

**ASX ANNOUNCEMENT**

28 October 2024

**Kookaburra Graphite Project PFS progresses Lincoln's aim to be Australia's Newest Graphite Producer**

***Kookaburra Graphite Project's Pre-Feasibility Study (PFS), using a "First to Market" Strategy, demonstrates a compelling case for a low-cost, low start-up capital cost project to supply the non-Chinese Graphite Market***

**Lincoln Minerals Ltd. ("Lincoln" or the "Company") (ASX: LML), is pleased to announce the results of a Pre-Feasibility Study ("PFS") for its Kookaburra Graphite Project (the "Project") (formerly known as Kookaburra Gully), located 40km north of Port Lincoln on the Eyre Peninsula, South Australia, Australia.**

**CAUTIONARY STATEMENTS REGARDING THE PFS**

*The estimated Mineral Resources underpinning the Production Target have been prepared by a Competent Person, Mr Shane O'Connell, in accordance with the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). See Competent Persons Statement for further details.*

*The PFS is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. While Lincoln Minerals 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 PFS will be achieved.*

*To achieve the range of outcomes indicated in the PFS, additional funding will likely be required. Investors should note that there is no certainty that LML will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of LML's existing shares. It is also possible that LML could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce LML's proportionate ownership of the project.*

*This announcement contains forward-looking statements. LML has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes it has reasonable basis to expect it will be able to fund development of the project. However, a number of factors could cause actual results, or expectations to differ materially from the results expressed or implied in the forward- looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the PFS.*

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**Lincoln Minerals Limited (ASX: LML) (“Lincoln” or “Company”)** is pleased to provide a Pre-Feasibility Study (PFS) for its 100%-owned Kookaburra Graphite Project (“KGP” or “the Project”) in South Australia, completed by independent consultants.

KGP consists of three individual areas: namely, Kookaburra Gully (Mining Lease 6460), owned by Lincoln’s 100% subsidiary, Australian Graphite Pty Ltd, Koppio and Kookaburra Gully SW Extension; and consists of mining and processing graphite deposits in and around the Kookaburra Gully Mining Lease, 40km north of Port Lincoln on the Eyre Peninsula in South Australia.

Lincoln Minerals aims to be the newest mine to market in Australia's graphite industry after the Uley Mine in South Australia closed in 2017. This strategy has been developed to leverage the Project’s major competitive advantages, resulting in a two-stage, low-capital start-up strategy.

The PFS outlines a staged development for KGP using open-pit mining and a simple floatation process to produce a graphite concentrate for export outside of China.

PFS highlights include:

- **Strong project economics:**

- Pre-tax NPV<sub>10</sub> of **A\$114m or (US\$77m)**;
- Pre-tax IRR of **41%**;
- Start-up capital requirement of **A\$29m (US\$19m)**
- Average Cash EBITDA<sup>1</sup> of **~A\$23m (US\$15m)**, Average Cash EBITDA<sup>1</sup> margin of **42%**.

- **Lincoln Minerals aims to be the newest to market in Australia's graphite industry. This strategy has been developed to leverage the Project’s major competitive advantages, resulting in a two-stage low-capital start-up strategy. The competitive advantages identified:**

- Short time frame to finalise approvals with an existing Mining Lease (ML) and secondary approvals well advanced.
- Low operating cost from the high-grade core that starts at the surface, requiring no pre-strip.
- Low capital infrastructure: power, water and road all close.
- Estimated average LOM total cash operating cost (CI)<sup>2</sup> at the site of \$772 (US\$517) per tonne of concentrate,
- Short qualification time for initial sales into well-priced industrial graphite markets.
- Cashflow positive throughout the industrial graphite price cycle, when in full production.

The production target underpinning financial forecasts included in the PFS is supported by 11% Measured Resources, 43% Indicated Resources and 46% Inferred Resources. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised.

<sup>1</sup> Cash EBITDA excludes any non-cash items

<sup>2</sup> CI - includes Mining, Processing, G&A and Logistics

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The PFS demonstrates that Lincoln is well positioned to progress its aim of being first to market in Australia. The study results outline a long-life, low-cost, low start-up capital, and a long-life graphite project, with the expectation of maintaining solid cashflow margins throughout the metal price cycle.

Other highlights include:

- **Two-stage development**, implying low risk development of initial graphite customer base before ramping up production at stage 2. Average production of 10ktpa of concentrate sales during first stage (two years), before expansion in Year 3 to 60ktpa of concentrate sales.
- **Potential to be cashflow positive** throughout the graphite price cycle, with an all in sustaining cost (AISC) for Life of Mine (LOM) a “break-even” graphite<sup>3</sup> price for industrial products is ~A\$855/t (~US\$573/t), which is considered compelling for an Australian graphite project.
- **Short Payback Period of 2.4 years** from start of Stage 2 and an overall 4.4 years from the start of Stage 1, with current Life of Mine (“LOM”) of up to 16 years.
- **Short approval time:** Kookaburra Gully is on an existing Mining Lease with remaining approvals well advanced, in a Tier 1, stable mining jurisdiction.
- **Potential to increase project scale and life:** via Exploration Targets
- **Potential to secure higher graphite prices by initially selling to the non-electric vehicle battery markets** (Industrial Graphite Markets): Currently the Industrial Graphite Market is paying significantly higher prices, due to robust immediate demand and high value in use. By commencing at lower production scale, LML can establish sale contracts in the Industrial Graphite Markets. During Stage 1, Lincoln will undergo qualification within the lithium-ion battery supply chain and look to pivot to lithium-ion battery market as demand and prices improve.
- A basket of KGP products, developed by an independent market expert estimated an average price of US\$850/tonne for Stage 1 and US\$1,000/tonne for Stage 2.
- Access to existing, high quality transportation infrastructure with potential future improvements in the region combined with a low-carbon footprint, low cost and mainly renewable electricity source.
- Securing non-lithium-ion battery market customers will provide Lincoln time to complete the mandatory Certification and Qualification requirements to be able to sell into the lithium-ion battery market.
- Investigation into a battery anode material (BAM) processing facility is progressing with BAM Scoping Study on track for completion in Q1 CY2025.
- Once battery market certification and qualifications are obtained, Lincoln will be well placed to take advantage of future increases in graphite prices in the lithium-ion battery market segment.

A summary of the key PFS results is described below in Table 1.

<sup>3</sup> Break Even Free Cash Flow Price = Costs / Concentrate Produced

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Table I. Summary of key results of Kookaburra Graphite Project PFS

Description	Unit	Value
Pre-Tax NPV <sup>4</sup>	A\$m	114
	US\$m	77
Pre-Tax IRR <sup>4</sup>	%	41%
Payback period from Capex Stage 2	Years	2.4
Capital Intensity	#	2.2
Mineral Resource	Mt	12.8
	%	7.6%
Annual Production Capacity - Stage 1	Ktpa	75
Annual Production Capacity - Stage 2	Ktpa	500
Recovery	%	90%
Average Production Stage 1	Ktpa	11
Average Production Stage 2 (Y3-Y7)	Ktpa	62
Average Production Stage 2 (Y8-Y16)	Ktpa	28
Operating Cost (CI) <sup>5</sup> (LOM)	A\$/t Process Material	65
	US\$/t Process Material	44
Operating Cost (CI) <sup>5</sup> (LOM)	A\$/t Con Produced	772
	US\$/t Con Produced	517
AISC <sup>6</sup> (LOM)	A\$/t Con Produced	855
	US\$/t Con Produced	573
LOM Free Cash Flow	A\$m	279
	US\$m	187
Stage 1 Project Capex	A\$m	29
	US\$m	19
Stage 2 Project Capex	A\$m	24
	US\$m	16
Sustaining / Deferred Capex	A\$m	25
	US\$m	17

<sup>4</sup> NPV / IRR excludes Land Acquisition Costs (~A\$5m), Government Environment Bond and SEB Payment (~A\$8m), and FS Studies costs, Stage 1 Price US\$850/t, Stage 2 Price US\$1000/t FX is 0.67 AUD/US

<sup>5</sup> CI - Includes Mining, Processing, G&A and Logistics

<sup>6</sup> ASIC - Includes Mining, Processing, G&A, Logistics, Royalties and Sustaining Capex



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### **Lincoln's CEO Jonathon Trewartha said:**

*"We are extremely delighted with the results of our Kookaburra Graphite Project Pre-Feasibility Study, which builds on the previous study completed in 2017 and demonstrates how a two-staged development process can allow us to become Australia's newest graphite producer and first-to-market by leveraging our high-grade graphite core which requires low capex and no pre-strip to commence production. This gives Lincoln a first-mover opportunity which will enhance our ability to secure long-term graphite customers – who are increasingly seeking ex-China graphite supply sources.*

*"Our staged approach to development will also provide the necessary cashflow to assist with funding the subsequent larger scale and longer life Stage 2 production."*

### **Next steps:**

Kookaburra Graphite Project remains on track for a Stage 1 Financial Investment Decision (FID) at the end CY26, indicatively paving the way for the construction and first production commencing in CY27. During that time, the Company will progress a Bankable Feasibility Study, Government Critical Mineral Incentives programs, approvals, commercial and government investment and securing offtake and sales agreements and potential strategic partnering and investment opportunities.

## **Kookaburra Graphite Project PFS Executive Summary**

### **I. The Project**

The Kookaburra Graphite Project (Project), 100% owned by Lincoln Minerals Limited (LML), is a significant graphite deposit located approximately 35km north of Port Lincoln and 20km west southwest of Tumbly Bay on the Eyre Peninsula in South Australia, as shown in Figure 1 and 2 below.

The Project involves mining and processing known graphite deposits in and around the Kookaburra Gully Mining Lease. The mineralisation is processed via simple crushing, flotation, and thickening of the graphite material to produce a graphite concentrate that is filtered, dried, and bagged for sale to downstream graphite processors.

Lincoln Minerals aims to be the next graphite producer in Australia's graphite industry. To achieve this aim, LML will leverage its four competitive advantages and will execute on a two-stage, low-capital start-up strategy.

Competitive advantages of LML's Project are:

- Short time frame to finalise approvals due to the Project being located on an existing Mining Lease (ML6460) with final approvals well advanced.
- Low operating cost due to the high-grade graphite mineralization that starts at the surface, requiring no pre-strip
- Low Capital expenditure and access to existing Tier 1 infrastructure (power, water and developed roads all proximal.
- Targeting cashflow positive throughout the graphite price cycle

LML has prepared a revised pre-feasibility study (PFS) based on information from the 2017 Feasibility Study, Program for Environment Protection and Rehabilitation (PEPR), and metallurgical test work, most of which is contained within previous studies conducted by the company. The PFS adopts a staged approach to minimize initial capital expenditure and allow for future expansion.

The Project is proposed to be developed sequentially with a staged approach with initial low start-up risks and costs leveraging off the current approved Mining Lease ML6460 (ML). Stage 1 of the project will process 75,000 tonnes per annum (tpa) of process feed, initially producing 10,000 tpa of high-quality graphite concentrate. Stage 2 will process 500,000 tpa of process feed, initially producing 60,000 tpa of high-quality graphite concentrate. Stage 1 is envisioned to operate for 2 years, dependent on the market price of the graphite product and approval of the second stage mining lease. Stage 2 is expected to produce from year 3 onwards. The Kookaburra Graphite Project consists of three individual areas: Kookaburra Gully (KG), Koppio and Kookaburra Gully SW Extension (KGE), all of which contain Mineral Resources reported in compliance with the 2012 JORC Code .

The graphite deposits are hosted within graphitic schists of the Paleoproterozoic Hutchison Group metasedimentary rocks, which were originally deposited as marine sand and silty clay, with carbonate and banded iron formation.

The general arrangement within the ML will include an open pit, crushing facilities, a mineral processing plant, waste rock storage facilities (WRD), a tailings storage facility (TSF) and other associated infrastructure.

The Project is described in further detail in the following sections.

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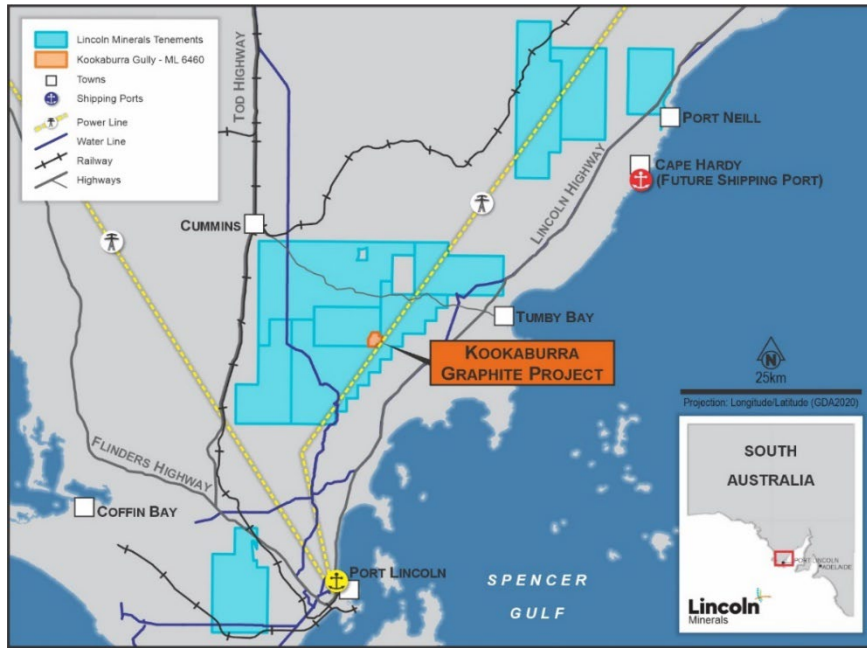


Figure 1: Kookaburra Graphite Project Location.

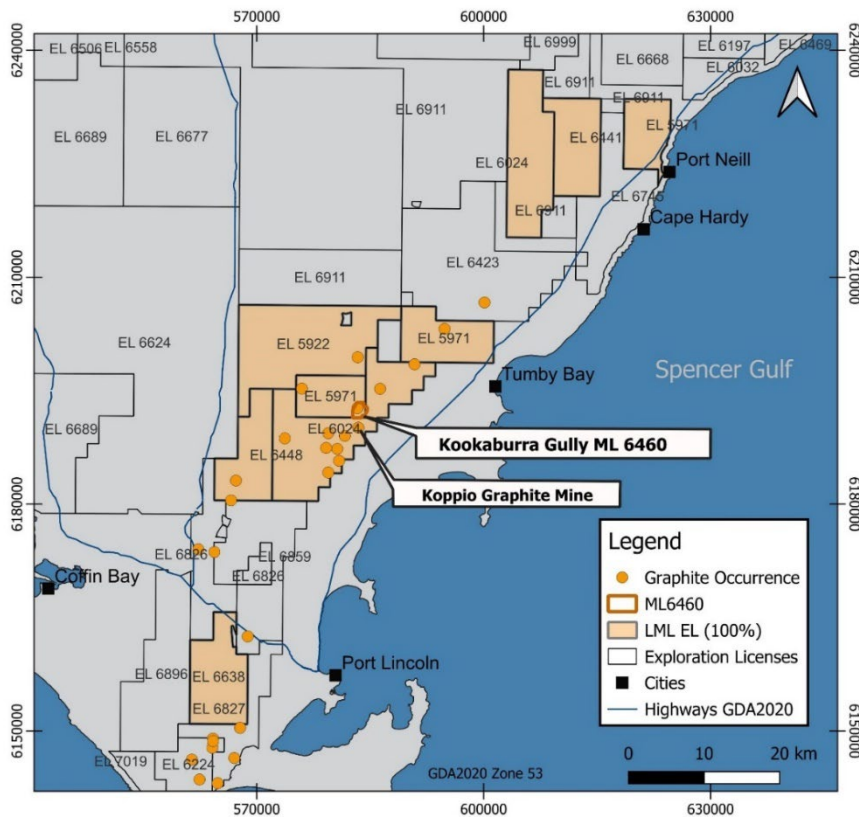


Figure 2: Mining and Exploration Leases and Graphite Occurrences

## 2. Mineral Resource Estimate

The Kookaburra Graphite Project encompasses three key areas: Kookaburra Gully (KG), Koppio, and Kookaburra Gully SW Extension (KGE). These deposits are situated within the graphitic schists of the Paleoproterozoic Hutchison Group, which were originally formed from marine sediments. The graphite mineralization is stratigraphically controlled, originating from marine algal and bacterial remains that transformed into graphite through high-grade metamorphism.

Geologically, the deposits strike NE to SW, with KG and Koppio dipping eastward at angles between 50° and 80°, while KGE is relatively flat lying. Extensive drilling has been conducted across these areas, with 127 holes (11,011m) at KG, 62 holes (5,375m) at Koppio, and 144 holes (8,489m) at KGE. This drilling has provided a substantial amount of data for resource estimation.

Resource estimation for the Project is based on Total Graphitic Carbon (TGC) grades. Ordinary Kriging is used for KG and KGE, while Inverse Distance Weighting is applied at Koppio. Various grade cut-offs are used to define core and halo domains, ensuring accurate resource modelling. Dry density measurements were taken using multiple methods, and sulphur content, generally below 0.5%, was estimated to manage any potential Acid Rock Drainage.

The resources are classified into Measured, Indicated, and Inferred categories based on drill spacing, geological continuity, and other quality metrics. The Mineral Resources for each area are presented in Table 1 and Figure 3 below.

Mineral Resources by Area	Cut-off Grade (%TGC)	Tonnage (Mt)	Average Grade (% TGC)	Contained Graphite (kt)
<b>Kookaburra Gully</b>				
Measured	2%	1.00	11.77	118
Indicated	2%	1.44	11.73	169
Inferred	2%	1.07	11.66	125
<b>Total</b>	<b>2%</b>	<b>3.51</b>	<b>11.72</b>	<b>412</b>
<b>Koppio</b>				
Indicated	2%	2.84	7.53	214
Inferred	2%	0.79	6.72	53
<b>Total</b>	<b>2%</b>	<b>3.63</b>	<b>7.35</b>	<b>267</b>
<b>Kookaburra Gully SW Extension</b>				
Indicated		0.58	7.73	45
Inferred	2%	5.12	4.86	249
<b>Total</b>	<b>2%</b>	<b>5.70</b>	<b>5.15</b>	<b>294</b>
<b>COMBINED TOTAL MEASURED + INDICATED + INFERRED</b>	<b>2%</b>	<b>12.84</b>	<b>7.57</b>	<b>973</b>

Table 1: Mineral Resources for the project in accordance with the JORC Code 2012<sup>7</sup>

<sup>7</sup> "Update to Target Achieved of Doubling the Kookaburra Graphite Project Resource" announced to ASX on 16 April 2024.



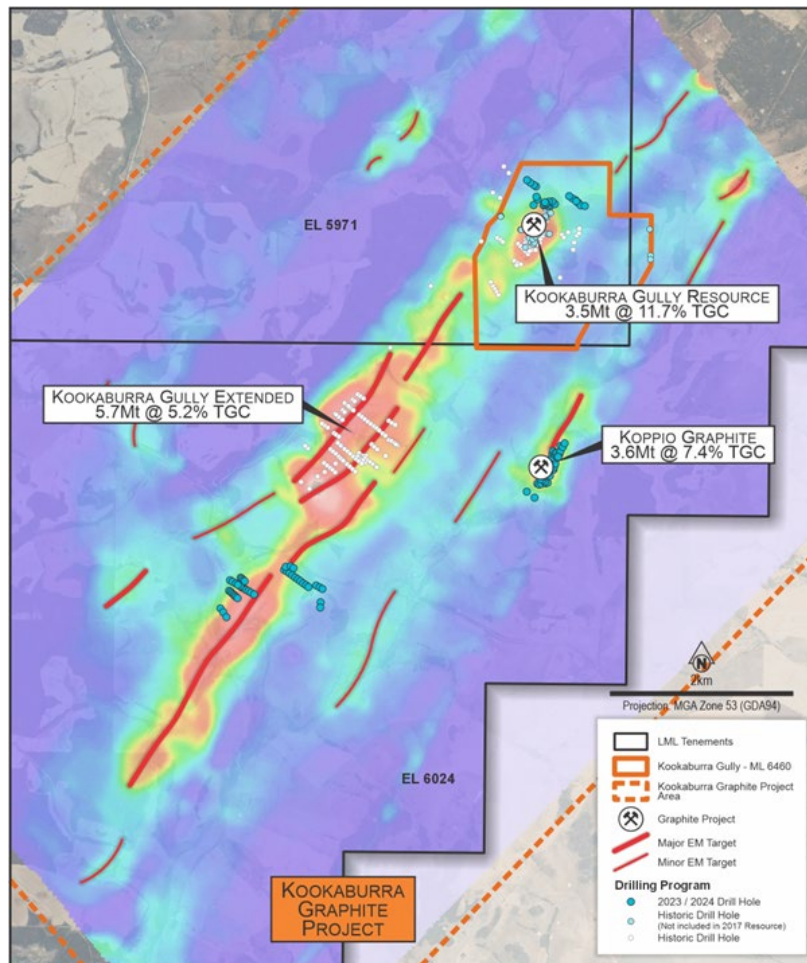


Figure 3: Kookaburra Graphite Project Mineral Resource

### Exploration Upside

Based on an airborne Tempest EM survey flown in mid-2012, a number of anomalies have been identified along strike from the existing deposits of KG, Koppio, and KGE. On 6 March 2024, LML provided an updated market announcement outlining the Exploration Targets based on the EM surveys and drilling activities conducted between 2012.

Exploration Targets<sup>8</sup> have not been incorporated into the mine plan supporting the Project. The Exploration Targets are presented in Table 2 and Figure 4 below.

<sup>8</sup> “Lincoln updates Exploration Targets for Kookaburra Graphite Project” announced to ASX on 6 March 2024.

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Target	Thickness	Strike Length	Down-Dip Length	Dip	Additional Exploration Target	Grade (TGC)	Contained Graphite Minimum (SG = 2.1)
Kookaburra Gully	15 - 20 m	600 - 800 m	125 - 200 m	60-85°	0 - 5.2 Mt	11 - 16%	0 - 0.5 Mt
Koppio Graphite Mine	10 - 25 m	700 - 1200 m	125 - 200 m	70-90°	0 - 12.9 Mt	7 - 12%	0 - 0.7 Mt
Kookaburra Gully Extended West Wing	10 - 20 m	600 - 1500 m	120 - 200 m	60-80°	0 - 13.9 Mt	4 - 10%	0 - 0.5 Mt
Kookaburra Gully Extended East Wing	10 - 20 m	1000 - 1600 m	200 - 500 m	0-60°	1.4 - 38.4 Mt	4 - 10%	0 - 1.1 Mt
Kookaburra Gully SW (Yellow Gums)	7 - 20 m	1500 - 2900 m	100 - 150 m	60-90°	2.7 - 22.6 Mt	4 - 10%	0.1 - 0.7 Mt
Glendara	5 - 15 m	600 - 900 m	50 - 100 m	60-90°	0.3 - 3.5 Mt	4 - 10%	0 - 0.1 Mt
Pernella	5 - 15 m	500 - 1200 m	50 - 100 m	60-90°	0.3 - 4.7 Mt	4 - 10%	0 - 0.2 Mt
Follet and Boyd	5 - 30 m	600 - 1800 m	50 - 100 m	80-90°	0.4 - 14.0 Mt	4 - 10%	0 - 0.5 Mt
Wren	5 - 15 m	700 - 1000 m	50 - 100 m	60-90°	0.2 - 2.7 Mt	4 - 10%	0 - 0.1 Mt
Brennard North	5 - 15 m	500 - 800 m	50 - 100 m	60-90°	0.2 - 2.3 Mt	4 - 10%	0 - 0.1 Mt
Brennard South	5 - 15 m	400 - 800 m	50 - 100 m	60-90°	0.3 - 3.1 Mt	4 - 10%	0 - 0.1 Mt
Bald Hill	5 - 10 m	500 - 900 m	50 - 100 m	60-90°	0.3 - 2.3 Mt	4 - 10%	0 - 0.1 Mt
<b>Total</b>					<b>6 - 126 Mt</b>		<b>0.1 - 4.5 Mt</b>

Table 2: Exploration Targets announced to ASX by LML on 6 March 2024.

The potential grade and quantity of Exploration Targets are conceptual and theoretical in nature. There has been insufficient exploration to estimate a Mineral Resource from these Exploration Targets, and it remains uncertain if further exploration will result in the estimation of additional Mineral Resources.

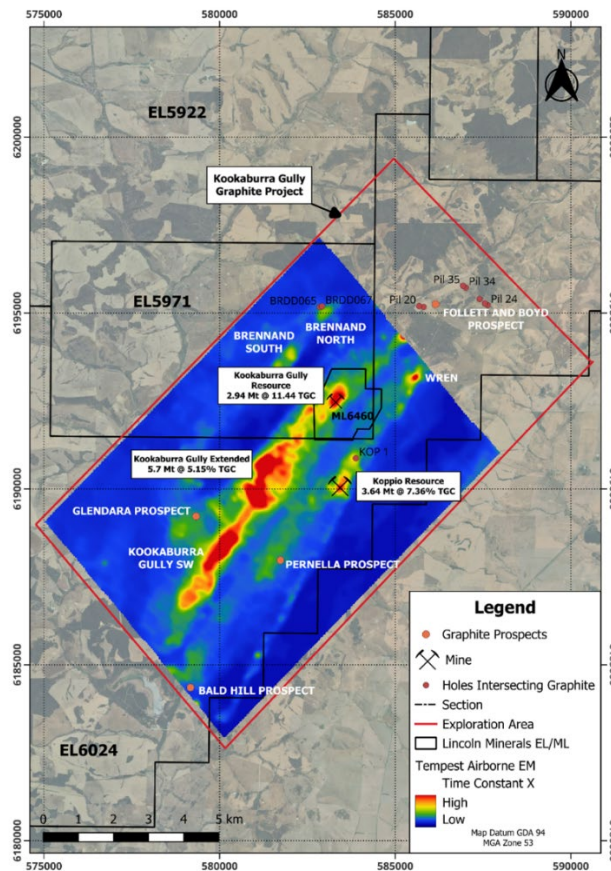


Figure 4: Location of exploration targets in relation to defined Mineral Resources

**3. Resource Confidence**

The first two years of the production schedule are supported by 96% Measured and Indicated Resource. Furthermore, the first five years of the production schedule are supported by 79% Indicated and better. This is considered a very high proportion and underpins confidence in the PFS outcomes. See Figure 5.

Both KG and Koppio have high resource maturity with 70% and 78%, respectively, at Indicated and Measured Resource status. Most of the Inferred Resource in the schedule comes in the later years and is located in KG Southwest Extension, where sufficient time exists to complete resource conversion drilling. An optimised schedule will consist mainly of Measured and Indicated in the early years with Inferred Resource dominating the latter years. With the potential mineralisation noted above in the Exploration Targets, it has the potential to operate for +25 years with further drilling and discovery.

It was decided that completing a JORC Ore Reserve did not add any value to the decision to take the next step and complete a feasibility.

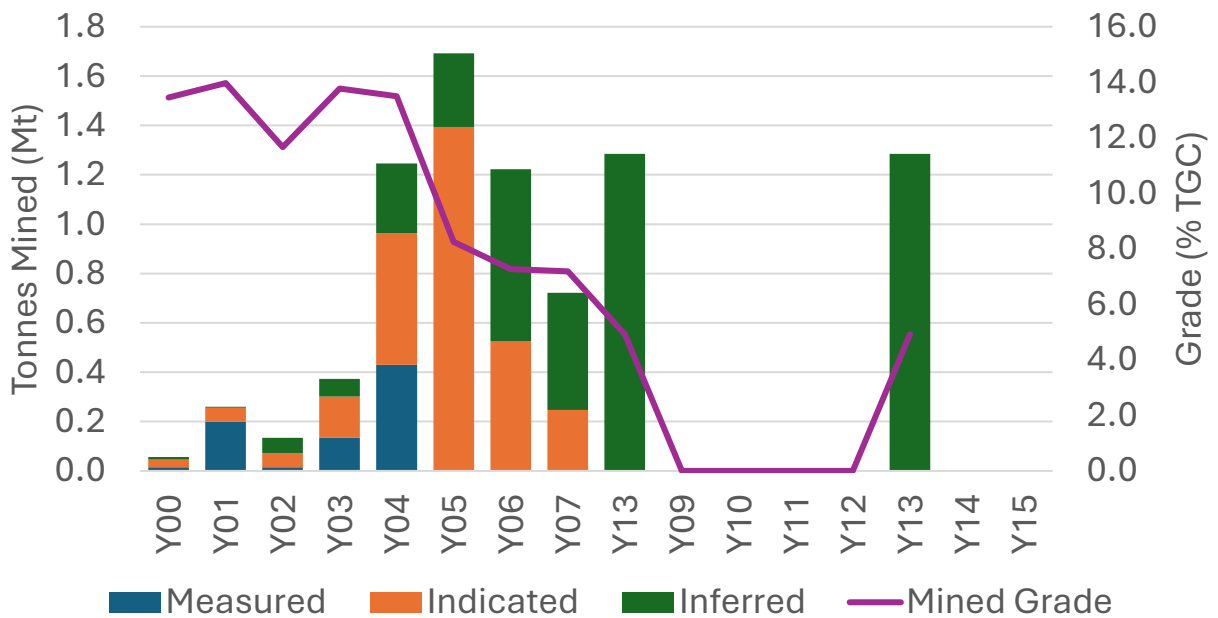


Figure 5: Inventory mined by period by resource category

**4. Kookaburra Gully Mining Lease and Mine Layout**

Lincoln Minerals Limited’s subsidiary, Australian Graphite Pty Limited (AGL), was granted a 21-year Mining Lease (ML), ML 6460, in June 2016. Surrounding Exploration Licences 5971 and 6024 were granted in 2017.

The Kookaburra Gully deposit is on ML 6460, while the Koppio deposit and Kookaburra Gully Southwest Extension (KGE) are on Exploration Licences 6024 and 6421, respectively. The project is required to apply for an extension of the ML to include these additional deposits. Mining and Processing can occur for up to six years before the extension is required.

The General Arrangement for Kookaburra Gully includes an open pit, crushing facilities, a mineral processing plant, waste rock storage, a tailings storage facility, and other infrastructure. The Mine Design section details the mine layouts for the staged approach.

Figures 6 and 7 below show the mine layout and stages.

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**5. Mining**

Mining will be conducted using conventional truck and shovel open-pit methods with a mining contractor.

The geological assessment indicates completely weathered rock extends to 20m below ground level, and partially weathered rock extends to depths between 25m and 70m. Completely weathered rock down to 20m will be excavated without blasting, while drill and blast methods will be used for partially weathered and unweathered rock.

The mine design and scheduling divide mining into three stages. Stage 1 involves early access to high-grade inventory via two small starter pits in the north and south of Kookaburra Gully, using a small-scale mining fleet. Stage 2 expands to a larger fleet, mining an interim staged pit pushback and a final pit pushback at Kookaburra Gully, followed by mining at Koppio and Kookaburra Gully Southwest. Stage 3 focuses on mining the remainder of the Kookaburra Gully Southwest deposit.

Material movements are planned to maximise high-grade material extraction in the early years, with lower grades stockpiled for later processing. This results in an overall mine life of 16 years.

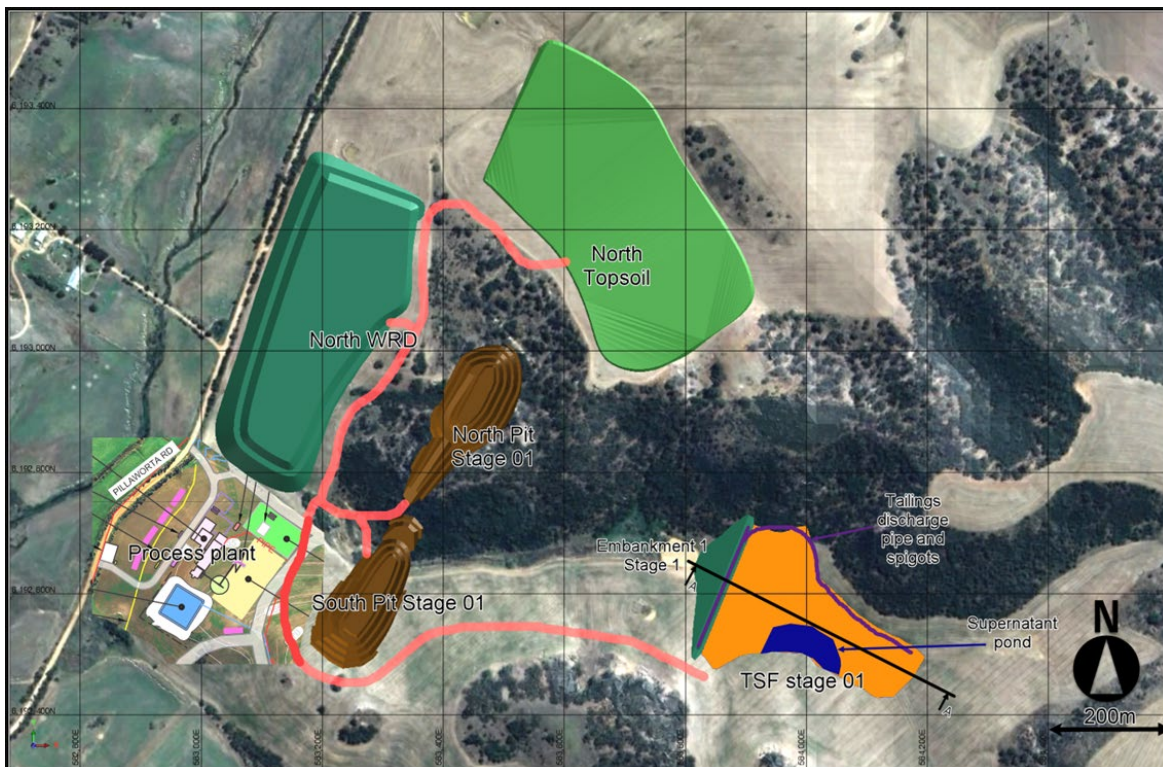


Figure 6: Stage I Mining Layout

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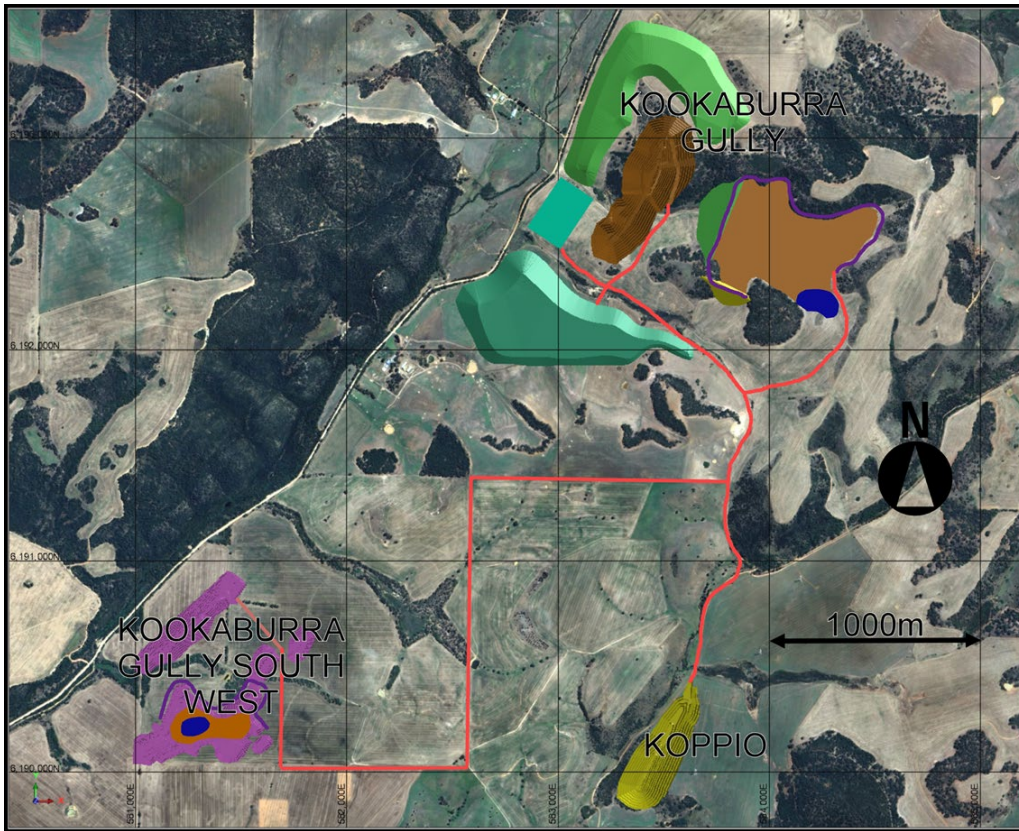


Figure 7: Mine layout focuses on Kookaburra Gully Stage 2.

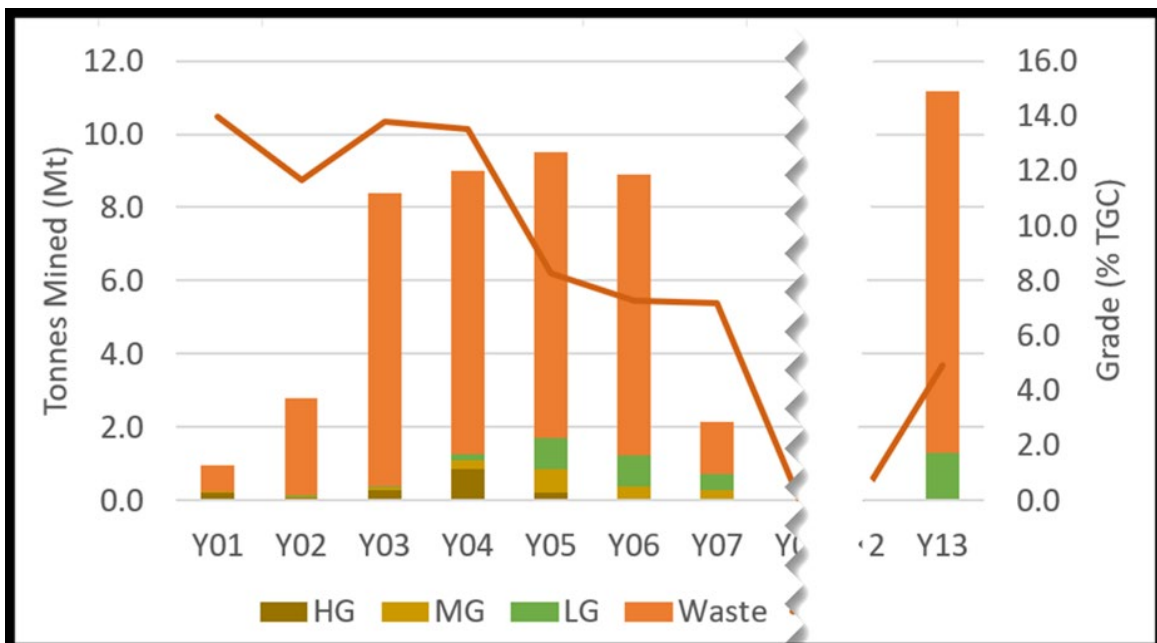


Figure 8: Mine material movements by year.

## Waste Rock Storage Facilities

The design of the Waste Rock Storage Facilities (WRSF) aims to utilise the surrounding natural landform and excavations from mining to reduce operating and capital costs and, more importantly, to maximise post-land use options and aesthetics of the surrounding area for the benefit of the community. Two WRSFs are designed for waste produced from Kookaburra Gully. Waste produced from Koppio and Kookaburra Gully Extension pits will be backfilled into the mined-out Kookaburra Gully and Koppio.

## Tailings Storage Facilities

The waste output (tailings) from the flotation process for the first two years, tailings will be stored in stage 1 of the KG tailings storage facility (TSF). The next ten years of tailings will be deposited into stage 2 of the KG TSF. The final 3.5 years of processing will see tailings deposited into the in-pit TSF located at the Kookaburra Gully Southwest pit.

## 6. Metallurgy and Process Plant Design

In addition to previous work reported by Australian Graphite Ltd, in 2015, detailed metallurgical test work was completed and reported for the 2017 PFS by Independent Metallurgical Operations (IMO) (Report: Kookaburra Graphite Project Pre-Feasibility Study Testwork Report, Project 5773, February 2017).

The testwork study was completed on three bulk samples representing different elevation levels in the orebody or stages in the proposed mining sequence of Kookaburra Gully:

- LOXI – a 50kg near-surface oxide sample from shallow (< 5m BGL) trenches in the central and northern parts of the orebody (weathered graphite schist above 152m AHD);
- LMC11 – a master composite sample of approximately 150kg from diamond drill core, representing the middle levels of the orebody (relatively fresh graphite schist below 133m AHD); and,
- LSU1 – a deeper 50kg sample from near the base of the proposed pit (fresh sulphide-bearing graphite schist below 101m AHD).

The results of that metallurgical test work are summarised in Table 3 below.

The Kookaburra Graphite Project aims to produce flake graphite concentrate for export.

The Pre-Feasibility Study (PFS), based on previous studies and metallurgical results, outlines a two-stage development plan. Stage 1 involves processing 75,000 tonnes per annum (tpa) of mined material to produce approximately 10,000 tpa of high-quality graphite concentrate with a grade of 94% to 96% Total Graphite Carbon (TGC) over the initial two years. Stage 2 scales up to process 500,000 tpa of mined material, yielding around 60,000 tpa of high-quality graphite concentrate from year three onwards.

The Study adopts a staged approach to minimize initial capital expenditure, allow for future expansion and also facilitate market entry of LML's graphite production including allowing adequate time for product qualification and certification timelines with end-users. The process flow sheet, developed from previous metallurgy and lock-cycle test work, includes crushing, flotation, thickening, filtering, drying, and bagging of the graphite concentrate.

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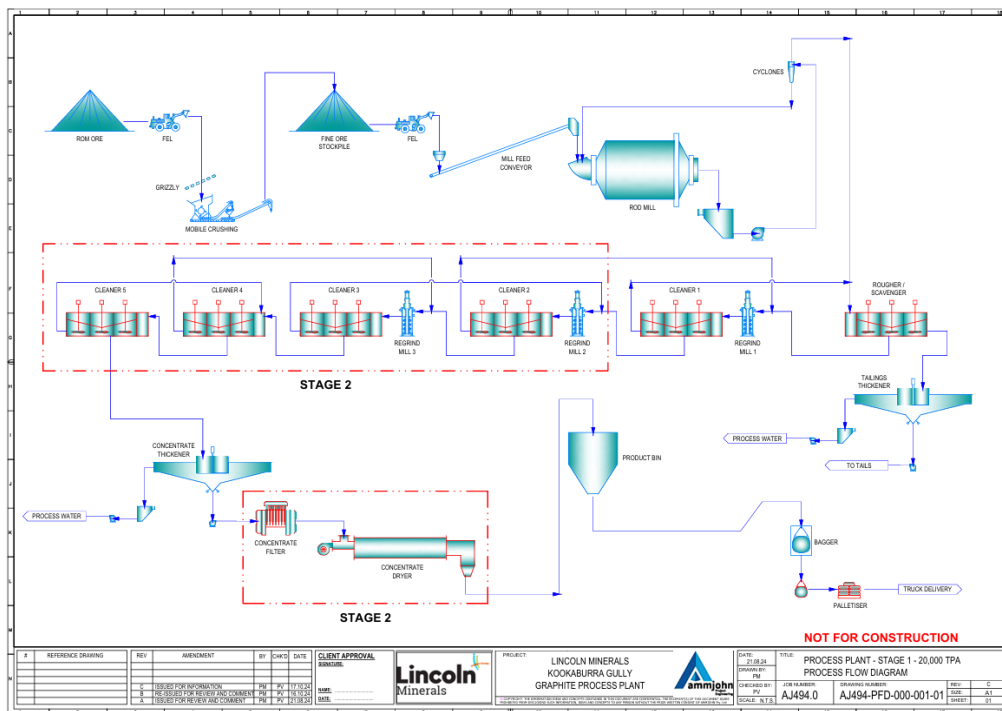


	Master Composite LMC11			Oxide Surface Composite LOX1			Deeper Composite LSU1		
Depth BGL*	40–119 m			1–5 m			99–119 m		
Depth AHD* (above sea level)	81–133 m			Trench 2 & 4 190–183 m Trench 1 152–156 m			66–101 m		
Graphite Recovery	ca. 90+%			ca. 90+%			ca. 90+%		
Calculated Total Concentrate Grade	96.6% TGC			95.0% TGC			95.1% TGC		
Screened concentrate	Assay TGC%	Assay LOI%	Dist'n %	Assay TGC%	Assay LOI%	Dist'n %	Assay TGC%	Assay LOI%	Dist'n %
+300 µm	93.2	96	0.1	97.8	97.1	0.4	97.4	97.4	0.31
+177 µm, -300 µm	93.2	96	3.5	97.8	97.1	5.2	97.4	97.4	4.7
+150 µm, -177 µm	95.8	97.2	3.9	96.4	97.7	4.7	97	97.6	6.9
+106 µm, -150 µm	96.6	97.5	11.4	97	97.3	14.8	97.5	97.7	13.9
+75 µm, -106 µm	96.7	97.4	11.4	97.1	97.2	12.7	96	97.6	12.2
-75 µm	96.8	96.8	69.7	93.8	94.5	62.2	94	94.6	62

**Table 3: Metallurgical Test Results**

\*BGL is below ground level; AHD is Australian Height Datum; Dist'n is distribution TC is Total Carbon; LOI is Loss on Ignition International ISO 565 (TBL-2) 1983 & American ASTM E 11-87 Standard Sieve/Mesh Sizes are: 50# = 300 µm; 80# = 180 µm; 100# = 150 µm; 200# = 75 µm

The flowsheet below shows the design of the full metallurgical plant in Stage 2.



**Figure 9: Stage 2 Process Flowsheet**

Key differences between the current Pre-Feasibility Study and the previous Feasibility Study (produced in 2017) relate to several updates and optimizations. The jaw crusher has been replaced with an impact crusher, and a mobile crusher will now be used for both stages. Material handling now involves a front-end loader feeding directly onto the mill feed conveyor. The rod mill for Stage 1 is designed to also accommodate tonnage anticipated during Stage 2 and will operate on day shift only during Stage 1, with no additional capital required for Stage 2.

Stage 1 is now designed with fewer flotation cells and includes a regrind mill, with additional cells and regrind mills added for Stage 2. Flash flotation and gravity concentration stages have been eliminated, and the product screen has been removed as most of the product is already fine. Concentrate dewatering will use an automatic filter press in Stage 2, while Stage 1 will rely on air drying.

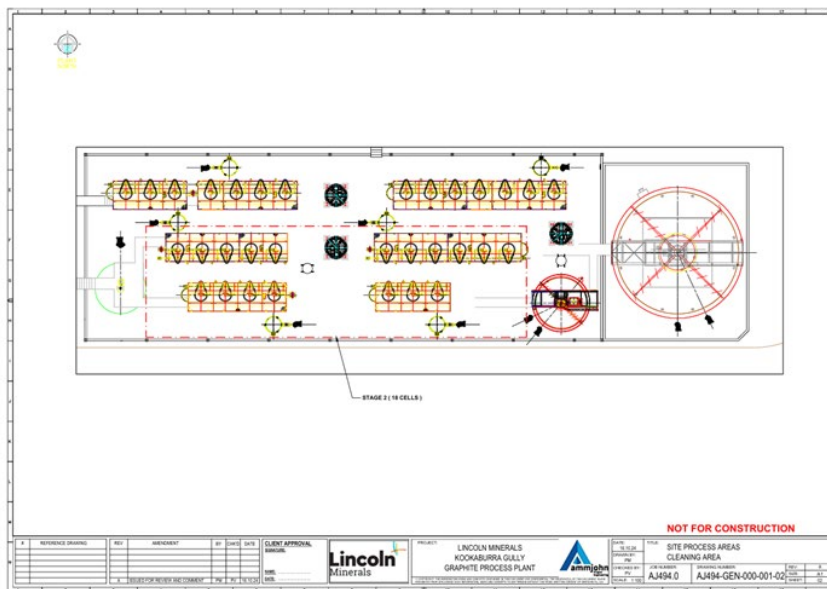


Figure 10: Site Process Areas

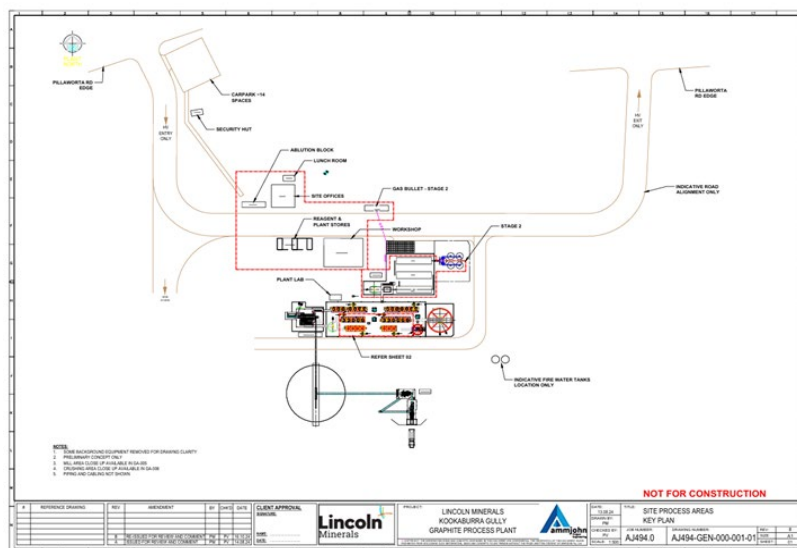


Figure 11: Site Process Area



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The following process design criteria (PDC) were used for the PFS with Stage 1 and Stage 2 described in the Table below. A full PDC can be found in the PFS appendices.

Description	Units	2017 Study	Stage 1	Stage 2
Nominal Annual Throughput	t/y(dry)	250,000	75,000	500,000
Availability (overall)	%	90%	90%	90%
Operating hours/year	h/y	7,884	7,884	7,884
Nominal throughput	t/h(dry)	32	10	63
Head Grade % TGC	%	15%	15%	13%
Material Moisture	%	3	3	3
Recovery	%	95	90	90
Graphite target	t/y(graphite)	35,500	10,000	60,000

Table 4: Process Design Criteria (PDC) and Production Schedule

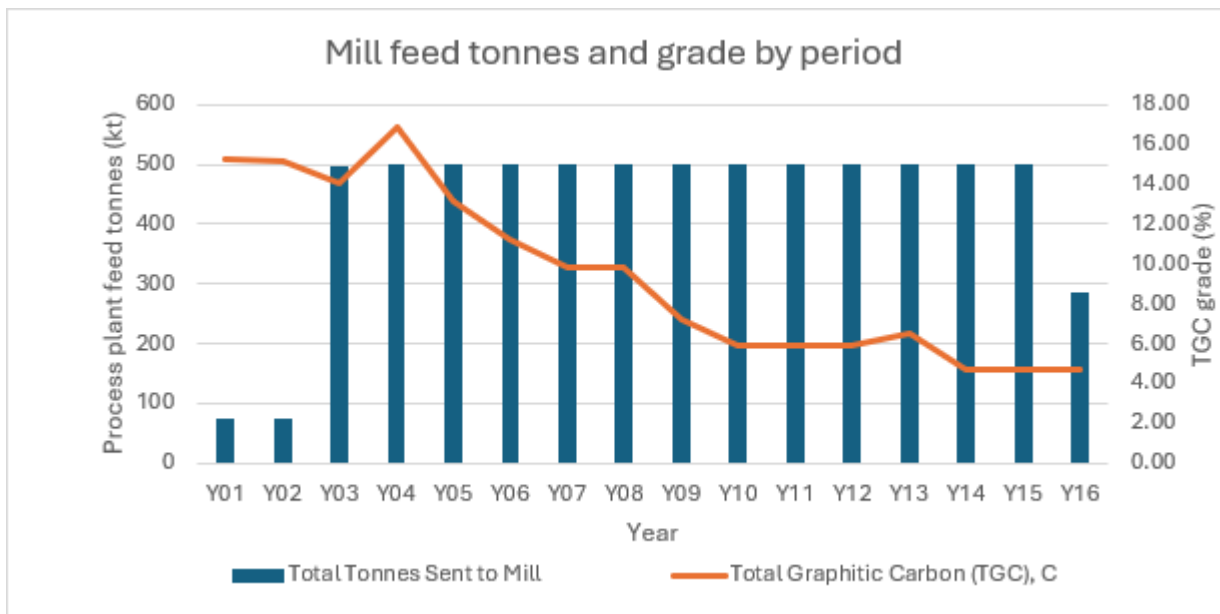


Figure 12: Estimate of Production of Mine Gate Products

7. Infrastructure

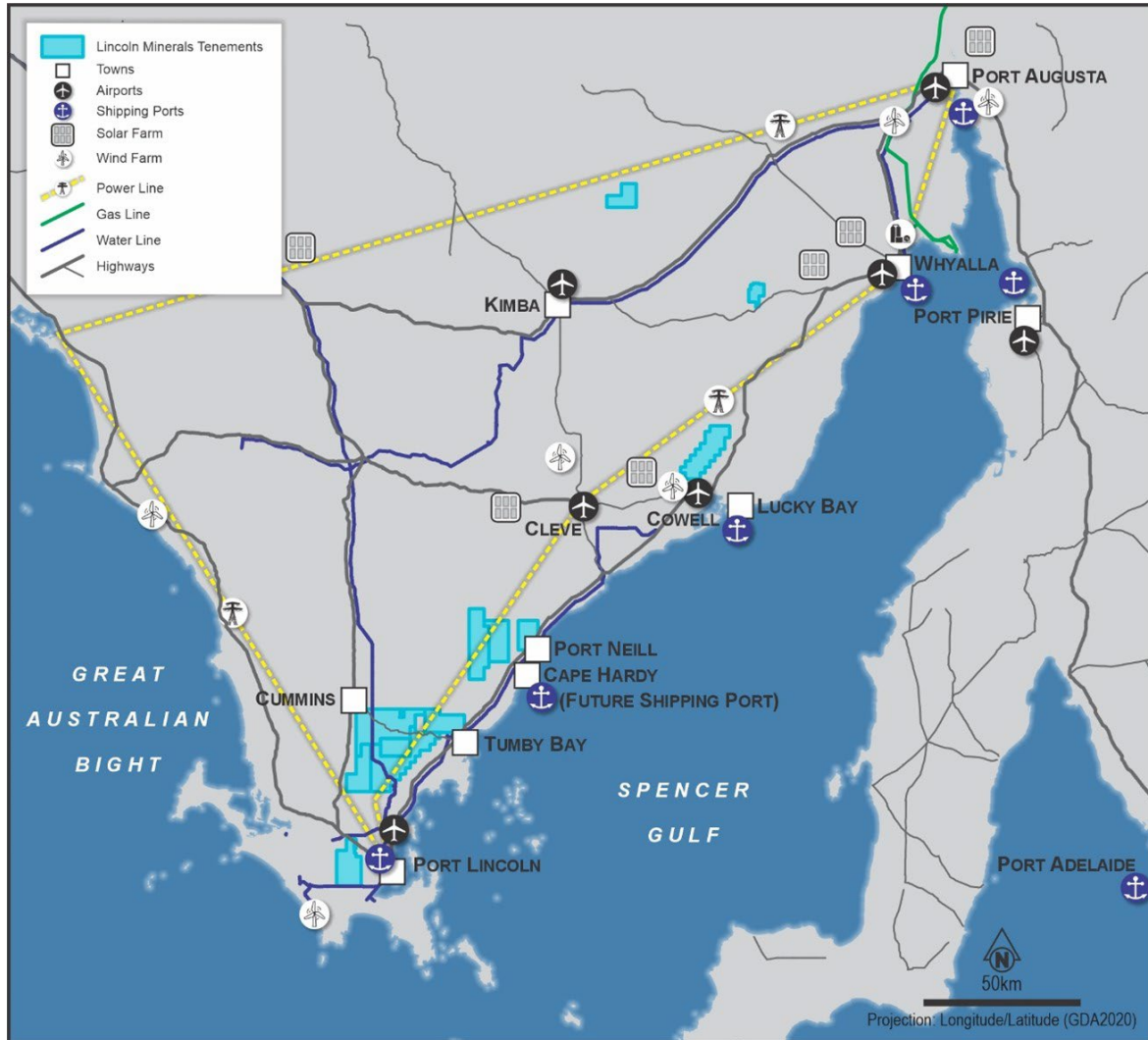


Figure 13: Eyre Peninsula Infrastructure

**Power and Water**

Kookaburra Gully’s power demand is projected to be 350 MWh per month during initial Stage 1 production and 1,300 MWh per month during Stage 2 production. The site will be connected to the SA Power Network via a dedicated 6km, 33kV powerline.

Water supply: The initial demand for Stage 1 is planned to be met by a network of small groundwater bores, with future supply for Stage 2 from the SA Water network and groundwater bore water. For Stage 2, a 13km pipeline is required to be laid.

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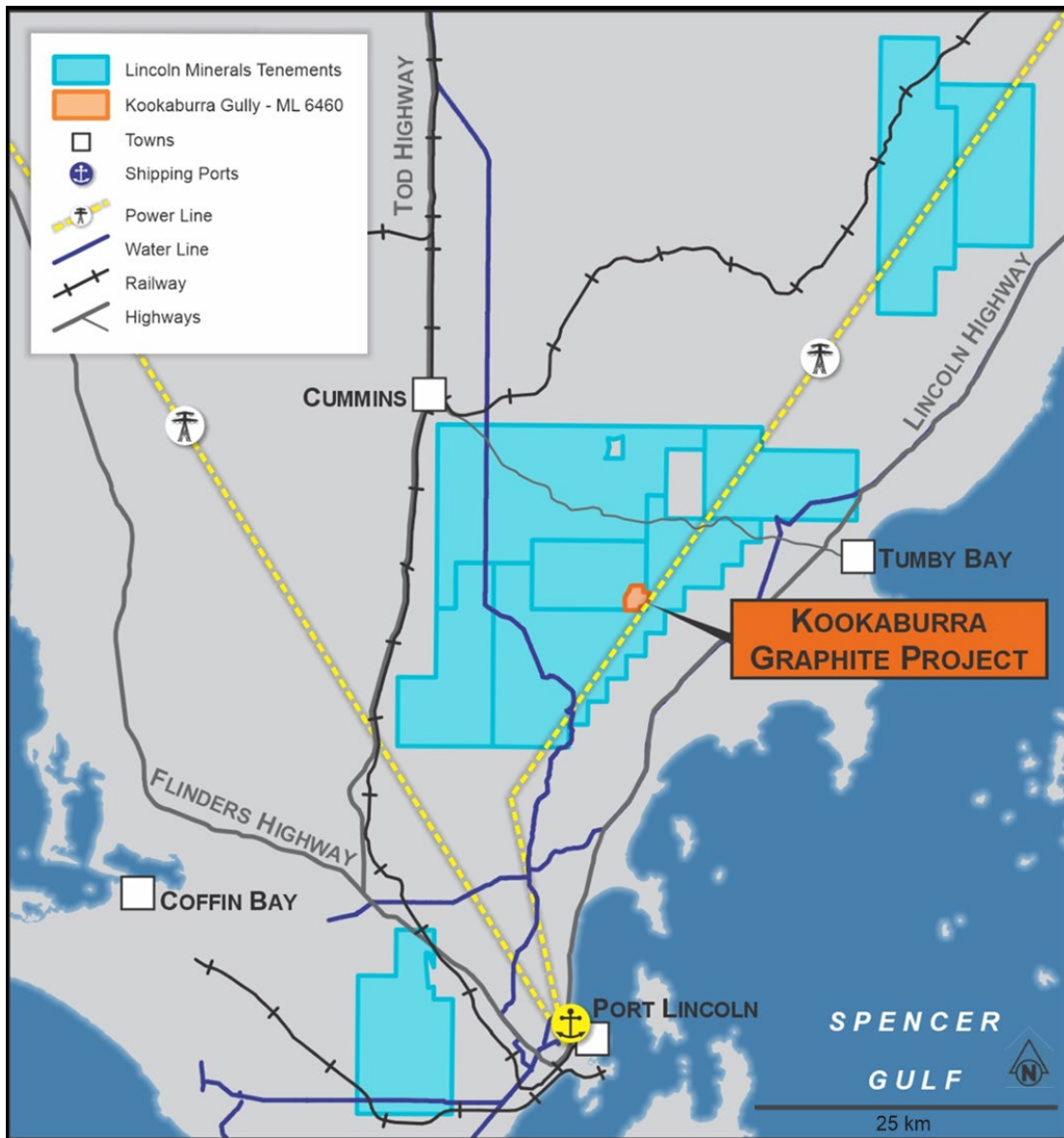


Figure 14: Local Infrastructure

**Port Options**

Port Adelaide has been selected as the preferred shipping port option for the PFS study.

**Transport Logistics**

Graphite concentrate will be packaged on-site in 25kg packets or bulka bags, loaded onto pallets or into twenty-foot containers (TEUs), and transported by truck to Port Adelaide.

## 8. Environmental, Social and Governance

The Kookaburra Graphite Project is situated in the District Council of Tumby Bay, within the Rural zones of the Hundred of Koppio and Hundred of Yallunda Flat. The project area, primarily agricultural land used for grazing and cropping, includes two hobby farms and pockets of native vegetation with streams feeding the Pillaworta Creek.

The finalisation of this Pre-Feasibility Study kicks off another round of stakeholder engagement. The purpose of this engagement is to involve stakeholders to ensure their feedback shapes the planning, design, and decision-making processes for the Bankable Feasibility Study, enhancing project outcomes. Since 2012, Lincoln Minerals and its subsidiary, Australian Graphite Pty Limited (AGL), have consulted with landowners, stakeholders, and the local community. A Community Engagement Plan implemented in 2017 has helped establish strong relationships with these groups as the project has progressed.

### Existing Environment and Mine Closure Planning

The area designated for Mining Lease(s) is primarily agricultural land, extensively cleared for cropping and grazing. Lincoln Minerals has integrated stakeholder engagement and environmental studies into the project's development to minimize environmental and community impacts. The project area includes pockets of native vegetation and watercourses feeding the Pillaworta Creek, part of the Tod River Wetlands sub-catchment. Protected native vegetation under the *Environment Protection and Biodiversity Conservation Act 1999* has been excluded from the mining footprint.

Lincoln Minerals is committed to a transitional and progressive mine closure plan, engaging early with the community and stakeholders to incorporate their feedback. The plan aims to transition the site for community benefit and achieve a positive environmental outcome.

### Workforce

Lincoln Minerals plans to hire most of its workforce from local communities near the project area. Air services from Adelaide to Port Lincoln will be available for those not based locally.

The project's location near coastal communities offers lifestyle benefits, and its proximity to major population centres is expected to attract many applicants. Medical support, including hospitals and doctors, is available in Cummins, Tumby Bay, and Port Lincoln, and local emergency services are also accessible. The project site will have emergency response and first aid facilities to complement these local services.

### Permitting

Lincoln has been granted a Mineral Lease for the Kookaburra Gully Graphite Project by the South Australia Department for Energy and Mining, as announced on 6 June 2016. This lease is the primary government approval for mining operations, setting conditions for construction, mining, and rehabilitation phases.

The Mineral Lease outlines the Program for Environment Protection and Rehabilitation (PEPR) requirements, which must be approved before mining can commence. The PEPR will detail how Lincoln Minerals plans to meet the conditions of the Mineral Lease and must be evaluated by the Department for Energy and Mining. Lincoln Minerals expects to submit the PEPR in mid-2025.

### Environment

Environmental assessments were conducted for the Kookaburra Graphite Project, formerly known as the Kookaburra Gully Graphite Project, as part of the compliance and permitting process to establish baseline characteristics and the project's environmental impact.

These studies supported a Mining Lease Proposal (MLP) under Section 35 of the *Mining Act 1971*, which resulted in the Mineral Lease (ML) 6460 grant to Kookaburra Gully on 3 June 2016.

**9. Product Specification, Marketing and Price Assumptions**

Based on the high proportion of -100# (<150micron) flake size product and high graphitic carbon product grades, Lincoln will initially sell its graphite concentrate into established specialty markets (also referred to as Industrial Markets) while qualifying products for other value-added and high technology battery markets. Specialty markets for standard mesh products include but are not limited to, dry or conductivity lubricants (grease, dry film, dispersants), carbon brushes, plastics, powder metallurgy, drilling fluids, alkali batteries and foundry materials. The average carbon content of Kookaburra Gully concentrate, as envisaged by the PFS, is >94% TGC or >95% LOI.

**Global STD Mesh Natural Flake Graphite Median Price Chart**  
**Prices in USD per Mt FOB Port - 2<sup>nd</sup> Qtr. 2024**

Average Sales Prices (ASP) Across 5 Market *Groups By Mesh Size & Purity Range	ASTM Mesh Size Grade / Purity (%LOI)					
		85 - 87	87 - 90	90 - 94	95 - 97.5	99.0 - 99.9
* Thermal Mgt. Lubricants, Polymers, Engineered Products, Energy Storage	+100 (50x100)	-	\$775	\$974	\$1,110	\$1,466
	-100	\$480	\$618	\$787	\$924	\$1,201
	-150	-	\$629	\$722	\$840	\$1,084
	+200 (100x200)	-	\$783	\$824	\$909	\$1,303
	-200	\$534	\$576	\$611	\$667	\$939

Median Prices based on 20 Mt FOB Port Min Orders - market price intelligence from contacts / industries, customer F/U, FOB Port EL reviews, Asia Metals, RefWin China for refractories

*This pricing chart is not to be disseminated, reproduced, copied, or used without the expressed written consent of Lone Star Tech Minerals - USA*

**Figure 15: STD ASTM Mesh Traditional Graphite Reference Pricing**

Source: Lone Star Tech Minerals-USA – Internal Technical Data and Pricing Database / Application Knowledge / Field Sales Experience

Historical Pricing Analysis ASP Summary

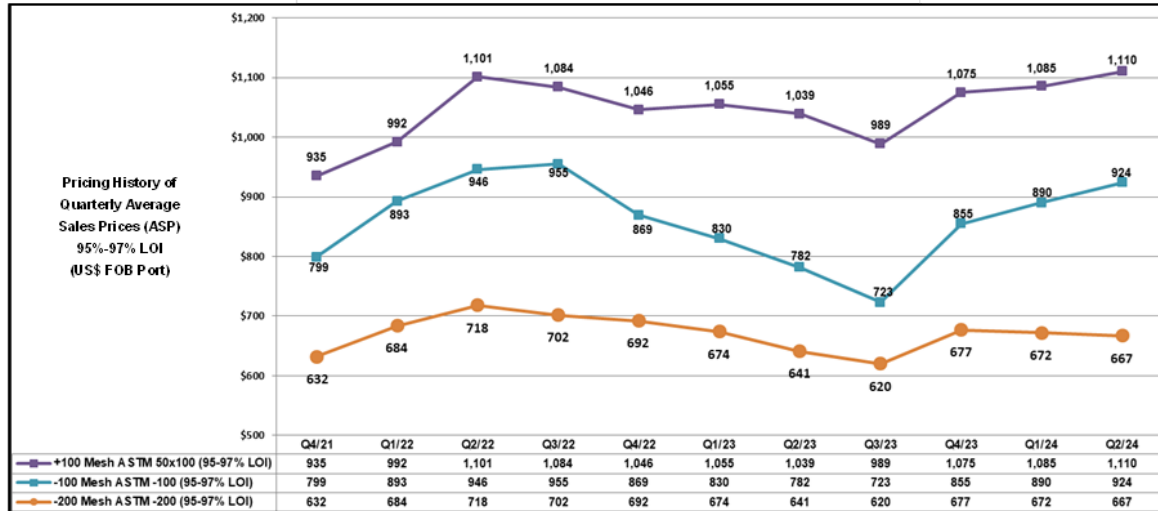


Figure 16: Historic Pricing for Industrial Graphite for STD ASTM Mesh

Source: Lone Star Tech Minerals-USA – Internal Technical Data and Pricing Database / Application Knowledge / Field Sales Experience

Lincoln has been working with Lone Star Tech Minerals to develop a marketing strategy and qualify products with specific global customers and to provide estimates of the timing, volume and prices of graphite products that the Project plans to sell into the global market (the ‘Sales estimates’). The Sales Estimates contemplate selling into two broad market segments.

**10. Specialty graphite (Industrial) market**

The Specialty Graphite Markets to be targeted by Lincoln in the first two years of production are detailed in the diagram below. These Industrial Graphite markets are well established and represent markets with favourable pricing dynamics that should comfortably support market entry for Lincoln’s initial Stage 1 production levels of 10,000 tonnes per annum.

Notably, these Industrial Graphite markets are characterised by relatively short qualification times, ranging from days to months rather than up to 2-3 years in the case of the EV Battery markets. This short qualification timeframe means that Lincoln will target the placement of Stage 1 output into sales contracts prior to and upon commencing production, generating rapid time to first cashflow.

Buyers in the Industrial Graphite markets are also seeking new non-China supply sources in response to China’s graphite product export restrictions and USA supply chain mandates, which dictate how much China graphite can enter the US anode supply chain. Lincoln expects to commence solid engagement with potential sales partners and end users in the coming quarters to firm up initial interest in non-binding sales contracts ahead of further project delivery milestones.



Figure 17: Summary of market groups / target applications using graphite powder<sup>9</sup>

## II. Electric Vehicle (EV) Battery Markets

The EV Battery market is the newest source of demand for flake graphite and is expected to become the largest source in future years, fueled by the strong demand growth from the EV sector.

Graphite is the key ingredient in the anode of a lithium-ion battery, which is the battery of choice for EV's due to its high power-to-weight ratio, high energy efficiency, good high-temperature performance, long life, and low self-discharge.

EV's have started to increase as a share of new vehicle purchases globally, reaching 80% in Norway, 22% in China and 6% in the USA. The World Resources Institute predicts EV sales are expected to reach 85-90% of new vehicles purchased in many markets by 2030, in response to greenhouse gas emission reduction targets and supportive government legislation<sup>10</sup>.

<sup>9</sup> Lincoln Minerals - Sales and Marketing Strategy Planning – Lab Analysis Data and Suitability Assessment Report

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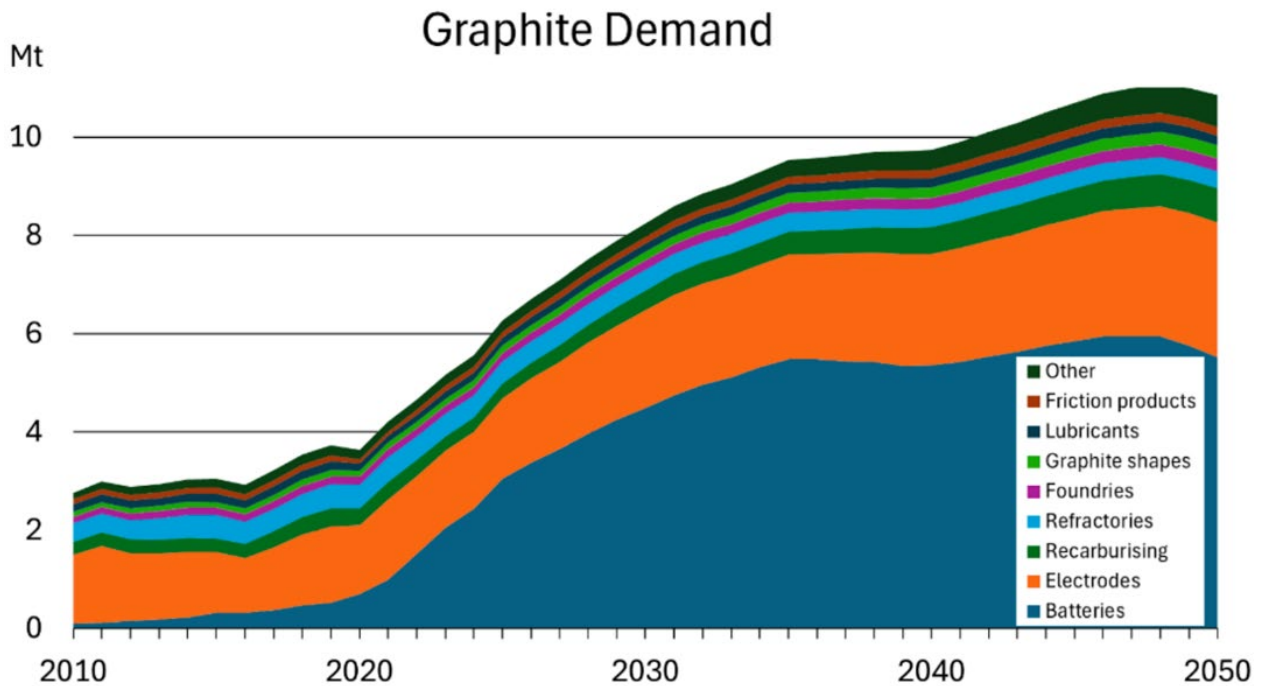


Figure 18: Graphite demand by end-use<sup>10</sup>

EV demand for natural graphite for use in lithium-ion battery anodes is expected to increase substantially from around 1.5-2.0mtpa to 6mtpa by 2035 (see Figure 18).

Given the requirement for battery performance of 10+ years within an EV, the qualification requirement for sale into the EV Battery sector is lengthy and can be up to 2-3 years.

Lincoln proposes to utilise some of the output from its first two years of production (Stage 1) to undertake the qualification of its product with potential battery manufacturers, allowing for sales contracts to be finalised and entered into ahead of the ramp up in output from year 3 onwards.

## 12. Capital Cost Estimate

Lincoln Minerals compiled the capital estimate, incorporating input from various sources. The engineering firm Ammjohn updated the estimate for the processing plant, while the NPI estimates were drawn from the 2017 NPI studies. The costing was done in line with AACEi Class 4 estimate of -30%/+50%. A 25% contingency has been included to account for the level of study maturity.

The capital estimates are categorised into five key areas:

- 1) Mining,
- 2) Processing Plant,
- 3) Tailings Storage Facility,
- 4) Non-Process Infrastructure (NPI), and

<sup>10</sup> Source: [Supply & demand | Sarytogan Graphite Investor Hub](#)



## 5) Other Non-Deductible Items.

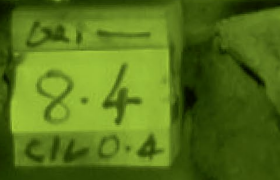
Item	Sub Item	Units	Stage 1	Stage 2	Deferred	Total
<b>Mining<sup>11</sup></b>	Mining Capex	A\$m	2.9			2.9
<b>Process Plant / Infrastructure</b>	Crushing	A\$m	1.3	1.0		2.3
	Milling and Flotation	A\$m	8.2	6.4		14.5
	Product Bagging	A\$m	1.5	5.5		7.1
	Utilities / Buildings	A\$m	1.3	1.2		2.5
	Project Management	A\$m	1.1	1.3		2.5
	Other	A\$m	1.2	1.5		2.7
	<b>Total</b>	<b>A\$m</b>	<b>14.7</b>	<b>16.9</b>		<b>31.6</b>
<b>TSF</b>	Stage 1	A\$m	1.7	-		1.7
	Deferred	A\$m			7.8	7.8
	<b>Total</b>	<b>A\$m</b>	<b>1.7</b>	<b>-</b>	<b>7.8</b>	<b>9.5</b>
<b>NPI</b>	Water - Bore Fields	A\$m	0.5			0.5
	Water – SA Main	A\$m		2.2		2.2
	Road Upgrade	A\$m	1.0			1.0
	Power Solution	A\$m	2.3			2.3
	<b>Total</b>	<b>A\$m</b>	<b>3.8</b>	<b>2.2</b>		<b>6.1</b>
<b>Contingency @ 25%</b>		A\$m	5.8	4.8	2.6	13.2
<b>Total – Project Costs</b>		A\$m	<b>28.8</b>	<b>24.0</b>	<b>10.4</b>	<b>63.2</b>
<b>Total – Project Costs</b>		US\$m	<b>19.3</b>	<b>16.1</b>	<b>7.0</b>	<b>42.3</b>
<b>Other</b>	Land Acquisition	A\$m	2.1	-	3.1	5.2
	Government Bond	A\$m	2.7	2.7	1.4	6.8
	SEB Payment	A\$m	0.3	0.3	0.1	0.7
	<b>Total</b>	<b>A\$m</b>	<b>5.1</b>	<b>3.0</b>	<b>4.6</b>	<b>12.7</b>
<b>Grand Total –</b>		A\$m	<b>33.9</b>	<b>27.0</b>	<b>15.0</b>	<b>75.9</b>
<b>Grand Total</b>		US\$m	<b>22.7</b>	<b>18.1</b>	<b>10.0</b>	<b>50.9</b>

Table 4: Capital estimates

The total expenditure across both stages amounts to A\$52.8m, covering a range of activities from site preparation to project management. The distribution of costs includes key sub-items such as Crushing, Utilities, Commissioning, and Buildings, with incremental increases in Stage 2 to support the ramp-up and expansion of operations.

Sustaining capital costs include all expenditures necessary to sustain and maintain operations throughout the Life-Of-Mine (LOM). Sustaining costs start in the year after construction and continued until the end of operations, and they are estimated to amount to A\$15m over the LOM.

<sup>11</sup> Includes A\$2.5m of mining cut back, which includes initial Run Of Mine Stockpiling



**Cash Flow Timing**

- Stage 1 cash flows will commence in Calendar Year 0. This stage encompasses preliminary works, central installations, and initial project setup while noting production starts from Year 1
- Stage 2 cash flows are scheduled for Calendar Year 2, aligned with the expansion and commissioning of additional infrastructure and processing capacities.

Figure 19 shows the Capex Cash flow timing.

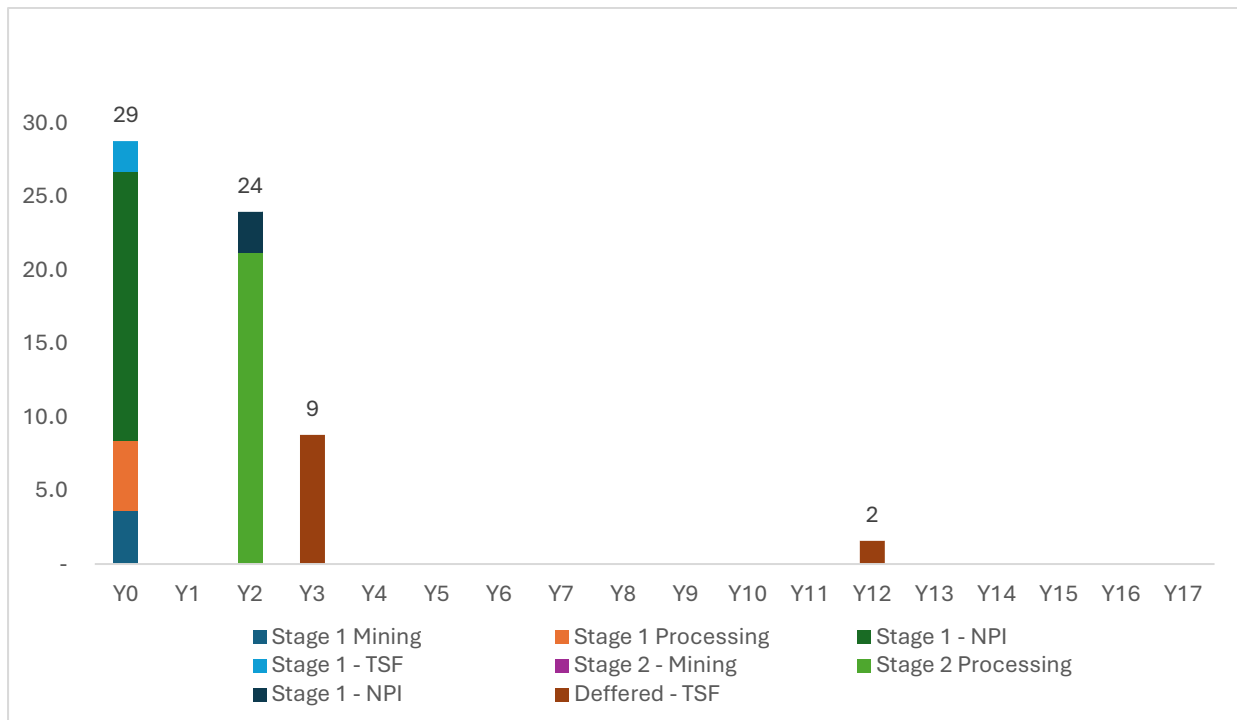


Figure 19: Capital Cash Flow Timing

**13. Operating Cost Estimates**

The Project's operating cost estimate (Opex) is based on a combination of prior experience, data from reference projects, budgetary quotes, and other relevant factors typical of a preliminary study. This approach ensures that the estimate reflects both practical knowledge and industry standards. However, it is important to note that the current estimate does not include provisions for cost escalation or contingencies. This means that future price increases in materials, labour, or other operational expenses over the LOM have not been factored in, nor has any allowance been made for unexpected costs that may arise during the project's execution.

Operating		Material Processed			Con Produced		
		Stage 1	Stage 2	Total	Stage 1	Stage 2	Total
Mining	A\$/t	122	22	24	845	262	284
Processing (including TSF)	A\$/t	52	27	27	359	323	325
Site G&A	A\$/t	17	4	5	115	54	56
Concentrate Logistics	A\$/t	16	9	9	108	108	108
<b>Total A\$ /t</b>	<b>A\$/t</b>	<b>206</b>	<b>62</b>	<b>65</b>	<b>1,427</b>	<b>747</b>	<b>772</b>
<b>Total US\$ /t</b>	<b>US\$/t</b>	<b>138</b>	<b>41</b>	<b>44</b>	<b>956</b>	<b>500</b>	<b>517</b>

Table 5: Operating Cost Estimates

#### 14. Financial Outcomes

The pre-tax base case financial model demonstrates an internal rate of return (IRR) of 41% and a net present value (NPV) of \$114m, using a 10% discount rate. The pre-tax payback period from construction of Stage 2 is estimated at 2.2 years. Table 7 presents the key valuation summary, while Table 8 presents a detailed financial analysis summary.

Metric	Unit
Method of Analysis	Discounted Cash Flow Analysis
Cash Flow Terms	Real Terms
Base Currency	Australian Dollars (A\$)
Base Date of Evaluation	First Year of Construction
Discount Rate	10.0% (A\$ Real)
Price	US\$ 850/t / US1,000 (Stage 1/2)
FX (AUD/USD)	0.67

Table 7: Key Valuation Summary

Description	Unit	Value
Pre-Tax NPV <sup>4</sup>	A\$m	114
	US\$m	77
Pre-Tax IRR <sup>4</sup>	%	41%
Payback period from Capex Stage 2	Years	2.4
Capital Intensity	#	2.2
Mineral Resource	Mt	12.8
	%	7.6%
Annual Production Capacity - Stage 1	Ktpa	75
Annual Production Capacity - Stage 2	Ktpa	500
Recovery	%	90%
Average Production Stage 1	Ktpa	11
Average Production Stage 2 (Y3-Y7)	Ktpa	62
Average Production Stage 2 (Y8-Y16)	Ktpa	28
Operating Cost (CI) <sup>5</sup> (LOM)	A\$/t	
	Process Material	65
Operating Cost (CI) <sup>5</sup> (LOM)	US\$/t Process Material	44
	A\$/t Con Produced	772
AISC <sup>6</sup> (LOM)	US\$/t Con Produced	517
	A\$/t Con Produced	855
LOM Free Cash Flow	US\$/t Con Produced	573
	A\$m	279
Stage 1 Project Capex	US\$m	187
	A\$m	29
Stage 2 Project Capex	US\$m	19
	A\$m	24
Sustaining / Deferred Capex	US\$m	16
	A\$m	25
	US\$m	17

Table 8: Financial Analysis Summary

This Project model generates substantial cash flows that are resilient to market fluctuations, providing a significant competitive edge (Figure 20).

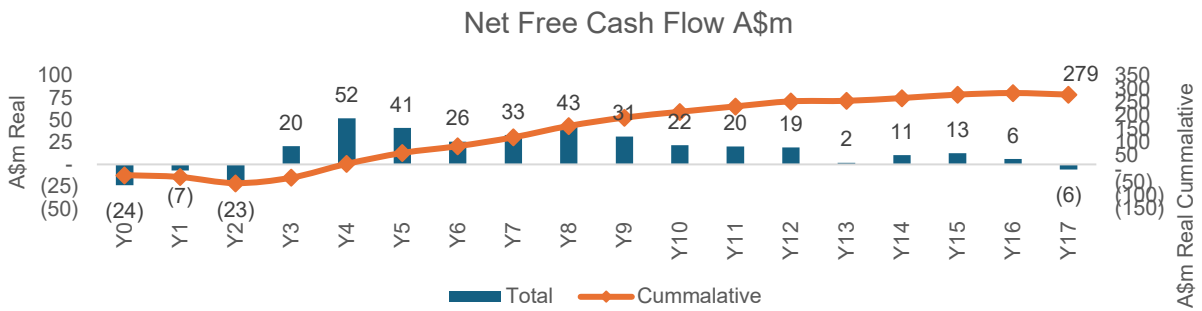


Figure 20: Free Cash Flow of the Project

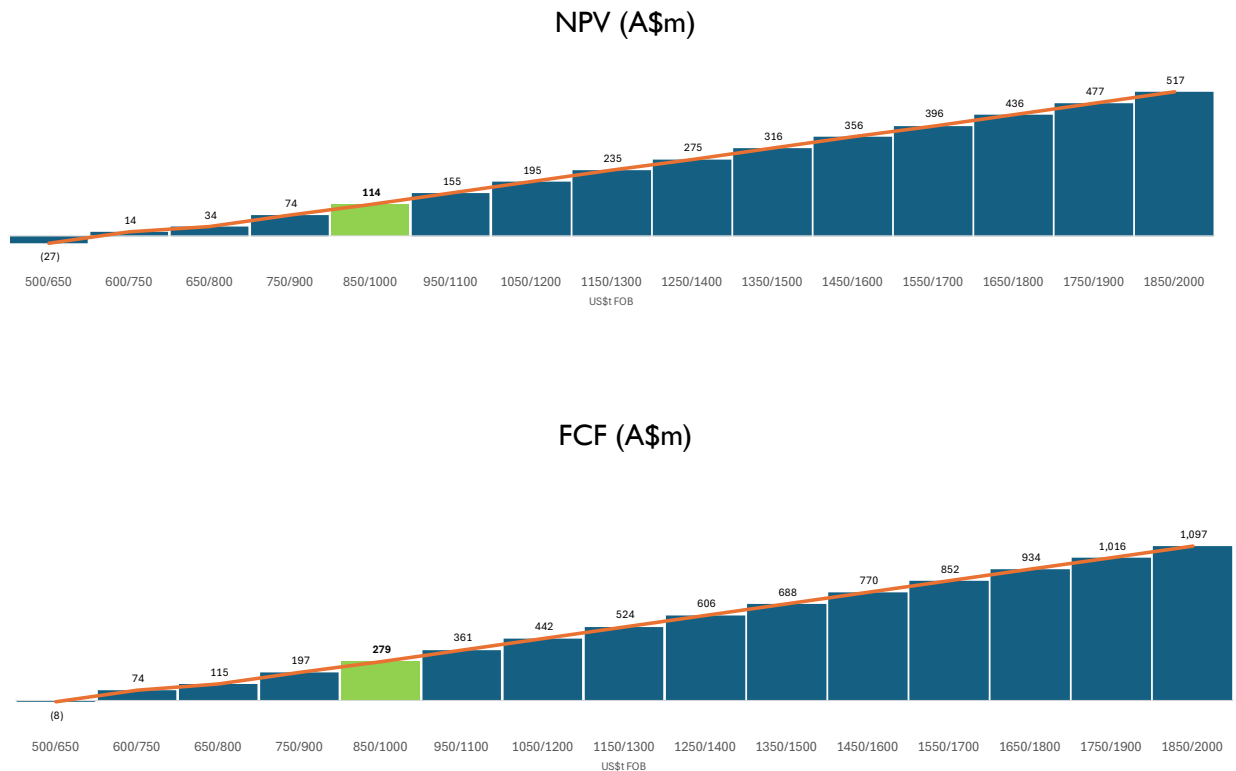


Figure 21: The Impact of NPV and Free Cash Flow on changes in price

In Figure 21, the blue bars show the Project value rising across potential product price brackets. Starting from the lower end (US\$565/715), there is a gradual increase in Project value at higher price levels.

Table 9 below shows the impact on NPV / IRR at different price points. It is important to understand the project's break-even point, which is at what Graphite Price the project becomes NPV zero. In this case, it is well below the project price assumption (US\$850/t / US\$1000/t), which indicates the project's robustness. Lincoln believes that the Project has one of the lowest break-even price points of any project in Australia.

IRR %	NPV (A\$M)	Stage 1 Price	Stage 2 Price
10%	Break Even NPV <sup>1</sup> - 0	565	715
15%	15	600	750
20%	32	645	795
25%	50	690	840
30%	70	740	890
<b>41%</b>	<b>114</b>	<b>850</b>	<b>1000</b>

<sup>1</sup>- Back solved price to calculate the NPV at zero

Table 9: Project Value Different Price Points

In addition to Table 9 above, to achieve Marginal Cash flow through the project's life Free Cash Flow (FCF) is equal to zero), the average price needs to be US\$655/t. To achieve marginal Cash EBITDA (Revenue minus Cash Costs) for LOM, the average price needs to be ~US\$550/t.

The project's average annual Cash EBITDA<sup>1</sup> is A\$23 m (US\$15m), and its average EBITDA margin is 42%.

A sensitivity analysis was undertaken on the project NPV based on several critical variables within the financial model.

Exchange Rate, Graphite Price, Capital Costs, Operating Costs, Recovery and Process Grade

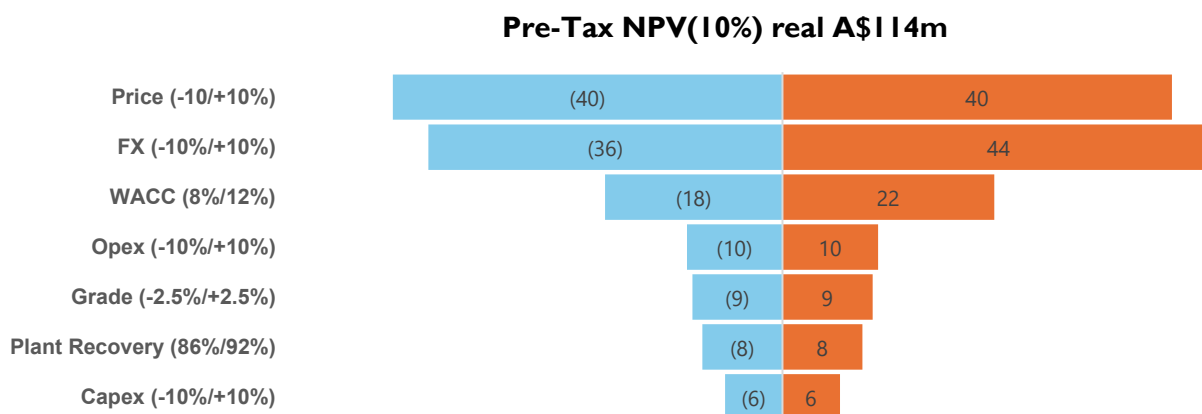


Figure 22: Pre-Tax NPV

### **15. Project Enhancement Opportunities**

The Kookaburra Project offers significant potential for value enhancement, including extending the project life beyond the initial 16 years. Key opportunities include developing high-value products such as micronized graphite and purified spherical graphite for the growing battery market, alongside cost savings from conservative design and budgeting.

#### **Resource Potential and Expansion:**

The Kookaburra Project's overall shallow, high-grade graphite resources are open at depth and along string. Exploration activity has the potential to discover additional high-grade, near-surface graphite feed that has the potential to reduce operating costs, further enhancing the project's economic viability.

#### **Strategic Advantage: First-to-Market:**

The project's low start-up capital costs support a "First to Market" strategy, achieved through a staged development approach. Stage 1 involves mining 75 ktpa to produce 10 ktpa of graphite concentrate, leveraging the existing Mining Lease (ML6460) approved for 35 ktpa. The project will scale up to produce 60 ktpa in Stage 2. The proximity to infrastructure further minimizes costs and accelerates market entry.

#### **Positive Economics Across Graphite Market Cycles:**

The Pre-Feasibility Study (PFS) indicates low-cost operations and minimal upfront capital requirements in both Stage 1 and Stage 2. This positions the Kookaburra Gully Project to remain cash-flow positive even during potential graphite market downturns.

#### **Sustainable Development and Community Impact:**

The project aims to minimize its environmental footprint, with plans to backfill two of the three pits and use the third as an in-pit tailings storage facility (TSF) post-mining. The development of a local, residential workforce from Port Lincoln and Tumbly Bay is expected to lower labour costs and contribute to community development.

#### **End-of-Life Opportunities:**

A thoughtful "End of Life" transition plan envisions repurposing the site post-closure, with potential for tourism or agricultural enterprises. This approach offers long-term value to the local community, fostering sustainable economic opportunities after mining operations cease. Incorporating our post closure vision with feedback from the community, and a desire to revegetate or encourage natural regeneration of native vegetation, the plan aims to result in a positive benefit for the community and a nature positive outcome for the local environment.

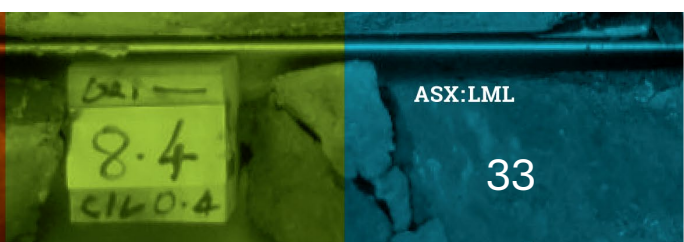
This comprehensive approach positions the Kookaburra Project as a long-term, economically viable venture with multiple pathways for value creation.

**16. Material Assumptions**

Material assumptions used in the estimation of the production targets and associated financial information relating to the study discussed in this announcement are set out in the following table.

Criteria	Commentary
Mineral Resource Estimates	<ul style="list-style-type: none"> <li>The Kookaburra Graphite Project is based on three individual block models.                             <ul style="list-style-type: none"> <li>Kookaburra Gully and Kookaburra Gully SW Extension have been modelled by GeoSupport FX.<sup>1</sup></li> <li>Koppio has been modelled by OreWin Pty Ltd<sup>1</sup></li> </ul> </li> <li>All Resource categories have been considered in the study.                             <p><sup>1</sup> "Update to Target Achieved of Doubling the Kookaburra Graphite Project Resource" announced to ASX on 16 April 2024.</p> </li> </ul>
Study Status	<ul style="list-style-type: none"> <li>The production targets and financial information in this study are aligned with AACE International Practice 18R-97, Class 4 estimates with a range of -30% to +50%, reflecting mature engineering practices using a lean engineering team to minimise costs, sourcing equipment and a cheaper origin and procurement strategies (like China or India) – where possible.</li> </ul>
Cut-off Parameters	<ul style="list-style-type: none"> <li>Open-pit optimisation was carried out using a graphite concentrate price of US\$850/t for Stage 1 and US\$1,000/t for Stage 2, 10% waste dilution and 95% mining recovery.</li> <li>The optimisation process assigned a processing limited break-even cut-off value of 3.0% based on processing cost, concentrate transport, royalties, and a concentrate selling price of US\$850/t for Stage 1 and US\$1,000/t for Stage 2.</li> <li>For the purposes of the mine plan, the low grade, medium grade and high grade are defined by the cut-offs of 3%, 8% and 11.5% TGC respectively. Material below 3.0% TGC is considered waste.</li> <li>The Mineral Resource is reported above 2% TGC cut off.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Mining studies for the project have been managed by Optima Consulting.</li> <li>Using the Whittle optimisation results as a guide the progression of mining was divided into stages. Stage 1 which mines early access to high grade inventory in the Kookaburra Gully deposit via two small starter pits in the north and south. Mining is via a small scale mining fleet consisting of a 90t excavator and 40t articulated dump trucks. Stage 2 where mining ramps up to a 'classic' sized fleet consisting of a 200t excavator and 90t rigid dump trucks.</li> <li>Overall the mine schedule takes advantage of higher grade materials and zones in earlier years, stockpiling lower grades and then mining and processing lower grades to produce an overall operations life of 16 years.</li> <li>Dilution and mining recovery parameters applied for this study are:                             <ul style="list-style-type: none"> <li>Dilution 10% waste at zero grade</li> <li>Mining Recovery 90%</li> </ul> </li> <li>Geotechnical slope design parameters applied to mine designs are based on investigations by AMC Consultants in 2016. Overall slope angles are approximately 40° in completely and partially weathered material and approximately 53° in slightly weathered and unweathered rock.</li> <li>The mining operation is a small scale conventional truck and excavator open pit mine. Mining will be on 5 m benches with excavation in two 2.5 m flitches to match excavator capabilities and assist with grade control.</li> </ul>





Criteria	Commentary
	<ul style="list-style-type: none"> <li>• Drill-and-blast is not expected to be used in completely weathered material in the upper 20 m of the pit. Drill-and-blast with low powder factors is expected to be used in the partially weathered rock. Drill-and-blast requirement will increase with depth as slightly weathered and unweathered rock is encountered.</li> <li>• Relatively low inflows of groundwater into the open pit of less than 10 l/s are expected. This water will be collected into sumps at the base of the working pit and pumped using a mobile diesel powered pump. The water will be delivered via HDPE pipe to the processing water storage tank.</li> <li>• The mine design applied 18m dual lane ramps suitable for 40 tonne trucks. In the lowermost 20m of the pit, 10 m wide single lane ramps are applied. The width allowed for out-of-pit ramps is 20m to allow additional width for a drain and a windrow on either side.</li> <li>• A minimum mining width of 20m was applied at the base of the pit. A minimum width of 40m was applied in areas of pit cutback.</li> <li>• Waste rock storage facilities are designed to have a final slope of 15° to match existing site topography.</li> <li>• Mining operations will be undertaken by a mining contractor.</li> </ul>
<p>Metallurgical factors or assumptions</p>	<ul style="list-style-type: none"> <li>• Metallurgical work for the project has been managed by CB Minerals Project Consulting.</li> <li>• ROM material will be processed by a simplified process flow that includes crushing, grinding, rougher flotation, 5 stages of cleaner flotation including 3 stages of regrinding, thickening, filter press and kiln drying, screening and packaging to produce a high-grade flake graphite concentrate for export in bulka bags and containers by truck to a shipping port for local and international markets.</li> <li>• Stage 1: Processing 75,000 tonnes per annum (tpa) material to produce ~10,000 tpa of graphite concentrate at a grade of 94% to 96% FC with 2 years of production. Initial material grade to be processed is 15.2% TGC.</li> <li>• Stage 2: Processing 500,000 tpa Material to produce ~60,000tpa of graphite concentrate from approximately year 3 onwards.</li> <li>• Ammjohn has been awarded the revision of the process engineering study, due to their prior knowledge of the project and local expertise.</li> <li>• The metallurgical process has been refined and tested on multiple samples representing weathered, oxidised, fresh and sulphide-rich ores based on testing undertaken at ALS (2012-2017) and IMO Metallurgy (2016-2017) in conjunction with LML and Inception Group.</li> <li>• During the 2016 testwork at IMO, a series of comminution and flotation tests were conducted on bulk composite samples including both batch tests and locked-cycle tests to determine processing recoveries and concentrate grades.</li> <li>• Recoveries &gt;90% were achieved by the IMO testwork, with 90% assumed in the Mineral Inventory</li> <li>• The recovered flake graphite is clean, with no visible natural mineral impurities.</li> <li>• Pilot plant test work undertaken in 2017 on a 19 tonne near-surface oxide zone sample produced 1.54 tonne of concentrate. The pilot plant tests</li> </ul>

Criteria	Commentary
	<p>produced an average concentrate grade of 95.7% LOI (total carbon) and processing recovery of 88.6%.</p> <ul style="list-style-type: none"> <li>The graphite concentrate price used for optimisation and Mineral Inventory estimation is a weighted average of flake graphite prices based on the metallurgical results derived from the IMO test work and average prices for the various flake sizes from Benchmark Minerals in mid-2016.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>Compilation and review of previous environmental studies and work into the PFS has been overseen by Gaia Environments.</li> <li>Environmental studies were undertaken for the original Mining Lease Application (MLA) and these were made available for public scrutiny and comment as part of the MLA process. These studies included flora and fauna, groundwater, surface water, climate (wind speed and direction, rainfall, temperature, evaporation), dust, noise, and soils. The MLA including all the environmental reports is available for download on the Company and Government (DPC) websites.</li> <li>The ML was granted on 3 June 2016 with a list of environmental management conditions.</li> <li>A Program for Environment Protection and Rehabilitation (PEPR) will be prepared following a number of further environmental and design studies. The PEPR will include further environmental studies in relation to ongoing climate, groundwater and surface water monitoring and modelling, and flora surveys both within the ML and along transport, power line and pipeline routes.</li> <li>The PEPR will include designs and site plans for the pit, waste rock storage facilities, process plant, tailings storage facility and infrastructure.</li> <li>The PEPR will include geochemical and kinetic analysis and scheduling of potentially acid forming (PAF) graphite material</li> <li>and waste rock.</li> <li>Preliminary designs for a valley fill tailings storage facility (TSF) have been completed by Optima Consulting following site geotechnical studies, kinetic tests on tailings and water balance modelling. The TSF has been designed to facilitate the safe longterm storage of PAF tailings and waste rock.</li> <li>The PEPR will include management plans for noise and dust, for progressive rehabilitation and for rehabilitation upon mine closure.</li> <li>The deposit is located within a general farming area used for cropping and grazing, and LML is holding ongoing discussions with local landholders and community groups to keep them well informed of the status and future planned directions of the project.</li> </ul>
Infrastructure and logistics	<ul style="list-style-type: none"> <li>Land acquisition and purchase agreements for the areas affected by ML and infrastructure corridors (if required) have not been finalised.</li> <li>Water will initially be provided by site dewatering with additional water available from either SA Water or the Northern Water Project.</li> <li>Power will be provided by connecting to the South Australian grid.</li> <li>The graphite concentrate products will be transported by a public access road to the main road network west of Tumbay Bay.</li> <li>Accommodation for the majority of the workforce will be available in the</li> </ul>

Criteria	Commentary
	<p>major regional centres of Tumby Bay, Cummins and Port Lincoln. There will be no accommodation on site.</p>
<p>Capital and Operating Costs</p>	<ul style="list-style-type: none"> <li>• Capital and Operating cost models have been managed by Andrew Blain Consulting.</li> <li>• Lincoln Minerals compiled the capital estimate, incorporating input from various sources. The engineering firm Ammjohn updated the estimate for the processing plant, while the NPI estimates were drawn from the 2017 NPI studies. The costing was done in line with AACEi Class 4 estimate of -30%/+50%. A 25% contingency has been included to account for the level of study maturity.</li> <li>• The capital estimates are categorised into five key areas: Mining, Processing Plant, Tailings Storage Facility, Non-Process Infrastructure (NPI), and Other Non-Deductible Items.</li> <li>• The total expenditure across both stages covers a range of activities from site preparation to project management. The distribution of costs includes key sub-items such as Crushing, Utilities, Commissioning, and Buildings, with incremental increases in Stage 2 to support the ramp-up and expansion of operations.</li> <li>• Sustaining capital costs includes all expenditure necessary to sustain operations throughout the LOM. Sustaining costs started in the year after construction and continued until the end of operations.</li> <li>• The project's operating cost estimate (Opex) is based on a combination of prior experience, data from reference projects, budgetary quotes, and other relevant factors typical of a preliminary study. This approach ensures that the estimate reflects both practical knowledge and industry standards.</li> <li>• Mining, blasting and haulage costs are based on estimated contractor mining unit costs and monthly total movement targets compiled by Ammjohn. The mining costs need to be further refined once a mining contract is established and to accommodate variable haulage distances to the ROM, WRSF and TSF locations over the life-of-mine.</li> <li>• Processing Costs: The primary components of processing costs are labour, operator consumables, particularly sodium silicate, and power. In Stage 2, liquid petroleum gas (LPG) is utilised for the drying process. This expense is not present in Stage 1, as the concentrate is air-dried, reducing costs.</li> <li>• Power Costs: Power is a significant factor in the processing rate, with costs based on accessing the South Australian power network.</li> <li>• Logistics Costs: Logistics expenses include transporting concentrate from the mine site to Port Adelaide. Return load efficiencies partially offset these costs, reducing total logistics expenditures.</li> <li>• Marketing costs are applied (3%) for Stage 1 and reducing to (2%) in stage 2.</li> <li>• Other ancillary costs have been determined by LML.</li> <li>• No material deleterious elements were identified to the process of marketing.</li> <li>• The exchange rate is based on AU\$1 = US\$0.67.</li> <li>• Historical (2016) road transport costs have been used for graphite concentrate. These costs exclude ship loading and warehouse storage.</li> <li>• The SA Government industrial mineral Royalty rate of 3.5% mine-gate value of the mineral has been used. The SA Government applies a reduced royalty rate of 2.0% of the value of the mineral for the first 5 years production for a new mine</li> </ul>

Criteria	Commentary
Revenue Factors	<ul style="list-style-type: none"> <li>The concentrate mesh and value-added product prices are based on prices determined from Lone Star Tech Minerals databases</li> <li>Average prices for graphite mesh-only products were determined by a weighted average of the percentages of the various size fractions of the mesh products year-by-year and applied in the Business Case financial modelling.</li> </ul>
Market Assessment	<ul style="list-style-type: none"> <li>The product specifications and general product marketability were considered in order to support the Mineral Resource estimate for Industrial Minerals. Metallurgical mesh size, concentrate grade and impurity characteristics were considered in determining their marketability.</li> <li>The majority (~90%) of the Kookaburra Gully concentrate is at the fine end of the mesh range and as such is not suitable for many of the existing coarser flake graphite markets. A typical fine (-100#) mesh product mix would comprise polymer/plastic additives (10%), lubricants/drilling (10%), friction materials (15%), other industrial (35%) and unallocated (30%).</li> <li>LML is currently generating a range of value-added products for customer qualification but this has not been included in the pricing and Mineral Inventory estimation.</li> <li>Test work is being undertaken to determine if Kookaburra Gully graphite is suitable for the 'spherical' battery market. The battery market is seen as a long term target for LML. Demand for flake graphite by battery makers will put pressure on supplies for the more traditional markets identified above.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>The economic factors are based on inputs from a large number of independent consultants (as identified in this report) on open cut operations, mineral processing, transportation, capital and contingencies to generate a life-of-mine financial model.</li> <li>A net present value (NPV) has been calculated using a discount rate of 10%. Inflation has not been included in the cash flow model.</li> <li>The NPV of the project is positive for the commodity prices used. The sensitivity of the market price is a driving factor of the project's viability.</li> </ul>
Social	<ul style="list-style-type: none"> <li>LML has engaged in local stakeholder information sessions and negotiations over the last 8-10 years and has prepared a formal Community Engagement Plan (CEP) which has been approved by the SA Government.</li> </ul>
Other	<ul style="list-style-type: none"> <li>A Mineral Lease (ML 6460) over the mine area was granted on 3 June 2016 by the SA Government for a period of 21 years.</li> <li>A formal process to describe, manage and mitigate environmental risks (PEPR) is yet to be completed and submitted to the SA Government for assessment. This approval process will take about 3 months from the date of submission subject to any further information required by the Government.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>Measured, Indicated and Inferred Mineral Resources within the pit designs have been considered for the project.</li> </ul>

Table 10: Material Assumptions

# ASX ANNOUNCEMENT

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**Approved for release by the Board of Lincoln Minerals Limited.** For further information, please visit [www.lincolnminerals.com.au](http://www.lincolnminerals.com.au)

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## Competent Persons' Statement

*The information in this document that relates to Mineral Resources is based upon information compiled by Mr S. O'Connell who is a Member of the Australasian Institute of Mining and Metallurgy. Mr O'Connell is a consultant and advisor to Lincoln Minerals Limited and has sufficient experience relevant to the style of mineralisation, the type of deposit under consideration and to the activity 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 (the JORC Code). Mr O'Connell consents to the release of the information compiled in this report in the form and context in which it appears.*

*The Exploration Targets are based on information compiled by Mr Peter Edwards, a full-time employee of Lincoln Minerals Ltd, and were reviewed and audited by DR Allan John Parker. Dr Parker is a Member of the Australasian Institute of Geoscientists, a Director of Geosurveys Australia Pty Ltd, a Non-Executive Director of Centrex Limited and was formerly Managing Director of Lincoln Minerals Limited. Dr Parker has sufficient experience relevant to the styles of mineralisation and to the activities which are being presented to qualify as a Competent Person as defined by the JORC code, 2012. Dr Parker consents to the release of the information compiled in this presentation in the form and context in which it appears.*

*It is emphasised that the potential quantity and grade of Exploration Targets is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

*Information extracted from previously published reports identified in this report is available to view on the Company's website [www.lincolnminerals.com.au](http://www.lincolnminerals.com.au). 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 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.*

*This report contains forward looking statements that involve estimates based on specific assumptions and statements by third parties. Actual events and results may differ materially from those described in these statements as a result of a variety of risks, uncertainties and other factors. Forward looking statements are based on LML's beliefs, opinions and estimates as of the date the forward-looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.*

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