



Initial JORC Resource announced for Salta Lithium Pular Project, Argentina

PepinNini Lithium Ltd (PNN, PepinNini, the Company) is pleased to report an initial lithium ("Li") and potassium ("K") resource statement for its Pular Lithium Brine project in the Salta province of Argentina.

The maiden JORC 2012 resource statement, for the Pular project follows the announcement last month of the initial JORC resource for PepinNini's Rincon lithium brine project – also in Argentina's Salta Province.

The Pular resource announced today and detailed in Table 1 below, includes 366,000 tonnes of lithium carbonate ("Li₂CO₃") equivalent (LCE) and 6,904,000 tonnes of potash ("KCl") equivalent in the Measured Resource category, with an additional 113,000 tonnes of LCE and 2,246,000 tonnes of KCl in the Inferred Resource category.

Ms Rebecca Holland-Kennedy, Managing Director of PepinNini Lithium, commented on the initial resource for the Pular Project,

"We are very excited to see such a significant initial JORC resource estimate from our hydrogeological consultants."

PepinNini now has a strong defined resource estimate in place for its Pular Project with the majority in the Measured category and because of the rocktypes that dominate the drainable brine resource it is anticipated that future wells completed in these units would be favourable for extracting brine."

"This will allow us to continue to advance to the next level of assessment for development of lithium production with potash credits."

Table 1 - Pular Project Brine Resource Statement

Resource Category	Brine Volume (m ³)	Avg. Li (mg/L)	In situ Li (tonnes)	Li ₂ CO ₃ Equivalent (tonnes) LCE	Avg. K (mg/L)	In situ K (tonnes)	KCl Equivalent (tonnes)
Measured	8.1 x 10 ⁸	85	68,700	366,000	4,480	3,620,000	6,904,000
Inferred	2.7 x 10 ⁸	77	21,200	113,000	4,280	1,178,000	2,246,000

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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Mineral Resource Calculation Methodology - Montgomery & Associates

Mr Michael Rosko M.Sc., C.P.G. of Montgomery & Associates (M&A) has prepared this initial Resource estimate for the Salar de Pular mineral concessions, located in the province of Salta, Argentina. The key parameters of brine mineral grade and drainable porosity have been used to compute the Measured Resource for the Salar de Pular concessions. Because of the relatively small spacing between wells, they believe it is reasonable to categorise about 70% of the Resource as Measured, with the rest categorised as Inferred. Depth-specific data were used (i.e. drainable porosity values for core samples and brine chemistry obtained from double packers (*refer JORC Table*)) 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.

Total area of the polygonal blocks used in the resource calculations is 1,602.4 hectares or 16.024 square kilometres (km²), as shown on Figure 1.

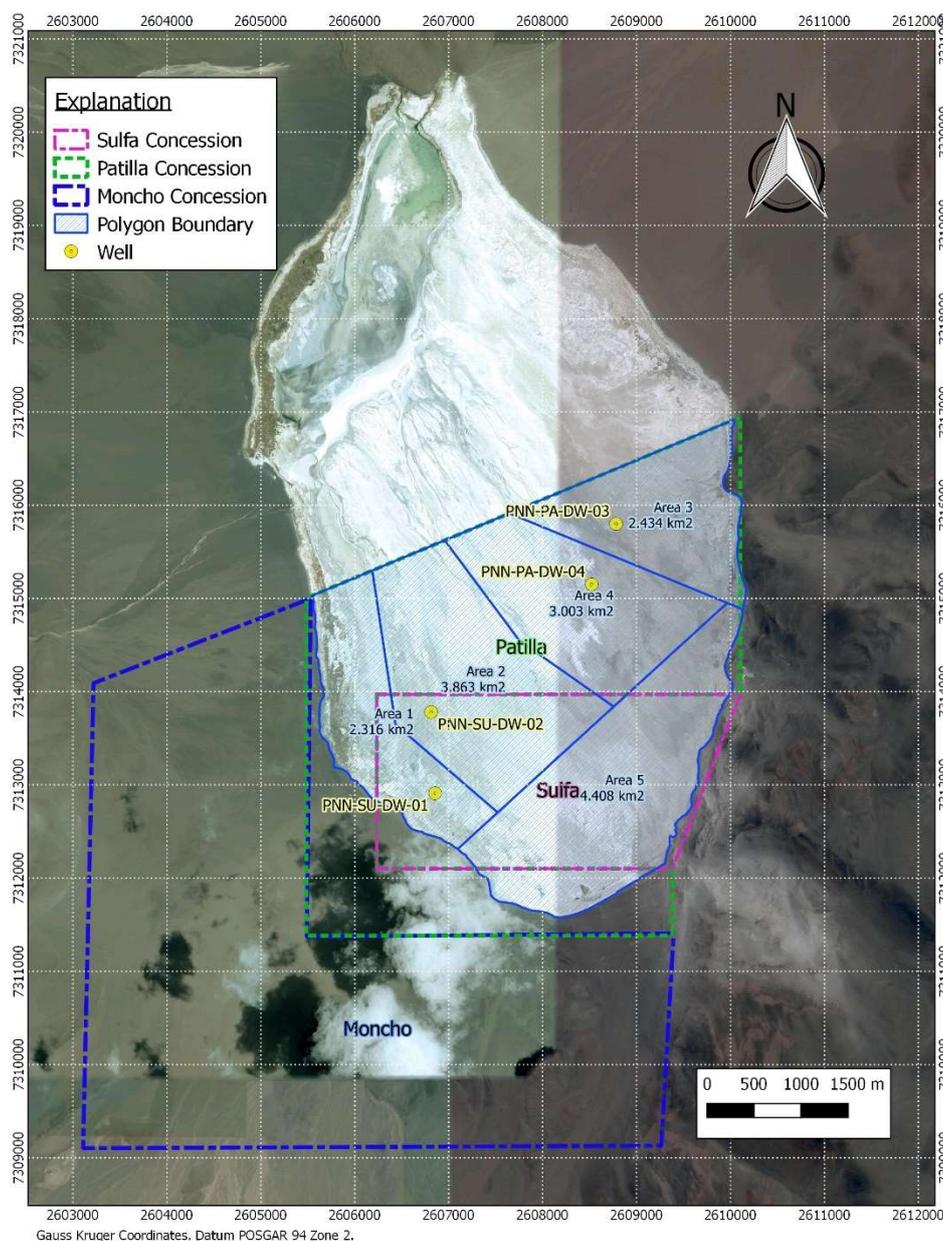


Figure 1 Well Locations and Polygons used for Resource Calculations

Diamond Drilling Program

The exploration diamond drilling program was designed by PepinNini exploration manager Marcela Casini to develop a resource estimate for the project. Drilling and construction were conducted during the period January 2018 through May 2018. Locations for the Pular exploration wells are shown on Figure 1. The diamond drilling program included drilling four vertical coreholes using a diamond core rig to total depths ranging from of 308.5 to 350 metres (Figures 2 through 5) for a total drilled of 1,349.5 metres. Drilling and construction services were provided by Hidrotec SRL, and were documented by PepinNini in internal company drilling reports of 2018.

Sample Analyses

Brine chemistry samples were analysed by SGS Argentina S.A., Salta, Argentina; SGS has extensive experience with lithium-bearing brines. Porosity analyses on selected core sample were conducted by Geosystems Analysis Inc. (GSA), Tucson, Arizona; GSA has worked on many Argentina brine projects during the last several years, including the Salar de Rincon Resource estimate for PepinNini. Well and sample locations are summarized in Table 2. Laboratory results for the brine chemistry and drainable porosity samples are shown on Figures 2, 3, 4, and 5.

Table 2. Summary of Well Locations and Samples

Borehole Identifier	Total Depth (metres)	UTM Easting ¹ (metres, POSGAR 94)	UTM Northing ¹ (metres, POSGAR 94)	Number of drainable porosity samples collected	Number of drainable porosity samples analysed	Number of depth-specific brine samples collected and analysed
PNN-SU-DW-01	308.5	2,606,831	7,312,929	8	8	26
PNN-SU-DW-02	341	2,606,812	7,313,779	7	7	19
PNN-PA-DW-03	350	2,608,781	7,315,799	10	10	16
PNN-PA-DW-04	350	2,608,520	7,315,149	0	0	19
Total = 1,349.5				Total = 25	Total = 25	Total = 80

¹UTM Easting and Northing surveyed by hand using a Garmin GPS Map 64; altitude of the wells is approximately 3,579 metres above mean sea level (masl) at each well location based on Google Earth values

NOTE: Includes duplicate brine samples, but not blank samples.

Except for the upper aquifer system near borehole PNN-SU-DW-01 (Figures 1 and 2), brine was evident throughout the entire sections drilled for each of the wells. The location for borehole PNN-SU-DW-01 is close to the southwest boundary of the salar where fresh water flows into the salar from the southwest and west. Brackish water is observed approximately in the upper 80 metres at each of the other boreholes. Below about 80 metres, lithium and potassium values are held in a relatively consistent brine to total depth for each of the boreholes (Figures 2, 3, 4 and 5).

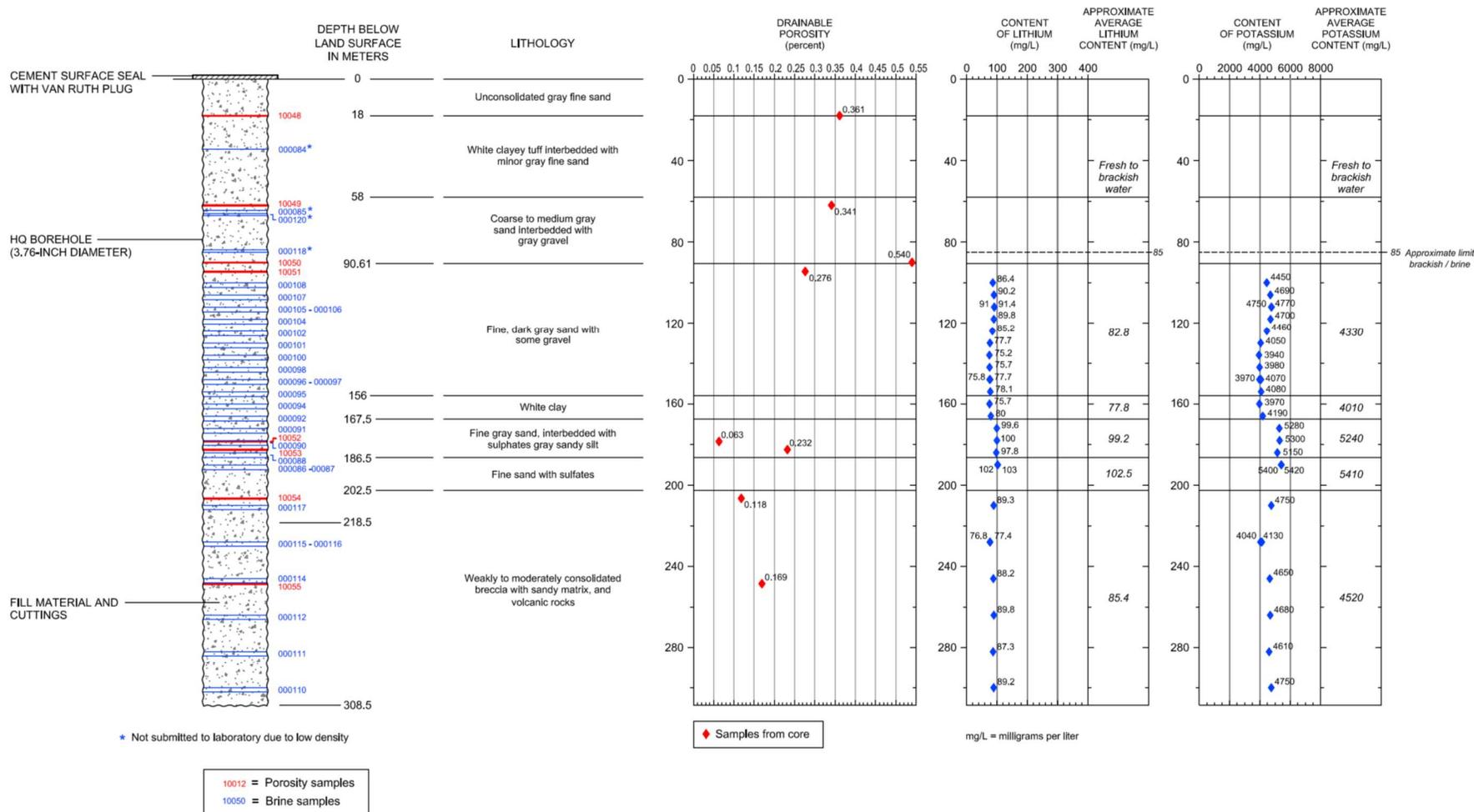


FIGURE 2. SCHEMATIC DIAGRAM OF CONSTRUCTION OF EXPLORATION BOREHOLE PNN-SU-DW-01

1534-PepinNini Lithium04, Salar de Pular3, Trabajo10, Figuras\Fig_2_PNN-SU-DW-01_19jul18



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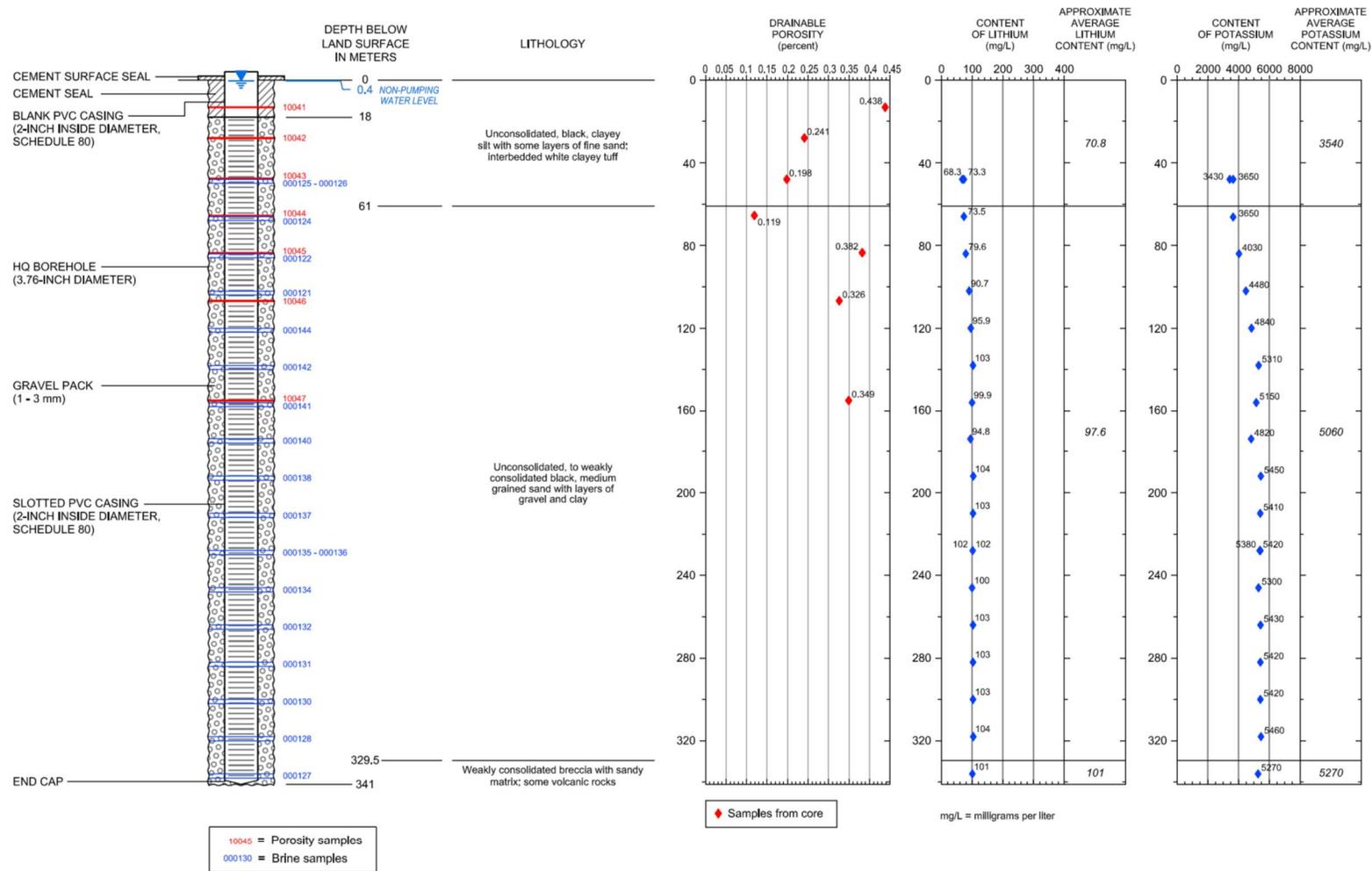


FIGURE 3. SCHEMATIC DIAGRAM OF CONSTRUCTION OF EXPLORATION WELL PNN-SU-DW-02

inNini Lithium04, Salar de Pular3, Trabajo10, FigurasFig_3_PNN-SU-DW-02_19jul18



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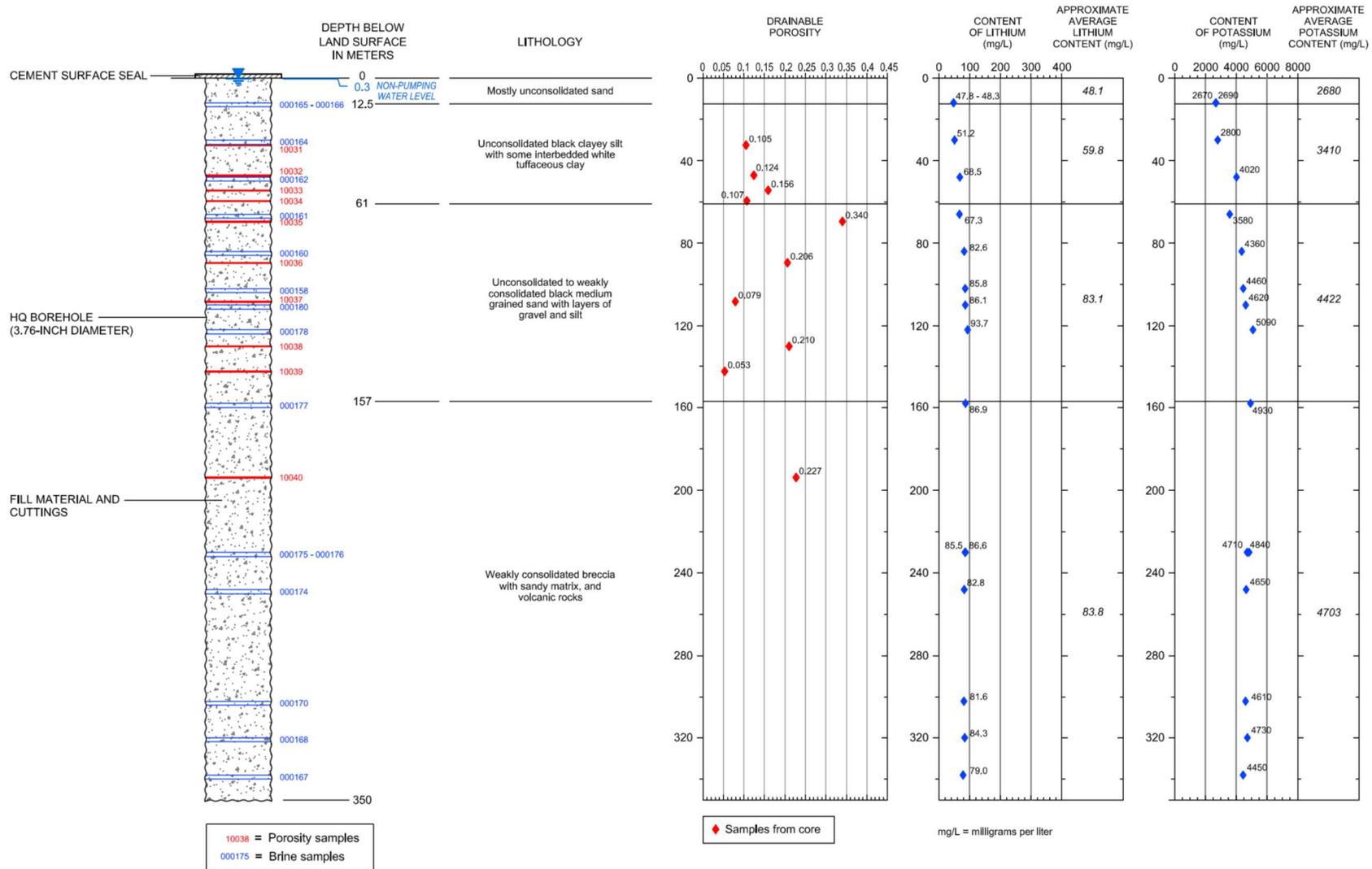


FIGURE 4. SCHEMATIC DIAGRAM OF CONSTRUCTION OF EXPLORATION BOREHOLE PNN-PA-DW-03

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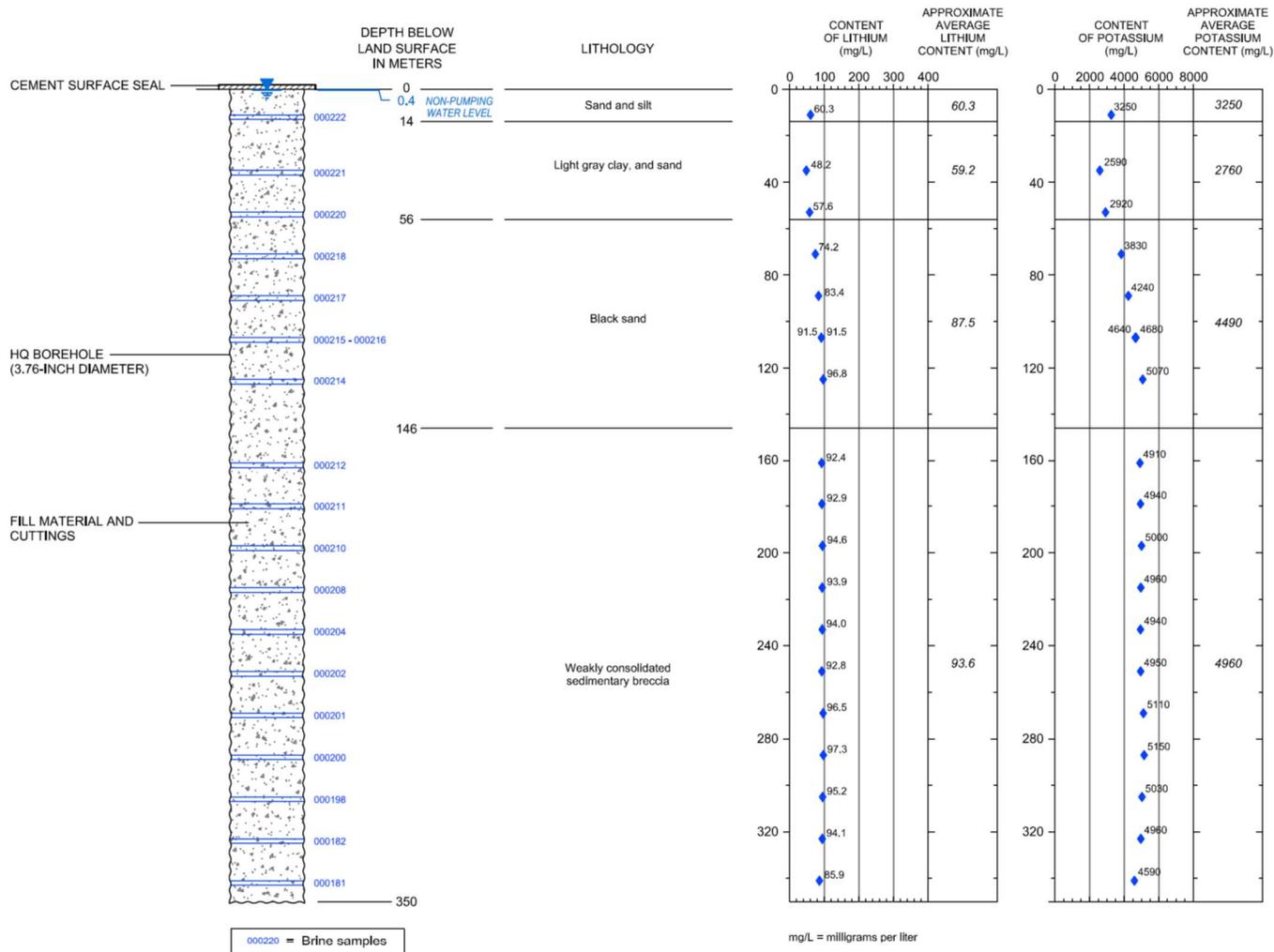


FIGURE 5. SCHEMATIC DIAGRAM OF CONSTRUCTION OF EXPLORATION BOREHOLE PNN-PA-DW-04

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Quality Control

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. SGS Laboratory results for the samples and their duplicates are given in Table 3.

Table 3 - Laboratory Results and Duplicate Values

SAMPLE NUMBERS (ORIGINAL AND DUPLICATE)	Li (mg/L) ¹		Mg (mg/L)		SO ₄ (mg/L)		K (mg/L)	
	ORIGINAL	DUPLICATE	ORIGINAL	DUPLICATE	ORIGINAL	DUPLICATE	ORIGINAL	DUPLICATE
PNN-SU-DW-01								
000105/000106	91	91.4	1,650	1,660	10,728	10,772	4,750	4,770
000096/000097	75.8	77.7	1,450	1,410	9,481	9,372	3,970	4,070
000086/000087	102	103	1,930	1,930	11,817	12,071	5,400	5,420
000115/000116	76.8	77.4	1,480	1,490	9,381	9,322	4,040	4,130
PNN-SU-DW-02								
000125/000126	68.3	73.3	1,470	1,560	9,315	9,210	3,430	3,650
000135/000136	102	102	1,960	1,950	11,687	11,495	5,380	5,420
PNN-PA-DW-03								
000165/000167	47.8	48.3	1,410	1,430	7,931	8,079	2,670	2,690
000175/000176	85.5	86.6	2,060	2,040	12,505	12,843	4,710	4,840
PNN-PA-DW-04								
000215/000216	91.5	91.5	1,500	1,490	21,607	21,916	4,640	4,680

¹ mg/L = milligrams per litre

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:

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

Based on the results of the duplicate, blank, and standard samples, we conclude that the laboratory results are reliable.

Definition of Polygon Blocks and Thicknesses

Total area of the polygonal blocks used in the resource calculations is 16.024 square kilometres (km²), as shown on Figure 1. Polygons 1, 2, 3, and 4 contain diamond drill holes (Figure 1); Polygon 5 covers the southern part of the salar where relatively fresh water with very low lithium brine occurs at land surface. Schematic diagrams for each of the boreholes are shown on Figures 2 through 5. The polygons are bounded by the mining concession to the north, and by the salar boundary on the west, south, and east (Figure 1).

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 metres below land surface – the same as the nearest borehole PNN-SU-DW-01.

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.

Definition of Hydrogeologic Units

Results of diamond drilling indicate that basin-fill deposits in Salar de Pular can be divided into hydrogeologic units that are dominated by three lithologies, with an additional minor lithology of tuffaceous clay in the near surface. Figures 2 through 5 show locations and results for the depth-specific core samples that were submitted to GSA in Tucson, Arizona for analysis. Predominant lithology, number of analyses for drainable porosity, and average of these units are given in Table 4. The average values below were used to estimate the resource.

Table 4 - Summary of Drainable Porosity Values

Predominant Lithology of Conceptual Hydrogeologic Unit	Number of Analyses	Mean Drainable Porosity
Unit 1: Tuffaceous clay*	0	.02
Unit 2: Mixed sand, silt, with minor clay	8	.15
Unit 3: Unconsolidated to moderately consolidated fine to medium sand	12	.25
Unit 4: Sandy and gravelly breccia	3	.17

*Units without analytical results were assigned reference values (Johnson, 1967)

Total Resource Estimation(Hydrogeologic Units)

Each borehole was divided into hydrogeologic units using the four lithologies given above. 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. Shallow trenching confirmed that brine occurs in the salar sediments approximately 0.03 to 0.04 metres below land surface.

Drainable porosity and lithium and potassium content are weighted by hydrogeologic unit thickness. Hydrogeologic units are shown for each well on Figures 2 through 5. Saturated thickness for the uppermost hydrogeologic units is estimated from the depth to water in the polygon's borehole to the base of the hydrogeologic unit. Polygon 5 assumes a depth to water of .04 metres below land surface, and is consistent with previous trench sampling.

For Polygons 1 and 5 (Figure 1), no resource is assigned to the upper units based on presumed low lithium content in the freshwater and brackish water zones. At Polygon 1, no lithium is attributed to the upper 85 metres, where the approximate brackish water/brine interface is believed to occur. This fresh and brackish water zone is believed to be due to inflow of fresh water into the salar from the west and southwest, and is why Polygon 1 parallels the salar edge. Polygon 5 assumes no lithium in the 60 metres because surface sampling reported very low lithium values at land surface, likely due to similar inflow of fresh water into the salar. Based on observations that the brine density and chemistry is relatively consistent below a depth of about 85 metres, we assume that with depth, all parts of the salar will have saturated brine.

Thickness of the lowermost hydrogeologic unit is limited by total depth of the corehole. 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.

Except for the Inferred resource in Polygon 5, we have assigned all of the estimated Resource 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, we believe that a Measured category is justified.

Summary of Measured, Indicated, and Inferred Resource

Using the method outlined above, the estimate for the total Salar de Pular project resource is as follows (Table 1 reported on page 1):

Resource Category	Brine Volume (m ³)	Avg. Li (mg/L)	In situ Li (tonnes)	Li ₂ CO ₃ Equivalent (tonnes) LCE	Avg. K (mg/L)	In situ K (tonnes)	KCl Equivalent (tonnes)
Measured	8.1 x 10 ⁸	85	68,700	366,000	4,480	3,620,000	6,904,000
Inferred	2.7 x 10 ⁸	77	21,200	113,000	4,280	1,178,000	2,246,000

No cutoff grade was applied; but the upper fresh and brackish water units in Polygons 1 and 5 were assumed to be zero. The reader is cautioned that mineral resources are not mineral reserves and do not have demonstrated economic viability.

The overall lithium grades range from about 80-100 mg/L in the brine below about 80 metres; potassium grades range from about 4,300–5,400 mg/L (Figures 2 through 5). A standard chemical relationship indicative of lithium brine quality is the ratio of magnesium to lithium (Mg:Li). Calculated ratios using non-weighted, average magnesium and lithium sample results are as follows:

- 18.7 for PNN-SU-DW-01
- 19.6 for PNN-SU-DW-02
- 23.6 for PNN-PA-DW-03
- 20.4 for PNN-SU-DW-04

Dominant Hydrogeologic Units

The dominant hydrologic units encountered during drilling for the Salar de Pular project include:

- a weakly- to moderately-consolidated black volcanic sand that is apparent below a depth of about 60 metres below land surface (mbls) at each of the boreholes. This unit has a variable thickness ranging from about 90 to 140 metres.
- a weakly- to moderately consolidated breccia unit that extends from about 150 to 200 mbls, with an unknown maximum thickness.

The sand and breccia units dominate the drainable brine resource. We believe that the transmissivity of future wells completed in these units would be favorable for extracting brine because of the assumed favorable aquifer conditions associated with these clastic units (See photos below).

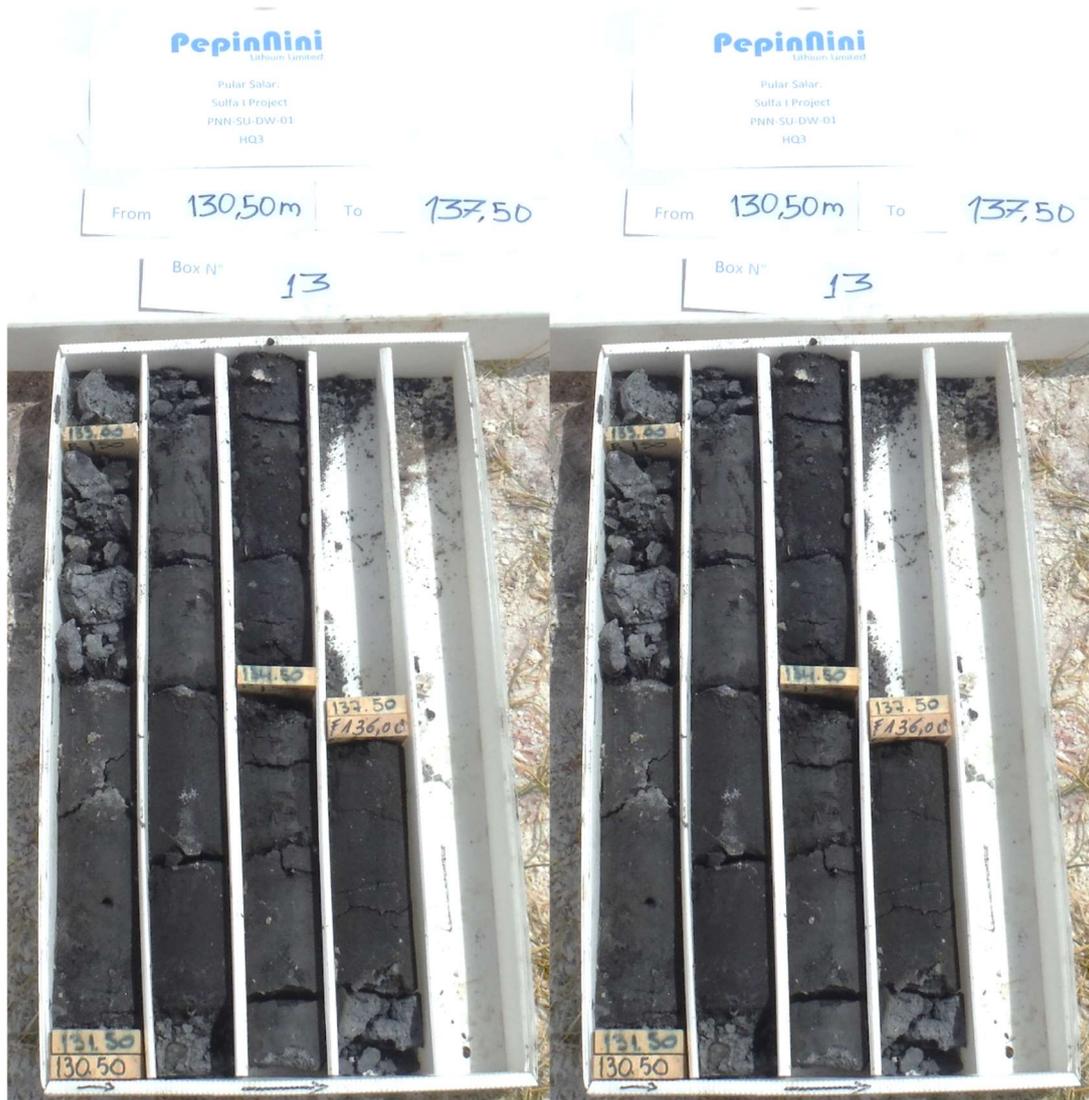


Photo 1 - Black Sand in PNN-SU-DW-01 from 130.5-137.5 metres and Breccia unit 241.65-245.65metres.

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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.

Johnson, A. I., 1967. **Specific yield – Compilation of specific yields for various materials:** U.S. Geological Survey Water Supply Paper 1662-D, 74 p.

Tecnologia y Recursos, 2016. **Exploracion Geofisica, Salar de Pular, Salta, Argentina.** Technical report prepared for PepinNini Lithium Limited, November 2016, 32 pp.

PepinNini Lithium Limited, 2018a. **Technical report for construction of exploration borehole PNN-SU-DW-01.** Internal report. 34pp.

_____, 2018b. **Technical report for construction of exploration borehole PNN-SU-DW-02.** Internal report. 35pp.

_____, 2018c. **Technical report for construction of exploration borehole PNN-PA-DW-03.** Internal report. 35pp.

_____, 2018d. **Technical report for construction of exploration borehole PNN-PA-DW-04.** Internal report. 35pp.

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.

JORC Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representability and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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. <div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <p style="text-align: center;">Packer Sampling</p>

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> • 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. <p>Core sampling for porosity testing</p>   
<p><i>Drilling techniques</i></p>	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • Diamond core drilling – HQ3 diameter drilled vertically, triple tube   <p>Recovering cores borehole PNN-PA-DW-03</p>

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> 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  <p>Slotted PVC used for piezometer borehole PNN-SU-DW-02</p>
<p><i>Drill sample recovery</i></p>	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures were taken to maximise sample recovery and ensure the representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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 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.

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Criteria	JORC Code explanation	Commentary
		 <p data-bbox="1294 703 1731 730">Core sampling Borehole PNN-SU-DW-02</p>
<p><i>Logging</i></p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • 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.

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Criteria	JORC Code explanation	Commentary
		<p>Representative samples from borehole PNN-SU-DW-01</p>

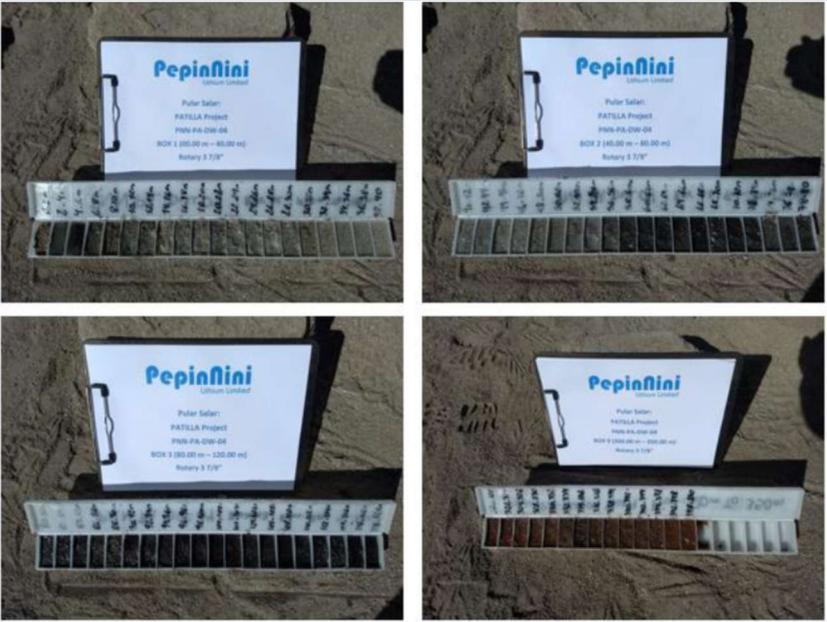
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Criteria	JORC Code explanation	Commentary
		 <p data-bbox="1267 746 1727 770">Unconsolidated black medium sand with layers of gravel</p> <p data-bbox="1771 459 1861 483">White clay</p> <p data-bbox="1850 571 1984 687"> PepinNini Lithium Limited Pulau Sazan: Suite 3, Project 0106-913041-02 BOX 2 (134.00 m³ - 151.00 m³) Rotary 3 7/8" </p> <p data-bbox="1229 815 1951 831">DRE BOXES SHOWING ALL THE LITHOLOGIES AFOREMENTIONED, AT A DIFFERENT DEPTH, CUTTING BOX LOG,</p> <p data-bbox="1229 874 1771 898">Representative samples borehole PNN-SU-DW-02</p>

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Criteria	JORC Code explanation	Commentary
		 <p data-bbox="1238 730 1794 756">Representative cores from borehole PNN-PA-DW-03</p>

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Criteria	JORC Code explanation	Commentary
		 <p data-bbox="1243 927 2083 954">Chip samples of representative lithologies non-cored borehole PNN-PA-DW-04</p> <ul data-bbox="1243 986 2083 1157" style="list-style-type: none"> <li data-bbox="1243 986 2049 1013">• Borehole PNN-SU-DW-02 was geophysically logged for natural gamma. <li data-bbox="1243 1034 2083 1090">• The boreholes were cleaned of drilling mud prior to extracting depth-specific brine samples <li data-bbox="1243 1106 2027 1157">• Brine samples were collected using a double packer to ensure that the samples are representative of a specific depth.
<p data-bbox="145 1029 324 1157">Sub-sampling techniques and sample preparation</p>	<ul data-bbox="347 1029 1220 1374" style="list-style-type: none"> <li data-bbox="347 1029 1142 1056">• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <li data-bbox="347 1061 1142 1114">• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <li data-bbox="347 1118 1187 1171">• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <li data-bbox="347 1176 1198 1228">• <i>Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</i> <li data-bbox="347 1233 1220 1313">• <i>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.</i> <li data-bbox="347 1318 1198 1374">• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	

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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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A chain of custody was maintained for samples from drilling location to laboratory receipt.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Geographic positioning control for borehole locations was measured using Gauss Kruger POSGAR (WGS-84) Zone 2 datum
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Well spacing for a salar-hosted brine deposit is acceptable according to generally agreed upon distances. Samples taken at intervals determined to be acceptable 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Boreholes drilled vertically to intersect salar horizontal layering
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Data collection, processing and analysis protocols aligned with industry best practice.

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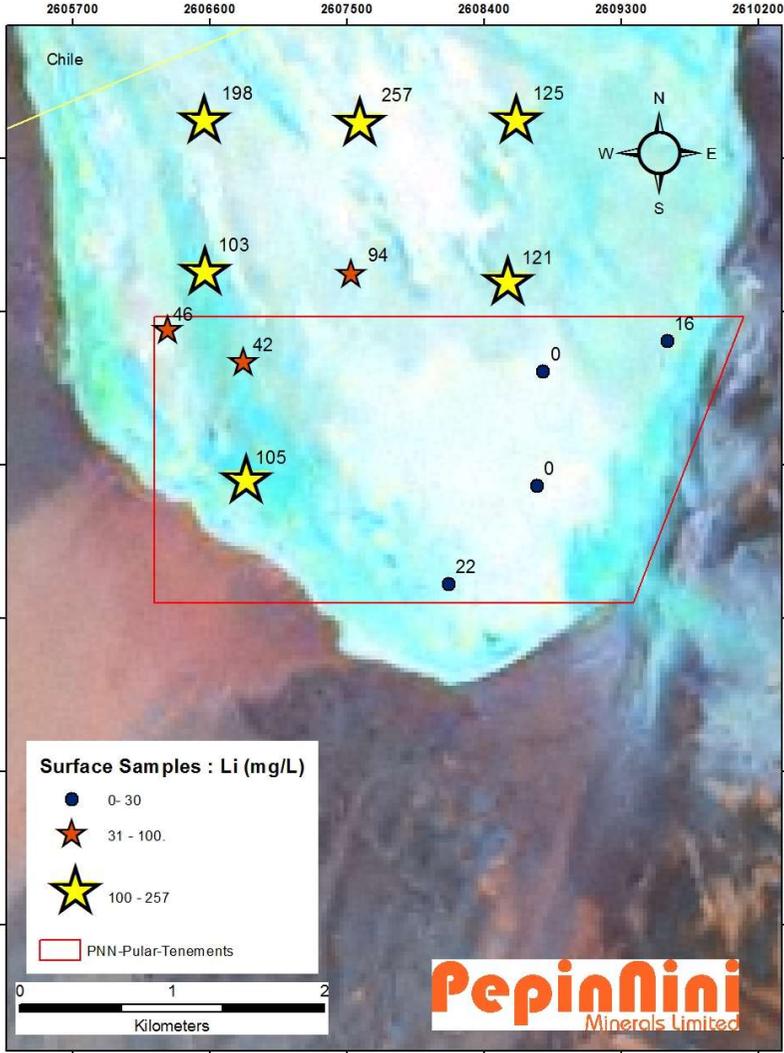
Section 2 Reporting of Exploration Results

(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 style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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 PepinNini SA 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.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Surface sample exploration carried out by Lithea Corporation – 2010 – mapped as yellow stars in plan below.

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Criteria	JORC Code explanation	Commentary
	<p>Geology</p> <ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	 <p>Surface Samples : Li (mg/L)</p> <ul style="list-style-type: none"> ● 0 - 30 ★ 31 - 100 ★ 100 - 257 □ PNN-Pular-Tenements <p>Kilometers</p> <p>PepinNini Minerals Limited</p>
		<ul style="list-style-type: none"> • PepinNini is primarily exploring for brine aquifers in salars (dried salt lakes) and the geological setting is suitable for lithium bearing brines in

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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	<ul style="list-style-type: none"> • 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"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ 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. 	<p>Borehole PNN-SU-DW-01</p> <ul style="list-style-type: none"> • 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 <p>Borehole PNN-SU-DW-02</p> <ul style="list-style-type: none"> • 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 <p>Borehole PNN-PA-DW-03</p> <ul style="list-style-type: none"> • 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

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Rig: Sandvick DE710 <p>Borehole PNN-PA-DW-04</p> <ul style="list-style-type: none"> 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
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No data aggregation used.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> 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
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Borehole location and surface sampling data points are shown below.

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Criteria	JORC Code explanation	Commentary
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Criteria	JORC Code explanation	Commentary
<i>Balanced reporting</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Results from boreholes PNN-SU-DW-01, PNN-SU-DW-02, PNN-PA-DW-03 and PNN-PA-DW-04 are fully reported.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> all data is reported in relevant sections no additional data to be reported
<i>Further work</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 during possible future aquifer testing of the proposed production well.

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