



## Salta Lithium Project

### Aquifers intersected at Rincon

The Directors of PepinNini Lithium Ltd(PNN, the Company) are pleased to report positive drilling results from one completed borehole on the Company's **Rincon Project**. Borehole PNN-VI-DW-01 intersected two aquifers, one in the near-surface of fractured halite, and a lower black sand-hosted aquifer. The borehole intersected three distinct rock type sequences. From 1m to 24.8m drilling intersected caliche(calcrete), sand, silt, clay and porous halite(rock salt) and from 26m to 69.5m black sands were intersected and intersected from 69.5 to the base of the borehole at 80m were fractured basement rocks(basalt) from which brine was also sampled.

#### ABOUT

PepinNini Lithium Limited is a diversified ASX listed Exploration Company focused on exploring and developing a lithium brine resource and production project in Salta Province Argentina within the Lithium Triangle of South America. The Company also holds strategically located exploration tenements in the Musgrave Province of South Australia. The company also holds a copper-gold exploration project in Salta Province, Argentina

#### DIRECTORS

Rebecca Holland-Kennedy

Managing Director

**Sarah Clifton-Brown**

Finance Director

**Philip Clifford**

Non-Executive Director

**Robert WeiSun**

Non-Executive Director

**Justin Nelson**

Company Secretary

#### CONTACT

PepinNini Lithium Limited

ABN 55 101 714 989

Level 1, 6/68 North Terrace

Kent Town SA 5067

TEL: +61 (0)8 8218 5000

FAX: +61 (0)8 8212 5717

EMAIL: [admin@pepinnini.com.au](mailto:admin@pepinnini.com.au)

#### FURTHER INFORMATION

**Ms Rebecca Holland-Kennedy**

Managing Director

TEL: +61 (0)8 8218 5000

[www.pepinnini.com.au](http://www.pepinnini.com.au)



Photo 1 - Drill Core Borehole PNN-VI-DW-01



Photo 2 - Brine Samples Borehole PNN-VI-DW-01



Sixteen samples were collected by drilling packers to ensure samples are representative of the interval being tested. Preliminary density results from laboratory analysis confirm density readings taken in the field indicating brine. Analytical results for lithium grade are in preparation and certification and will be released as soon as available however due to time differences to Argentina will not be reported before COB in Australia.

The borehole has been completed as a monitoring well to support further sampling and pumping testing at a later date.

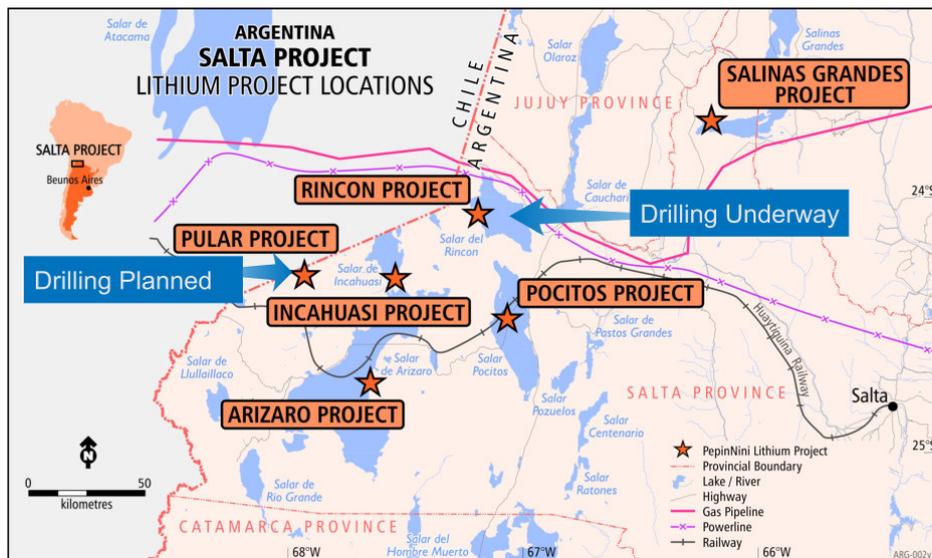
A second borehole located some 4km to the north has now been completed to a depth of 130m and samples sent to a certified laboratory in Buenos Aires, Argentina.



Photo 3 - Packer Sampling



Figure 1 - Rincon Salar Borehole Locations



*This announcement on the Salta Lithium project has been reviewed by Iain Scarr AIPG CPG, IMEx Consultants Inc, Greenwood Village, Colorado, USA, who has sufficient experience which is 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 and Qualified Person for the Canadian National Instrument 43-101". Iain Scarr consents to the inclusion in the release of the matters based on this information, and in the form and context in which it appears*

## JORC Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representability and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Liquid samples were collected using borehole packers at 6 metre intervals over two metres thickness</li> <li>Borehole fluid density, temperature and Ph were recorded at time of sampling</li> <li>During the packer test, several 250l drums are filled with borehole 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 borehole must be cleaned taking out the amount of brine that represents 200 to 250% of the borehole volume capacity at any given depth</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core drilling - HQ diameter drilled vertically, triple tube</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise 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 style="list-style-type: none"> <li>The borehole was drilled and cored to 80m. Core samples not being reported</li> <li>Cores will be retained for geotechnical testing of porosity, grainsize and density</li> <li>Liquid samples were collected from 72m to 16m using the double packer.</li> <li>Shallower than 15m, the packer was not effective, as such brine samples were collected from surface pits.</li> </ul>
Logging	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core is geologically logged for lithology and photographed,</li> <li>The well is geophysically logged for density, resistivity and spontaneous potential(SP). to assist in identifying the aquifer</li> <li>Field parameters are measured for brine samples. These include density, temperature and conductivity. These are included in the bore hole descriptive log.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The borehole was drilled to 80m</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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 maximise representativity 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>	<ul style="list-style-type: none"> <li>The borehole must be cleaned before sampling can commence</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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 (eg 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 style="list-style-type: none"> <li>A chain of custody was established for samples from drilling location to laboratory receipt.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>A Competent person(CP) is used for oversight verification of sampling techniques, laboratory verification and reporting review</li> <li>16 samples were taken of which 5 are control samples as per CP requirements</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic positioning control for borehole location using both latitude and longitude and Gauss_Kruger POSGAR (WGS-84)</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>A single borehole sample results being reported</li> <li>Samples taken every 6 metres within the borehole</li> </ul>
Orientation of	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Boreholes drilled vertically to intersect salar horizontal layering</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>A chain of custody is established for samples from field to laboratory with each stage signed off and handed over</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Data collection, processing and analysis protocols aligned with industry best practice.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Mina Villanovena 1 File Number 19565, Held 100% by PepinNini SA an Argentina entity wholly owned by PepinNini Minerals Ltd.</li> <li>Held under grant from Mining Court of Salta Province, Argentina Tenure (Mina) held in perpetuity and appropriately maintained.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration carried out by ADY - Energi Group</li> </ul> <p>Enirgi Group's Lithium Project - Salar del Rincón , Salta, Argentina - News Release17 April 2017 <a href="http://www.enirgi.com">www.enirgi.com</a></p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>PepinNini is primarily exploring for brine aquifers in salars (dried salt lakes) and the geological setting is suitable for lithium bearing brines in commercial quantities.</li> <li>Brine aquifers are indicated by high conductivity/low resistivity responses considered prospective for lithium brine</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Borehole PNN-VI-DW-01 <ul style="list-style-type: none"> <li>Borehole coordinates: GK Posgar Zone 3: N 3382155.2/E 7330630.6 Elevation:3683 masl</li> <li>Start drilling date: Dec 7, 2017</li> <li>Finish drilling date: Dec 9, 2017</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</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 style="list-style-type: none"> <li>• Total Depth: 80 meters</li> <li>• Drilling Methodology: Diamond Drilling</li> <li>• Drilling Company: Hidrotec</li> <li>• Rig: HT06LF90</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</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>	<ul style="list-style-type: none"> <li>• No data aggregation used,</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole 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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Boreholes drilled vertically and core reported as true depths and intersection lengths, salar lithologies are horizontal</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <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 drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Borehole location plan provided in Figure 1</li> <li>• Borehole being reported - location - N 3380680.7/E 7333439.13 - GK(Zone 3) grid</li> </ul>

Criteria	JORC Code explanation	Commentary
		 <p data-bbox="1328 754 1839 778">Villanovena Mina and Borehole Location Plan -</p>
<p><b>Balanced reporting</b></p>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>sample results not being reported.</li> </ul>
<p><b>Other substantive exploration data</b></p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The grid system used is Argentina Gauss_Kruger POSGAR (WGS-84) zone 2 &amp; zone 3 depending the location of the salar.</li> </ul>
<p><b>Further work</b></p>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg 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 style="list-style-type: none"> <li>Brine will be sampled and analysed for chemical makeup, borehole has been converted to a piezometer well for observation and pumping tests will be carried out to provide information on the hydrogeologic properties of the aquifers and potential extractability of brines.</li> </ul>