# **ASX ANNOUNCEMENT**

**22 SEPTEMBER 2025** 



### **Leliyn Graphite Project, Northern Territory**

# Strong Scoping Study results show Leliyn can be a globally-competitive graphite producer

Low operating costs underpin positive scoping study result

#### **HIGHLIGHTS**

- Competitive C1 costs per tonne of graphite concentrate produced
- Scoping study based on 1.5 mtpa processing plant
- Initial Capital costs of AUD\$343m
- Open pit mining strip ratio 0.8:1 (waste:ore) for life of mine
- Study revealed extensive scope for optimisations which could deliver production increases with capital and operating cost reductions
- Potential to grow the inventory, mine life and production rate with the graphite host schist extending well beyond the current resource boundary

**Kingsland Minerals Ltd (Kingsland, ASX:KNG)** is pleased to announce that a scoping study has found that its Leliyn graphite project in the Northern Territory will be financially and technically robust with globally-competitive costs.

Kingsland Minerals Managing Director, Richard Maddocks said "These are strong results which highlight the excellent outlook for Leliyn. Importantly, the C1 or cash operating cost is forecast to be just US\$423/t of concentrate produced, which is very competitive with current operations worldwide. This result is even more promising given that we only had a limited amount of mineralisation to utilise for the study. With more drilling and increased indicated resources, we are confident that we can build on this result and establish a long-life, profitable graphite concentrate operation".

#### **Background & Study Approach**

Kingsland Minerals listed on the ASX in June 2022 and commenced exploration for graphite in early 2023. The potential for Leliyn to be a very large deposit was recognised early and this resulted in Kingsland focusing on the development of the Leliyn graphite project. During the period from May 2023 to December 2024, Kingsland completed a program of reverse circulation (RC) and diamond (DD) drilling totalling 67 RC holes for 7,046m and 11 DD holes for 2,369m, This drilling was used to estimate a Mineral Resource for Leliyn, summarized in Table 1.



#### **Cautionary Statement: LELIYN GRAPHITE SCOPING STUDY**

This Scoping Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of a potential development of the Leliyn Graphite deposit. It is a preliminary technical and economic study of the potential viability of the Leliyn Project. The Scoping Study outcomes, production target and forecast financial information referred to in this release are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore Reserves. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised.

Further exploration and evaluation work and appropriate studies are required before Kingsland Minerals Ltd will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.

Of the Mineral Resources scheduled for extraction and processing in the Scoping Study production plan approximately 70.4% are classified as Indicated and 29.6% as Inferred. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

Inferred Resources comprise 16% of the processing schedule in the first three years of processing and comprise 40% of the remaining four years in the seven year processing schedule. Kingsland confirms that the financial viability of the Leliyn Project is not dependent on the inclusion of Inferred Resources in the production schedule.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found in the ASX release dated 8 April 2025. For full details of the Mineral Resources estimate, please refer to ASX release dated 8 April 2025, 'Indicated Resource to Support Scoping Study at Leliyn'. Kingsland confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

This release contains a series of forward-looking statements. Generally, the words "expect," "potential", "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, to differ materially from those expressed or implied in any of our forward-looking statements, which are not guarantees of future performance. Statements in this release regarding Kingsland's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of graphite concentrate, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe Kingsland's future plans, objectives or goals, including words to the effect that Kingsland or management expects a stated condition or result to occur. Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by Kingsland, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements.

Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

Kingsland Minerals has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this release. This includes a reasonable basis to expect that it will be able to fund the development of the Leliyn Project upon successful delivery of key development milestones and when required. The detailed reasons for these conclusions are outlined throughout this ASX release. While Kingsland considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved and are considered preliminary in nature.

To achieve the range of outcomes indicated in the Scoping Study, pre-production funding in excess of AUD\$300M may be required. There is no certainty that Kingsland will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Kingsland's shares. It is also possible that Kingsland could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Leliyn Graphite Project. This could materially reduce Kingsland's proportionate ownership of the Leliyn Project.

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in this ASX release



Table 1: Leliyn Mineral Resource Estimate (April 2025)<sup>1</sup>

Classification	Million Tonnes (Mt)	Grade TGC%	Mt contained Graphite
Indicated	12.3	7.9	1.0
Inferred	180.2	7.2	13.0
TOTAL	192.5	7.3	14.0

Following the Leliyn JORC MRE, Kingsland commissioned GR Engineering Services Limited (GRES) to lead a scoping study for Leliyn's development of a 1.5 million tonne per annum (Mtpa) processing plant. This Scoping Study is a preliminary technical and economic assessment of Leliyn's prospective viability for potential development of a bulk open pit mine and processing facility, the primary objectives of which include:

- to evaluate indicative capital costs, operating costs and mine design optimisation on a 1.5Mtpa basis;
- to validate prospective economies of scale and identify key drivers of cost and value; and
- to identify key opportunities for subsequent optimisation and growth.

The Scoping Study has evaluated Leliyn on a 'standalone' basis, with the process plant and associated process infrastructure delivered via an EPC (Engineering, procurement and construction) contract and mining performed by a third-party contractor. This study has been conducted at a scoping study level of accuracy of  $\pm$  35% for cost inputs.

This scoping study has been completed as a 'proof of concept' exercise. Now that it has been confirmed that Leliyn can produce graphite concentrate at a competitive cost, the next step is to take advantage of Leliyn's considerable potential to appropriately size the project to take advantage of economies of scale. Kingsland has taken a financially prudent approach to competing work programs to date, now that economic viability has been confirmed, future work programs will be focussed on achieving the significant potential of Leliyn. Refer to 'Key Opportunities' later in this report for further details.

<sup>&</sup>lt;sup>1</sup> ASX release 'Indicated Resource to Support Scoping Study at Leliyn' released on 8 April 2025



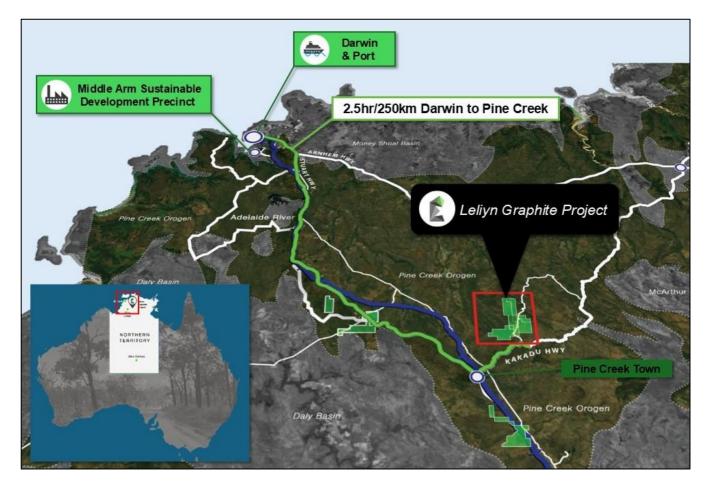


Figure 1 - Leliyn project location

#### **Key Assumptions & Outcomes**

#### **Development & Operations Model**

The Scoping Study has considered Leliyn's development as a bulk open pit mining operation sourcing materials from one open pit using a third-party mining contractor model and processing via a newly built adjacent 1.5Mtpa processing plant incorporating flotation recovery techniques to produce graphite concentrate. Project delivery (development and commissioning) has assumed EPC contract basis for the delivery of the processing plant and associate process infrastructure. See 'Capital Costs' for further detail.



#### **Key Assumptions**

The key physical, operating and financial assumptions for the Scoping Study are set out in Table 2 below. See 'Operating Costs' and 'Key Opportunities' for further detail. Minor rounding errors may occur in tabulated data.

Table 2 - Key physical, operating and financial assumptions

Metric	Units	
<u>Project</u>		
Project Life	Years	8.9
Development Period	Weeks	104
Processing Duration	Years	6.9
Mining Optimisation		
Assumed LoM Graphite Concentrate Price	A\$ /t	\$1,580
Mining Duration	Years	6.2
Waste Mined	Mt	8.3
Mineral Resources Mined	Mt	10.3
Project Strip Ratio	waste:ore	0.8
Processing Physicals		
Plant Throughput Capacity	Mtpa	1.5
Material Processed	Mt	10.3
Bond Ball Mill Work Index	kWh/t	17
Bond Abrasion Index	Ai	0.05
Graphite Recovery	%	88%
Average LoM Graphite Grade	% TGC	7.28
Processing Costs per tonne milled		
Processing Cost	A\$ / t	\$27.00
Royalties (Govt)	%	5.00%
Transport	A\$/ t	\$25
General & Administrative	A\$ / t	\$5.00

#### **Key Financial Results**

The key estimated LoM production and financial results of the Scoping Study are detailed in Table 3 below.

Leliyn is estimated to produce a total of  $\sim$ 662,000t recovered graphite concentrate during a 6.9 year processing period, for average annual production of  $\sim$ 95kt graphite concentrate. Estimated LoM revenue is A\$1.05 billion, with an estimated operating pre-tax cash margin of A\$563 million.

Leliyn's average estimated operating cash cost is A\$651 / t graphite concentrate, with an average estimated operating cash margin of A\$280 / t graphite concentrate, and an All-in Sustaining Cost (AISC) of A\$796 / t graphite concentrate (see 'Additional Financial Analysis' for further information).



The project has an estimated ~A\$343m initial capital cost. Please refer to the 'Operating Costs', 'Capital Costs' and 'Additional Financial Analysis' sections for further detail.

**Table 3 - LoM production and financial results summary** 

Metric	Unit	s
Mining Production		
Contained Graphite	t	752,000
Metal Production		
Payable Graphite Concentrate	t	662,000
Avg Annual Graphite Concentrate Production (Processing Period)	t	94,500
Operating Financials		
LoM Revenues	A\$	\$1.05 billion
LoM Cash Operating Costs (incl. govt. royalties)	A\$	\$483 million
LoM Operating Cashflow	A\$	\$563 million
LoM Operating Margins		
Operating C1 Cash Cost (exc. royalties and sustaining capital)	A\$/t conc.	\$651
Operating Cashflow	A\$/t conc.	\$930
LoM Capital Costs		
Processing & Infrastructure (incl. tails dam and evaporation pond)	A\$m	\$265
Owner's Costs inc village, access road, powerline, airstrip and switchyard	A\$m	\$52
Contingency	A\$m	\$25
Sustaining Capital	A\$m	\$34
Mine Closure & Rehabilitation	<u> </u>	<u>\$10</u>
Total	A\$m	\$386
Project Returns (Unlevered, Pre-Tax)		
Project Free Cash Flow (undiscounted)	A\$m	\$186
Payback Period (from start of production)	Years	4

#### **Site Access & Layout**

Leliyn is located ~250km southeast of Darwin, Northern Territory and is accessible by sealed, major roads, the Stuart and Kakadu Highways. Access to site is via the Mary River Access Road off the Kakadu Highway.

About 17km of the Mary River Access Road will be upgraded to provide all year access to the mine, processing facility and a 250-person accommodation village. One open pit, with a 500m blast exclusion zone, is located ~5km southwest of the village.

Raw water is planned be sourced from a borefield within 5km north of the project site and from pit dewatering. A tailings storage facility (TSF) designed to accommodate a total 10.4Mt of tailings (with expansion possible) will be established north of the open pit with an initial 36 months (10Mt) capacity. A waste rock facility (WRF) will be established east of the open pit, between the open pit and a 1.5Mtpa process plant.



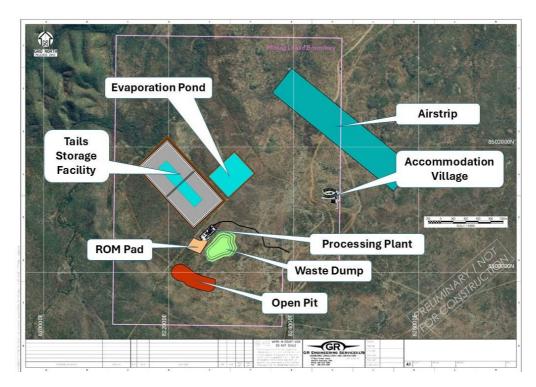


Figure 2 - Overall Leliyn project plan including key infrastructure

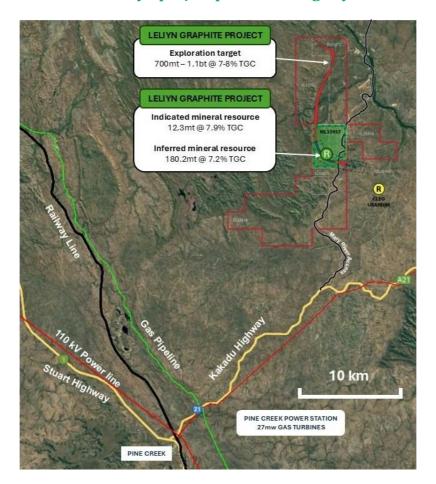
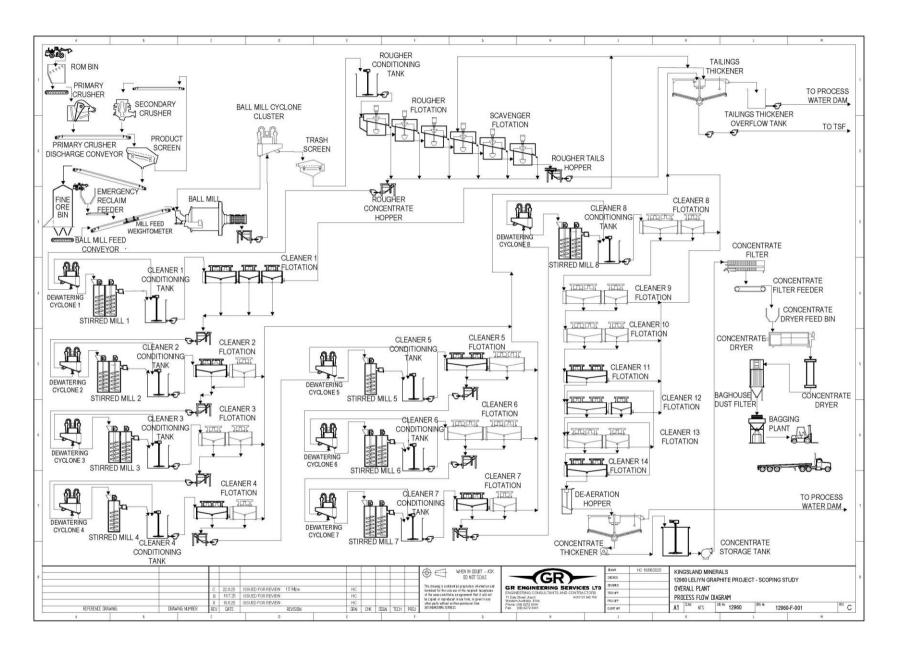


Figure 3 - Pine Creek Area with existing infrastructure

**Figure 4: Processing & Recovery Circuit** 





#### **Mine Design**

Auralia Mining Consulting completed a pit optimization, pit design and mine scheduling for Leliyn utilising cost estimates from Kingsland and their own data. The inputs into the pit optimisation are contained in Table 4. Further details of these costs are set out in sections entitled 'Capital Costs' and 'Operating Costs' below.

**Table 4: Optimisation inputs** 

Optimisation Input	AUD
Average Mining Cost/t	\$4.40
Average Processing Cost/t	\$25.00
Graphite Price/t concentrate	\$1,000.00
Processing Recovery %	85
Royalty %	5
Average Wall Angle (degrees)	45
Mining dilution %	2
Mining recovery %	98

A mine design was then completed using the optimal shells as a basis. The chosen pit shells used for the final design were chosen with consideration of the amount of inferred and indicated mineral resource mineralisation within the total pit. Pit shells 6 and 15 were chosen as the basis for the final pit design. These shells are summarised in Table 5. Shell 6 is a first stage and shell 15 a second stage to provide the final pit.

Table 5: Optimisation pitshells used in pit design

Pitshell	Ore tonnes	Grade (%)	Waste tonnes	Strip Ratio waste:ore
6	2,963,983	7.81	680,139	0.23
15	10,397,066	7.46	8,628,476	0.82

There is potential for additional drilling to increase the amount of indicated mineral resource mineralisation along strike from the current pit design, noting the potential for pit extensions into areas with existing JORC Inferred Resources (see Figure 5).

The pit design used the selected pit shells (6, 15) as a framework. Parameters used during the design phase included ramp widths of 15m at a gradient of 1 in 9, bench heights of 20m at 60° bench face angles, berm widths of 7m, and minimum cutback width of 30m. These design parameters provide flexibility in equipment selection and are compatible with both articulated and rigid fleets.

The maximum vertical mining depth is 100m below surface. Figure 5 illustrates the strike potential from the scoping study pit design to increase potential production with additional successful drilling to convert inferred to indicated mineral resources. Figure 6 shows indicated and inferred resources with the scoping study pit shell. Figures 7 and 8 show a cross section through the pit showing resource graphite grades and resource classification.



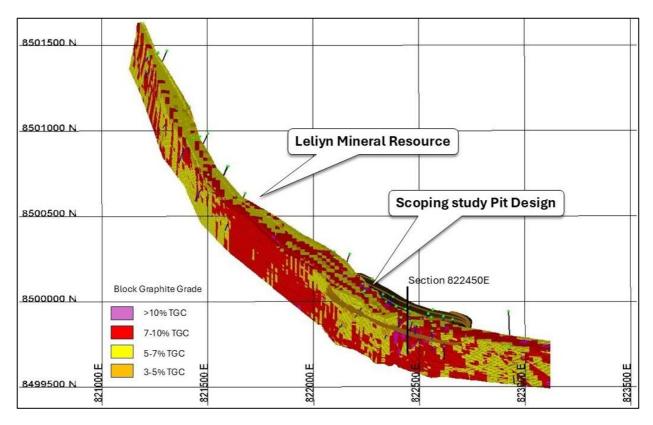


Figure 5 - Oblique view looking north showing Leliyn open pit and MRE block model

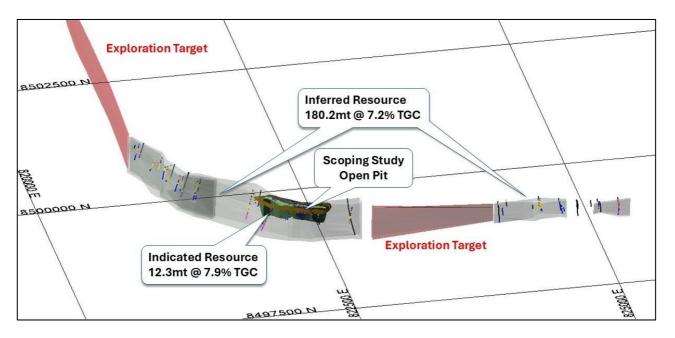


Figure 6 - View showing Indicated and Inferred Mineral Resources and the Scoping Study Pit



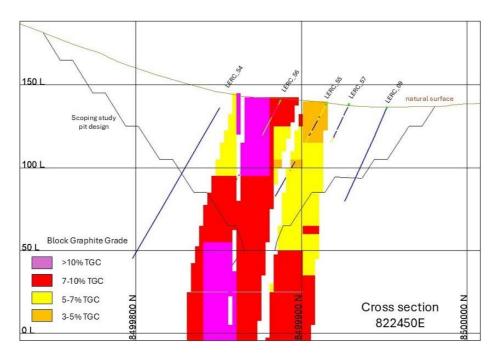


Figure 7: Cross section 822450E looking west showing block model grades

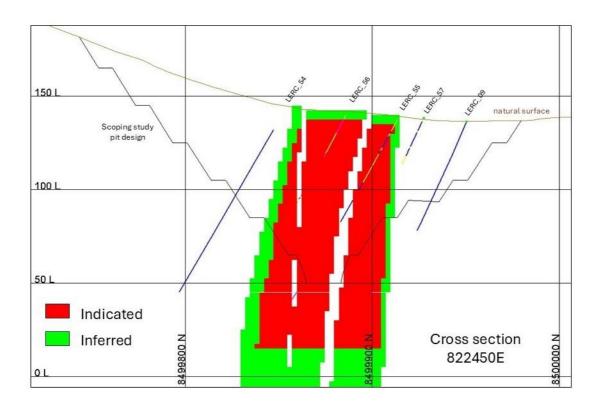


Figure 8: Cross section 822450E looking west showing MRE resource classification (+/- 10m)



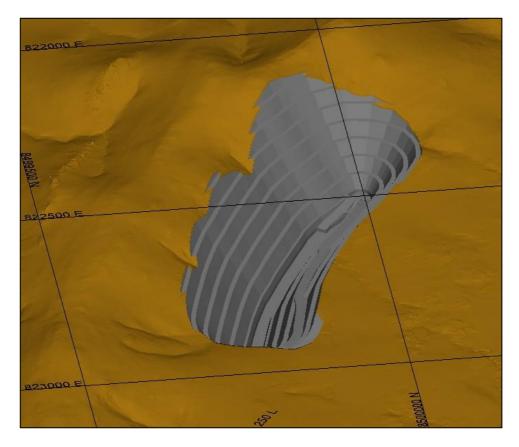


Figure 9: Oblique view looking west showing pit design and topography

#### **Target Production & Materials by Year**

An equipment-based schedule was developed by Auralia Mining Consulting with planned mill feed constrained to 1.5Mtpa. Mining operations are estimated for 6.2 years (project years 2-9), with 1.5Mtpa mill feed production during years 3-8 and 1.3Mt for year 9. Project years 1 and 2 are the construction phase.

The mining schedule is based on Leliyn's JORC Mineral Resource Estimate (MRE) of April 2025. 70% of mineralisation is classified as 'Indicated' and 30% 'Inferred' on a LoM basis.

As  $\sim$ 84% of the JORC Mineral Resources scheduled during the first three (3) years of processing are classified as Indicated, and the project has a projected  $\sim$ 4 year payback period (from start of processing), Kingsland considers the inclusion of such Inferred mineralisation to be reasonable. Each year of processing returns a positive cashflow, even when not including Inferred mineralisation. Kingsland has reviewed the individual years of the mining schedule and confirm that the inclusion of Inferred MRE material in the mining schedule is not the determining factor for the project's economic/ financial viability.

Figure 10 shows the proportion of Indicated and Inferred resources processed for each year.



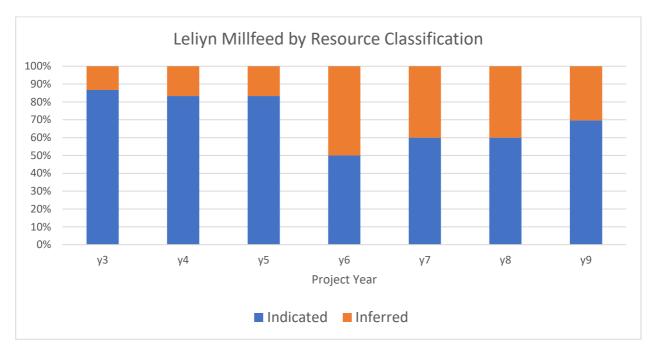


Figure 10 - Annual mill feed by JORC Category, as a proportion of total mill feed mined

Table 6 - Annual mill feed by JORC category, by total tonnes and proportion of mill feed

Classification	Units	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total Mt	Total %
Measured	Mt	0	0	0	0	0	0	0	0	0%
Indicated	Mt	1.30	1.25	1.25	0.75	0.90	0.90	0.92	7.27	70.4%
Inferred	Mt	0.20	0.25	0.25	0.75	0.60	0.60	0.40	3.05	29.6%
Tota	I	1.50	1.50	1.50	1.50	1.50	1.50	1.32	10.32	100%

Note that years 1 and 2 are the construction phase

#### **Operating Costs**

LoM operating costs are estimated, based upon:

- a detailed estimate of LoM mining operating costs built by Auralia Mining Consultants from first principles, averaging A\$4.49 /t of material moved or A\$8.10 /t material processed;
- a detailed estimate of process operating costs built by GRES of A\$27.00 /t for mill feed mineralisation; and
- an estimate of transport costs to Darwin for graphite concentrate of A\$25 /t; and



• an estimate of general and administration costs of A\$5 /t of material processed.

All mining and processing costs are based on fresh, primary mineralisation.

#### **Capital Costs**

GRES prepared the Leliyn capital cost estimate with a nominal accuracy of +/- 35% by reference to designs for similar facilities, budget pricing for similar equipment, and rates from recently completed studies and projects. GRES maintains an up-to-date database of such costs which was used for estimation.

A summary of estimated capital cost for the process plant, all associated process infrastructure, and all non-process infrastructure is as follows:

Table 7 - Processing and infrastructure capital cost estimate, by project area and cost type

Project Facility / Area	Supply (A\$m)	Install (A\$m)	Freight (A\$m)	Design Growth Contingency (A\$m)	Total (A\$m)
Processing infrastructure direct costs	143.0	42.4	11.9	20.2	217.6
Processing infrastructure indirect costs	5.0	47.5	0.4	5.2	58.1
Mine village and construction camp	26.0	0	0	0	26.0
Tails Dam Initial Lift	0.0	15.0	0	0	15.0
Owners Costs	3.6	0	0.3	0.03	3.9
Mine infrastructure	22.1	0	0	0	22.1
Total	205	89.9	12.3	25.4	342.7

The TSF is designed to accommodate 10.4Mt of tailings, with initial capacity for 36 months' storage (4.5Mt). The TSF will subsequently be lifted in project years 6, 7 and 8 to last the remainder of the scoping study period. Further expansion of the TSF is possible if required.

Mine infrastructure costs include the upgrading of the mine access road (\$10m), powerline to connect to existing mains power (\$2.1m), switchyard for mains power connection (\$5m) and an airstrip (\$5m).

A period of 2 years (104 weeks) has been allocated for pre-production construction.

#### Other Capital Cost Allowances

Processing, infrastructure and TSF sustaining capital costs are estimated by project year in Table 8 below.



**Table 8 - LoM sustaining capital cost estimate summary** 

Year	Processing & Infrastructure (A\$m)	Tailings Storage Facility (A\$m)
1	-	-
2	-	-
3	\$4.0	-
4	\$4.0	-
5	\$4.0	-
6	\$4.0	\$2.0
7	\$4.0	\$2.0
8	\$4.0	\$2.0
9	\$4.0	-
Total	\$28.0	\$6.0

#### **Additional Financial Analysis**

Based upon the results of the Scoping Study, Kingsland has prepared an all in sustaining cost (AISC) estimate as follows:

**Table 9 - AISC calculation for Leliyn Scoping Study (estimate, subject to rounding)** 

Operating Costs	A\$ million	A\$ / t milled	A\$ / t conc.
Mining	\$83.6	\$8.10	\$126
Processing	\$278.7	\$27.00	\$421
G&A (inc. transport)	\$68.2	\$6.60	\$103
C1 Cash Cost	\$430	\$41.70	\$651
Royalties (5% NSR)	\$52.3	\$5.06	\$79
Sustaining Capital (inc. mine closure)	\$44.0	\$4.26	\$67
All-in Sustaining Cost (AISC)	\$527	\$51.03	\$796

Figure 11 shows a sensitivity analysis of major cost and price inputs. This graph shows that the project is most sensitive to changes in the graphite pricing used to generate income revenue. The total free cashflow is least sensitive to operating costs.

Figure 12 shows the 2025 global C1 cost curve for graphite concentrate producers. The C1 cost includes mining, processing, G&A, and transport costs. Leliyn at A\$651 (USD\$423, using exchange rate of USD0.65 to AUD1.00) is shown on the graph. C1 costs for Leliyn are very competitive, particularly for producers outside of China.



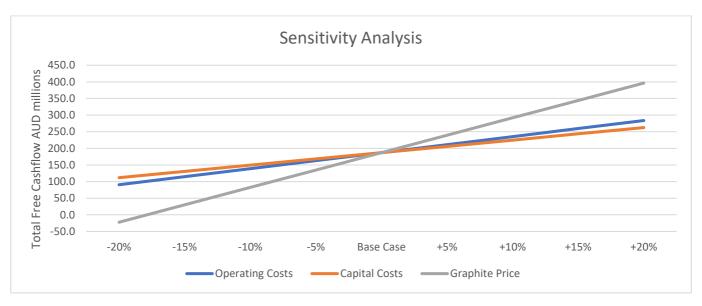


Figure 11: Sensitivity Analysis

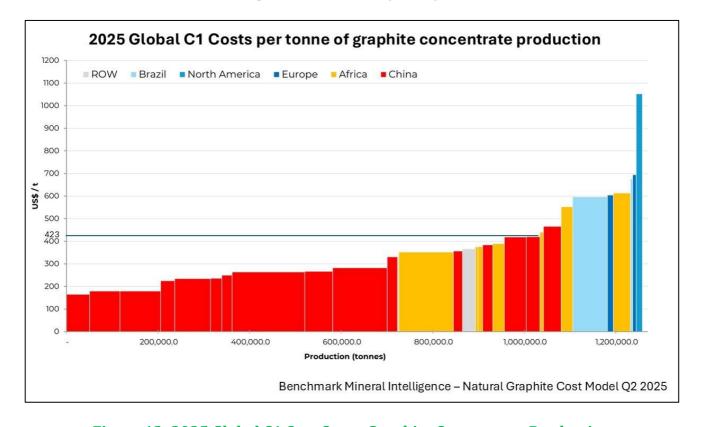


Figure 12: 2025 Global C1 Cost Curve Graphite Concentrate Production

#### **Graphite Pricing**

Kingsland has based the graphite concentrate pricing in the financial model on Benchmark Mineral Intelligence (BMI) annual forecasts for -100 mesh 94-95% concentrate. The base price is the BMI East Africa FOB -100 mesh 94-95% and this has been escalated based on BMI forecast data. Table 10 shows the prices used in the financial analysis. Leliyn is designed to produce a fine flake concentrate



only so a basket price of different products is not applicable. These prices are all real 2025 dollars and have not been adjusted for inflation. This study has allocated three years for pre-approval works and then two years for pre-production construction. Production is therefore forecast to commence in 2031 and conclude in 2037.

**Table 10: Annual Graphite Concentrate Pricing used in Financial Model** 

Year	Price USD		Price AUD		Year	Р	rice USD	Р	rice AUD
2025	\$	537.00	\$	826.15	2033	\$	1,007.27	\$	1,549.64
2026	\$	557.18	\$	857.21	2034	\$	1,010.59	\$	1,554.75
2027	\$	589.65	\$	907.15	2035	\$	1,117.79	\$	1,719.68
2028	\$	587.49	\$	903.84	2036	\$	1,130.94	\$	1,739.91
2029	\$	727.85	\$	1,119.76	2037	\$	1,130.94	\$	1,739.91
2030	\$	807.12	\$	1,241.72	2038	\$	1,144.09	\$	1,760.14
2031	\$	855.85	\$	1,316.69	2039	\$	1,144.09	\$	1,760.14
2032	\$	941.04	\$	1,447.75	2040	\$	1,157.24	\$	1,780.38

Exchange rate AUD1.00 = USD0.65

#### **Key Opportunities**

The preliminary Scoping Study has identified multiple areas for potential optimisation of Leliyn's modelled technical and financial results, in terms of process design, capital costs and operating costs. Several relate to conservative assumptions used to establish key project costs and value drivers, and have a material impact on other technical and financial aspects such as mine optimisation and project life.

#### **Process Design**

• Crushing/Grinding/Flotation: the Scoping Study comminution and flotation parameters were based on limited test-work from a small number of samples. A thorough, robust sampling and test-work regime will be implemented to optimise the production of graphite concentrate. Focus will be on maximising recovery and maximising concentrate grades. This could also result in lower capital and operating costs

#### **Capital Costs**

• Procurement: the Scoping Study assumes a majority of project supply via indirect procurement (including via EPC) and domestic Australian supply and fabrication of all platework and tankage. There is potential to increase the proportion of direct supply procurement and consider overseas supply and fabrication of platework and tankage, subject to quality control assurances and review.



#### **Operating Costs**

- Energy costs: the Scoping Study assumes a mains power connection with power averaging 0.19kWh. Leliyn is located within  $\sim$ 25km of the Amadeus-Darwin gas pipeline. Utilising gas to generate power will be investigated in future studies with the aim of reducing power costs. In addition, power from renewable sources such as wind and solar with battery back-up will also be investigated.
- Processing throughput: This scoping study was limited by the amount of available Indicated Mineral Resources in the Leliyn MRE. The Indicated Mineral Resource classification, at a minimum, is required to make up a significant part of the planned mill feed schedule in order for forward looking statements of Production Targets to be made. If additional drilling results in an increase in Indicated Mineral Resources this will also lead to a re-assessment of the optimal processing throughput. The Leliyn graphite project will benefit from economies of scale with increased mining and processing rates.

#### **Mine Design**

- Resource / design profile: Kingsland will review opportunities for additional drilling to improve the confidence in the Mineral Resources block model and optimise the mine design. By increasing the amount of Indicated Mineral Resources Kingsland can potentially plan a larger pit resulting in a longer minelife.
- Cost optimisation: lower key operating costs such as process consumables and power consumption can materially expand mining optimisation, allowing for improved mine design and as a result improved operating efficiencies, operating costs, and total scheduled materials (increased LoM).

#### Other

- Project schedule: several capital cost items include material components inputs such as labour which are effectively time related costs. A faster project delivery schedule can materially reduce total estimated capital costs, with the parallel benefit of bringing forward production and revenues.
- By Product credits: Kingsland is conducting metallurgical testwork on the viability of concentrating and ultimately extracting, gallium and rutile from the Leliyn graphitic schist.

#### **Funding**

Including all factored contingencies, the Scoping Study estimates a cost of ~A\$342.7 million for Leliyn's development, including all supply, installation and labour, freight, owner's costs and EPC costs, to cover capital and operating costs from the start of project construction through to graphite concentrate production.



Kingsland anticipates that this funding requirement will be met by a typical combination of debt and equity financing, with capital to be raised prior to starting the project construction. It is also possible that other forms of financing may be considered in due course, including royalty and streaming options.

Given the early stage of Leliyn's development, formal approaches to providers of required debt and/or equity to fund the project have not commenced. To do so, at this early stage, would be premature. Further work is required to provide more accurate estimates of funding requirements. before such approaches are made.

At the appropriate time Kingsland will connect with government agencies such as the Northern Australia Infrastructure Fund (NAIF) to assess availability of debt funding for the development of Leliyn. NAIF invests in projects the support the future growth of northern Australia and works with the Critical Minerals Office to identify investment opportunities. NAIF has previously invested in the development of resource projects and earmarked \$500 million of funding for critical minerals projects<sup>2</sup>.

Kingsland has raised approximately \$6.2 million to advance the Leliyn Graphite project. Kingsland raised \$3.6 million via a single tranche placement of 11.3 million shares at \$0.32 per share in June 2023 (refer to ASX announcement on 23 June 2023) and also raised \$2.56 million by issuing 11.1 million shares at \$0.23 per share to Quinbrook Infrastructure Partners in October 2024 (refer to ASX announcement on 31 October 2024). Given the Company's history of raising capital to date and the support from its shareholders, the directors are confident of the Company's ability to raise additional funds to progress the Leliyn Graphite Project as and when required.

Kingsland considers that there is a reasonable basis to conclude that funding for the project will be available when required, on the following basis (among others):

- Government Support: the Australian and the Northern Territory governments both support the development of critical mineral projects in northern Australia and have mechanisms to financially support such development;
- Robust pre-optimisation results: Before any further analysis or optimisation, this preliminary Scoping Study has demonstrated robust estimated technical fundamentals and economic results for Leliyn which deliver significant operating free cash flows, a reasonably fast payback period, and an attractive return on capital investment at forecast graphite prices; and
- Optimise Project production profile: Kingsland will complete additional drilling to increase the amount of indicated mineral resources. While the delineation of additional resources cannot be guaranteed through more exploration, Kingsland is confident, based on previous drilling, that there is a reasonable chance of this occurring. If additional indicated resources are estimated, an increased mine-life and/or increased processing throughout will be investigated. This is anticipated to result in lower operating costs and hence a more positive economic outcome.

However, and notwithstanding the foregoing, there can be no assurance or certainty that Kingsland will be able to source this funding as and when required. Where such funding is available, it is

<sup>&</sup>lt;sup>2</sup> www.naif.gov.au (accessed 18 September 2025)



possible that it may only be available on terms that may be dilutive to, or otherwise affect, the value of the Company's existing shares.

#### **Conclusion & Recommendations**

The Scoping Study provides a strong initial baseline of estimated technical and financial results for the Leliyn graphite project, and the justification that it is a commercially viable standalone project. The Scoping Study has also identified multiple areas for additional analysis and potential optimisation.

# 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 and developing the Leliyn Graphite Project in the Northern Territory. Leliyn is one of Australia's most significant graphite deposits with a Mineral Resource of 192.5mt @ 7.3% Total Graphitic Carbon containing 14mt of graphite. In addition to Leliyn, Kingsland owns the Cleo Uranium Deposit in the Northern Territory. Kingsland drilled this out in 2022 and estimated an Inferred Mineral Resource containing 5.2 million pounds of  $U_3O_8$ . The Lake Johnston Project in Western Australia has historic nickel drill intersections and is also prospective for lithium mineralisation. Kingsland has a portfolio of very prospective future energy mineral commodities.

#### **FOLLOW US ON TWITTER:**

https://twitter.com/KingslandLtd

#### **INVESTOR RELATIONS**

Read Corporate Paul Armstrong

Email: info@readcorporate.com.au

Tel: +61 8 9388 1474

#### **BOARD OF DIRECTORS**

Richard Maddocks: Managing Director

**Bruno Seneque:** Director/Company Secretary, CFO

Nicholas Revell: Non-executive Director Robert Johansen: Non-executive Director

#### **SHAREHOLDER CONTACT**

Bruno Seneque

Email: info@kingslandminerals.com.au

Tel: +61 8 9381 3820



The information in this report that relates to Exploration Results and Exploration Targets 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 report that relates to mine design and mine scheduling is based on information compiled by Anthony Keers, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Anthony Keers 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'. Anthony Keers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Anthony Keers is a full time employee of Auralia Mining Consulting.

The information in this report that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation reviewed by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of SGS Australia owned Independent Metallurgical Operations Pty Ltd, a wholly owned subsidiary of SGS Australia Holdings Pty Ltd, who has been engaged by Kingsland Minerals Ltd to provide metallurgical consulting services. Mr Adamini has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Leliyn graphite concentrate scoping study is based on, and fairly represents, information and supporting documentation reviewed by Mr Michael Rodriguez, BSc Metallurgy, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Rodriguez is an independent consultant who has been engaged by Kingsland Minerals Ltd to provide metallurgical consulting services. Mr Rodriguez has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

Information regarding the Mineral Resource Estimate for the Leliyn Graphite Deposit is extracted from the report 'Indicated Resource to Support Scoping Study at Leliyn' created on 8 April 2025. Information regarding previous gallium drilling results is extracted from the report 'Assays Reveal Significant Gallium By-product Potential' released on 27 September 2023. Information regarding the Leliyn Graphite Exploration Target is extracted from the report 'Globally Significant Exploration Target at Leliyn Graphite' released on 21 June 2024. Information regarding metallurgical test-work is extracted from the reports 'Outstanding Initial Metallurgical Results for Leliyn Graphite Project' released 12 June 2024 and 'Bulk Concentrate Sample dispatched for Advanced Metallurgical Test-work released on 5 March 2025. Information regarding previous exploration results is extracted from the report 'Further Thick & High-grade Graphite Intercepts Ahead of Maiden Resource' released on 18 December 2023 and 'Strong Infill Drilling Results at Leliyn Graphite Project' released on 16 January 2025. These reports are 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 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 announcements 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 announcements.



Table 11: ASX Announcements regarding Leliyn Graphite Project

Date	Announcement Title
29-August-2025	Leliyn Produces 99.97% Purified Spherical Graphite
13-August-2025	Gallium by-product at Leliyn
22-July-2025	Leliyn Scoping Study almost completed
9-July-2025	Test work underway for rutile and gallium by-product potential
6-May-2025	Scoping Study Underway on Leliyn Graphite Project
8-April-2025	Indicated Resource to Support Scoping Study at Leliyn
5-March-2025	Leliyn Graphite Bulk Concentrate Sample Dispatched
16-January-2025	Strong Infill Drilling Results at Leliyn Graphite Project
31-October-2024	Strategic Investment by Quinbrook Infrastructure Partners
27-August-2024	Mining Lease Application for Leliyn Graphite Project
21-June-2024	Globally Significant Exploration Target at Leliyn
12-June-2024	Outstanding Initial Metallurgical Results at Leliyn Graphite
3-March-2024	Australia's Largest Graphite Resource
18-December-2023	Further Thick & High-grade Graphite Intercepts at Leliyn
13-November-2023	Thickest Intercept to Date of 285m @ 6.1% TGC at Leliyn
25-October-2023	More Wide, High Grade Graphite Intercepts at Leliyn Graphite
27-September-2023	Assays Reveal Significant Gallium By-Product Potential
7-September-2023	Testwork Confirms Favourable Flake Size for Li-ion Batteries
5-September-2023	Bonanza intersection of 206m @ 10% Graphite at Leliyn
22-August-2023	Diamond core assays confirm high grades over big widths
16-August-2023	158m High Grade Graphite Intersection at Leliyn
24-July-2023	Extremely wide intersections with high grades at Leliyn
15-June-2023	First assays reveal extensive high-grade graphite at Leliyn
25-May-2023	First Holes Intersect 150m of Graphite Schist at Leliyn
21-March-2023	Graphite Exploration Target
1-February-2023	Significant Graphite Discovery



# Modifying Factors used in Leliyn Scoping Study

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.  Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource Estimate (MRE) on which the Scoping Study is based was announced to the ASX on 8 April 2025.  No Ore Reserve has been declared as part of the Scoping Study.
Site Visits  Comment on any site visits undertaken by the Competent Person and the outcome of those visits.  If no site visits have been undertaken indicate why this is the case.	The competent person for the Leliyn MRE conducted a site visit on 15 to 18 September 2023.
Study status  The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.  The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered	No Ore Reserve has been declared. The Study is a Scoping Study.
Cut-off parameters  The basis of the cut-off grade(s) or quality parameters applied.	The Mineral Resource for Leliyn is reported above a nominal cut-off grade of 0.5% TGC. The graphitic schist is relatively homogeneous with hard boundaries between the graphitic schist and surrounding barren material. The Mineral Resource is reported as a global estimate.  The mining cut-off grade is based on optimization parameters tabulated in this report. No cut-off grades were forced within the optimisations; Whittle applied the appropriate economic cut-off grade as required per run. The final economic cut-off determines what is classified as ore and waste. It varies depending upon the parameters input to the formula. The formula for economic cut-off grade is as follows:  ECOG = (Mining Dilution x Processing Cost)/Processing Recovery x (Sell Price - Sell Costs)  The cut-off grade for the parameters used in the base case optimisation was calculated as 2.97%, this was manually checked with no errors discovered.
Mining factors or Assumptions The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of	No Ore Reserve has been declared.  The deposit outcrops on surface with only open pit mining considered in this scoping study. Underground mining was not considered. A pit



#### Criteria

appropriate factors by optimisation or by preliminary or detailed design).

The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.

The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and preproduction drilling.

The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).

The mining dilution factors used.

The mining recovery factors used.

Any minimum mining widths used.

The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.

The infrastructure requirements of the selected mining methods.

#### Commentary

optimisation was undertaken using Whittle software to determine the economic pit limits.

Geotechnical assumptions applied in this study are summarised as follows: ramp widths of 15m at a gradient of 1 in 9, bench heights of 20m at 60° bench face angles, berm widths of 7m, and minimum cutback width of 30m.

Input assumptions used for pit optimisation process are provided in the body of the release.

mining recovery factors of 98% have been applied and dilution of 2%.

A minimum mining width of 30m has been applied.

Approximately 70% of the material to be processed through the plant is of the Indicated Resource category, with the remaining 30% in the Inferred Resource category. The relative proportion of Inferred Mineral resources to be milled on a year-by-year basis is presented in Figure 9 of the release. The inclusion of these Inferred Mineral resources is suitable for a scoping-level study. Given a projected ~4 year payback period (from start of production), Leliyn's financial viability does not depend upon inclusion of Inferred Resources, and therefore that a reasonable basis exists for disclosing a production target including Inferred Resources.

Detailed infrastructure requirements relating to the open cut mining method have not been included within the scope of the scoping study.



#### Criteria Commentary Metallurgical factors or The metallurgical process proposed in the study is a conventional flotation Assumptions process, which is considered appropriate on the basis of existing characterisation testwork. The flotation process is proven process and The metallurgical process proposed and the appropriateness workflow for this style of graphite mineralisation. of that process to the style of mineralisation. Metallurgical test work has been undertaken across the deposit which is Whether the metallurgical process is well-tested technology sufficient for informing a scoping-level study, with samples representing a or novel in nature. broad range of geological & metallurgical domains having been included in The nature, amount and representativeness of metallurgical characterisation studies. Metallurgical recovery factors have been derived test work undertaken, the nature of the metallurgical from this testwork. domaining applied and the corresponding metallurgical No deleterious elements applicable to the proposed metallurgical process recovery factors applied. have been identified. Any assumptions or allowances made for deleterious No pilot-scale test work and limited bulk sampling has been undertaken elements. for this scoping study. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? **Environmental** Baseline environmental requirements have been determined but not yet implemented. Additional environmental baseline surveying will be required The status of studies of potential environmental impacts of as future studies (PFS) are progressed. the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, Consideration of specific approvals is beyond the scope of this study other status of design options considered and, where applicable, than there are no issues having been identified that cannot be addressed by the status of approvals for process residue storage and accepted industry practices and the necessary approvals related to these waste dumps should be reported. practices. Infrastructure Leliyn is a remote project location with the nearest townsite being Pine Creek, approximately 40km to the west. The project is serviced by existing The existence of appropriate infrastructure: availability of sealed and gravel roads from Pine Creek to the site location. The project land for plant development, power, water, transportation power requirements are proposed to be sourced from existing high voltage (particularly for bulk commodities), labour, accommodation; powerlines within 20km of the project site. Water would be derived from a or the ease with which the infrastructure can be provided or proposed borefield with reverse-osmosis generation of fresh water accessed. requirements. An on-site accommodation village would house the fly in-fly out workforce with an airfield also located on-site. The project is located on an existing pastoral lease and extensive land is available to provide for the requirements of the project. An extensive local network of infrastructure service providers and related capacity are available from Darwin.



Criteria	Commentary
Costs  The derivation of, or assumptions made, regarding projected capital costs in the study.  The methodology used to estimate operating costs.  Allowances made for the content of deleterious elements.	Capital costs used in the study have been developed by GRES using detailed Mechanical Equipment Lists and recent GRES database pricing for the supply of equipment, labour and installation. Capital costs of the tailings storage facility were based on design work by WSP, based upon scoping level design quantities, the mining and processing schedules, and unit costs rates based on historical costs for similar work.
The source of exchange rates used in the study.  Derivation of transportation charges.  The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.  The allowances made for royalties payable, both Government and private.	Operating costs have been built up from first principals by GRES referencing comparable operations and existing metallurgical test work. Auralia Mining Consulting built up mining operation costs from first principals.  Exchange rates used in the study are based upon current rates (1 AUD = 0.65 USD).  Transportation charges have been estimated by GRES and based upon database pricing and recent contract history.  The allowance for royalties payable (5% NSR) is based upon state royalties applicable to the project.
Revenue factors  The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.  The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	The derivation of the feed grade comes from the Mineral Resource estimate with the application of the mining schedule. All other relevant revenue factors are assumed in line with current rates and as outlined above.  Graphite is to be sold in the form of graphite concentrate grading 94% TGC produced at site. Pricing for fine graphite concentrate (<100 mesh or 150 microns) is based on forecasts from Benchmark Mineral Intelligence.
Market assessment The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.  A customer and competitor analysis along with the identification of likely market windows for the product.  Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract	Graphite concentrate is further refined into coated, purified, spherical graphite (CPSG) which is then used to manufacture active anode material for batteries. Kingsland currently has an off-take agreement with Quinbrook Infrastructure Partners where Quinbrook will purchase Kingsland's graphite concentrate at a to be determined price. No additional market analysis has been undertaken for this study.
Economic  The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.  NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The financial model is estimated on a real basis, factoring in both revenue and cost assumptions. All other cost factors have been developed by GRES and Auralia Mining Consultants from first principals, or based upon data base pricing, or recent contract pricing and detailed engineering evaluation.



Criteria	Commentary
Social  The status of agreements with key stakeholders and matters leading to social licence to operate.	An application for a Mining Lease has been submitted with the approval process commenced. Kingsland Minerals maintains proactive relationships with key stakeholders during the exploration and study phase of this project and the company has not identified any specific matters that would impact a future development. The project is located on a Pastoral Lease for which there are established processes for obtaining authorisation for a potential future mining operation.
Other (incl Legal and Governmental)	No Ore Reserve has been declared.
To the extent relevant, the impact of the following on the	No naturally occurring risks have been identified.
project and/or on the estimation and classification of the Ore Reserves:	The project is 100% owned by Kingsland Minerals and there is a binding off- take agreement in place with Quinbrook Infrastructure Partners.
Any identified material naturally occurring risks.	Statutory approvals are required to enable the development and operation of this project. The Northern Territory has a well-defined statutory process
The status of material legal agreements and marketing arrangements.	for seeking the required approvals and the company anticipates the project would follow the standard approval process which is yet to mapped out in specific detail. Some Commonwealth approvals may also be required but it is anticipated these would follow similarly established
The status of governmental agreements and approvals critical to the viability of the project, such as mineral	
tenement status, and government and statutory approvals.	approval processes.
There must be reasonable grounds to expect that all necessary Government approvals will be received within the	There are no currently identified third party unresolved matters that may impact upon future approvals.
timeframes anticipated in the Pre- Feasibility or Feasibility	impact apon juture approvais.
study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on	
which extraction of the reserve is contingent	
Classification	No Ore Reserve has been declared.
The basis for the classification of the Ore Reserves into varying confidence categories.	
Whether the result appropriately reflects the Competent Person's view of the deposit.	
The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	
Audits or reviews	No Ore Reserve has been declared.
The results of any audits or reviews of Ore Reserve estimates.	