

ASX Announcement | 02 November 2023

# Mineral Resource Estimate Upgrade RK Lithium Prospect - 42% Increase to 14.8 Million Tonnes

# HIGHLIGHTS

- Measured, Indicated & Inferred Mineral Resource Estimate at a 0.25% Li<sub>2</sub>O cutoff of: 14.8Mt @ 0.45% Li<sub>2</sub>O, 391 ppm Sn, 77ppm Ta<sub>2</sub>O<sub>5</sub>, 0.20% Rb and 237ppm Cs
- 42% increase in total Mineral Resource tonnes
- 46% increase in contained LCE to 164,500 tonnes
- 75% of Mineral Resource in the Measured and Indicated categories
- Bulk of Mineral Resource located from Surface to 150m Depth
- Mineralisation commences at surface and is amenable to open cut mining
- Mineralisation remains open along strike and at depth, especially in the south
- Metallurgical testwork shows positive flotation recoveries to concentrates and to roast/leach liquor
- Potential for numerous by-products for local markets such as Sn-Ta concentrates, fine sand concentrates, clay concentrates
- PAM has strong support from local communities, provincial and federal Government
- Thailand's large vehicle manufacturing industry is transitioning rapidly to EV production with Mercedes producing EVs, BYD and GWM building EV factories.
- Demand for Li-ion batteries in all forms is increasing rapidly, supply demand projections support tight markets
- Discussions with IRPC progressing very well and positioning PAM to meet its aim to produce battery grade lithium compounds in Thailand

**Pan Asia Metals Managing Director, Paul Lock, commenting on the Mineral Resource Estimate update said**: "This is a solid result, increasing the Mineral Resource by nearly 50% is in itself a great outcome but shifting 50% of the Mineral Resource into Measured and 75% into Measured and Indicated and delivering 164,500t of LCE, is a fantastic outcome. Further, the bulk of the Mineral Resource is in the 0-150m zone, so it's doable, and PAM's metallurgical testwork confirms that the oxide zone beneficiates essentially as well as the fresh zone, putting PAM in a great position. With the updated Mineral Resource we will generate a pit shell and this will feed into our feasibility work, which is progressing well". With 23 countries passing the crucial 5% tipping point to mass EV adoption, that 5% or greater EV sales to total auto sales, the outlook for lithium and critical metals looks very good.

#### PAN ASIA METALS LIMITED

Level 3, 77 Robinson Road, Robinson 77, Singapore, 068896 Level 23, 52 Thaniya Plaza, Silom Road, Bangrak, Bangkok, 10500 www.panasiametals.com



Battery and critical metals explorer and developer **Pan Asia Metals Limited (ASX: PAM)** ('**PAM**' or 'the **Company**') is pleased to is pleased to announce an updated Mineral Resource Estimate (MRE) for its 100% owned RK Lithium Project (RKLP) located in southern Thailand (See Figure 1). The MRE was estimated by CSA Global in accordance with the JORC Code (2012). Technical details of the MRE are presented in Table 1 of the JORC Code in Appendix 1.

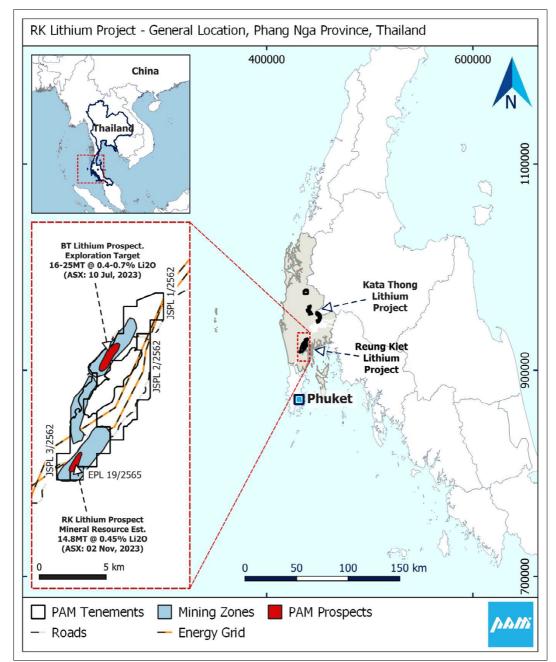


Figure 1. RK Lithium Project - Location in southern Thailand



The MRE is reported at 0.25%  $Li_2O$  lower cut-off. The current Mineral Resource at RK is shown in Table 1 below.

Resource Category	Resource (Mt)	Li <sub>2</sub> O %	Sn ppm	Ta₂O₅ ppm	Rb %	Cs ppm	Cont. LCE
Measured	7.80	0.44	410	74	0.20	230	85,289
Indicated	3.26	0.49	349	85	0.20	261	39,375
Inferred	3.74	0.41	390	78	0.19	229	38,252
Total	14.80	0.45	391	77	0.20	237	164,500

Table 1. RK Lithium Prospect - Mineral Resource at a 0.25% Li<sub>2</sub>O cut-off (November 2023)

Note: Contained LCE for individual Resource categories is subject to tonnes and grade rounding.

The stated aim of the drilling campaign post reporting of the inaugural Mineral Resource for the RK Lithium Prospect in 2022 was to increase the maiden Mineral Resource tonnage and upgrade the classification of the Mineral Resource from Inferred to Indicated, with some Measured possible. With an additional 56 diamond drill holes for a total 102 diamond drill holes the Mineral Resource tonnage was increased by 42% to 14.8 million tonnes and the contained LCE was increased by 46% to 164,500 tonnes.

Mining studies can now be undertaken and used to complete the Preliminary Feasibility Study (PFS) and submission of a Mining License Application (MLA).

Subject to the results of the PFS, the upgraded Mineral Resource will allow for an Ore Reserve to be declared.

#### **Mineral Resource Estimate**

The RK Lithium Project (RKLP) is one of PAM's key assets, comprising the RK Lithium Prospect (RK) and the BT Lithium Prospect (BT). RKLP is a hard rock lithium project with lithium hosted in lepidolite/muscovite rich pegmatites chiefly composed of quartz, albite, lepidolite and muscovite, with minor cassiterite and tantalite as well as other accessory minerals including some rare earths. Previous open pit mining extracting tin and tantalum from the weathered pegmatites at both RK and BT was conducted into the early 1970's. At RK, the prospect subject to this Mineral Resource upgrade, this activity was focused in the northern half of the Mineral Resource trend.

The Mineral Resource at the RK Lithium Prospect (RK) is based upon 102 diamond drillholes. The Mineral Resource is reported in two geological categories based upon the



weathering. There is an oxide/transitional portion and a fresh rock portion as shown in Table 2.

The oxide & transitional portion of the Mineral Resource is composed of variably weathered to totally oxidized rock with some minor fresh rock in the transitional zone. The oxide/transitional Mineral Resource Estimate is **3.42Mt @ 0.51% Li<sub>2</sub>O, 278ppm Sn, 84ppm Ta<sub>2</sub>O<sub>5</sub>, 0.20% Rb and 285ppm Cs**. The oxide/transitional zone extends from surface up to 70m vertically below surface.

Resource Category	Zone	Resource (Mt)	Li <sub>2</sub> O %	Sn ppm	Ta₂O₅ ppm	Rb %	Cs ppm
All	Fresh	11.38	0.42	424	76	0.20	222
All	Ox/Trans	3.42	0.51	278	84	0.19	285
Total		14.80	0.45	391	77	0.20	237

Table 2. RK Lithium Prospect - Mineral Resources by weathering zone

Mineral Resources were further reported based upon category and weathering, see Table 3. These data indicate that 75% of the Mineral Resources are in the Measured and Indicated categories, with all Measured Resource occurring in fresh mineralisation.

Resource Category	Zone	Resource (Mt)	Li <sub>2</sub> O %	Sn ppm	Ta₂O₅ ppm	Rb %	Cs ppm
Measured	Fresh	7.80	0.44	410	74	0.20	230
Indicated	Fresh	1.36	0.40	438	87	0.21	218
Indicated	Ox/Trans	1.90	0.55	285	84	0.20	292
Inferred	Ox/Trans	1.52	0.47	270	83	0.18	277
Inferred	Fresh	2.22	0.38	469	77	0.20	195
Total		14.80	0.45	391	77	0.20	237

Table 3. RK Lithium Prospect - Mineral Resources by weathering zone and Resource	ce Category
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#### **Geology and Mineralisation**

The RKLP is situated in the Western Granite Province of the South East Asian Tin and Tungsten Belt. In the project area Cretaceous to Tertiary aged granites intrude older Permo-Carboniferous glacio-marine meta-sedimentary rocks of the Phuket Group. Lepidolite rich pegmatites associated quartz feldspar pegmatites intrude the sediments of the Phuket Group along the NE trending Phang Nga Fault Zone.



The Mineral Resource is hosted in a sequence of aplo-pegmatite dyke and veins intruding pebbly siltstone. Lithium mineralisation is contained in lithium rich micas, mostly lepidolite and some muscovite disseminated through the pegmatite dykes and veins. Some lithium mineralisation also occurs with the micas in the siltstone adjacent to the aplo-pegmatite dykes and veins, but generally at lower grades. There are three interpreted Zones constituting the Mineral Resource, termed Zones 1, 2 and 3. Zone 2 contains 86% of the Mineral Resource (see Figure 2).

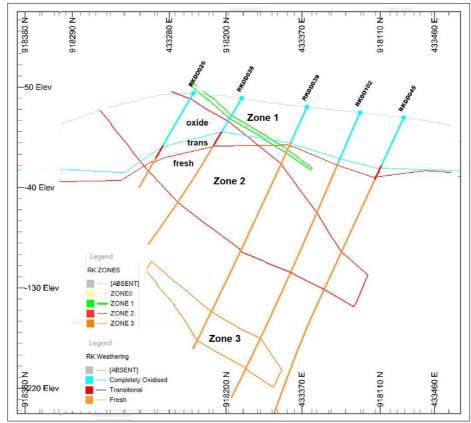


Figure 2. RK Lithium Prospect - Interpreted Zones constituting the Mineral Resource

All three zones strike NE-SW and dip between 70-40 degrees with dips progressively shallowing towards the southern end of the deposit which remains open along strike and at depth.

The Mineral Resource is also classified based upon weathering regime, being fresh rock or oxide/transitional material located above the fresh rock (see Figure 2)

# Sampling and sub-sampling techniques

Samples for assay are half drill core, cut from the whole drill core at intervals averaging 1m in length. The core samples are prepared by ALS Global in Vientiane where the sample



is fine crushed to 70% passing 2mm and a sub-sample up to 1.2kg is taken using a rotary splitter. This sample is then pulverised to 85% passing 75 microns. A smaller sub-sample of approximately 100g is sent to ALS Global in Vancouver or Brisbane, Australia for analysis. The sample preparation method is ALS method Prep-31BY.

#### **Drilling techniques**

The MRE is based on 19,134m of diamond drilling in 102 holes. Most of this drilling (77%) is HQ3 (61.1mm) diameter with remainder being NQ3 (45.1mm) diameter core in deeper areas. Triple tube methods are employed so as to maximize core recovery.

# Resource Classification - Drill and data spacing and distribution

Drill spacings are generally 50m x 50m nearer surface and become wider spaced in many areas particularly as depth increases. The drilling covers approximately 1.2km of strike length and has targeted mineralisation from surface to maximum depths of approximately 300m below surface. The bulk of the Mineral Resource defined is less than 150m below surface. The drillhole plan is shown in Figure 3.

Considering data quality, data distribution, and geological and grade continuity, a large portion of Zone 2 fresh mineralisation was classified as a Measured Resource. Infill drilling since the previous and initial MRE of June 2022, and improved SG and density data, have contributed to a higher level of confidence. The modelling parameters returned highly acceptable results and the geological domaining shows little change to the interpreted mineralisation and weathering profiles.

Portions of Zone 1 and Zone 2 oxidised/transition and fresh mineralisation have been classified as either Indicated or Inferred Mineral Resources, either because of the paucity of SG and/or density data and/or low numbers of geochemical data which has resulted in low confidence in the estimates. All of Zone 3 is compriseded of fresh mineralisation only, and has been classified as an Inferred Mineral Resource because validation criteria gives low confidence.



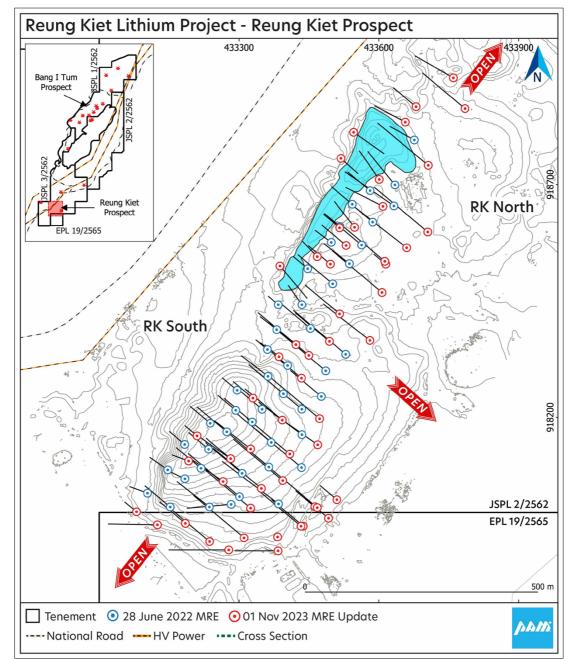


Figure 3. RK Lithium Prospect -Drill Plan, location of Mineral Resource upgrade drill holes

# Sample Analysis

Samples for holes RKDD001-061 have been analysed for Li by ALS Global using ALS methods Li-OG63 or ME-ICP89L. Multielement analysis is also reported for method ME-ICP89L with samples from RKDD001-015 being analysed for multi-elements by ME-MS85. Analytical methods for holes RKDD062 to RKDD102 utilised the ME-ICP61 and ME-MS81.



# **Estimation methodology**

Wireframes were interpreted using a 0.10%  $Li_2O$  cut-off in combination with geology. Drill assays were used to interpolate grades into blocks using Localised Multivariate Uniform Conditioning and Ordinary Kriging. The blocks are predominantly 5m wide, 5m high and 10m long. Several methods were used to validate the estimated results including gradetonnage curves using a change of support model, visual review and comparison of sampling results and block model grades.

# Cut-off grades and basis of selection

The Mineral Resource is reported at a lower cut-off grade 0.25%  $Li_2O$ . It is reasonable to expect that at a 0.25%  $Li_2O$  cut-off grade, an average head grade of 0.45%  $Li_2O$  can be achieved over the Life of Mine. PAM has benchmarked mining costs, and metallurgical processing recoveries and costs. This has shown, that there are reasonable prospects for eventual economic extraction.

# Mining and metallurgical methods and parameters, and other modifying factors

Conventional open pit mining has been considered to potentially recover much of the Mineral Resource, with some considerations given to underground mining of deeper zones.

Metallurgical methods envisage the production of a lepidolite/muscovite concentrate. This concentrate can then be processed into selected lithium compounds and associated by-products. These processing methods are either in operation or have been demonstrated to at least Pre-Feasibility level. Other modifying factors such as proximity to infrastructure and markets have also been considered along with broad environmental considerations.

Pan Asia has conducted flotation testwork and produced lepidolite concentrates at acceptable recovery and grades. These concentrates have been tested by sulphate roasting and water leaching which extracted acceptable levels of Li into leach liquor.

# **Comparison with Previous Estimates**

In June 2022, CSA Global undertook the initial MRE for the Reung Kiet Project at which time all Mineral Resources were classified as "Inferred". Mineral Resources were reported at a 0.25% Li<sub>2</sub>O cut-off for the Oxidised/Transitional and Fresh resource (see Table 4). The updated Oxidised/Transitional and Fresh Mineral Resources are shown in Table 5.

The updated Mineral Resource has increased total Resource tonnage by 42% from 10.4Mt to 14.8Mt, and increased contained LCE by 46% from 113,027t to 164,502t. Grades for  $Li_2O$ , Sn, Rb and Cs have increased slightly. Importantly the updated Mineral Resource have



much improved confidence with 75% of the Mineral Resource Estimate now reporting to the Measured and Indicated categories.

Resource Category	Zone	Resource (Mt)	Li <sub>2</sub> O %	Sn ppm	Ta₂O₅ ppm	Rb %	Cs ppm	Cont. LCE
Inferred	Fresh	7.20	0.42	432	87	0.16	195	74,416
Inferred	Ox/trans	3.20	0.49	256	88	0.15	244	38,611
Total		10.40	0.44	387	87	0.16	210	113,027

Table 4. RK Lithium Prospect - Mineral Resources at a 0.25% Li<sub>2</sub>O cut-off (July 2022)

Table 5. RK Lithium Prospect - Mineral Resources at a 0.25% Li<sub>2</sub>O cut-off (November 2023)

Resource Category	Zone	Resource (Mt)	Li <sub>2</sub> O %	Sn ppm	Ta₂O₅ ppm	Rb %	Cs ppm	Cont. LCE
Meas, Ind, & Inf	Fresh	11.38	0.42	424	77	0.20	222	118.056
Ind & Inf	Ox/trans	3.42	0.51	278	84	0.19	285	43,082
Total		14.80	0.45	391	77	0.20	237	164,502

Note: Contained LCE for individual Resource categories is subject to tonnes and grade rounding.

#### **Forward Work Plan**

The updated Mineral Resource for RK Lithium Prospect will now be used to formulate preliminary mine design, mine planning and production scheduling. This will assist with project design and the preparation of a Mining Lease Application and with inputs into the Pre-Feasibility Study.

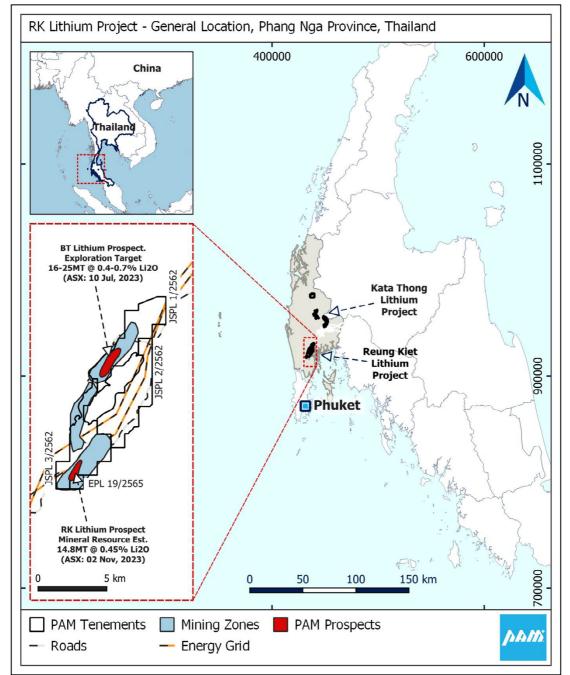
PAM has been conducting metallurgical test-work to investigating the recovery of lepidolite/muscovite to a concentrate. The concentrate produced in this testwork will then be used to test various downstream processing methods to produce a variety of lithium compounds and various potential by-products. PAM will also investigate the potential to recover Sn-Ta, sand and clay concentrates as well as the potential for chemical by-products such as Rb, Cs, K, Ca and Si compounds.

Ends Authorised by: Board of Directors



# 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 40km<sup>2</sup>.



Regional map identifying the location of the RK Lithium Project



# ABOUT PAN ASIA METALS LIMITED (ASX:PAM)

Pan Asia Metals Limited is the only publicly traded battery materials company with lithium projects in South-East Asia and South America, and with agreements with key battery and chemical producers in the Asian region to produce advanced battery chemicals.

PAM's Asian assets are 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 South American assets are strategically located in the Atacama region of Chile, with both lithium brine and lithium clay assets located on key infrastructure 40km from the coast and 75km from Iquique with a large port and commercial airport.

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 lithium projects through to feasibility and plans to expand its global lithium resource sustainably through its extensive holdings in Asia and South America.

To learn more, please visit: <u>www.panasiametals.com</u> Stay up to date with the latest news by connecting with PAM on <u>LinkedIn</u> and <u>Twitter</u>.

For Media Enquiries, reach out to:

# For Investor Enquiries, reach out to:

# Patrick ChangTish KohPan Asia Metals LimitedPan Asia Metals LimitedInvestor Relations &Communications &Business DevelopmentMarketing Managerpatrick.chang@panasiametals.comtish.koh@panasiametals.com



#### **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 forwardlooking 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 forwardlooking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

#### Important

To the extent permitted by law, PAM and its officers, employees, related bodies corporate and agents (Agents) disclaim all liability, direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of PAM and/or any of its Agents) for any loss or damage suffered by a Recipient or other persons arising out of, or in connection with, any use or reliance on this document or information.



# **APPENDIX A - JORC TABLE 1**

# Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld x-ray fluorescence instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Surface diamond drilling was used to collect samples within the immediate area of the Reung Kiet prospect. Drilling was carried out between April 2019 and February 2023. Approximately 77% of the core is HQ3 and 23% is NQ3 size. The Competent Person considers that the sampling techniques adopted are appropriate for the style of mineralisation.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Half HQ3 and NQ3 core samples were collected using a diamond saw. A knife and shovel were used split the saprolite material into half-core samples. Sample intervals were based on logged mineralisation and geology. Sampling intervals range from 0.1 m to 2.4 m.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done; this would be relatively simple (e.g. "reverse	Half-core samples weighing between 2.5 kg and 3.0 kg were crushed to 70% less than 2 mm using a Boyd crusher. The sample was rotary split and about 1 kg of the sample pulverised to 85% passing 75 $\mu$ m.
	circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay"). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Samples from RKDD001 to RKDD015 were analysed for lithium only using the ore grade lithium specialised four- acid digestion method and inductively coupled plasma- atomic emission spectroscopy (ICP-AES) finish (ALS Code Li-OG63). This method utilises 0.4 g of the sample. The ME-OG620 methods was triggered as an overrange method for the Li-OG3 analytical method. The sample analysis was completed at ALS Vancouver, British Columbia (BC), Canada.
		Lithium assaying was completed on 0.2 g of the pulp from drillholes RKDD016 to RKDD0061 using the sodium peroxide fusion industry analytical method and inductively coupled plasma-mass spectrometry (ICP-MS) finish (ALS Code ME-MS89L) at ALS Vancouver, BC, Canada. 414 samples from RKDD006 to RKDD0011 and RKDD014 to RKDD0015 were selected and analysed using the ME-MS89L method at a later stage. Samples from RKDD061 to RKDD102 were assayed using the ME-ICP61 and ME-MS81 at ALS Brisbane due to the long turnaround time experienced from using ME-MS89L method. The ME-IPC61 method is a four-acid digestion of 0.25g sample with ICP-AES analysis. The ME-MS81 trace element method utilises a lithium borate fusion prior to acid dissolution and ICP-MS analysis.
Drilling techniques	Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Surface diamond drilling using the HQ3 (61.1 mm) and NQ3 (45 mm) triple tube diameters was employed at the Reung Kiet Lithium Project ("RKLP" or "the Project"). A total of 102 holes totalling 19,134 m were drilled on the Project. Drilling was carried out between April 2019 and February 2023 by contract drill company, Drill Corp Thailand (a subsidiary of Drill Corp Asia).



Criteria	JORC Code explanation	Commentary
		The drilling was undertaken with most holes at an azimuth of 310° and inclined at 55–65° which is appropriate given the relatively moderate dip of the geology. All core was oriented using the spear method.
		The Competent Person considers that the drilling techniques adopted were appropriate for the style of mineralisation and for reporting a Mineral Resource.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Drill sample recoveries are recorded for every run as part of the logging. The core recovery from the 102 diamond drillholes averaged 98%. Recoveries that are <40% are associated with weathered zones.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The triple tube drilling method was used to maximise recovery in weathered zones. Drillers are instructed to drill slowly when drilling though a weathered profile to achieve good recoveries. Any sampling issues were addressed and rectified immediately.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	There was no reported evidence of sample bias due to loss of sample.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Logging is completed on paper copies and transferred to Microsoft Excel spreadsheets by the geologists. All drillhole logging was detailed with lithology, geology descriptions, weathering, orientation depths, structure and recovery recorded on logging sheets. Geotechnical logging was limited to contacts and major structures.
		The Competent Person considers logging appropriate for reporting of a Mineral Resource.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	All logging is generally qualitative with sufficient detail. All core is stored at site and has been photographed wet and dry.
	The total length and percentage of the relevant intersections logged.	All diamond core has been geologically logged in full.
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	The diamond drill core was split into half using a core saw while a knife and a shovel were used to split the weathered material into half. A representative half-core sample was dispatched to ALS laboratory for preparation and analysis.
		A duplicate sample was collected at the laboratory by rotary splitting the samples of the nominated samples afte crushing.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	No reverse circulation samples were collected for the Project. 56 Trench samples (from nine trenches) and 53 rock-chip samples were collected but these have not been used for Mineral Resource estimation.



Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	All samples preparation was completed at ALS laboratory Vientiane in Laos. Samples received at the laboratory were weighed, and crushed to 70% less than 2 mm. The sample was rotary split to obtain a duplicate when required and the remaining samples returned as coarse rejects to site and stored under cover for future reference. Approximately 1 kg of the sample was pulverised to 85% passing 75 µm. The laboratory reports the particle size analysis for the crushed and pulverised samples.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Crushed duplicates were collected as every 10 <sup>th</sup> sample at the laboratory using ALS laboratory's internal protocols.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Laboratory coarse duplicate samples were collected by rotary splitting the original crushed sample at the laboratory to ensure representativity.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Received sample weights averaged 2.4 kg and sample sizes are considered appropriate to the grain size of the materia being sampled.
data and data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or	Samples were analyses at ALS Vancouver, BC, Canada and ALS Brisbane. The techniques are considered a total technique for the elements being reported.
	total.	617 (7%) pulp samples for RKDD001 to RKDD015 were analysed for lithium only using the using the ore grade LI-OG63 four acid digestion method and ICP-AES finish. Th ME-OG620 methods was triggered as an overrange methor for the Li-OG3 analytical method. Pulp samples from RKDD001 to RKDD015 were sent to ALS in 2023 and re- assayed using the ME-MS85 method at ALS Brisbane. The results for Caesium, rubidium, tin and tantalum (previousl analysed using a handheld x-ray fluorescence (XRF) machine) were replaced with pulp results.
		A total of 4,308 (51%) samples from RKDD016 to RKDD061 and other selected samples from RKDD006 to RKDD0011 and RKDD014 to RKDD0015 utilised the Super trace ME-MS89L analytical method which is a sodium peroxide fusion method and ICP-MS finish. 52 elements were determined by ME-MS89L and include Ag, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Nb, Nd, Ni, Pb, Pr, Rb, Re, Sb, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, TI, Tm, U, V, W, Y, Yb, and Zn.
		A total of 3,539 (42%) samples from RKDD062 to RKDD102 utilised the ME-ICP61 and ME-MS81 at ALS Brisbane. The ME-IPC61 method is a four-acid digestion of 0.25 g sample with ICP-AES analysis and the analytes include Ag, Al, As. Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Li, Mg, Mn, Mo, NA, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W and Zn.



Criteria	JORC Code explanation	Commentary
		The ME-MS81 trace element method utilises a lithium borate fusion prior to acid dissolution and ICP-MS analysis. The 33 analytes are Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Ge, Gd, Hf Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb, Zr.
		The LI-OG63, ME-MS89L, ME-ICP61 and ME-MS81 analytical techniques are industry standard for lithium and considered total. PAM is encouraged to re-assay the samples analysed by XRF using industry standard methods.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	A PAM owned Olympus Vanta M Series Model VMW-CCC- G3-U handheld XRF analyser with reading time totalling 50 seconds XRF instrument was used to analyse Caesium, rubidium, tin and tantalum from drillholes RKDD001 to RKDD015 during the early stages of drilling. 617 samples were analysed by this method.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	11 types of internal standards made from trench pulps were inserted as every 20 <sup>th</sup> sample. A total of 99 internal standards were analysed between 2022 and 2023. Internal standards were not inserted for holes RKDD001 to RKDD005 during the early stages of drilling. Pulps from these drillholes originally assayed using the Li-OG63 method were re-assayed in 2023 by ALS using the ME-ICP61 method and included QAQC samples.
		Performance of internal standards was checked using a lower and upper limit of $\pm$ 7% departure from the mean. Lithium values fall inside the upper and lower limits while caesium, rubidium, tin and tantalum show some outliers. I is unclear whether the departures from the mean are related to the inhomogeneity of the standards or the assaying imprecision.
		PAM inserted 196 at certified reference materials (CRMs) at rate of 1 in every 20 samples for drillholes RKDD062 to RKDD102. Four types of CRMs (GTA-08, GTA-09, OREAS 75 and OREAS 752). The GTA CRMs were certified for lithium, tin and tantalum while the OREAS CRMs were certified for lithium only. All the CRM results were within the acceptable ±3 standard deviations (SD). Results for tin from GTA-08 and lithium from OREAS 752 show a slight low bias while results for lithium from GTA-08 show a slight high bias. However, this is not of material concern.
		PAM inserted three types of crushed blanks at a rate of 1:20 samples. A total of 508 blanks made from limestone obtained from a local construction quarry shop were inserted. Three populations of the course blank were note and, these are termed CB1 with lithium results which are a or near the lower limit of detection, CB2 with lithium results ranging from 5 ppm to 25 ppm and CB3 with lithiur results generally between 20 ppm and 50 ppm.



Criteria	JORC Code explanation	Commentary
		828 crushed duplicate samples were inserted at a rate of one in approximately every 10–15 <sup>th</sup> sample from drillholes RKDD006 to RKDD102. The crushed duplicate plot for lithium shows a good correlation between the primary and the duplicate sample and no evidence of bias in the lithium assay results.
		A total of 507 pulp samples (inclusive of quality assurance and quality control – QAQC) were dispatched to Bureau Veritas (BV) in Perth for analysis. The samples were taken every 20–25 <sup>th</sup> sample from the pulps derived from sampling of holes RKDD006 to RKDD102. A good correlation was observed between the two sets of data.
		A total of 28 samples collected from the internal standard were submitted to BV in Perth for external verification of the lithium, tin, tantalum, rubidium or caesium values. Results for caesium, rubidium, tin and tantalum also show a good correlation between the two laboratories. In addition, ALS completed internal laboratory CRM, blank
		and pulp duplicates analyses.
		<ul> <li>The Competent Person recommends the following:</li> <li>Assaying the blank samples before being used to confirm that elements of interest are undetectable.</li> <li>Compile written procedures for quality assurance</li> </ul>
		process.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have been verified by the Company Senior and Chief Geologists. Lithium mineralisation is associated with distinct, purple-coloured zones.
	The use of twinned holes.	Twin holes have not been drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Logging is completed manually on paper designed for logging at the core shed by the geologist. The data is then transferred to Microsoft Excel spreadsheets. Collection of relevant geological, lithology, geotechnical, structure and rock type information are collected into separate log sheets. The data are checked by the Senior Geologist and Chief Geologist to minimise transcription errors. Data is validated to ensure the field and assay data is merged appropriately.
		The data is stored on the site laptop and backed up on tw external drives and on the Chief Geologist's laptop. Hard copies for log sheets and survey data are kept on site.
		CSA Global has randomly checked the laboratory raw data against the database assays.
		No formal documentation of logging and sampling procedures have been completed by PAM.
	Discuss any adjustment to assay data.	PAM and CSA Global converted Li ppm values to Li <sub>2</sub> O by multiplying by a conversion factor of 2.153 calculated from atomic mass and molecular weight to align with industry standards for reporting lithium metal.



Criteria	JORC Code explanation	Commentary	
		All assays below detection limit have been converted to half the detection limit by PAM.	
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	100-hole collars were located using a differential global position system (GPS) by Geophysical Consultants (Thailand) Co. Ltd ("Austhai"). The differential GPS method has an accuracy of approximately 10 cm. Two holes (RKDD087 and RKDD102) were located using a handheld GPS.	
		Downhole surveys for 95% of the holes were completed using a Reflex camera. The surveys were checked and validated by the site and senior geologists. 5% of the holes (RKDD001 to RKDD005) drilled in the early phases of the Project do not have downhole surveys.	
		The Competent Person considers a relatively high level of confidence can be placed in the location of data points.	
	Specification of the grid system used.	The Project utilises the Universal Transverse Mercator (UTM) World Geodetic System 1984 (WGS84) Zone 47N coordinate system.	
	Quality and adequacy of topographic control.	A photogrammetry survey of the area was conducted by Austhai in October 2021. The survey generated the digital terrain model (DTM) and contour lines at 0.25 m, 0.50 m, and 1.00 m intervals using four 3D control points for maximum accuracy.	
		In February 2022, Austhai conducted a differential GPS survey along the shoreline of the old waterbodies to estimate the most accurate elevation of the open pits and determine the volume of the waterbodies. The volume of historical waterbodies and the approximate depths of the mined pits were incorporated in the photogrammetric survey.	
		The Competent Person considers the topography to be adequate at this stage of exploration.	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill spacing over the Reung Kiet deposit ranges from approximate 25 m x 30 m to 80 m x 80 m along and across strike. The dominant drill spacing at the Reung Kiet deposit is 50 m along strike x 50 m across strike.	
	Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The Competent Person considers the drill spacing appropriate for reporting a Mineral Resource.	
	Whether sample compositing has been applied.	77% of the sample are between 0.6 m and 1.4 m. No composting was applied at the sampling stage.	
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The mineralisation strikes northeast-southwest deposit and has a moderate to steep deep to the southeast. There is no evidence of major structures disrupting the continuity of the mineralisation.	



Criteria	JORC Code explanation	Commentary	
		The Competent Person considers the general drillhole azimuth of about 310° inclined at 55–65° and spacing as appropriate for reporting a Mineral Resource.	
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The relationship between the drilling orientation and the orientation of key mineralised structures is unlikely to have introduced a sampling bias.	
Sample security	The measures taken to ensure sample security.	All drill core is securely kept under lock and key at the core shed on site. Samples were securely packed on site and recorded before being dispatched to the laboratory. Sample submission forms confirming the number of dispatched samples. Samples were couriered via Safeway Logistics to Laos via the Nong Khai-Laos border check point in Nong Khai Province of Thailand. The laboratory confirms the receipt of sample upon receipt. Pulp samples for analysis are air-freighted to Vancouver in accordance with laboratory protocols.	
		The Competent Person considers the chain of custody and security measure taken from the field capture to delivery to Nagrom appropriate.	
Audits or	The results of any audits or reviews of sampling	No independent audits or reviews have been undertaken.	
reviews	techniques and data.	CSA Global has reviewed the sampling and geological data before using it for the Mineral Resource estimate (MRE) considers the data appropriate for reporting a Mineral Resource.	

# Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Reung Kiet Lithium Project is located within Special Prospecting Licence (SPL) 3/2562 and Exclusive Prospecting Licence (EPL) 19/2565. PAM holds a 100% interest in three contiguous SPLs and one EPL, collectively covering about 48 km <sup>2</sup> . The prospecting licences are SPL 1/2562, SPL 2/2562, SPL 3/2562 and EPL 19/2565.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	SPL 3/2562 was granted on 15 February 2019 and expires in February 2024. EPL 19/2565 was granted on 1 September 2022 and expires on 31 August 2024. Both SPL 3/2562 and EPL 19/2565 are registered under Siam Industrial Metal Company Limited, which is 100% owned by PAM.
		The Competent Person can confirm that according to Legal Opinion issued by Legal Asean (Thailand) dated 17 September 2020 the tenement is in good standing.
		The Competent Person has not verified any potential social or environmental pediments to progressing the Project.



Criteria	riteria JORC Code explanation Commentary			
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	A joint Thai and Institute of Geological Sciences (a precursor of the British Geological Survey) study was conducted in the area in the 1960s. The study included geological mapping, documentation of old workings, surface geochemical sampling, mill concentrates and tailings sampling and metallurgical test work on the Reung Kiet pegmatite.		
		A historical open pit mine extracting tin from the weathered pegmatites was conducted in the early 1970s. The pit is about 500 m long, 125 m wide and extends to 25 m below surface to the top of hard rock. The Reung Kiet Project was part of a major tin mining region up until the mid-1980s but there is little detailed information regarding previous exploration and mining in the area.		
		In 2011, Thai company, Mae Fah Mining Co. Limited, lodged prospecting licence applications over area. In 2014, UK based ECR Minerals Plc entered into an option agreement to acquire the project, but the option did not proceed, and the tenement application lapsed. 11 rock chips samples from unknown locations and analytical results of eight of the 11 samples reported elevated Li <sub>2</sub> O grades of up to 1.9%. Accessory tin and tantalum results were reported. PAM was granted the three SPLs in 2019.		
Geology	Deposit type, geological setting and style of mineralisation.	The project is located in the Western Province of South- East Asia Tin tungsten Belt. The Reung Kiet project sits adjacent and sub-parallel to the regionally extensive northeast trending Phangnga fault. The Cretaceous age Khao Po granite intrudes into the Palaeozoic age Phuket Group sediments along the fault zone, Tertiary aged lithium-caesium-tantalum (LCT) pegmatite dyke swarms intrude parallel to the fault zone.		
		The Reung Kiet pegmatite trend is divided into two main parts, Reung Kiet North and Reung Kiet South. Reung Kiet North includes the old open cut and immediate surroundings. Reung Kiet South extends along strike to the southeast and encompasses a prominent knoll. The pegmatites at Reung Kiet strike at about 220° parallel to the Phang Nga Fault Zone.		
		Pegmatite dykes and veins at Reung Kiet North dip at a high angle ranging from 65° to 70° to the southeast while those at Reung Kiet South dip at angles between 60° and 30°. Drilling beneath the pit has intersected dykes up to 30 m wide.		
		The dykes and veins host the bulk of the lithium mineralisation; however, it is common for the adjacent and intercalated meta-siltstone to contain elevated lithium grades. The pegmatites are composed of quartz, feldspar, albite, muscovite with minor cassiterite and tantalite minerals. Siltstones adjacent to the pegmatites generally contain lithium mineralisation.		



Criteria	JORC Code explanation	Commentary
		The Competent Person is of the opinion that the understanding of the Project's geology is sufficient at this stage of exploration. More work needs to be done to explain the mineralisation in the siltstones adjacent to the pegmatites.
Drillhole information	<ul> <li>A summary of all information material to the understanding of the Exploration Results including a tabulation of the following information for all Material drillholes:</li> <li>Easting and northing of the drillhole collar</li> <li>Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar</li> <li>Dip and azimuth of the hole</li> <li>Downhole length and interception depth</li> <li>Hole length.</li> </ul>	The collar summary of diamond drillholes completed Reung Kiet deposits which were used in the MRE is presented in Table 2. A drillhole location plan is included as Figure 6.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Exploration Results are not being reported.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Exploration Results are not being reported.
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Exploration Results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported.
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Exploration Results are not being reported.
mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	The mineralised zones dip at approximately 40–60° to the southeast. The dip of the mineralisation gradually steepens towards the northeast. The mineralisation is generally intersected perpendicular to the drill orientation.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Exploration Results are not being reported.



Criteria	JORC Code explanation	Commentary	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	A project, tenement and drillhole location plan are included in the report. Selected representative grade cross- sections are included as in the main report	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration Results are not being reported.	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Other exploration work completed is described above in "Exploration done by other parties".	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	The Competent Person recommends infill drilling in areas with a grid spacing wider than 100 m x 100 m grid to improve the confidence in the Mineral Resource. Down-di infill drilling will improve variography and data interpolation.	
		Extensional drilling is recommended to the northern, southern and deeper parts of the deposit where mineralisation remains open.	
		More density measurements should be collected to cover the extents and depth of mineralised domains.	
		Use of commercially CRMs is recommended.	
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams showing the location of the drilled holes and tenement have been included in this report.	

#### Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary	
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Drillhole data required for the Mineral Resource estimation was provided to CSA Global as collar, assay, geology, specific gravity (SG) and weathering Microsoft Excel files by PAM.	



Criteria	JORC Code explanation	Commentary			
		Data validation included checks for incorrect hole depths, overlapping intervals, missing survey data, missing data. Random cross checks were made between the original assay file certificates and the Microsoft Excel files. The data was inspected in 3D software to ensure there are no issues with the topographic DTM.			
	Data validation procedures used.	Data was checked for duplicate intervals, missing assays, and that the sample intervals did not extend below end of hole depth.			
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Ms Millicent Canisius (CSA Global Senior Consultant, Resource Geology) visited the RKLP between 9 and 11 May 2022 on behalf of the Competent Person. Several drill collars were located and confirmed in the field. Data collection, logging and sampling procedures were discussed and verified. Core inspection was completed.			
	If no site visits have been undertaken indicate why this is the case.	Not applicable.			
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The mineralisation interpretation was based on a combination of lithium drill assay greater than 0.1% and logged lithology.			
		Three broad mineralisation envelopes were generated using lithology and assays and the envelope may include samples with grades that are less than 0.1% Li as internal dilution. The mineralised envelopes are separated by very low grade (generally <0.1% Li) siltstone zones which are largely unsampled.			
	Nature of the data used and of any assumptions made.	102 logged drillholes that were geologically logged and 101 holes with assays were used for the geological interpretation. RKD050 was abandoned and re-drilled as RKDD051, the abandoned hole was not assayed.			
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Additional infill drilling will be used to refine the current interpretation; however, this is unlikely to result in any significant changes to the geological interpretation.			
	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	Geological domaining to guide the Mineral Resource estimation used a combination of assays and geological logging. Trenches and rock chips were used to guide the mineralisation outcrop on surface.			
	<u> </u>	The mineralisation is reasonably continuous along and across strike.			
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The RKLP has been drilled over a strike length of 1.2 km in a northeast-southwest direction. Zone 1 is generally narrow and averages about 8 m, Zone 2's thickness averages 60 m and Zone 3 comprises the deeper part of the mineralised zone and averages 15 m in thickness. Zone 0 is generally hosted by unmineralised siltstone.			
		The mineralisation extends from surface to about 150 m below surface and varies in thickness from section to section. The mineralisation remains open at depth and on strike.			



Criteria	JORC Code explanation	Commentary		
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Having considered the dimensions of the mineralised pegmatite vein swarms and intercalated siltstones, it is CSA Global's view that by applying a linear estimator such as ordinary kriging (OK), excessive smoothing will be introduced. Mining operations are planned and designed based on block models. A fundamental parameter of this type of model is the choice of block dimensions or selective mining unit (SMU) size, which affects the operation and mining costs.		
		In the early stages of mining operations, the available information is mainly drillholes samples, which may bring negative outcomes such as over-smoothed models, especially for complicated ore deposits. Therefore, a change of support is necessary to determine the distribution of grades at an equivalent volume to the SMU size.		
		The non-linear localised uniform conditioning (LUC) method is appropriate for improved grade estimation of small blocks, when the input data spacing is coarse such as it is at Reung Kiet, where nominal spacing is 50 m x 50 m.		
		Generally, when the density of drillhole information is relatively low compared to the desired estimation block size, the estimation of these "small" blocks by the usual linear methods (e.g. by inverse distance weighting (IDW) or OK) would normally lead to a gross distortion, in the form of smoothing.		
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The maiden MRE was undertaken in June 2022 by CSA Global, and the results have been compared to the October 2023 MRE. Infill and extensional drilling have increased total ore tonnes significantly, with small changes to the grade estimates.		
	The assumptions made regarding recovery of by- products.	While Li <sub>2</sub> O is the targeted variable with the greatest economic value, tin, tantalum, caesium and rubidium have been co-estimated and reported using a Li <sub>2</sub> O cut- off. All elements have been sampled in equal numbers.		
	Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	The presence of deleterious elements has not been investigated in this phase.		
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The panel size for the LMUC estimates is $30 \text{ m x } 40 \text{ m x}$ 5 m where the drillhole spacing is about $50 \text{ m x } 50 \text{ m}$ and the sample length is 1 m on average. The size of the SMUs within the panel is 5 m x 10 m x 5 m and closely approximates the intended selective mining dimensions envisaged.		
	Any assumptions behind modelling of selective mining units.	The nature of the mineralisation requires a small estimation block and selective mining. A larger estimation block will comprise of a large proportion of unmineralised material and a diluted, smoothed average grade and will not reflect the grade that can be achieved by selectively mining.		



Criteria	JORC Code explanation	Commentary			
	Any assumptions about correlation between variables	The maiden MRE was undertaken in June 2022 by CSA Global, and the results have been compared to the October 2023 MRE. Infill and extensional drilling have increased total ore tonnes significantly, with small changes to the grade estimates.			
	Description of how the geological interpretation was used to control the resource estimates.	Because individual pegmatites could not be modelled confidently and are too numerous to model individually, broad envelopes, which define the three mineralised Zone 1, 2 and 3, encapsulate vein swarms of pegmatites which occur together in a coherent pattern of mineralisation. Furthermore, Zones 1 and 2 were divided by weathering/alteration into oxidised, transition and fresh ores. Zone 3 comprises of only fresh ore.			
	Discussion of basis for using or not using grade cutting or capping.	Parameters considered were the numbers cut, the impact on the mean grades and the continuity of the high-grade tail of the distribution.			
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Validation comprised of (geo)statistical and visual comparisons. (Geo)statistical methods used included a comparison of SMU grade estimates to the 1 m composites, comparison of grade-tonnage curves from a change of support model (Discrete Gaussian Model) with those of the estimated grades to primarily obtain a view of the amount of smoothing from the linear estimate. Swath plots were constructed along the three axes and compare estimates to 1 m composite grades.			
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are estimated on a dry tonnage basis. The SG measurements were conducted on drill core that ha been stored for months in a hot dry shed, all oxide SGs were wax coated. Fresh rock SGs were not wax coated, but the rocks are extremely massive. The calculated SGs are in line with expectations for the materials tested.			
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A 0.25% Li <sub>2</sub> O cut-off was applied which yields a life-of- mine average head grade of 0.45% Li <sub>2</sub> O, which is 1.11% lithium carbonate equivalent (Li <sub>2</sub> CO <sub>3</sub> ) assuming a 65% recovery of Li <sub>2</sub> CO <sub>3</sub> , and that by-products will contribute an additional 15% in value.			
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters	It is envisaged that open cut mining, with oxide material initially extracted from the Reung Kiet South area and potentially blended with fresher material commencing at the base of the old open cut in the Reung Kiet North area. Depending upon strip ratio and other modifying factors, underground mining is likely to be undertaken at some point. PAM believes it would need to mine and process 1.0–			
	when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul><li>1.5 Mt of run of mine with a strip ratio around 5:1 and much less during the early years of the mine.</li><li>Open pit mining costs have been benchmarked against similar operations in Thailand.</li></ul>			



Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding	PAM has conducted several phases of flotation testwork on weathered and fresh mineralisation. Test material has been derived from trench and some rock-chip samples, from crushed drill core derived from ALS assaying and from half-core
	metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	The testwork work results at this stage indicate Li recoveries in oxide material are ~65%-70% and ~75%-80 in fresh rock, into concentrates grading around 2.9-3.5% Li2O
		Mineralogical and liberation analysis indicates the lepidolite is typically fine-medium grained with 95% liberation achieved at a grind size of 80% p150 microns, and is thus 'available' for physical recovery.
		The flotation testwork is ongoing and is yet to be optimised. However, it is a reasonable expectation based upon results to date that 70-80% of the lepidolite can be recovered to a concentrate grading between 3-3.5% $Li_2O$ over the life of the project.
		PAM has conducted roasting/leaching testwork on the various concentrates produced from the flotation testwork. Li recoveries into leach liquor for both oxide and fresh concentrates tested averaged ~79%. Recoveries from there to lithium chemicals, carbonate, hydroxide or phosphate are not known
		Rb and Cs will report to the lepidolite concentrate and are potentially recoverable as well as K and Ca sulphate by- products with potentially some sulphates recycled into the sulphate-roast process.
		Sn and Ta recovery test-work is at an early stage. However, it a reasonable expectation that minerals containing Sn(cassiterite) and Ta-Nb minerals (tantalite-microlite) can be recovered to concentrates via simple gravity methods, and then potentially further upgraded/separated by magnetic methods. It is also the case that these minerals were recovered when the Reung Kiet mine was active in late 1960's-early 70's when the weathered pegmatite material was extracted.
		Pan Asia is continuing flotation testwork and will also conduct Sn-Ta recovery testwork. The lepidolite concentrates produced from the testwork will undergo further roasting and leaching testwork.



Criteria	JORC Code explanation	Commentary		
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	Environmental factors have not been considered at this early stage of project development.		
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Density samples were collected from full and half cores over intervals ranging from 6 cm to 115 cm, averaging 17 cm. Density measurements collected by gamma and callipers have augmented SGs obtained by the Archimedes method. Most SG and density measurements were taken from Zone 2 Fresh which is volumetrically by far the largest domain. While the mean values are similar, there is a low bias of about 0.015 t/m <sup>3</sup> towards the gamma/calliper readings which is insignificant. There is a more significant difference between SGs and density measurements in Zone 2 Oxides and as a result, although kriging metrics are of high confidence, resources have been restricted to "Indicated" and "Inferred". The SGs in Zone 2 Fresh were estimated by moving average algorithm. Zone 2 Oxides and Transition ores were assigned the average densities.		
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	All SG measurements were collected from the mineralised area, Zone 2. Density measurements collected by gamma and callipers have augmented SGs obtained by the Archimedes method.		
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Samples were measured using the Archimedes principal SG = weight in air / (weight in air - weight in water). In addition, a geophysical logging (gamma and calliper) program was run, whereby readings were taken every cm along the holes. These readings were composited to 1 m intervals for analytical purposes. All physical sample measurements were collected from the mineralised area in Zone 2, whereas the geophysical logging program recorded readings from within each of the mineralised zones and across the weathering profile. Zone 1 and Zone 3 were assigned the average geophysical densities, based on the weathering domain.		



Criteria	JORC Code explanation	Commentary		
		Zone/Weathering	Method	Count
		1/Oxidised	Gamma	76
		1/Transitional	Gamma	11
		1/Fresh	Gamma	33
		2/Oxidised	Gamma/Archimedes	266/127
		2/Transitional	Gamma/Archimedes	109/48
		2/Fresh	Gamma/Archimedes	1,453/464
		3/Oxidised	No mineralisation	
		3/Transitional	No mineralisation	
		3/Fresh	Gamma	45
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource has been classified in accordar with guidelines contained in the JORC Code. The classification applied reflects the authors views of the uncertainty attributed to the Mineral Resources repu- herein. Key criteria that have been considered when classifying the Mineral Resource are detailed in JORC Table 1 which is contained in Appendix A. After considering data quality, data distribution, and geological and grade continuity, a large portion of Zc fresh ore was classified as a Measured Resource. Infi drilling since the previous and initial MRE of June 20 and the collection of geophysical density measurem which show acceptable agreement with SGs collecte conventional Archimedes principal, have contributed higher level of confidence in the interpolated results kriging parameters, previously discussed, return high acceptable results and the geological domaining sho little change to the interpreted mineralisation and weathering profiles. Portions of Zone 1 and Zone 2 oxidised, transition are fresh have been classified as either Indicated or Infe		e. The iews of the urces reporter red when ed in JORC ution, and rtion of Zone ource. Infill of June 2022, neasurements is collected by ontributed to ed results. The eturn highly aining shows ion and nsition and
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and	<ul> <li>Mineral Resources, either because of the paucity of S and/or density measurements and low numbers of geochemical data which has resulted in low confident the estimates. The entirety of Zone 3 comprising of o fresh ore, has been classified as an Inferred Mineral Resource because validation of the estimates against 1 m composites gives low confidence.</li> <li>The quality of the estimates as measured by the OK criteria such as kriging efficiency, the weight of the m the slope of regression and the percentage of negative estimation weights, amongst other, vary from poor to f very good.</li> </ul>		nbers of v confidence orising of only d Mineral tes against the by the OK nt of the mea of negative



Criteria	JORC Code explanation	Commentary
		Estimates generally reproduced the mean of the input 1 m composites and estimation smoothing by OK varies between moderate and low. Variography ranges between poor and robust. Geological and grade continuity are generally well defined although in Zone 3 anomalous behaviour is evident in all the five elements as seen when data are declustered. Even now that the number of samples has more than doubled since the previous estimate, this anomalous grade behaviour still persists, Zone 3 is wholly classified as "Inferred" this is an issue to be investigated prior to the next MRE update.
		Validation comprised of (geo)statistical and visual comparisons. (Geo)statistical methods used included a comparison of SMU grade estimates to the 1 m composites, comparison of grade-tonnage curves from a change of support model (Discrete Gaussian Model) with those of the estimated grades to primarily obtain a view of the amount of smoothing from the linear estimate. Swath plots were constructed along the three axes and compare estimates to 1 m composite grades.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The MRE appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	The results of any audits or reviews of MREs.	No previous reviews have been conducted on the Reung Kiet Mineral Resource.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the MRE using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Mineral Resource accuracy is communicated throug the classification assigned to this Mineral Resource. The MRE has been classified in accordance with the JOR Code (2012 Edition) using both a quantitative (geostatistical/statistical) and a qualitative (visual) approach.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The recoverable resources estimation method, Localised Multivariate Uniform Conditioning (LMUC), was applied in Zone 2 which contains about 70% of the total tonnes, with the specific purpose of providing the best local estimation of the in-situ resources. Where LMUC was no applied, local estimation was undertaken by OK and validated using Discrete Gaussian Model change of support.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No records, from artisanal mining that has occurred, are available.