

6 June 2023

# EM survey confirms immense potential of Leliyn Graphite Project in NT

**Dimensions of the graphitic schist outlined in the survey are entirely consistent with the large Leliyn Exploration Target**

## Highlights

- **Ground electro-magnetic (EM) survey completed over Leliyn Exploration Target**
- **Leliyn has a large Exploration Target of 200-250Mt at 8-11% Total Graphitic Carbon for 16-27Mt of contained graphite<sup>1</sup>**
- **EM survey generates strong response over interpreted graphitic schist unit**
- **RC and Diamond Core drilling continuing**

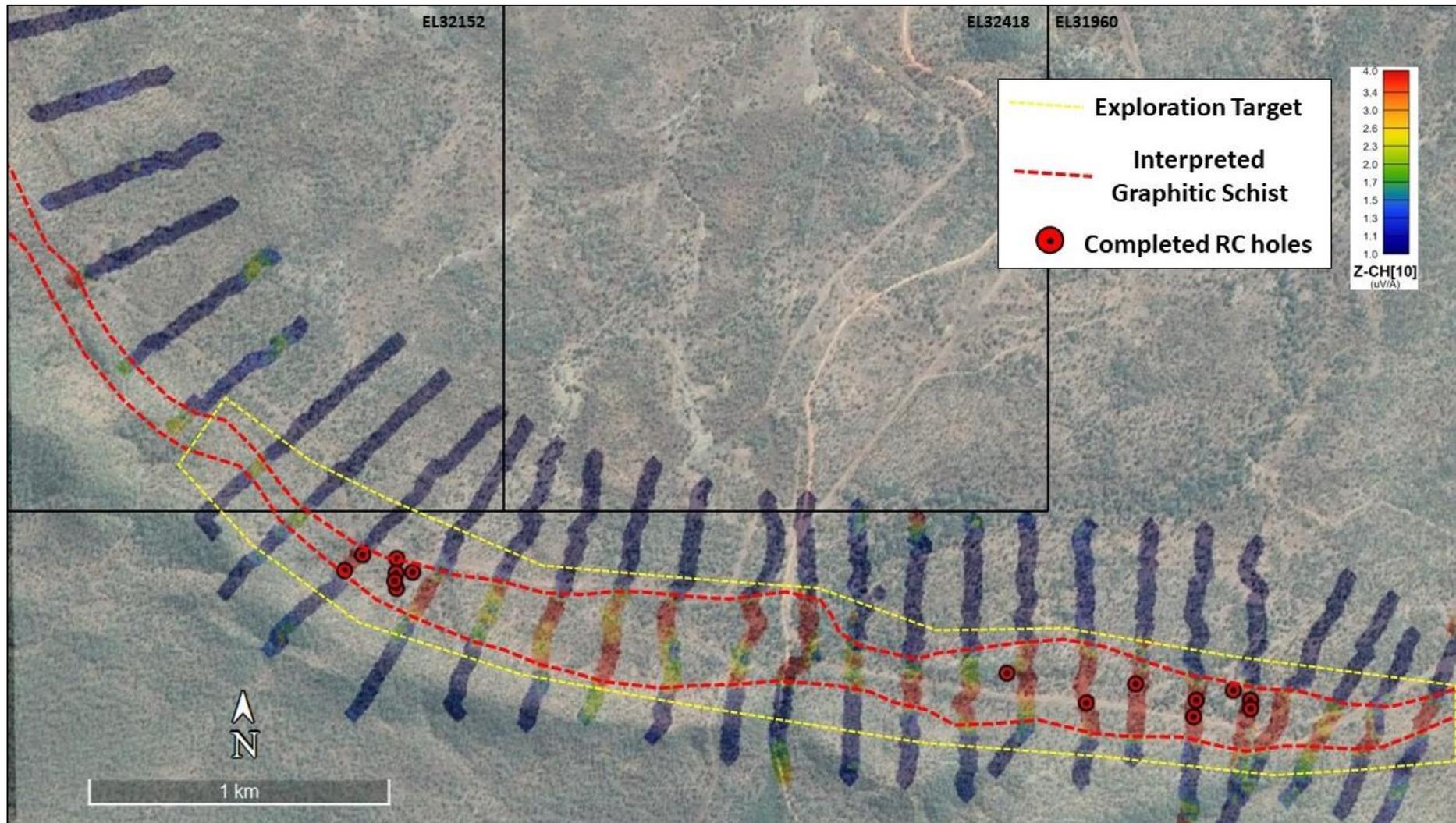
Kingsland Minerals Ltd (ASX:KNG) is pleased to announce the highly promising results of the recently-completed ground EM survey over its Leliyn Graphite Project in the Northern Territory.

The survey was completed over the area which underpins the Leliyn Exploration Target and has proven to be very successful in delineating the graphitic schist unit, which returned a high EM response. The EM response over yet to be drilled ground is similar to that where holes that have been drilled previously have significant graphitic schist intersections.

Kingsland Managing Director Richard Maddocks said: *“The EM survey clearly illustrates the dimensions and tonnage potential of the graphitic schist at Leliyn. RC drilling is confirming the width of the graphitic schist unit and we are eagerly awaiting assay results.”*

---

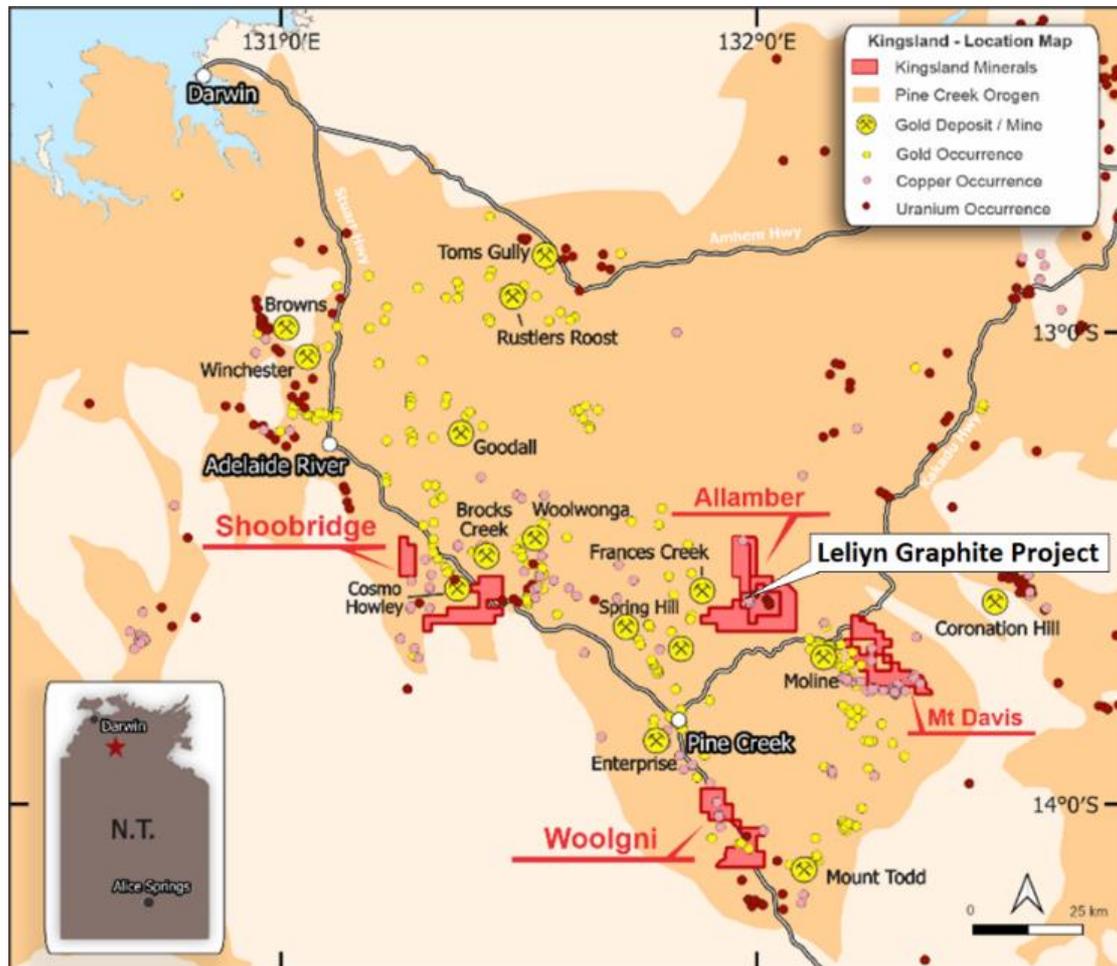
<sup>1</sup> Refer to ASX announcement ‘Graphite Exploration Target’ released by KNG on March 21 2023. The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised.



**Figure 1: Ground EM survey**

Figure 1 shows the EM survey lines over the interpreted graphitic schist unit and Exploration Target area. Completed RC drill holes within the 5km-long Exploration Target have intersected significant widths of graphitic schist and are also shown on Figure 1.<sup>2</sup> The three lines to the north-west did not extend far enough to survey the interpreted graphitic schist unit so may be extended at a later date.

<sup>2</sup> Refer to ASX announcement 'First Holes Intersect 150m of Graphite Schist at Leliyn' released on 25 May 2023



**Figure 2: Kingsland Minerals Northern Territory Exploration Projects**

THIS ANNOUNCEMENT HAS BEEN AUTHORISED FOR RELEASE ON THE ASX BY THE COMPANY'S BOARD OF DIRECTORS

### **About Kingsland Minerals Ltd**

Kingsland Minerals Ltd is an exploration company with assets in the Northern Territory and Western Australia. Kingsland's focus is exploring the Leliyn Graphite Project in the Northern Territory. The Company is confident that Leliyn has significant potential, as shown by the substantial Exploration Target of 200-250 million tonnes grading 8-11 per cent Total Graphitic Carbon (TGC) for contained graphite of 16-27Mt<sup>3</sup>. The Exploration Target is based on a graphitic schist measuring 5km long, 200m deep and 100m wide. The 5km strike length of the schist sits within a longer 20km-long graphitic schist. The initial exploration program will focus on the 5km stretch which hosts the Exploration Target. This will underpin a maiden JORC Resource. Kingsland believes there is also significant exploration potential within the remaining 15km of graphitic schist.

<sup>3</sup> The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised

Following a successful listing on the ASX in June 2022 company details are as follows:

**FOLLOW US ON TWITTER:**

<https://twitter.com/KingslandLtd>

**CAPITAL STRUCTURE**

Shares on issue: 45,019,842

Options on issue: 18,694,920

**INVESTOR RELATIONS**

Read Corporate

Paul Armstrong

Email: [info@readcorporate.com.au](mailto:info@readcorporate.com.au)

Tel: +61 8 9388 1474

**BOARD OF DIRECTORS**

Mal Randall: Non-Executive Chairman

Richard Maddocks: Managing Director

Bruno Seneque: Director & Company Secretary

Nicholas Revell: Non-Executive Director

**SHAREHOLDER CONTACT**

Bruno Seneque

Email: [info@kingslandminerals.com.au](mailto:info@kingslandminerals.com.au)

Tel: +61 8 9381 3820

**Competent Persons Statement**

*The information in this report that relates to Exploration Results is based on information compiled by Richard Maddocks, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Richard Maddocks has sufficient experience that 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'. Richard Maddocks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Richard Maddocks is a full time employee of Kingsland Minerals Ltd and holds securities in the company.*

*The information in this announcement referring to the Leliyn Exploration Target and RC drilling is extracted from the reports entitled 'Graphite Exploration Target' created on March 21 2023 and 'First Holes Intersect 150m of Graphite Schist at Leliyn' created on 25 May 2023, both are available to view on [www.kingslandminerals.com.au](http://www.kingslandminerals.com.au) or on the ASX website [www.asx.com.au](http://www.asx.com.au) under ticker code KNG. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.'*

## JORC Tables

### Section 1: Sampling Techniques and Data Leliyn Graphite Project

| Criteria                     | JORC Code explanation  | Commentary  |
|------------------------------|--|---|
| <b>Sampling techniques</b>   | <ul style="list-style-type: none"> <li>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.</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. 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.</li> </ul> | <ul style="list-style-type: none"> <li>RC drilling samples were collected as 1m intervals via a riffle splitter off the drill rig.</li> </ul>                               |
| <b>Drilling techniques</b>   | <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>RC drilling techniques were used.</li> </ul>   |
| <b>Drill sample recovery</b> | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>   | <ul style="list-style-type: none"> <li>RC drilling sample recoveries are considered to be high</li> </ul>   |
| <b>Logging</b>               | <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>All drilling was qualitatively geologically logged recording lithology, mineralisation colour, weathering and grain size.</li> </ul> |

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| <b>Sub-sampling techniques and sample preparation</b> | <ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul> | <ul style="list-style-type: none"> <li>• No assays have been reported</li> </ul>  |
| <b>Quality of assay data and laboratory tests</b>     | <ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>  | <ul style="list-style-type: none"> <li>• No assay results have been reported</li> <li>• The EM acquisition program consists of 28 individual lines oriented across strike and spaced at ~200-300m intervals.</li> <li>• A Loupe system was used to acquire EM data.</li> <li>• Production rates for the Loupe system were estimated to be 5-10 line-km per day with a team of 2 technicians.</li> </ul> |
| <b>Verification of sampling and assaying</b>          | <ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>  | <ul style="list-style-type: none"> <li>• No assays have been reported.</li> </ul>   |
| <b>Location of data points</b>                        | <ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• RC holes were surveyed with a hand held GPS with +/- 5m accuracy.</li> <li>• Geophysical survey lines were located with an in-built GPS with +/- 5m accuracy.</li> </ul>   |
| <b>Data spacing and distribution</b>                  | <ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>  | <ul style="list-style-type: none"> <li>• Drill spacing is designed on 200m spacing with about 50m spacing along drill lines.</li> <li>• The data at this stage is only being used to establish the width and orientation of the graphitic schists. Additional drilling will be required to estimate Mineral Resources</li> </ul>  |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Orientation of data in relation to geological structure</b> | <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>Drilling is generally perpendicular to the strike direction of then graphitic schists.</li> </ul> |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>  | <ul style="list-style-type: none"> <li>Samples are taken to the assay lab by Kingsland personnel.</li> </ul>                             |
| <b>Audits or reviews</b>                                       | <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>No audits or reviews of sampling techniques have been undertaken.</li> </ul>                      |

## Section 2: Reporting of Leliyn Graphite Project Exploration Results

| Criteria                                       | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Mineral tenement and land tenure status</b> | <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 license to operate in the area.</li> </ul> | <ul style="list-style-type: none"> <li>The Leliyn Graphite Project is located on tenements EL 31960 and EL 32152. These tenements are 100% owned by Kingsland Minerals Ltd. There are no known encumbrances to conducting exploration on these tenements.</li> </ul>   |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <ul style="list-style-type: none"> <li>There has been an extensive history of exploration for uranium and copper over the past 40 years. There has however been only limited work done focussed on graphite. Thundelarra Exploration (now Ora Gold Ltd) sampled some holes in 2012 for graphite at their Hatrick copper prospect and Cleo uranium prospect. These samples indicated the presence of significant grade and thickness of graphite mineralisation measured as total graphitic carbon (TGC). In 2017 one diamond drill hole TALD001 was drilled into the graphitic schist and sampled for TGC. Significant grades and widths of graphite mineralisation were encountered. Samples from TALD001 were submitted to Pathfinder Exploration Pty Ltd for thin section petrographical analysis.</li> </ul> |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>  | <ul style="list-style-type: none"> <li>Carbonaceous sediments of the Masson Formation have been contact metamorphosed by the Cullen Granites. This has metamorphosed carbon to graphite and converted shales to schists.</li> <li>This contact extends for about 20 km within Kingsland's tenement package.</li> </ul>   |
| <b>Drill hole information</b>                  | <ul style="list-style-type: none"> <li>A summary of all information material to the under-standing 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> </ul> </li> </ul>  | <ul style="list-style-type: none"> <li>Drilling information is included in this announcement</li> </ul>  |

| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
|   | <ul style="list-style-type: none"> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length</li> <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>  |  |
| <b>Data aggregation methods</b>   | <ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul> | <ul style="list-style-type: none"> <li>No compositing or aggregation has been used.</li> </ul>   |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <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 (e.g. 'down hole length, true width not known').</li> </ul>   | <ul style="list-style-type: none"> <li>Drilling has been perpendicular to the strike direction. The true width of mineralisation will vary but is generally expected to be from 70% to 80% of the reported down-hole widths.</li> </ul>          |
| <b>Diagrams</b>   | <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>Relevant diagrams have been included within the main body of text.</li> </ul>   |
| <b>Balanced Reporting</b>   | <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>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</li> </ul>  | <ul style="list-style-type: none"> <li>No assay results have yet been received for this drilling.</li> <li>The competent person deems the reporting of these drill results to be balanced.</li> </ul>  |
| <b>Other substantive exploration data</b>                               | <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;</li> </ul>   | <ul style="list-style-type: none"> <li>RC and diamond drilling will progress at Leliyn ultimately aimed at the estimation of a Mineral Resource.</li> <li>Diamond drill samples will be used for metallurgical test work to determine</li> </ul> |

| Criteria                   | JORC Code explanation   | Commentary  |
|----------------------------|---|---|
|                            | <p><i>bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>   | <p>flotation characteristics and the suitability of Leliyn graphite for battery end uses.</p> <ul style="list-style-type: none"> <li>• There is no other substantive data to report. Exploration at Leliyn is at an early stage with only limited historical exploration data relevant to graphite mineralisation.</li> </ul> |
| <p><b>Further work</b></p> | <ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul> | <ul style="list-style-type: none"> <li>• Diamond drill samples will be used for metallurgical test work to determine flotation characteristics and the suitability of Leliyn graphite for battery end uses.</li> </ul>  |