

# PanAsiaMetals

ASX Announcement | 30 October 2020

## Pan Asia Metals progresses drilling program at Khao Soon Tungsten Project

### Drilling highlights:

- Three diamond core holes completed and one in progress
- Close spaced spot hand-held XRF analysis of drill core returns elevated tungsten
- Average hhXRF values in the weathered mineralized zone between 0.2-0.3% WO<sub>3</sub>
- Current interpretation suggests the mineralised zone is about 25m thick
- Interpretation suggests a 4m thick higher grade zone of 0.5%-0.6% WO<sub>3</sub>
- Breccia zone interpreted as shallow dipping to southeast
- Drilling is ongoing and will test for lateral and depth extensions

Specialty metals explorer and developer **Pan Asia Metals Limited (ASX: PAM)** ('PAM' or 'the Company') is pleased to provide an update on its maiden drilling program at the Khao Soon Tungsten Project (KSTP) located in southern Thailand.

KSTP is PAM's key asset and a significant historical producer. Modern exploration has discovered potentially world-class, district scale tungsten mineralisation across numerous prospects. Reconnaissance diamond drilling by PAM has intersected robust widths and grades associated with strong surface anomalies, from which Exploration Targets have been estimated.

### Drilling program progresses

PAM commenced drilling at the Target 2 Prospect (T2) within the KSTP on October 4<sup>th</sup>, four days prior to PAM's listing on the ASX.

Target 2 is defined by a large high tenor, tungsten in soil anomaly about 450m long and 150m wide (see Figure 1). Shallow drilling by previous explorers intersected tungsten mineralised laterite on the western side of the soil anomaly.

The drilling program at Target 2 has three main objectives:

1. Test an Induced Polarisation anomaly.
2. Test the WO<sub>3</sub> in soil anomaly.
3. Evaluate the Exploration Target defined at Target 2.

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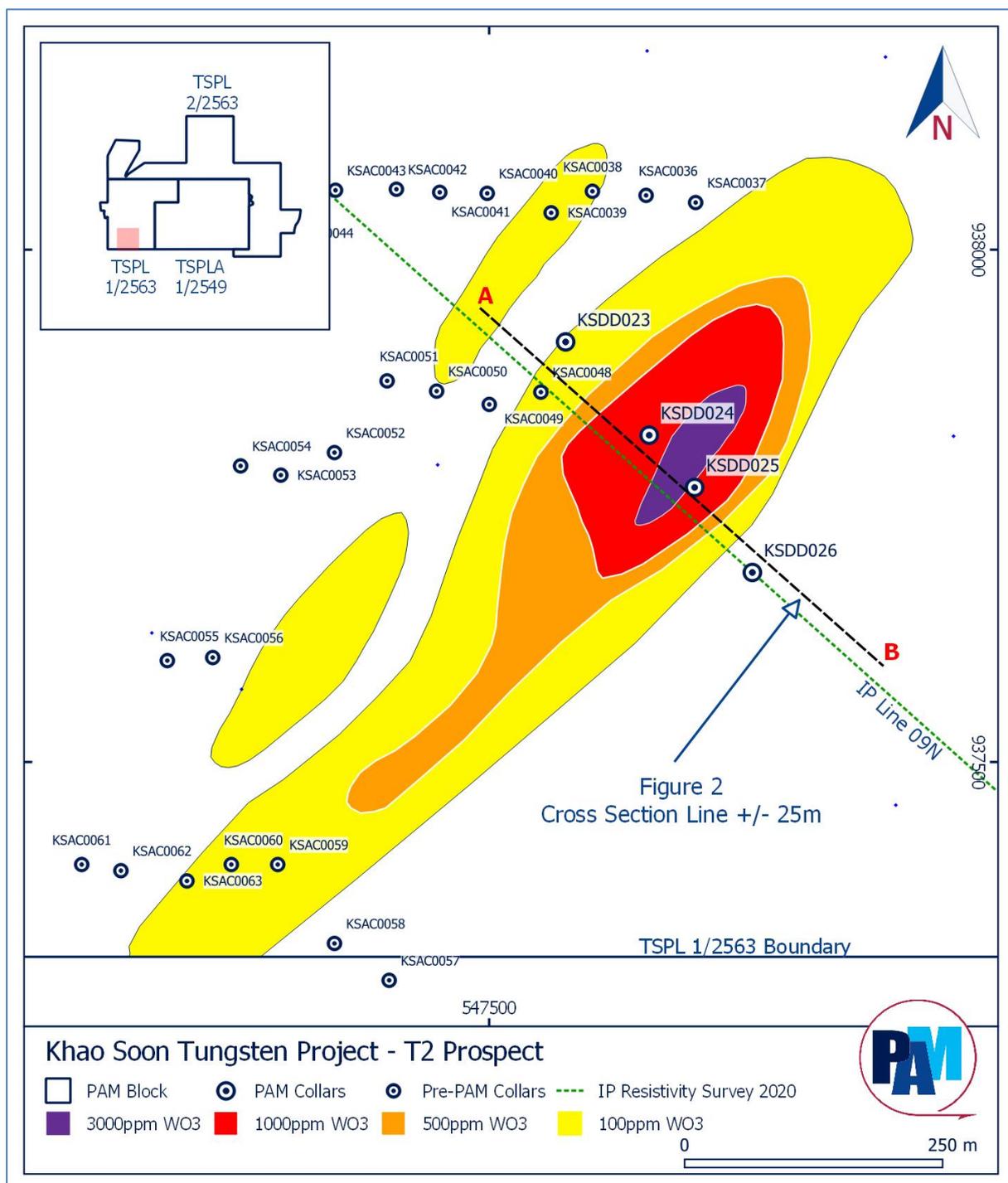


Figure 1: Khao Soon Tungsten Project – T2 Prospect, Drill Hole Locations

To date, three HQ diameter diamond drillholes (KSDD023 to KSDD025) have been completed for a total of 334.1m. A fourth hole (KSDD026) is in progress, see Table 1 for drillhole details. All holes are drilled on the same cross section +/- 25m, across the central portion of the Target 2 soil



anomaly (see Figure 2). Further drilling is planned to test the mineralised zone along strike and at depth.

The interpretation of drilling results at Target 2 indicates the mineralized zone dips about 20 degrees to the southeast and is about 25m thick. The mineralized zone appears to form at the upper contact of a large fault breccia.

PAM conducts routine spot hand-held X-Ray Fluorescence (hhXRF) analysis at regular spacings along the drill core, especially in areas of enriched tungsten, where sample points are typically spaced at 0.1-0.2m.

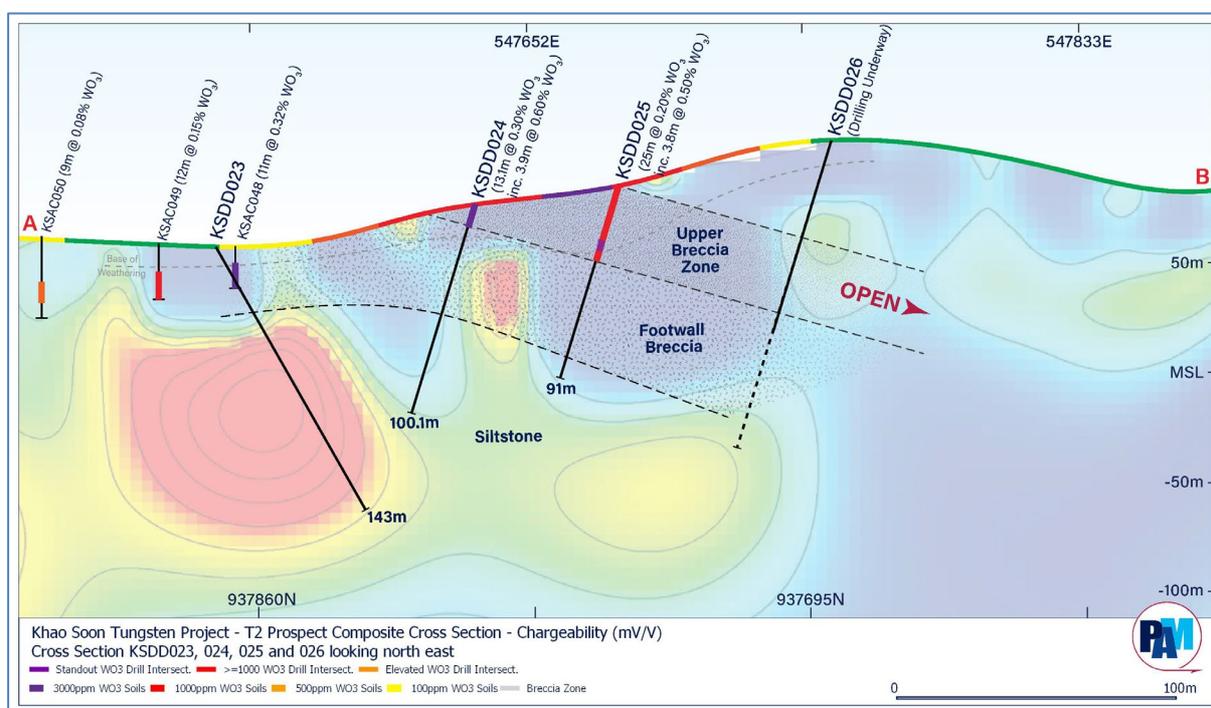


Figure 2: Khao Soon Tungsten Project – T2 Prospect, Composite Cross Section

PAM uses a Delta Olympus Premium hhXRF device which utilises an X-ray fluorescence tube to take relatively rapid (30 second) measurements over an area about 20mm<sup>2</sup> to report up to 36 elements. In this case, it is used by PAM geologists to take readings on drill core to evaluate the tenor of the contained tungsten mineralisation and other associated pathfinder elements. The spot readings on the core are yet to be verified by an independent laboratory and the Company wishes to make clear that the hhXRF results are not formal assays but are preliminary estimates of tungsten grades only, and require confirmation by appropriate sampling and independent laboratory analysis.

However, it is PAM's experience that the spot hhXRF analysis does provide a relatively good indication of tungsten grades when compared to those reported from laboratory analysis. This is especially the case in more weathered mineralisation and is based upon extensive QA/QC



conducted by PAM during previous drilling campaigns at Khao Soon. However, in fresh rock spot hhXRF becomes a considerably less reliable indicator of tungsten grade and will commonly underestimate by a significant factor. Details of the current drilling program and previous drilling programs relevant to this release can be found in Appendix 1, being JORC Table 1.



Picture 1: Khao Soon Tungsten Project – DrillCorp setting up for KSDD026, drilling with HQ diameter rods

A discussion of the drill program and results is presented below.

**KSDD023** – This hole was designed to test a strong Induced Polarisation chargeability anomaly which occurs sub-surface and to the west of a large tungsten in soil anomaly. As there is no outcrop in the prospect area, the IP anomaly was interpreted to potentially represent the down dip extension of the mineralized zone emanating from the tungsten in soil anomaly. KSDD023 was also designed to test for tungsten hosted in laterite which was intersected by previous explorers (see Figure 2).

Based upon spot readings using hhXRF, the hole intersected weakly elevated tungsten from 0-13m hosted in lateritic saprolite, with values typically between 50-150ppm  $WO_3$ . The lateritic hosted tungsten mineralisation intersected by previous explorers, such as 11m @ 0.32%  $WO_3$  in hole KSAC048 approximately 50 meters to the south west was not intersected.

**KSDD024** - Results of KSDD023 effectively ruled out the potential for a west dipping mineralized zone associated with the IP anomaly. Accordingly, KSDD024 was drilled to test for a sub-vertical to east dipping mineralized zone. The hole intersected tungsten mineralisation hosted in lateritic and deeply weathered breccia from 0-13.1m. as indicated by close spaced, spot hhXRF analysis of the drill core. The average of 145 hhXRF readings is 0.3%  $WO_3$  (see Table 2)



A large zone of fault breccia was intersected from 16-62m. This breccia contains local pyrite. Wolframite or other tungsten minerals have not been observed and spot hhXRF analysis indicates isolated zones of weakly elevated tungsten in the breccia. The breccia passes into massive siltstone which continues to the end of the hole at 100.1m (see Figure 2).

**KSDD025** – This hole was drilled about 65m south east KSDD024 to test the mineralized zone further down-dip. The hole passed through lateritic, deeply weathered and oxidized breccia with elevated tungsten from surface to 28.7m based upon spot hhXRF analysis of the drill core. The interval from surface to 25m returned an average of 0.20% WO<sub>3</sub> from 214 readings (see Table 2). As with KSDD024 a thick fault breccia continued to about 80m downhole with local pyrite development. This was followed by massive siltstone to end of hole at 91m (see Figure 2).

**KSDD026** – This hole is located about 100m south east of KSDD025 and is designed to test the interpreted breccia zone further down-dip in fresh rock. The hole is currently at 90m. From about 49m to 70m the hole passed through fractured to brecciated siltstone, which contained patchy fine grained pyrite. No visible tungsten mineralisation has been observed and only local weakly elevated tungsten was returned by spot hhXRF. Please note, as the intersection is in fresh rock, spot hhXRF is a considerably less reliable indicator of the presence of tungsten. The hole is currently at 90m and drilling is continuing (see Figure 2).

| HoleID  | East UTM<br>Zone 47N | North UTM<br>Zone 47N | Elevation<br>(m) | Dip | Azimuth<br>mag. | Depth (m)   |
|---------|----------------------|-----------------------|------------------|-----|-----------------|-------------|
| KSDD023 | 547574               | 937910                | 90               | -60 | 135             | 143         |
| KSDD024 | 547655               | 937819                | 106              | -75 | 315             | 100.1       |
| KSDD025 | 547699               | 937768                | 107              | -75 | 315             | 91          |
| KSDD026 | 547755               | 937685                | 126              | -75 | 315             | In progress |

Table 1: Drillhole collar details



| Hole ID        | From (m) | To (m)      | Interval (m) | No. of readings | WO <sub>3</sub> % |
|----------------|----------|-------------|--------------|-----------------|-------------------|
| <b>KSDD024</b> | <b>0</b> | <b>13.1</b> | <b>13.1</b>  | <b>145</b>      | <b>0.30</b>       |
| KSDD024        | 0        | 9.1         | 9.1          | 100             | 0.17              |
| KSDD024        | 9.1      | 13          | 3.9          | 44              | 0.61              |
| <b>KSDD025</b> | <b>0</b> | <b>25</b>   | <b>25</b>    | <b>214</b>      | <b>0.20</b>       |
| KSDD025        | 0        | 10.4        | 10           | 77              | 0.10              |
| KSDD025        | 10.8     | 10.8        | 0            | 2               | 0.05              |
| KSDD025        | 11.8     | 13          | 1            | 8               | 0.09              |
| KSDD025        | 13.1     | 23          | 10           | 92              | 0.35              |
| KSDD025        | 19.2     | 23          | 3.8          | 34              | 0.50              |
| KSDD025        | 23.6     | 23.7        | 0.1          | 3               | 0.08              |
| KSDD025        | 24.4     | 24.7        | 0.3          | 5               | 0.10              |
| KSDD025        | 27.1     | 27.1        | 0            | 1               | 0.06              |

Table 2. Spot hand-held XRF analysis (KSDD024 and 025)

### Next Steps

Drilling is continuing at Target 2 with further holes planned to test for strike and depth extensions of the mineralized zone associated with the soil anomaly. PAM geologists are currently logging the drill core which is being sampled and will be dispatched for laboratory analysis in the near term. Results are expected in late November.

Following the completion of initial drilling at Target 2, PAM intends to conduct further drilling to evaluate the Exploration Targets defined at several prospects within the Khao Soon project area. This will include both infill drilling and extensional drilling along strike and at depth. There are several Induced Polarisation targets also planned for drill testing.

The Company looks forward to keeping the market updated on the drilling progress and results obtained from the ongoing drilling program at Khao Soon.



**Pan Asia Metals Managing Director Paul Lock said:** "The Khao Soon Tungsten project is a potentially world-class project and one of the few in the global peer group which has the geography, scale, and grade potential required to be developed at low cost. PAM's plan is to expand on the four previously tested prospects and start testing the other six prospects with the objective of defining a Mineral Resource in the near term. PAM already has a very large drill supported Exploration Target of 15-29Mt at 0.2-0.4% WO<sub>3</sub><sup>#</sup>, placing PAM in a peer group-leading position in the world's most critical metal. With definition of a Mineral Resource, PAM will be one step closer to its goal of delivering value-added chemicals such as Ammonium Para-tungstate (APT) into the South East Asian industrial sectors. Very few tungsten explorers and/or developers are in this position."

**Ends**

**Authorised by:**

Board of Directors

#Please Note: Readers are advised that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource. Readers are advised that JORC declarations and JORC Table 1 information for Exploration Results and Exploration Targets are provided in PAM's ASX Release titled 'PAM Projects – Technical Reports' which was published on the ASX platform on the 8th of October, 2020.

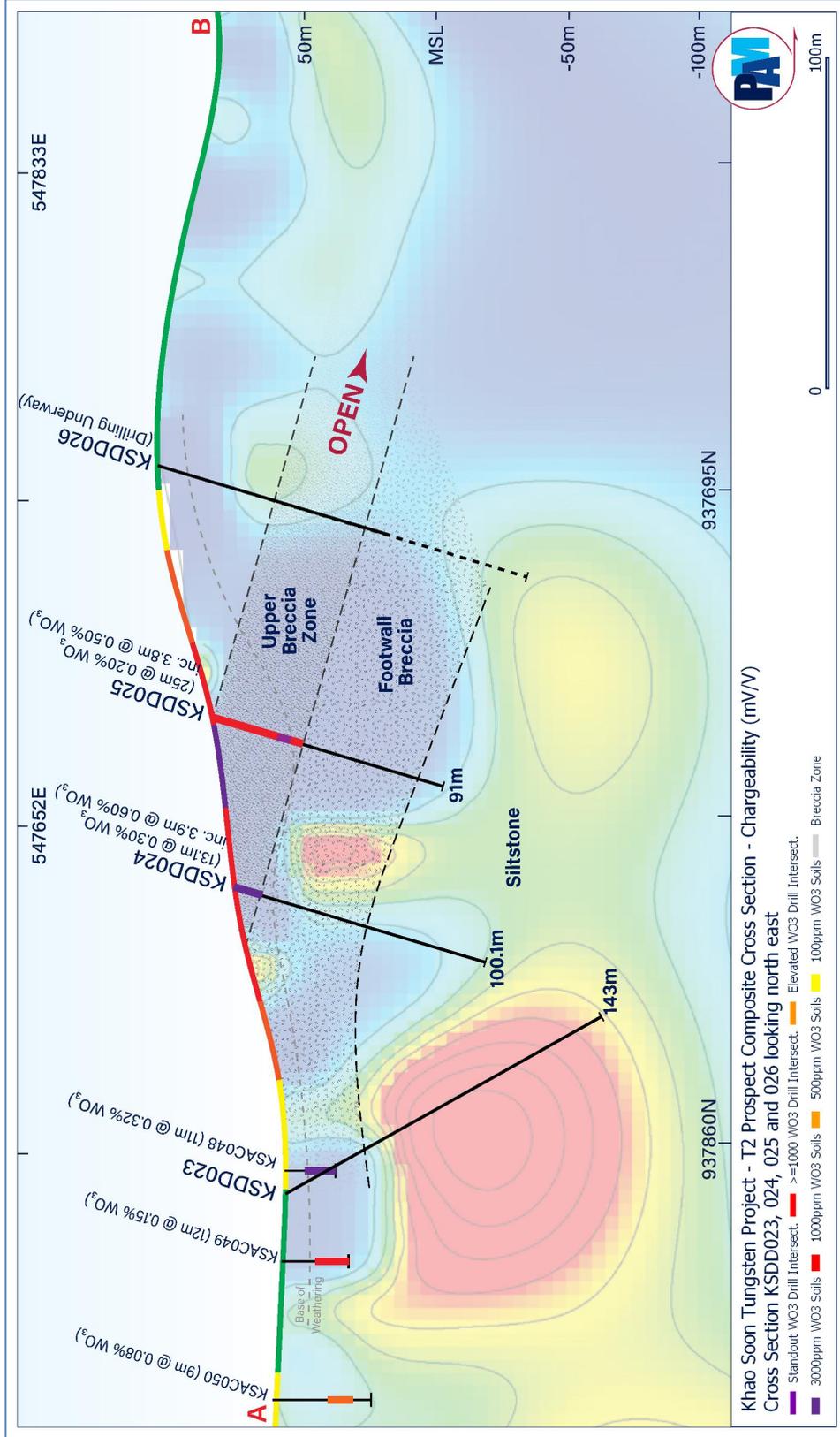


Figure 2: Khao Soon Tungsten Project – T2 Prospect, Composite Cross Section



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### About the Khao Soon Tungsten Project

The Khao Soon Tungsten Project is a wolframite style tungsten project located approximately 600km south of Bangkok in Nakhon Si Thammarat Province, Southern Thailand. PAM holds a 100% interest in 2 contiguous Special Prospecting Licences (SPL) a 1 Special Prospecting Licence Application (SPLA) covering about 33km<sup>2</sup>.

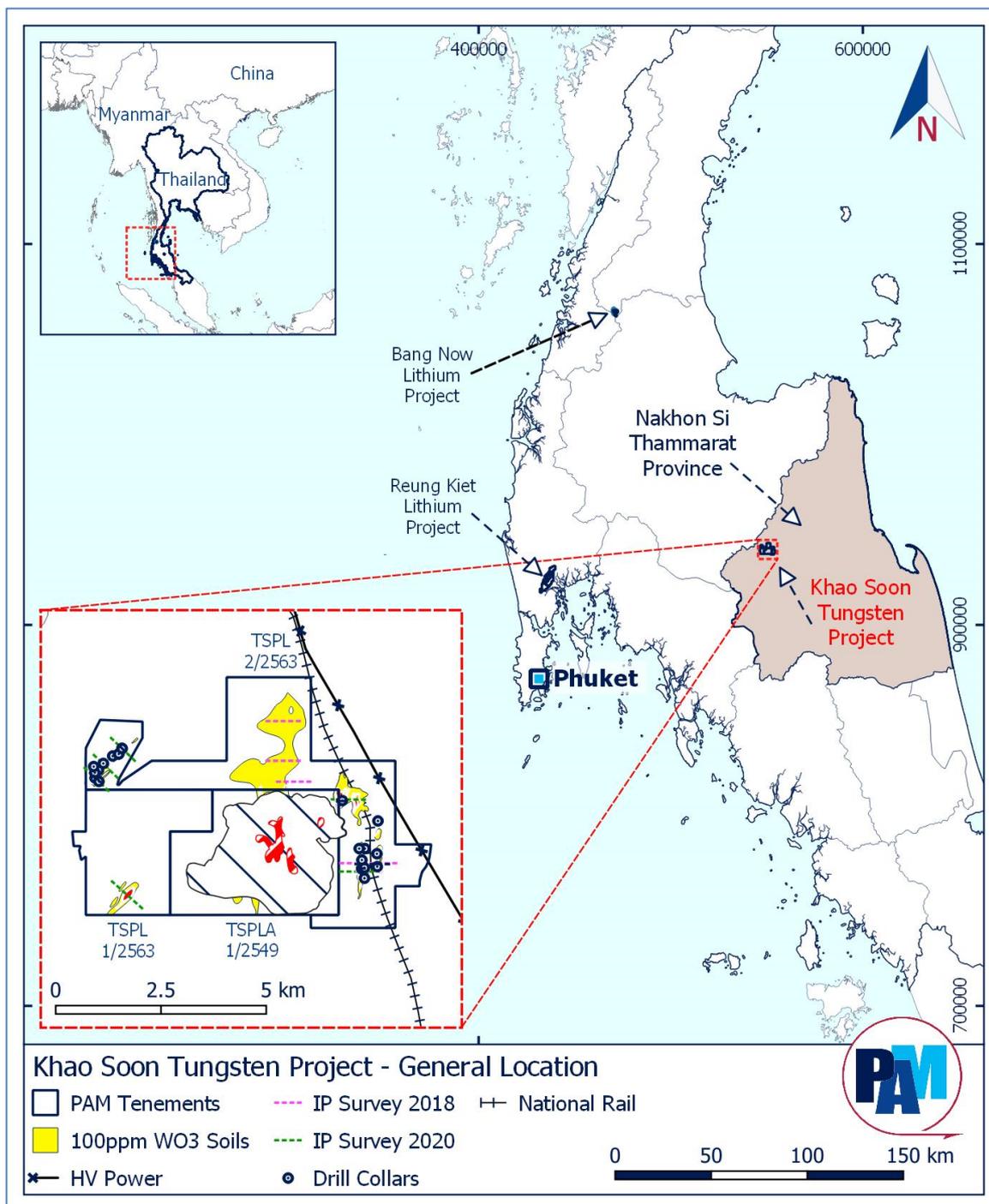


Figure 2: Regional map identifying the location of the Khao Soon Tungsten Project



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

Pan Asia Metals Limited (ASX:PAM) is a specialty metals explorer and developer focused on the identification and development of projects in South East Asia that have the potential to position Pan Asia Metals to produce metal compounds and other value-added products that are in high demand in the region.

Pan Asia Metals currently owns two tungsten projects and two lithium projects. Three of the four projects are located in Thailand, fitting Pan Asia Metal's strategy of developing downstream value-add opportunities located in low-cost environments proximal to end market users.

Complementing Pan Asia Metal's existing project portfolio is a target generation program which identifies desirable assets in the region. Through the program, Pan Asia Metals has a pipeline of target opportunities in South East Asia which are at various stages of consideration. In the years ahead, Pan Asia Metals plans to develop its existing projects while also expanding its portfolio via targeted and value-accretive acquisitions.

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

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### **Competent Persons Statement**

The information in this Public Report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr David Hobby, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hobby is an employee, Director and Shareholder of Pan Asia Metals Limited. Mr Hobby has sufficient experience that is relevant to the style of mineralization 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. 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 cautions security holders and prospective security holders to not place undue reliance on these forward-looking statements, which reflect the view of Pan Asia 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 does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

### **Important**

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APPENDIX 1 - JORC Code, 2012 Edition – Table 1  
 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria                          | JORC Code explanation  | Commentary  |
|-----------------------------------|--|---|
| <p><b>Sampling techniques</b></p> | <ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse 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</li> </ul> | <ul style="list-style-type: none"> <li>Samples are derived from diamond drilling conducted by Pan Asia (PAM) in 2017-2020 and aircore drilling conducted by Thai Goldfields (TGF) in 2013. Aircore samples were speared to obtain a sub-sample. Pan Asia drill core is cut in half with one half being the sub-sample. These methods are considered appropriate.</li> <li>The spot handheld XRF analysis are undertaken at regular intervals along the drill core, increasing to 0.1-0.2m in mineralized zones.</li> <li>Routine analysis of a W Certified Reference Material (CRM) or 'standards' are inserted during XRF or laboratory analysis. Duplicates are also used as are internal laboratory QA/QC data reported.</li> <li>Tungsten mineralization is hosted in laterite and weathered rock transitioning into fresh rock. Sample recovery for the air core drilling is not known. Sample recovery for PAM core drilling was variable in the laterite and weathered zones.</li> <li>Air core drilling was conducted to obtain mostly 3m samples from which a 2-4kg sub-sample was recovered using the spear method. This sample was then dried and split to recover a 0.2-0.6kg sub sample which was then pulverized and a 60gram assay pulp is extracted for analysis.</li> <li>Drill core is cut in half to collect mostly 0.5-1.5m individual sample lengths. Crushing to -6mm of the whole sample, then riffle splitting and pulverization of 0.5-1kg, from which a 100g sample was extracted for assay.</li> <li>The spot hand held XRF only analyses about 20mm2 on the drill core. As such it cannot be considered representative, although comparisons between spot hhXRF and laboratory derived analysis do show reasonable to excellent correlation across the mineralized zones in weathered material. This agreement breaks down when comparing hhXRF to laboratory results in fresh mineralisation (see Table A at end)</li> </ul> |

| Criteria                     | JORC Code explanation   | Commentary   |
|------------------------------|---|--|
|                              | <p><i>inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>  |  |
| <b>Drilling techniques</b>   | <ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</i></li> </ul>  | <ul style="list-style-type: none"> <li>• Reverse circulation (air-core) drilling was employed with a hole diameter of 75mm or 3". This is a face sampling drilling method.</li> <li>• Diamond drilling was conducted using HQ, HQ, triple tube or NQ/NQ triple tube. The core was not oriented.</li> </ul>   |
| <b>Drill sample recovery</b> | <ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul> | <ul style="list-style-type: none"> <li>• There is no recording of drill sample recovery for the TGF air-core drilling.</li> <li>• Diamond core recovery is recorded for every drill run by measuring recovered solid core length over the actual drilled length for that run.</li> <li>• Triple tube drill methods were used to assist with maximising sample recovery especially in the weathered zone. Sample recovery of the mineralised zones (&gt;400ppm WO<sub>3</sub> averages 72%. This excludes zones where no core and therefore no sample or assays are recorded.</li> <li>• Most air-core samples were dry or slightly damp with minimal loss of fines and limited potential for any other significant loss or gain of material. Some samples especially those near the end of hole were reported to be wet. There is a general slight decrease in grade where samples are wet at the base of the mottled zone or extending into weathered bedrock. This observation is thought to be geological. However, sample bias cannot be ruled out as W is potentially hosted in relatively dense minerals.</li> <li>• For diamond core drilling scatterplots of grade v recovery indicate that high W grades slightly concentrate with recoveries of 40-65%, potentially indicating some bias. However, lower to moderate W grades broadly occur across the broad range of recoveries.</li> </ul> |
| <b>Logging</b>               | <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• Core and chip samples were geologically logged with salient features recorded to sufficient detail for the results being reported.</li> <li>• Logging was qualitative. Colour, grain size, weathering, lithology type and salient comments are recorded. A photograph is available for all air-core samples, as drilled, and for parts of the QA-QC process. For drill core each tray is photographed wet and dry. Some cut core photos are also recorded.</li> </ul>   |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   | <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>  | <ul style="list-style-type: none"> <li>100% of every hole is geologically logged. For the air-core program it represents 528 log records from 1540m of drilling. For the diamond core there are around 240 logged intervals from 1912m of drilling.</li> </ul>   |
| <b>Sub-sampling techniques and sample preparation</b> | <ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>   | <ul style="list-style-type: none"> <li>Half core samples are cut with a large knife or broad chisel (when soft enough) or cut with a diamond saw if too hard to hand-cut. The remaining half is retained in the core tray. The bagged sample is crushed to 100% passing -6mm. A 0.5-1kg sub-sample is then riffle split. The entire sample is then pulverized to 75microns.</li> <li>For aircore holes the 20-30kg bag sample from the rig was laid down, the bag cut and the sample slightly flattened. An aluminum scoop/spear was used to sample this material on a rough grid. These sub-samples generally weighed between 2.5-4.5kg. There are 20 wet samples recorded in the dataset. Retained TGF 'coarse reject' samples were used by PAM to derive a further sub-sample/duplicate, in accordance with sampling methods used by TGF. The above methods in association with appropriate QA/QC checks conducted by PAM are demonstrated as being adequate.</li> <li>Initial sub-sampling as described above typically collected 15-30% of the air-core drill sample, and further sub-sampling collected 10-20% of that sample. This sample was pulverized and an 'assay pulp' was collected.</li> <li>For drill core samples 50% of the drilled interval is collected for sampling, 100% is fine crushed and around 30-50% of this sample is pulverized to produce the pulp for assay.</li> <li>The methods described are considered appropriate.</li> <li>The drilled air-core samples at the drill rig were 'laid out' and sampled on a rough grid to help maximise representivity. This sub-sample is placed into a smaller bag and mixed to ensure homogeneity. This sample is again 'spear' sampled to obtain a smaller sub-sample which is then pulverized. After pulverizing a 60 gram 'assay pulp' was extracted using a spoon. Every type of sub-sample was weighed and recorded by TGF.</li> <li>TGF conducted some duplicate sampling. PAM has undertaken duplicate sampling of the drill "coarse reject" sub-samples and of the "pulp reject" samples. There is acceptable agreement between TGF duplicates and the original pulp and pulp reject 'duplicate' samples. To validate the TGF sub-sampling methods, PAM conducted work seeking to duplicate the type of sub sampling as employed by TGF. A 2m deep hand auger hole was dug to gain a 26kg sample. Three sub-samples were collected using the TGF 'spear' sub-sampling methods. PAM also collected two riffle split samples from the bulk auger sample. Comparison of the W assay results indicate the TGF sampling methods produce an acceptably representative sample.</li> <li>For the Pan Asia diamond drilling no field duplicate/second-half sampling has been undertaken</li> <li>The sample/sub-sample sizes are considered appropriate for material being sampled. The pulverized sub-sample is also considered appropriate.</li> </ul> |
|   | <ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>   |

| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
| <b>Quality of assay data and laboratory tests</b> | <ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e lack of bias) and precision have been established.</li> </ul> | <ul style="list-style-type: none"> <li>The re-analysis of TGF air-core samples utilized pressed pellet XRF by ALS methods ME-XRF05 or ME-XRF15b (22 samples) and fusion bead with ICP-MS finish (96 samples) by ALS method ME-MS85. Analysis was undertaken at ALS Chemex in Brisbane, Australia. These samples were dried and re-pulverised by ALS in accordance with ALS method PUL-32. QA-QC work was also conducted on 'coarse reject' raw dill sample. For the PAM drilling, all samples were prepared by SGS in Bangkok and a 100g assay pulp sent to SGS in Perth for analysis. A sodium peroxide digestion (SGS method DIG90Q) was employed with analysis by ICP-MS (SGS method IMS90Q). Three samples &gt;0.5%W were analysed by XRF (SGS method XRF78S). These techniques employed are appropriate for tungsten analysis and are considered to be a total analysis technique.</li> <li>PAM has utilised an Olympus Delta hand-held XRF DP 4000 Premium (hhXRF) in Geochem and/or Soil mode, with dual beam analysis of 15 seconds each. For the PAM Olympus hhXRF data a calibration factor is applied to the reported W grades. This is derived from the comparison between laboratory derived W results (including standards) and those reported by hhXRF on the same samples. A linear formula of Modelled. W = hhXRF W x 1.44 is apparent, with a correlation co-efficient of 0.98 (see Chart 1 at end). However, to be conservative PAM uses a modelled calibration factor of 1.3 when reporting the spot hhXRF results.</li> <li>PAM submitted a total of 128 of the TGF samples for re-analysis. These samples were comprised of 118 assay pulps, 6 pulp rejects collected as 60g sub-samples and 4 TGF coarse rejects, PAM collected as 1.5kg spear samples PAM also collected a field auger sample (26kg) in an effort to duplicate the sub-sampling techniques employed by TGF. The sub-samples included 3 samples, duplicating the TGF sampling methods and two 1.5kg riffle split samples for grade comparison. All samples collected by PAM were sent to ALS in Brisbane for preparation and analysis. PAM did not submit any standards or blanks nor conduct external laboratory checks for the samples submitted to ALS, rather relied on internal ALS QA-QC. The 118 assay pulps act as laboratory check samples of the original handheld XRF data. The pulp rejects and coarse rejects effectively act as duplicates to the original samples.</li> <li>For the PAM diamond drilling program certified W standards and a coarse blank were inserted at regular intervals into the appropriate sample stream. Duplicates or external laboratory checks have not been used. However, all pulp reject samples were analysed with a hand held The comparison of the lab results to W standards and the hhXRF results show excellent correlation. However, the hhXRF consistently undercalls W grades in a very precise and linear fashion to the point where it can be accurately modelled to reconcile with the laboratory grades, by the use of a calibration factor. Results from this work establish levels of precision and accuracy in sampling, sub-sampling and analytical methods that are acceptable for the results being reported.</li> <li>Significant intersections from the TGF drilling have been confirmed by the re-sampling and re-assaying program undertaken by PAM. Original samples have been sighted in association with the TGF geologist responsible for the drilling program, who is now Senior Geologist for PAM.</li> <li>For the Pan Asia core drilling significant intersections have been verified by alternate company personnel, being the Chief geologist and Exploration Geologist. Comparisons of spot hhXRF with lab results is also done.</li> </ul> |
| <b>Verification of sampling</b>                   | <ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>   | <ul style="list-style-type: none"> <li>Significant intersections from the TGF drilling have been confirmed by the re-sampling and re-assaying program undertaken by PAM. Original samples have been sighted in association with the TGF geologist responsible for the drilling program, who is now Senior Geologist for PAM.</li> <li>For the Pan Asia core drilling significant intersections have been verified by alternate company personnel, being the Chief geologist and Exploration Geologist. Comparisons of spot hhXRF with lab results is also done.</li> </ul>  |

| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
| <b>and assaying</b>  | <ul style="list-style-type: none"> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>   | <ul style="list-style-type: none"> <li>Twinned holes not used. However KSDD001 and KSDD002 are effective twins to 34m, and results compare favourably.</li> <li>Primary data includes GPS co-ordinates, paper geological logs and sample data records. The hard copy records are checked against Excel spreadsheet files derived from digital data import or manual data entry.</li> <li>hhXRF readings with depths are recorded on the device and then exported as csv files and converted to Excel.</li> <li>Adjustment of the data includes the conversion of elemental W reported from lab and hhXRF analysis to WO<sub>3</sub>, by multiplying W by 1.261. The calibration of 1.3 x hhXRF W is applied based upon QA/QC, as reported above.</li> </ul> |
| <b>Location of data points</b>                                 | <ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | <ul style="list-style-type: none"> <li>Drill holes are surveyed by handheld GPS, accurate to about 2-5m in X and Y.</li> <li>The grid system used is WGS84, Zone 47. Northings and Eastings are reported in meters.</li> <li>The topographic control used is Thailand national data. This is reported at 10m contour intervals. This data was checked against Google Earth elevations and those derived from GPS. The data is considered adequate for the exploration results reported.</li> </ul>  |
| <b>Data spacing and distribution</b>                           | <ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul> | <ul style="list-style-type: none"> <li>The TGF drill hole data spacing is typically 200m x 50m). PAM diamond drilling is at various spacings along strike and across section.</li> <li>Mineral Resources are <b>not</b> being reported</li> <li>Sample compositing has not been applied,.</li> </ul>  |
| <b>Orientation of data in relation to geological structure</b> | <ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>   | <ul style="list-style-type: none"> <li>The TGF sampling is undertaken from vertical holes through a horizontally layered laterite deposit. Primary structures are unlikely in this material. There is potential for primary structures in the bedrock, where some mineralization is reported. The PAM diamond core drilling was mostly undertaken normal to the strike of possible structures, and in many cases normal or near normal to the dip of interpreted mineralized zones.</li> </ul>  |

| Criteria                 | JORC Code explanation   | Commentary   |
|--------------------------|---|--|
|                          |   | <ul style="list-style-type: none"> <li>No relationship is apparent and no material sampling bias is assumed.</li> </ul>  |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The measures taken to ensure sample security.</i></li> </ul> | <ul style="list-style-type: none"> <li>The drilled sub-samples were transported back to the local TGF office. The assay pulps, reject and coarse reject pulps derived from these samples are securely stored. TGF samples selected for re-analysis by ALS were transported back to Australia by PAM personnel and mailed to ALS via registered post.</li> <li>PAM diamond core is securely stored (under lock and key) at PAM's field base. Samples for analysis are delivered to laboratory personnel by PAM personnel, and sometimes by reputable Courier company.</li> </ul>  |
| <b>Audits or reviews</b> | <ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>  | <ul style="list-style-type: none"> <li>As previously described. PAM has conducted audit sampling of assay pulps, reject pulps and coarse reject pulps. Comparison of these results indicate the TGF sampling, sub-sampling and assay data is acceptable. The sampling techniques for the PAM diamond drilling have been less formally assessed, aside from checks of assay accuracy/precision which provide acceptable comparisons. The sub-sampling and sample preparation techniques employed are industry standard. However audits or reviews have not been undertaken. The use of close spaced spot hand held XRF readings on drill core has been employed by PAM during all of its diamond drilling programs at Khao Soon. As such the results of the hhXRF can be compared to the results obtained from independent laboratory analysis of the drillcore.</li> </ul> |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
| <b>Mineral tenement and land tenure status</b> | <ul style="list-style-type: none"> <li>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.</li> </ul>   | <ul style="list-style-type: none"> <li>The tenements are held are known as Special Prospecting Licences and are 100% owned by Pan Asia Metals. They are located in Nakhon Si Thammarat province and are designated, TSPL1/2563 and TSPL 2/2563, Both licences have a five year term and are due to expire in 2025</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>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.</li> </ul>   | <ul style="list-style-type: none"> <li>The tenure is securely held under the provisions of the Minerals Act 2017. PAM is unaware of any impediments to obtaining a licence to operate in the area aside from the normal provisions that operate in Thailand, such as regulatory approvals in association with securing agreements with relevant landholders.</li> </ul>   |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <ul style="list-style-type: none"> <li>TGF is the only company recorded to have done exploration, prior to PAM. PAM is reliant on the TGF data, having conducted appropriate due diligence and QA-QC studies. The TGF work has been conducted to an acceptable level.</li> </ul>  |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>  | <ul style="list-style-type: none"> <li>The deposit type is described as tungsten hosted in laterite and weathered to fresh breccia, probably associated with faulted hydrothermal breccia. The mineralization is located in the Main Range Province of the South East Asian Tin Tungsten Belt. Granitoid magmatism due to subduction and collision of microplates during the Early Triassic to Oligocene has generated some world-class tin - tungsten deposits in the region.</li> </ul> |
| <b>Drill hole Information</b>                  | <ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:                             <ul style="list-style-type: none"> <li>easting and northing of</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Provided in text</li> </ul>  |

| Criteria                        | JORC Code explanation  | Commentary   |
|---------------------------------|--|--|
| <b>Data aggregation methods</b> | <p>the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</p> <ul style="list-style-type: none"> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> <ul style="list-style-type: none"> <li>• 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.</li> </ul> |  |
|                                 |  | <ul style="list-style-type: none"> <li>• Intersections are generally reported at &gt; 0.05%WO<sub>3</sub>, but allow for internal dilution of &lt; 0.05%WO<sub>3</sub>. No top cut has been applied. Weighted average techniques are used for laboratory reported data. For spot hhXRF analysis of drill core the arithmetic average is reported, given the close spaced nature of the analysis points.</li> <li>• Higher grade zones within the bulk lower grade zones are reported, where material, nominally at &gt;0.1 -0.3% WO<sub>3</sub>.</li> <li>• The intersections reported and breakdown of material lower and higher grade zones is presented in the text of the document.</li> </ul> |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
|  | <p>aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>  | <ul style="list-style-type: none"> <li>Metal equivalents are not reported.</li> </ul>   |
| <p><b>Relationship between mineralisation widths and intercept lengths</b></p> | <ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul> | <ul style="list-style-type: none"> <li>The lateritic mineralization intersected in the aircore is horizontal and the drill holes are vertical. Accordingly reported intersections are perpendicular to mineralization and represent true widths. For Pan Asia drill core, the results reported for holes KSD024 and 025 can be considered very near to true thickness based on current interpretations</li> </ul> |
| <p><b>Diagrams</b></p>   | <ul style="list-style-type: none"> <li>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 drill hole collar locations and appropriate sectional views.</li> </ul>  | <ul style="list-style-type: none"> <li>See attached report.</li> </ul>  |
| <p><b>Balanced reporting</b></p>   | <ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades</li> </ul>   | <ul style="list-style-type: none"> <li>Hand-held XRF results are reported in the test of the document.</li> </ul>   |

| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
|  | <p><i>and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>  |   |
| <p><b>Other substantive exploration data</b></p> | <ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul> | <ul style="list-style-type: none"> <li>• The surface areas containing and surrounding the reported drilling results have been mapped and soil sampled and rock-chip sampling has taken place where possible. Results from these programs indicate extensive development of a ferruginous clay-pisolitic zones and lateritic and weathered breccia zones at surface, and occurring in association with large W in soil anomalies. Many of the prospect areas are devoid of outcrop and can be deeply weathered.</li> <li>• Pan Asia has conducted reconnaissance Induce Polarisation surveys to investigate sub-surface chargeability and resistivity in prospect areas. There has been insufficient drill testing of identified IP anomalies to conclude the efficacy of this technique in identifying mineralisation.</li> </ul> |
| <p><b>Further work</b></p>                       | <ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>                              | <ul style="list-style-type: none"> <li>• The mineralization has generally been intersected in widely spaced holes in close proximity to surface. Infill drilling is planned as well as extensional drilling along strike and at depth. A metallurgical evaluation is also planned for the variety of oxidized and fresh mineralization intersected.</li> <li>• See diagrams in text of document.</li> </ul>   |

Table A. Comparison between laboratory derived WO<sub>3</sub> intersections and spothhXRF modelled WO<sub>3</sub> intersections

| Hole ID | from (m) | to (m) | interval (m) | Lab WO3% | spot hhXRF mod WO3% | Comment             |
|---------|----------|--------|--------------|----------|---------------------|---------------------|
| KSSD001 | 0        | 52.7   | 51.2*        | 0.50     | 0.51                | mostly weathered    |
| KSSD002 | 0        | 34     | 34           | 0.63     | 0.45                | mostly weathered    |
| KSSD003 | 25.1     | 55.7   | 24.3         | 0.24     | 0.31                | mostly weathered    |
| KSSD004 | 6.8      | 57.1   | 41*          | 0.26     | 0.17                | mostly weathered    |
| KSSD006 | 14.4     | 42     | 27.6         | 0.15     | 0.17                | mostly weathered    |
| KSSD012 | 6        | 17.6   | 11.6         | 0.17     | 0.14                | mostly weathered    |
| KSSD013 | 2        | 10     | 8.0          | 0.18     | 0.16                | mostly weathered    |
| KSSD016 | 0        | 7.6    | 7.6          | 0.27     | 0.20                | mostly weathered    |
| KSSD021 | 0        | 14.55  | 14.55        | 0.44     | 0.20                | weathered and fresh |
| KSSD022 | 0        | 27.3   | 27.3         | 0.28     | 0.13                | weathered and fresh |

\* zones of no core recovery excluded from intersection

Chart A. Comparison scatterplot of laboratory derived W and hhXRF derived W from assay pulps and standards, with regression formula

