ASX ANNOUNCEMENT

21 January 2025

Strong progress from first-phase of drilling at Nióbio Project, Brazil

Highlights

- **Power Minerals is making strong progress with its initial diamond drilling program at the Nióbio Project, Brazil**
- **The diamond drilling program consists of up to 800m testing priority pegmatite targets identified by previous surface sampling programs and a LiDAR survey**
- **Four holes 356.15 metres completed to date across two pegmatite targets, drilling has commenced on a third target.**
- **All holes have intercepted targeted pegmatite consistent with Power's exploration model at Nióbio**
- **Results expected in Q1 2025**

Power Minerals Limited (ASX: **PNN**, **Power** or **the Company**) is pleased to provide an update on the strong progress from its maiden drilling program at the Nióbio project in Rio Grande do Norte state, Brazil.

The drilling program is designed as a first test of priority pegmatite targets defined from Power's previous sampling programs and a recently completed LiDAR (Light Detection and Ranging) survey (ASX announcement 1 October 2024). These programs returned **high-grade niobium, tantalum and rare earth element (REE) results** (ASX Announcements 16 July and 22 July, 28 August 2024) .

The program commenced on 15 December 2024 and is planned to consist of up to 800 metres of NQ diamond core drilling. Drilling has progressed well, with four holes completed to date showing encouraging initial indications.

Drilling progress summary

Power selected target pegmatites for this initial drill program based on site visits and examination of its sample results by its Australian and Brazilian exploration teams. Most of the target pegmatites have some degree of artisanal mining, providing at or near surface exposure of the pegmatite mineralogy as well as providing samples. The pegmatites are hosted in either mica schist or quarzitic sandstone providing excellent visual recognition of pegmatite.

The first drillhole, **PMB24-01,** was completed with a -70 degree dip and a total end-of-hole depth of 101.95 metres, where mica schist mixed with pegmatite was intercepted (contact zone).

A second drillhole, **PMB25-02,** has been drilled on the same pegmatite target. PMB25-02 was drilled to a depth of 89.9 metres and intersected 60 metres (not true width) of pegmatite, followed by a ~20 metres downhole transition zone with the host mica schist. The pegmatite in the drill core is very distinctive compared to the host fine mica schists. This hole was drilled at a shallower dip angle (-60 degrees) to ensure that all potential zonation across the pegmatite was intersected.

The third drillhole **PMB25-03** intercepted ~50 metres (down hole) of pegmatite with minor intervals of mica schist. This drillhole was also at a -60 degree angle.

The drill rig has been moved to a new pegmatite site (Target 3), and a fourth drillhole, **PMB25-04** has been completed. This hole has provided confirmation of the presence of two separate pegmatites at this site. PMB25-04 intercepted pegmatite to a depth of 20m, then 9m of quartzite bedrock, followed by another pegmatite with a different mineral texture from the first (Figures 1 and 2). That there are different phases (or types) of pegmatite is consistent with Power's exploration model and increases the potential that suitably mineralised pegmatites may exist within the Nióbio project area.

Figure 1: Drill core from hole PMB25-04, showing a section from 14m-17m depth

Figure 2: Drill core from hole PMB25-04, showing pegmatite a section 3.3 to 6.2 metres down hole.

Hole	From	To	Length	Visual Observation
PMB24-01	0	101.95	101.95	Transition zone
PMB25-02	0	60.4	60.4	Pegmatite
PMB25-02	60.4	80.4	20	Transition zone
PMB25-03	0	53.4	53.4	Pegmatite
PMB25-04	0	19.8	19.8	Pegmatite
PMB25-04	29.3	62.7	33.4	Pegmatite

Visual estimate of pegmatite intersections. Intervals are down hole length; true width is not known. Transition zone is host with numerous thin pegmatite veins. Detailed geological logging has not been completed. Visual estimates of lithology or mineralogy should never be considered a proxy or substitute for laboratory analysis where concentration or grades are the factor of principal economic interest. Visual estimates of lithology potentially provide no information regarding the occurrence or absence of Ta-Nb bearing minerals.

"We are pleased with the progress of our maiden drilling program at Nióbio, with all holes to date intersecting targeted mica schist and pegmatite, which helps validate our exploration model at Nióbio. We are delighted to have been able to expedite exploration at Nióbio to the point that we are undertaking this first phase of drilling, and look forward to completing the program and seeing the results from this drilling towards the end of Q1."

Power Minerals Managing Director, Mena Habib

Background to drilling program

The first phase drilling program at the Nióbio project is by NQ diamond core, with the drillholes angled (not vertical) to intercept the pegmatite contacts. Visual examination to date indicates the core recovery is excellent with very little core loss. All drill core will be measured, cut and examined on-site by Power's experienced local geologist, and selected samples will be sent for laboratory analysis. Results are expected during Q1 2025.

Tântalo Project update

Power advises that after completing due diligence it will not proceed with its option to acquire the Tântalo Project. Power entered into an exclusive option to acquire the Project subject to successful completion of due diligence (ASX announcement 25 September 2024). As part of the due diligence process, encouraging niobium, tantalum, and rare earth elements (REE) sampling results were returned from Tântalo, but a number of licencing issues were uncovered which may adversely impact Power's ability to conduct ground disturbing exploration in a timely manner.

Given this and the positive progress being made at the Nióbio project, Power will focus on the Nióbio project, and will not proceed with the Tântalo acquisition. Power also continues to assess other advanced project opportunities.

Authorised for release by the Board of Power Minerals Limited.

– 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 our niobium prospective assets in Brazil and delivering value from our Australian assets.

Cautionary Statement

This announcement provides visual images of the diamond drilling core. The company draws attention to uncertainty in reporting visual results. Visual estimates of mineral abundances should never be considered a proxy or substitute for laboratory analysis where concentration or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. The diamond core is in the process of being cut and has not yet been geologically logged in detail, and no estimation is available on the amount of any potentially mineralized minerals.

Compliance Statement

With reference to previously reported Exploration Results, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Competent Persons Statement

The information in this document that relates to the Nióbio Nb-Ta Project in Brazil has been prepared with information compiled by Steven Cooper, FAusIMM (No 108265). Mr Cooper is the Exploration Manager and is a full-time employee of the Company. Mr Cooper has sufficient experience that 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 Cooper consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Drillhole Collar Table

Drillhole	Depth	Status	Easting	Northing	Target	Azimuth	Dip	Start_date
PMB24-01	101.95	finished	752017	9249804	1	270	-70	15/12/2024
PMB25-02	89.9	finished	752007	9249804	1	270	-60	7/01/2025
PMB25-03	77.4	finished	751997	9249730	1	260	-60	9/01/2025
PMB25-04	86.9	finished	753646	9243109	3	135	-60	11/01/2025
PMB25-05		Commenced	752884	9243241	2			

Notes: Coordinate datum is WGS84. All drillholes are within permit 8484.218/2021. Final depth is in metres.

JORC Code, 2012 Edition – Table 1 Nióbio Project, Rio Grande do Norte, 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.*	• The NQ and minor HQ diamond core has not yet ben geologically logged or split and sampled. This will be completed by the onsite geologist as soon as practical. • Mineralised intercepts will be verified using a field pXRF instrument which gives a qualitative measure of the relevant elemental abundances. But due to the small analytical window and lack of preparation homogenisation the exact reported field pXRF values are uncertain and cannot be relied upon. This will be completed prior to core sampling to assist in sample interval selection. • The diamond core will be sampled at one metre intervals, or at natural geological contacts if present.
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).*	• Drilling is being carried out by Brazilian contractor Servdrill using a track mounted DG-1500 diamond core rig. • Diamond core is NQ diameter. Some drillholes have been collared with HQ core over a minor interval to assist in drilling near surface, more broken ground. • A downhole tool is utilized at regular intervals to confirm downhole position.
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.*	• The diamond core recovery will be measured for each core run, typically up to 3 metres.

Criteria	JORC Code explanation	Commentary
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, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No drill core sampling has begun. • Samples will be described and photographed within the downhole core tray location from which it was taken..
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.*	• The NQ and HQ diamond core has not yet been spilt and sampled. • Core cutting will be by diamond saw longitudinally into half, and then quartered if necessary. • The length of the diamond core sampled will be cleaned, measured and the material photographed before removal. . .
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 will be submitted to a commercial laboratory for detailed analyses. • No samples have been collected from the diamond core and no sample results are available. • Results will be 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 twinned drillholes have been undertaken. • No data has been received or adjusted. • Results will be received as pdf documents that are then OCR into spreadsheets which are then checked. Final data storage is within a MS Access relational database, where additional validation checks are performed.
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.*	• Coordinates are in WGS84 datum, UTM Zone 24S. • Sample locations were measured using handheld Garmin GPS and are approximate as only single point measurements (+/- 5m). More accurate measurements will be made on completion of the drilling.

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	• 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.*	• Current activity is only at reconnaissance level exploration. • No sampling or geological logging is complete.
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.*	• The drillholes have been designed to cross cut the main target pegmatite lithology to maximize structure, geotechnical and geological data. • Drillholes are not likely perpendicular to the pegmatites and interval measurements provided are downhole and do not likely represent true thickness. • Any biasing effect is yet to be determined as no samples have been taken.
Sample security	• *The measures taken to ensure sample security.*	• Logging and sample will be carried out by PNN and contract personnel who are always on site during drilling. • No third parties have been allowed access to the samples.
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 drilling is within permits 846.218/2021 in the Municipality of Borborema, Rio Grande do Norte, Brazil. The permit is held 100% by Power Minerals Ltd. • The permit is granted and believed to be in good standing with the relevant government authorities.
Exploration done by	• *Acknowledgment and appraisal of exploration by other parties.*	• There are no known records of previous modern exploration within the permit areas but due diligence is being undertaken by PNN to

Criteria	JORC Code explanation	Commentary
other parties		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. • Within the permit area the pegmatites are hosted in fine mice schists and quartzite sandstones.
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.*	• Drillhole collar information is provided in the main body of the announcement. • As drilling is currently underway the coordinates are not final and may be adjusted following more careful measurement.
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. Diamond core samples will provide grade determination over measured width. The sample intervals will not likely be true 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.*	• No results are available. Detailed geological logging is not complete.
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.*	• The drilled pegmatites sites have been subjected to artisan activity in the past. It is not know the amount or type of minerals that were recovered. • Drilling is currently restricted to sites were no environmental disturbance is required.
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 further targets for future drilling and economic assessment (subject to results).