Lithium Limited

ASX RELEASE 23 January 2019 ASX:**PNN**

JORC Resource Restatement Sulfa Mina on Salar de Pular, Salta Lithium Project, Argentina

PepinNini Lithium Ltd (PNN,PepinNini, the Company) wishes to re-issue the announcement of 4 January 2019 for a JORC 2012 Resource restatement following the announcement (ASX:9 Nov 18)of the discontinuation of the exploration purchase option covering Patilla Mina on Salar de Pular.The resource restatement covers brine within the Company's 100% owned Sulfa 1 Mina(mining concession) including exploration activities carried out by PNN during 2018. The JORC 2012 Resource tabulated in Table 1 below is of low grade Lithium Carbonate(LCE) Measured 91,000 tonnes and Inferred 82,000 tonnes and includes a potash(KCL) resource. The Company is currently evaluating the potential to blend this brine with brine from the Company's other projects(Figure 1) to produce a feasible higher grade product.

Figure 1 – Pular, Rincon and Incahuasi Projects

Table 1 Updated Resource Estimate, Pular Project

Resource Category	Brine Volume (m^3)	Avg. Li (mg/L)	In situ Li (tonnes)	Li_2CO_3Equivalent (tonnes)LCE	Avg. K (mg/L)	In situ K (tonnes)	KCl Equivalent (tonnes)
Measured	2.0×10^8	87	17,100	91,000	4,510	888,700	1,695,000
Inferred	2.0×10^8	77	15,400	82,000	4,280	853,400	1,627,000

No cut-off grade was applied; The reader is cautioned that mineral resources are not mineral reserves and do not have demonstrated economic viability.

The resource estimate was prepared in accordance with The JORC Code 2012 and uses best practice methods specific to brine resources, including a reliance on core drilling and sampling methods that yield depth-specific chemistry and effective (drainable) porosity measurements. The resource estimation was completed by independent competent person Mr. Michael Rosko, M.Sc., C.P.G. of the international hydrogeology firm E.L. Montgomery & Associates (M&A).

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

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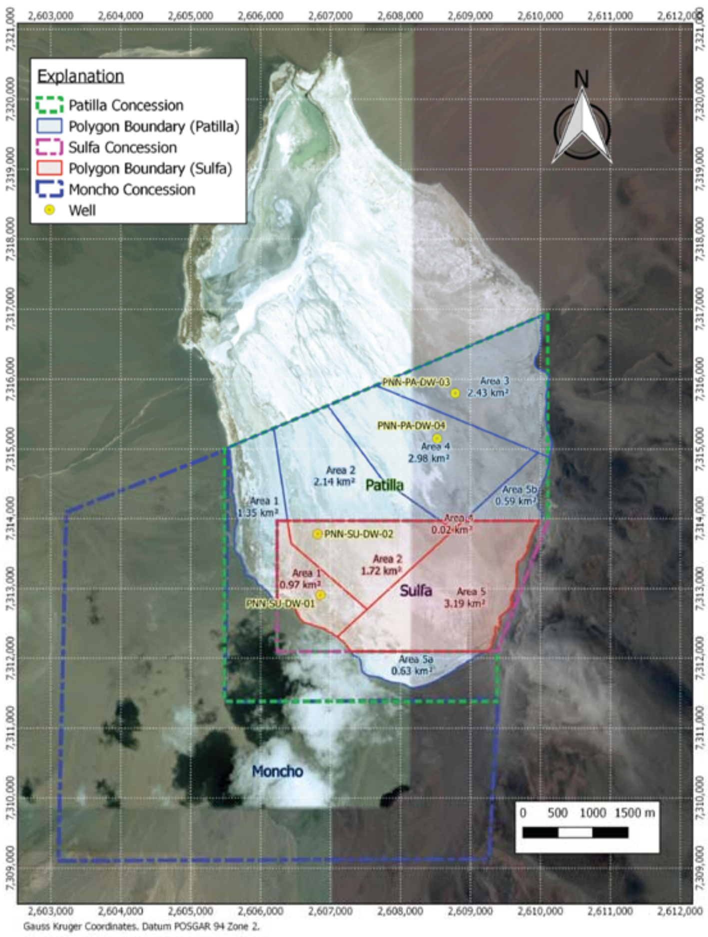
Definition of Polygon Blocks and Thicknesses used for Resource Restatement

The total area of the polygonal blocks used in the updated resource calculation was 5.906 square kilometres(km^2). The polygons used for the calculation are shown in red on **Figure 2**. The initial total area for the resource estimate reported 27 July 2018, including all tenements was 16.024 km^2 . Eliminating the Patilla tenement, subject of the discontinued exploration option, results in a 63% reduction in the total area of the concessions being considered for the resource estimate resulting in a reduction in the resource estimate of the same magnitude.

To recalculate the resource for only the Sulfa Mina, the initial polygons were not redrawn around the exploration boreholes, as was done for the first resource estimate in July 2018(PNN ASX:27 July 2018). Because of the confidence of the competent person(Mr Michael Rosko) in the initial resource estimate, Mr Rosko only eliminated that part of the resource that was not calculated from Sulfa Mina and did not redraw the polygons. All other aspects of the initial resource estimate were maintained, including assumptions on basin boundaries, unit thicknesses and properties, brine grades, and non-inclusion of fresh or brackish water zones in the upper part of the system.Polygons 1, 2 and 4 are still considered a Measured Resource, and Polygon 5 is still considered an Inferred Resource; Polygon 3 was located completely in the Patilla Mina(discontinued exploration option mina) and is not considered in the the resource calculations(**Figure 2**).

Figure 2 – Updated Polygon Blocks Sulfa Mina, Salar de Pular



This announcement on the Salta Lithium project has been prepared with information compiled by Mr. Michael Rosko, M.Sc., C.P.G. of the international hydrogeology firm E.L. Montgomery & Associates, Mr Rosko is a Registered Member of the Society for Mining, Metallurgy and Exploration which is a Recognised Professional Organisation under JORC. Mr. Michael Rosko 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". Mr. Michael Rosko is a Principal Hydrogeologist with E.L. Montgomery & Associates and as such is an independent consultant to PepinNini Lithium Limited Mr. Rosko consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

Appendix - JORC Table 1

Section 1 Sampling Techniques and Data

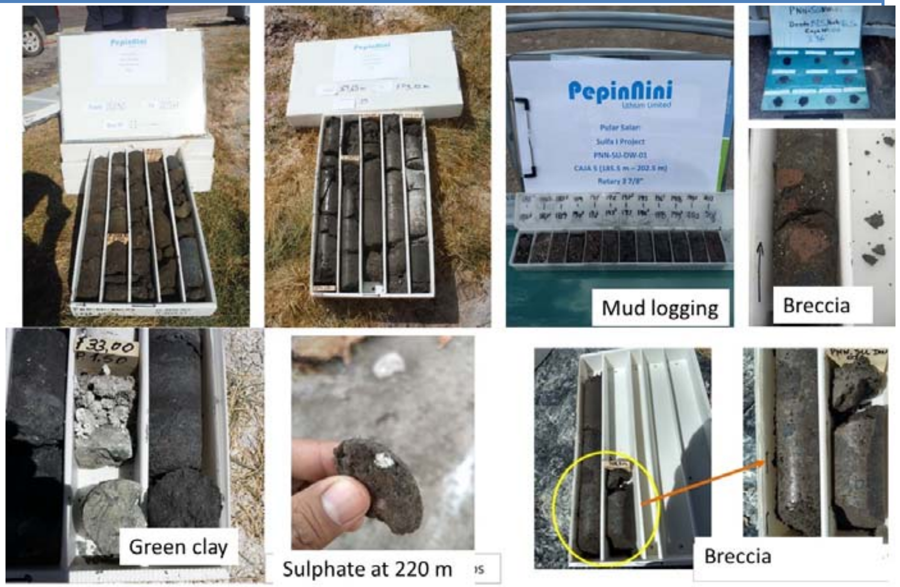
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representability and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• Brine samples were collected using borehole packers over 2.4 metres thickness at 6 metre intervals in much of the first borehole. Due to the homogeneity of the brine, subsequent sampling was done at 20 metre or larger intervals. • Borehole fluid density, temperature, electrical conductivity, and pH were recorded at time of sampling. 

Criteria	JORC Code explanation	Commentary
		Packer Sampling • During packer sampling, drilling fluids were removed prior to sample collection to ensure that representative samples were obtained • HQ3 diameter core samples were collected and submitted to Geosystems Analysis Inc., Tucson, Arizona, USA for RBRC (Relative Brine Release Capacity) testing to estimate porosity and specific yield. The samples were generally collected every 20 metre intervals, or when a substantial lithological change was observed. In uniform lithologic material, fewer samples were obtained and submitted for testing. Core sampling for porosity testing 
Drilling techniques	• *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).*	• Diamond core drilling – HQ3 diameter drilled vertically, triple tube

Criteria	JORC Code explanation	Commentary
		 Recovering cores borehole PNN-PA-DW-03 • PVC casing was installed in borehole PNN-SU-DW-2 to allow for future monitoring of water level and chemistry. • Boreholes DW-1, -3, and -4 were abandoned following drilling and sampling  Slotted PVC used for piezometer borehole PNN-SU-DW-02
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures were taken to maximise sample recovery and ensure the representative nature of the samples.* • *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.*	• The boreholes were drilled and partially cored • PNN-SU-DW-01 – Total Depth 308.5m; 214.5m cored • PNN-SU-DW-02 – Total Depth 341.0m; 119.5m cored • PNN-PA-DW-03 – Total Depth 350.5m; 350.5m cored • PNN-PA-DW-04 – Total Depth 350m; not cored • Drill core recoveries were recorded at the time of drilling and recorded with lithological interpretation and sample intervals. Core recoveries ranged from

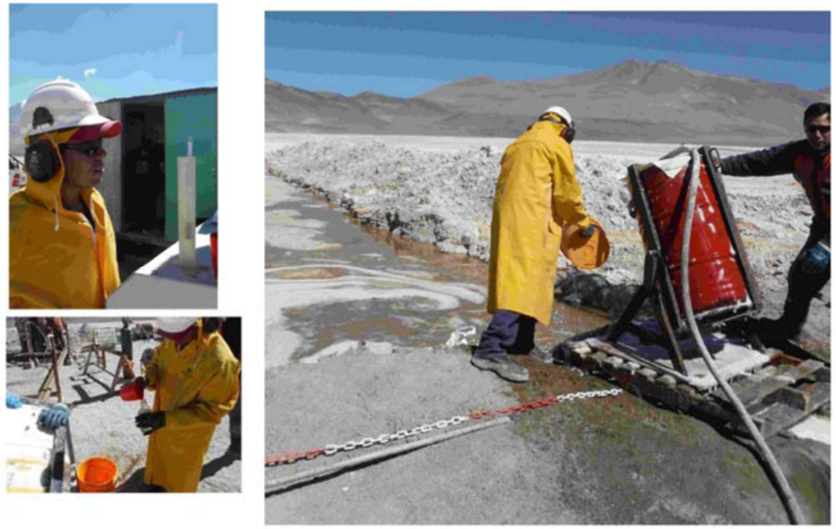
Criteria	JORC Code explanation	Commentary
		0-100% depending in lithology; sand and gravel lithologies generally had lower recovery percentages than the halite and clay lithologies. Unconsolidated or weakly-consolidated sand intervals with lower percentage recovery were typically associated with higher brine yield during brine sampling.  Core sampling Borehole PNN-SU-DW-02
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Drill core was geologically described; each core box was photographed. Percent recovery was noted. • Drill cuttings obtained during rotary drilling were also geologically described and photographed.

Criteria	JORC Code explanation	Commentary
		 Representative samples from borehole PNN-SU-DW-01

Criteria	JORC Code explanation	Commentary
		 ORE BOXES SHOWING ALL THE LITHOLOGIES AFOREMENTIONED, AT A DIFFERENT DEPTH, CUTTING BOX LOG, Representative samples borehole PNN-SU-DW-02

Criteria	JORC Code explanation	Commentary
		 Representative cores from borehole PNN-PA-DW-03

Criteria	JORC Code explanation	Commentary
		 Chip samples of representative lithologies non-cored borehole PNN-PA-DW-04 • Borehole PNN-SU-DW-02 was geophysically logged for natural gamma.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The boreholes were cleaned of drilling mud prior to extracting depth-specific brine samples. • Brine samples were collected using a double packer to ensure that the samples are representative of a specific depth.

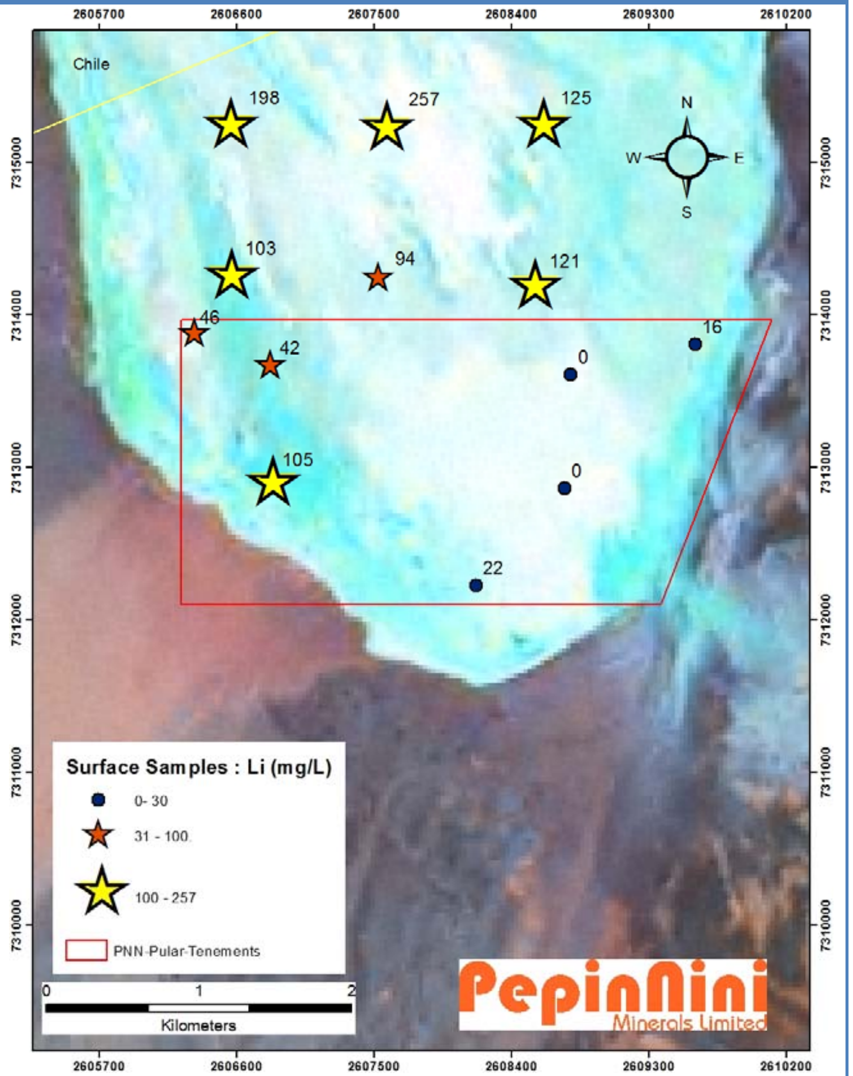
Criteria	JORC Code explanation	Commentary
		 Packer sampling borehole PNN-PA-DW-03 • Sample bottles are partly filled and rinsed with the brine to be sampled, emptied, and then re-filled before the bottle is capped and securely taped.  • In accordance with the quality assurance and quality control (QAQC) program approved by the Competent Person (CP), 30% of the samples provided to the laboratory were duplicates, blanks, and known standards. These samples

Criteria	JORC Code explanation	Commentary
		were included to verify laboratory accuracy and analysis repeatability.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• A chain of custody was maintained for samples from drilling location to laboratory receipt.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Marcela Casini the exploration manager provided CP oversight for verification of sampling techniques, laboratory verification and reporting review • A total of 103 brine samples were submitted for laboratory analyses, of which 32 were QAQC samples as per CP requirements
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Geographic positioning control for borehole locations was measured using Gauss Kruger POSGAR (WGS-84) Zone 2 datum
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Well spacing for a salar-hosted brine deposit is acceptable according to generally agreed upon distances between exploration boreholes. • Samples were taken at intervals determined to be appropriate based on characterization of both the brine quality and the lithologic units encountered within the boreholes. Interval details are provided in previous sections of this table.
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.* • *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.*	• Boreholes drilled vertically to intersect salar horizontal layering
Sample security	• *The measures taken to ensure sample security.*	• A chain of custody was established for samples from field to laboratory with each stage signed off and handed over to final receipt by 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.)

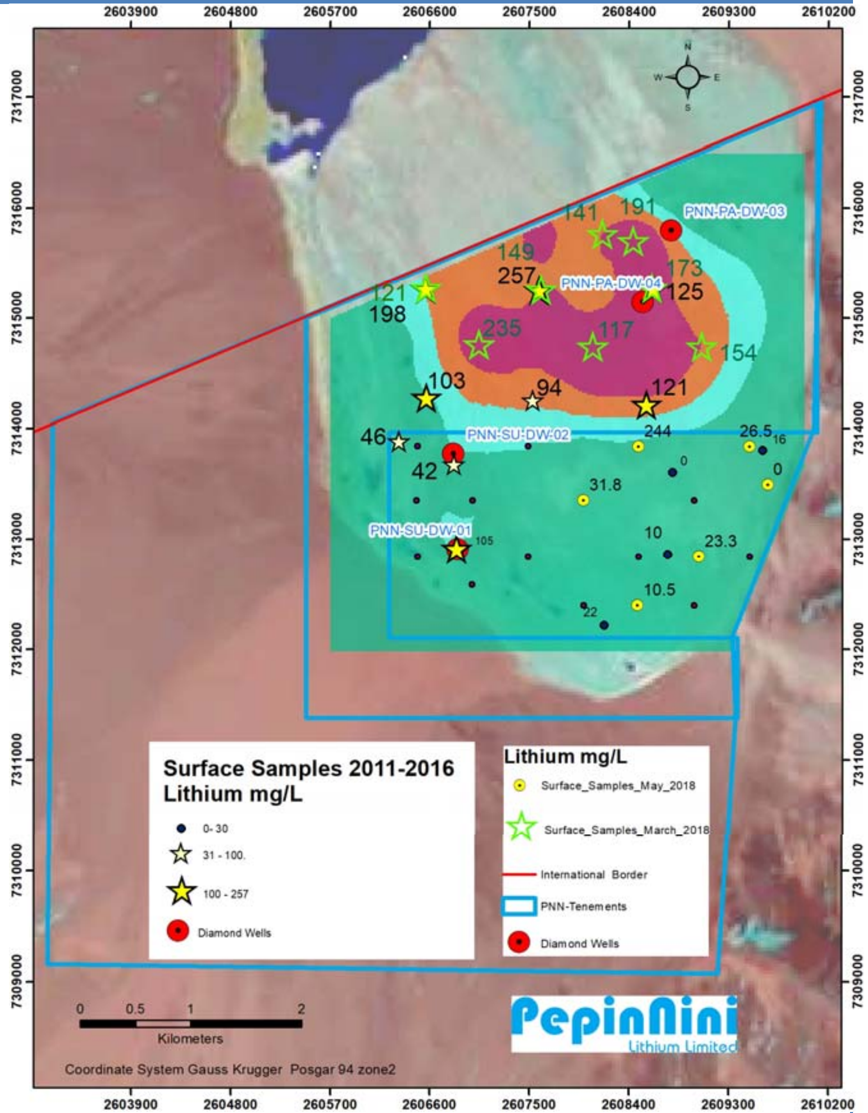
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• Mina Sulfa 1 File Number 19188, Held 100% by PepinNini SA, an Argentina entity wholly owned by PepinNini Lithium Ltd. Mina Patilla File Number 20414 held by Lithea Corporation and during time of drilling held under an exploration option agreement dated 21 February 2018 with Lithea Corporation, a wholly owned subsidiary of Lithium S, TSX:LSC based in Toronto, Canada. • Held under grant from Mining Court of Salta Province, Argentina Tenure (Mina) held in perpetuity and appropriately maintained.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Surface sample exploration carried out by Lithea Corporation – 2010 – mapped as yellow stars in plan below.

Criteria	JORC Code explanation	Commentary
		
Geology	• *Deposit type, geological setting and style of mineralisation.*	• PepinNini is primarily exploring for brine aquifers in salars (dried salt lakes) and the geological setting is suitable for lithium bearing brines in

Criteria	JORC Code explanation	Commentary
		commercial quantities. • Brine aquifers are indicated by high conductivity/low resistivity responses considered prospective for lithium brine
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	**Borehole PNN-SU-DW-01** • Borehole coordinates: GK Posgar Zone 2: 2606831.3 East - 7312929.3 North Elevation: 3,579 masl • Start drilling date: 19 Jan 2018 • Finish drilling date: 21 Feb 2018 • Total Depth: 308.5 meters • Drilling Methodology: Diamond Drilling • Drilling Company: Hidrotec SRL • Rig: Sandvick DE710 **Borehole PNN-SU-DW-02** • Borehole coordinates: GK Posgar 94 Zone 2: North 7313779.4, East 2606812.4 Elevation: 3,579 masl • Start drilling date: 28 Feb 2018 • Finish drilling date: 19 Mar 2018 • Total Depth: 341 meters • Drilling Methodology: Diamond Drilling • Drilling Company: Hidrotec SRL • Rig: Sandvick DE710 **Borehole PNN-PA-DW-03** • Borehole coordinates: GK Posgar 94 Zone 2: North 7315799.0, East 2608781.3 Elevation: 3,580 masl • Start drilling date: 30 Mar 2018 • Finish drilling date: 13 Apr 2018 • Total Depth: 350.5 meters • Drilling Methodology: Diamond Drilling • Drilling Company: Hidrotec SRL

Criteria	JORC Code explanation	Commentary
		• Rig: Sandvick DE710 **Borehole PNN-PA-DW-04** • Borehole coordinates: GK Posgar 94 Zone 2: North 7315149.4, East 2608519.77 Elevation: 3,579 masl • Start drilling date: 19 Apr 2018 • Finish drilling date: 26 Apr 2018 • Total Depth: 350 meters • Drilling Methodology: Rotary Drilling • Drilling Company: Hidrotec SRL • Rig: Sandvick DE710
Data aggregation methods	• *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.*	• No data aggregation used.
Relationship between mineralisation widths and intercept lengths	• *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').*	• Boreholes drilled vertically and core reported as true depths and intersection lengths; salar units are basinfill and lacustrine deposits, and are generally horizontal in nature
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.*	• Borehole location and surface sampling data points are shown below.

Criteria	JORC Code explanation	Commentary



Criteria	JORC Code explanation	Commentary
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.*	• Results from boreholes PNN-SU-DW-01, PNN-SU-DW-02, PNN-PA-DW-03 and PNN-PA-DW-04 are fully reported.
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.*	• All data are reported in relevant sections; no additional data to be reported.
Further work	• *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, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The next step would be construction of a production well to obtain aquifer parameters for the sand and breccia units, and to estimate potential future production rates from a wellfield. Borehole (PNN-SU-DW-02) has been converted to a piezometer well for measuring water level during future aquifer testing of the proposed production well.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• *For every exploration program a field work plan is created outlining all field procedures including sampling techniques and geological/hydrogeological logging techniques. A spread sheet (electronic data capture) designed for all logging is created with codes for different physical characteristics to be logged. All field geologists must sign and agree the plan before they commence work on the project* • *All logs are checked against geophysical down hole logs where possible and the exploration manager verifies all logs, any discrepancies are re-logged* • *For accuracy and certainty boreholes are located with two GPS devices one using latitude and longitude and the other map coordinates on the Gauss Kruger Posgar 94 Zone 2 used in Argentina* • *Boreholes are then plotted onto ArcInfo (GIS mapping software) for plan generation* • *All data is checked for accuracy* • *Duplicate brine samples were submitted to the same laboratory to confirm laboratory repeatability as part of the Quality Assurance and Quality Control (QA/QC) procedure. To date, a total of four duplicate samples were submitted during the exploration program*
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• *The CP has not visited the site; however, he has considerable experience in the Puna region in which the project is situated with a number of brine projects with similar hydrogeologic characteristics* • *The CP was in receipt of daily exploration reports during the drilling program and at times suggested various actions to ensure consistency of data and best practice for sampling* • *The exploration manager has visited the project site and discussed various parameters for exploration with the CP during the program* • *The CP reviewed core and cuttings and consulted with exploration manager regarding details of the descriptions and lithologies*

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Geological interpretation</td><td>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.
Nature of the data used and of any assumptions made.
The effect, if any, of alternative interpretations on Mineral Resource estimation.
The use of geology in guiding and controlling Mineral Resource estimation.
The factors affecting continuity both of grade and geology.</td><td>The borehole spacing and surface sampling has given a high degree of confidence in the geological model
The brine level is horizontal and physical parameters of density, temperature and pH along with time and depth were recorded during drilling to identify any variation and assist in sampling.</td></tr>
<tr><td>Dimensions</td><td>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</td><td>Because of the relatively small spacing between wells, it was felt to be reasonable to categorize about 70% of the Resource as Measured, with the rest categorized as Inferred.
Depth-specific data were used (i.e. drainable porosity values for core samples and brine chemistry obtained from double packers) to estimate the resource.
The method involves constructing polygonal blocks and defining hydrogeologic units based on exploration drilling and sampling, and then estimating the Resource based on sampling results
Due to confidence in the initial resource estimate the polygons around the boreholes were not redrawn for the recalculated resource but rather the area not within the Sulfa tenement was eliminated to restate the resource within the Sulfa tenement only</td></tr>
<tr><td>Estimation and modelling techniques</td><td>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.
The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
The assumptions made regarding recovery of by-products.</td><td>Each borehole was divided into hydrogeologic units using four lithologies
<table>
<tr><th>Predominant Lithology of Conceptual Hydrogeologic Unit</th><th>Number of Analyses</th><th>Mean Drainable Porosity</th></tr>
<tr><td>Unit 1: Tuffaceous clay*</td><td>0</td><td>.02</td></tr>
<tr><td>Unit 2: Mixed sand, silt, with minor clay</td><td>8</td><td>.15</td></tr>
<tr><td>Unit 3: Unconsolidated to moderately consolidated fine to medium sand</td><td>12</td><td>.25</td></tr>
<tr><td>Unit 4: Sandy and gravelly breccia</td><td>3</td><td>.17</td></tr>
</table></td></tr>
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<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
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Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
Any assumptions behind modelling of selective mining units.
Any assumptions about correlation between variables.
Description of how the geological interpretation was used to control the resource estimates.
Discussion of basis for using or not using grade cutting or capping.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

</td><td>

Drainable porosity values for each hydrogeologic unit within a single polygon were computed by averaging the available drainable porosity data from within the hydrogeologic unit at the polygon borehole. For the instances in which a hydrogeologic unit within an individual borehole had no chemical determinations, the analyses from the nearest samples both above and below the unit were averaged and that value applied to the entire unit.
Units without analytical results were assigned reference values (Johnson, 1967)
Duplicate brine samples were submitted to the same laboratory to confirm laboratory repeatability as part of the Quality Assurance and Quality Control (QA/QC) procedure. To date, a total of four duplicate samples were submitted during the exploration program
Comparison of the duplicate samples suggests that the samples are being analysed similarly; large differences between the results for the duplicate samples do not occur. In addition to the duplicate samples, a total of 13 blank samples, and 11 standard samples were submitted during the program. None of the blank samples reported lithium concentrations above the detection limit, and the average error for the lab results compared to the 11 standard sample values submitted are as follows:

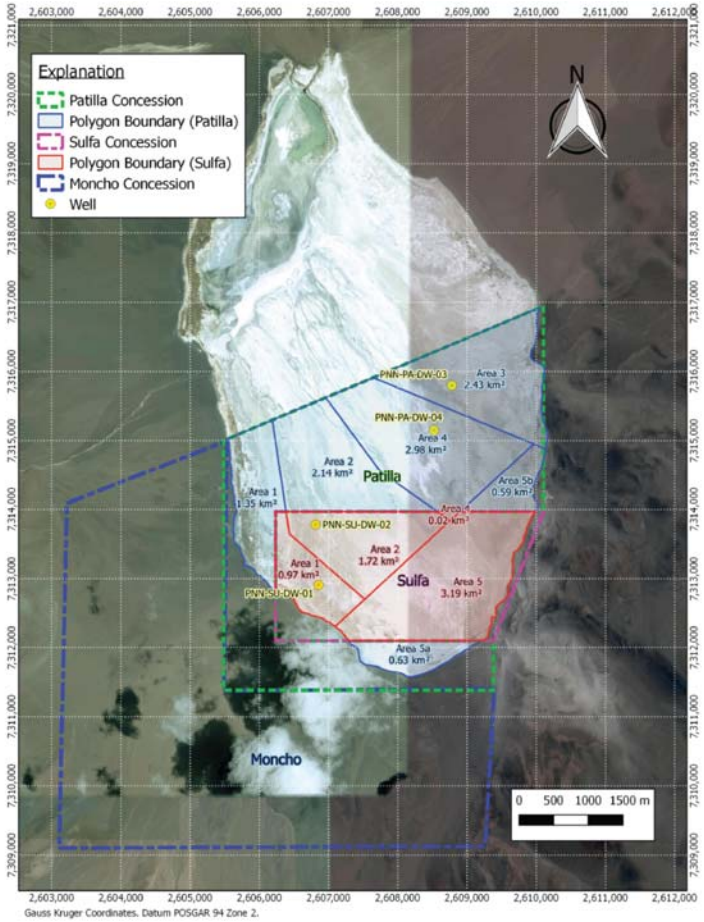
<table>
<tr><th>Average lithium value for 11 standard samples (mg/L)</th><th>Percent average difference compared to prepared standard of 258 mg/L of lithium</th><th>Average potassium value for 11 standard samples (mg/L)</th><th>Percent average difference compared to prepared standard of 6,390 mg/L of potassium</th></tr>
<tr><td>260.8</td><td>+1%</td><td>6,240</td><td>-2.4%</td></tr>
</table>

Based on the results of the duplicate, blank and standard samples, it was concluded the laboratory results were accurate

</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
		• *Total area of the polygonal blocks used in the initial resource calculations was 16.024 square kilometres (km^2). The total area of the polygon blocks use for the updated resource calculation was 5.906 km^2* • *The reduced area of the Sulfa tenement represents a reduction of 63% of the total area for the resource estimation* • *Hydrogeologic bedrock was not encountered during drilling. The lower boundary for each of the four polygons with wells was the maximum depth drilled. The depth for the southern polygon was estimated to be 308.5 meters below land surface – the same as the nearest borehole PNN-SU-DW-01.* • *Thickness of the lowermost hydrogeologic unit is limited by total depth of the borehole. It is assumed that the properties at the borehole for hydrogeologic unit thickness, drainable porosity, lithium, and potassium extend continuously throughout the entire polygon. The resource computed for each polygon is independent of adjacent polygons. The computed resource for each polygon was the sum of the products of saturated hydrogeologic unit thickness, polygon area, drainable porosity, and lithium and potassium content. No cut-off grade was applied.* • *Polygons 1, 2, 3, and 4, which contain exploration boreholes, are considered to be in the Measured Resource category. Polygon 5 in the south, with no exploration borehole, is considered to be an Inferred Resource.*

Criteria	JORC Code Explanation	Commentary
		• *For the updated resource the polygons used are shown in Figure 2 on page 2 and reproduced below:*



- *Polygons 1,2 and 4 are still considered a Measured Resource, and Polygon 5 is still considered an Inferred Resource; Polygon 3 was not considered in the updated resource.*

Criteria	JORC Code Explanation	Commentary
		• *Drainable porosity and lithium and potassium content are weighted by hydrogeologic unit thickness.* • *For Polygons 1 and 5, no resource is assigned to the upper units based on presumed low lithium content in the freshwater and brackish water zones. This fresh and brackish water zone is believed to be due to inflow of fresh water into the salar from the west and southwest.*
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• *Lithium brine is a liquid resource, moisture content is not relevant to resource calculations*
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• *No cut-off grade was applied but the upper fresh and brackish water units in Polygons 1 and 5 were assumed to be zero.* • *Based on observations that the brine density and chemistry is relatively consistent below a depth of about 85 meters, we assume that with depth, all parts of the salar will have saturated brine.*
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• *Potential brine abstraction is considered to involve pumping via a series of production wells* • *The sand and breccia units dominate the drainable brine resource. The CP believes that the transmissivity of future wells completed in these units would be favourable for extracting brine because of the assumed favourable aquifer conditions associated with these clastic units*
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• *The production of Lithium Carbonate(Li_2CO_3) from lithium brine has been demonstrated by a number of companies with projects in Argentina in close proximity to PepinNini, for example Argosy Minerals Ltd(ASX:AGY 6 August 2018) it is assumed PepinNini would use similar methods to enrich brine to 99.6% lithium and produce Lithium Carbonate(Li_2CO_3* • *Further pilot testing work is planned, but as yet not undertaken, to test production of Lithium Carbonate(Li_2CO_3) from Pular brine*

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Environmental factors or assumptions</td><td>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</td><td>A fresh and brackish water zone is believed to be due to inflow of fresh water into the salar from the west and southwest. Because of this, for Polygons 1 and 5, no resource has been assigned to the upper units based on presumed low lithium content in the freshwater and brackish water zones.
An environmental report has been accepted by the mining court for the tenement grant</td></tr>
<tr><td>Bulk density</td><td>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>Bulk density determination is not relevant for brine resource calculations as the drainable porosity of the hydrogeologic units is the relevant factor for brine resource calculations
Drainable porosity values are obtained from core samples and brine chemistry from depth-specific samples from double packers
Summary of Borehole locations and samples including drainable porosity
<table>
<tr><th>Corehole Identifier</th><th>Total Depth (meters)</th><th>UTM Easting[1] (meters, POSGAR 94)</th><th>UTM Northing[1] (meters, POSGAR 94)</th><th>Number of drainable porosity samples collected</th><th>Number of drainable porosity samples analyzed</th><th>Number of depth-specific brine samples collected and analyzed</th></tr>
<tr><td>PNN-SU-DW-01</td><td>308.5</td><td>2,606,831</td><td>7,312,929</td><td>8</td><td>8</td><td>26</td></tr>
<tr><td>PNN-SU-DW-02</td><td>341</td><td>2,606,812</td><td>7,313,779</td><td>7</td><td>7</td><td>19</td></tr>
<tr><td>PNN-PA-DW-03</td><td>350</td><td>2,608,781</td><td>7,315,799</td><td>10</td><td>10</td><td>16</td></tr>
<tr><td>PNN-PA-DW-04</td><td>350</td><td>2,608,520</td><td>7,315,149</td><td>0</td><td>0</td><td>19</td></tr>
<tr><td></td><td>Total = 1,349.5</td><td></td><td></td><td>Total = 25</td><td>Total = 25</td><td>Total = 80</td></tr>
</table>
</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• *Except for the Inferred resource in Polygon 5, all the estimated Resource was assigned as Measured. This is consistent with recommendations by Houston et al. (2011) where they suggest that well spacing required to estimate a Measured Resource be no farther than 3-4 kilometres apart from each other. Given the relatively small size of the salar and the polygons, the uniformity of the brine chemistry, and the relatively good stratigraphic understanding of the hydrogeologic units, it was believed by the CP that a Measured category was justified*
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• *The Resource estimate was subject to internal peer review by Montgomery and Associates and PepinNini*
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• *Duplicate brine samples were submitted to the same laboratory to confirm laboratory repeatability as part of the Quality Assurance and Quality Control (QA/QC) procedure. To date, a total of four duplicate samples were submitted during the exploration program. Based on the results of the duplicate, blank, and standard samples, the CP concluded that the laboratory results are reliable* • *Given the relatively small size of the salar and the polygons, the uniformity of the brine chemistry, and the relatively good stratigraphic understanding of the hydrogeologic units, the CP believes that a Measured category is justified* • *The sand and breccia units which dominate the drainable brine resource are believed by the CP to suggest that the transmissivity of future wells completed in these units would be favourable for extracting brine because of the assumed favourable aquifer conditions associated with these clastic units*

References

Houston, J, Butcher, A., Ehren, P., Evans, K., and Godfrey, L., 2011. **The evaluation of brine prospects and the requirement for modifications to filing standards.** Economic Geology, 106 (7). 1225-1239. 10.2113/econgeo.106.7.1225.