



**ASX RELEASE** 

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**ASX CODE** 

**PNN** 

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## **PROJECTS**

#### **Argentina**

Salta Lithium Project

Santa Ines Copper-Gold Project

#### Australia

Eyre Peninsula Kaolin-Halloysite Project

Musgrave Nickel-Copper-Cobalt-PGE Project

# Outstanding aquifer depth of +605m and successful brine sampling in second hole at Rincon salar

- Second diamond drillhole in JORC Mineral Resource drilling program at Rincon salar has reached 605m depth in the lithium brine aquifer; and drilling continues to basement
- 100% successful packer testing and brine sampling
- Thickness and depth of lithium brine aquifer confirm the substantial Mineral Resource potential at Rincon
- Rincon drilling is planned to comprise 3 diamond core holes, designed to increase the existing JORC Mineral Resource with final results expected in August 2023
- Results will feed into a Preliminary Economic Assessment (PEA) which is currently underway for Rincon
- Rincon is one of five salares that comprise Power's Salta Lithium Project, Argentina
- Power's JORC Mineral Resource drilling campaign is designed to substantially upgrade Salta's existing JORC Lithium Resource and support future development plans.

Lithium exploration and development company Power Minerals Limited (ASX: PNN) (**Power** or **the Company**) is pleased to announce a highly positive progress update from the second drillhole of its JORC Mineral Resource definition drilling program at Rincon salar, Argentina.

Rincon salar is part of its Salta Lithium Brine Project, in the Salta province in the lithium triangle of north-west Argentina (Figure 4).

The second Rincon hole (PM23-VI-02) has been successfully drilled to a current depth of 605 metres, with drilling currently ongoing to basement. Brine samples have been taken from 18 double packer tests at selected intervals, and have delivered excellent flow and high brine density results up to **1.22 kg/L**.

See Table 1 for details of results to date.



Drillhole PM23-VI-02 is situated near the eastern boundary in the central part of Power's licence area at the Rincon salar. It is a duplicate hole from previous PNN drilling conducted in 2017, and is designed to confirm results and extend the depth of the previous drilling (Figures 1,2 & 3). On completion of PM23-VI-02, drilling will move to a third hole at Rincon (PM23-VI-01).

Based on 2017 PNN drilling and adjacent peer company drilling, these results confirm the presence of lithium-bearing brines in the second hole at the priority Rincon salar, and are a positive indicator of strong aquifer thickness for brine within the hole. Historic lithium grades with current brine density results and estimated visual porosity help confirm the substantial Mineral Resource potential of the Rincon salar.

"These are exciting results from the second hole in our Mineral Resource definition drilling at the Rincon salar, and continue to confirm the JORC Mineral Resource potential of our ongoing drilling campaign at the Salta Project. The thickness, depth, brine density and flow rate of the lithium brine aquifer in hole PM23-VI-02, enhance our geological understanding and provide significant confidence in our ability to expand the existing JORC Mineral Resource at Rincon. Drilling will move to a third hole at Rincon and we look forward to updating the market on results when they become available."

**Power Minerals Managing Director Mena Habib** 

Date	Depth from (m)	Depth to (m)	Density (kg/L)	рН	EC (mS/cm)	Temp (C°)	Comments
3/07/2023	127.5	129.5	1.215	6.98	221.7	15.9	Double packer
2/07/2023	145.5	147.5	1.213	6.98	220.5	14.9	Double packer
2/07/2023	154.5	156.5	1.214	7.03	220.9	15.2	Double packer
2/07/2023	169.5	171.5	1.214	7.06	222.0	16.9	Double packer
2/07/2023	187.5	189.5	1.215	7.09	222.7	16.3	Double packer
2/07/2023	196.5	198.5	1.213	7.06	221.6	15.3	Double packer
1/07/2023	217.5	219.5	1.214	7.07	220.3	15.8	Double packer
1/07/2023	247.5	249.5	1.216	6.97	223.4	15.9	Double packer
1/07/2023	277.5	279.5	1.121	6.76	219.4	17.5	Double packer
1/07/2023	307.5	309.5	1.221	6.75	217.1	14.0	Double packer
30/06/2023	337.5	339.5	1.223	6.86	220.9	12.1	Double packer
30/06/2023	367.5	369.5	1.220	6.91	220.8	18.5	Double packer
30/06/2023	397.5	399.5	1.221	6.74	212.6	12.9	Double packer
29/06/2023	427.5	429.5	1.215	7.05	216.6	11.4	Double packer
28/06/2023	457.5	459.5	1.210	7.25	220.5	16.8	Double packer
28/06/2023	487.5	489.5	1.212	7.21	214.9	14.4	Double packer
27/06/2023	517.5	519.5	1.210	7.20	215.5	13.2	Double packer
8/07/2023	601.5	603.5	1.213	7.08	223.2	14	Double packer

Table 1: Summary brine sampling results for second drillhole (PM23-VI-02) at the Rincon salar



# **Background to Rincon Resource Drilling**

Drilling at the Rincon salar is planned to consist of three diamond drillholes for a total of approximately 1,500 metres (Figure 1). It is designed to confirm results from previous drilling in 2017 and to test for additional potential lithium resources in the northern part of the licence area, and to increase the existing Rincon Mineral Resource (ASX announcement, 27 June 2018).

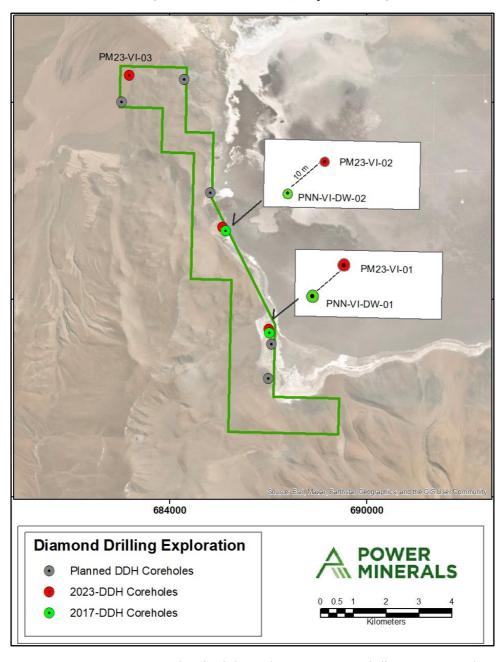


Figure 1: Location plan for lithium brine resource drilling, Rincon salar



The drilling at Rincon and planned JORC Mineral Resource upgrade will form a key input to the Preliminary Economic Assessment (PEA) currently being completed at Rincon (ASX announcement, 8 December 2022). The PEA is expected to be completed in the current quarter.

Drilling at Rincon forms a key component of Power's ongoing JORC Mineral Resource drilling campaign at the overall Salta Project, which is designed to expand the Project's existing JORC Mineral Resource, to support future development plans.

Power recently completed drilling at its first target, the Incahuasi salar, and the results delivered a maiden JORC Mineral Resource at Incahuasi, which adds to the total JORC Mineral Resource at the Salta Project (ASX announcement, 23 May 2023).



Figure 2: Lithium brine samples (500ml bottles) from drillhole PM23-VI-02 sent for laboratory assay tests



**Figure 3:** Drill core from 569.4 to 572.2 metres depth in drillhole PM23-VI-02 at Rincon salar (Note: high core recovery and sandy matrix)



# **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 147.07km². 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.

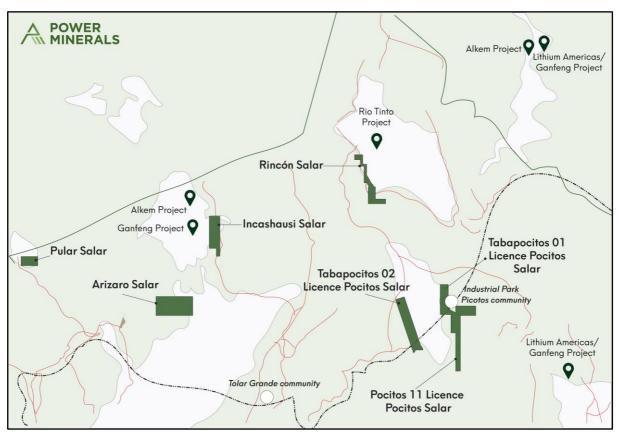


Figure 4: Salta Lithium Brine Project location map, north-west Argentina (PNN licences in green)

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 lithium-focused exploration and development company, committed to the systematic exploration and development of its core asset, the Salta Lithium Brine Project in the prolific lithium triangle in the Salta Province in Argentina. It is currently undertaking a major JORC Mineral Resource expansion drilling campaign at Salta, and is focused on expediting development of the Project in to a potential, future lithium producing operation. Power also has a portfolio of other assets in key, demand-driven commodities including; kaolin-halloysite, nickel-coppercobalt and PGEs plus copper-gold.

## **Competent Persons Statement**

This announcement regarding the Salta Lithium project has been prepared with information compiled by Marcela Casini, MAusIMM. Marcela Casini is an experienced and highly qualified hydrologist working with PNN Argentina and Steven Cooper, FAusIMM, Exploration Manager. They have 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>From 120 metres the drillhole PM23-VI-02 is being drilled using diamond triple tube HQ3 core drilling with 61.1mm diameter core. Core recovery was measured on all core runs. The first 120 metres from surface of drillhole PM23-VI-02 was completed with 13.3mm diameter tricone.</li> <li>Sampling from the diamond core for petrophysical parameters in continuing but results have not yet been received.</li> <li>Liquid samples were collected using drillhole double packers at various depths with regular two metre sample thicknesses.</li> <li>Drillhole packer fluid samples were measure at the time of sampling on site for temperature, electrical conductivity (EC) and pH using a Myron Ultrameter 6PIIFC instrument. Density is measured by standard hyrdrometers with different ranges.</li> <li>During the packer test, several 200L drums are filled with drillhole fluid. If a single drum is not filled in 30 minutes, the formation interval being tested is considered dry, in that case it is considered that the fluid is only that within the drilling barrel and so is not representative of the formation at that depth.</li> <li>To collect a representative sample the drillhole fluid must be cleaned. Current sampling involved taking out the amount of brine that represents three times the drillhole volume capacity at any given depth.</li> <li>Eighteen liquid samples (plus quality control samples)</li> </ul>

Criteria	JORC Code explanation	Commentary
		from given depths have been collected to be analysed for a suite of elements, density, electrical conductivity and pH by a commercial laboratory.
Drilling techniques	<ul> <li>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.).</li> </ul>	<ul> <li>Contractor Hidrotec SRL completed the drilling by 13.3mm diameter tricone to 120 metres, then triple tube HQ3 diamond core.</li> <li>Surface brine has been used as drilling fluid for lubrication during drilling.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximize sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Diamond drill core recoveries were calculated by measuring the core recovered against the drillers recorded depth for each diamond core run.</li> <li>There can be 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 interval. It is unknown if the core loss will reflect a positive or negative bias on the results reported over that down hole section.</li> <li>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.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drill core has been qualitatively logged by company geologists, recording lithology, alteration, sedimentary structures, visual porosity estimate to company procedures.</li> <li>All drill core was photographed prior to removing from site.</li> <li>The entire length of all drillhole core has been logged.</li> <li>The drillhole will be geophysically logged for resistivity and spontaneous potential (SP) to assist in identifying the</li> </ul>

Criteria	JORC Code explanation	Commentary
		aquifer.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	The sampling of drill core for petrophysical parameters is currently in progress.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Drillhole packer fluid samples were measure at the time of sampling on site for temperature, electrical conductivity (EC) and pH using a calibrated Myron Ultrameter 6PIIFC instrument. This is by experienced PNN personnel on the final 200L drum of each packer test sample.</li> <li>The on-site density of the brine was measured with standard hyrdrometers with different ranges by PNN personnel on the final 200L drum for each packer sample.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>On completion of the drilling, the logging and sampling data will be checked by the Exploration Manager for inconsistencies and then stored in an MS Access relational database.</li> <li>The first 130 metres of drillhole PM23-VI-02 is a twin of drillhole PNN-VI-DW-02 twin (collars 10 metres horizontal apart).</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Drill core was logged by hand on printed log sheets. 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 field teams to ensure only properly verified data is stored in the Access database.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drillhole collars have been surveyed with a hand held multi-band GPS in averaging mode (usually a couple hours).</li> <li>No downhole orientation surveys were conducted on the vertical hole.</li> <li>All work has been carried out using standard WGS84 UTM Zone 19S coordinate system.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>This drillhole is on the western side of the Rincon salar (Salta Province, Argentina) and the diamond drilling spacing when complete is expected to be sufficient to establish the geological and grade continuity of the deposit for Mineral Resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>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 drillhole will provide a better understanding of the stratigraphy and the nature of the sub-surface brine bearing aquifers</li> <li>Reported depths are all down-hole depths in metres.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were transported to the laboratory for chemical analysis in sealed one litre (1L) rigid plastic bottles with</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>sample numbers clearly identified. Samples were transported by a trusted member of the team or courier.</li> <li>The water samples were moved from the drillhole site to secure storage at the camp on a daily basis during the packer tests.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>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.</li> </ul>

# 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	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>Mina 'Villanovena 1' File Number 19565 is held 100% by Power Minerals SA, an Argentina entity wholly owned by Power Minerals Ltd (ASX:PNN).</li> <li>The Mina is held under grant from the Mining Court of Salta Province, Argentina in perpetuity and is appropriately maintained.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>There is no known modern exploration in this local area by other parties.</li> </ul>
Geology	Deposit type, geological setting and style of mineralization.	<ul> <li>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.</li> <li>Brines within the salt lake are formed by the solar concentration of fluids containing trace amounts of elements such as lithium. The</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul><li>lithium originated as a product of geothermal fluids and the weathering of volcanic rocks.</li><li>Geology was recorded during the diamond drilling.</li></ul>
Drillhole Information	<ul> <li>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> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>Drillhole ID: PM23-VI-02</li> <li>Easting: 685721 (WGS84, Zone 19S)</li> <li>Northing: 7332086 (WGS84 Zone 19S)</li> <li>Elevation: 3731 metres (above sea level)</li> <li>Hole depth: 605 metres and continuing (8 July 2023, downhole, vertical)</li> <li>Measurements on the brine samples during collection on-site are provided in main report.</li> <li>The first 130 metres of drillhole PM23-VI-02 is a twin of drillhole PNN-VI-DW-02. Drillhole PM23-VI-02 (tricone to 120 metres, then HQ3 diamond core) collar is located 10 metres east of drillhole PNN-VI-DW-02 (HQ3 diamond core to 130 metres EOH).</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Assay mean averages have been provided where multiple sampling occurs in the same sampling interval. Multiple samples include both field and laboratory duplicate samples.

Criteria	JORC Code explanation	Commentary
Relationship between mineralization widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>The drillhole was drilled with dip of -90 degrees (vertical).</li> <li>Mineralisation interpreted to be horizontally lying and drilling is perpendicular to this.</li> </ul>
Diagrams	<ul> <li>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 drillhole collar locations and appropriate sectional views.</li> </ul>	Map and any relevant sections are provided in the main report.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>No grade information is available from PM23-VI-02, only physical parameters on the brine measured on-site from sampled intervals.</li> </ul>
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.	Core samples for petrophysical measurements have been collected but results have not been completed.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The drillhole PM23-VI-02 is still continuing.</li> <li>The results will be assessed on an ongoing basis and additional holes will be planned and drilled when deemed necessary. All further work on each target area is dependent on the results received.</li> </ul>