

21 February 2024

## Uranium Potential at Napperby Project

### Highlights

#### Napperby Project, Northern Territory, Australia

- Oceana's Napperby Project covers some of Arunta Province's hottest granites plutons, the Wangala Granite (uranium) and Ennugan Mountains Granite (uranium/thorium)
- Both granite plutons show outstanding uranium/thorium ratios and are almost fully encapsulated within Napperby's EL32836 and ELA32841
- Follow-up exploration activities will target uranium and Rare Earth Elements (REEs) in parallel with Lithium-Caesium-Tantalum (LCT) pegmatites

Oceana Lithium Limited (ASX: OCN, "Oceana" or "the Company") is pleased to add uranium to the target list of prospective elements at its 100% owned Napperby Project in the Northern Territory, Australia.

The project is located within the highly prospective Arunta Province, which is endowed with some of the most prospective rocks for lithium, Rare Earth Elements (REEs) and uranium mineralisation in the Northern Territory.

The Paleoproterozoic Wangala and Ennugan Mountains granites have long been recognised as "Hot Granites" and known to be anomalously enriched in a range of elements including U, Th, P, F and REEs.

As shown in **Figure 1**, both granite plutons show outstanding Uranium/Thorium ratios and are almost fully encapsulated within Oceana's Napperby Project leases EL32836 and ELA32841 (under application).

Over the years, several mineral occurrences with uranium and uranium/thorium have been recorded by the Northern Territory Geological Survey, with uranium being more common in the Wangala Granite and uranium/thorium occurring in the Ennugan Mountains Granite.

Further to the south in the Ngalia Basin there are several mineral occurrences and deposits recorded including the Napperby Uranium Deposit, with a JORC 2012 Inferred Mineral Resource of 9.54Mt at 382ppm  $U_3O_8$  (refer to Core Exploration Ltd - ASX Announcement dated 12/10/2018) and the Cappers Deposit where Air Core hole NAC122 intercepted 2.2m @ 211ppm  $U_3O_8$  from 3.55m (refer to Energy Metals - ASX Announcement dated 17/09/2009).

### Oceana Lithium Limited

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#### Directors and Management

**Dr Qingtao Zeng**

Chairman

**Caue (Paul) Araujo**

Chief Executive Officer

**Chen Chik (Nicholas) Ong**

Non-Executive Director

**Daniel Smith**

Non-Executive Director and Company Secretary

**Mike Sousa**

Exploration Manager / Competent Person, Brazil

**Cintia Maia**

Corporate Director, Brazil

**Carolina Carvalho**

Manager Legal Affairs, Brazil

#### Projects

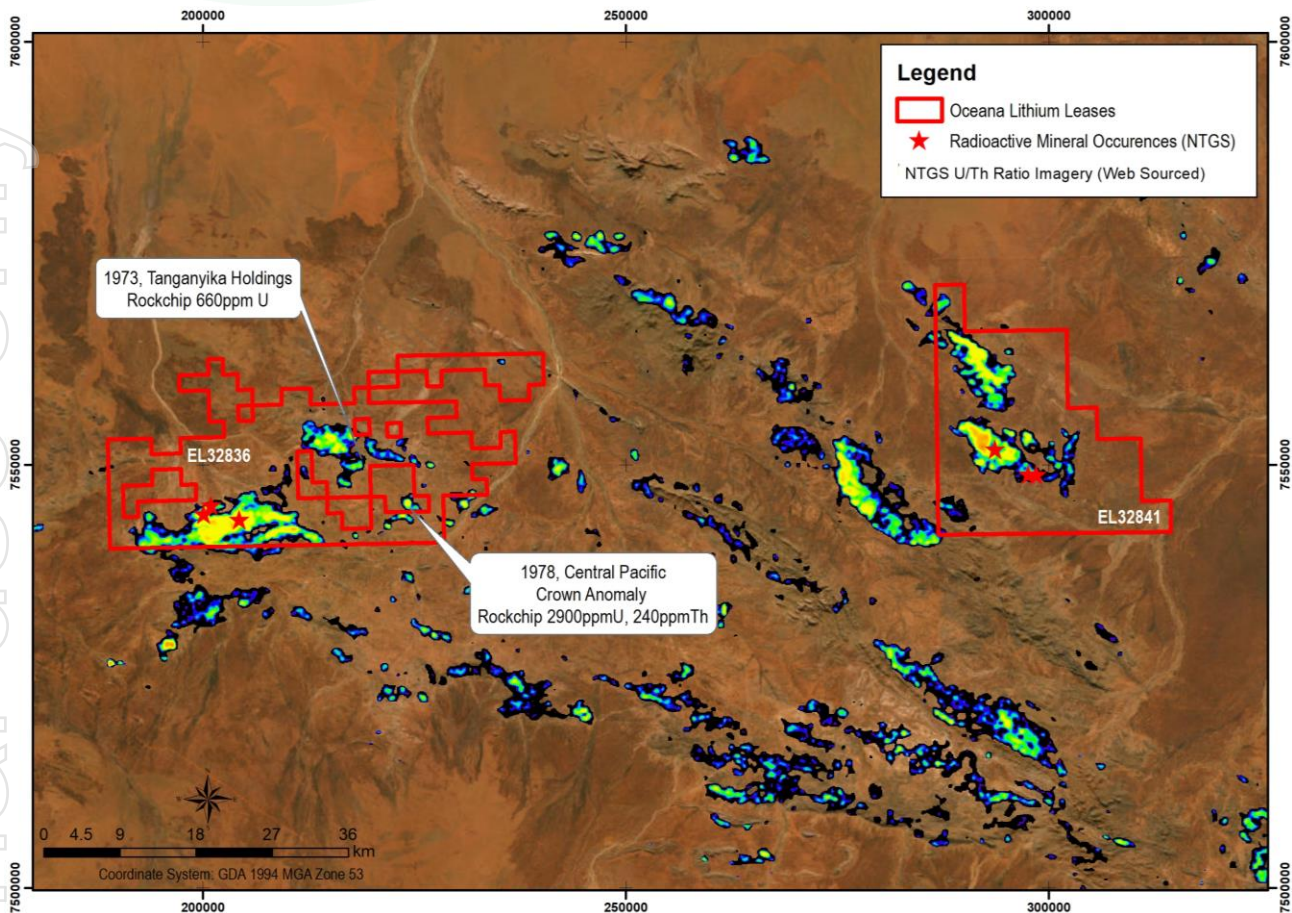
Solonópole Project  
(Ceará, BRAZIL)

Napperby Project  
(Northern Territory, AUSTRALIA)

Shares on Issue 82,498,000

Tradeable Shares 52,476,500

ASX Code OCN



**Figure 1:** Map showing U/Th ratio and known uranium, thorium and REEs mineral occurrences at Napperby Project

The following passages are taken from the independent geological report included in the Oceana's prospectus and are still very relevant today.

Recent publications by the Northern Territory Geological Survey refer to the Wangala Granite as a composite multi-phase pluton that has been subject to a late hydrothermal event of ca 1575Ma (Chewings) age, which has introduced phosphorus, uranium, fluorine, tin, tungsten and REEs.

Of particular interest is a poorly exposed muscovite-rich granite with abundant pegmatite bodies at the eastern end of the pluton, believed to be the final phase of intrusion. This phase is especially fertile for both Niobium-Yttrium-Fluorine (NYF) and Lithium-Caesium-Tantalum (LCT) segregations in pegmatite, yet surprisingly there are very few analyses for lithium. Bed-rock interpretation indicates this phase is extensive in the sub-crop beneath alluvial-colluvial flats.

This area has been subject to shallow geochemical drilling mainly for uranium exploration in the 1970s, but there is no information on the lithological and geochemical nature of the bedrock.

The contact zones and the eastern termination of the Wangala pluton against Lander Formation are highly prospective for rare-element pegmatites and REEs but still totally unexplored.

The Ennugan Mountains Granite of 1621 Ma (post Yambam) age is a two-phase pluton. The southern phase is an I-type biotite-hornblende granite which implies derivation from lower crustal melting. It is characterised by lenses of biotite schist with elevated uranium, thorium, phosphorus, fluorine and REEs.

Uranium exploration in the 1970s primarily focused on paleo-channel uranium, but also identified bedrock localities with elevated uranium (up to 320ppm) and thorium (up to 820ppm). These anomalies are associated with accessory allanite, monazite and xenotime.

In 1973, Tanganyika (CR1973 - 00068) explored an old EL749 for gold, tin, tungsten, tantalum and uranium. Field work identified several uranium anomalies associated with east-west oriented shear zones. One significant radiometric anomaly with approximate coordinates 218900mE, 7550300mN was identified in a shear zone 4km east of Double Dam within the Wangala Granite where a rock chip gave 660ppm U. This corresponds to a uranium locality on the Stewart map at approximate coordinates 218820mE, 7550450mN.

In 1978, Central Pacific, acting as Yuendumu Mining Company, held old ELs 1316 and 1317 which covered most of the Wangala area (CR1978-0103, 1978-0108). It initially focused on uranium, and amongst several other regional uranium anomalies, obtained a rock chip analysis of 0.29% U and 240ppm Th from a small "syenite" outcrop on the alluvial plain of one of the Crown Creek tributaries just south of 21 Mau Hills, which was called the Crown Anomaly (approximate coordinates 224672mE, 546064mN). Later work by ANZECO (CR1979-0103) showed this to be the secondary mineral autunite (uranyl phosphate) and the primary mineral brannerite. This occurrence is not on the Stewart Map.

As part of the uranium search, ANZECO investigated the radiogenic apatite-biotite schist enclaves within the Wangala Granite in the Quartz Hill area of the Wangala Hills. This work identified several semi continuous apatite-biotite lenses and quartz-tourmaline-topaz veins several hundreds of metres in length and up to 5m wide.

Only the apatite-bearing schist was uraniferous, with extensive rock-chip sampling giving averages of 183ppm U (maximum 820ppm) and 220ppm Th (max 490ppm). Thin section petrology was not able to identify the primary radiogenic mineral within the apatite. Zircon, allanite, topaz and sphene were common accessory minerals. Qualitative spectral analysis identified "trace" amounts of cerium, lithium, lanthanum, yttrium and niobium. No analysis for REEs was done.

### Near Future Exploration

Due to the large amount of work that has been conducted by previous explorers and Oceana's geologists, a comprehensive data review will be completed, including preliminary rock chip and soil sampling results. This could be followed up with reconnaissance stream sampling if necessary, in order to define areas that will be subjected to more robust exploration techniques such as soil sampling and ground (or drone) radiometric geophysical surveys.

Oceana plans to conduct follow-up exploration activities to target Uranium and Rare Earth Elements (REE) in parallel with Lithium-Caesium-Tantalum (LCT) pegmatites.

### Changes to Directors' Remuneration, Registered Address and Principal Place of Business

In response to current market conditions for junior exploration companies, the Board has decided to further reduce Directors' remuneration by an additional 20%, which represents a 35% reduction when compared to the Oceana's IPO in July 2022. The Company has also identified numerous cost-saving opportunities to optimize expenditures and deliver value through more exploration at Solonópole and Napperby projects.

Effective from 1 March 2024, the registered address and principal place of business of the Company will be located at **Minerva Corporate, Level 8, 99 St Georges Terrace, Perth, Western Australia, 6000.**

The Company ended the December 2023 quarter with approximately **\$3.3 million** in cash and no debt.



Authorised for release by the Board of Oceana Lithium Ltd.

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### Competent Person Statement

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The information in this announcement that relates to exploration results is based on information reviewed, collated and fairly represented by Mr Graeme Fraser who is a Member of AusIMM. Mr Fraser visited the project site and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Fraser consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. Mr Fraser confirms information in this market announcement is an accurate representation of the available data for the exploration areas mentioned herein.

The exploration results contained in this announcement were first reported by the Company in its prospectus dated 4 April 2022 and announced to ASX on 29 June 2022. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus.

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### About Oceana Lithium

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**Oceana Lithium Limited** is a mineral exploration and development company with advanced + early-stage Lithium exploration projects in prime mining jurisdictions in Brazil and Australia.

Oceana's Chief Executive is Brazilian born and educated Caue Araujo who has wide industry experience in mining project development, including critical minerals. Having had his early training as a geologist with Vale in Brazil, Caue has a practical understanding of local operating conditions including social and cultural sensitivities and corporate and compliance challenges that must be respected to successfully operate in Brazil. Cintia Maia, Director of the Company's wholly owned subsidiary in Brazil, Ceará Lítio Mineração, provides local knowledge and support to the Company's Brazil exploration team led by Mr Mike Sousa. Non-Executive Chairman and geologist Dr Qingtao Zeng provides oversight of the Company's exploration effort at the Napperby Project in the Northern Territory. Mr Daniel Smith, an experienced company director, is Non-Executive Director and Company Secretary. Non-Executive Director Mr Chen Chik (Nicholas) Ong adds further experience in ASX listing rules compliance and corporate governance.

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## APPENDIX 1

### 1 JORC CODE, 2012 EDITION – TABLE 1

#### 1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>No new sampling has been done in the preparation of this announcement.</li> <li>Stream sediment: methods of historical sampling on Oceana's tenements are given in referenced company reports.</li> <li>Vacuum drilling: used for historical geochemical sampling of the base of the regolith, as referenced in company reports.</li> <li>Rock Chips: some historical rock chip analyses used in this report are taken from company reports referenced in this report.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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>	<ul style="list-style-type: none"> <li>No new drilling was undertaken in the preparation of this announcement.</li> <li>RAB drilling: Some historical RAB drilling has taken place on Oceana's tenements by previous explorers, as referenced in this announcement.</li> <li>RC drilling: No historical RC drilling has taken place on Napperby's tenements.</li> <li>Core drilling: No core is referred to in the previous exploration reports.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no drilling reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>assessed.</i></p> <ul style="list-style-type: none"> <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>	
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies 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>	<ul style="list-style-type: none"> <li>Lithological log codes are available for most open-file historic drill programs.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Statutory reports circa 2000 and later are in digital form and provide details on sample collection and preparation.</li> <li>Earlier historic reports give little or no details on sample collection and preparation.</li> <li>No resources reported, so no full QA/QC report carried out to date.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Assays recorded in this announcement are drawn entirely from historical exploration reports.</li> <li>Some early reports of 1970s and 1980s give only tabulations in text, and do not present certificates of analyses, or give analytical procedures.</li> <li>Recent reports give certificates and codes of analyses.</li> <li>Analyses has been done by previous explorers</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>using a variety of commercial laboratories that use their own internal standards.</li> <li>QA/QC procedures are recorded in digital assay files for more recent analyses.</li> <li>No resources reported, so no full QA/QC report carried out to date.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No verification of historical assays has been attempted.</li> <li>No adjustments to any historic analyses have been made.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Samples points are drawn from figures and tables in statutory digital reports to NTGS. These are on GDA94 Zone 53S coordinate system.</li> <li>Regarding analogue data, sample location points have been compiled into GIS format by digitizing maps and plans.</li> <li>Regarding digital company reports, sample points are taken from digital files.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Stream-sediment sample spacings are given in the statutory company reports.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no drilling or trenching reported.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Historical work only and sample security not reported..</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Audit of sampling techniques from previous explorers is not possible.</li> </ul>

## 1.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>EL32836 is 100% owned by Oceana NT Pty Ltd.</li> <li>ELA32841 is in application stage and will need liaison with the Central Land Council of the Northern Territory. There are no contested overlaps.</li> <li>Oceana NT Pty Ltd is a fully owned subsidiary of Oceana Lithium Ltd.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All open-file Company Reports relating to the Napperby Tenements have been assessed and those directly relevant are summarised in the announcement.</li> <li>Oceana has no reason not to trust the sampling positions, method, or results provided by previous explorers.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Napperby lies in the Aileron Province on the southern margin of the North Australian Craton. They cover radiogenic, high-heat generating granite related to Yambah Orogeny.</li> <li>LCT pegmatite intrusions occur within EL32836.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Historic drilling on the ELA328941 is for geochemical sampling of shallow regolith, and not classified as target drilling.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>○ hole length.</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>	
Data aggregation methods	<ul style="list-style-type: none"> <li>● In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>● Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>● The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>● No data aggregation undertaken.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>● These relationships are particularly important in the reporting of Exploration Results.</li> <li>● If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>● If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>● Not Applicable as no drilling reported.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>● Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>● Appropriate figures provided.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>● Relevant historical data to uranium, lithium, REEs and pegmatite minerals was included in the announcement.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>All meaningful available exploration data, previous geological mapping and geochemical sampling has been considered herein.</li> <li>Due to Napperby being early Greenfields exploration in nature, there is no other material exploration data available for this project at this stage.</li> <li>New meaningful and material data will be reported on as it becomes available.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg 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>	<ul style="list-style-type: none"> <li>Further work will be detailed in future announcements.</li> </ul>

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