27 September 2023

Leliyn Graphite Project, Northern Territory

Assays Reveal Significant Gallium By-Product Potential

These pivotal results have the potential to enhance the economics of the large-scale Leliyn Graphite Discovery

Highlights

- **Samples taken from drilling at the Leliyn graphite discovery have returned assays containing significant levels of Gallium (Ga)**
- **The Gallium intersections include:**
  - **266m @ 15.0 g/t Ga from 0m (LEDD_05)**
  - **204m @ 15.8 g/t Ga from 0m (LERC_14)**
  - **150m @ 18.9 g/t Ga from 0m (LERC_13)**
  - **150m @ 21.1 g/t Ga from 0m (LERC_10)**
- **Gallium is a critical element used in advanced electronics and is now widely sought after around the world**
- **The main global supplier is China, which recently introduced export controls for Gallium and Germanium**
- **The Gallium price is currently more than A$700/kg, highlighting the potential significant impact of these assays on the Leliyn project**
- **A 100kg sample of graphitic schist has recently been submitted for graphite metallurgical test-work, focussing on flotation characteristics of the graphite**
  - This sample will also be assayed during the test-work to determine where the gallium reports to in the flotation process

Kingsland Minerals Ltd (ASX:KNG) is pleased to announce exceptional Gallium assays with strong grades over substantial widths at its Leliyn Graphite Project in the Northern Territory.

Leliyn is emerging as a major graphite discovery, with mineralisation intersected over a 5km corridor. This stretch sits within a 20km visible graphitic schist but drilling to date has focused solely on the 5km corridor.

The Gallium assays add another significant level to the potential of Leliyn.

Kingsland Managing Director Richard Maddocks said:

"The discovery of significant gallium at Leliyn is potentially very significant. Gallium is a critical element and may provide a potentially valuable by-product from the development of the Leliyn graphite project. Our prime focus remains graphite but we will include gallium in the upcoming metallurgical test-work to begin to assess the viability of extracting it from the graphitic schist".

Assay Details

As part of the routine assaying procedures at Leliyn, drill holes were analysed for a 40 multi-element suite as well as for Total Graphitic Carbon (TGC). This was initially conducted to assess the mineralogy of the graphitic schist and to provide data to aid in the metallurgical analysis. After conducting checks at the assay laboratory, it is now possible to confirm the presence of significant levels of the critical element Gallium (Ga).

Figure 1: Analysis of Critical Minerals, source: US Dept of Energy

Figure 1 shows a summary of critical minerals from the United States Department of Energy.[1] Both Graphite and Gallium are listed as critical based on supply risk and importance to energy. It should be noted that this report was prepared before China introduced export controls for Gallium and Germanium.

Gallium is a critical mineral used in the manufacture of gallium arsenide, which is used to make radio frequency chips for mobile phones and satellite communication, and semiconductors. China currently dominates world production, accounting for more than 95% of global annual output.[2]

Beginning on 1 August 2023, China introduced export controls for gallium and germanium, with exporters now requiring a licence to export.

At this early stage, the potential deployment of the Gallium within the graphitic schist is not known. No work has been done on establishing the mode of occurrence of gallium or its mineralogy. While most of the assays have been in the graphitic schist, some areas outside this also contain gallium. This may suggest that gallium has been introduced as an alteration mineral or retrograde metamorphism product. Additional work is required to assess the occurrence and emplacement of gallium at Leliyn. A 100kg sample of graphitic schist has been recently submitted for graphite metallurgical test-work, focussing on flotation characteristics of the graphite. This sample will also be assayed during the test-work to determine where the gallium reports to in the flotation process.

It should be stressed that graphite remains the prime focus of Kingsland's work at Leliyn. The gallium will be assessed as a potentially viable by-product of the graphite processing. Figures 2 to 9 show a plan view of the drilling area and cross sections of Gallium drill intersections. Note that section F had no Gallium assays conducted so is not included.

Gallium metal (99.995% Ga) is currently trading at about USD 500 per kilogram (AUD 770 per kilogram)[3]

[1] Critical Minerals Assessment, US Dept of Energy May 2023
[2] United States Geological Survey https://pubs.usgs.gov/periodicals/mcs2023/mcs2023-gallium.pdf
[3] Kitco Strategic Metals https://www.kitco.com/strategic-metals/

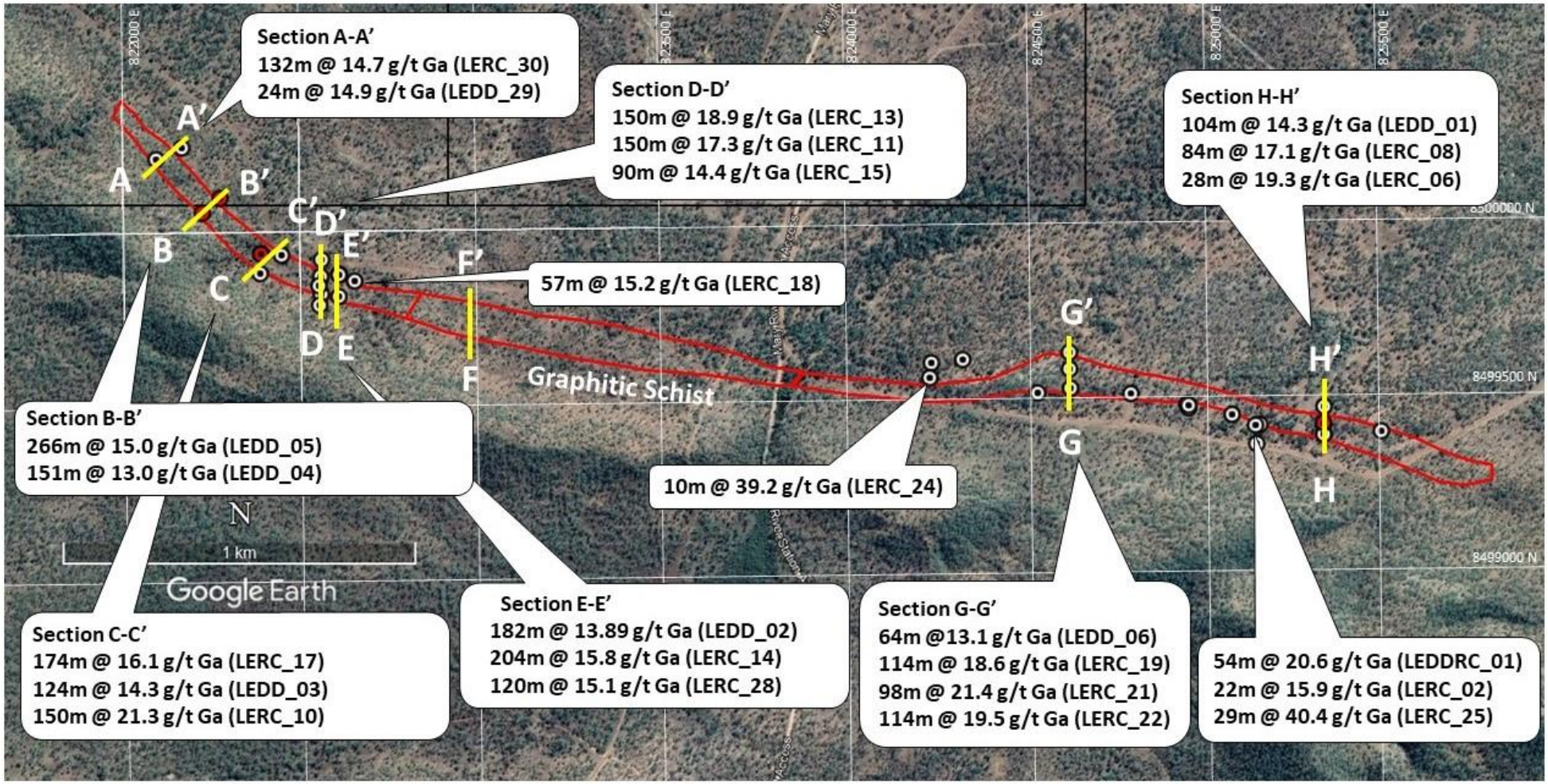

Figure 2: Plan view showing cross section locations and significant Gallium intersections

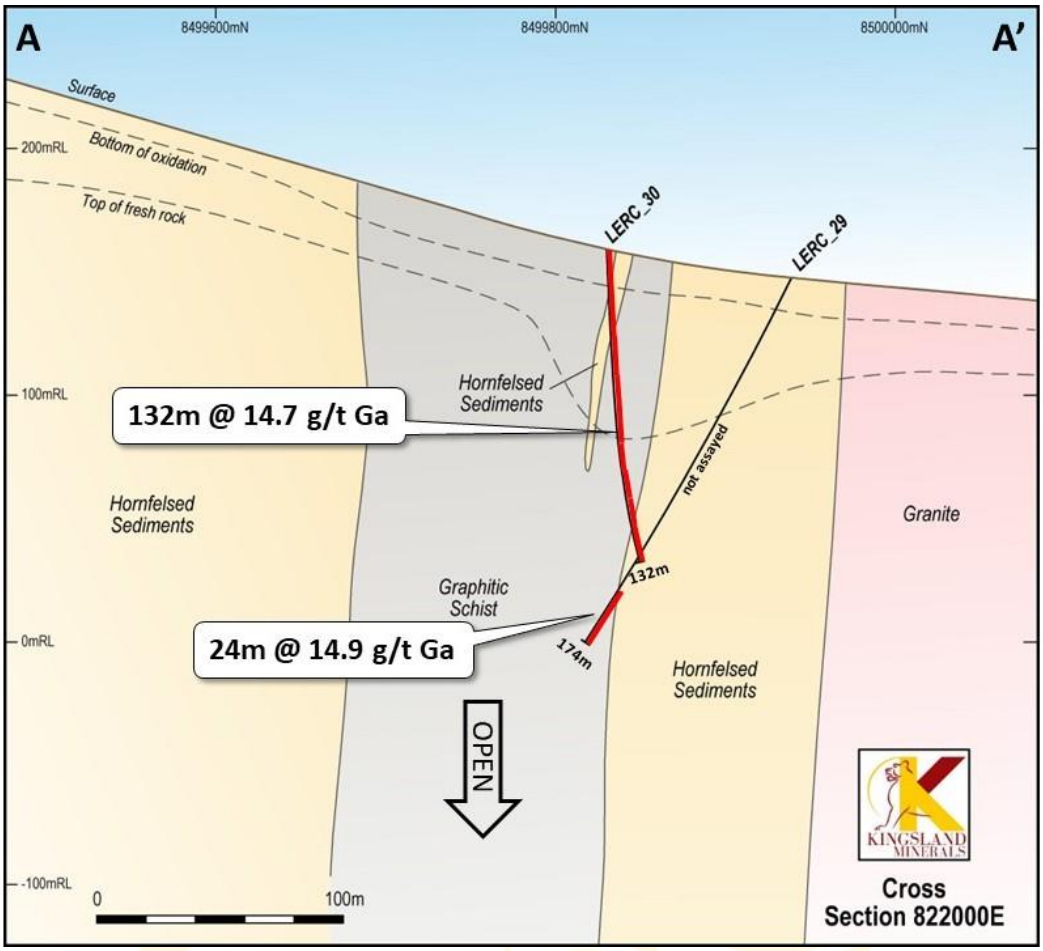

Figure 3: Cross section A-A'

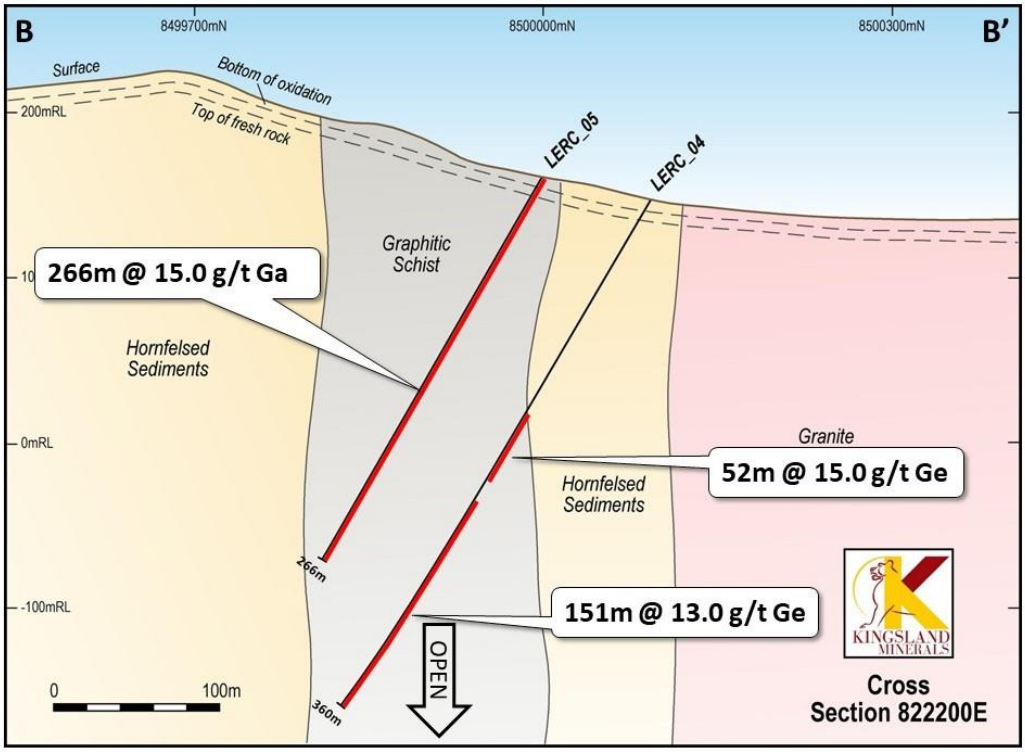

Figure 4: Cross section B-B'

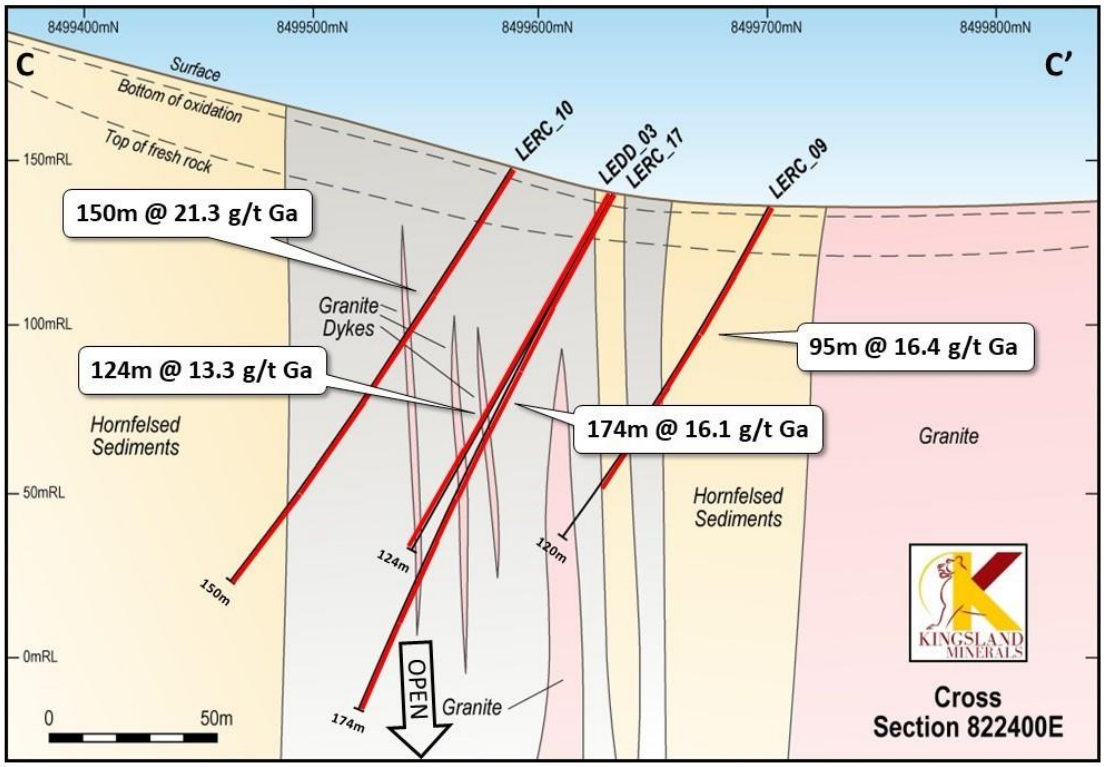

Figure 5: Cross section C-C'

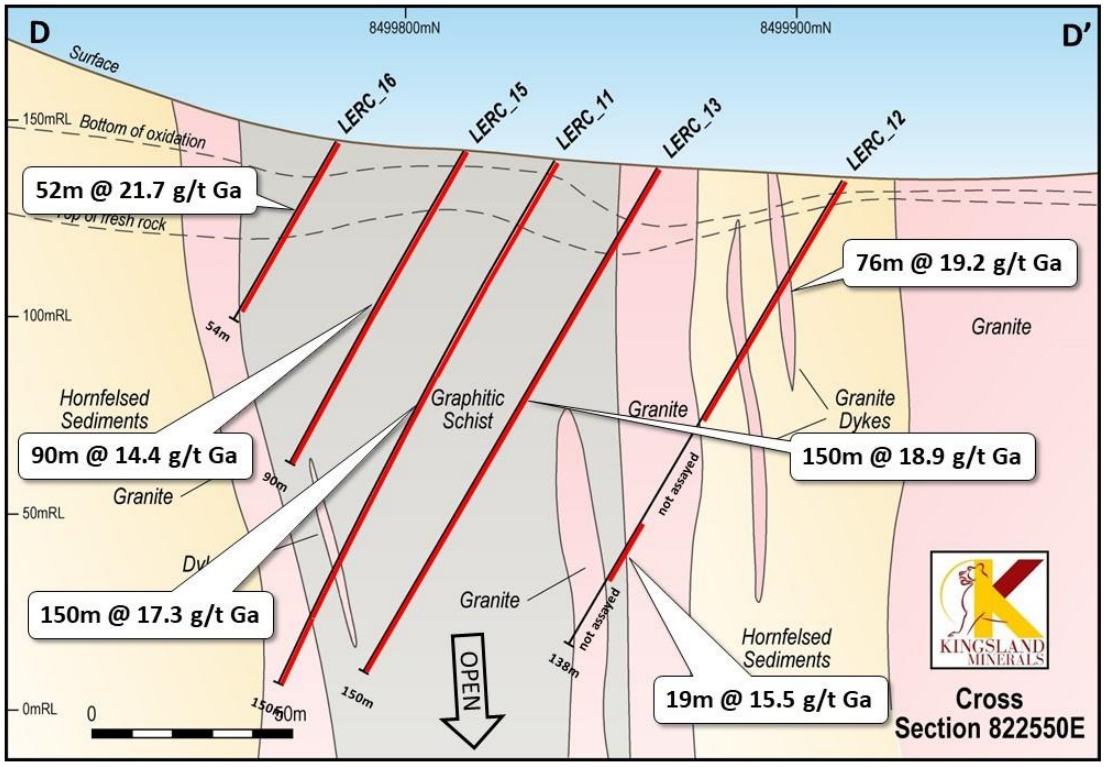

Figure 6: Cross section D-D'

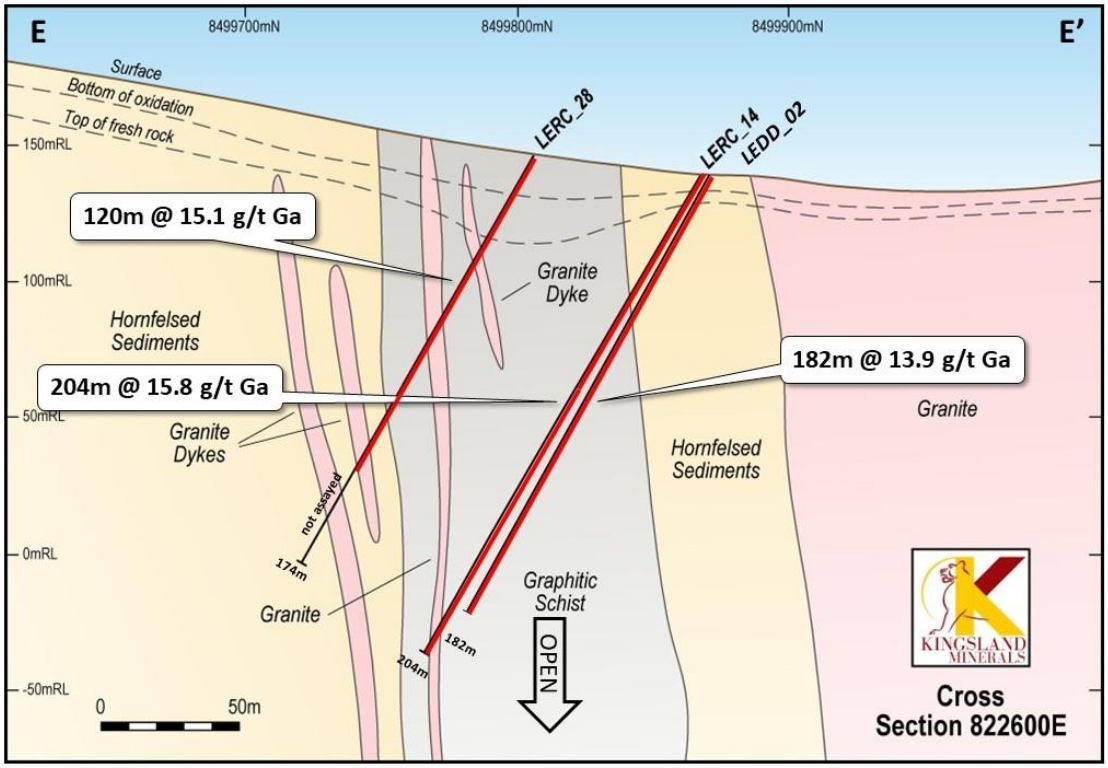

Figure 7: Cross section E-E'

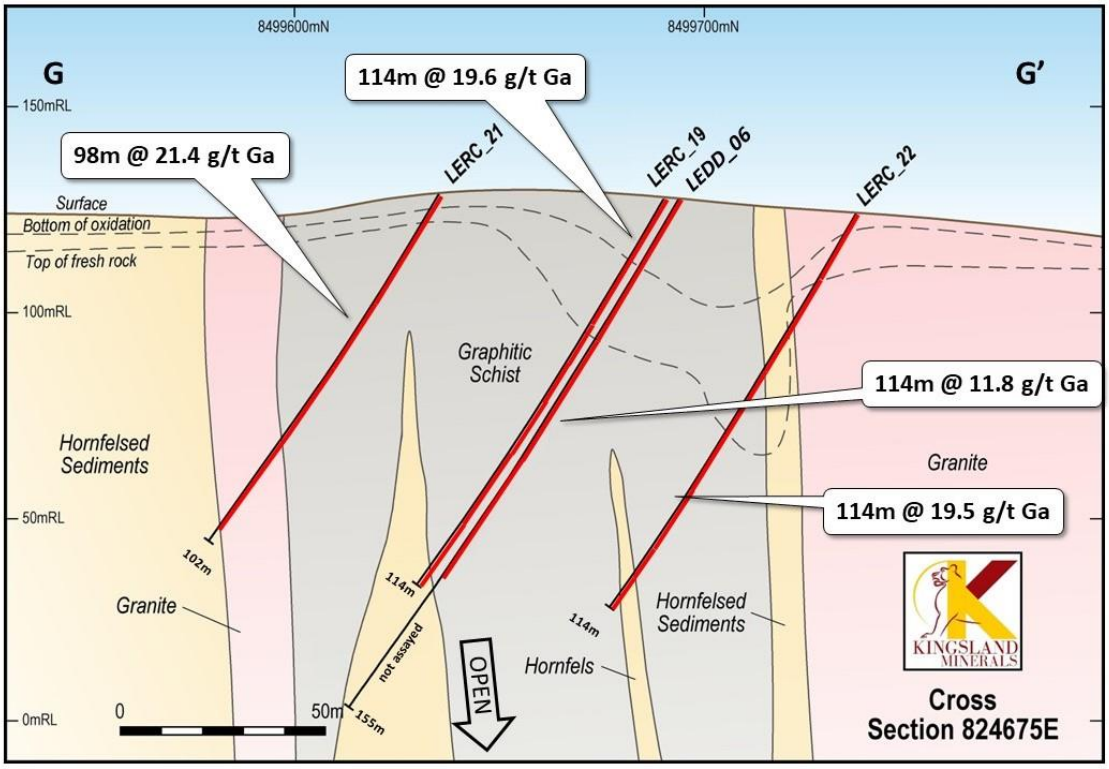

Figure 8: Cross section G-G'

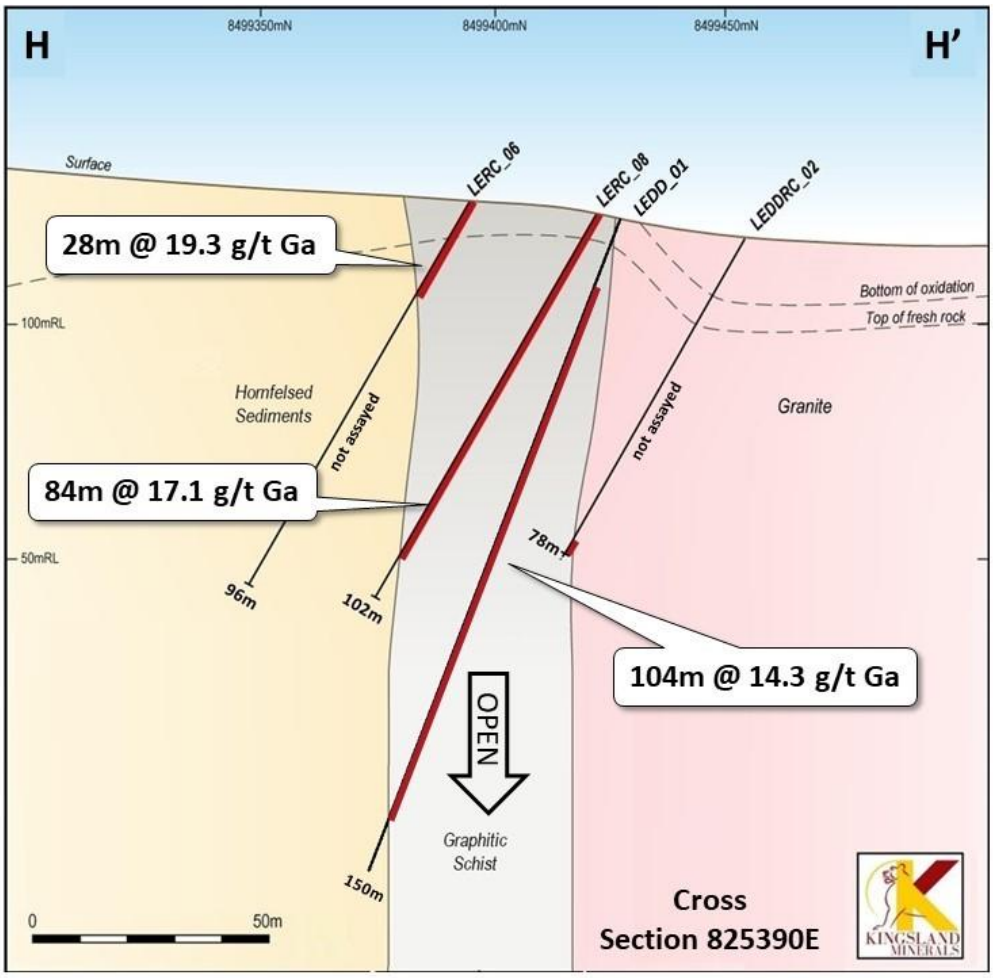

Figure 9: Cross section H-H'

Table 1 :Assay details Leliyn Graphite Project

Hole	From	To	Width	Ga g/t
LERC_02	39	61	22	15.85
LERC_06	0	28	28	19.27
LERC_08	0	84	84	17.05
LERC_09	0	57	57	16.48
	63	94	31	18.47
LERC_10	0	150	150	21.25
LERC_11	0	150	150	17.28
LERC_12	0	76	76	19.24
LERC_13	0	150	150	18.87
LERC_14	0	204	204	15.78
LERC_15	0	90	90	14.42
LERC_16	0	52	52	21.73
LERC_17	0	174	174	16.07
LERC_18	40	97	57	15.23
LERC_19	0	114	114	18.61
LERC_20	0	42	42	21.93
LERC_21	0	98	98	21.41
LERC_22	0	114	114	19.47
LERC_23	0	18	18	18.23
LERC_24	20	30	10	39.20
LERC_25	0	29	29	40.40
LERC_26	0	10	10	34.92
	31	35	4	41.74
LERC_28	0	120	120	15.08
LERC_29	150	174	24	14.89
LERC_30	0	132	132	14.69
LERCDD_01	0	54	54	20.56
LEDD_01	28	132	104	14.28
LEDD_02	0	182.39	182.39	13.88
LEDD_03	0	124	124	14.33
LEDD_04	150	202	52	15.04
	212	363	151	13.04
LEDD_05	0	266.42	266.42	14.99
LEDD_06	0	64	64	13.11

Intersections are reported at a 5 g/t Ga cut-off grade with a maximum of 2 consecutive meters of internal dilution.

Table 2: Details of Leliyn Drilling

Hole	Type	East MGA52	North MGA52	RL	Dip	Azi	Depth
LEDD_01	DDH	825395	8499428	124	-70	195	149.6
LEDD_02	DDH	822614	8499882	139	-60	190	182.39
LEDD_03	DDH	822393	8499941	139	-60	220	124
LEDD_04	DDH	822280	8500099	147	-60	335	362.56
LEDD_05	DDH	822229	8500058	161	-60	335	drilling
LEDDRC_01	RC	825215	8499428	123	-60	180	54
LEDDRC_02	RC	825339	8499459	118	-60	180	78
LERC_01	RC	824851	8499519	119	-60	180	90
LERC_02	RC	825202	8499426	124	-60	180	72
LERC_03	RC	825014	8499484	124	-60	180	54
LERC_04	RC	825208	8499375	129	-60	180	84
LERC_05	RC	not yet drilled					
LERC_06	RC	825395	8499398	126	-60	180	96
LERC_07	RC	824587	8499524	138	-60	180	36
LERC_08	RC	825395	8499426	124	-60	180	102
LERC_09	RC	822455	8499945	136	-60	225	120
LERC_10	RC	822396	8499893	147	-60	225	150
LERC_11	RC	822557	8499850	140	-60	180	150
LERC_12	RC	822565	8499923	135	-60	180	138
LERC_13	RC	822562	8499876	138	-60	185	150
LERC_14	RC	822614	8499880	139	-60	180	204
LERC_15	RC	822563	8499826	141	-60	180	90
LERC_16	RC	822562	8499795	145	-60	185	54
LERC_17	RC	822391	8499943	139	-60	235	174
LERC_18	RC	822656	8499866	139	-60	184	174
LERC_19	RC	824678	8499590	128	-60	187	114
LERC_20	RC	825009	8499488	124	-60	180	42
LERC_21	RC	824680	8499536	129	-60	180	102
LERC_22	RC	824678	8499637	124	-60	185	114
LERC_23	RC	824282	8499570	131	-60	185	60
LERC_24	RC	824287	8499612	129	-60	185	60
LERC_25	RC	825014	8499477	125	-60	180	60
LERC_26	RC	824376	8499620	131	-60	180	78
LERC_27	RC	825136	8499457	126	-60	180	60
LERC_28	RC	822613	8499819	146	-60	180	174
LERC_29	RC	822173	8500242	149	-60	215	174
LERC_30	RC	822100	8500210	161	-90	0	132

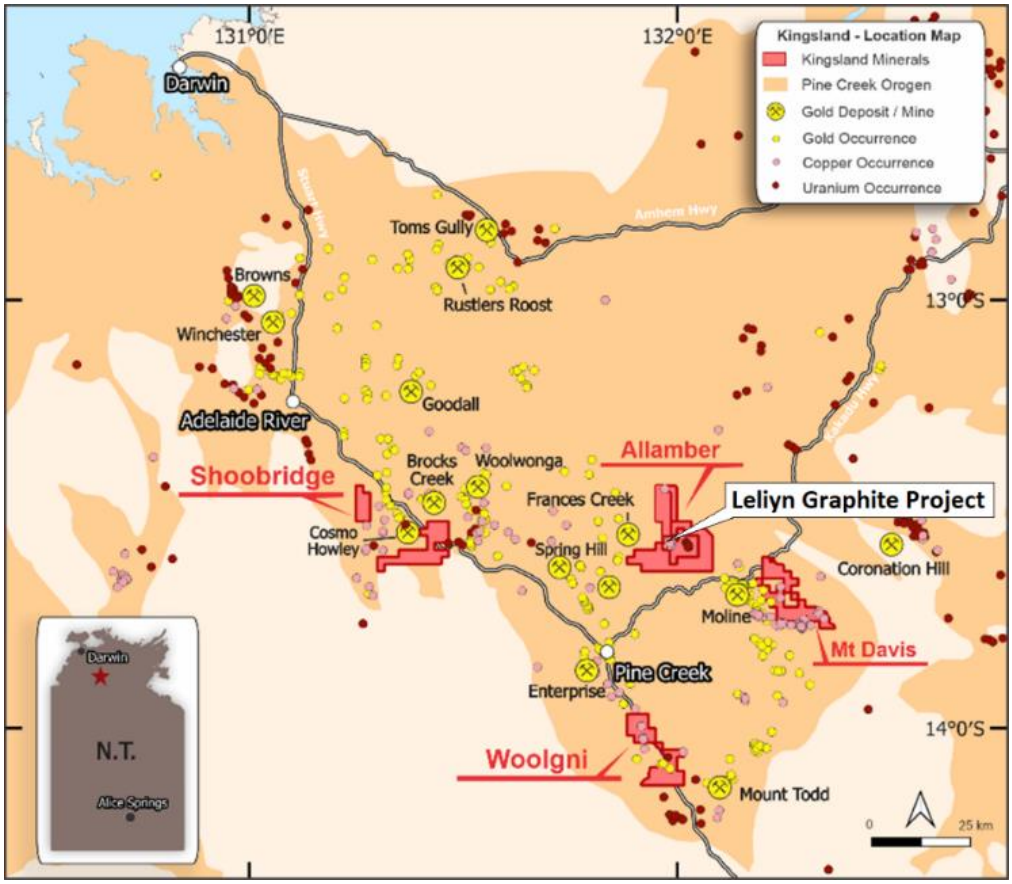

Figure 10: Kingsland Minerals Northern Territory Exploration Projects

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. **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**. 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.

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

FOLLOW US ON TWITTER:
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CAPITAL STRUCTURE
Shares on issue: 58,299,300
Options on issue: 18,694,920

INVESTOR RELATIONS
Read Corporate
Paul Armstrong
Email: 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: Technical Director

SHAREHOLDER CONTACT
Bruno Seneque
Email: 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 is extracted from the report entitled 'Graphite Exploration Target' created on March 21 2023 and available to view on www.kingslandminerals.com.au. or on the ASX website 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 announcement 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
Sampling techniques	• *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.* • *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 (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.*	• RC drilling samples were collected as 1m intervals via a riffle splitter off the drill rig. • Diamond core is cut in half
Drilling techniques	• *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).*	• RC drilling techniques were used. • Diamond drilling is HQ size
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.*	• RC drilling sample recoveries are considered to be high • Core recoveries are generally at 100% except for fault zones
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All drilling was qualitatively geologically logged recording lithology, mineralisation colour, weathering and grain size.

Criteria	JORC Code explanation	Commentary
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.*	• Sample preparation and assaying was conducted at North Australian Laboratories in Pine Creek • Samples are dried at 120 C for a minimum of four hours [or over-night if samples are excessively wet]. Sample prep is jaw crushing whole sample through a Boyd double toggle jaw crusher to a nominal 2mm particle size, splitting 400 gram through a jones riffle splitter and fine pulverising to 75 micron through an LM2 pulveriser. A barren washed creek sand as a barren flush is pulverised after every sample • Samples were delivered to the lab in Pine Creek by Kingsland personnel. • Total Graphitic Carbon is analysed with a weak acid digestion (HCl diluted to a 50% solution with demineralised water) followed by a 420°C roast and then final analysis in a CS analyser • A suite of multi-elements, including gallium (Ga) was also assayed using a 4-acid digest followed by ICP-MS and ICP-OES
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Internal QAQC by the laboratory indicate no sampling or bias issues. • The assay technique is considered appropriate for the style of mineralisation and results in a total analysis of graphitic carbon. • Standards and field duplicates are submitted as part of the RC drilling program
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.*	• Assays have been verified by company geologists. • Some diamond core holes have been drilled as twins to RC holes
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.*	• RC holes were surveyed with a hand held GPS with +/- 5m accuracy. • The project areas lies at the boundary between MGA zones 52 and 53 so GPS co-ordinates are sometimes reported in these different grids depending where drill holes lie. The default grid to use in computer software to enable all holes to be plotted on the same grid co-ordinates will be MGAZ52

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drill spacing is designed on 200m spacing with about 50m spacing along drill lines. Some lines to the west of the project have been drilled at 50m spacing to assess shorter range variability in geology and grade • 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
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.*	• Drilling is generally perpendicular to the strike direction of then graphitic schists.
Sample security	• *The measures taken to ensure sample security.*	• Samples are taken to the assay lab in Pine Creek by Kingsland personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques have been undertaken.

Section 2: Reporting of Leliyn Graphite Project Exploration Results

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 license to operate in the area.*	• 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.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Carbonaceous sediments of the Masson Formation have been contact

Criteria	JORC Code explanation	Commentary
		metamorphosed by the Cullen Granites. This has metamorphosed carbon to graphite and converted shales to schists . • This contact extends for about 20 km within Kingsland's tenement package. • The occurrence, mineralogy and distribution of gallium is not well understood at this time

Drill hole information	• *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:*
	  • *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.*
		• Drilling information is included in this announcement

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.*	• Assays are reported as weighted average intersections. • Intervals have been reported at a cut-off grade of 2% TGC with a maximum of 4m of internal dilution.
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').*	• 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.
Diagrams	• *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.*	• Relevant diagrams have been included within the main body of text.
Balanced Reporting	• *Accuracy and quality of surveys used*	• The competent person deems the

Criteria	JORC Code explanation	Commentary
	to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • *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.*	reporting of these drill results to be balanced.
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.*	• RC and diamond drilling will progress at Leliyn ultimately aimed at the estimation of a Mineral Resource. • Diamond drill samples will be used for metallurgical test work to determine flotation characteristics and the suitability of Leliyn graphite for battery end uses. • 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.
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.*	• Diamond drill samples will be used for metallurgical test work to determine flotation characteristics and the suitability of Leliyn graphite for battery end uses. • Additional metallurgical test-work is required to assess the viability of extracting gallium from the graphitic schist