Orion Extension	Yes	620	-	-	-	Yes	-	Tested
Orion Repeat	Yes	260	Ag-As-Bi-Mo- Pb-Sb-Se-Zn	200 x 190	3,500	Yes	-	Drilled: Requires follow up
Orion Splay	Yes	245	Ag-As-Bi-Mo- Pb-Sb-Se-Zn	90 x 45 90 x 110 600 x 390	28,000 14,300 2,500	No	Ag-As-Au-Bi- Co-Cu-Mo-Pb- Sb-Se-Te-W-Zn	Tested
Orion Offset	Yes	155	Ag-As-Bi-Cd-Mo- Pb-Sb-Se-Zn	200 x 190	3,800	Yes	Ag-As-Au-Bi- Co-Cu-Mo-Pb- Sb-Se-Te-W-Zn	Drilled: Requires follow up
OR2	Yes	160	Ag-As-Bi-Cd-Cu- In-Pb-Sb-Se-Zn	105 x 45	7,200	Yes	Ag-Bi-Mo- Sb-Se	Drilled: Requires follow up
ORI	Yes	200	As-Bi-Pb-Sb- Se-Te	70 x 200	16,700	No	Ag-Bi-Cd-Cu- Mo-Pb-Sb-Se- Te-Zn	Drilled: Requires follow up
Ironclad	TBD	-	Ag-As-Au-Bi-Cu Se-Te-Zn	Not S	Surveyed	No	Ag-Bi-Cd-Cu-Mo- Pb-Sb-Se-Te-Zn	Requires EM/IP
OR3	TBD	255	Ag-As-Bi-Cd-Mo-Pb- Sb-Se-Te-Zn	735 x 130 640 x 285	6,100 8,800	Yes	Ag-Bi-Cd-Cu-Mo Pb-Sb-Se-Te-W-Zn	Requires Drilling
OR4	TBD	250	Ag-As-Bi-Cd-In-Mo- Pb-Se-Sn-Te-Zn	65 × 80 55 × 60 55 × 60	5,100 9,500 9,500	Yes	Ag-Bi-Cd-Cu-Mo Pb-Sb-Se-Te-Zn	Requires Drilling
OR5	TBD	-	As-Au-Bi-Cu-Se Te-Zn	Not S	Surveyed	Yes	Ag-Bi-Cd-Cu-Mo- Pb-Sb-Se-Te-Zn	Requires magnetic modelling
OR7	TBD	210	Ag-As-Bi-Cd-Mo-Pb- Se	310 × 230 305 × 465 430 × 270	3,200 8,600 5,200	Yes	Ag-As-Au-Ba-Cd- Cu-In-Mo-Sb-Zn	Requires Drilling
THI	TBD	215	As-Bi-Mo-Se-Te	200 x 530	2,000	No	-	Requires Drilling
TH2	TBD	290	Ag-As-Bi-Cd-Mo-Pb- Sb-Se-Te-Zn	160 x 260	4,800	Yes	Ag-Bi-Cd-Cu-Mo- Pb-Sb-Se-Te-Zn	Requires Drilling
Rufina	TBD	230	-	250 x 210	2,400	No	Ag-As-Bi-Cd-Cu- In-Mo-Pb-Sb-Se- Te-Zn	Requires Drilling
Lambrusco	TBD	330	-	220 x 430	1,400 (EOH)	No	-	Requires Drilling
Neptune Camp	TBD	-	-	Not S	Surveyed	-	-	Early stage
Mangrove Camp	TBD	-	-	Not S	Surveyed	-	-	Early stage



ABN 40 1 19 03 1 864

**ASX:DRE** 

#### SNAPSHOT – Tarraji-Yampi Cu-Au-Ag-Co

#### Unexplored since the 1970s

- Outcropping mineralisation was discovered in 1905 and mined for copper at Grant's Find, Wilson's Reward, Monarch, Ironclad and Tarraji from 1907-1920.
- Only historical exploration within the area was by WMC Resources ("WMC") in the 1950s and Australian Consolidated Minerals ("ACM") in the 1970s with both parties exploring for copper.
- Contained entirely within the Yampi Sound Training Area ("YSTA"), Commonwealth land was off limits to mineral exploration from 1978 to 2013.

#### Genuine Camp Scale Potential

- Five clusters of historical mining on outcropping mineralisation.
- Orion discovery (~350m wide x ~150m long x 250m deep and open at depth), under just 1m of cover, made in 2021. Results include KMRC022: 16m @ 2.2% Cu, 38.7g/t Ag, 6.6g/t Au, 0.40% Co from 77m. (ASX 15 Nov 2021)
- Lithostructural and geochemical similarities to pelitic-mafic or "Besshi-style" VMS systems such as Monty /DeGrussa in Western Australia, Windy Craggy in Canada or the Matchless deposits in Namibia.

#### Significant, Step-Change, Growth Potential

- Dreadnought is the first to deploy modern geochemical and geophysical techniques to explore for mineralisation under shallow cover in the region.
- Multiple priority Orion look-alikes defined through geochemical and geophysical surveys with highly conductive anomalism.

#### High-Grade, Multi-Metal Potential Including Cu-Ag-Au-Co

• Previous drilling at Orion includes thick high-grade intersections (ASX 15 Nov 2021 and 8 Dec 2021):

KMRC017:	l 2m @	I.6% Cu,	31.7g/t Ag,	0.5g/t Au,	0.02% Co	from 45m
KMRC022:	l 6m @	2.2% Cu,	38.7g/t Ag,	6.6g/t Au,	0.40% Co	from 77m, including:
	2m @	<0.1% Cu,	4.8 g/t Ag,	27.6g/t Au,	I.50% Co	from 77m, and:
	7m @	4.7% Cu,	83.3g/t Ag,	4.9g/t Au,	0.20% Co	from 82m
KMRC039:	20m @	I.4% Cu,	13.4g/t Ag,	0.5g/t Au,	0.03% Co	from 3m, including:
	3m @	7.6% Cu,	116.2g/t Ag,	2.2 g/t Au,	0.14% Co	from I8m
KMRC047:	l 2m @	3.0% Cu,	21.4g/t Ag,	I.7g/t Au,	0.02% Co	from 1m, including:
	5m @	5.9% Cu,	44.9 g/t Ag,	3.7g/t Au,	0.01% Co	from Im

#### **Global Energy Decarbonisation Driving Copper Fundamentals**

- Copper is essential for electricity-related technologies with renewable energy systems requiring up to 12x more copper compared to traditional energy systems.
- S&P Global forecasts that global demand for copper could double from 25mt to 50mt by 2035. Under this scenario, by 2030, supply from both existing and projected copper mines will meet just 80% of demand (S&P Global: The Future of Copper, July 2022).



**ASX:DRE** 

ABN 40 1 19 03 1 864

**Background on Tarraji-Yampi (E04/2508, E04/2557, E04/2608, E04/2860, E04/2861, E04/2862, E04/2863: 100%, E04/2315: 80%)** Tarraji-Yampi is located entirely within the Yampi Sound Training Area ("**YSTA**"), a Commonwealth Defence Reserve in the West Kimberley, ~80kms from the port of Derby. The YSTA is the second largest Defence Reserve in Australia after Woomera in South Australia and was off limits to mineral exploration from 1978 to 2013.

The only significant exploration undertaken in the area was by WMC Resources 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.



Figure 6: Plan view image showing the location of Cu-Au and VMS prospects over geological interpretation at Tarraji-Yampi.





ABN 40 119 031 864

For further information please refer to previous ASX announcements:

- 25 August 2021 RC Results from Orion, Grant's & Fuso Indicate a large Cu-Au-Ag-Co System
  - II October 2021 Massive Sulphides Intersected in Multiple Holes at Orion Cu-Au-Ag-Co
- 2 November 2021 Supergene Confirmed and Massive Sulphides Extended at Orion
- 15 November 2021 High-Grade Cu-Ag-Au-Co Discovery at Orion
- 8 December 2021 Further High-Grade Cu-Ag-Au-Co from Orion Discovery
- 22 June 2022 Orion Auger Program Tarraji-Yampi Project
- 15 August 2022 Nine Orion Look-alikes from Auger Program, More to Come
- 3 October 2022 Commencement of Regional Auger Program
- 18 May 2023 Additional Orion Look-Alikes from Auger Program
- 24 October 2023 Drilling and Geophysical Surveys Completed at Tarraji-Yampi
- 27 March 2024 Drilling and Geophysical Results from Tarraji-Yampi
- I 7 June 2024 Cu-Au Drilling Commenced at Tarraji-Yampi
- I 8 July 2024
   Four Strong Off-Hole Conductors Identified

#### UPCOMING NEWSFLOW

October: Results of further target generation and definition work at Mangaroon Au (100%) October: Results from EIS co-funded IP surveys at Tarraji-Yampi (80%/100%) October: Results from Nb-REE drilling at the Gifford Creek Carbonatite (Mangaroon 100%) October/November: Results from Au and Cu-Au-Zn-Ag drilling at Mangaroon (100%) October/November: Results from airborne geophysical surveys at Mangaroon (100%) October/November: Results from diamond drilling at the Star of Mangaroon (100%) October/November: Results from metallurgical testing at Star of Mangaroon (100%) November: Initial Resource for Star of Mangaroon (100%) October: Quarterly Activities and Cashflow Report 28 November: Annual General Meeting

~Ends~

For further information please contact: **Dean Tuck** Managing Director Dreadnought Resources Limited E: <u>dtuck@dreres.com.au</u>

Jessamyn Lyons Company Secretary Dreadnought Resources Limited E: <u>jlyons@dreres.com.au</u>

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



ABN 40 1 19 03 1 864

#### **Cautionary Statement**

This announcement and information, opinions or conclusions expressed in the course of this announcement contains forecasts and forward-looking information. Such forecasts, projections and information are not a guarantee of future performance, involve unknown risks and uncertainties. Actual results and developments will almost certainly differ materially from those expressed or implied. There are a number of risks, both specific to Dreadnought, and of a general nature which may affect the future operating and financial performance of Dreadnought, and the value of an investment in Dreadnought including and not limited to title risk, renewal risk, economic conditions, stock market fluctuations, commodity demand and price movements, timing of access to infrastructure, timing of environmental approvals, regulatory risks, operational risks, reliance on key personnel, reserve estimations, native title risks, cultural heritage risks, foreign currency fluctuations, and mining development, construction and commissioning risk.

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

#### **Competent Person's Statement – Exploration Results**

The information in this announcement that relates to geology, exploration results and planning, and exploration targets was compiled by Mr. Dean Tuck, who is a Member of the AIG, Managing Director, and shareholder of the Company. Mr. Tuck has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Tuck consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the forma and context in which the Competent Person's findings are presented have not been materially modified from the original reports.



ABN 40 1 19 03 1 864

## 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.

DREADNOUGHT

Results to date indicate that there may be a related, large scale, Proterozoic Cu-Au VMS system at Tarraji-Yampi, similar to DeGrussa and Monty in the Bryah Basin.

# Mangaroon Ni-Cu-Co-3PGE, Au & REE Project (100%)

Mangaroon covers ~5,300kms<sup>2</sup> and is located 250kms south-east of Exmouth in the Gascoyne Region of WA. At the Money Intrusion, Ni-Cu-Co-3PGE has been identified. Dreadnought also has areas of outcropping high-grade gold including the historic Star of Mangaroon and Diamond 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 ~3,700kms<sup>2</sup> covering over 200kms strike along the Bresnahan Basin / Wyloo Group unconformity. Bresnahan is prospective for unconformity related heavy rare earth ("**HREE**") deposits similar to Browns Range HREE deposits, unconformity uranium ("**U**") deposits and mesothermal lode gold similar to Paulsens Au-Ag-Sb deposits along strike.

Prior to consolidation by Dreadnought, the Bresnahan Basin had been successfully explored for unconformity uranium with limited exploration for mesothermal gold. Bresnahan is a first mover opportunity to explore for unconformity HREE.

#### Central Yilgarn Gold, Base Metals, Critical Minerals & Iron Ore Project (100%)

Central Yilgarn is located ~190km northwest of Kalgoorlie in the Yilgarn Craton. The project comprises ~1,400kms<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.



ABN 40 119 031 864

	Та	able 2: Si	gnificant R	esults	(>0.2%	Zn, Cu	, Pb, >0	.2g/t A	u)		
Hole ID	From (m)	To (m)	Interval (m)	Cu (%)	Au (g/t)	Ag (g/t)	Co (%)	Zn (%)	Pb (%)	Prospect	
KMDD001	58.3	61.3	3	4.5	2.2	46.0	0.15	0.4			
incl	60	61	1	5.8	3.7	50.9	0.28	1.0			
and	113	118	5					0.4		Orion and Orion	
incl	117	118	1					1.2			
and	120	121			0.3					Repeat	
and	162	178	16		0.1	12.7		0.7	0.7		
incl	173	175	2		0.1	26.8		2.6	1.1		
KMDD002	335	340	5	0.1		3.3					
and	382	392	10		0.1			0.2		Orion Extension	
and	431	438	7					0.2			
and	472	490	18		0.1			0.2			
KMDD003	80	83	3		0.1			0.3			
incl	81	82	I		0.4			0.4	0.2		
and	96	98	2					0.3		Orion spiay	
and	136	139	3		0.1			0.4			
KMDD004	11	16	5	0.4		0.5					
incl	23	24	1		0.1	32.2		1.3	0.7		
and	25	27	2		0.1			0.2		Orion Offset	
and	98	108	10					0.2			
incl.	106	108	2			3.8		0.7	0.2		
KMDD005			No	Signific	ant Resu	lts				OR2	
KMDD006	27	33	6	1.2			0.08				
incl	28	30	2	2.0			0.19			UKI	

#### Table 3: Drill Collar Data (GDA94 MGAz51)

Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Туре	Prospect
KMDD001	627943	8168679	66	-60	292	219.5	DD	Repeat
KMDD002	628248	8168621	66	-66	292	552.2	DD	Extension
KMDD003	627958	8168558	64	-60	270	251.1	DD	Splay
KMDD004	627829	8168614	65	-65	292	150.3	DD	Offset
KMDD005	627698	8168790	68	-70	280	171.8	DD	OR2
KMDD006	627921	8169380	70	-61	302	179.9	DD	ORI



ABN 40 1 19 03 1 864

## 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
$\sum$	Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under</li> </ul>	Diamond (DD) drilling was undertaken to produce samples for assaying.
16		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	Core is orientated for structural and geotechnical logging where possible. In orientated core, half core is submitted to the lab for analysis in intervals ranging from 20cm to 1m
D		<ul> <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 taken to be appropriate calibration.</li> </ul>	then the half core is cut so as to preserve the orientated, then the half core is cut so as to preserve the orientation line with the same side of the core submitted down the hole. QAQC samples consisting of duplicates, blanks and CRM's (OREAS Standards) will be inserted through the program at a rate of 1:50 samples. Duplicate samples are submitted as
		<ul> <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</li> </ul>	quarter core. All samples are submitted to ALS Laboratories in Perth for determination of 48 multi-elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61) determination of Au by Fire Assay and ICP-AES finish (ALS Code Au-ICP22).
		information.	
	Drilling techniques	<ul> <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>	<b>Diamond Drilling</b> Diamond drilling was undertaken by Top Drill with a truck- mounted low impact Sandvik DE880 diamond drill rig. Drilling is either HQ to end of hole or initially HQ and dropping to NQ once the hole is cased off for deeper drill holes.
D			Core is orientated using a Axis Champ North-seeking Gyro and True Core Orientation Tool.
5	Drill sample recovery	<ul> <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>	Diamond Drilling HQ and NQ drilling has been undertaken. All core recoveries are measured and recorded by the drill crew for each run and remeasured and checked by Dreadnought personnel. Core recovery to date has been very high. At this stage, no known bias occurs between sample recovery
$\bigcirc$	Logging	<ul> <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>	and grade.         Diamond Drilling         Diamond core is logged under supervision of a Senior         Geologist with sufficient experience in this geological terrane         and relevant styles of mineralisation using an industry         standard logging system which could eventually be utilised         within a Mineral Resource Estimation.         Lithology, mineralisation, alteration, veining, weathering and         structure are recorded digitally.
			DD Logging is qualitative, quantitative or semi-quantitative in nature.
	Sub-sampling techniques and sample preparation	<ul> <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</li> </ul>	<b>Diamond Drilling</b> 20cm – Im half core samples are sawn and submitted to the lab for analysis. If core is orientated, then the core is cut so as to preserve the orientation line with the same side of the core submitted down the hole.
		<ul> <li>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</li> </ul>	QAQC in the form of duplicates, blanks and CRM's (OREAS Standards) are inserted through the mineralised zones at a rate of 1:50 samples. Additionally, within each mineralised zone, a duplicate sample is taken and a blank inserted directly after.
		<ul> <li>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>	Samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.66g charge for determination of 48 multi-



ABN 40 1 19 03 1 864

	Criteria	JORC Code explanation	Commentary
			elements via 4 acid digestion with MS/ICP finish (ALS Code ME-MS61) and the determination of Au by Fire Assay and ICP-AES finish (ALS Code Au-ICP22). Standard laboratory QAQC is undertaken and monitored.
	Quality of assay data and laboratory tests	<ul> <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 procedures have been established</li> </ul>	Laboratory Analysis Fire Assay is considered a total digest for Au and Four-acid digest is considered a "near-total" digest for most elements. Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receival.
	Verification of sampling and assaying	<ul> <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>	Logging and Sampling Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database. Significant intersections are inspected by senior company personnel. No twinned holes have been drilled at this time. No adjustments to any assay data have been undertaken.
$\mathbb{D}$	Location of data points	<ul> <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>	Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z). GDA94 Z51 is the grid format for all xyz data reported. Azimuth and dip of the drill hole was recorded after the completion of the hole using a Axis Champ North-seeking Gyro. A reading was undertaken every 10th metre with an accuracy of +/- 0.5° azimuth and +/-0.15° dip.
15	Data spacing and distribution	<ul> <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>	See tables for hole positions and sampling information.
	Orientation of data in relation to geological structure	<ul> <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>	Drilling was undertaken at a near perpendicular angle to the interpreted strike and dip of the stratigraphy and modelled magnetic data. No sample bias is known at this time.
	Sample security	• The measures taken to ensure sample security.	All core samples were collected and sealed by Dreadnought staff and delivered to Derby Stock Supplies in Derby before transport to Dreadnought's coreshed in Perth. Samples were delivered to ALS Laboratories Perth by Dreadnought personnel from the company coreshed.
_	Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	The program is continuously reviewed by senior company personnel.

## Section 2 Reporting of Exploration Results (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties,</li> </ul>	The Tarraji-Yampi Project consists of 5 granted (E04/2315, E04/2508, E04/2557, E04/2608) and 4 pending (E04/2860, E04/2861, E04/2862, E04/2863) Exploration Licenses.
	<ul><li>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</li></ul>	The Tarraji tenement (E04/2315) is an 80/20 JV between Dreadnought Exploration Pty Ltd and Whitewater Resources Pty Ltd.

🕑 in dreadnoughtresources.com.au



**ASX:DRE** 

+61 (08) 9473 8345 info@dreres.com.au Unit I, 4 Burgay Court Osborne Park WA 6017

ABN 40 1 19 03 1 864

y in

	Criteria	JORC Code explanation	Commentary
		along with any known impediments to obtaining a licence to operate in the area.	The Yampi Tenements (E04/2508, E04/2557, E04/2608) and Tarraji Tenements (E04/2860, E04/2861, E04/2862, E04/2863) are 100% owned by Dreadnought Exploration Pty Ltd.
7			Dreadnought Exploration Pty Ltd is a wholly owned subsidiary of Dreadnought Resources Ltd.
) )			E04/2315, E04/2508, E04/2557, E04/2860, E04/2861, E04/2862, E04/2863 are located within the Yampi Sound Training Area (YSTA) which is freehold land owned by the Commonwealth Government and administered by the Department of Defence. Being freehold Commonwealth Land, Native Title has been extinguished but falls within Dambimangari Land.
2			E04/2608 is partly located within the YSTA and partly on Vacant Crown Land which has Native Title claim by the Warra Combined (NNTT Number 2901).
)	Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Regional mapping, basic stream sediment, soil sampling and limited diamond drilling was completed by WMC in the 1950s.
			Shallow percussion and diamond drilling was undertaken by ACM at Chianti in the 1970s.
7			The YSTA was off limits to exploration from 1978 until 2013.
	Geology	Deposit type, geological setting and style of mineralisation.	The Tarraji-Yampi Project is located within the Hooper Complex which is a Proterozoic Mobile Belt in the West Kimberley.
$\mathbb{D}$			The Hooper Complex has known occurrences of Cu-Zn- Pb-Ag VMS mineralisation within the Marboo Formation, magmatic Ni-Cu-PGE mineralisation in the Ruins Dolerite and later stage Proterozoic Cu-Au mineralisation associated with significant structures and late-stage intrusions.
	Drill hole information	<ul> <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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	An overview of the drilling program is given within the text and tables within this document.
	Data aggregation methods	<ul> <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</li> </ul>	Significant intercepts are length weight averaged for all samples above the below cut offs (including up to 3m of internal waste) >0.2% Cu, Zn, Pb >0.2g/t Au No top cutting has been applied. No metal equivalents are reported.
	Relationship between	equivalent values should be clearly stated. • These relationships are particularly important in the	Drilling is undertaken close to perpendicular to the dip and
	mineralisation widths and intercept lengths	<ul><li>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></ul>	strike of the mineralisation. The true thickness of the mineralisation intersected in drill holes cannot currently be accurately calculated.

dreadnoughtresources.com.au



ABN 40 119 031 864

Crit
Diagre
Balane Other explor
Furthe

Criteria	JORC Code explanation	Commentary
	(e.g. 'down hole length, true width not known').	
Diagrams	<ul> <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> <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> <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> <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>	Additional Diamond Drilling DHEM IP