POWER MINERALS

ASX RELEASE


**ASX RELEASE**

22 November 2022

**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**
Executive Director

**James Moses**
Non-Executive Director

**David Turvey**
Non-Executive Director

**PROJECTS**

**Argentina**
Salta Lithium Project

Santa Ines Copper-Gold Project

**Australia**
Eyre Peninsula Kaolin-Halloysite Project

Musgrave Nickel-Copper-Cobalt-PGE Project


# Highly encouraging first drillhole completed at Salta Lithium Project

- **First diamond drill hole of Mineral Resource definition campaign at the Salta Lithium Project successfully completed to a depth of 400m at the Incahuasi salar**
- **Multiple, highly encouraging potential lithium brine aquifers of significant thickness intersected including:**
  - ✓ **191m thick sandy gravel unit (from 138 to 339m depth) hosting brine with visual medium to high drainable porosity**
  - ✓ **Halite unit from surface to 52m depth containing saturated brine with visual medium to high drainable porosity**
- **Brine sampling to be conducted to determine brine density and indicative aquifer flow rate**
- **Samples to be sent immediately for laboratory analysis for lithium content and drainable porosity**
- **Up to 2 additional holes to be drilled at the Incahuasi salar**
- **Following drilling at Incahuasi, drilling will move to the Pocitos and Rincon salares**
- **Drilling designed to deliver a significant upgrade to the Project's existing JORC Mineral Resource for lithium, and to support future development plans**

Diversified minerals company Power Minerals Limited (ASX: PNN) (**Power** or **the Company**) is pleased announce the successful completion of its first Mineral Resource definition drillhole on the Incahuasi salar at the Salta Lithium-Brine Project, in the Salta province in the lithium triangle of north-west Argentina.

Power has successfully completed its first diamond drill hole at the Incahuasi salar (PM22-IN-01) reaching basement rock at a total depth of 400 metres (Figure 1, Figure 2a and Figure 3b). Highly positive salar evaporite and semi-consolidated sedimentary lithologies were intersected to a depth of 339 metres before reaching basement rock.

This included a 191-metre interval (from 138 to 339 metres depth), which contained brine with visual medium to high drainable porosity which has the potential to host significant quantities of lithium brine.

**"Power is very excited by the encouraging visual results from its first Mineral Resource definition drill hole at the Incahuasi salar at the Salta Project. Additional drilling at Incahuasi is designed to deliver a maiden JORC Mineral Resource for lithium at this salar, while upcoming drilling at the Pocitos and Rincon salares aims to deliver a substantial increase to the current Mineral Resource at the Project. Obtaining a large inventory of high-quality lithium brine represents a key step in the development pathway for the Project.**

**Power Minerals Executive Director Mena Habib**

## Initial visual results

Power's ongoing Mineral Resource drilling campaign commenced at the Incahuasi salar (salt lake), which is located immediately adjacent to Ganfeng Lithium Co. Ltd's project in the region (ASX announcement, 31 October 2022). See Figure 1 photo of site works and Figures 3a and 3b for drillhole location plans.

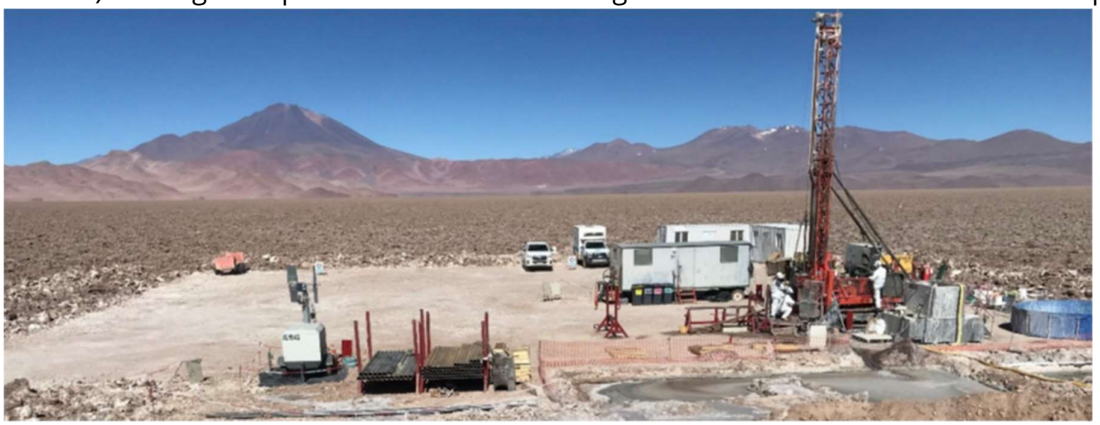
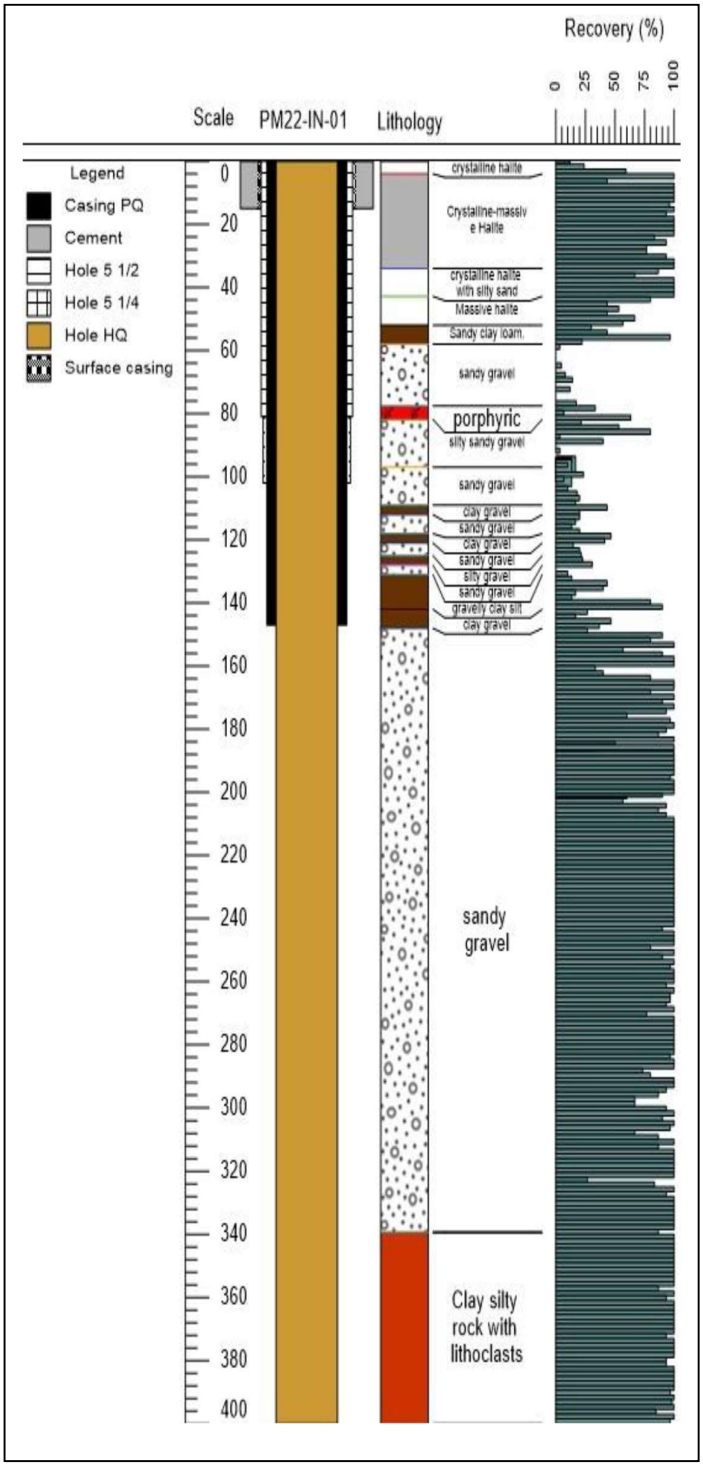


**Figure 1:** Resource drilling platform for drillhole PM22-IN-01 at the Incahuasi salar, Salta Lithium Project

The Salta Lithium-Brine Project consists of seven mining leases over a total area of 147.07km² that are on five salares (Figure 4). The first drill hole at the Incahuasi salar (PM22-IN-01) has been successfully completed to a total depth of 400 metres. Several highly encouraging salar lithologies were intersected in the drill hole, which represent potential lithium-brine bearing aquifer units (Figure 2a and Figure 2b), as outlined following;

1. A relatively homogenous sandy gravel unit of 191 metres thickness was intersected from 138 to 339 metres depth, which contained brine with visual medium to high drainable porosity. **This unit represents a high potential aquifer to contain and yield significant quantities of lithium brine.**
2. A crystalline to massive halite (salt) evaporite unit occurs from surface to 55 metres depth containing saturated brine and of a visual estimate of medium to high drainable porosity, and **which has potential to host significant quantities of lithium brine**.
3. This surface halite unit was followed by an 83 metre-thick interbedded clay, silt and sandy gravel unit from 55-138 metres depth, with core recovery of up to 30%. Porosity is difficult to estimate at this point, and this may be due to the presences of caverns or uncemented or unconsolidated sands.





Crystalline Halite (salt) = medium porosity


Sandy Gravel (saturated) = medium - high

**Figure 2a**: Summary Drill Hole Log PM22-IN-01
**Figure 2b:** core photos of representative salar lithologies

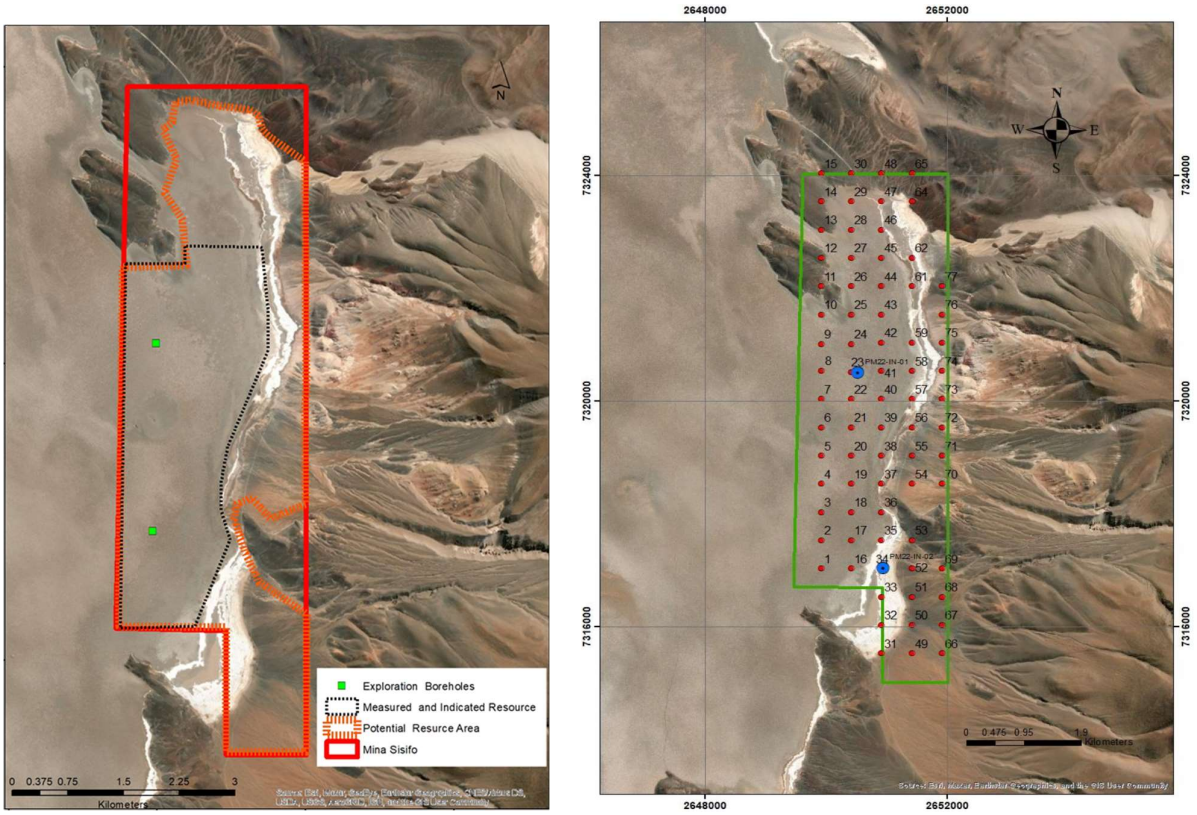



**Figure 3a:** Incahuasi salar showing location of two planned drillholes (green dots) and potential Resource area
**Figure 3b**: Revised drill hole locations (blue dots) and previous TEM geophysical survey points (red dots)

## Next Steps:

- Conduct brine sampling of drillhole PM22-IN-01 to determine brine density and indicative aquifer flow rate using packer tests, following down-hole electrical conductivity survey. Results of these tests will be reported following compilation and interpretation.
- Brine samples obtained from the packer tests will be sent for laboratory assessment for multi-element geochemical analysis, including lithium content and related salts. Selected drill core samples will be sent to an accredited laboratory for physical property tests, especially drainable porosity. Results will be reported as received.
- Complete planned drilling at Incahuasi salar including drillhole PM22-IN-02 (Figure 3b) to test a highly conductive subsurface TEM geophysical conductor, indicating high-flow and highly saturated brines. Further shallow ~50m holes may be drilled to test for near-surface water in alluvial fans.
- Based on drilling and test results, a maiden JORC Mineral Resource estimate is planned to be completed at the Incahuasi Project in Q1 calendar 2023.

Following completion of drilling at the Incahuasi salar, drilling is planned to progress at the Pocitos and Rincon salares within the Salta Project (Figure 4).

The drilling campaign is designed to deliver a maiden Mineral Resource at Incahuasi and Pocitos, and expand the existing Mineral Resource at Rincon, with the aim of upgrading the Salta Project's existing JORC Mineral Resource (ASX announcements, 23 January 2019 and 27 June 2018), and to support future development plans at the Project.

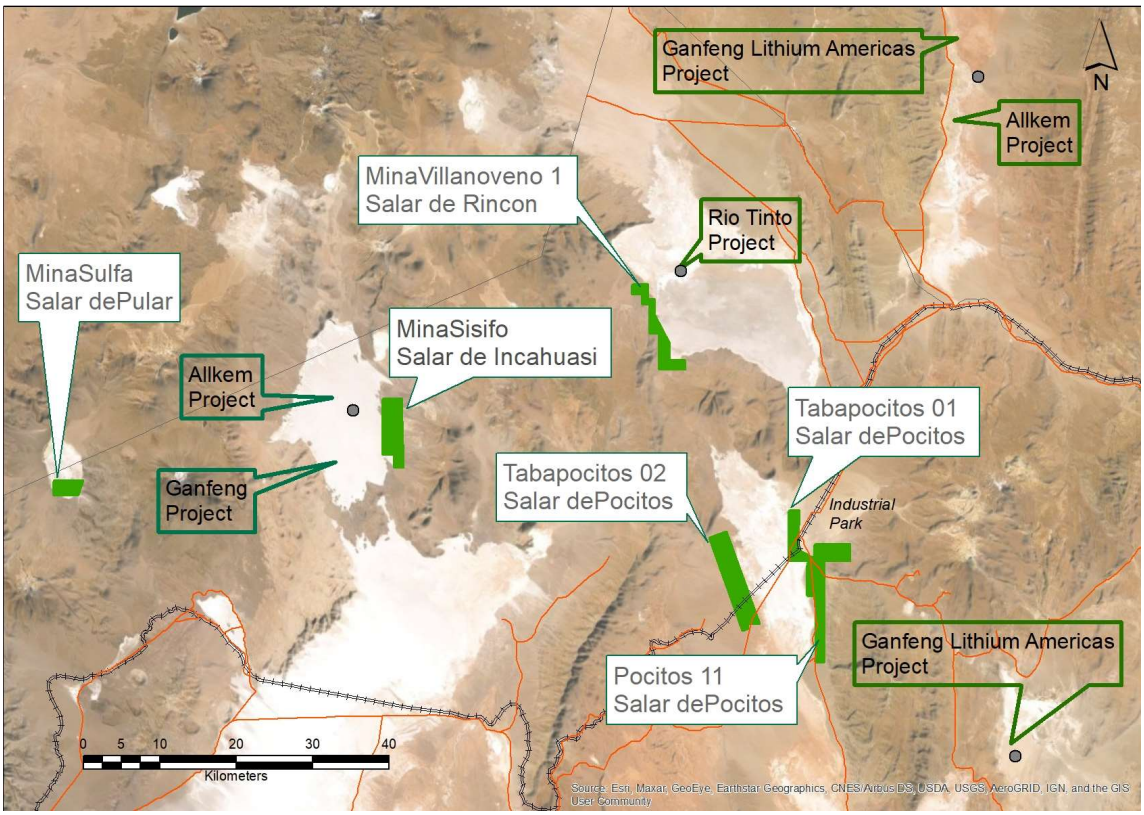



**Figure 4:** Salta Lithium Brine Project location map, north-west Argentina (PNN licenses in green)

## About the Salta Lithium Project

The Salta Project is strategically located in the Salta province in north-west Argentina and is part of the Lithium Triangle, the world's leading lithium-brine region. The Project consists of five salares (salt lakes) that sit within seven mining leases, over a total project area of 147.07km$^2$. The Project's Incahuasi salar is located immediately adjacent to Ganfeng Lithium Co. Ltd's project and the Rincon salar is adjacent to Rincon Mining Ltd, recently acquired by Rio Tinto Ltd for US$825 million. Power is focused on the accelerated exploration and development of the Project, to drive shareholder value.

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 a diversified ASX-listed mineral resources exploration company with a portfolio of projects in demand driven commodities. It is focused on the systematic exploration and development of its projects. These include the Salta Lithium Brine Project in the prolific lithium triangle in the Salta Province in Argentina, the Eyre Peninsula Kaolin-Halloysite Project, strategically located on the Eyre Peninsula in South Australia, and the Musgrave Nickel-Copper-Cobalt-PGE Project in the Musgrave Province in northern South Australia. The Company also holds the Santa Ines Copper-Gold Project in Argentina, located in the same geological setting as BHP's world-class, nearby Escondida Copper-Gold Mine in Chile.

## Competent Persons Statement

This announcement regarding the Salta Lithium project has been prepared with information compiled by Marcela Casini, MAusIMM. Marcela Casini is the Company's Exploration Manager, Argentina and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration 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". Marcela Casini consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

## Forward looking Statements

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

# JORC Code, 2012 Edition – Table 1 Report

## 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 (e.g. 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralization that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized 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 mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.* | • The diamond drillholes were completed using triple tube HQ3 drilling with 61.1mm diameter core. Core recovery was measured on all core runs.<br>• Sampling from the diamond core for petrophysical parameters has not been completed.<br>• Sampling the open hole by packers for brine sample analyses has not yet been completed. |
| *Drilling techniques* | • *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).* | • Contractor Hidrotec SRL completed the drilling by triple tube HQ3 diamond core.<br>• Surface brine has been used as drilling fluid for lubrication during drilling |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximize sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Diamond drill core recoveries were calculated by measuring the core recovered against the drillers recorded depth for each diamond core run.<br>• There was a high range in core recovery (zero to 100%) in some sections of drillhole. With complete core loss it is difficult to impossible to determine visual porosity for that |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | interval. It is unknown if the core loss will reflect a positive or negative bias on the results reported over that down hole section.<br>• Brine quality is not directly related to core recovery and is largely independent of the quality of core samples. However, the porosity and permeability of the lithologies where samples are taken is related to the rate of brine inflow |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All drill core has been qualitatively logged by company geologists, recording lithology, alteration, sedimentary structures, visual porosity estimate to company procedures.<br>• All drill core was photographed prior to removing from site.<br>• The entire length of all drill hole core has been logged. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • The sampling of drill core for petrophysical parameters is currently in progress. |
| *Quality of assay data and* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc.,* | • No laboratory testing has been completed to date. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *laboratory tests* | *the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • On completion of the drilling the logging and sampling data will be entered into spreadsheets and will be checked by the Exploration Manager for inconsistencies and then stored in an MS Access relational database.<br>• No holes were twinned.<br>• Drill core was logged by hand on printed log sheets according to standardized header, lithological and structural information. Data is then input into MS Excel spreadsheets which are then emailed to database manager for input into MS Access. The data is interrogated and all discrepancies are communicated and resolved with the filed teams to ensure only properly verified data is stored in the Access database. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • All drillhole collar was initially surveyed with a hand held GPS.<br>• No drillhole downhole orientation surveys were conducted on the vertical hole.<br>• All work has been carried out using standard WGS84 UTM Zone 19S coordinate system. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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* | • This was the maiden drillhole at Inchuasi Salar and the diamond drilling spacing when complete is expected to be sufficient to establish the geological and grade continuity |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *applied.*<br>• *Whether sample compositing has been applied.* | of the deposit for Mineral Resource estimation. |
| *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.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • The salt lake (salar) deposits that contain lithium-bearing brines generally have sub-horizontal beds and lenses that contain sand, gravel, salt, silt and clay. The vertical diamond drill hole will provide a better understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers<br>• Reported depths are all down-hole depths in metres. |
| *Sample security* | • *The measures taken to ensure sample security.* | • Drill core on site was contained within lidded core trays under the care of company employees. On completion of the drilling these will be strapped down and transported to Salta by company employees. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • All planned sampling techniques and procedures for data capture were deemed to be of industry standard and satisfactory; being supervised by the company's senior and experienced geologists. |

## 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.*<br>• *The security of the tenure held at the time of reporting* | • Mina Sisifo File Number 20545 is held 100% by Power Minerals SA, an Argentina entity wholly owned by Power Minerals Ltd (ASX:PNN).<br>• The Mina is held under grant from the Mining Court of Salta Province, Argentina in perpetuity and appropriately maintained. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *along with any known impediments to obtaining a license to operate in the area.* | |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • There is no known modern exploration in this area by other parties. |
| *Geology* | • *Deposit type, geological setting and style of mineralization.* | • The sediments within the salar consist of salt/halite, clay, sand and silt horizons, accumulated in the salar from terrestrial sedimentation and evaporation of brines.<br>• Brines within the Salt Lake are formed by solar concentration, interpreted to be combined with warm geothermal fluids, with brines hosted within sedimentary units.<br>• Geology was recorded during the diamond drilling. |
| *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:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *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 ID: PM22-IN-01<br>• Easting: 650467.1 (WGS84, Zone 19S)<br>• Northing: 7319321.6 (WGS84 Zone 19S)<br>• Vertical hole<br>• Total hole depth: 400 metres.<br>. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of* | • No grade information is available or presented. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | |
| *Relationship between mineralization widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | • The drillhole was drilled with dip of -90 degrees (vertical).<br>• Mineralisation interpreted to be horizontally lying and drilling is perpendicular to this. |
| *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.* | • Map is provided. Relevant sections are provided in the main report. |
| *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.* | • Grade information has not yet been determined. |
| *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.* | • Petrophysical measurements on core samples have not been completed. |
| *Further work* | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* | • The results will be assessed on an ongoing basis and additional holes will be planned and drilled when deemed necessary. All further work on |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| | • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | each target area is dependent on the results received. |