



ASX Announcement | 23 August 2024

## Rosario Copper Project, Chile IP Geophysics Program Scheduled to Start in September

### Highlights

- Inverse Polarisation (IP) Program to start on or about 23<sup>rd</sup> September.
- 19 IP lines are proposed for a total of ~27 line km.
- Inaugural Reverse Circulation (“RC”) drilling program to follow.
- The Rosario Copper Project is one of the newest high potential early stage copper projects in Chile’s Central Copper Belt, 10km north of the famous El Salvador Copper Mine.

Battery and critical metals explorer and developer, Pan Asia Metals Limited (ASX: PAM) (“PAM” or “the Company”) is pleased to announce that it has engaged Quantec Geoscience Limited (Quantec) to provide geophysical services at its Rosario Copper Project in Chile, with a start date on or about 23<sup>rd</sup> September, 2024.

#### Pan Asia Metals’ Managing Director, Paul Lock, commented:

*“We are excited to be conducting the first ever geophysical survey at Rosario and look forward to seeing what’s below, given the high grade rock chip and channel samples and Rosario’s proximity to the famous El Salvador mine 10km to the south, which has been in operation since 1959. The IP program will be closely followed by an inaugural drill program.”*

The objective of the program is to map and detect Manto Style Copper mineralisation within the survey area for drill targeting, delineation and structural control identification, specifically:

- Detect and discriminate targets related to potential mineralisation, alteration, lithology;
- Discriminate between large, potentially greater tonnage targets and smaller targets; and
- Compliment near surface information for integrated drill targeting.

The program will employ conventional Direct Current Induced Polarisation (DCIP) using a Pole-Dipole array (P-DP Array) survey which will provide high resolution resistivity and chargeability imaging to the desired depth of investigation for the Project from surface to ~300m. At present, the survey proposes 19 IP lines for a total of ~27 line km. See Figure 1. This may be altered slightly as the survey progresses dependent on initial results.

#### 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](http://www.panasiametals.com)

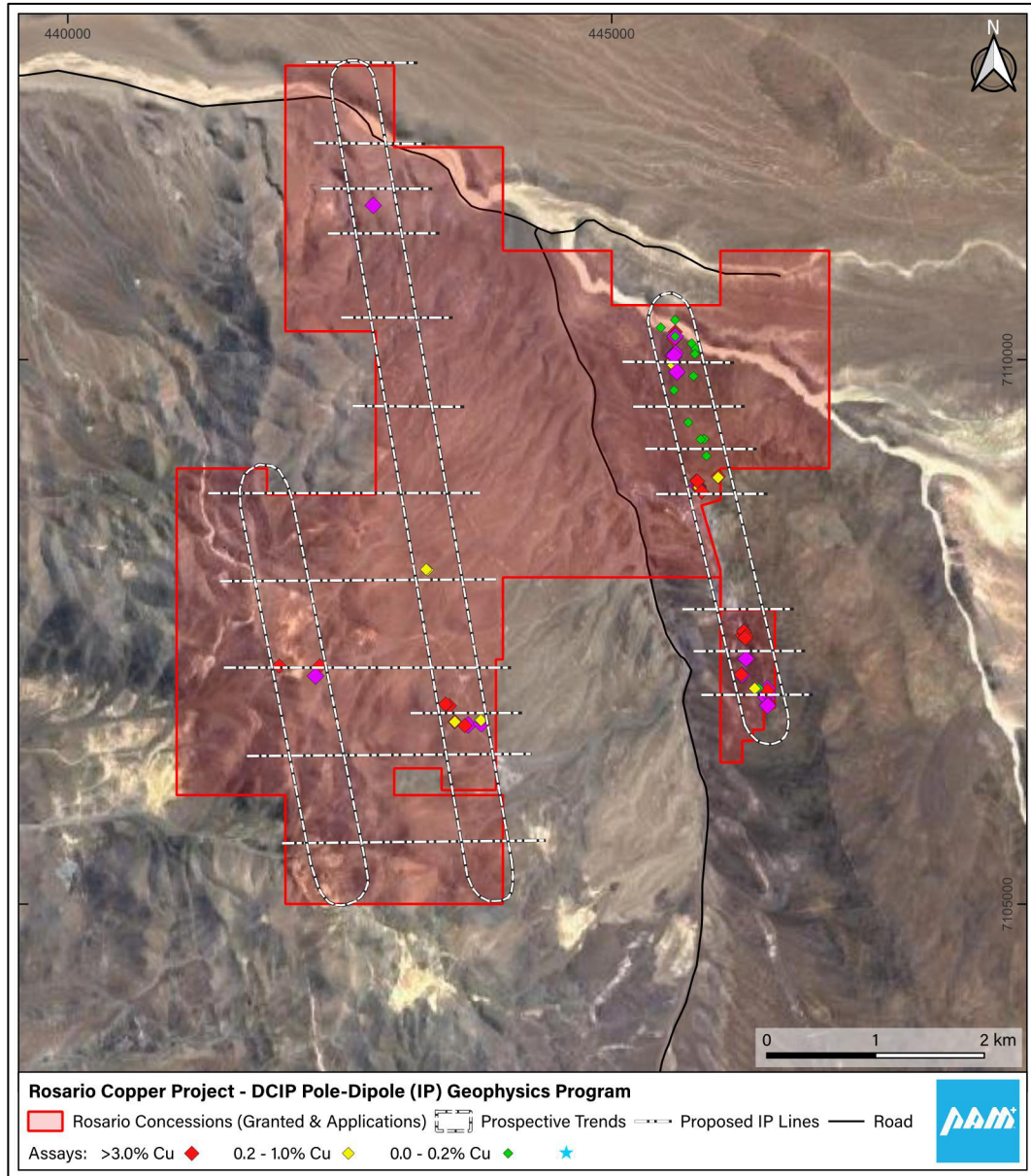


Figure 1: Rosario Copper Project – Proposed IP Survey Lines

Discussions with drilling contractors are underway with the objective of a start date in October.

- Ends -



**Authorised by the Board of Directors**

**For further information please contact:**

**Pan Asia Metals Limited**

Paul Lock

Managing Director

M: +61 408 631 497

E: paul.lock@panasiametals.com

**Investor Relations**

Dayna Louca

Jane Morgan Management

M: +61 409 581 972

E: dayna@janemorganmanagement.com.au



## **ABOUT PAN ASIA METALS LIMITED (ASX:PAM)**

Pan Asia Metals Limited is an ASX listed battery metals company with lithium and copper exploration and development projects located in South-East Asia and South America. PAM has 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 ICE and NEV producer in the region. PAM's lithium project is located on the coast in Southern Thailand with all infrastructure needs satisfied to facilitate movement of lithium concentrates into Thailand's Eastern Economic Corridor, an industrial corridor with over 20 vehicle manufactures and ancillary first and second tier suppliers which will position PAM to produce lithium chemicals cost competitively to supply the region's soaring demand for battery minerals. PAM's South American assets are strategically located in Chile - the lowest cost and largest lithium chemical and copper producing country in the world. PAM has one of South America's largest and most strategically positioned lithium brine projects which is situated at an altitude of 800-1100m with all necessary transport and energy infrastructure. The project is north of Chile's lithium chemical refining hub in Antofagasta, with access by rail and road, and only 75km from Iquique, a well-equipped coastal city with a population of 200,000, a deep water bulk and container port. PAM's copper project is one of the most strategically placed copper projects in South America, situated 10km to the north of Codelco's El Salvador Copper Mine and 100km from Enami's El Salado oxide and sulphide copper ore processing plant (actual road distance). Codelco's Porterillos Copper Smelter is also located 40km south of the El Salvador mine (actual road distance).

PAM is focused on securing battery metals projects which have the potential to position PAM as a low cost producer of the metals essential for electrification – lithium and copper. PAM aims to produce high-value products with a minimal carbon footprint. PAM is also a respected local company and local employer.

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

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



### **Competent Persons Statement**

The information in this report that relates to Exploration Targets and Exploration Results, is based on information compiled by Mr. David Hobby, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Hobby is a full time employee, Director and Shareholder of Pan Asia Metals Limited. Mr. Hobby has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. Hobby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Forward Looking Statements**

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

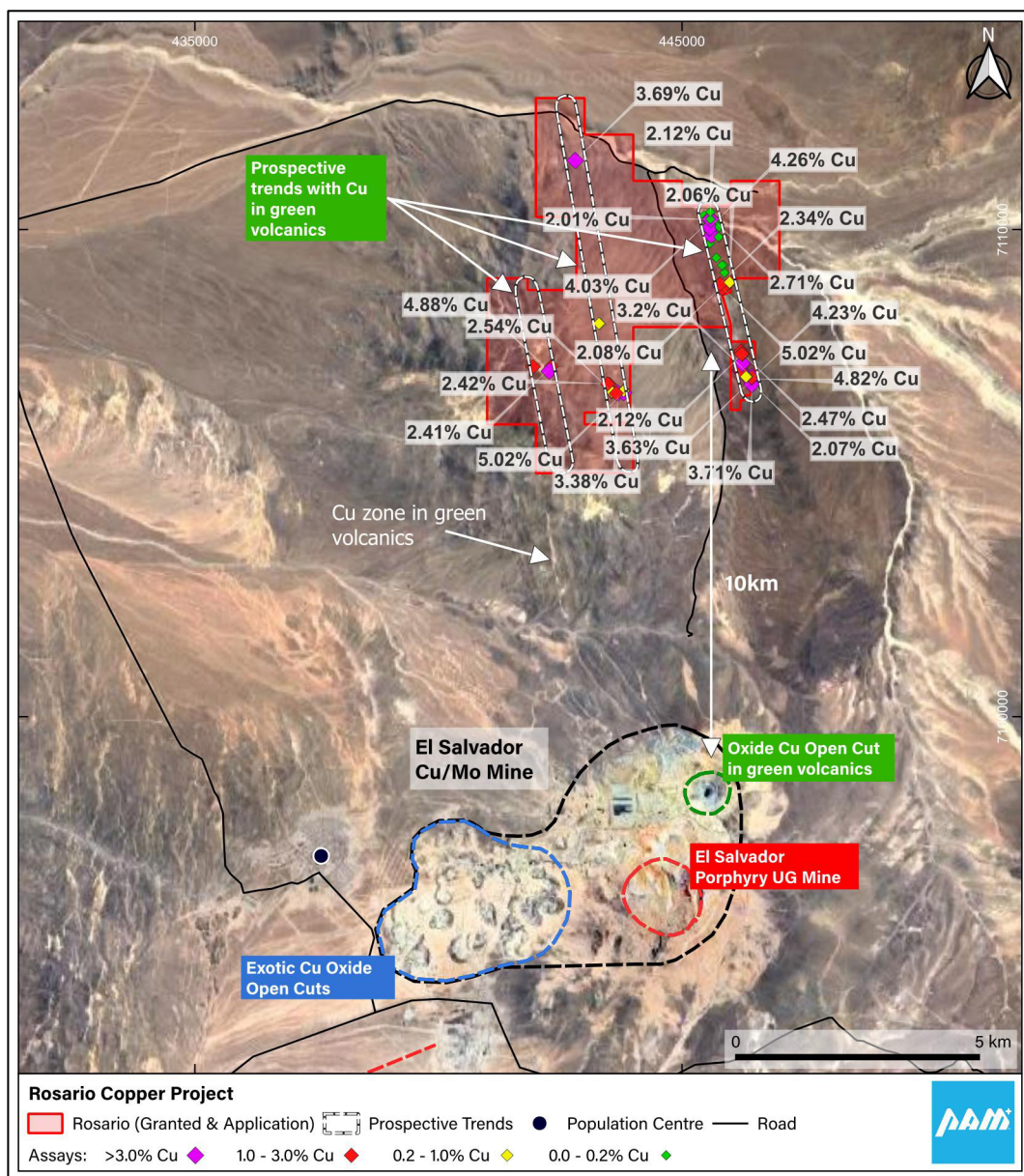
### **Important**

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 1 – PAM’S PROJECT PORTFOLIO

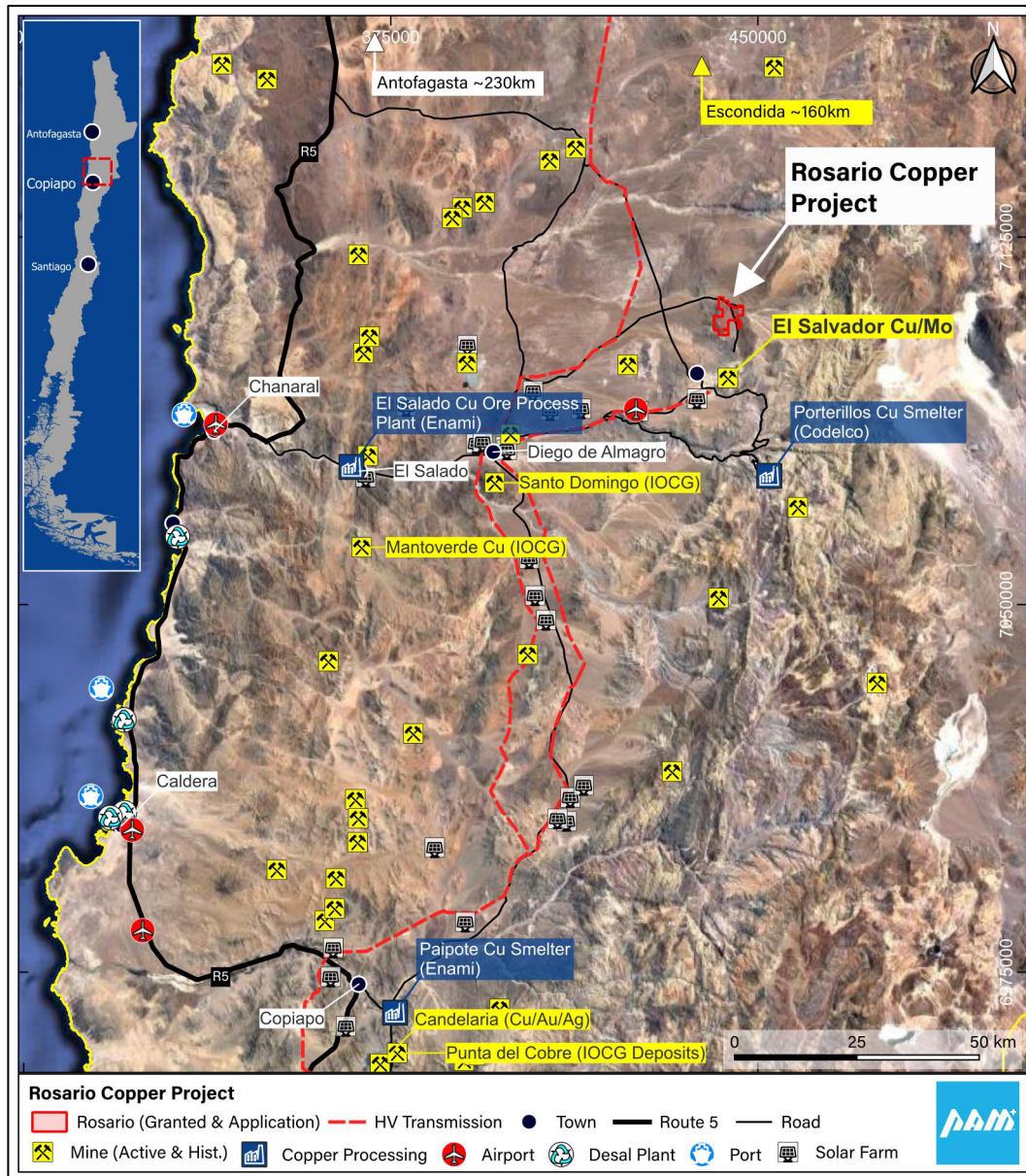
### ROSARIO COPPER PROJECT

The Rosario Copper Project is located in the commune of Diego de Almagro, Chanaral Province in the Atacama region of northern Chile. The Project is interpreted as highly prospective yet significantly under explored Manto style copper-silver project. This style of mineralisation occurs throughout the northern parts of Chile and is responsible for significant historical and current copper production. The largest examples of this deposit style have historic production and Mineral Resources of plus 200Mt at grades of 1% Cu or better along with by-product silver. These include the Mantos Blancos, El Solado and Michilla mines, along with a host of ‘smaller’ but significant deposits



Rosario Copper Project relative to Codelco's El Salvador Copper Projects

The Project is approximately 120 kilometres east of the port city of Chanaral and 160km north of the mining city of Copiapo. Access to the project is via well-formed paved roads and then dirt roads for the last 10km. The project lies about 10km north of the El Salvador mine (owned by CODELCO) and the town of El Salvador (pop. ~ 7000). The infrastructure in the area is excellent.



Rosario Copper Project and its regional setting

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

JORC Code, 2012 Edition – Table 1  
Rosario Copper Project

Section 1 Sampling Techniques and Data  
(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	
Sampling techniques	<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. 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 inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may</li> </ul>	<p>Samples were collected from small scale mine workings, prospecting pits and natural subcrop and outcrops.</p> <p>Sample types include semi-selective rockchips, random rockchips and some 'channel' chips, and are considered to be appropriate for the style of mineralisation present. Sample weights are generally in the 0.5-2kg range.</p> <p>The work has been conducted by the project Vendors in several phases and includes sampling by an Independent Geologist acting for Variscan Mines.</p>



Criteria	Explanation	
	warrant disclosure of detailed information.	
Drilling techniques	<ul style="list-style-type: none"> <li>• 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).</li> </ul>	No drilling is being reported.
Drill sample recovery	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• 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.</li> </ul>	No drilling is being reported.
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	No drilling is being reported. Rockchip samples are geologically described noting salient features.
Sub-sampling techniques and sample preparation	<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</li> </ul>	All samples have been processed by ALS laboratories in Chile.

Criteria	Explanation	
	<p><i>whether sampled wet or dry.</i></p> <ul style="list-style-type: none"> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>Samples are crushed to &gt;70% to &lt;2mm by ALS Method CRU-31. This sample is then riffle split to obtain a sub-sample of 250g by ALS Method SPL-21. The sub-sample is pulverised to &gt;75% to &lt;75 microns.</p> <p>ALS conduct internal QA/QC on the sub-sampling process regarding grain size and distribution. ALS also conduct assay analysis of duplicate sample of the pulverised sample. A review of this data indicates the samples are representative of the material being sampled.</p>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<p>Copper, silver and other elements were analysed by ALS Method ME-ICP41 which involves an Aqua Regia digestion and analysis by Inductive Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES). Samples returning above detection limit of 1% Cu were re-analysed using ALS Method Cu-AA46 which uses Atomic Absorption Spectroscopy (AAS).</p> <p>Gold was analysed by ALS Method Au-ICP21, which involves 30g fire assay with ICP-AES finish. These methods are considered to provide total analysis for the elements of economic interest.</p> <p>All samples were analysed for Cu and Ag. Au and other elements were not analysed in some programs.</p> <p>Internal ALS QA/QC procedures involving standards, duplicates and blanks analysis have been reviewed and indicate acceptable levels of accuracy and precision of the assay data.</p>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> </ul>	<p>No drilling is being reported.</p>

Criteria	Explanation	
	<ul style="list-style-type: none"> <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>	<p>Data is delivered from ALS in csv format for direct import into GIS data files. These data are checked against sample number v's the imported assay against the data from ALS.</p> <p>Data that has been adjusted includes two copper assays that reported grades of &gt;5% Cu. Overlimit assaying was not performed on these samples and they are recorded as containing 5.01% Cu in the data being presented.</p>
Location of data points	<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>	<p>Drilling and Mineral Resources are not being reported.</p> <p>Sample locations and other mapped features are located by hand-held GPS in grid system UTM Zone 19 South WGS84, with an accuracy of less than 10m, commonly 2-5m.</p> <p>Topographic control is achieved by fitting the X-Y co-ordinates to Google Earth ground level. This also serves to verify sample locations with observed ground features at sample sites.</p>
Data spacing and distribution	<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>	<p>Data spacing of rock chip sampling is highly variable from 1m up to several hundred metres. With consecutive samples collected across some faces. GPS co-ords were appropriately altered to reflect this.</p> <p>Mineral Resources or drill results are not being reported.</p>
Orientation of data in relation to geological structure	<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> <li>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.</li> </ul>	<p>Most sampling is essentially random. A few consecutive channel chip samples were collected across the NWN-SES strike of the steeply dipping main zone of mineralisation.</p>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>Samples were temporarily stored in the 4WD being used by the geologists who collected the samples. The vehicle was securely parked and locked during any overnight stays. At the end of the</p>

Criteria	Explanation	
		program the samples were then delivered in same vehicle to ALS laboratories in La Serena or Santiago, Chile
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Pan Asia's Chief Geologist has held extensive discussions with the Vendor's highly experienced Geologist who was present during all of the sampling programs at Rosario. Pan Asia is satisfied the sampling and assaying programs have been conducted to an acceptable standard.

## Section 2 Reporting of Exploration Results

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

Criteria	Explanation	
Mineral tenement and land tenure status	<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> <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>	<p>The project contains 4 Exploitation Concessions. These are Rosario 6, 1-40 which covers 1.9km<sup>2</sup> and Salvadora 1/14 which is 1km<sup>2</sup>. These are situated on the eastern side of the project. Rosario 7, 1/38 which covers 1.95km<sup>2</sup> and Abandonara 2, 1/10 which covers 0.6km<sup>2</sup> are situated in the central parts of the project. In the NE portion of the Abandonara Concession there is an historical site of Tambo-Cachiyuyo.</p> <p>The Exploitation Concessions are partly surrounded and encompassed by 8 Exploration Concession applications that cover 17.95km<sup>2</sup>. All of the Concessions and applications that make up the project are held by the vendors. PAM has entered into a 6-week exclusivity agreement to conduct due diligence on the project. Should PAM decide to proceed it has the right to enter into an option agreement for up to 3 years. The option fee per year is \$US100k payable as 50% cash with the remaining 50% payable as PAM shares or cash at PAM's election.</p> <p>PAM at any time can elect to acquire 100% of the project for \$US2.0 Million, payable as 50% cash with the remaining 50% payable as PAM shares or cash at PAM's election.</p> <p>The tenure is secure under the robust Chilean system and there are no known impediments to obtaining licence to operate in the area.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	PAM acknowledges the exploration conducted by the Vendors and Variscan Mines (ASX:VAR) from 2012-2022. PAM is currently reliant upon these programs and it forms the basis of this report.
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The Rosario project is interpreted as a Manto/Redbed volcanic hosted deposit. The mineralisation has a structural and lithological control and is hosted in late Cretaceous to early Tertiary andesites and associated volcano-sedimentary sandstone that were deposited in a submarine setting.
Drill hole Information	<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:</li> </ul>	No drilling being reported.

Criteria	Explanation	
	<ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> <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>	
<p>Data aggregation methods</p>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent</li> </ul>	<p>Any reported average grades are arithmetic with no cutting of high grades. Lower cut-off grades for average calculations are reported. All data relates to rockchip sampling with no drilling data being reported.</p>

Criteria	Explanation	
	<p><i>values should be clearly stated.</i></p>	
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<p>No drilling being reported.</p>
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p>Appropriate maps, plans and figure are provided in the report.</p>

Criteria	Explanation	
<i>Balanced reporting</i>	<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 and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	All grades shown on maps, with higher grades labelled.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	No other substantive exploration data is available.
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	The project is at a relatively early stage of exploration. Additional work is planned to include more detailed geochemical sampling and mapping, including trenching. Induced Polarisation geophysics is also planned across the prospective trends to identify sulphide zone targets. It is anticipated that drill targets will be identified, and drilling is planned to commence at the earliest opportunity.