Independent review confirms Lincoln graphite suitability for global EV markets; fast tracks downstream anode plans

- **A comprehensive independent review of previous metallurgical test work confirms graphite from Lincoln's Kookaburra Project is ideal for use as a feedstock for high quality battery anode material to serve the fast-growing global EV markets.**
- **Review confirms existing data is sufficient for Lincoln to commence a Pre-Feasibility Study (PFS) for KGP (due Q4 2024), targeting production of graphite concentrate at production rates 70-185% higher than those in the 2017 Feasibility Study.**
    - **Previous Pilot Plant test work with Shandong Lianchuang Mining Design Co., Ltd., in China, confirmed standard plant design and process flowsheet delivered a high quality end product.**
    - **Two-phase pilot program achieved up to 95.2% recovery with a concentrate grade of 94.6% TGC.**
    - **Processing at Classifier Milling Systems (CMS) in Ontario, Canada, successfully produced five target micronised grades, aligning with a strategy to diversify product offerings to meet multiple customer requirements.**
    - **Batch tests have confirmed production of consistently high-grade graphite products, including up to 97% Total Graphitic Carbon (TGC) without additional cleaning stages.**
    - **Initial batch tests at ALS Laboratories demonstrated Lincon graphite's high recoveries, with samples showing up to 98% recovery rates and achievement of 99.9% purity after purification using HF acid.**
- **Lincoln appointed Stephen McEwen as Project Development Manager to oversee the Kookaburra PFS, which is due for delivery in Q4 2024.**
- **Review allows Lincoln to fast-track downstream Battery Anode Material (BAM) strategy with an integrated study set to commence in coming weeks.**

Lincoln Minerals Limited (LML or **Company')** (ASX:LML) is pleased to provide results of a comprehensive independent review of its previous metallurgical test work for the Kookaburra Graphite Project (KGP), located on the Eyre Peninsula in South Australia, as it progresses development on KGP to "dig ready" status by H2 CY2025.

The review was completed by independent metallurgist Clint Bowker, who has more than 30 years of experience working for Bureau Veritas Group and BHP, and builds on Lincoln's substantial previous metallurgical test work at KGP, completed from 2013 to 2018 (as detailed below) which included batch tests, Pre-Feasibility Study (PFS) metallurgical studies, pilot plant operations, and micronisation efforts. Results from previous test work was pivotal in determining an optimised process flowsheet which

demonstrated the exceptionally high quality of fine flake graphite products that could be produced from KGP, most notably the suitability of output for use in the high growth global EV battery markets.

The independent review also fast tracks Lincoln's planned 2024 KGP Pre-Feasibility Study, which represents the first major study update from a Feasibility Study completed in 2017. The PFS is due for completion in Q4 CY2024 and is targeting a significant increase in production rates to 60-100ktpa of natural graphite concentrate, which is expected to significantly increase interest in the KGP from project off take and strategic investment partners.

It confirms that nearly all the additional metallurgical or other battery test work, required prior to formalisation of Lincoln's downstream Battery Anode Material (BAM) strategy, is already complete. Lincoln now looks forward to updating the market on its commencement of the vertically integrated study in coming weeks.

Further confirmation of KGP's high quality metallurgy comes at an important junction for the Company and aligns with the increasingly supportive Australian government funding and policy backdrop, which aims to foster a strong and enduring domestic mine production and associated supply chain, in which Lincoln expects to play a significant role.

Lincoln's CEO Jonathon Trewartha said*: "Our Kookaburra Graphite Project is an advanced graphite development project, with continued data reviews undertaken by management demonstrating that it is more advanced than I expected when I first joined Lincoln seven months ago. The presence of substantial quantities of micronised test work and high quality product samples fast tracks our plans to advance the project to production. Previous pilot plant test work undertaken in China and completed in 2018 used samples from not only the Kookaburra Gully Deposit but also the Koppio and Kookaburra Gully Extended deposit, giving a high confidence that the results we already possess are representative.*

This enables us to complete our Pre-Feasibility Study (PFS) for KGP with no further test work required, underpinning our aim to significantly expand graphite concentrate production rates in an updated PFS Study on track for Q4 2024.

There is strong policy and funding support from various levels of Australian government for Australian critical minerals projects and the associated downstream supply chain. Lincoln considers itself ideally positioned to benefit from this policy and support and aims to work closely with government to see the rapid development of our compelling high grade project.

Our recent appointment of Stephen McEwen as Project Development Manager underscores our dedication to deliver on time our upstream BAM Business Case and our Concentrate PFS."

Overview of KGP metallurgical studies and test work

Lincoln's KGP benefits from a substantial amount of previously undertaken metallurgical and study-related test work, which has confirmed the high quality of the KGP graphite concentrate and its suitability for use in high quality anode material, that can service the fast growing global EV battery markets.

Below is an overview of historical test work already completed by Lincoln.

2013-2015:

Initial batch tests at ALS Laboratories, Adelaide, proved Lincoln's KGP's high recovery potential, with samples showing up to 98% recovery rates [1,2]. After purification using Hydro Fluric acid, further compelling purification was achieved, with results as high as 99.9% TGC.

2016: PFS Metallurgical Testing

Comprehensive testing was then undertaken on bulk samples to finalize an optimised process flow sheet. Results indicated a significant portion of the graphite was recoverable at desired purity levels with minimal need for regrinding: [3,4,5]

- Locked cycle testing (LCT) confirmed >95% LOI (loss on ignition) grades and 90% graphite recovery
- Flake sizes predominantly below 100# mesh (150µm), ideal for battery anode material (BAM) as used in the high growth global electric vehicle (EV) market
- A simple conventional flowsheet was confirmed.

2017: Process Plant Design and Costing

In collaboration with Inception Consulting Engineers and ammjohn Consulting Engineers, a conceptual design for the process plant was developed, based on the detailed metallurgy and lock-cycle test work, ensuring efficient operations and cost-effective graphite production. [3,4,5,6,7]

2017-2018: Pilot Plant Operations

Conducted at Shandong Lianchuang, this phase included detailed batch and pilot testing, significantly refining Lincoln's understanding of the KGP ore's behaviour in a semi-industrial scale setting. Two rounds of pilot tests in 2017 and 2018 underscored the robustness of a revised flowsheet, achieving: [7,8,9]

- Concentrate grade (fixed C) of 94.6% and a recovery rate of 95.2%, a Loss on Ignition (LOI) of 96.0%, and a product oversize rate (i.e., +100 mesh or 150µm content) of only 5.5%.

A 300kg concentrate sample produced by Shandong Lianchuang Mining was then sent to CMS for micronisation (see next section).

2018: Micronisation at CMS

CMS successfully processed 300kg of - 150 µm and 95% LOI (ASTM-1595) flake concentrate into the five target grades, yielding finished micronised flake graphite. [8,9]

This micronised product was considered acceptable for use in the high growth global EV markets, subject to further testing. Lincoln will utilise this existing micronised product for further detailed testing and analysis and to underpin future studies.

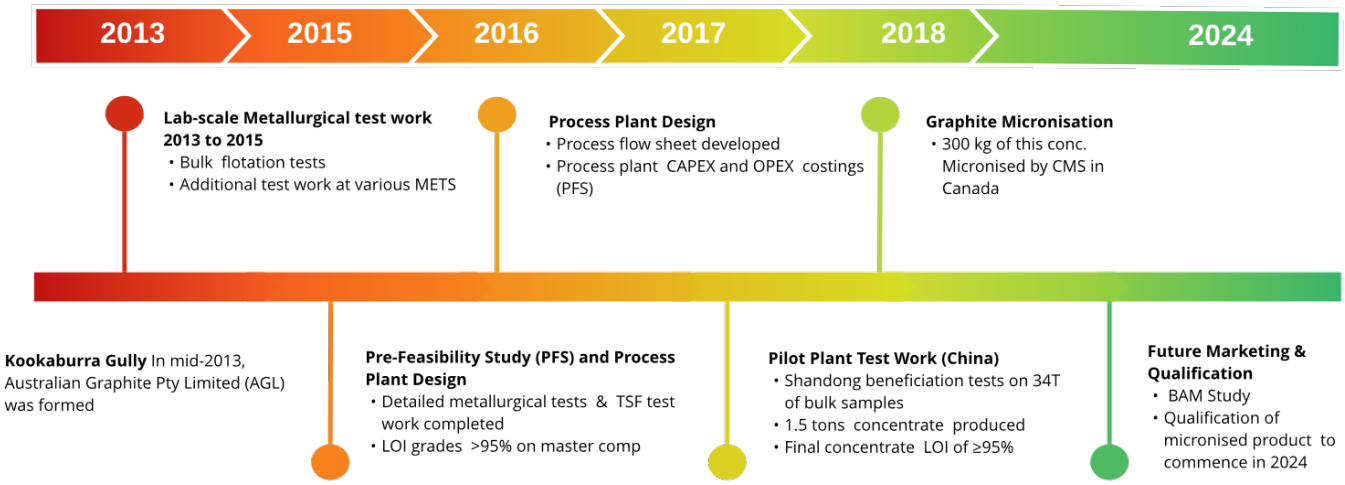

Figure 1: Previous Metallurgical Studies and Test work

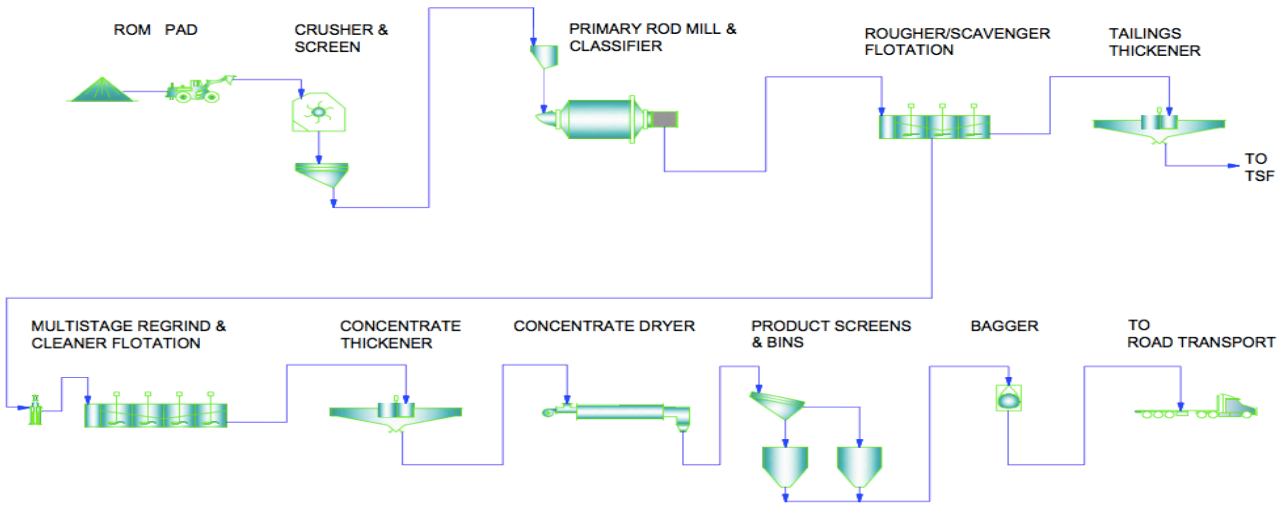

Figure 2: Feasibility Study 2017 - Simple Flow Sheet

Approved for release by the Board of Lincoln Minerals Limited. For further information, please visit lincolnminerals.com.au.

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Notes

1. ASX Announcement 6 January 2014, Good graphite metallurgical results for Lincoln's world-class Kookaburra Gully project on South Australia's Eyre Peninsula
2. ASX Release 14 April 2015, Kookaburra Gully An emerging new Australian graphite mine
3. ASX Announcement 30 September 2016, Lincoln Minerals 2016 Annual Report. Lincoln Minerals Limited
4. ASX Release 2 December 2016, An imminent new, world-class, high-grade, low-cost graphite mine on SA's southern Eyre Peninsula
5. ASX Release 27 April 2017, Kookaburra Gully Graphite Mine Development
6. ASX Release 17th May 2017, Improved graphite Mineral Resource status at Kookaburra Gully on South Australia's Eyre Peninsula
7. ASX Announcement 16 October 2017, Feasibility Study and Ore Reserve estimate for Kookaburra Gully on South Australia's Eyre Peninsula
8. ASX Release 27th November 2017, New Feasibility study and Ore Reserve results for Lincoln's proposed $44 million high-grade Kookaburra Gully graphite mine in SA
9. ASX Release 28th November 2017, Managing Director's Presentation 2017 Annual General Meeting
10. ASX Release 7 February 2024, High Grade Australian Graphite For the Global Energy Transition