

19 July 2021

HIGH-GRADE REE IRONSTONES CONFIRMED OVER 2.5KMS AT MANGAROON

HIGHLIGHTS

- High-grade Rare Earth Element ("REE") ironstones confirmed over ~2.5kms of strike at the Yin Prospect (Dreadnought 100%), located ~15kms southwest of the Yangibana REE Project ("Yangibana") which is currently under construction and development by Hastings Technology Metals Limited (ASX:HAS, "Hastings"). Significant rock chips results include:
 - MNRK292: 7.50% TREO, including 2.73% Nd₂O₃+Pr₆O₁₁
 - MNRK288: 4.77% TREO, including 1.84% Nd₂O₃+Pr₆O₁₁
 - MNRK290: 4.76% TREO, including 1.73% Nd₂O₃+Pr₆O₁₁
- The total rare earth oxides ("TREO") and the Nd₂O₃+Pr₆O₁₁ results from Yin exhibit similar mineralogical characteristics to Yangibana. In addition, samples have also been submitted to confirm similar metallurgical characteristics.
- A ground magnetic survey confirms the Yin ironstones continue under shallow cover between outcrops. A detailed airborne magnetic-radiometric survey will be flown over all twelve of the currently identified REE prospects in the December 2021 quarter.

Dreadnought Resources Limited ("**Dreadnought**") is pleased to announce that it has received additional high-grade REE assays covering ~2.5kms of ironstone outcrops at Yin. Results indicate that the ironstones are similar to those seen at Yangibana.

To date, twelve REE prospects have been identified, based on wide spaced radiometric anomalies coincident with apparent ironstone outcrops. Eleven of these REE prospects remain to be inspected.

Dreadnought's Managing Director, Dean Tuck, commented: "It is encouraging to confirm high-grade REE mineralisation over 2.5kms at the first of twelve prospects. Having confirmed similar mineralogical characteristics to Yangibana, we are now in the process of confirming another key economic driver being similar metallurgical characteristics.

A detailed airborne magnetic-radiometric survey will be conducted ahead of a drill program planned for Yin and the other eleven prospects as required. The metallurgical assessment will focus on the



potential for the TREO to be upgraded into a saleable intermediate product in the form of a concentrate.

In the interim, work in the Kimberley continues with two rigs and a ground geophysical crew operating."

Figure 1: Dreadnought's Luke Blais and Nick Chapman (L to R) mapping and sampling an outcropping REE ironstone at Yin.

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Figure 2: Map showing the location of rock chip samples at Yin and the location of ~2.5kms of outcropping ironstones and their interpreted extensions under shallow cover.



Rare Earths at Mangaroon (E09/2448, E09/2450, E09/2535: DRE 100%)

The Yangibana ironstones are readily accessible and located 5-20kms from the Cobra - Gifford Creek Road. The ironstones were first targeted by prospectors in 1972 as base metal bearing gossans. The REE potential of the ironstones was first assessed in 1985 and has seen substantial work since Hastings acquired the ironstones north of the Lyons River Fault in 2011 (Figure 3).

However, no significant REE exploration was ever undertaken south of the Lyons River Fault, considered to be the southern extent of REE mineralisation.

Yangibana currently has a JORC 2012 Mineral Resource^{*} of 27.42Mt @ 0.97% TREO with 0.33% $Nd_2O_3+Pr_6O_{11}$ and is under construction and development. The high proportion of $Nd_2O_3+Pr_6O_{11}$, which are used for magnets for electric vehicles and renewable power generation, are an important component of the project economics.

The TREO results and the $Nd_2O_3+Pr_6O_{11}$ component from Yin, exhibit similar characteristics to Yangibana (Figure 4). To further confirm the similarity to Yangibana, two bulk samples have been collected from outcrop for floatation test work and mineralogical analysis. The metallurgical assessment is an important first step in determining the potential for the TREO to be upgraded into a saleable intermediate product in the form of a concentrate.

Significantly, eleven other REE prospects remain to be tested, with a detailed airborne magneticradiometric survey to refine existing and additional targets. These surveys are to be conducted ahead of a drill program planned for Yin and the other eleven prospects as required.



Figure 3: Plan view image showing the location of Dreadnought's REE prospects including Yin (purple), in relation to the Lyons River Fault and the location of deposits within the Yangibana REE Project (black). *HAS.ASX: 5 May 2021 "Yangibana Project updated Measured and Indicated Resource tonnes up by 54%"





Figure 4: Scatter plot showing the similarity of TREO and Nd₂O₃+Pr₆O₁₁ values from Yin and publicly available Yangibana rock chip data.

Sample ID	Easting	Northing	TREO %	$Nd_2O_3 + Pr_6O_{11}\%$	(Nd ₂ O ₃ + Pr ₆ O ₁₁) % of TREO
MNRK0239	401687	7350298	0.75	0.27	36%
MNRK0240	401678	7350262	3.72	1.05	28%
MNRK0241	401766	7350278	0.92	0.30	33%
MNRK0242	401769	7350245	0.37	0.08	22%
MNRK0243	401787	7350233	0.90	0.19	21%
MNRK0244	401789	7350216	0.70	0.17	24%
MNRK0245	401765	7350205	0.57	0.15	26%
MNRK0246	402086	7351845	0.49	0.21	43%
MNRK0247	402082	7351754	2.57	1.05	41%
MNRK0288	401980	7351426	4.77	1.84	39%
MNRK0289	401966	7351398	3.12	1.21	39%
MNRK0290	401940	7351340	4.76	1.73	36%
MNRK0291	401885	7351250	0.41	0.15	37%
MNRK0292	401876	7351215	7.50	2.73	36%
MNRK0293	401850	7351176	2.65	0.97	37%
MNRK0294	401697	7350535	0.34	0.12	35%
MNRK0295	401798	7349246	0.73	0.20	27%
MNRK0296	401887	7349411	0.90	0.31	34%

Table 1: New rock chip results from the Yin REE prospect (GDA94 MGAz50)



Ongoing and Upcoming Work Programs at Mangaroon:

Completed: Wide spaced 800x50m soil sampling along the Edmund Fault and Minga Bar Faults including close spaced 100x50m target definition soils at Cullen's Find, White Well and Mitchell's Find – Assays Pending

Ongoing: Mapping and rock chipping along the Money Intrusion for Ni-Cu-PGE target generation

Commenced: Metallurgical test work on REE ironstones at Yin

July/August: Project wide multi-element stream sediment sampling

August/September: Petrological and mineralogical analysis of rocks from Yin

August/September: Fixed Loop EM Surveys along the Money Intrusion for Ni-Cu-PGE target definition

September/October: Detailed airborne magnetic-radiometric survey over twelve REE prospects



Figure 5: Dreadnought's Luke Blais, Dean Tuck and Nick Chapman (L to R) with high-grade REE ironstones from Yin.



Background on Mangaroon (E08/3274, E8/3178, E09/2384, E09/2433, E09/2473: Option with FQM) (E08/3275, E09/2370, E09/2448, E09/2449, E09/2450, E09/2467, E09/2478: 100%)

Mangaroon covers >4,500 sq. kms of the Mangaroon Zone in the Gascoyne Region of Western Australia. The region is host to high-grade gold mineralisation at the Bangemall/Cobra and Star of Mangaroon gold mining centres and the high-grade Yangibana REE deposits. During most of the region's early history, there was no government support for prospecting or exploration resulting in a vastly underexplored region in Western Australia.

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 Yangibana. Mangaroon is still in the early stages with limited modern exploration.



Figure 6: Plan view map of Mangaroon showing the location of current prospects and new tenement application in relation to major structures, geology, roads and the Yangibana REE Project.



About Rare Earths

REEs are comprised of fifteen elements that are "rare" in terms of the limited number of concentrated deposits.

Neodymium and praseodymium (Nd_2O_3 and Pr_6O_{11}) are classified as light rare earths and are used in steelmaking to remove impurities, as well as in the production of specialty alloys (including steel, chromium, magnesium, molybdenum, tungsten, vanadium and zirconium).

The use of REEs in magnets is rapidly increasing with neodymium-iron-boron magnets being the strongest known magnets and are used in applications such as electric motors for hybrid cars, wind turbines, high-tech military components and battery alloys.

China accounts for >90% of global REE supply and applies restrictions to this supply. Accordingly, REEs are critical metals because of the specialised use in modern technology combined with China's near monopoly on supply. The political and economic issues surrounding global supply have highlighted the strategic importance of REEs.

Critical Minerals

Critical minerals are considered vital for the economic well-being of the world's economies, yet whose supply may be at risk due to geological, geopolitical or other factors. These minerals are used in the manufacture of mobile phones, flat screen monitors, wind turbines, electric cars, solar panels and many other high-tech applications.

The minerals ranked as most critical by the USA, Japan, South Korea, the UK and the European Union are as follows: rare-earth elements (REE), gallium (Ga), indium (In), tungsten (W), platinum-group elements (PGE), cobalt (Co), niobium (Nb), magnesium (Mg), molybdenum (Mo), antimony (Sb), lithium (Li), vanadium (V), nickel (Ni), tantalum (Ta), tellurium (Te), chromium (Cr), manganese (Mn) and bismuth (Bi).

Dreadnought's critical minerals prospects include the following:

- Illaara: Peggy Sue tantalum, niobium and lithium prospect
- Mangaroon: Yin light rare earths and Lumpy's Ni-Cu-PGE prospects
- Tarraji-Yampi: Rough Triangle Cu-Sb-Bi-Ag, Texas and Orion Ni-Cu-PGE prospects



Sources:

Study on the review of the list of Critical Raw Materials, European Commission, 2017. Critical Minerals in Australia: A Review of Opportunities and Research Needs, Geoscience Australia, 2018.

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For further information please refer to previous ASX announcements:

- 25 November 2020 Mangaroon Ni-Cu-PGE & Au Project
- 15 March 2021 Exploration Commences at Mangaroon Ni-Cu-PGE & Au Project
- 7 April 2021 Option/JV Agreement with Global Base Metal Miner at Mangaroon
- 17 May 2021 Update on Mangaroon Ni-Cu-PGE & Au Project
- 11 June 2021 High-Grade REE Ironstones Outcropping at Mangaroon

UPCOMING NEWSFLOW

July: Results from target definition and generation work at Mangaroon

July: Diamond drilling at Texas Ni-Cu-PGE and RC drilling at Fuso and Paul's Find Cu-Au, Orion Ni-Cu-PGE and Chianti-Rufina VMS targets

July: Results 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: 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).

2-4 August: Attending Diggers and Dealers in Kalgoorlie

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

August/September: Commencement of ground EM survey along the Money Intrusion at Mangaroon

~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 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 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.



Table 2: All rock chip results from the Yin and Y2 REE prospects (GDA94 MGAz50)

Sample ID	Easting	Northing	TREO %	Nd ₂ O ₃ + Pr ₆ O ₁₁ %	(Nd ₂ O ₃ + Pr ₆ O ₁₁) % of TREO
MNRK0101	401637	7350206	7.14	2.20	31%
MNRK0102	401648	7350201	7.72	2.35	30%
MNRK0104	401657	7350221	1.13	0.34	30%
MNRK0105	401689	7350278	3.56	1.11	31%
MNRK0106	401715	7350353	1.91	0.60	31%
MNRK0107	401723	7350334	0.42	0.12	29%
MNRK0108	401802	7350196	0.54	0.10	19%
MNRK0109	401783	7350255	0.98	0.29	30%
MNRK0111	401720	7350085	0.44	0.15	34%
MNRK0239	401687	7350298	0.75	0.27	36%
MNRK0240	401678	7350262	3.72	1.05	28%
MNRK0241	401766	7350278	0.92	0.3	33%
MNRK0242	401769	7350245	0.37	0.08	22%
MNRK0243	401787	7350233	0.90	0.19	21%
MNRK0244	401789	7350216	0.70	0.17	24%
MNRK0245	401765	7350205	0.57	0.15	26%
MNRK0246	402086	7351845	0.49	0.21	43%
MNRK0247	402082	7351754	2.57	1.05	41%
MNRK0270	401687	7350359	0.29	0.06	21%
MNRK0271	401710	7350350	0.34	0.09	26%
MNRK0272	401737	7350352	0.69	0.20	29%
MNRK0273	401684	7350365	1.50	0.46	31%
MNRK0274	401746	7350320	1.82	0.54	30%
MNRK0275	401735	7350307	1.45	0.42	29%
MNRK0276	401711	7350283	0.31	0.09	29%
MNRK0277	401701	7350273	0.28	0.07	25%
MNRK0278	401663	7350216	0.98	0.28	29%
MNRK0279	401632	7350191	1.39	0.42	30%
MNRK0280	401628	7350211	0.70	0.16	23%
MNRK0281	401646	7350221	1.20	0.36	30%
MNRK0282	401653	7350213	3.69	1.18	33%
MNRK0283	401638	7350206	0.64	0.18	29%
MNRK0284	401634	7350207	11.37	3.56	32%
MNRK0288	401980	7351426	4.77	1.84	39%
MNRK0289	401966	7351398	3.12	1.21	39%
MNRK0290	401940	7351340	4.76	1.73	36%
MNRK0291	401885	7351250	0.41	0.15	37%
MNRK0292	401876	7351215	7.50	2.73	36%
MNRK0293	401850	7351176	2.65	0.97	37%
MNRK0294	401697	7350535	0.34	0.12	35%
MNRK0295	401798	7349246	0.73	0.2	27%
MNRK0296	401887	7349411	0.90	0.31	34%
MNRK0112	400611	7352124	0.45	0.14	31%



JORC Code, 2012 Edition – Table 1 report template Section 1 Sampling Techniques and Data

JORC TABLE 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 Rock Chips 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 XRF (ALS Method ME-XRF30). Yangibana Rock Chips Rock Chips were collected by Hastings and Artemis personnel and submitted for analysis. Hastings submitted rock chips to Genalysis for determination of Rare Earth Oxides by Lithium Borate Fusion ICP-MS (Genalysis Method FP6/MS). Artemis submitted rock chips to Genalysis for determination of Rare Earth Oxides by Lithium Borate Fusion ICP-MS (Genalysis Method FP6/MS).
Drilling techniques	• 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.).	No drilling undertaken
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature 	No drilling undertaken



Criteria	JORC Code explanation	Commentary
	of the samples. • 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.	
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	No drilling undertaken
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Rock Chips Entire rock chips were submitted to the lab for sample prep and analysis. Yangibana Rock Chips Sub-sampling and sample prep are unknown.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 Rock Chips All samples were submitted to ALS Laboratories in Perth where 1-3kg rock chips samples were crushed so that >70% of material passes through -6mm, the sample is then pulverised to >85% passing 75 micron. A 66-gram aliquot of pulverised sample is fused with 12:22 lithium borate flux containing an oxidizing agent, and poured to form a fused disk. The resultant disk is in then analysed by XRF spectrometry specifically for Rare Earths (ALS Method ME-XRF30) Lithium borate flux onsidered a total digest and Method ME-XRF30 is appropriate for REE determination. No standards, duplicates or blanks submitted with rock chips. Yangibana Rock Chips Hastings submitted rock chips to Genalysis for determination of Rare Earth Oxides by Lithium Borate Fusion ICP-MS (Genalysis Method FP6/MS). Lithium borate fusion is considered a total digest and Method FP6/MS is considered appropriate for REE determination.



Criteria	JORC Code explanation	Commentary
		 determination of Rare Earth Oxides by Lithium Borate Fusion ICP-MS/OES (Genalysis Method FS105/MS/OES). Lithium borate fusion is considered a total digest and Method FS105/MS/OES is considered appropriate for REE determination.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Rock Chips Rock chip and geological information is written in field books and coordinates and track data saved from hand held 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. Yangibana Rock Chips No verification of sampling and assaying of the Yangibana rock chips has been undertaken by Dreadnought
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 All sample locations were recorded with a Garmin handheld GPS which has an accuracy of +/- 5m. GDA94 MGAz50. Yangibana Rock Chips Survey information of the Yangibana rock chips is unknown, coordinates were included in the public assay files from WAMEX reports
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	Sample spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for a Mineral Resource.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	At this early stage of exploration, mineralisation thickness's, orientation and dips are not known.
Sample security	The measures taken to ensure sample security.	 All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Norex General Transport in Exmouth. Samples were delivered directly to ALS Laboratories Perth by Norex General Transport out of Exmouth. Yangibana Rock Chips



Criteria	JORC Code explanation	Commentary
		Sample security is unknown
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The program is continuously reviewed by senior company personnel.
		Yangibana Rock Chips
		Audits and reviews of rock chips are unknown.

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	 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. 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. 	 The Mangaroon Project consists of 1 granted Exploration License (E09/2370,) and 12 pending Exploration Licenses (E08/3178, E08/3274, E08/3275, E09/2384, E09/2433, E09/3178, E09/2448, E09/2449, E09/2450, E09/2467, E09/2468, E09/2535) All tenements are 100% owned by Dreadnought Resources. E08/3178, E08/3274, E09/2384, E09/2433, E09/2473 are subject to an option agreement with First Quantum Minerals over the base metal rights. E08/3178, E09/2370, E09/2384 and E09/2433 are subject to a 2% Gross Value Royalty held by Beau Resources. E08/3274, E08/3275, E09/2433, E09/2448, E09/2449, E09/2450 are subject to a 1% Gross Value Royalty held by Beau Resources. The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016) The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah Minnie Creek, Towra and Uaroo Stations
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Historical exploration of a sufficiently high standard was carried out in the region by a few parties including: Hurlston Pty Ltd 1986-1987: WAMEX Report
		A23584
		Newmont 1990: WAMEX Report A32886
		Newcrest 1990: WAMEX Report A36887
		Desert Energy 2006-2007: WAMEX Reports A78056, A80879
		Yangibana Rock Chips
		Hastings 2017: WAMEX Report A114242



Criteria	JORC Code explanation	Commentary
		Hastings 2014: WAMEX Report A102800
		Hastings 2013: WAMEX Report A97135
		Hastings 2012: WAMEX Report A93001
		Artemis 2009: WAMEX Report A89503
Geology	 Deposit type, geological setting and style of mineralisation. 	 The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province. The Mangaroon Project is prospective for orogenic gold, magmatic Ni-Cu-PGE mineralisation and Ferrocarbonatite hosted REEs.
Drill hole information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	No drilling undertaken
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	No drilling undertaken
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	No drilling undertaken
Diagrams	Appropriate maps and sections (with	Refer to figures within this report.



Criteria	JORC Code explanation	Commentary
	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.	
Balanced reporting	 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. 	 The accompanying document is a balanced report with a suitable cautionary note.
Other substantive exploration data	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.	 Suitable commentary of the geology encountered are given within the text of this document.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Detailed airborne magnetics, surface geochemistry and mapping prior to drilling