POWER MINERALS

ASX RELEASE

ASX RELEASE

28 August 2024

ASX CODE

PNN

REGISTERED OFFICE

Power Minerals Limited
6/68 North Terrace
Kent Town SA 5067

t: +61 8 8218 5000
e: admin@powerminerals.com.au
w: www.powerminerals.com.au

BOARD

Stephen Ross
Non-Executive Chairman

Mena Habib
Managing Director

James Moses
Non-Executive Director

PROJECTS

Argentina
Salta Lithium Project

Brazil

LÍtio Niobium-Tantalum-REE Project

Australia

Eyre Peninsula Kaolin-Halloysite-REE Project

Musgrave Nickel-Copper-Cobalt-PGE Project

Further high-grade niobium, tantalum and REE results at LÍtio Project, Brazil

- **Ongoing sampling program at LÍtio Project delivers further high-grade niobium, tantalum and rare earth element (REE) results**
- **Latest results include:**
  - **40.9% Nb_2O_5 and 21.4% Ta_2O_5 in sample P0560/24**
  - **38.4% Ta_2O_5 and 11.7% Nb_2O_5 in sample P0561/24**
  - **30,040 ppm (3%) PREO* in sample P0558/24**
  - **27,080 ppm (2.8%) PREO* in sample P0556/24**
- **Sampling program confirms the presence of high-grade niobium and tantalum mineralisation at multiple locations across the entire length of the LÍtio Project**
- **Latest samples were taken from the central region of the LÍtio Project and multiple sites in the north of the Project area**
- **A LiDAR (Light Detection and Ranging) survey will be undertaken over the Project to identify new pegmatite dykes**
- **A bulk sample, trenching and maiden drilling program is planned as the next phases of field work at LÍtio (subject to results)**

Power Minerals Limited (ASX: PNN, Power or the Company) is pleased to announce further high-grade niobium, tantalum and rare earth elements (REE) sampling results at its LÍtio Project in Brazil.

The latest sampling results were taken from seven sites across three separate areas within the LÍtio project area – in the central area of the Project, in the northern area and also near the northern boundary.

In conjunction with previous high-grade sampling results reported last month (**ASX announcement 22 July 2024**), the results confirm the presence of high-grade concentrations of niobium and tantalum minerals at multiple locations spanning the entire length of the LÍtio Project area (Figure 1).

High-grade sampling results have now been returned from areas within the LÍtio Project where no previous pegmatite dykes have been mapped.

* PREO = Partial rare earth oxides

Latest highlight results include:

- **40.9% Nb_2O_5 and 21.4% Ta_2O_5 in sample P0560/24**
- **38.4% Ta_2O_5 and 11.7% Nb_2O_5 in sample P0561/24**
- **30,040 ppm (3%) PREO in sample P0558/24**
- **27,080 ppm (2.8%) PREO in sample P0556/24**

Note: Partial REO includes only values available for La_2O_3, CeO_2, Pr_6O_{11} and Nd_2O_3. Values for other REO are available but are qualitative only (simply confirming their presence) and can't be relied upon.

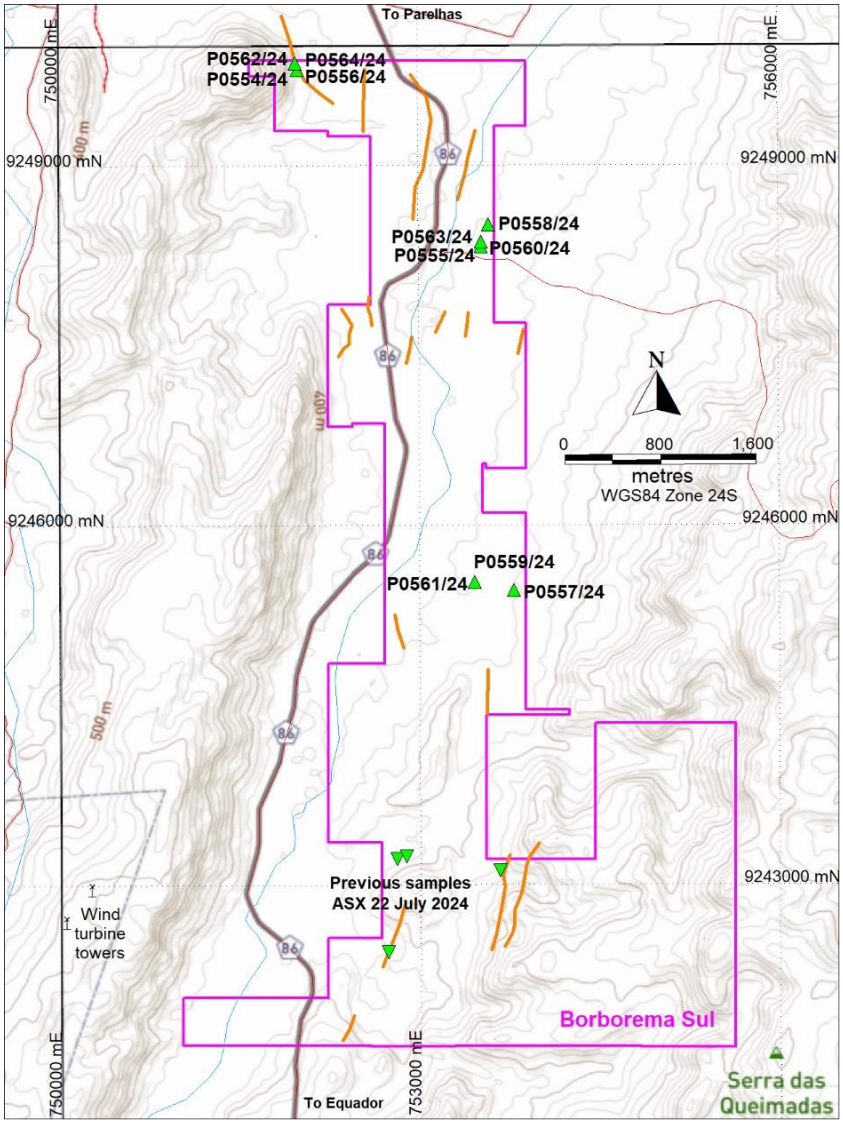

Figure 1: LÍtio project location map, showing sampling areas to date across the Project area.

In the northern part of the Lĺtio Project, individual pegmatite dykes appear to extend over 1,100 metres in length, and in the southern area, Power has mapped pegmatite dykes that appear to be 900 metres long. This is based on visible outcrop and does not include possible concealed extensions due to transported alluvial and scree cover.

It is known that the swarms of pegmatite dykes in the region can extend over many kilometres in length. The contacts of the pegmatites appear sharp, but are often obscured by coarse grained pegmatite scree. The 40.9% Nb_2O_5 sample (P0560/24) was returned from an area where no previous pegmatite dykes had been mapped.

Following the discovery of these occurrences of niobium and tantalum mineralisation, Power will undertake an airborne LiDAR (Light Detection and Ranging) survey over the Project area (ASX announcement 21 August 2024), which aims to expedite the identification of new pegmatite dykes – in addition to numerous already mapped pegmatite dykes - and additional exploration targets.

> **"These latest sampling results confirm the presence of high-grade niobium-tantalum-REE mineralised pegmatites in multiple new locations at the LĺTio project. In conjunction with our recently released high-grade results from the southern extent of the Project, we have now delivered widespread, high-grade sample results across the full length of our LĺTio tenure. While these results are acknowledged as early stage, they provide strong confidence and an early validation of our exploration strategy at the Project. We now look forward to reporting results of the LiDAR survey currently being undertaken, and making plans for more substantive exploration, including bulk sampling, trenching and drilling, subject to results."**
>
> **Power Minerals Managing Director Mena Habib**

Sampling methodology

The sampling program currently being undertaken by Power is designed to effectively evaluate and prioritise the numerous pegmatites within the Lltio Project area.

Due to the course and large crystal sizes within the Lltio pegmatites, large samples are required to deliver systematic representative sampling results. The minerals distribution may also be zoned inward - from the margins to the core - and with vertical depth.

There are a high number of pegmatite dykes spread across different parts of the Project area, and a number of them have limited exposed outcrop. As such, Power is utilising concentrate sampling as a rapid, cost-effective method to determine which pegmatites actually host niobium and tantalum. Simple grab rock samples may miss identifying possible niobium-tantalum mineralisation.

The concentrate sampling is also able to determine which areas at Lítio may host other high density minerals, including platinoids, and can identify areas that are barren, and require no further exploration. Power is ensuring that its field sampling and laboratory analyses are consistent in methodology across the sampling program, to enable appropriate comparison between sampled areas.

Once this sampling has been completed, more time consuming costeaning with channel sampling at surface can be undertaken. This would then be followed by drilling designed to test the depth extent of mineralisation. Further details on Power's initial sampling program at the Lítio Project are provided in ASX announcement of 22 July 2024.

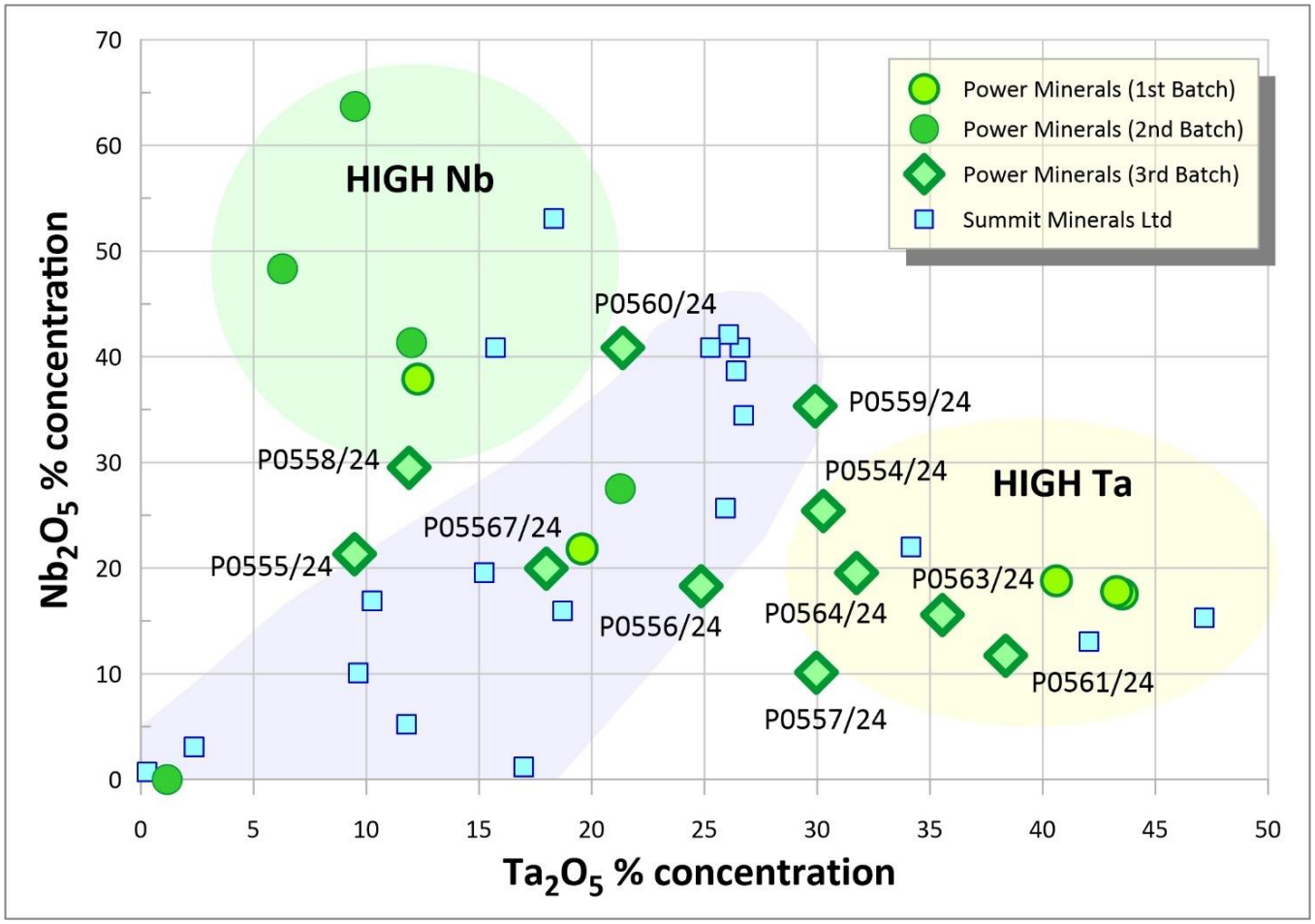

Figure 2: Results of samples reported to date by Power at the Lítio Project, and samples reported by Summit Minerals at its Equador Project, which is adjacent to the Lítio Project (ASX: SUM, ASX announcement 24 June 2024). Power's samples show very similar populations as the reported Summit samples, with examples of Nb-rich, Ta-rich and intermediate sub-groups as seen in the Summit project area.

Next steps

The LiDAR survey to be undertaken is expected to be completed in the current quarter. It will provide a detailed 3D topographic image of the Project's terrain, including the location of historical artisanal workings (Garimperios). The methodology used for the current sampling program is expected to provide rapid insight into the specific commodity(s) targeted at these individual workings.

In conjunction, the outcomes of the LiDAR survey and sampling program will be used to identify and prioritise target areas for the next phases of exploration, which is planned to include bulk sampling, trenching and a first-phase drilling program (subject to results).

SAMPLE	NAME	Site	Type	East_WGS84	North_WGS84	Nb_2O_5	Ta_2O_5
P0554/24	João Drone Grosso	2	Rock	751998	9249798	25.4	30.3
P0555/24	Riacho 22/07 Antônio	4	Stream	753522	9248323	21.3	9.5
P0556/24	João Drone Fino	2	Rock	751998	9249798	18.3	24.9
P0557/24	Antônio Grande Fino	8	Stream	753788	9245455	10.1	30.0
P0558/24	P2 Eólico Milhinho	3	Stream	753586	9248508	29.5	11.9
P0559/24	Banquer nariz	6	Rock	753457	9245523	35.3	29.9
P0560/24	Riacho 23/07 Esgumaro eólica curto:	5	Stream	753524	9248364	**40.9**	21.4
P0561/24	Antônio Grande Grosso	7	Rock	753457	9245523	11.7	**38.4**
P0562/24	João Drone Externo fino	1	Stream	751979	9249854	20.0	18.0
P0563/24	Antônio ITA	4	Stream	753522	9248323	15.6	35.5
P0564/24	João Drone Externo Grãos	1	Stream	751979	9249854	19.6	31.8

Table 1: Niobium and tantalum sample results from LÍtio Project

SAMPLE	East WGS84 metre	North WGS84 metre	Batch	SiO_2 %	Al_2O_3 %	CeO_2 ppm	La_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Part REO Total
P0554/24	751998	9249798	OS0157/24	25.51	3.36	990	100	100	20	1210
P0555/24	753522	9248323	OS0157/24	15.69	5.63	6860	100	1520	210	8690
P0556/24	751998	9249798	OS0157/24	28.53	3.20	19870	100	6240	870	**27080**
P0557/24	753788	9245455	OS0157/24	20.76	5.85	880	100	1060	50	2090
P0558/24	753586	9248508	OS0157/24	18.98	6.61	20850	100	8400	690	**30040**
P0559/24	753457	9245523	OS0157/24	14.90	1.26	2120	100	2720	80	5020
P0560/24	753524	9248364	OS0157/24	9.03	0.62	1890	100	1950	70	4010
P0561/24	753457	9245523	OS0157/24	23.65	0.05	100	100	1430	60	1690
P0562/24	751979	9249854	OS0157/24	9.72	2.04	4550	100	710	90	5450
P0563/24	753522	9248323	OS0157/24	21.59	5.42	570	100	930	100	1700
P0564/24	751979	9249854	OS0157/24	27.14	3.15	1930	100	100	100	2230

Table 2: Rare earth oxide results from LÍtio Project

Authorised for release by the Board of Power Minerals Limited.

-ENDS-

For further information please contact:
Power Minerals Limited
E: admin@powerminerals.com.au
T: +61 8 8218 5000
Additional information is available at www.powerminerals.com.au

About Power Minerals Limited

Power Minerals Limited is an ASX-listed exploration and development company. We are committed to the development of our lithium assets in Argentina into significant lithium producing operations, the exploration of the LÍtio Niobium Project in Brazil and delivering value from our non-core Australian assets.

Competent Persons Statement

The information in this document that relates to the LÍtio niobium, REE and lithium project in Brazil has been prepared with information compiled by Steven Cooper, FAusIMM. Mr Steven Cooper is the Australian Exploration Manager and is a full-time employee of the Company. Mr Steven Cooper has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Steven Cooper consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 Llito Nb-Ta-REE Project, Brazil

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 warrant disclosure of detailed information.*	• Selective rock chip and stream concentrate samples have been collected for geochemistry during the course of reconnaissance field examination. The samples are not designed to estimate mineralized grades as this is the first stage of exploration activity in the local areas. • On site pXRF data has been used as a guide only and only used to indicate elevated tantalum and niobium values exist. Due to the small analytical window and lack of preparation homogenisation the exact reported field pXRF values are uncertain and cannot be relied upon.
Drilling techniques	• *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).*	• No drilling undertaken.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• No drilling undertaken.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean,*	• No drill core and chip sampling performed. • Samples are described and photographed with the location from which it was taken. The location and sample number are recorded.

Criteria	JORC Code explanation	Commentary
	channel, etc) photography. • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sub sampling has been conducted. The concentrate samples for geochemistry were focused on determining the presence or absence of Nb-Ta and REE mineralization. • The raw material is concentrated in a pan, dried and then magnetic separation, first at 2500 gauss to eliminate the ion and titanium oxides and then at 7000 and 9000 gauss to recover the final concentrate. • The same standardized method has been applied to all rock chip or stream sediment samples collected. • The sample size was considered appropriate for grain size of the material and the objective of the sampling. .
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Collected samples have been submitted to the commercial laboratory ASIC Services, part of Alex Stewart International, in Santos, São Paulo state, Brazil, for detailed analyses. • The concentrate was analysed after preparation to produce a pressed pallet suitable for reading the X-Ray fluorescence (XRF) reading equipment. The XRF scanning uses a specific calibration curve for Nb-ore and presents quantitative data as oxides, plus moisture. An additional multi-element scan using the XRF provided qualitative oxide data. This qualitative data is not presented as it is uncalibrated. • Only quantitative values are obtained for the rare earth elements Ce, La, Nd and Pr. Other REE are indicated in the qualitative XRF data but are not reported due to high uncertainty. • Results are received as pdf documents directly from the laboratory.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling was undertaken. • No data has been adjusted. • Results received as pdf documents that are then OCR into spreadsheets which are then checked. Final data storage is within a MS Access relational database, were additional validation checks are performed.

Criteria	JORC Code explanation	Commentary
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Coordinates are in WGS84 datum, UTM Zone 24S . • Sample locations were measured using handheld Garmin 62sc GPS. • GPS topographic control used is +/-5m. • Location coordinates provided in the main text.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Sampling was not designed to constrain resources. • Current activity is only at reconnaissance level exploration.
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.* • *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.*	• Concentrate samples for geochemistry were focused on mineralized structures to determine the presence or absence of Nb-Ta and REE mineralization. • At this discovery stage geometrics is not critical as it is point sampling only.
Sample security	• *The measures taken to ensure sample security.*	• Samples were delivered or transported to the ASIC Services commercial laboratory after selection and packaging by the PNN geologist engaged to carry out the field program.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None undertaken at this early stage.

Section 2 Reporting of Exploration Results

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

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The three permits are 846.218/2021, 846.244/2021 and 848.219/2021 in the Municipality of Borborema, Paraiba State, Brazil. The three permits are held 100% by Ita Iron Mineracao Ltd. • PNN has entered into a binding Heads of Agreement to acquire the three permits, subject to 60-day period due diligence. • The permits are granted and believed to be in good standing with the relevant government authorities.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• There are no known records of previous exploration within the permit areas but due diligence is being undertaken by PNN to confirm.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Possible tantalum-niobium, beryllium, tin and lithium bearing pegmatites formed at the end of the Brasiliano cycle (500-450 Ma) are targets within the Borborema Pegmatite Province (BPP) of northeast Brazil.

Drill hole Information	• *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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• No drilling was completed.

Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No data was aggregated. • No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Current activity is only reconnaissance level exploration. Concentrates are spot samples not intended for any grade determination over a width.

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 drill hole collar locations and appropriate sectional views.*	• Geological map with significant sample results will be provided when available.
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.*	• Laboratory geochemical results for the PNN sampling is provided. The objective was only to confirm that Nb-Ta-REE mineralization is present within the permit area.
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.*	• On site pXRF data has been used as a guide only and only used to indicate elevated tantalum and niobium values exist. Due to the small analytical window and lack of preparation homogenisation the exact reported pXRF values are uncertain and cannot be relied upon.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further field work to complete mapping of the property and to conduct additional geochemical sampling is planned in the near future. Power's initial field work programs will be designed to define targets for a maiden drilling program (subject to results)