December 2018 QUARTER ACTIVITIES AND CASH FLOW REPORTS

- **Argentine Lithium Brine Project –** geophysical TEM survey Incahuasi Project indicates two distinct conductive zones; with both potentially lithium brine bearing to >200m .
- Brine resource within retained Pular Project restated to contain 91,000 tonnes Measured and 82,000 tonnes Inferred LCE and 1.7million tonnes Measured and 1.6 million tonnes Inferred Potash(KCl).
- **Corporate** –
  - Annual Report 2018 released 2 October 2018
  - Annual General Meeting (AGM) 29 November 2018 with all resolutions passed.
  - Fund raising during the quarter raised a total of $413,000 and the convertible note was terminated and paid out

Figure 1 – Pular, Rincon and Incahuasi Projects

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
Justin Nelson
Company Secretary

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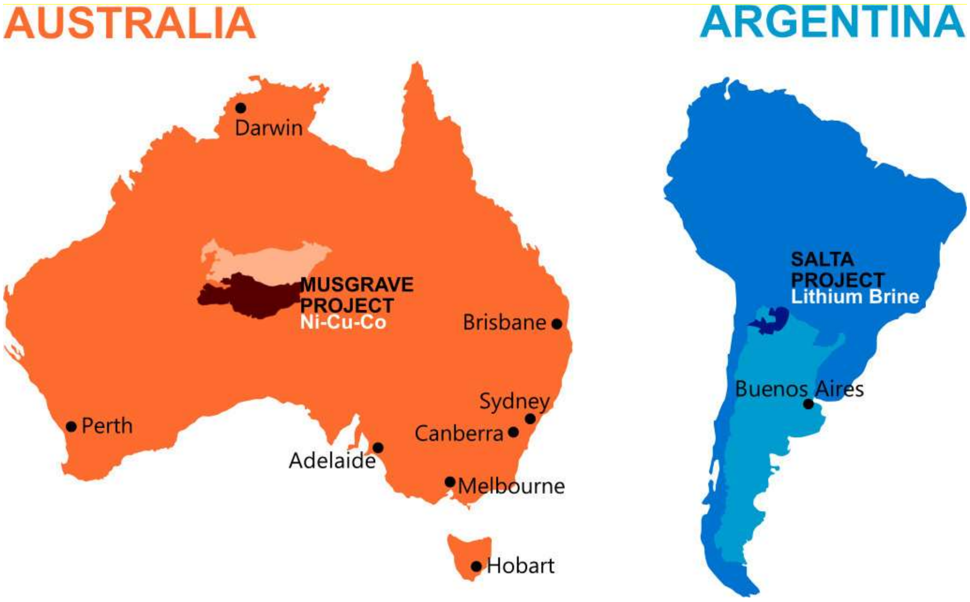


Salta Province Projects

PepinNini Lithium Ltd (PNN or the Company) has a wholly owned Argentine entity PepinNini SA(PNN SA) with a land holding for the Lithium Project of nine mining licences (*mina*) totalling 20,840 hectares in the western part of the Salta Province of NW Argentina. The properties are considered prospective for lithium brine aquifers associated with *Salares* (Salt lakes).

Table 1: PepinNini SA Lithium Project Mining Leases (Mina)

Salar	Mina	Area (hectares)*	Work to date and planned
Salar de Pular	Sulfa 1	657	Drilling completed –resource re-stated
Salar de Pular	Patilla	1,346	Exploration Option terminated
Salar de Pular	Moncho	2,128	Drilling completed –resource re-stated
Salinas Grandes	Luxemburgo	2,495	Planned Geophysics (VES)
Salar de Arizaro	Ariza Sur 1	3,004	Planned Geophysics (VES)
Salar del Rincon	Villanovena 1	1,586	Drilling completed – initial resource stated, pumping well planned
Salar Pocitos	Tabapocitos 02	2,970	Drilling completed
Salar Pocitos	Pocitos II	3,000	Drilling completed
Salar de Arizaro	La Maderita	3,000	Planned Geophysics (VES)
Salar de Incahuasi	Sisifo	2,000	Geophysics (TEM) completed, drilling planned
Total		**20,840**	
** 100hectares = 1sqkm*			

The projects being developed all occur within the recognised "Lithium Triangle" which covers parts of Argentina, Chile and Bolivia.

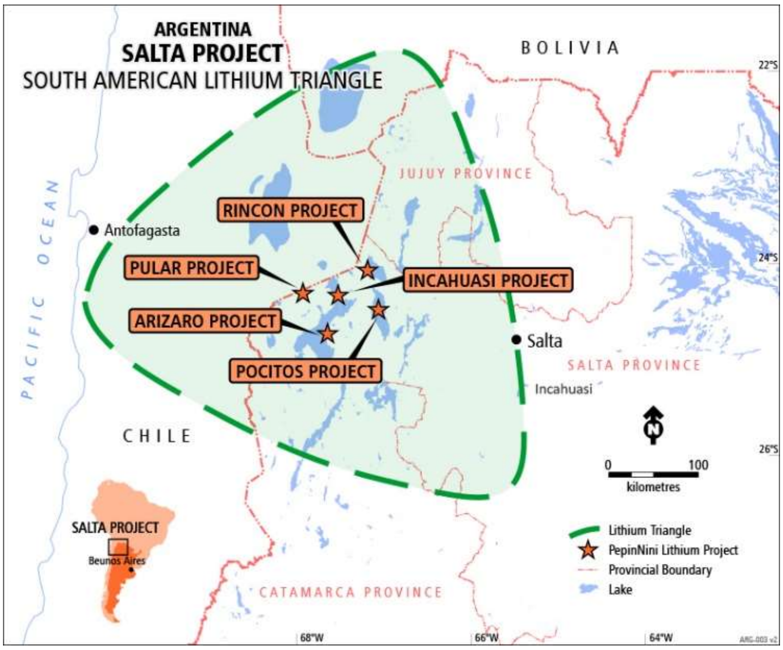


Figure 2 - The Lithium Triangle of South America

The lithium brine minas are situated within five different salar(dried salt lake) environments in the high Puna region of Salta Province, north west Argentina.

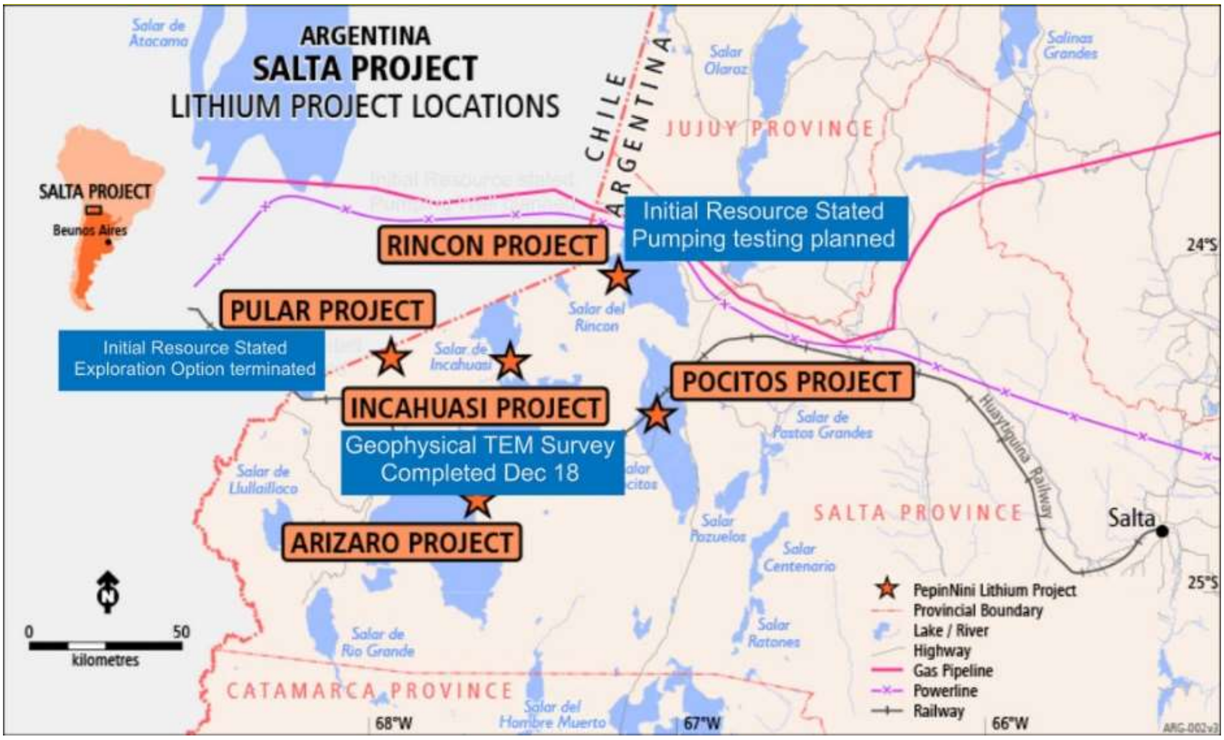


Figure 3 - Lithium Projects - Salta Province, Argentina.

Salar de Incahuasi Project

During the quarter a geophysical Time Domain Electromagnetic (TEM) survey was carried out by Quantec Geoscience.

The survey indicates two distinct zones; firstly a halite surface layer (yellow to red Figure 4) with a conductive potential brine bearing layer below and a saturated conductive zone (crimson to purple Figure 4) from the surface and potentially brine bearing. The survey penetrated to 200m in depth with the interpreted brine bearing zone continuing beyond 200m. Quantec's experience in this type of exploration environments indicates that high resistivity values in the surface are due to halite materials in salar surface, and the more conductive materials below it matches brines that may be rich in lithium.(TEM Survey Report Sisifo, Incahuasi, Quantec Geoscience 19 Dec 18).

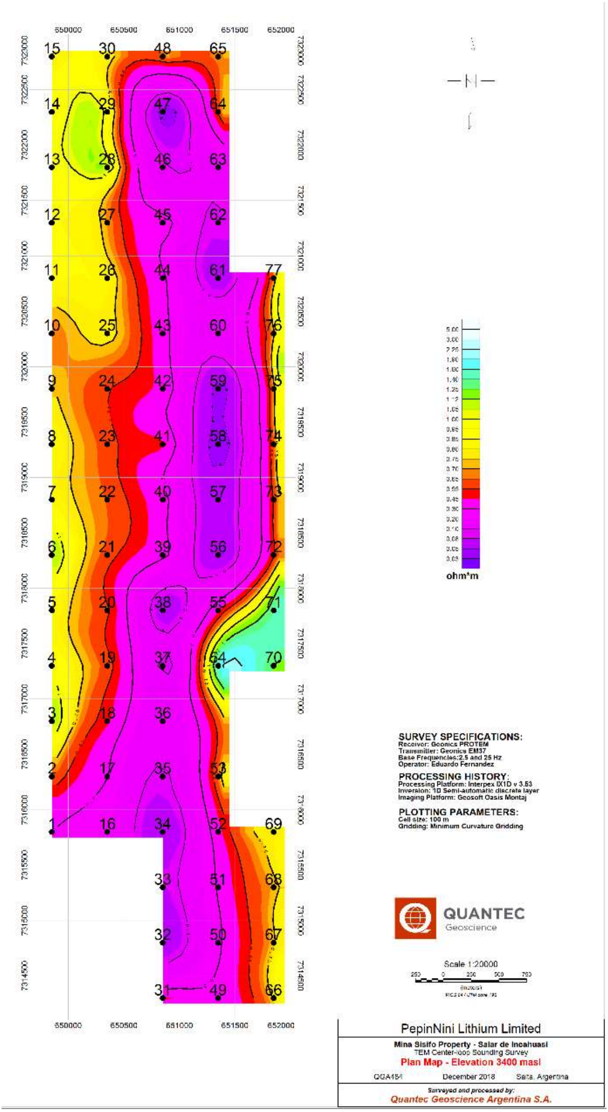


Figure 4 – Plan View at 3,400m elevation of TEM Survey Results, Mina Sisifo, Incahuasi Salar, Salta, Argentina Dec 2018

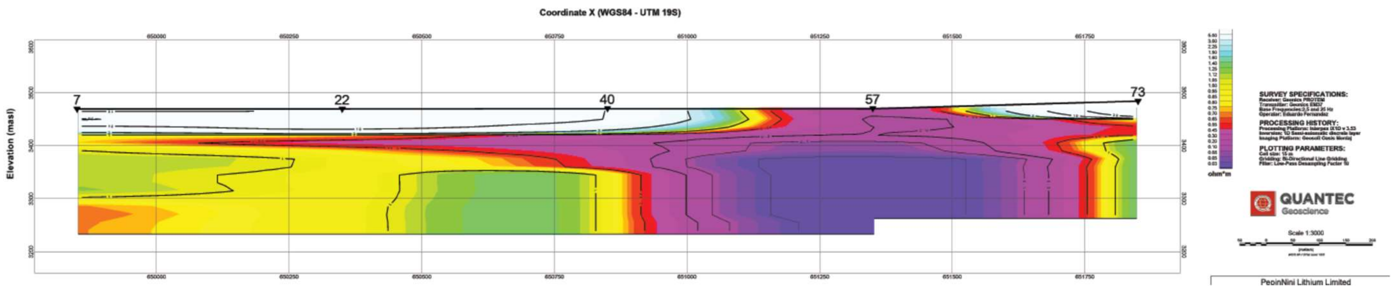


Figure 5 Cross section from surface of TEM survey results Mina Sisifo, Salar de Incahuasi

Data obtained from the previous holding entity; Lithea Inc indicates surface Lithium grades up to 296mg/l(Figure 6)

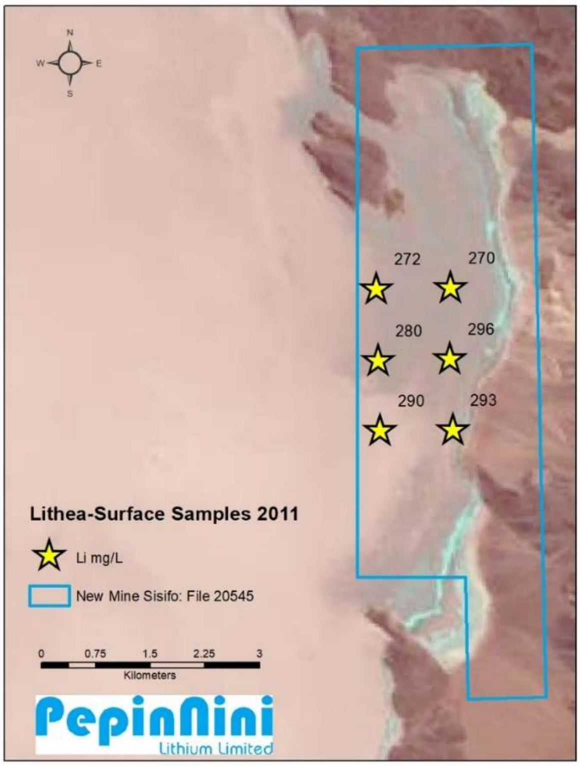


Figure 6 2011 Surface Sample Results Lithium - Sisifo Mina, Salar de Incahuasi

Salar de Pular Project

During the quarter the Company announced the discontinuation of the exploration purchase option covering Patilla Mina on Salar de Pular entered into with Lithea Inc, wholly owned subsidiary of Lithium S(TSX-V:LSC) announced as Transaction 1;ASX:22 Feb 2018. The Company has withdrawn from the option agreement after undertaking appropriate investigations across Patilla Mina in conjunction with its broader exploration activities across its 100% owned Sulfa 1 and Moncho Minas which combined had covered the entire Argentine portion of Salar de Pular. The Company retains 2,785hectares(ha) of the 4,131ha of the salar or 70%.By withdrawing from the transaction the Company avoids further payments of US$775,000.

The Resource for this project stated ASX:27 July 2018 was re-calculated by independent competent person Mr. Michael Rosko, M.Sc., C.P.G. of the international hydrogeology firm E.L. Montgomery & Associates (M&A).

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.

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 x 10^8**	**87**	**17,100**	**91,000**	**4,510**	**888,700**	**1,695,000**
Inferred	2.0 x 10^8	77	15,400	82,000	4,280	853,400	1,627,000

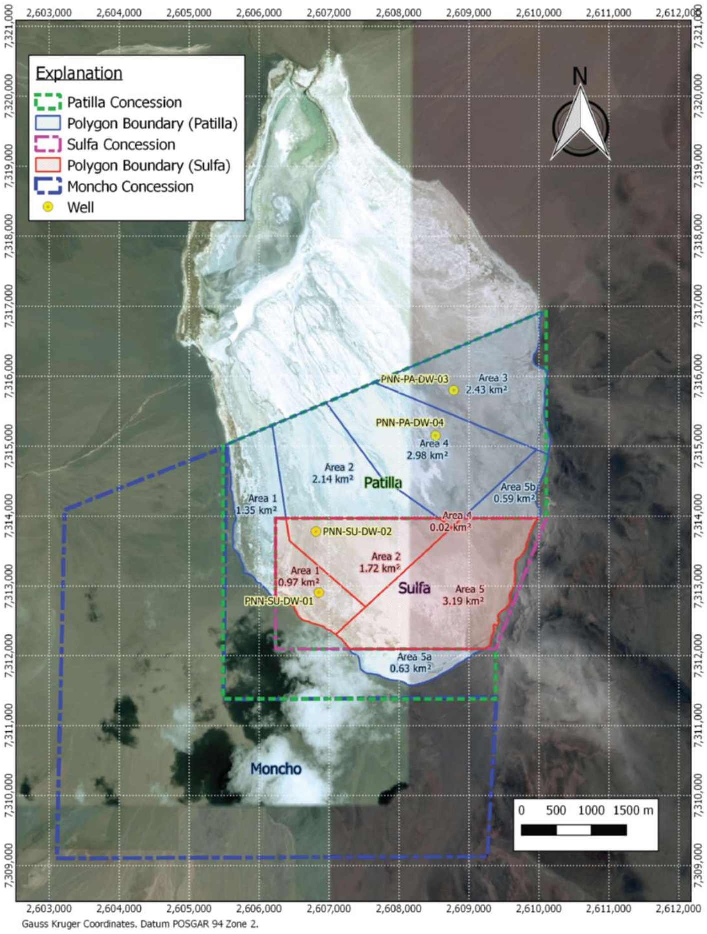
No cut-off grade was applied; The reader is cautioned that mineral resources are not mineral reserves and do not have demonstrated economic viability.

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 7**. 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 7**).

Figure 7 – Updated Polygon Blocks Sulfa Mina, Salar de Pular



Tabulated below are exploration activities achieved to reporting date and planned for the next two years. Actual activities will be dependent on the results of preceding activities.

Quarter/Project	Pular	Incahuasi	Rincon	Company
December 2018	Resource restatement	Geophysical TEM survey	Planning for re-sampling and pumping testing	Funding and investing partner search
March 2019	Pumping testing	Exploration drilling	Re-sampling and pumping testing	Seek strategic partner for offtake agreement and Project funding
June 2019	Conversion to production well from pumping testing	Exploration drilling and pumping testing	Resource restatement and production well conversion	Scoping study for project viability and planning - funding
September 2019	Pilot testing for LCE test production	Resource statement	Pilot testing for LCE test production	Pre-Feasibility study for LCE production - funding
December 2019	Pilot evaporation pond construction	Pilot testing for LCE test production	Pilot evaporation pond construction	Production plant design and funding
March 2020	Evaporation & concentration – transport planning and roadway construction	Pilot evaporation pond construction transport planning and roadway construction	Evaporation & concentration	Production plant construction - funding
June 2020	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Production plant construction - funding
September 2020	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Production plant construction - funding
December 2020	Evaporation & concentration	Evaporation & concentration	Evaporation & concentration	Marketing LCE -
March 2021	LCE production	Evaporation & concentration	LCE production	Marketing LCE
June 2021	LCE production	LCE production	LCE production	Sale LCE

PepinNini SA also hold 4 mining leases over 6,840 ha which are prospective for Copper and Gold, the Santa Ines Project. No field exploration activities were carried out during the quarter on these projects.

Musgrave Province Projects

PNN's 100% Musgrave Project includes 8 exploration licence applications and 2 granted exploration licences in the name of NiCul Minerals Ltd (NCL) a wholly owned subsidiary of the company. The tenure covers 14,003 km^2 of the Musgrave Province within South Australia. (See Figure 8). NCL are targeting Nickel- Copper-Cobalt minerals. A number of targets have been generated from an airborne electromagnetic(EM) survey flown in a collaboration with CSIRO and Geoscience Australia in 2016. No field work was carried out during the quarter on NCL tenements.

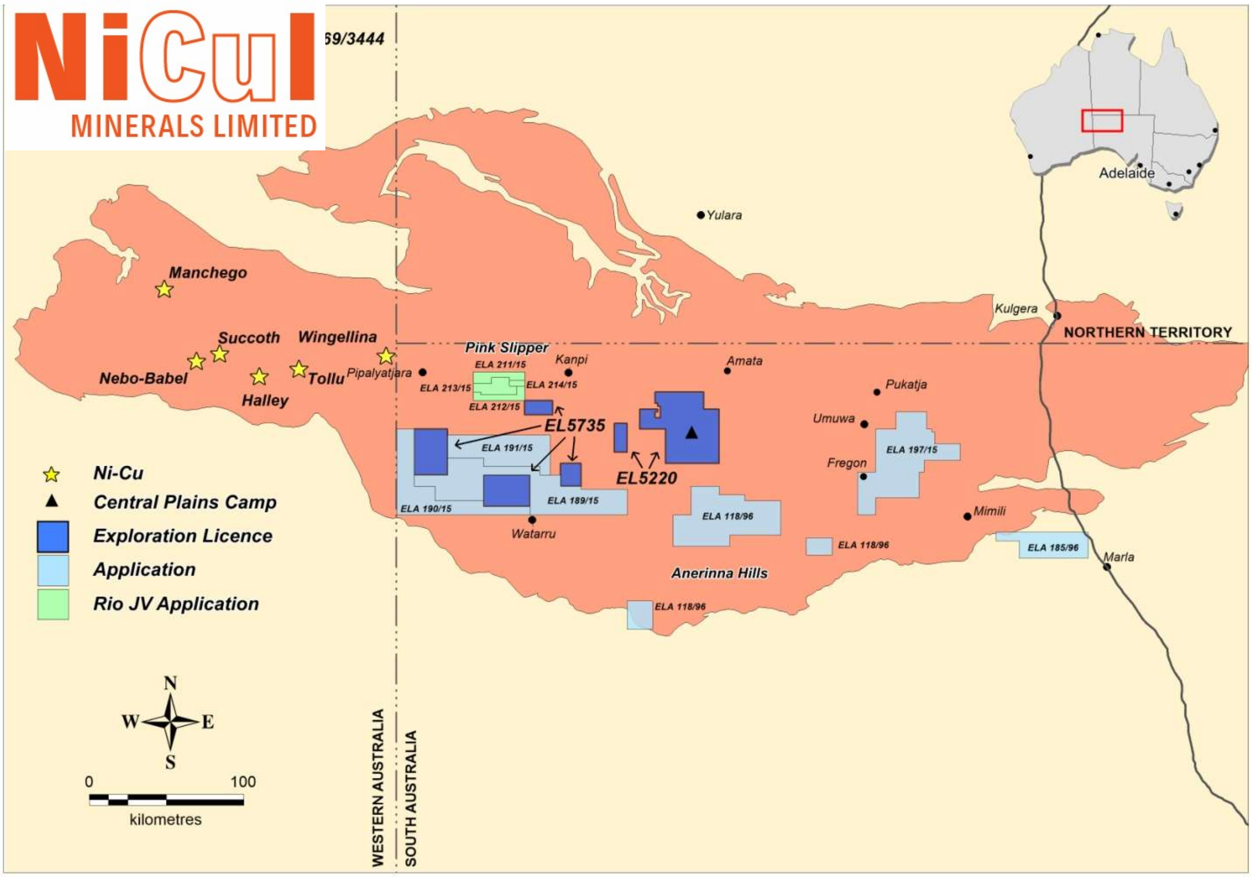


Figure 8: PNN's Musgrave Project locations, South Australia

Rio Tinto Joint Venture (South Australia)

No progress was made regarding access to joint venture exploration licence application (ELA2015/00214) which covers 37km^2 and includes the Pink Slipper geophysical target. NiCul Minerals Ltd continue to request that Anangu Pitjantjatjara Yankunytjatjara(APY) Lands Executive Board progress the negotiation and granting of the JV tenement.

South Australia - Gawler Ranges (Eyre Peninsula)

Toondulya Bluff Gold Project

The Toondulya Bluff (EL5897) project was not felt to warrant expenditure as not core to the company's focus on battery mineral exploration. The exploration licence expired 25 November 2018 and was not renewed

No field work was undertaken during the quarter.

TENEMENT SCHEDULES

Australia

Tenement	Tenement Name	Area Km²	JV	PepinNini Interest	Grant Date
		South Australia			
EL5897	Toondulya Bluff	390		100%	expired
EL 5735	Mt Harcus	1,607		100%	25/10/10
EL 6148	Mt Caroline	1,918		100%	25/2/13
ELA 118/96	Anerinna Hills	2,415		100%	application
ELA 185/96	Willugudinna	823		100%	application
ELA 367/09	Mt Caroline West	46		100%	application
ELA 368/09	Hanging Knoll	34		100%	application
ELA 189/15	Katalina	2,360		100%	application
ELA 190/15	Mt Agnes	1,342		100%	application
ELA 191/15	Krewinkel Hill	1,256		100%	application
ELA 197/15	Ironwood Bore	2,202		100%	application
ELA 211/15	Tjintalka	184	JV02	earning 51%	application
ELA 212/15	Kapura	160	JV02	earning 51%	application
ELA 213/15	Jalukana	234	JV02	earning 51%	application
ELA 214/15	Tjalukana	37	JV02	earning 51%	application
Totals		14,618			

Argentina

	Tenement	Type	Project	Application	Granted	Applied Area Ha	Title Holder
Cu-Au	Mina Santa Ines	*Mina*	Santa Ines	27-Sep-10	20-Sep-11	18	PNN SA 100%
Cu-Au	Santa Ines VIII	*Mina*	Santa Ines	18-Jul-13	28-Aug-14	3,000	PNN SA 100%
Cu-Au	Santa Ines XII	*Mina*	Santa Ines	11-Oct-14	30-Nov-15	2,609	PNN SA 100%
Cu-Au	Santa Ines XIII	*Mina*	Santa Ines	11-Oct-14	9-Sep-15	511	PNN SA 100%
						6,138	
Li Brine	Sulfa 1	*Mina*	Salar de Pular	2-Jun-16	22-Feb-17	657	PNN SA 100%
Li Brine	Luxemburgo	*Mina*	Salinas Grandes	2-Jun-16	22-Jun-16	2,495	PNN SA 100%
Li Brine	Salinita Norte II	*Mina*	Salinas Grandes	2-Jun-16	22-Jun-16	2,994	lapsing
Li Brine	Lidia I	*Mina*	Salinas Grandes	9-Aug-16	9-Sept-16	3,228	LSC transaction
Li Brine	Lidia II	*Mina*	Salinas Grandes	9-Aug-16	9-Sept-16	2,719	LSC transaction
Li Brine	Lidia III	*Mina*	Salinas Grandes	10-Aug-16	9-Sept-16	3,500	LSC transaction
Li Brine	Lidia V	*Mina*	Salinas Grandes	17 Jan 17	Not yet	3,022	LSC transaction
Li Brine	Ariza sur 1	*Mina*	Salar de Arizaro	2-Jun-16	22-Jun-16	3,004	PNN SA 100%
Li Brine	Villanovena 1	*Mina*	Salina del Rincon	2-Jun-16	22-Jun-16	1,586	PNN SA 100%
Li Brine	Tabapocitos 02	*Mina*	Salar Pocitos	2-Jun-16	22-Jun-16	2,970	PNN SA 100%
Li Brine	Pocitos 11	Mina	Salar Pocitos	17-Aug-16	19-Sept-16	3,000	PNN SA 100%
Li Brine	Guayos II	Mina	Salar de Cauchari	17-Aug-16	19-Sept-16	1,610	lapsing
Li Brine	Guayos III	Mina	Salar de Cauchari	16-Dec-16	Not yet	1,906	lapsing
Li Brine	Salinita VII	*Mina*	Salinas Grandes	9-Mar-17	Not yet	2,990	LSC transaction
Li Brine	La Filomena	*Mina*	Centenario Salar	4-Apr-17	22-May-17	1,503	lapsing
Li Brine	La Maderita	*Mina*	Salar de Arizaro	4-Aug-17	17-Oct-14	3,000	PNN SA 100%
Li Brine	Patilla	*Mina*	Salar de Pular	22-Feb-18	Not yet	1,346	Exploration option terminated
Li Brine	Sisifo	*Mina*	Incahuasi Salar	22-Feb-18	13-Jun-18	2,000	PNN SA 100%
Li Brine	Moncho	*Mina*	Salar de Pular	5-Dec-17	8-Feb-18	2,128	PNN SA 100%
						20,840	
	Total 13					26,978	

The section 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.

Resource calculations stated for Salar de Pular,Salta Lithium Project, Argentina have 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

The information in this report that relates to Exploration Results and Mineral Resources for the Australian projects is based on information compiled by Phil Clifford BSc MAusIMM. Phil Clifford is a Non-Executive Director 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". Phil Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information please contact:

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Managing Director, PepinNini Lithium Limited
Phone: (08) 8218 5000

Note: Additional information on PNN is available at www.pepinnini.com.au

Appendix 5B - Mining exploration entity and oil and gas exploration entity quarterly report

Appendix 1 – JORC Table 1 – Exploration Activity – Geophysical Survey

Appendix 2 – JORC Table 1 – Resource Statement – Salar de Pular

+Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity	
PepinNini Lithium Limited	
ABN	**Quarter ended ("current quarter")**
55 101 714 989	December 2018

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(256)	(1,070)
	(b) development		
	(c) production		
	(d) staff costs	(56)	(113)
	(e) administration and corporate costs	(106)	(152)
1.3	Dividends received (see note 3)		
1.4	Interest received		
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Research and development refunds		
1.8	Other (provide details if material)		
1.9	**Net cash from / (used in) operating activities**	**(418)**	**(1,335)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (6 months) $A'000**
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	**Net cash from / (used in) investing activities**		

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of shares	370	1,211
3.2	Proceeds from issue of convertible notes	(60)	40
3.3	Proceeds from exercise of share options	40	
3.4	Transaction costs related to issues of shares, convertible notes or options		
3.5	Proceeds from borrowings	122	122
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	**Net cash from / (used in) financing activities**	**472**	**1,413**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	62	38
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(418)	(1,335)
4.3	Net cash from / (used in) investing activities (item 2.6 above)		
4.4	Net cash from / (used in) financing activities (item 3.10 above)	472	1,413
4.5	Effect of movement in exchange rates on cash held		
4.6	**Cash and cash equivalents at end of period**	**116**	**116**

5.	**Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	116	62
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**116**	**62**

6.	**Payments to directors of the entity and their associates**	**Current quarter $A'000**
6.1	Aggregate amount of payments to these parties included in item 1.2	85
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

1. Chairman, Managing, Finance and Non-Executive Directors' Remuneration $77,326.81
2. Chairman, Managing, Finance and Non-Executive Directors' Superannuation $7,239.66

7.	**Payments to related entities of the entity and their associates**	**Current quarter $A'000**
7.1	Aggregate amount of payments to these parties included in item 1.2	
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

8.	**Financing facilities available** *Add notes as necessary for an understanding of the position*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
8.1	Loan facilities		
8.2	Credit standby arrangements		
8.3	Other (please specify)		

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

9.	**Estimated cash outflows for next quarter**	**$A'000**
9.1	Exploration and evaluation	200
9.2	Development	
9.3	Production	
9.4	Staff costs	
9.5	Administration and corporate costs	75
9.6	Other (provide details if material)	
9.7	**Total estimated cash outflows**	**275**

10.	**Changes in tenements (items 2.1(b) and 2.2(b) above)**	**Tenement reference and location**	**Nature of interest**	**Interest at beginning of quarter**	**Interest at end of quarter**
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	Mina Patilla File 20414 – Argentina	Exploration Purchase Option	25%	0
		EL5897 Toondulya Bluff - South Australia	Granted tenement	100%	0
10.2	Interests in mining tenements and petroleum tenements acquired or increased	-		-	-

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Sign here: .... Date: ...30 Jan 2019.
(~~Director/~~Company secretary)

Print name: .....Justin Nelson...

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

Appendix 1 – JORC Table 1 – Exploration Activity – Geophysical Survey

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.*	• 77 data collection points were designed and 75 actually taken • Data collected with a moving loop method with receiver coil located at the centre of a square, single-turn moving loop. • Loop dimensions were fixed at 200x200m • Frequency of 25Hz throughout the survey to allow for secondary magnetic field decay measurements over 20 time channels, transmitter set at 110V output to produce an average current of 18amp and turn off time between 90-120 us • A lower frequency was also collected at 2.5Hz to allow for more accurate modelling of discrete-layer inversions • Receiver configured to automatically record 3 samples with integration period of 30secs
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).*	• No drilling is being reported
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure 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.*	• No drilling is being reported
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.*	• No drilling is being reported

Criteria	JORC Code explanation	Commentary
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.*	• No drilling being reported
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.*	• Data was downloaded from the receiver using PROTEM W package • Quality control was performed; the Z component averaged and results exported to US1 format using PROTEM • US1 file was transformed to USF format using USFXLT, USF files are the input for the IX1D inversion program • Interpex IX1Dv3.53 was used to invert the Vertical(Z) component of the TEM data, it si a 1-D Direct current(DC) resistivity, Induced Polarisation(IP), Magnetotelluric (MT)and electromagnetic sounding inversion program, • USF files are imported and x,y,z coordinates are assigned to each sounding • Data points out of the general trend are deleted • Each sounding is inverted with a number of layers equal to the number of data points • Thicknesses are generated from the spacing or frequency data and the initial model is homogenous earth • The inverse modelling allows the operator to obtain a 1-D discrete layer, resistivity to depth model for each sounding position
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.*	• To evaluate the coherence of the data sampled a comparison graphically displayed decay of the Z-component resistivity vs time was performed for the three recorded measurements, if noise was observed a repeat set of three measurements was recorded and compared • The Z component was measured with the positive field direction vertically upward. X & Y were also measured, with the X coordinate being positive in the profile direction(ie towards increasing station number) and the Y

Criteria	JORC Code explanation	Commentary
		coordinate being orthogonal to the X. • The discrete layers models created from the processing are reviewed and revised by: ○ Fit of model to data(%) ○ Resolution of resistivity and depth ○ Analysis of the equivalence of data
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.*	• The grid system used is Argentina Gauss_Kruger POSGAR (WGS-84) UTM 19S. • A square grid of 77 sounding stations was agreed before the survey at 500m spacing, 75 sounding stations were collected.
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.*	• 500m between geophysical sounding stations • Geographic positioning control appropriate for exploration survey lines
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.*	• The deepest layer does not have a thickness associated it is assumed to extend to infinity • As data is collected on a square grid format, data distribution allows for generation of plan view maps which are presented as different elevations(masl) form 3,300masl to 3,450 masl ie every 50m
Sample security	• *The measures taken to ensure sample security.*	• Survey data collected, collated and interpreted by Quantec and PepinNini personnel
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Data collection and processing 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 Sisifo File Number 20545, Held 100% by PepinNini SA an Argentina entity wholly owned by PepinNini Minerals Ltd. • 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 sampling program done 2011 by previous tenement holder Lithea Corporation • *Technical Report Salar de Incahuasi, Salta, Argentina by Dr Richardo N Alonso and Walter R Rojas, August 2011(unpublished)*
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 lithium bearing brines in 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:*
	  ○ *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.*
		• No drilling is being reported

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high*	• To evaluate the coherence of the data sampled a comparison graphically displayed decay of the Z-component resistivity vs time was performed for

Criteria	JORC Code explanation	Commentary
	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.*	the three recorded measurements, if noise was observed a repeat set of three measurements was recorded and compared • The Z component was measured with the positive field direction vertically upward. X & Y were also measured, with the X coordinate being positive in the profile direction(ie towards increasing station number) and the Y coordinate being orthogonal to the X.
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').*	• No drilling undertaken
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.*	• As data is collected on a square grid format, data distribution allows for generation of plan view maps which are presented as different elevations(masl) form 3,300masl to 3,450 masl ie every 50m. • Profiles of stitched 3D discrete layered models at scale 1:5000 for N-S profiles and 1:3,000 for E-W profiles • 3-D view of all N-S E-W profiles
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.*	• Private company brine surface sampling carried out in 2011 by previous tenement holder Lithea Corporation. *Technical Report Salar de Incahuasi, Salta, Argentina by Dr Richardo N Alonso and Walter R Rojas, August 2011(unpublished)*
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.*	• *Technical Report Salar de Incahuasi, Salta, Argentina by Dr Richardo N Alonso and Walter R Rojas, August 2011(unpublished)*
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 phase of exploration will be drilling and sampling for resource definition

Appendix 2 – JORC Table 1 – Resource Statement – Salar de Pular

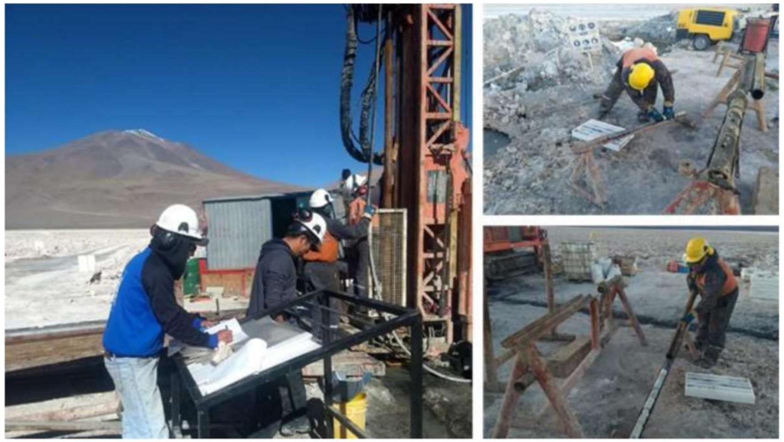
Section 1 Sampling Techniques and Data

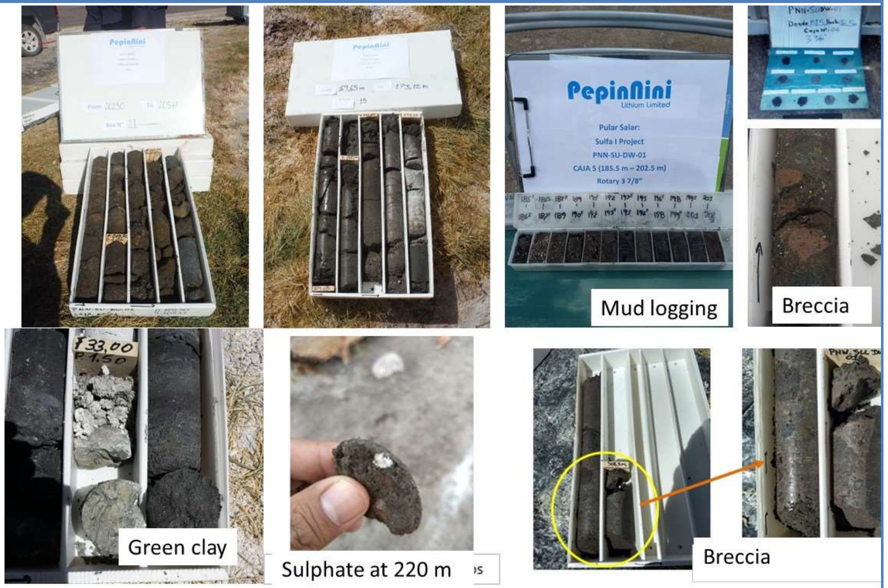
(Criteria in this section apply to all succeeding sections.)

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

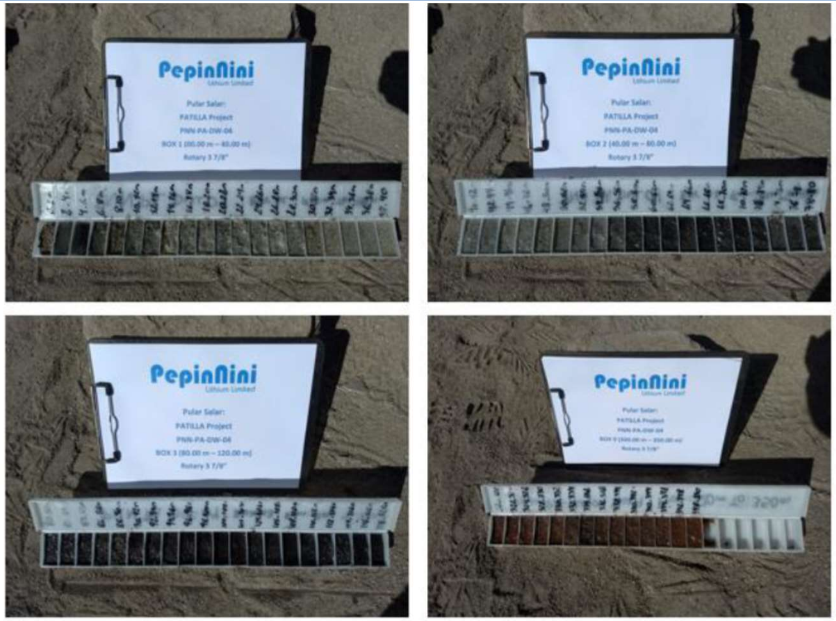
Criteria	JORC Code explanation	Commentary
		 Recovering cores borehole PNN-PA-DW-03 • PVC casing was installed in borehole PNN-SU-DW-2 to allow for future monitoring of water level and chemistry. • Boreholes DW-1, -3, and -4 were abandoned following drilling and sampling  Slotted PVC used for piezometer 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

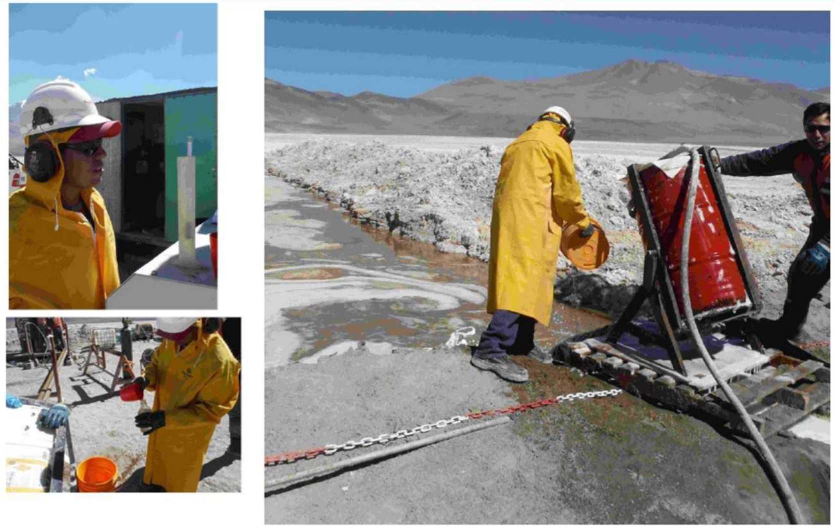
Criteria	JORC Code explanation	Commentary
		0-100% depending in lithology; sand and gravel lithologies generally had lower recovery percentages than the halite and clay lithologies. Unconsolidated or weakly-consolidated sand intervals with lower percentage recovery were typically associated with higher 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.

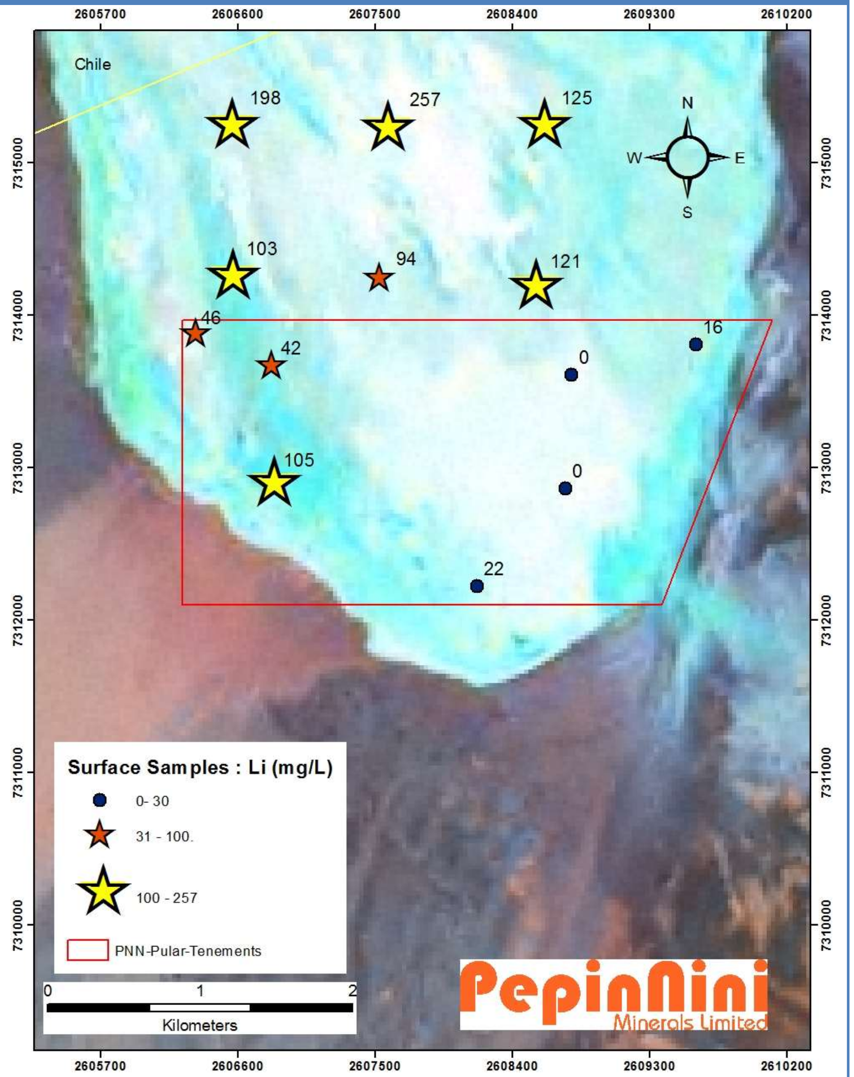
Criteria	JORC Code explanation	Commentary
		 Packer sampling borehole PNN-PA-DW-03 • Sample bottles are partly filled and rinsed with the brine to be sampled, emptied, and then re-filled before the bottle is capped and securely taped.  • In accordance with the quality assurance and quality control (QAQC) 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

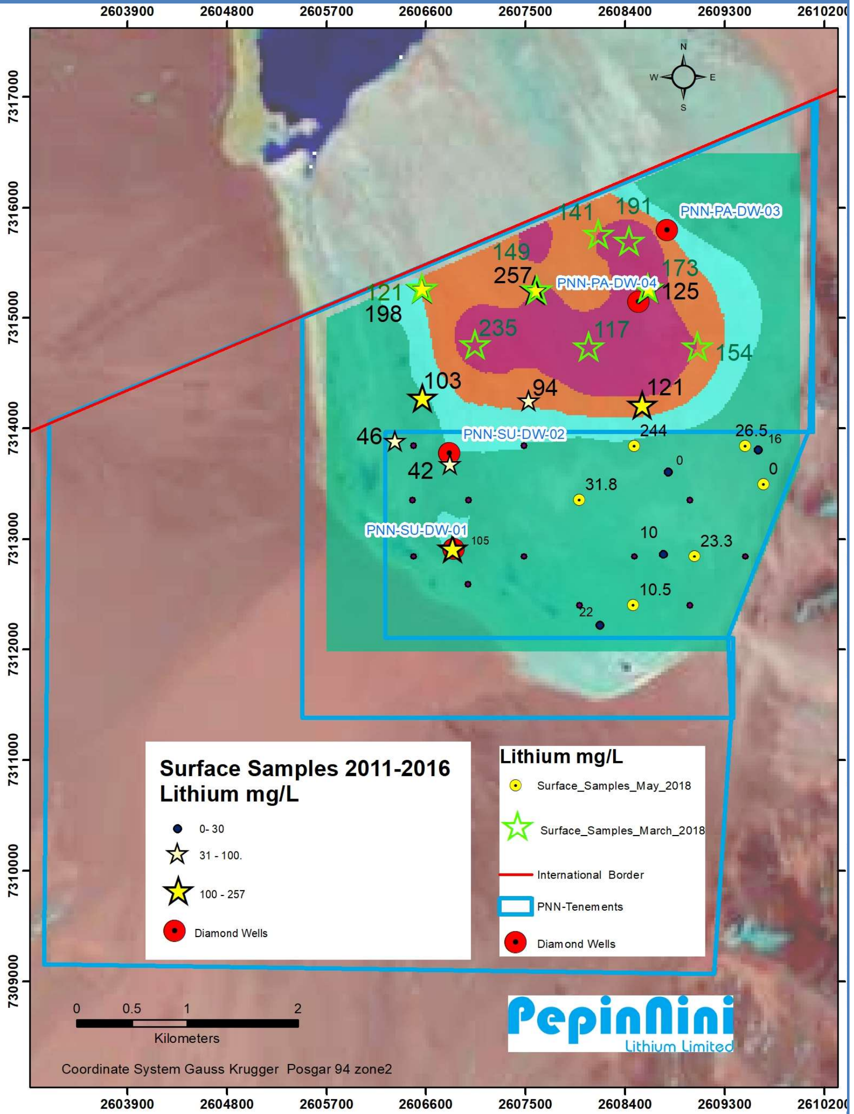
(Criteria listed in the preceding section also apply to this section.)

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:* ○ *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.*	**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>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
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<td>

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.

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<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

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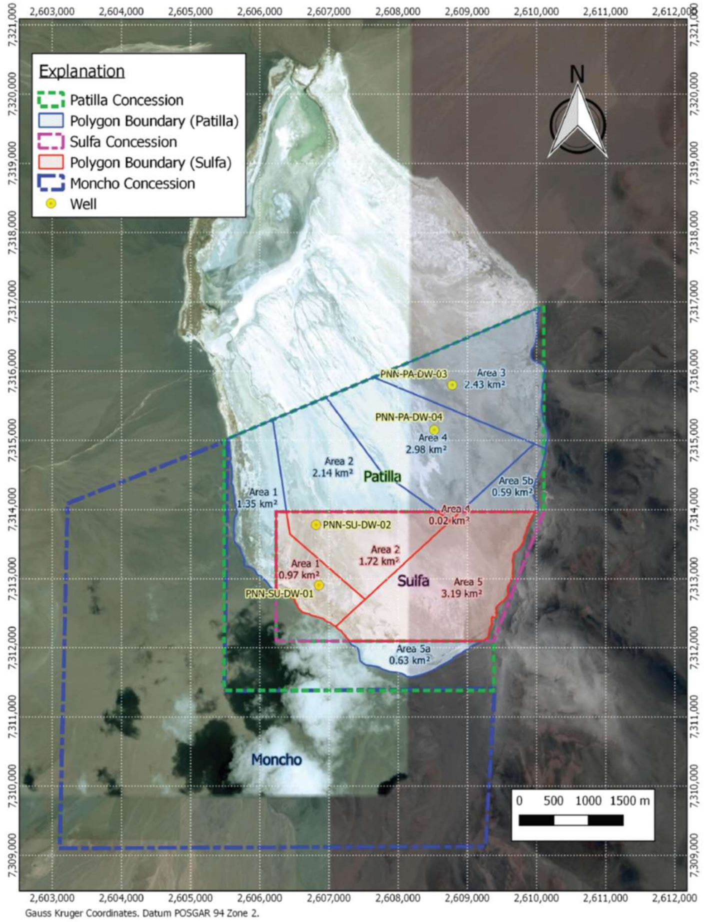
</table>

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.