

ASX ANNOUNCEMENT

18 February 2025

First-phase drilling complete at Nióbio Project, Brazil

Multiple 30m+ pegmatite intercepts returned

Highlights

- **Power Minerals completes first stage of diamond drilling at the Nióbio Project, Brazil, with 10 holes for 809.75m drilled across three targets.**
- **Pegmatites intersected in all 10 of holes drilled, with some intercepts measuring more than 30m (downhole), returning a range of mineralogy.**
- **pXRF analysis and detailed logging underway to select samples for laboratory analysis.**
- **Assay results expected in March / April 2025 and will be released when available.**
- **Planning for the next stage of exploration to commence once laboratory analysis is complete.**

Power Minerals Limited (ASX: **PNN, Power** or **the Company**) is pleased to announce it has successfully completed its first-pass drilling program at the Nióbio Project in Rio Grande do Norte state, Brazil, with pegmatites intercepted in all holes.

Power completed 10 diamond core holes for a total of 809.75 metres in this first phase of drilling, with numerous broad pegmatite intercepts of more than 30m thickness (downhole).

Drilling was designed to test priority pegmatite targets defined from Power's previous sampling programs, which returned **high-grade niobium, tantalum and rare earth element (REE) results** (ASX Announcements 16 July and 22 July, 28 August 2024), and a recently completed LiDAR (Light Detection and Ranging) survey, which helped to define targets (ASX announcement 1 October 2024).

Detailed logging of core from the drilling, with the assistance of a pXRF unit, is currently underway on-site. Samples will then be selected for laboratory analysis, and Power expects drilling results will be available in approximately six to eight weeks.

Power plans to use the assay results to help planning for follow-up drilling at the Nióbio Project.

“We’re pleased to have completed our first-phase of drilling at the Nióbio Project to plan and schedule. Initial results are encouraging, with pegmatites intercepted in all 10 holes completed, some being broad intercepts more than 30 metres wide.

Samples are currently being prepared to be submitted for laboratory analysis, with assay results expected in the following month. The results from this initial drilling are anticipated to play a key role in planning for further exploration at the Project.

The are also numerous un-tested, immediate, walk-up targets at Nióbio, and we look forward to systematically assessing these as we move forward with our exploration of the Project.”

Power Minerals Managing Director, Mena Habib

Drilling summary

Drilling at the Nióbio Project commenced in the previous quarter (16 December 2024) and has been successfully completed, with 10 holes of 809.75m NQ diamond core drilling completed in this initial phase of drilling.

Power tested three pegmatite targets from four drill pad sites in this drilling program. Various horizontal (azimuth) and vertical (dip) angles were used to maximise the intersection of pegmatites from each site.

Many pegmatite intercepts in the drilling were more than 30m thick (downhole). Drilling also intersected a transition zone of mixed networks of thin pegmatite veins within the host metasediments. The pegmatites are emplaced often within or adjacent to brittle meta-arenites forming sheeted dyke systems. The presence of multiple parallel pegmatites, each showing variation in visual mineralogy significantly enhances the overall scope that the targeted minerals are present.

Consistent with the Company’s exploration model at the Project, the pegmatites are not simple, single bodies but constitute multiple pegmatites with differing mineralogy. The difference in mineralogy is important as it provides a range where (in the right pegmatite at the right petrophysical conditions) target metals have precipitated. Even within a single pegmatite there can be zoning, practically in the very wide pegmatites.

The pegmatites have been identified by their distinctive very coarse grained nature, having by definition crystals centimetres and across. The host rocks are fine grained schists and quartzite showing strong metamorphic foliation texture. The pegmatite are composed of a large range of very large crystals of generally pale coloured minerals (quartz, feldspars and a wide various silicates and aluminium silicates) together lesser amounts of mafic or darker minerals in a range of crystal sizes.

Unlike spodumene lithium mineralisation which forms low grade large crystals, which may dominate the mineralogy and enable whole-rock mining, tantalum (Ta), niobium (Nb) and rare earth elements (REE) are often present within numerous smaller, dark minerals which are visually harder to individually identify.

While more difficult to provide visual estimates of possible economic grade, the target mineralogy of small, dark, dense crystals may make any mining recovery operation a straight forward process, using gravity separation.

Power's choice of previously disturbed and cleared artesian workings as drill sites expedited the drilling progress for the first phase of drilling. Many other priority pegmatite targets are yet to be drill tested, as additional environment approvals are required. These target areas may be the subject of drilling by Power in future drilling programs.

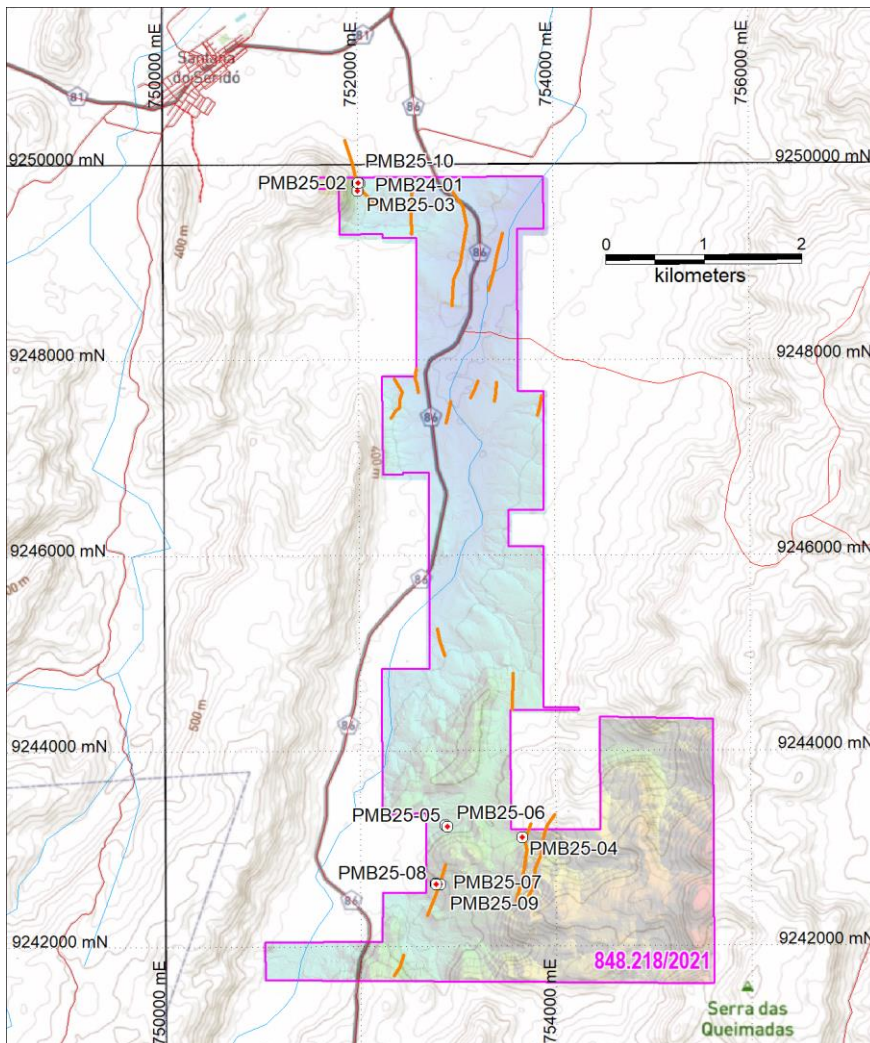


Figure 1: Drill collar locations at Power's Niobio Project, Brazil

Power is using a pXRF unit onsite to assist with the detailed logging and selection of samples for laboratory submission. The core has been moved to a secure local location and the systematic cutting of the pegmatite core by diamond saw has commenced under the supervision of the PNN geologist. The samples will be dispatched to a commercial laboratory and all analyses will be completed to best practice industry standards.

Next steps

Assay results from the first phase of drilling are currently expected in approximately six to eight weeks. Power plans to use the results to help rank priority targets for planned future drilling. It will also utilise the recent LiDAR survey results to assess further pegmatites within the Nióbio Project area.

Subject to results, Power may re-drill the three tested pegmatites to confirm grade and determine a mineral resource estimate.

It will also seek environmental drilling approvals for other target pegmatites not yet drilled.

Table 1: Nióbio Project - Significant pegmatite drillhole intercepts

Hole	From	To	Visual Observation
PMB24-01	0.00	101.95	Transition zone
PMB25-02	0.00	60.40	Pegmatite
PMB25-03	0.00	53.40	Pegmatite
PMB25-04	0.00	19.80	Pegmatite
PMB25-04	29.30	62.70	Pegmatite
PMB25-05	0.00	85.75	Transition zone
PMB25-06	10.05	12.30	Pegmatite
PMB25-07	46.00	50.40	Pegmatite
PMB25-08	8.00	10.15	Pegmatite
PMB25-09	0.00	3.15	Pegmatite
PMB25-10	24.00	26.00	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.

Table 2: Drill Collar Table and Location

Hole	Target	Easting metre	Northing metre	Elevation metre	Azimuth Degree	Dip Degree	Depth metre
PMB24-01	Target 01	752012	9249804	367	270	-70	101.95
PMB25-02	Target 01	752000	9249804	370	270	-60	79.90
PMB25-03	Target 01	751999	9249733	368	260	-60	77.40
PMB25-04	Target 03	753654	9243113	436	135	-60	86.90
PMB25-05	Target 02 North Site	752867	9243237	379	110	-60	85.75
PMB25-06	Target 02 North Site	752889	9243226	382	290	-60	32.40
PMB25-07	Target 02 South Site	752810	9242635	390	110	-60	119.30
PMB25-08	Target 02 South Site	752762	9242641	385	110	-60	125.45
PMB25-09	Target 02 South Site	752771	9242639	386	0	-90	7.20
PMB25-10	Target 01	752008	9249816	368	350	-70	93.50

Coordinates UTM WSG84 Zone 24 South.

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 6385 2299

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

Cautionary Statement

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 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.

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
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> The NQ and minor amount of HQ diamond core is currently being geologically logged and sections split and sampled. This will be completed by the onsite PNN geologist as soon as practical. Visually mineralised intercepts will be checked 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.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> Drilling was carried out by Brazilian contractor Servdrill using a track mounted DG-1500 diamond core rig. Diamond core is NQ diameter, with HQ diameter core utilized starting from collar to depths ranging from 7.2 to 19 metres depth. A downhole tool is utilized at regular intervals to confirm downhole position.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<ul style="list-style-type: none"> The diamond core recovery will be measured for each core run, typically up to 3 metres.
<i>Logging</i>	<ul style="list-style-type: none"> <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> Drill core sampling has commenced but no samples have been dispatched to laboratory. Samples will be described and photographed in their downhole order within their original field core trays.

Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <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> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • The diamond core is currently been split and sampled. • Core cutting is 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 any removal.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <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> • <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> 	<ul style="list-style-type: none"> • Collected samples will be submitted to a commercial laboratory for detailed analyses. • Industry standard filed duplicates, standards and blanks will be inserted into the laboratory batches. • Results will be received as pdf documents and spreadsheets directly from the laboratory. These results will be compared and verified before uploading into the company database. • No sample results are available at this time.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • No twinned drillholes have been undertaken. • No data has been received or adjusted. • Results will be received as pdf documents spreadsheets that are then checked for consistency. Final data storage is within a MS Access relational database, where additional validation checks are performed.
<i>Location of data points</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Coordinates are in WGS84 datum, UTM Zone 24 South. • Sample locations were measured using handheld Garmin GPSmap 64 in averaging mode for at least 20 minutes on completion of the drillhole. Expected accuracy is likely within three metres. • Location coordinates are collar details and are provided in the main text.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Current activity is only at reconnaissance level exploration. • No sampling or geological logging is complete.
<i>Orientation of data in</i>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> 	<ul style="list-style-type: none"> • The drillholes have been designed to cross cut the main target pegmatite lithology to maximize structure, geotechnical and geological data.

Criteria	JORC Code explanation	Commentary
<i>relation to geological structure</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
<i>Sample security</i>	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Logging and sample analysis will be carried out by PNN and contract personnel who were always on site during drilling and sampling. No third parties have been allowed access to the samples. The samples are kept under security on private property pending delivery to the laboratory.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The drilling is within permits 846.218/2021 in the Municipality of Parelhas, Rio Grande do Norte, Brazil. The permit is held 100% by Power Minerals Brasil Ltda, a fully owned subsidiary of Power Minerals Limited. The permit is granted and in good standing with the relevant government authorities.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> There are no known records of previous modern exploration within the permit areas. All drilled sites have been previously heavily disturbed and the subject of artesian mining. There are no existing records.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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 mica schists and quartzite sandstones.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	<ul style="list-style-type: none"> Drillhole collar information is provided in the main body of the announcement. Down hole sampling is still incomplete.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ 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. 	
Data aggregation methods	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● No data was aggregated. ● No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ● 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'). 	<ul style="list-style-type: none"> ● 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.
Diagrams	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Geological sections with significant sample results will be provided when available. Geological logging is still continuing.
Balanced reporting	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● No results are available. Detailed geological logging is not complete.
Other substantive exploration data	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● The drilled pegmatites sites have been subjected to artisan activity in the recent past. The amount or type of minerals that were recovered is unknown. ● Drilling has been restricted to sites within the artisan workings resulting in no new environmental disturbance required.
Further work	<ul style="list-style-type: none"> ● 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, 	<ul style="list-style-type: none"> ● Further field work to complete mapping of the property and to conduct additional geochemical sampling is planned in the near future. Power's next field work programs will be designed to define further

Criteria	JORC Code explanation	Commentary
	<i>including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	targets for future drilling and economic assessment (subject to results).