7 July 2021

HIGH-GRADE TANTALUM RESULTS FROM PEGGY SUE – ILLAARA PROJECT

HIGHLIGHTS

- **Encouraging high-grade rock chips in first pass sampling at the Peggy Sue critical minerals prospect ("Peggy Sue") with significant results including:**
  - **LRK046: 529ppm Ta_2O_5**
  - **LRK067: 391ppm Ta_2O_5**
  - **LRK066: 295ppm Ta_2O_5**
  - **LRK100: 357ppm Ta_2O_5**
  - **LRK069: 310ppm Ta_2O_5**
  - **LRK068: 283ppm Ta_2O_5**
- **Multiple clusters of high-grade mineralisation indicate a potentially large and fertile system.**
- **Furthering mapping and sampling will focus on identifying mineral source and zonation to define drill targets for testing in late 2021/early 2022.**

Dreadnought Resources Limited ("**Dreadnought**") is pleased to announce the results from rock chip sampling of pegmatites at Peggy Sue, part of the Illaara Project ("**Illaara**").

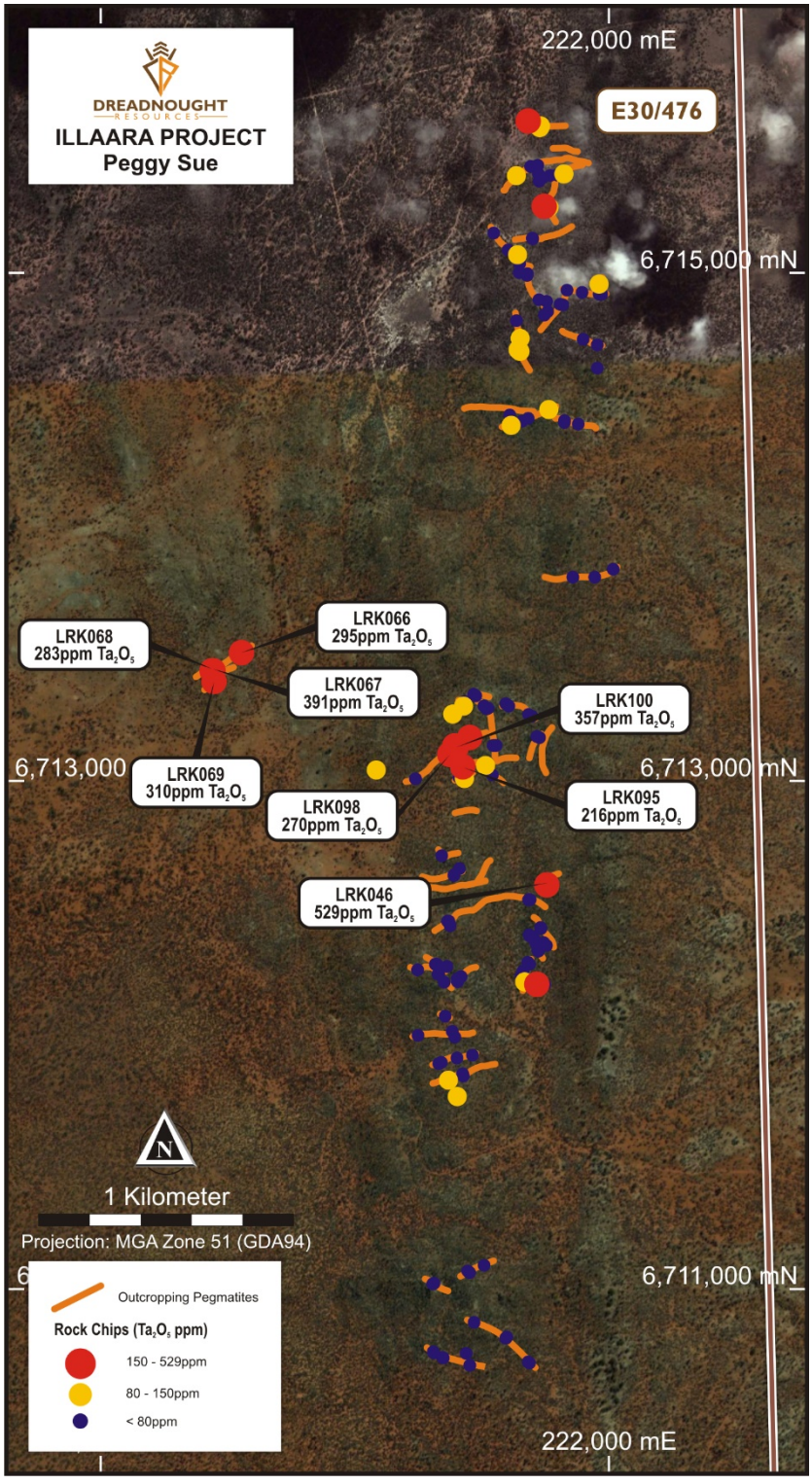
Results from Peggy Sue have identified multiple, high-grade tantalum clusters and anomalous lithium. Typically, these deposits are formed by a host granite source with mineralisation (including beryllium, niobium, caesium, tantalum and lithium) distributed in distinct zones beyond the source. These rock chip results indicate a potentially large and fertile system. Future work will look to further map and sample the pegmatites to determine the mineral zonation patterns and define drill targets. This work is planned to commence in the December 2021 quarter.

Dreadnought Managing Director, Dean Tuck, commented: "*Identifying these high-grade tantalum clusters from first pass sampling is highly encouraging. Tantalum is a critical metal where security of supply matters and Peggy Sue is ideally situated in a Tier 1 jurisdiction. Going forward, we will be looking to extend the mineralisation and define any zonation within these pegmatite swarms with an eye to vector in towards additional tantalum and potential lithium and caesium zones.*"

Figure 1: Dreadnought's Nick Chapman and Luke Blais sampling a large pegmatite at Peggy Sue.

Peggy Sue (E30/476: 100%, E30/485: Option to acquire 100%)

Peggy Sue was highlighted by a strong and coherent 5,000m x 1,000m soil anomaly (Li-Cs-Ta-Nb-Rb-Be-Sn) in the southern area of Illaara associated with fertile late-stage felsic intrusions. Reconnaissance mapping of the area confirmed the presence of a large pegmatite dyke swarm, with some outcropping pegmatites >10m thick and several hundred metres in length, associated with the anomalism.



The results of the reconnaissance rock chip sampling have confirmed several clusters of high-grade tantalum mineralisation, indicative of a highly fractionated and fertile pegmatite system (Figure 2). Lithium values were subdued in the rock chips with a maximum of 0.37% L_2O, which could be due to the pegmatites being strongly zoned, or near surface leaching of the lithium minerals.

Follow up sampling and more detailed mapping will be undertaken to define mineralisation extents and mineral zonation. This work will be undertaken in the December 2021 quarter with results by the end of 2021.

Figure 2: Plan view image showing the location of mapped pegmatites and rock chip sample locations highlighting high grade Ta_2O_5 results.

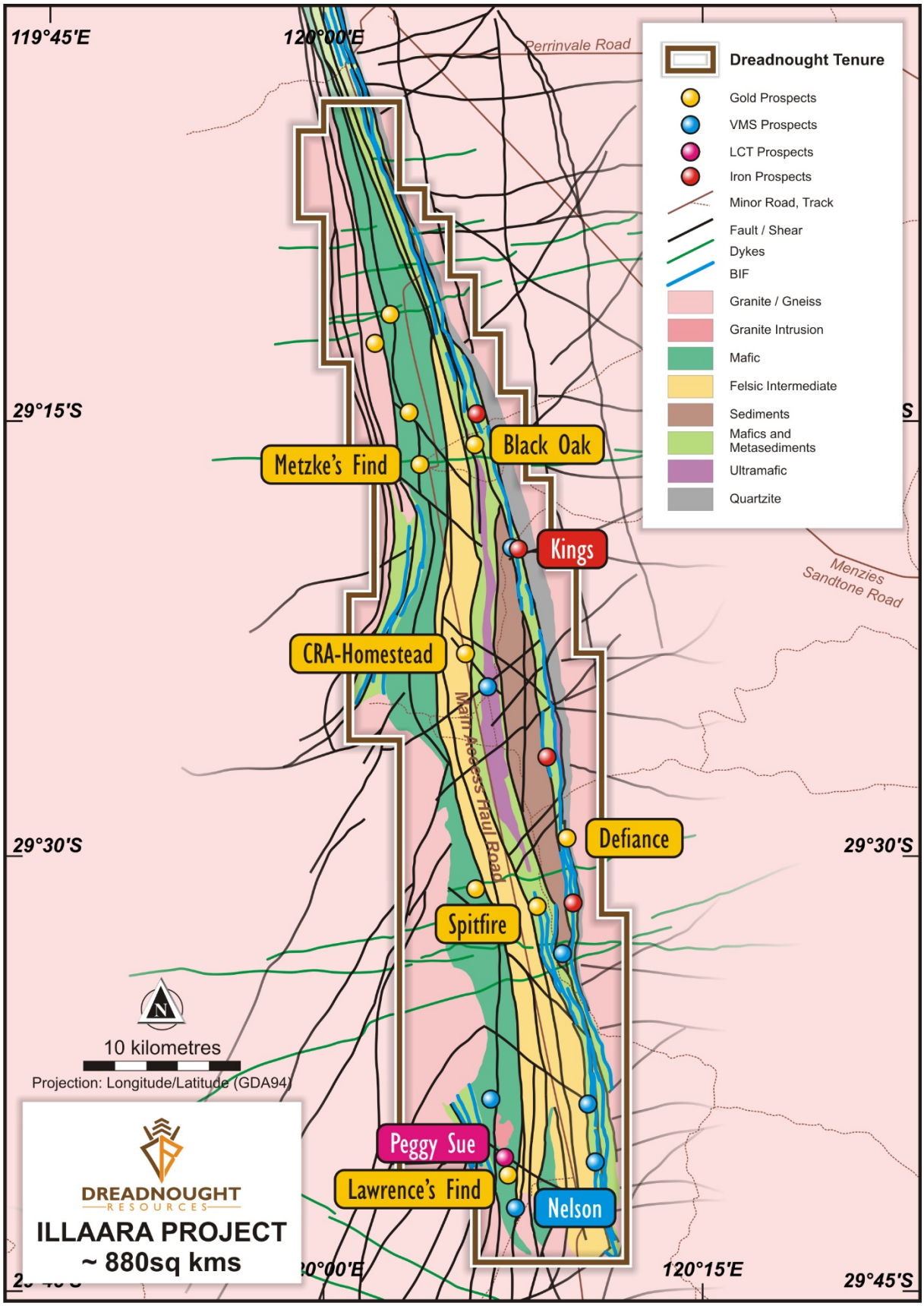


Figure 3: Plan view of Illaara showing the location of targets over solid geology.

About Tantalum

Tantalum is a critical material with limited threat from substitution and reliable high-performance consumers in sectors such as aerospace, medical and military. The largest application for tantalum is in high performance capacitors which is experiencing growth due to the roll out of 5G infrastructure and electrification of homes, cars and workspaces. Other major markets include anti-corrosive materials for the chemical processing industry, mill products, cemented carbides and specialist tantalum alloys for aerospace.

World niobium and tantalum Resources are poorly reported. Central Africa is known to host major Resources, but dependable estimates are unavailable.

Global production comes mainly from: the Democratic Republic of Congo (39%); Rwanda (28%); Nigeria (8%); China (7%); Brazil (6%) and Australia (3%).

The majority of Australia's tantalum Resources and probably all of Australia's tantalum production, are from lithium-tantalum, hard-rock pegmatite deposits where tantalum is produced as a by-product from lithium mining. In the past, however, a number of these deposits were primarily focussed on tantalum mining, sometimes with lithium and/or tin as by-products (eg Wodgina, Greenbushes and Bald Hill).

Australian sourced tantalum potentially offers a more sustainable and traceable product compared to African-sourced tantalum. The European Union's new Conflict Minerals Regulation came into force on 1 January 2021. The Regulation aims to stem the trade in tin, tantalum, tungsten and gold which sometimes finance armed conflict or are mined using forced labour. Along with the Dodd Frank provisions of the US, the Regulation will put more responsibility on consumers to ensure sustainability.

Background on Illaara

Illaara is located 190 kms from Kalgoorlie and comprises seven tenements (~900 sq kms) covering 75km of strike along the entire Illaara Greenstone Belt. The Illaara Greenstone Belt has now been consolidated through an acquisition from Newmont and subsequently the purchase of Metzke's Find and an option to acquire 100% of E30/485 and E29/965.

Recent gold exploration within the Illaara Greenstone Belt was spurred on by a ~55km long Au-As-Sb anomaly generated from regional regolith sampling by the Geological Survey of Western Australia.

Prior to Newmont, the Illaara Greenstone Belt was held by Portman Iron and Cleveland Cliffs who were looking to extend their mining operations north as part of their Koolyanobbing Iron Ore Operation. Given the long history of iron ore mining in the region, Illaara is well situated in relation to existing road and rail infrastructure connecting it to a number of export ports.

Historically gold was discovered and worked at Metzke's Find and Lawrence's Find in the early 1900s. In addition to gold, outcropping VMS base metals mineralisation was identified and briefly tested in the 1980s with no subsequent exploration utilising modern techniques.

For further information please refer to previous ASX announcements:

- *24 June 2019* *75 km Long Illaara Greenstone Belt Acquired from Newmont*
- *6 December 2019* *Consolidation of 75km Long Illaara Greenstone Belt*
- *16 February 2021* *Significant Soil Anomalies Along Lawrence's Corridor*
- *27 April 2021* *Illaara Update and Regional Target Generation*

UPCOMING NEWSFLOW

July: Results from target definition and generation work at Mangaroon

July: Results from target definition and generation work at Tarraji-Yampi

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: 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).

2-4 August: Attending Diggers and Dealers in Kalgoorlie

~Ends~

For further information please contact:

Dean Tuck
Managing Director
Dreadnought Resources Limited
E:dtuck@dreadnoughtresources.com.au

Jessamyn Lyons
Company Secretary
Dreadnought Resources Limited
E:jlyons@dreadnoughtresources.com.au

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.

DREADNOUGHT
RESOURCES

Table 1: Significant Results (>0.1 % Li_2O or >80ppm Ta_2O_5)

Sample ID	Easting	Northing	Ta_2O_5 (ppm)	Li_2O (ppm)	Nb_2O_5 (ppm)	Cs (ppm)	Rb (ppm)	Prospect
LRK010	221595	6710810	8	947	44	10.3	2180	
LRK023	221718	6712209	159	22	72	6.2	967	
LRK024	221670	6712215	93	22	86	23.7	617	
LRK046	**221757**	**6712600**	**529**	**22**	**227**	**11.2**	**2650**	
LRK054	221370	6711828	97	22	92	8.4	1995	
LRK058	221405	6711764	88	65	82	2.4	131	
LRK066	**220556**	**6713515**	**296**	**22**	**127**	**9.9**	**366**	
LRK067	**220443**	**6713443**	**391**	**bdl**	**134**	**7.5**	**337**	
LRK068	**220440**	**6713443**	**283**	**bdl**	**124**	**5.7**	**144**	
LRK069	**220447**	**6713401**	**310**	**22**	**163**	**8.4**	**217**	
LRK071	221328	6712244	18	861	90	5.6	1480	
LRK085	221392	6712634	13	1356	73	11.2	1570	
LRK091	221516	6713068	84	517	144	18.9	1215	
LRK092	221523	6713077	58	883	227	16.2	1900	
LRK095	**221426**	**6713065**	**216**	**194**	**132**	**4.9**	**56.3**	
LRK096	221433	6713017	145	215	114	22	670	
LRK098	**221376**	**6713113**	**270**	**129**	**169**	**4.6**	**250**	
LRK099	221395	6713146	167	452	110	29.2	3000	
LRK100	**221401**	**6713142**	**357**	**301**	**199**	**13.3**	**1350**	
LRK101	221454	6713180	181	215	103	8.9	861	
LRK102	221464	6713183	123	861	80	16.6	1285	Peggy Sue
LRK112	221510	6713299	61	3724	112	37.4	4900	
LRK113	**221480**	**6713275**	**216**	**151**	**114**	**5.1**	**75.5**	
LRK114	221469	6713346	69	1055	116	12	2040	
LRK116	221429	6713300	97	323	104	5.6	534	
LRK118	221387	6713269	84	667	268	11.5	1290	
LRK121	221086	6713048	116	990	97	18.2	1770	
LRK122	221684	6715606	190	43	90	2.4	138	
LRK123	221732	6715584	136	22	87	3.5	657	
LRK124	221729	6715577	134	bdl	87	10.2	1040	
LRK126	221824	6715395	81	65	93	3.2	482	
LRK135	221638	6715387	136	22	96	2.1	287	
LRK136	221746	6715271	159	22	323	2.7	535	
LRK137	221766	6715264	102	43	110	1.6	211	
LRK142	221642	6715077	138	22	127	2.2	522	
LRK150	221652	6714697	89	22	94	2.7	715	
LRK151	221644	6714704	99	43	139	0.9	167.5	
LRK152	221652	6714749	105	65	160	3	513	
LRK162	221963	6714962	89	43	94	3.3	609	
LRK170	221617	6714405	115	43	203	2.5	288	
LRK173	221765	6714467	92	43	117	1.1	150.5	

bdl = below detection limit, location in GDA94 MGAz51

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 LCT Pegmatite related elements by Sodium Peroxide Fusion with a ICP-AES and ICP-MS analysis (ALS Method MS91-PKG).
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 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.*	No drilling undertaken
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*	No drilling undertaken

Criteria	JORC Code explanation	Commentary
	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.*	
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.
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 20-gram aliquot of pulverised sample is digested by Sodium Peroxide Fusion with a ICP-AES and ICP-MS analysis (ALS Method MS91-PKG). • Sodium peroxide fusion is considered a total digest and Method MS91-PKG is appropriate for LCT determination. • No standards, duplicates or blanks submitted with rock chips.
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.
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 MGAz51.
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*	Sample spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for a Mineral Resource.

Criteria	JORC Code explanation	Commentary
	for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	
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 ALS Laboratories in Kalgoorlie. • Samples were delivered directly to ALS Laboratories Perth by ALS.
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	• *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 Illaara Project consists of 7 granted Exploration Licenses (E30/471, E30/476, E29/957, E29/959, E29/1050, E29/965 and E30/485) • Tenements E30/471, E30/476, E29/957 and E29/959 are 100% owned by Dreadnought Resources. • These 4 tenements are subject to a 1% NSR retained by Newmont • E29/1050 is 100% owned by Dreadnought Resources with a 1% NSR retained by Gianni, Peter Romeo. • E29/965 and E30/485 are currently held by Dalla-Costa, Melville Raymond, is in good standing and is subject to an option to acquire 100% by Dreadnought Resources. • There are currently no clear Native Title Claims over the Illaara Project • Part of the Illaara Project is located on Walling Rock Station.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Newmont Exploration has undertaken exploration activities since 2016 which are mentioned in previous reports. • Historical exploration of a sufficiently high standard was carried out by numerous parties which have been outlined and detailed in previous ASX announcements:

Criteria	JORC Code explanation	Commentary
		Eastern Group 1988: WAMEX Report A22743 Anglo Australian 1995: WAMEX Report A45251 Polaris 2006-2007: WAMEX Report A75477
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Illaara Project is located within the Illaara Greenstone Belt within the Southern Cross Domain of the Youanmi Terrane approximately 60kms west of the Ida Fault. • The Illaara Project is prospective for orogenic gold, VMS, LCT pegmatites and potentially komatiite hosted nickel mineralisation.
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.*	• All results have been reported above 0.1% Li_2O and >80ppm Ta_2O_5 Au. • No top cutting has been applied. • All reported results have been length weighted (arithmetic length weighting). • No metal equivalent values are reported.
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 scales) and tabulations of intercepts should be included for any significant*	• Refer to figures within this report.

Criteria	JORC Code explanation	Commentary
	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 is 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.*	• Further mapping and rock chip sampling will be undertaken at Peggy Sue