POWER MINERALS

ASX RELEASE

ASX RELEASE

1 October 2024

ASX CODE

PNN

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PROJECTS

Argentina
Salta Lithium Project

Brazil

Nióbio Niobium Project

Tântalo Niobium Project

Australia

Eyre Peninsula Kaolin-Halloysite-REE Project

Musgrave Nickel-Copper-Cobalt-PGE Project

LiDAR survey identifies priority targets at Nióbio Project, Brazil

- **LiDAR surveys have been completed over entire permit area of Nióbio Niobium Project (1,600ha) in northeast Brazil**
- **Large number of linear, positive topographic features identified, potentially representing previously unknown pegmatite dykes**
- **Several ground disturbances, likely associated with historical artisanal mining activities, also observed**
- **Results exceeded Power's expectations, providing targets to fast-track exploration plans which will commence with pegmatite sampling programs**
- **LiDAR data has highlighted changes in topographic gradients that will assist in accurately delineating the boundaries of transported alluvial material in the lower valley areas**
- **Recent rock chip samples further enhance the prospectivity of Nióbio, particularly along the southern boundary adjacent to Summit Minerals' (ASX: SUM) Equador Project with results including:**
  - **63.7% Nb_2O_5 and 9.5% Ta_2O_5 with 2354ppm partial REO[1]**
  - **43.5% Ta_2O_5 and 17.5% Nb_2O_5 with 1062ppm partial REO[1]**
- **Power has also secured an option over the Tântalo Project, south of Nióbio, providing an expanded exploration footprint in Brazil**

Power Minerals Limited (ASX: **PNN**, **Power** or **the Company**) is pleased to announce that it has identified multiple high-quality exploration targets at its Nióbio Niobium Project in Paraiba State, Brazil.

These initial exploration targets have been defined from Power's recently completed LiDAR (Light Detection and Ranging) survey over the Nióbio Project area (Figure 1).

The LiDAR survey has exceeded Power's expectations by identifying multiple exploration targets across the permit, which will facilitate Power's plans to fast-track on-ground exploration at the Project.

The results of the LiDAR survey are encouraging, identifying several linear topographic features that may represent previously unmapped pegmatite dykes and ground disturbances linked to historical artisanal mining (Figures 2 and 3). This mirrors the success of LiDAR surveys conducted at neighbouring projects, such as at Summit Minerals' (ASX: SUM) Equador Project, where similar surveys helped identify priority exploration targets.

The outcomes of Power's LiDAR survey at Nióbio help advance the Company's understanding of the Nióbio Project's geology and provide a clear roadmap for prioritising on-ground exploration activities.

> **"The LiDAR survey has helped confirm exploration targets at Nióbio, allowing us to define areas for on-ground exploration much quicker than would be expected without the benefit of LiDAR survey data. We are excited to begin on-ground exploration, commencing with sampling at these targets, which has the potential to confirm the presence of high-grade niobium and REE mineralisation at the Project. The LiDAR survey has been an important step in advancing exploration efforts at our Brazilian project portfolio, in particular in helping develop the Nióbio Project into a key asset for Power.**
>
> **Having also secured an option for the Tântalo Project, immediately south of Nióbio, we are excited to see how the application of our exploration methods may be used to fast-track our on-ground fieldwork across a much larger project area."**
>
> **Minerals Managing Director Mena Habib**

The LiDAR survey commentary

LiDAR is a cost effective optical remote-sensing technique that uses laser light to densely sample the earth's surface and is able to produce highly accurate measurements. It is designed to provide very high-resolution imagery to identify pegmatite trends and facilitate detailed mapping of the survey area.

Power's LiDAR survey also provided a detailed 3D topography image of the terrain including any existing artisanal workings (Garimperios), which will further aid in mapping the pegmatite trends. The LiDAR survey has been successful in identifying expedited new, priority exploration targets at the Nióbio Project area.

Pegmatite dykes often produce a linear line of outcrop (or thin long ridges) in the soil due to being more resistive to weathering and younger than host bedrock. A LiDAR survey can detect and map these linear features, even under vegetation. Each linear target may then be confirmed as pegmatite by on-ground assessment. Priority will be given to linear targets which appear to show evidence of ground disturbance by artesian miners at the Project area, which will be inspected and sampled for mineralisation.

Sampling will also be conducted on pegmatite dykes identified by the survey to confirm the presence of mineralisation. For subtle linear features in deeper soil covered areas, auger drilling may be completed to confirm the presence of pegmatite outcrop covered by a thin layer of transported sediment and soil.

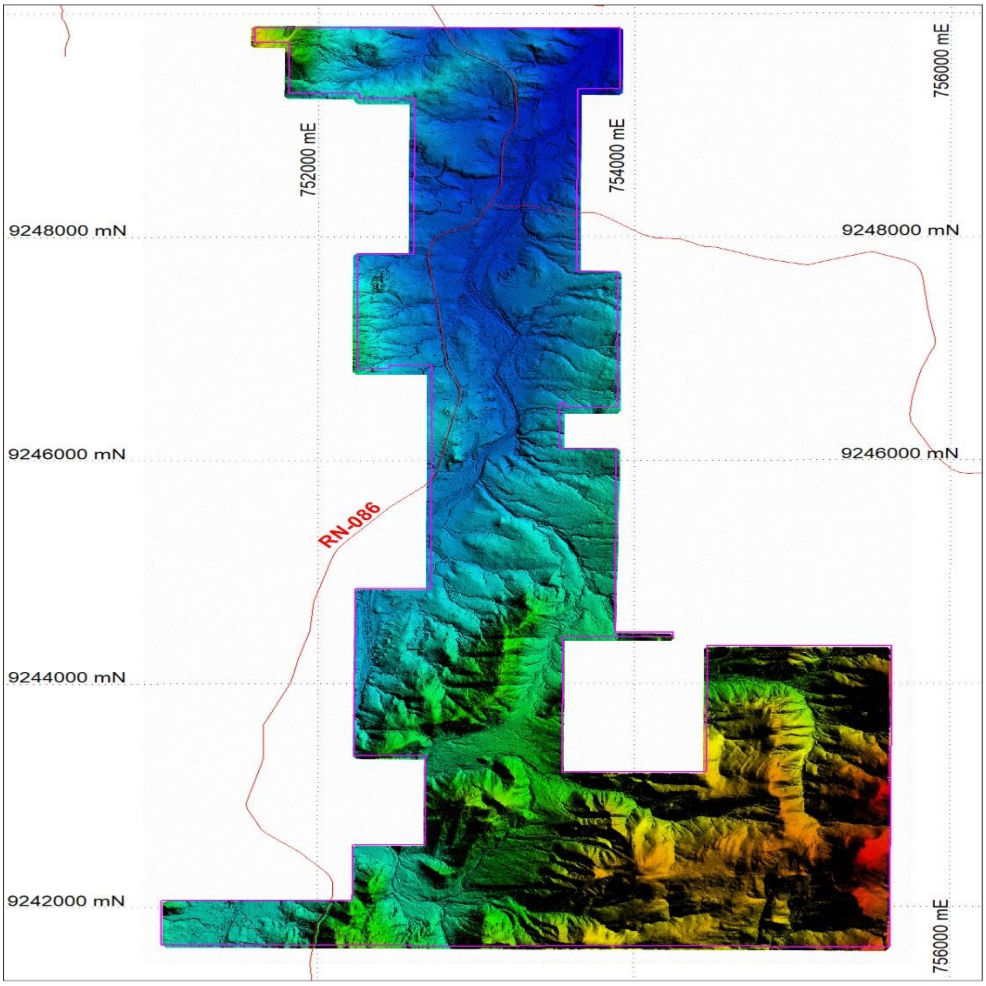

Figure 1: LiDAR image over Power's Nióbio Permit in Brazil

The survey also provides highly accurate ground surface models capturing even the smallest drainage channel. This significantly enhances Power's ability to determine the source catchment area of any alluvial or eluvial samples. Detailed examination of the LiDAR data is expected to continue to generate further targets based on comparison of topographic characteristics of known pegmatite outcrops and modelling of similar vegetation and colour variations in imagery where pegmatite is sub-cropping or pegmatite lag (float or scree).

The LiDAR survey was conducted using a DJI Matrice 350 drone equipped with a Zenmuse L2 LiDAR sensor and Trimble DA2 Geo RTX navigation. This advanced technology allowed for the collection of highly precise data, achieving a point cloud density of approximately 400 points/m², designed to significantly enhance on-ground exploration efforts.

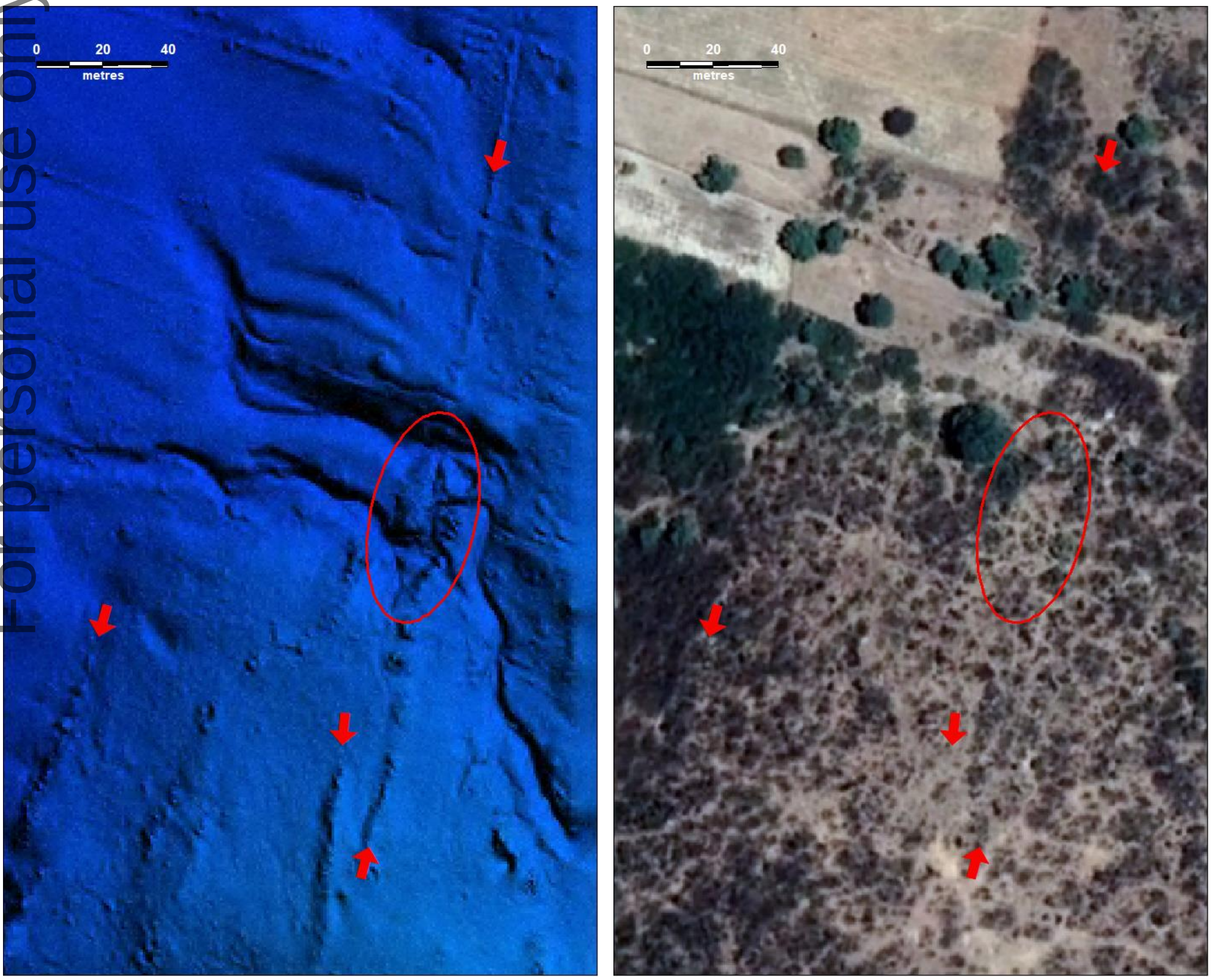

Figure 2: LiDAR image (left) showing possible pegmatite dyke outcrops and possible workings in creek, the same area is shown using Google Earth image on the right.

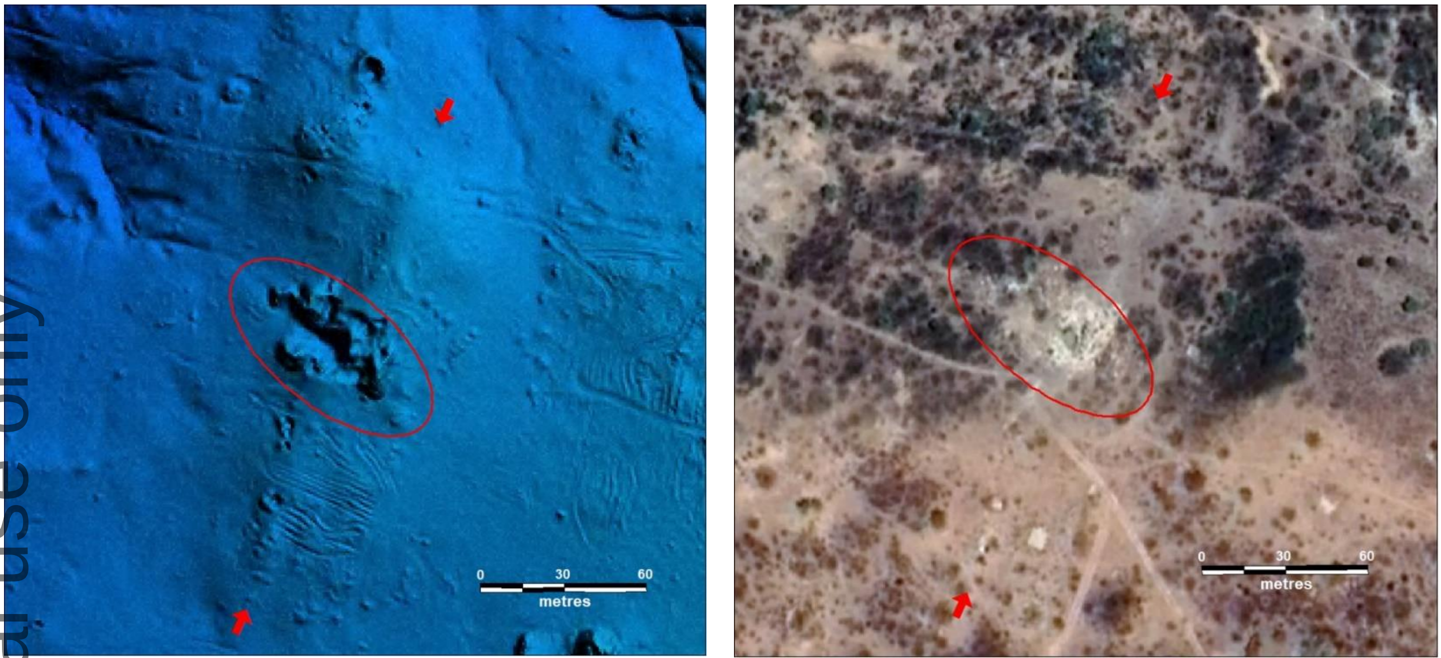

Figure 3: LiDAR image (top) showing possible trench across a possible pegmatite with image below showing the same area as a Google Earth image.

Next Steps

Power will use the results from the LiDAR survey in conjunction with ongoing sampling programs to define and prioritise exploration targets. Ground disturbances identified by the LiDAR survey, particularly those believed to be linked to historical artisanal mining, will be assessed and sampled to confirm potential mineralisation. The Company will also focus on mapping the limits of transported alluvial material using the highly detailed topographic data from the LiDAR survey.

This work forms part of Power's strategy to expedite exploration at the Nióbio Project, with the ultimate goal of delivering targets for a first-phase drilling program.

Nióbio Project Background

The **Nióbio** Project comprises three permits and is considered highly prospective for niobium, rare earth (REE) and lithium (Figure 4). Power recently completed the acquisition of the Nióbio Project (ASX Announcement 6 August 2024), and has conducted a highly successful initial stage of surface sampling which confirmed the presence of high-grade niobium, tantalum and rare earth elements (REE) within the Nióbio Project area (ASX Announcement 22 July 2024), with results including

- 63.7% Nb_2O_5 and 9.5% Ta_2O_5 with 2,354 ppm partial REO
- 43.5% Ta_2O_5 and 17.5% Nb_2O_5 with 1,062 ppm partial REO
- 41.3% Nb_2O_5 and 11.99 % Ta_2O_5 with 1793 ppm partial REO
- 48.4% Nb_2O_5 and 6.3% Ta_2O_5 with 4,975 ppm partial REO

The Nióbio Project is adjacent to Summit Minerals' (ASX: SUM) Equador Project, which has returned laboratory assay results from sampling of up to **63.07% Nb_2O_5, 47.17% Ta_2O_5** and **24,760ppm (2.47%)** partial rare earth oxides (PREO) (SUM: ASX Announcement, 24 June 2024). The geology of Summit's Equador Project is interpreted to continue into the Nióbio Project.

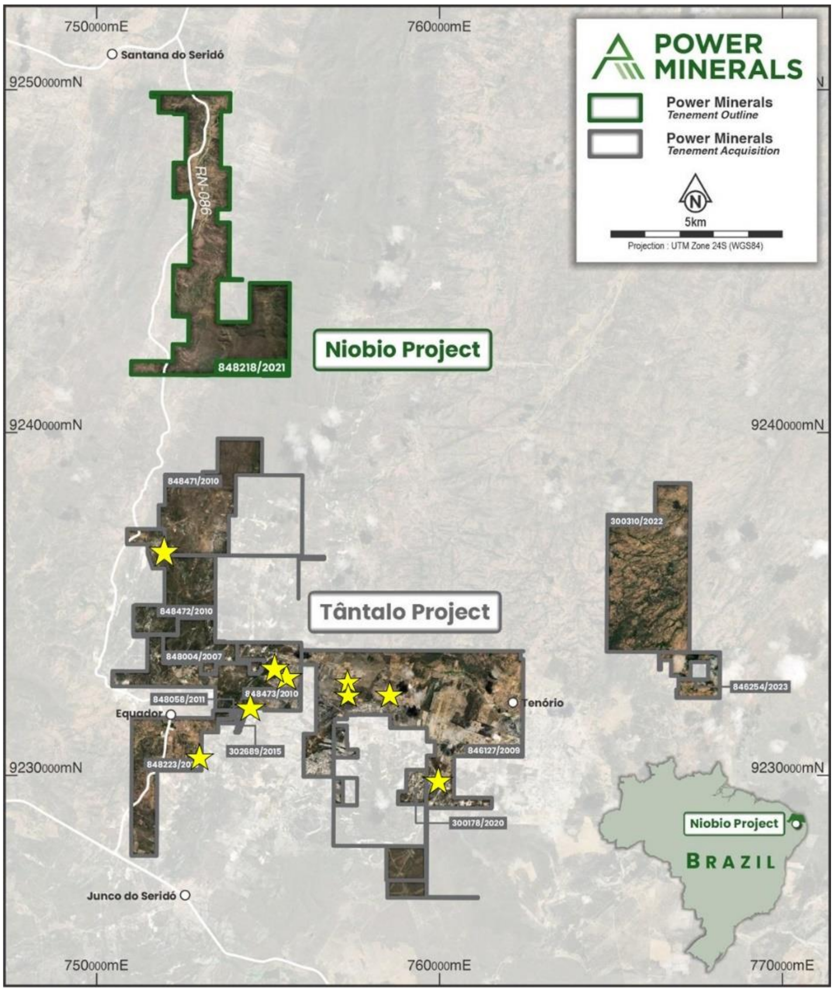

Figure 4: Project location map, showing Power's Nióbio permit and the newly acquired Tântalo Project located to the south. The yellow stars reference areas currently being operated by artisanal miners in the Tântalo Project.

-ENDS-

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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 Nióbio 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 Nióbio 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 LiDAR survey, Nióbio 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.*	• A LiDAR (Light Detection and Ranging) survey was completed using a Zenmuse L2 that integrates a Livox LiDAR module, a high-precision IMU and a camera with a 1-inch CMOS in a 3-axis stabilized gimbal. This was mounted on DJI Matrice 350 RTK drone fitted with RTK (Real-Time Kinematic) navigation system in conjunction with Trimble DA2 Geo multi-band GNSS RTK geodetic GPS receiver. • The drone based survey was over the entire Parelhas permit area, part of the Power Minerals Ltd Nióbio Nb-Ta-REE Project, covering an area of approximately 1,600 hectares. .
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.*	• Drill core and chip sampling was not performed.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, 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. .
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.*	• No sample results are reported
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. • Data is stored on RAID drives in Adelaide, and separate drives in Melbourne and Brazil and is regularly backed-up.
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.*	• LiDAR and aerial imagery location derived from GNSS RTK receiver – Trimble DA2 Geo (RTX geodetic GPS) with Static Precision Horizontal: 3 mm + 0.1 ppm; Vertical Static Accuracy: 3.5 mm + 0.5 ppm; Horizontal RTK: 8 mm + 1ppm and vertical RTK: 15 mm + 1ppm. The GNSS mobile station operating GPS + GLONASS + BeiDou + Galileo satellites. • Survey is georeferenced in UTM-24S-SIRGAS2000 format. Images provided

Criteria	JORC Code explanation	Commentary
		are in WGS84 UTM Zone 24 datum. .
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.*	• LiDAR reading point cloud density of approximately 400 points/m^2 is achieved on flight lines and altitude of both 100 metres. • No Mineral Resource or Ore Reserve are being reported
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.*	• Data has planned lateral and longitudinal images of both 75% overlap to ensure that the same feature is observed in different images and different views to avoid orientation bias.
Sample security	• *The measures taken to ensure sample security.*	• No samples were collected. LiDAR data is stored on RAID drives in Adelaide, and separate drives in Melbourne and Brazil and is regularly backed-up.
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 Parelhas permit 846.218/2021 is in the Municipality of Borborema, Paraiba State, Brazil. The permit is owned 100% by Power Minerals Ltd (see PNN ASX release 6 August 2024). • The permit is granted and believed to be in good standing with the relevant government authorities.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• There are no known records of previous modern exploration within the permit area. There has been historical unrecorded artesian mining activity.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Possible tantalum-niobium, REE, 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').*	• No mineralisation results are presented.
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*	• Images from LiDAR are provided in body of main text.

Criteria	JORC Code explanation	Commentary
	appropriate sectional views.	
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.*	• All material information on the survey is provided.
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.*	• Detailed examination of the LiDAR data will continue to generate further targets based on comparison of topographic characteristics of known pegmatite outcrops and modelling of similar vegetation and colour variations in imagery where pegmatite is sub-cropping or pegmatite lag (float or scree).
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 is planned to complete mapping of the entire property and to conduct geochemical sampling. This will include on-ground mapping and sampling of the new LiDAR target areas to identify and categorise (e.g. Nb:Ta:REE ratios) any possible new pegmatites. Power's initial field work programs will be designed to define targets for a maiden drilling program (subject to results)