

ASX Announcement | April 20, 2023

## **Reung Kiet Lithium Project Positive Roasting and Leaching testwork results**

### **HIGHLIGHTS**

- Lepidolite concentrates derived from fresh and weathered mineralisation subjected to sulphate roasting and water leaching testwork results received.
- Excellent recoveries achieved, ranging up to 88% lithium (Li) extraction.
- Ten tests undertaken on concentrates derived from fresh mineralisation (5) and oxidised mineralisation (5).
- Fresh concentrate tests yielded slightly better lithium extraction compared to oxidized concentrates.
- Further optimisation testwork is underway.
- Further work to also test concentrates derived from optically sorted ore to be undertaken.

Battery and critical metals explorer and developer Pan Asia Metals Limited (ASX: PAM) ('PAM' or 'the Company') is pleased to report that it has received the results from sulphate roast and lithium extraction on samples of lepidolite concentrates from the Reung Kiet Lithium Prospect.

**Pan Asia Metals Managing Director Paul Lock said:** *"We are very pleased with these results, particularly so as we achieved lithium recoveries of up to 88% in the first round of our roasting and leaching testwork, and greater than 80% with lower reagent use. With additional testwork we are confident of achieving better results, we are aiming for recoveries in the mid to high '80s and plan to achieve this through further work on roast reagent ratios, roast time and temperature and the effect of agglomerating the roast feed, as well as using a concentrate derived from sorted ore."*

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Two samples of lepidolite concentrate, weighing approximately 1kg each, were delivered to ALS Metallurgy in Perth in late December, 2022. These two concentrate samples were generated from the testwork program performed by BGRIMM Technology Group (BGRIMM) during 2022.

### Testwork method

The fresh (Fr) and oxide (Ox) samples were milled to 80% passing 125 microns (0.125mm). These samples were then split into 5 x 100 gram samples. Each 100g sample was mixed with three roast reagents (limestone, gypsum and sodium sulphate) at quantities shown in Table 1. Water was added to achieve a moisture content of 20%.

Table 1. Test reagent conditions

Test No.	Concentrate (kg)	Limestone (kg)	Gypsum (kg)	Sodium Sulphate (kg)
1	0.1	0.01	0.02	0.03
2	0.1	0.02	0.02	0.02
3	0.1	0.03	0.02	0.01
4	0.1	0.04	0.04	0.04
5	0.1	0.01	0.01	0.01

The roast feed samples were then roasted in a kiln at 900°C for 1hr with small sub-samples then taken for XRD analysis. The remaining roast product samples were leached in de-ionised (DI) water (20% solids) at 60°C for 1 hour. At the end of the leach period, the slurry was filtered. The filtrate was assayed. The residue was re-pulped with DI water (20% solids) and washed (re-leached) at 60°C for 1 hour and the filtration step repeated. The re-pulp procedure was repeated. The final residue was assayed.

### Leach Results

The leach results in terms of lithium extraction v gypsum + sodium sulphate addition are shown in Figure 1 below. It is evident that the Fr and Ox samples show similar trends across the five tests conducted, with Tests 1-4 providing the best Li extractions.

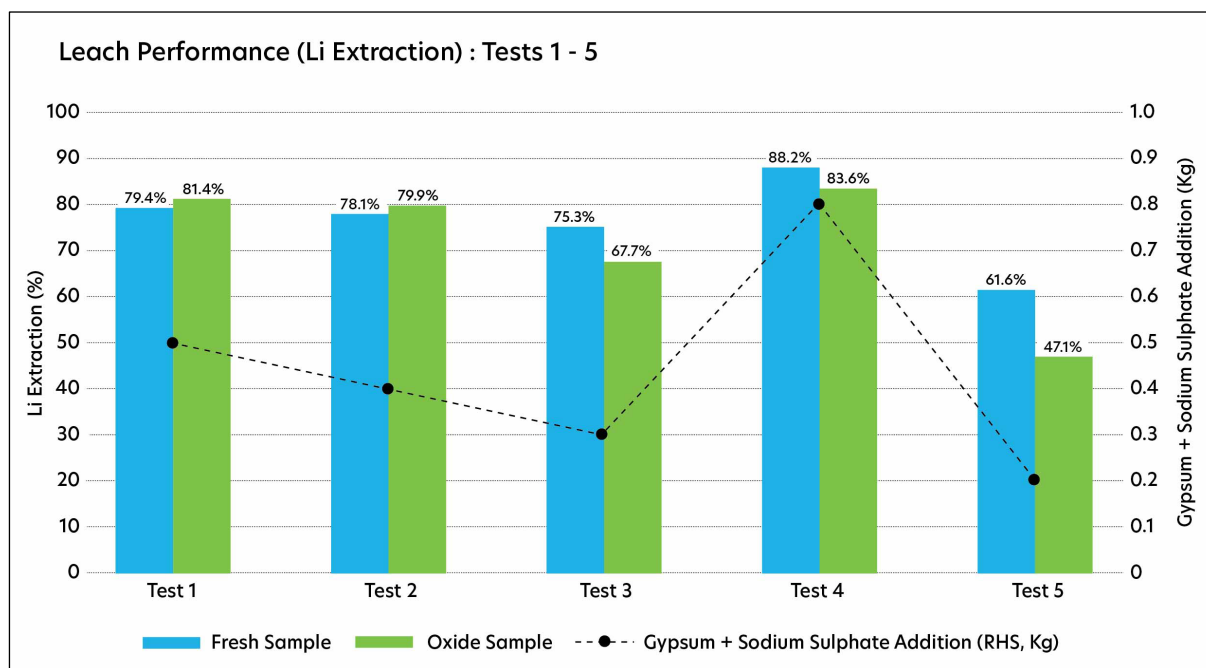


Figure 1 - Li extraction v sulphate addition

Test 1 and 2 conditions resulted in Li leach extractions of 78 – 81%.

Test 3 conditions resulted in slightly lower leach extraction than Test 1 and 2 (likely due to lower sulphate addition).

Test 4 conditions resulted in the highest Li extractions (84 – 88%), however also had the highest reagent addition with dosage levels chosen to represent upper 'operational' limits.

Test 5 conditions showed the lowest Li extraction; likely due to insufficient reagent dosing with this dosage chosen to represent lower limits.

The results indicate that the amount of total sulphate added can be trended against Li extraction, with the lowest sulphate additions resulting in the lowest Li extraction, and vice versa. The extractions of K, Na and Rb exhibit similar trends.

### **Further Work**

The results generated from this Phase 1 roast-leach testwork are highly encouraging.

Roast and leach conditions remain to be optimizsd and this will be explored in next phase of testwork, which will further investigate:

- Roast reagent ratios, roast time and temperature and the effect of agglomerating the roast feed.
- Concentrate derived from sorted ore vs pre-sorted ore in this testwork<sup>1</sup>.

The Company looks forward to reporting the results of ongoing testwork

### **Ends**

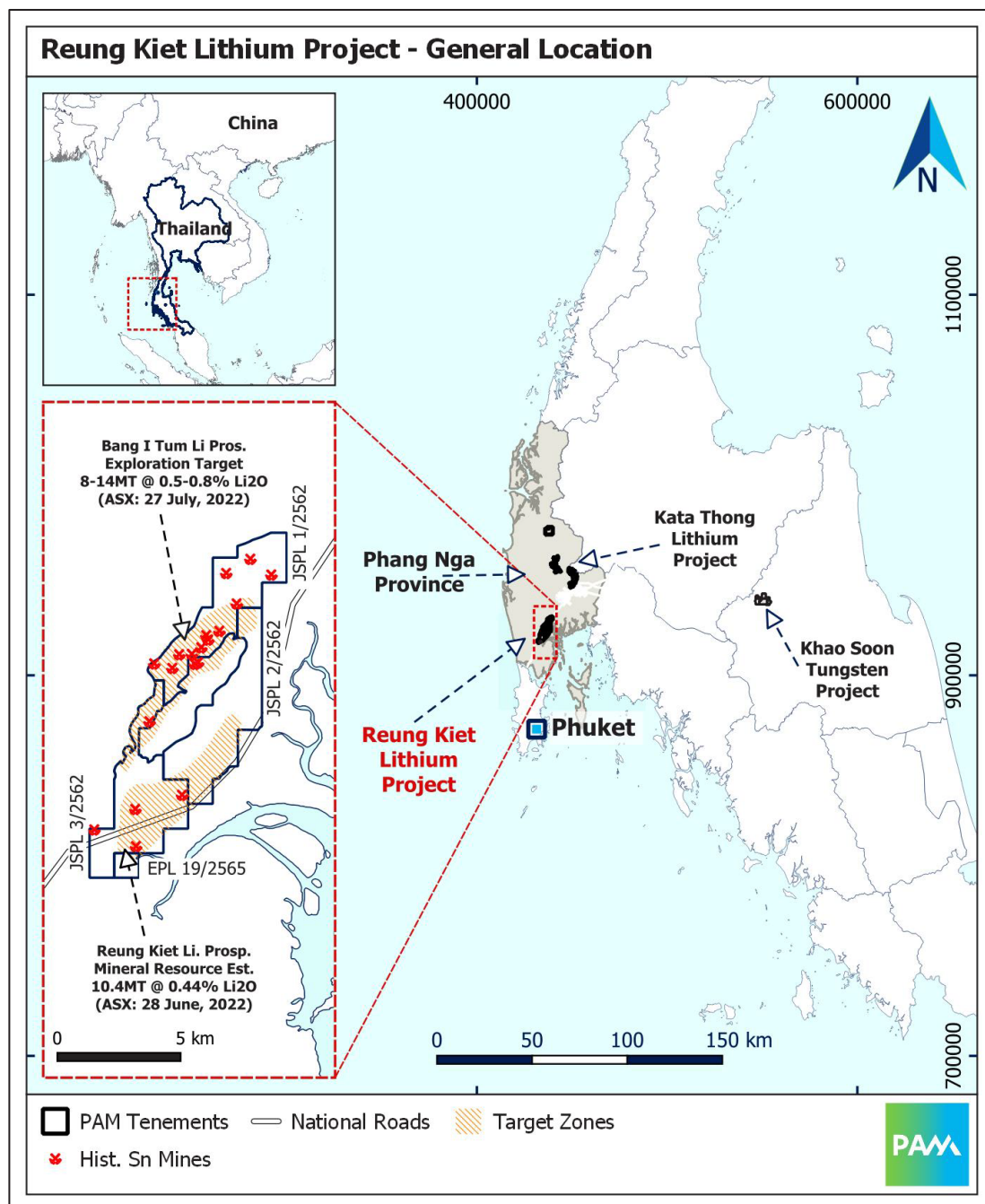
**Authorised by:**  
**Board of Directors**

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<sup>1</sup> Please refer to PAM's ASX announcement dated 22 November, 2022 and titled 'Exceptional Ore Sorting Test-Work Results Confirmed'

### About the Reung Kiet Lithium Project

The Reung Kiet Lithium Project is a lepidolite style lithium project located about 70km north-east of Phuket in the Phang Nga Province in southern Thailand. Pan Asia holds a 100% interest in 3 contiguous Special Prospecting Licenses (SPL) and 1 Exclusive Prospecting License (EPL) covering about 40km².



Regional map: Location of Phang Nga and the Reung Kiet Lithium Project

## About Pan Asia Metals Limited (ASX:PAM)

Pan Asia Metals Limited is the only publicly traded battery metals company with advanced lithium projects in South-East Asia, strategically located in Thailand – the largest vehicle producer in the region. With Asia accounting for more than half of the global annual vehicle production, PAM is uniquely positioned to capitalize on the soaring demand for battery minerals in the region.

PAM's dedication to producing innovative, high-value products with a minimal carbon footprint makes us an ideal partner for meeting our needs in both battery chemicals and sustainable energy. PAM is also a respected local company, with a strategy focused on developing an integrated supply chain to cost-effectively deliver relevant and in-demand products to the Li-ion battery market.

PAM is rapidly advancing its Reung Kiet lithium project through pre-feasibility studies and plans to expand its global lithium resource sustainably through the Kata Thong project, also located in Thailand, and other potential low-cost projects globally.

To learn more, please visit: [www.panasiametals.com](http://www.panasiametals.com)

Stay up to date with the latest news by connecting with PAM on [LinkedIn](#) and [Twitter](#).

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### **Competent Persons Statement**

The information in this report that relates to Mineral Resources is based on information compiled by Ms Millicent Canisius and Mr Anthony Wesson, both full-time employees of CSA Global. Mr Anthony Wesson is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and Ms Millicent Canisius is a Member of the Australasian Institute of Mining and Metallurgy. Mr Anthony Wesson and Ms Millicent Canisius have sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking, to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Anthony Wesson and Ms Millicent Canisius consent to the disclosure of the information in this report in the form and context in which it appears.

The information in this report that relates to Exploration Targets and Exploration Results, is based on information compiled by Mr. David Hobby, is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Hobby is a full time employee, Director and Shareholder of Pan Asia Metals Limited. Mr. Hobby has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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 (JORC Code). Mr. Hobby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Forward Looking Statements**

Various statements in this document constitute statements relating to intentions, future acts and events which are generally classified as "forward looking statements". These forward looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties and other important factors (many of which are beyond the Company's control) that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed in this document. For example, future reserves or resources or exploration targets described in this document may be based, in part, on market prices that may vary significantly from current levels. These variations may materially affect the timing or feasibility of particular developments. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Pan Asia Metals cautions security holders and prospective security holders to not place undue reliance on these forward-looking statements, which reflect the view of Pan Asia Metals only as of the date of this document. The forward-looking statements made in this document relate only to events as of the date on which the statements are made. Except as required by applicable regulations or by law, Pan Asia Metals does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of

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