



#### 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

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ASX:PNN

# Salta Lithium Project Exploration Update

The Directors of PepinNini Lithium Ltd (PNN, the Company) report surface sampling has been completed on the Company's **Pular Project**. Shallow pits were dug in the surface of the salar and brine density was reported in field observation.

The results have been plotted in Figure 1 below together with results of surface sampling done by Lithea Inc(ref ASX:PNN:22-02-18) in 2011 and by PNN in 2016(ASX:PNN:16-12-16).

There is a correlation between brine density and lithium grade as can be seen in Figure 1 in which a zone (red)of higher density(range 1.21-1.27 g/ml) coincides with higher lithium grade in surface samples (yellow stars).

Eight samples of brine from these surface samples have been sent for analysis for lithium grade. Results would be expected in May.

Lithium grade from surface sampling could be reduced due to the seasonal effects of rainfall and snow melt. As seen in other salars, deeper brine that is isolated from surface effects might be expected to be of a higher grade during those seasons, reports Hydrogeologist Marcela Casini, Exploration Manager PepinNini SA.

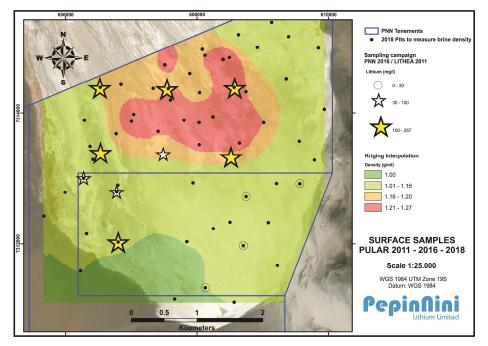


Figure 1 - Salar de Pular Surface Samples 2011-2016-2018

These surface sample results increase the value to the Company of our exploration purchase option transaction with Lithium S(ASX:PNN:22 -02-18) given the prospectivity of Salar de Pular for the Company said Managing Director Rebecca Holland-Kennedy

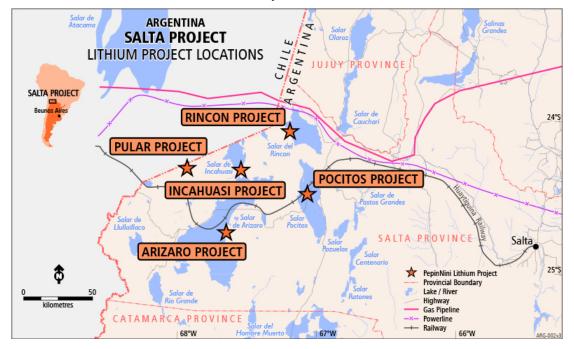


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Drilling of the third borehole on Salar de Pular is at 110.5m. The borehole is planned to be drilled up to 350m.



Photo 2 - Core recovery borehole PNN-PA-DW-03



This announcement on the Salta Lithium project has been prepared with information compiled by Marcela Casini, MAusIMM. Marcela Casini is the Exploration Manager-Argentina of PepinNini Lithium Limited and 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". 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.

### **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> <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>	• Liquid samples were collected from surface pits. The pits were excavated to the depth where the brine was encoutered
		• Pits brine density,conductivity, temperature and pH were recorded at the time of sampling
		• Pits were allowed to stand ony long enough to reduce turbidity, but not long enough to affect concentration due to evaporation.
		• The possibility of lithium mineralization is suggested by higher density and conductivity, that typically correlate with higher level of total dissolved solids
		<ul> <li>To collect a representative sample pits are allowed to stand ony long enough to reduce turbidity, but not long enough to affect concentration due to evaporation</li> </ul>
Drilling techniques	<ul> <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>	Drilling not being reported
Drill sample recovery	<ul> <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>	Drilling not being reported.
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>Drilling not being reported</li> <li>Liquid brine samples from shallow pits</li> <li>Field parameters are measured for brine samples. These include density, ph temperature and conductivity. These are included in sample pit descriptive log.</li> <li>The pits s were hand excavated to the depth of half meter or thedepth when</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>the brine was encountered.</li> <li>Sample bottles are partly filled and rinsed with the brine to be sampled, emptied and then re-filled before the bottle top is installed and securely taped.</li> </ul>
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 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> <li>Sample bottles are partly filled and rinsed with the brine to be sampled, emptied and then re-filled before the bottle top is installed and securely taped</li> </ul>
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 (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>	Analysis not being reported
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>	A Competent person(CP) is used for oversight verification of sampling techniques, laboratory verification and reporting review
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole 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>	Geographic positioning control for sample location using both latitude and longitude and Gauss Kruger POSGAR (WGS-84)
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> </ul>	Analysis not being reported

Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	
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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	Pits were excavated vertically to intersect salar horizontal layering
Sample security	• The measures taken to ensure sample security.	A chain of custody for samples was in place from data collection point to acceptance and sign off from laboratory
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Data collection, processing and analysis protocols aligned with industry best practice.

## 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> <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</li> </ul>	<ul> <li>Mina Sulfa 1File Number 19188, Held 100% by PepinNini SA an Argentina entity wholly owned by PepinNini Lithium Ltd.</li> <li>PepinNini SA an Argentina entity wholly owned by PepinNini Lithium Ltd hold an exploration option for up to 18months for Mina Patilla File Number 20414 as per (ASX:22 Feb 2018)</li> </ul>
	area.	<ul> <li>Held under grant and registration from Mining Court of Salta Province, Argentina Tenure (Mina) held in perpetuity and appropriately maintained.</li> </ul>
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	Exploration carried out by Lithea Inc in
parties		TECHNICAL REPORT, SALAR DE PULAR, SALTA, ARGENTINA PREPARED BY EKEKO S.A. BY DR. RICARDO N. ALONSO( MAusIMM), University of Salta and GEÓL. WALTER R. ROJAS - AUGUST, 2011
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <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>

Criteria	JORC Code explanation	Commentary
Drill hole 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 drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole 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>	Drilling not being reported
Data aggregation methods	<ul> <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> <li>No data aggregation used,</li> </ul>
Relationship between mineralisation 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 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>	Drilling not being reported
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.	Sample location plan provided in Figure 1
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.	All sample results reported.
Other substantive exploration	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations;</li> </ul>	The grid system used is Argentina Gauss_Kruger POSGAR (WGS-84)

Criteria	JORC Code explanation	Commentary
data	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.	zone 2.
Further work	<ul> <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> <li>Completion of exploration drilling and brine sampling - 3 boreholes on the Salar.</li> <li>Brine grade to be reported from drilling samples taken using double packers.</li> </ul>