

PROPOSED STRATEGIC LITHIUM ACQUISITION LYNDON PROJECT - WESTERN GASCOYNE

HIGHLIGHTS

- **Odessa Minerals** to acquire the “**Lyndon Project**” located 200km NE of Carnarvon in the Gascoyne Complex of Western Australia covering an area of 606km², subject to Shareholder approval
- The attractive multi-commodity acquisition consists of an area highly prospective for **Lithium (Li), Rare Earth Elements (REE) and Nickel-Copper (Ni-Cu)**
- The acquisition will diversify Odessa’s commodity exposure, especially to the regenerative battery metals market, to enhance its value proposition and returns to shareholders

Lithium Potential:

- An area in excess of **50km² with numerous clusters of pegmatites prospective for Lithium**
- Highly anomalous Government (GSWA) Lithium geochemistry of 49.6ppm¹

Rare Earth Element (REE) Potential:

- Several aeromagnetic features similar to those associated with REE carbonatites recently discovered 90km to the SE by Dreadnought (ASX:DRE)

Nickel - Copper Potential:

- 32 strike-kilometres of Mundine Well Dolerite prospective for **Magmatic Nickel-Copper Sulphide mineralisation**
- Ni-Cu sulphide deposits currently being evaluated by First Quantum/Dreadnought 30km to the east²

Odessa’s CEO, Alistair Stephens, commented: “*This Lyndon Project acquisition is an excellent opportunity for Odessa to enter the battery metals sector, in a part of the Gascoyne Complex that is host to a number of newly discovered occurrences of Lithium, Rare Earth and Nickel-Copper. We remain resolutely focussed on progressing our cornerstone diamond projects in the Kimberley region, and as work becomes limited during the northern wet season, this acquisition will provide an excellent year-round exploration project for Odessa.*”

¹ Geological Survey of Western Australia (GSWA, WACHEM No 208317)

² Dreadnought Resources Limited ASX Announcement 14 February 2022



Odessa Minerals Limited (ASX:ODE) (Odessa or the Company) is pleased to announce it has signed a binding agreement to acquire three (3) Exploration Licence Applications referred to as the “**Lyndon Project**” (refer Table 1; “**Tenements**”) from CRC Minerals Pty Ltd that covers 606 km² in the Gascoyne Complex of Western Australia.

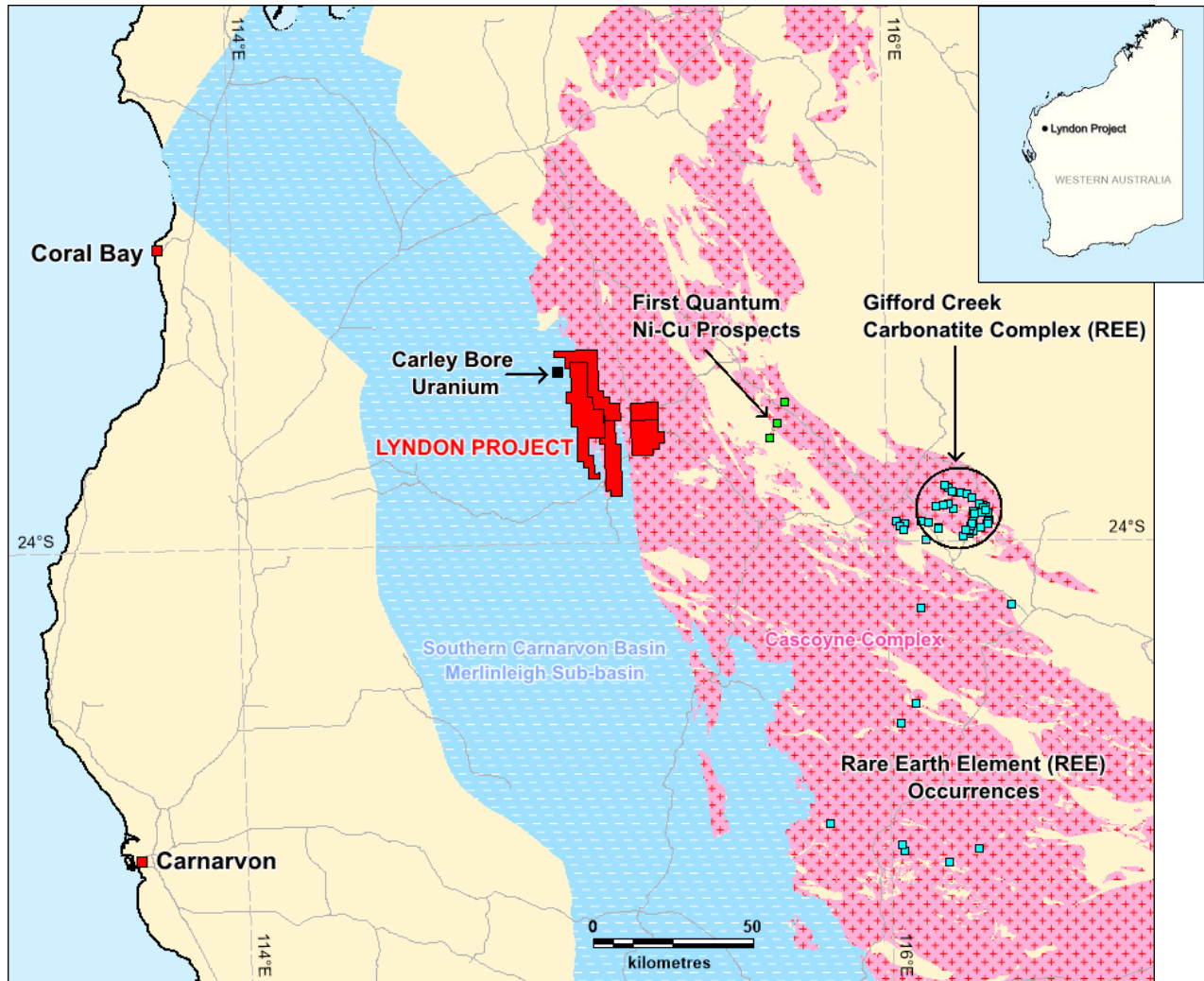


Figure 1: Lyndon Project. Location and Regional Geology

LYNDON PROJECT – Geology and Mineral Targets

The Lyndon Project tenements are primarily prospective for **Lithium, Rare Earths and Nickel-Copper Sulphide mineralisation**.

The Lyndon Project contains excellent potential for the discovery of new Lithium-rich pegmatites, Rare Earth Carbonatites and Magmatic Nickel-Copper Sulphide deposits in what is becoming a significant, emerging metallogenic province that has recently seen the discovery of a number of highly promising Lithium-bearing Pegmatites, REE-rich Carbonatites and Magmatic Ni-Cu sulphide deposits.



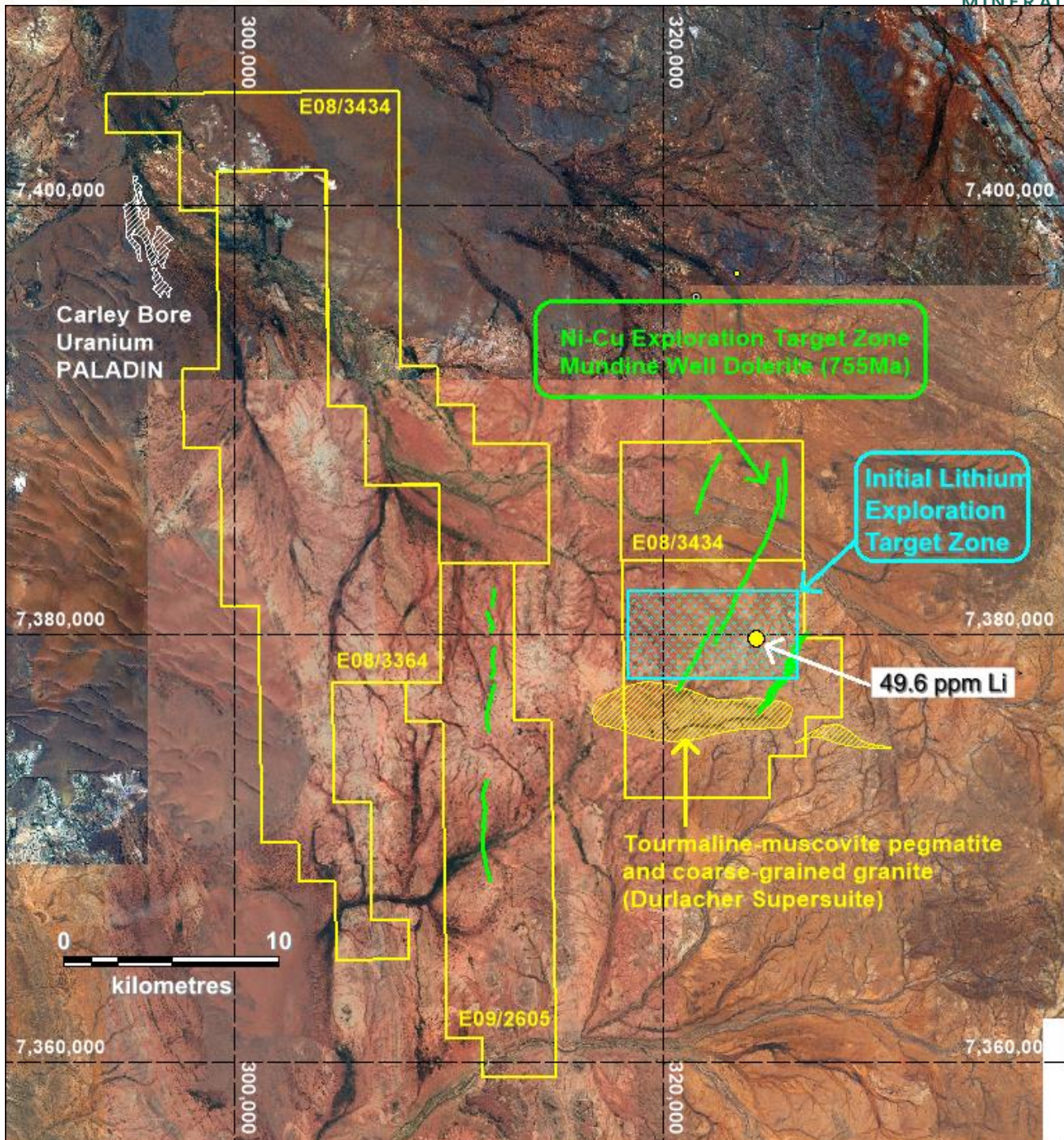


Figure 2: Lyndon Project. Location of the Government (GSWA) Lithium geochemistry and key target areas for Lithium, REE, Nickel and Copper.

The Lyndon Project area has three (3) principal discovery opportunities;

1. **Lithium-bearing Pegmatites.** Sampling by the Geological Survey Western Australia (GSWA, No. 208317) has identified anomalous Lithium geochemistry (**49.6ppm Li**) in the vicinity of several outcropping pegmatites. The area is unexplored for lithium and represents an excellent opportunity for new lithium discoveries;



2. **Rare Earth Element Carbonatites:** The area contains several geophysical features similar to those associated with REE carbonatites on the neighbouring Mangaroon Project currently being explored by Dreadnought Resources Limited (ASX:DRE).

3. **Magmatic Nickel-Copper Sulphide mineralisation** in mafic intrusions of the Mundine Well Dolerite. An intrusion (the "Money Intrusion") that is part of the same mafic suite (age, rock-type) is currently being explored by Dreadnought - First Quantum 30km to the west. The Money Intrusion is host to several significant and promising Nickel-Copper Sulphide occurrences. The mostly outcropping mafic sills within the Lyndon Project area have never before been explored for magmatic sulphide mineralisation.

Tenement No. Name	E08/3364 Ebra Bore	E09/2605 Lyndon	E08/3434 Daylight Well
Mineral Targets	REE	Li, REE, Ni-Cu	Li, REE, Ni-Cu
Blocks	70	69	61
Area (sq. km.)	220	207	179
Application Date	31 May 2021	30 July 2021	9 September 2021
Grant Date	Pending	Pending	Pending

Table 1: Lyndon Project. Tenement Schedule ("Tenements").

Acquisition terms:

Odessa is proposing to acquire 100% of the Lyndon Project **Tenements** (Table 1) from CRC Minerals Pty Ltd. ("CRC") for the following consideration:

- \$10,000 non-refundable deposit payable by Odessa to CRC;
- The acquisition consideration comprises:
 - Cash payment of \$90,000 (excluding GST);
 - 52,000,000 shares in Odessa and 15,000,000 4-year unlisted options (exercisable at 4 cents), with 80% of the shares and options to be issued upon the grant of any two of the three Tenements and the remaining 20% to be issued on the grant of the final third Tenement ("Consideration Securities"); and
 - The grant of a 1.3% net smelter royalty in favour of CRC.

The acquisition of the Tenements (and payment of the acquisition consideration) is subject to conditions (which may be waived by Odessa), including:

- Grant of any two of the three Tenements;
- Receipt of Ministerial consent under the Mining Act 1978 (WA) to the transfer of the any two of the three Tenements from CRC to Odessa; and



- Odessa obtaining shareholder approval for the issue of the Consideration Securities. Odessa intends to obtain shareholder approval just prior to or following grant of the Tenements to CRC.

A break fee of \$200,000 will be payable to CRC in the event that Odessa's shareholders do not approve the acquisition of the Lyndon Project and the other conditions are satisfied.

The vendors of the Lyndon Project are unrelated parties of the Company.

This announcement has been approved for release by the Board of Odessa Minerals.

ENQUIRIES

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Competent Persons Statement

The information in this report that relates to mineral exploration from the Lyndon Project is based on information compiled from Government geochemical data and published geological maps reviewed by Mr. Robert Perring who is a geologist and Director of CRC Minerals Pty Ltd. Mr. Perring is a Registered Professional with the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposits 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' (JORC code). Mr. Perring consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



JORC CODE, 2012 EDITION – TABLE 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg 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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘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.</i> 	<ul style="list-style-type: none"> 49.6ppm Li assay reported in this announcement extracted from the WACHEM database. GSWA sample number 208317. Sample location: 324407E, 7379748N (GDA94/MGA 50) WACHEM database (DMIRS-047) is a public-domain compilation of multi-element geochemistry of unconsolidated surface material (regolith) and drill core collected by the Geological Survey of Western Australia. Samples have been analysed for a range of major element oxides, trace elements and rare earth elements (REE) using a variety of analytical approaches at commercial, government and university laboratories. WACHEM contains the geochemistry for approximately 40,000 samples and is available for download from the GSWA data website. In the Lyndon area, samples were collected by the GSWA at a density of approximately one sample pre 15 sq.km.
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Not applicable.
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain</i> 	<ul style="list-style-type: none"> Not applicable.



Criteria	JORC Code explanation	Commentary
	<i>of fine/coarse material.</i>	
Logging	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Not applicable.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Not applicable.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • GSWA reports that reference materials (standards), duplicates and blanks were used to gauge the quality of analyses reported in the WACHEM database.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. 	<ul style="list-style-type: none"> • Not applicable.



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	
<i>Location of data points</i>	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> GSWA reports that sample accuracy is within 10metres.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Given the low sample density (approximately 1 per 15 sq.km.), the reported geochemistry is likely to only reflect the geochemistry of lithologies that outcrop within about 150m of the reported sample site.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> Orientation work is unlikely to have been undertaken by the GSWA given the regional nature of the sampling.
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Not reported by GSWA.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Not reported by GSWA.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Lyndon Project area held under three Exploration License applications applied for by CRC Minerals Pty Ltd. E08/3364 Application date: 3 May 2021 E08/3434 Application date: 9 September 2021 E09/2605 Application date: 30 July 2021 CRC Minerals Pty Ltd is not aware of any circumstances that would prevent the tenements applications from being granted in 2022. The applications are currently passing through the WA Mines Department (DMIRS) standard processing processes.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historical gravity and VTEM data collected by a uranium explorer over the northern part of what is now E08/3364 during 2007 – 2011. No surface sampling or drilling exploring for Li, REE or Ni-Cu has ever been conducted within the project area.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Area considered prospective for Li-bearing pegmatites, REE-bearing carbonatites and magmatic Ni-Cu sulphide in mafic sills. Mineralisation of these types has been discovered by other explorers elsewhere within the Gascoyne Complex.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> 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"> 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. 	<ul style="list-style-type: none"> No drilling exploring for Li, REE or Ni-Cu has ever been conducted within the project area.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) 	<ul style="list-style-type: none"> Not applicable.



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	<p>and cut-off grades are usually Material and should be stated.</p> <ul style="list-style-type: none"> 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. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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 (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Not applicable.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Summary diagram showing project location and initial prospective areas for Li and Cu-Ni included in this announcement.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Reporting in this announcement is considered fair and reasonable at this pre-grant stage.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The GSWA 1:100,000 scale Lyndon Geological Series Map (#1950) shows a large area of tourmaline-muscovite pegmatite that largely outcrops within the Lyndon Project area.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the 	<ul style="list-style-type: none"> Fields programs will be developed once the exploration licenses have been granted and a site visit can be conducted to determine the best media for sampling. However, future field surveys are likely to include geological mapping, and soil, rock and drainage sampling to delineate anomalous prospects



Criteria	JORC Code explanation	Commentary
	<i>main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	for higher-density investigations, with the aim of establishing the source of any metal anomalism.

